



APPENDIX C

CISCO-SYSLOG-MIB

This appendix contains the CISCO-SYSLOG-MIB.



Note

The MWTM Event API WSDL definition might be found at any of the following locations:

{MWTM_INSTALL_BASEDIR}/apache/htdocs/mibs/CISCO-SYSLOG-MIB.my

<ftp://ftp.cisco.com/pub/mibs/v2/CISCO-SYSLOG-MIB.my>

```
-- *****
-- CISCO-SYSLOG-MIB.my: Cisco syslog message MIB file
--
-- August 1995, Scott Mordock
--
-- Copyright (c) 1995-1997, 2005 by cisco Systems, Inc.
-- All rights reserved.
-- *****
--
-- This MIB provides a means to gather syslog messages generated
-- by the Cisco IOS
--
-- Terminology:
-- Various textual messages are generated by the Cisco IOS. The IOS
-- can be configured such that these messages are sent to a "syslog"
-- server. With this MIB these same messages can also be received via
-- the SNMP. These messages are hereupon referred to as "syslog
-- messages" in this document. Note: Messages generated as a result
-- of entering CLI debug commands are not made available via the SNMP
-- at this time.
--
-- All IOS syslog messages have the following attributes:
--     timestamp (optional), facility name (where the message came
--     from), severity, message name, message text
--
-- The following example is often seen:
--     %SYS-5-CONFIG_I: Configured from console ...
-- where facility=SYS, severity=5, message name=CONFIG_I

CISCO-SYSLOG-MIB DEFINITIONS ::= BEGIN

IMPORTS
    MODULE-IDENTITY,
    NOTIFICATION-TYPE,
    OBJECT-TYPE,
```

```

        Integer32,
        Counter32,
FROM SNMPv2-SMI
TEXTUAL-CONVENTION,
DisplayString,
TimeStamp,
TruthValue
FROM SNMPv2-TC
        MODULE-COMPLIANCE,
OBJECT-GROUP
FROM SNMPv2-CONF
        ciscoMgmt
FROM CISCO-SMI;

ciscoSyslogMIB MODULE-IDENTITY
LAST-UPDATED"9508070000Z"
ORGANIZATION"Cisco Systems, Inc."
CONTACT-INFO
"        Cisco Systems
Customer Service

Postal: 170 W Tasman Drive
San Jose, CA 95134
USA

Tel: +1 800 553-NETS

E-mail: cs-snmp@cisco.com"
DESCRIPTION
"The MIB module to describe and store the system messages
generated by the IOS."
 ::= { ciscoMgmt 41 }

ciscoSyslogMIBObjects OBJECT IDENTIFIER ::= { ciscoSyslogMIB 1 }

Subgroups

clogBasicOBJECT IDENTIFIER ::= { ciscoSyslogMIBObjects 1 }
clogHistoryOBJECT IDENTIFIER ::= { ciscoSyslogMIBObjects 2 }

Textual Conventions

SyslogSeverity ::= TEXTUAL-CONVENTION
STATUScurrent
DESCRIPTION
"The severity of a syslog message. The enumeration
values are equal to the values that syslog uses + 1.
For example, with syslog, emergency=0."
SYNTAXINTEGER {
emergency(1),
alert(2),
critical(3),
error(4),
warning(5),
notice(6),
info(7),
debug(8)

-- Basic syslog objects

clogNotificationsSent OBJECT-TYPE
SYNTAX          Counter32

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UNITS "notifications"
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
        "The number of clogMessageGenerated notifications that
        have been sent. This number may include notifications
        that were prevented from being transmitted due to
        reasons such as resource limitations and/or
        non-connectivity. If one is receiving notifications,
        one can periodically poll this object to determine if
        any notifications were missed. If so, a poll of the
        clogHistoryTable might be appropriate."
 ::= { clogBasic 1 }

clogNotificationsEnabled OBJECT-TYPE
    SYNTAX          TruthValue
    MAX-ACCESS      read-write
    STATUS          current
    DESCRIPTION
        "Indicates whether clogMessageGenerated notifications
        will or will not be sent when a syslog message is
        generated by the device. Disabling notifications
        does not prevent syslog messages from being added
        to the clogHistoryTable."
    DEFVAL { false }
 ::= { clogBasic 2 }

clogMaxSeverity OBJECT-TYPE
    SYNTAX          SyslogSeverity
    MAX-ACCESS      read-write
    STATUS          current
    DESCRIPTION
        "Indicates which syslog severity levels will be
        processed. Any syslog message with a severity value
        greater than this value will be ignored by the agent.
        note: severity numeric values increase as their
        severity decreases, e.g. error(4) is more severe than
        debug(8)."
    DEFVAL { warning }
 ::= { clogBasic 3 }

clogMsgIgnores OBJECT-TYPE
    SYNTAX          Counter32
    UNITS           "messages"
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
        "The number of syslog messages which were ignored. A
        message will be ignored if it has a severity value
        greater than clogMaxSeverity."
 ::= { clogBasic 4 }

clogMsgDrops OBJECT-TYPE
    SYNTAX          Counter32
    UNITS           "messages"
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
        "The number of syslog messages which could not be
        processed due to lack of system resources. Most
        likely this will occur at the same time that syslog
        messages are generated to indicate this lack of
        resources. Increases in this object's value may serve
        as an indication that system resource levels should be

```

```

        examined via other mib objects.  A message that is
        dropped will not appear in the history table and
        no notification will be sent for this message."
 ::= { clogBasic 5 }

-- Syslog message history table

clogHistTableMaxLength OBJECT-TYPE
    SYNTAX      Integer32 (0..500)
    UNITS       "entries"
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "The upper limit on the number of entries that the
        clogHistoryTable may contain.  A value of 0 will
        prevent any history from being retained.  When this
        table is full, the oldest entry will be deleted and
        a new one will be created."
    DEFVAL     { 1 }
 ::= { clogHistory 1 }

clogHistMsgsFlushed OBJECT-TYPE
    SYNTAX      Counter32
    UNITS       "messages"
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The number of entries that have been removed from
        the clogHistoryTable in order to make room for new
        entries.  This object can be utilized to determine
        whether your polling frequency on the history table
        is fast enough and/or the size of your history table
        is large enough such that you are not missing
        messages."
 ::= { clogHistory 2 }

clogHistoryTable OBJECT-TYPE
    SYNTAX      SEQUENCE OF ClogHistoryEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "A table of syslog messages generated by this device.
        All 'interesting' syslog messages (i.e. severity <=
        clogMaxSeverity) are entered into this table."
 ::= { clogHistory 3 }

clogHistoryEntry OBJECT-TYPE
    SYNTAX      ClogHistoryEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "A syslog message that was previously generated by this
        device.  Each entry is indexed by a message index."
    INDEX{ clogHistIndex }
 ::= { clogHistoryTable 1 }

ClogHistoryEntry ::=
    SEQUENCE {
        clogHistIndex
            Integer32,
        clogHistFacility
            DisplayString,
        clogHistSeverity
            SyslogSeverity,

```

```

clogHistMsgName
    DisplayString,
clogHistMsgText
    DisplayString,
clogHistTimestamp
    TimeStamp
}

clogHistIndex OBJECT-TYPE
    SYNTAX      Integer32 (1..2147483647)
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "A monotonically increasing integer for the sole
        purpose of indexing messages.  When it reaches the
        maximum value the agent flushes the table and wraps
        the value back to 1."
    ::= { clogHistoryEntry 1 }

clogHistFacility OBJECT-TYPE
    SYNTAX      DisplayString (SIZE (1..20))
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "Name of the facility that generated this message.
        For example: 'SYS'."
    ::= { clogHistoryEntry 2 }

clogHistSeverity OBJECT-TYPE
    SYNTAX      SyslogSeverity
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The severity of the message."
    ::= { clogHistoryEntry 3 }

clogHistMsgName OBJECT-TYPE
    SYNTAX      DisplayString (SIZE (1..30))
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "A textual identification for the message type.  A
        facility name in conjunction with a message name
        uniquely identifies a message type."
    ::= { clogHistoryEntry 4 }

clogHistMsgText OBJECT-TYPE
    SYNTAX      DisplayString (SIZE (1..255))
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The text of the message.  If the text of the message
        exceeds 255 bytes, the message will be truncated to
        254 bytes and a '*' character will be appended -
        indicating that the message has been truncated."
    ::= { clogHistoryEntry 5 }

clogHistTimestamp OBJECT-TYPE
    SYNTAX      TimeStamp
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The value of sysUpTime when this message was generated."
    ::= { clogHistoryEntry 6 }

```

```

-- notifications

ciscoSyslogMIBNotificationPrefix OBJECT IDENTIFIER ::= { ciscoSyslogMIB 2 }
ciscoSyslogMIBNotifications OBJECT IDENTIFIER
    ::= { ciscoSyslogMIBNotificationPrefix 0 }

clogMessageGenerated NOTIFICATION-TYPE
    OBJECTS {clogHistFacility,
             clogHistSeverity,
             clogHistMsgName,
             clogHistMsgText,
             clogHistTimestamp
            }
    STATUS current
    DESCRIPTION
        "When a syslog message is generated by the device a
        clogMessageGenerated notification is sent. The
        sending of these notifications can be enabled/disabled
        via the clogNotificationsEnabled object."
    ::= { ciscoSyslogMIBNotifications 1 }

-- conformance information

ciscoSyslogMIBConformance OBJECT IDENTIFIER ::= { ciscoSyslogMIB 3 }
ciscoSyslogMIBCompliances OBJECT IDENTIFIER ::= { ciscoSyslogMIBConformance 1 }
ciscoSyslogMIBGroups OBJECT IDENTIFIER ::= { ciscoSyslogMIBConformance 2 }

-- compliance statements

ciscoSyslogMIBCompliance MODULE-COMPLIANCE
    STATUScurrent
    DESCRIPTION
        "The compliance statement for entities which implement
        the Cisco syslog MIB."
    MODULE-- this module
    MANDATORY-GROUPS { ciscoSyslogMIBGroup }
    ::= { ciscoSyslogMIBCompliances 1 }

-- units of conformance

ciscoSyslogMIBGroup OBJECT-GROUP
    OBJECTS {
        clogNotificationsSent,
        clogNotificationsEnabled,
        clogMaxSeverity,
        clogMsgIgnores,
        clogMsgDrops,
        clogHistTableMaxLength,
        clogHistMsgsFlushed,
        clogHistFacility,
        clogHistSeverity,
        clogHistMsgName,
        clogHistMsgText,
        clogHistTimestamp
    }
    STATUScurrent
    DESCRIPTION
        "A collection of objects providing the syslog MIB capability."
    ::= { ciscoSyslogMIBGroups 1 }

END

```