



Cisco Media Gateway Controller MIB Guide (Release 7)

July 26, 2001

Corporate Headquarters

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
<http://www.cisco.com>
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 526-4100

Text Part Number: OL-1235-01

THE SPECIFICATIONS AND INFORMATION REGARDING THE PRODUCTS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL STATEMENTS, INFORMATION, AND RECOMMENDATIONS IN THIS MANUAL ARE BELIEVED TO BE ACCURATE BUT ARE PRESENTED WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS.

THE SOFTWARE LICENSE AND LIMITED WARRANTY FOR THE ACCOMPANYING PRODUCT ARE SET FORTH IN THE INFORMATION PACKET THAT SHIPPED WITH THE PRODUCT AND ARE INCORPORATED HEREIN BY THIS REFERENCE. IF YOU ARE UNABLE TO LOCATE THE SOFTWARE LICENSE OR LIMITED WARRANTY, CONTACT YOUR CISCO REPRESENTATIVE FOR A COPY.

The following information is for FCC compliance of Class A devices: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio-frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case users will be required to correct the interference at their own expense.

The following information is for FCC compliance of Class B devices: The equipment described in this manual generates and may radiate radio-frequency energy. If it is not installed in accordance with Cisco's installation instructions, it may cause interference with radio and television reception. This equipment has been tested and found to comply with the limits for a Class B digital device in accordance with the specifications in part 15 of the FCC rules. These specifications are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation.

Modifying the equipment without Cisco's written authorization may result in the equipment no longer complying with FCC requirements for Class A or Class B digital devices. In that event, your right to use the equipment may be limited by FCC regulations, and you may be required to correct any interference to radio or television communications at your own expense.

You can determine whether your equipment is causing interference by turning it off. If the interference stops, it was probably caused by the Cisco equipment or one of its peripheral devices. If the equipment causes interference to radio or television reception, try to correct the interference by using one or more of the following measures:

- Turn the television or radio antenna until the interference stops.
- Move the equipment to one side or the other of the television or radio.
- Move the equipment farther away from the television or radio.
- Plug the equipment into an outlet that is on a different circuit from the television or radio. (That is, make certain the equipment and the television or radio are on circuits controlled by different circuit breakers or fuses.)

Modifications to this product not authorized by Cisco Systems, Inc. could void the FCC approval and negate your authority to operate the product.

The Cisco implementation of TCP header compression is an adaptation of a program developed by the University of California, Berkeley (UCB) as part of UCB's public domain version of the UNIX operating system. All rights reserved. Copyright © 1981, Regents of the University of California.

NOTWITHSTANDING ANY OTHER WARRANTY HEREIN, ALL DOCUMENT FILES AND SOFTWARE OF THESE SUPPLIERS ARE PROVIDED "AS IS" WITH ALL FAULTS. CISCO AND THE ABOVE-NAMED SUPPLIERS DISCLAIM ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON INFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE.

IN NO EVENT SHALL CISCO OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOSS OR DAMAGE TO DATA ARISING OUT OF THE USE OR INABILITY TO USE THIS MANUAL, EVEN IF CISCO OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

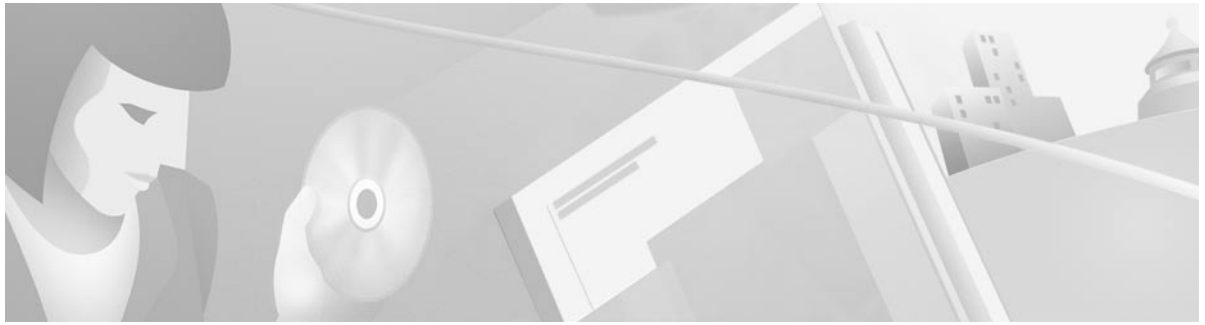
AccessPath, AtmDirector, Browse with Me, CCDE, CCIP, CCSI, CD-PAC, *CiscoLink*, the Cisco *NetWorks* logo, the Cisco *Powered* Network logo, Cisco Systems Networking Academy, the Cisco Systems Networking Academy logo, Fast Step, Follow Me Browsing, FormShare, FrameShare, GigaStack, IGX, Internet Quotient, IP/VC, iQ Breakthrough, iQ Expertise, iQ FastTrack, the iQ Logo, iQ Net Readiness Scorecard, MGX, the Networkers logo, *Packet*, RateMUX, ScriptBuilder, ScriptShare, SlideCast, SMARTnet, TransPath, Unity, Voice LAN, Wavelength Router, and WebViewer are trademarks of Cisco Systems, Inc.; Changing the Way We Work, Live, Play, and Learn, Discover All That's Possible, and Empowering the Internet Generation, are service marks of Cisco Systems, Inc.; and Aironet, ASIST, BPX, Catalyst, CCDA, CCDP, CCIE, CCNA, CCNP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, the Cisco IOS logo, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Enterprise/Solver, EtherChannel, EtherSwitch, FastHub, FastSwitch, IOS, IP/TV, LightStream, MICA, Network Registrar, PIX, Post-Routing, Pre-Routing, Registrar, StrataView Plus, Stratm, SwitchProbe, TeleRouter, and VCO are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the U.S. and certain other countries.

All other trademarks mentioned in this document or Web site are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0105R)

Document Objectives	v
Audience	v
Document Organization	vi
Document Conventions	vii
MIB Conventions	vii
Documentation Suite	vii
Obtaining Documentation	vii
World Wide Web	vii
Documentation CD-ROM	viii
Ordering Documentation	viii
Documentation Feedback	viii
Obtaining Technical Assistance	viii
Cisco.com	ix
Technical Assistance Center	ix
Contacting TAC by Using the Cisco TAC Website	ix
Contacting TAC by Telephone	ix
Management Information Base Overview	1-2
MIB Source	1-2
MIB Objects	1-2
MIB Archive	1-3
Simple Network Management Protocol	1-4
Internet MIB Hierarchy	1-5
SNMP MIB	1-6
Compliance	1-6
Cisco Compliance	1-6
Implementation	1-6
SNMP MIB Tables	1-7
Object Identifiers	2-1
TransPath Main Branches	2-1
Operational Core MIB Objects	2-2
TransPath Operational Component	2-2
Alarm Record Objects	2-4
Transpath Enterprise Specific Traps	2-6
Measurement-MIB Definitions	3-1
Imports	3-2
Measurement MIB Objects	3-2
TDM Interface Measurements Table	3-2

TDM Link Measurements Table	3-4
TDM Adapter Measurements Table	3-7
Auxiliary Signal Service Measurements Table	3-10
Signaling Service Measurements Table	3-12
SS7 Signaling Link Measurements Table	3-15
SS7 Signaling Service Measurements Table	3-18
ISDN PRI Link Measurements Table	3-19
SS7 ANSI ISUP Signal Service Measurements Table	3-21
SS7 ITU TUP Measurements Table	3-48
SSU ITU NUP Table	3-84
OVL State Table	3-86
SystemStat Table	3-89
TCAP Table	3-97
SCCP Table	3-104
CALL Table	3-107
	3-109
Imports	4-1
Textual Conventions	4-1
Host System MIBs	4-2
The Host Resources Storage Group	4-4
Host Resources Device Group	4-8
File System Table	4-21
Host Resources Running Software Group	4-26
Host Resources Running Software Performance Group	4-30
Host Resources Installed Software Group	4-31
Object Identifier	5-1
Critical Application MIBS	5-1
FS.MY	5-8
Object Identifiers	5-8
FS.MY	5-8
	5-16
MIB-2.MY	5-16
Groups in MIB-II	5-17
Historical	5-17
System group	5-17
Interfaces group	5-20
Interfaces table	5-20
Introduction	A-1
Introduction	B-1

Cisco Structured Management Information MIBs	B-1
ciscoAdmin assignments	B-4
Administrative assignments for repeaters	B-4
Administrative assignments for chip sets	B-5
Object Identifiers	C-1
snmpTargetObjects group	C-2



Preface

This preface describes the objectives, audience, organization, and conventions for this document and explains how to find information on related products and services. It contains the following sections:

- Document Objectives, page v
- Audience, page v
- Document Organization, page vi
- Document Conventions, page vii
- Documentation Suite, page vii
- Obtaining Documentation, page vii
- Obtaining Technical Assistance, page viii

Document Objectives

Management Information Base (MIB) files are provided with all Cisco MGC software releases. These files contain variables that you can set or read for information on network devices and interfaces. This guide describes the Simple Network Management Protocol Management (SNMP) MIBs for the software Release 7 media gateway controller (MGC).

Audience

The primary audience for this document is network operators and administrators who have experience in the following areas:

- Telecommunications network operations
- Data network operations
- SS7 protocols, switching, and routing
- Telecommunications hardware
- Data network hardware

In addition, the following audiences may find this document useful:

- Software and hardware installers

- Network designers

Document Organization

This document contains the following chapters:

Table 1 Document Contents

Chapter	Title	Content
Chapter 1	Introduction	Provides an overview of the media gateway MIBs. It also includes related documentation.
Chapter 2	Cisco Transpath TP MIBs	This chapter describes the Cisco Transpath TP MIBs.
Chapter 3	Cisco TP Measurement MIB	This chapter describes the Cisco TP Measurement MIBs.
Chapter 4	Host-Resources MIB Definitions	This chapter provides information about the host resource MIBs that are used to identify the manufacturer, model, and version of a specific hardware or software product.
Chapter 5	Critical Application MIBs	This chapter describes the critical application MIBs are represented by a string containing the full path to the binary as well as command line parameters that are passed to the standard command line shell of the operating system and used to invoke an external command.
Appendix A	SNMPINFO1.dat	This appendix provides information about object identifiers which uniquely designate any point in the hierarchical tree, whether object or branch point and provides a description of object identifier definition (OID).
Appendix B	Cisco Enterprise Structure of Management Information	This chapter provides a set of objects used for the structure of management information for the Cisco enterprise and consists of new object identifier definition (OID) assignments for Cisco REPEATER MIB and others.
Appendix C	SNMP Target MIB	SNMP target MIBs provide mechanisms to remotely configure the parameters used by an SNMP entity for the generation of SNMP messages.

Document Conventions

This guide uses the following conventions:



Note

Means *reader take note*. Notes contain helpful suggestions or references to materials not contained in this manual.

MIB Conventions

Table 2 provides descriptions of the command conventions used in this document.

Table 2 *Command Conventions*

Convention	Description of usage
{1500}	Value range
::= { snmpTargetAddrEntry 4 }	MIB symbol
Braces ({})	Alternate but required keywords and can be separated by vertical bars ().
Angle brackets (<>)	Nonprinting characters

Documentation Suite

Consult the following related documentation for information about the MIBs.

SNMP Notifications Developer's Guide, by Bob Stewart. This is a guide for the design, implementation, and testing of SNMP Traps and Informs.

The Simple Book, An Introduction to Network Management, by Marshall T. Rose. This book focuses on the Simple Network Management Protocol and revisions to the SNMPv2.

Obtaining Documentation

The following sections provide sources for obtaining documentation from Cisco Systems.

World Wide Web

You can access the most current Cisco documentation on the World Wide Web at the following sites:

- <http://www.cisco.com>
- <http://www-china.cisco.com>
- <http://www-europe.cisco.com>

Documentation CD-ROM

Cisco documentation and additional literature are available in a CD-ROM package, which ships with your product. The Documentation CD-ROM is updated monthly and may be more current than printed documentation. The CD-ROM package is available as a single unit or as an annual subscription.

Ordering Documentation

Cisco documentation is available in the following ways:

- Registered Cisco Direct Customers can order Cisco Product documentation from the Networking Products MarketPlace:
http://www.cisco.com/cgi-bin/order/order_root.pl
- Registered Cisco.com users can order the Documentation CD-ROM through the online Subscription Store:
<http://www.cisco.com/go/subscription>
- Nonregistered Cisco.com users can order documentation through a local account representative by calling Cisco corporate headquarters (California, USA) at 408 526-7208 or, in North America, by calling 800 553-NETS(6387).

Documentation Feedback

If you are reading Cisco product documentation on the World Wide Web, you can submit technical comments electronically. Click **Feedback** in the toolbar and select **Documentation**. After you complete the form, click **Submit** to send it to Cisco.

You can e-mail your comments to bug-doc@cisco.com.

To submit your comments by mail, for your convenience many documents contain a response card behind the front cover. Otherwise, you can mail your comments to the following address:

Cisco Systems, Inc.
Document Resource Connection
170 West Tasman Drive
San Jose, CA 95134-9883

We appreciate your comments.

Obtaining Technical Assistance

Cisco provides Cisco.com as a starting point for all technical assistance. Customers and partners can obtain documentation, troubleshooting tips, and sample configurations from online tools. For Cisco.com registered users, additional troubleshooting tools are available from the TAC website.

Cisco.com

Cisco.com is the foundation of a suite of interactive, networked services that provides immediate, open access to Cisco information and resources at anytime, from anywhere in the world. This highly integrated Internet application is a powerful, easy-to-use tool for doing business with Cisco.

Cisco.com provides a broad range of features and services to help customers and partners streamline business processes and improve productivity. Through Cisco.com, you can find information about Cisco and our networking solutions, services, and programs. In addition, you can resolve technical issues with online technical support, download and test software packages, and order Cisco learning materials and merchandise. Valuable online skill assessment, training, and certification programs are also available.

Customers and partners can self-register on Cisco.com to obtain additional personalized information and services. Registered users can order products, check on the status of an order, access technical support, and view benefits specific to their relationships with Cisco.

To access Cisco.com, go to the following website:

<http://www.cisco.com>

Technical Assistance Center

The Cisco TAC website is available to all customers who need technical assistance with a Cisco product or technology that is under warranty or covered by a maintenance contract.

Contacting TAC by Using the Cisco TAC Website

If you have a priority level 3 (P3) or priority level 4 (P4) problem, contact TAC by going to the TAC website:

<http://www.cisco.com/tac>

P3 and P4 level problems are defined as follows:

- P3—Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.
- P4—You need information or assistance on Cisco product capabilities, product installation, or basic product configuration.

In each of the above cases, use the Cisco TAC website to quickly find answers to your questions.

To register for Cisco.com, go to the following website:

<http://www.cisco.com/register/>

If you cannot resolve your technical issue by using the TAC online resources, Cisco.com registered users can open a case online by using the TAC Case Open tool at the following website:

<http://www.cisco.com/tac/caseopen>

Contacting TAC by Telephone

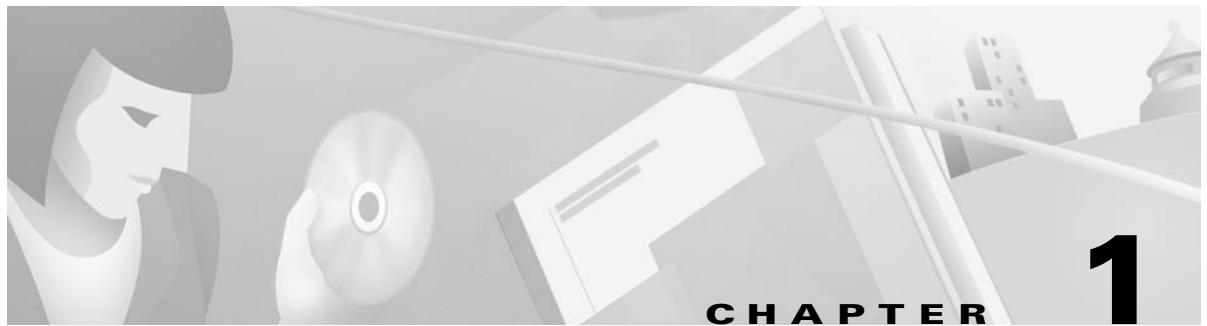
If you have a priority level 1 (P1) or priority level 2 (P2) problem, contact TAC by telephone and immediately open a case. To obtain a directory of toll-free numbers for your country, go to the following website:

<http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml>

P1 and P2 level problems are defined as follows:

- P1—Your production network is down, causing a critical impact to business operations if service is not restored quickly. No workaround is available.

P2—Your production network is severely degraded, affecting significant aspects of your business operations. No workaround is available.



Introduction

Network management takes place between two major types of systems: those in control, called managing systems, and those observed and controlled, called managed systems. The most common managing system is called a network management system (NMS). Managed systems can include hosts, servers, or network components such as routers or intelligent repeaters.

To promote interoperability, cooperating systems must adhere to a common framework and a common language, called a protocol. In the Internet network management framework, that protocol is the Simple Network Management Protocol (SNMP). SNMP is an application-layer protocol designed to facilitate the exchange of management information between network devices. The SNMP system consists of three parts:

- SNMP manager
- SNMP agent
- MIB

The Internet network management framework is based on the idea of a managing system interfacing to a managed system. The managing system is called a manager, and runs a network management application. The managed system is running an agent that answers requests from the manager. The manager and the managed system converse using the Simple Network Management Protocol (SNMP).

The “conversation” between the manager and the managed system is about the Management Information Base (MIB) that defines all the information that can be seen or changed by the manager. Portions of the MIB may be standard or proprietary and a similar concept of the MIB must be shared by both manager and agent.

SNMP and its MIBs are defined in a combination of system specific language and Abstract Syntax Notation 1 (ASN.1). ASN.1 is a rich definition language, but SNMP uses only a subset, defined in SNMP's Structure of Management Information (SMI). For transmission, SNMP is encoded according to ASN.1's basic encoding rules (BER).

SNMP may be carried over a wide choice of transport protocols. The most common combination is the User Datagram Protocol over the Internet Protocol, UDP/IP. Other possibilities include AppleTalk, Netware, or Ethernet.

SNMP has facilities for identifying the requester and the operational context in which a request is to be performed by the agent, such as read-only or read-write, a MIB subset for a particular group of users, or a subset that may be elsewhere or obtained through other mechanisms (proxy). These facilities are the ones concerned with security.

SNMP has a small number of MIB management operations it can perform for observation and control of MIB information, comprising various ways of reading (get operations), and one way of modifying (set operation).

This chapter includes the following sections:

- Management Information Base Overview, page 1-2
- Simple Network Management Protocol, page 1-4
- Internet MIB Hierarchy, page 1-5
- SNMP MIB, page 1-6

Management Information Base Overview

In a managed device, specialized low-impact software modules, called agents, access information about the device and make it available to the network management system (NMS). Managed devices maintain values for a number of variables and report those, as required, to the NMS. For example, an agent might report such data as the number of bytes and packets in and out of the device, or the number of broadcast messages sent and received. In the Internet network management framework, each variable is referred to as a managed object, which is anything that an agent can access and report back to the NMS.

All managed objects are contained in the Management Information Base (MIB) database. The managed objects, or variables, can be set or read to provide information on network devices and interfaces. An NMS can control a managed device by sending a message to an agent of that managed device requiring the device to change the value of one or more of its variables.

MIB Source

MIBs may come from various sources:

- **Standard**— on the IETF standards track at Proposed, Draft, or full standard. A Proposed Standard can change somewhat due to implementation experience. A Draft Standard changes somewhat less, with more attention to backward compatibility. A full Internet Standard doesn't change much. At all levels these are published as Requests for Comment (RFCs).
- **Internet Draft**—IETF work in progress. Sometimes the best way to instrument technology is with an Internet Draft MIB, which is typically being worked on by an IETF working group. Such MIBs are somewhat unstable, so it is necessary to capture the specific Internet Draft and to place the MIB within the Cisco Enterprise MIB space (not in the Experimental branch).
- **Cisco**—Cisco enterprise-specific (also called proprietary or private, even though publicly documented). Such MIBs add instrumentation not covered by standard MIBs. As of IOS Version 10.2, Cisco has old MIBs and new MIBs. The old MIBs are from older software versions and often have somewhat unconventional features.
- **Other companies**— non-Cisco enterprise-specific. It is occasionally appropriate to implement a MIB defined by some other company, especially when implemented technology they originated and instrumented. This has similar problems to Internet Drafts in that a version of the MIB definition must be captured, but the MIB itself should remain wherever in the MIB space the originating company put it so as to easily support existing applications.

MIB Objects

A MIB is a tree where the leaves are individual items of data called objects. An object may be, for example, a counter or a protocol status. MIB objects are also sometimes called variables. Note that the SNMP framework uses object in a somewhat different way than does OSI management. An OSI object

is a network entity, such as a router or a protocol, which has attributes. These OSI attributes and SNMP objects are essentially the same concept, that is, individual data values. See Appendix A for a detailed description. MIB object consists of the following values:

- Object type—identifies the type of MIB object.
- Syntax—identifies the data type which models the object.
- Access—identifies the maximum level of access and can have one of five values (listed from highest to lowest):
 - Read-create—indicates that instances of the object may be read, written, and created
 - Read-write—indicates that instance of the object may be read or written, but not created
 - Read-only—indicates that instances of the object may be read but not written or created
 - Accessible-for-notify—indicates that instances of the object may only appear in notifications
 - Not-accessible—indicates that instances of the object may not be directly read, written, or created.
- Status—the status of a managed object can be:
 - Mandatory—indicates that the definition is required and should be implemented
 - Current—indicates that the definition is current
 - Deprecated—indicates that the definition will soon be made obsolete and need no longer be implemented
 - Obsolete—indicates that managed nodes should not implement the object.
- Description—provides a textual description of the managed object

An example of a MIB object is shown below.

tpTDMIfCollectTimeInterval OBJECT-TYPE

```
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
```

This object shows measurement time interval seconds.

```
::= {tpTDMIfStatTableEntry 1}
```

For descriptions of supported MIBs and how to use MIBs, see the Cisco MIB web site on CCO at <http://www.cisco.com/public/sw-center/netmgmt/cmtk/mibs.shtml>.

MIB Archive

Cisco Management Information Bases (MIBs) are archived in Cisco's FTP server and are accessible via anonymous FTP at the following location: <ftp://ftp.cisco.com/pub/mibs>

Simple Network Management Protocol

Cisco MIB variables are accessible through the Simple Network Management Protocol (SNMP), which is an application-layer protocol designed to facilitate the exchange of management information between network devices.

Instead of defining a large set of commands, SNMP places all operations in a get-request, get-next-request, and set-request format. For example, an SNMP manager can get a value from an SNMP agent or store a value into that SNMP agent. The SNMP manager can be part of a network management system (NMS), and the SNMP agent can reside on a networking device such as a router. You can compile the Cisco MIB with your network management software. If SNMP is configured on a Catalyst Switch, the SNMP agent can respond to MIB-related queries being sent by the NMS.

An example of an NMS is the CiscoWorks network management software. CiscoWorks uses the Cisco MIB variables to set device variables and to poll devices on the internetwork for specific information. The results of a poll can be displayed as a graph and analyzed in order to troubleshoot internetwork problems, increase network performance, verify the configuration of devices, monitor traffic loads, and so on.

As shown in Figure 1, the SNMP agent gathers data from the MIB, which is the repository for information about device parameters and network data. The agent can send traps, or notification of certain events, to the manager. The Cisco trap file, `mib.traps`, which documents the format of the Cisco traps, is available on the Cisco host `ftp.cisco.com`.

Figure 1-1 Simple Network Management Protocol Network



The SNMP manager uses information in the MIB to perform the operations described in Table 1.

Table 1-1 SNMP Manager Operations

Operation	Description
get-request	Retrieve a value from a specific variable.
get-next-request	Retrieve a value from a variable within a table.
get-response	The reply to a get-request, get-next-request, and set-request sent by an NMS.
set-request	Store a value in a specific variable.
trap	An unsolicited message sent by an SNMP agent to an SNMP manager indicating that some event has occurred.

With this operation, an SNMP manager does not need to know the exact variable name. A sequential search is performed to find the needed variable from within a table.

Internet MIB Hierarchy

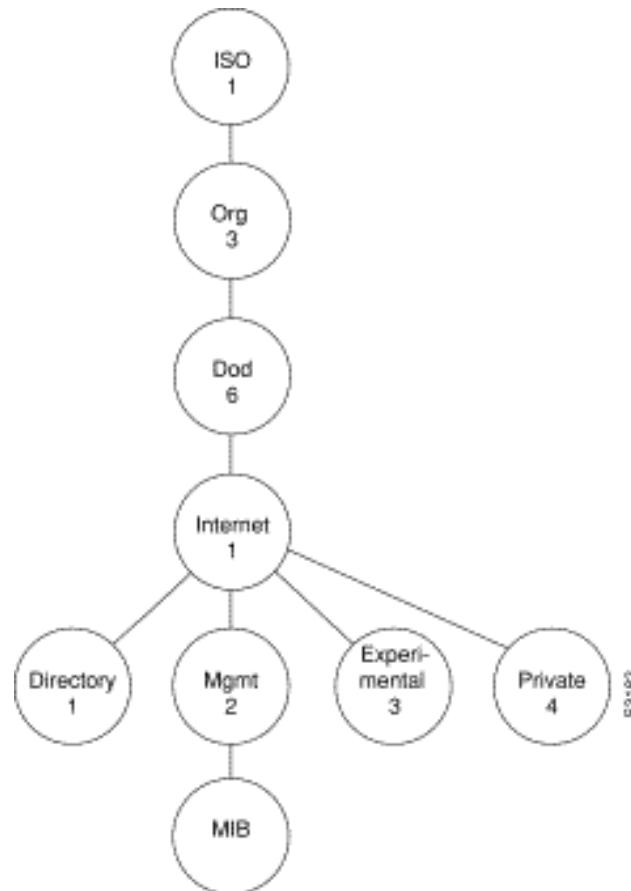
The MIB structure is logically represented by a tree hierarchy (see Figure 1-2). The structure uses branches and those that fall below each category have short text strings and integers to identify them. Text strings describe object names, while integers allow computer software to create compact, encoded representations of the names. For example, the Cisco MIB variable `authAddr` is an object name and is denoted by number 5, which is listed at the end of its object identifier number 1.3.6.1.4.1.9.2.1.5.

The object identifier in the Internet MIB hierarchy is the sequence of numeric labels on the nodes along a path from the root to the object. The Internet standard MIB is represented by the object identifier 1.3.6.1.2.1. It also can be expressed as `iso.org.dod.internet.mgmt.mib`. (See Figure 1-2.)


Note

The International Telecommunications Union Telecommunication Standardization Sector (ITU-T) carries out the functions of the former CCITT.

Figure 1-2 Internet MIB Hierarchy



SNMP MIB

An SNMP MIB is an abstract database, that is, a conceptual specification for information that a management application may read and modify in a certain form. This does not imply that the information is kept in the managed system in that same form. The SNMP agent translates between the internal data structures and formats of the managed system and the external data structures and formats defined for the MIB.

The SNMP MIB is conceptually a tree structure with conceptual tables, as discussed in more detail below. Relative to this tree structure, the term "MIB" is used in two senses. In one sense it is actually a MIB branch, usually containing information for a single aspect of technology, such as a transmission medium or a routing protocol.

A MIB used in this sense is more accurately called a MIB module, and is usually defined in a single document. In the other sense a MIB is a collection of such branches.

Such a collection might comprise, for example, all the MIB modules implemented by a given agent, or the entire collection of MIB modules defined for SNMP.

MIBs may be standard or enterprise. Internet standard MIBs are defined by working groups of the Internet Engineering Task Force (IETF) and published as Requests for Comment (RFCs). enterprise MIBs are defined by other organizations, usually individual companies. Done properly, enterprise MIBs instrument technology not covered by standard MIBs, whether completely or as an extension to a standard MIB.

The prototypical standard MIB is MIB-II, the second revision of the original SNMP MIB. MIB-II contained branches for the basic areas of instrumentation, such as the system, its network interfaces, IP, and TCP. All of these started out in a single MIB module, but as SNMPv2 evolves, they are being split into separate modules.

Compliance

Cisco MIBs are a set of variables that are private extensions to the Internet standard MIB II. The MIB II is documented in RFC 1213, Management Information Base for Network Management of TCP/IP-based Internets: MIB-I. It includes information on the benefits of the new feature, supported platforms, related documents, troubleshooting tips, configuration examples, and a detailed command reference.

Cisco Compliance

At present, Cisco implementations of standard MIBs are often read-only or have some objects or object groups missing due to security concerns and time pressure for implementation. Since IOS Version 10.2, the developer must document such specifics with AGENT-CAPABILITIES from RFC 1904.

Implementation

To find what MIBs Cisco implements, start at ftp-eng.cisco.com with [ftp://ftp-eng.cisco.com/pub/mibs/README](http://ftp-eng.cisco.com/pub/mibs/README).

This supplies a list of what MIBs are available in what software versions. This can not account for MIBs not included in a particular software subset or because a feature is turned off. This is the function of AGENT-CAPABILITIES descriptions and the `snmpORTable` (RFC 1907) in later software versions.

The documentation for how to implement a MIB is somewhat sketchy and distributed. As pieces of it coalesce, pointers will appear here. There are three major steps to implementing a MIB:

1. Design the MIB.
2. Generate skeleton code.
3. Add your code.

Once your MIB description document is complete, you run it through a MIB compiler to generate skeleton code to which you will add your own code. Our agent already exists, as do strict, detailed procedures for generating skeleton code. How your code fits into that structure depends somewhat on the access you have to the actual instrumentation and Cisco's conventions for modularity.

The primary documentation for this process is in the form of implemented MIBs and the section on establishing a MIB in the Writing MIBs appendix of the IOS

The following documentation is also available:

SNMP MIB Tables

Tables are a powerful and often confusing aspect of SNMP MIBs. Architectural purists say SNMP has conceptual tables, not real tables. This is because every object, whether in a table or not, is a leaf of the tree, identified by an OID that includes an instance. So, in an abstract sense, all objects are alike. But practically speaking, SNMP has tables and using or implementing them gets somewhat more complex than implementing scalars.

Tables have a rigid structure, defined in the SMI. Tables may contain only simple objects, not other tables, although multiple indexes can represent the concept of tables in tables. An entry, or row, in a table is uniquely identified by one or more table indexes, also called auxilliary objects. The OID of an object from a table is the OID for that object's position in the MIB tree concatenated with a representation of all the table indexes for an entry in the table.

For example, the Interface MIB (RFC 1573) has a key table called the ifTable. Its index object is ifIndex, an integer. Minus the instance, the OID for a counter from that table is:

```
iso.internet.mgmt.mib-2.interfaces.ifTable.ifEntry.ifInOctets
```

Or, numerically:

```
1.3.6.1.2.1.2.2.1.10
```

For the interface with ifIndex 7, the full OID is:

```
iso.internet.mgmt.mib-2.interfaces.ifTable.ifEntry.ifInOctets.7
```

```
1.3.6.1.2.1.2.2.1.10.7
```

Observe that row selection (instance) comes after column selection. This can be particularly confusing when applying the principle of lexical order to a table. Using the GetNext protocol operation to walk a table proceeds columnwise, that is, all instances for a column are returned before starting the next column.

Table indexes can be much more complex. Here's an example from the Cisco VINES MIB. The INDEX clause from the ASN.1 definition is:

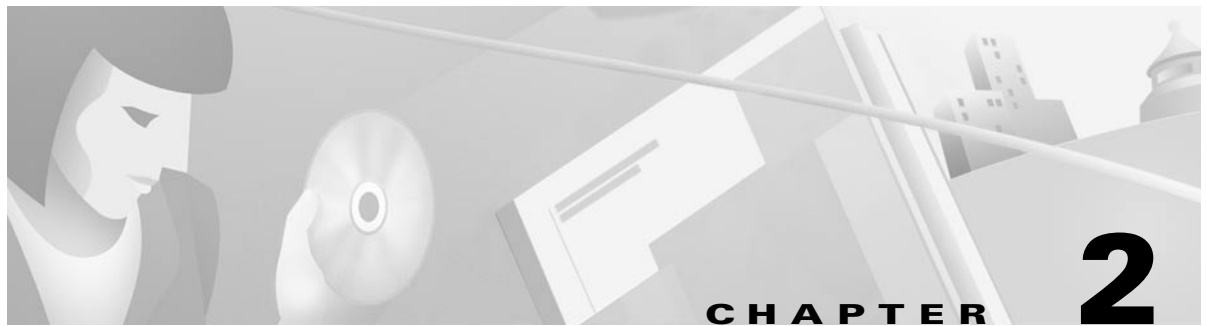
```
INDEX { cvForwNeighborHost,
        ifIndex,
        cvForwNeighborPhysAddress }
```

The first two indexes are simple integers, with `ifIndex` being imported from the standard `ifTable`. The final index is a variable length octet string. Including the integers is simple and obvious. The variable-length index object gets a bit more complex. RFC 1212 includes rules for encoding variable length index objects as instances. The general rule is that the value is preceded by a length and the length and each part of the value are separate subidentifiers.

So, for example, if we have neighbor host number 9, `ifIndex` 3, and an Ethernet neighbor physical address `0000.0c03.1ef0`, the instance portion of an object for that row is: `9.3.6.0.0.12.3.30.240`

In RFC 1902, SNMPv2 extends the instance encoding rules to include an "IMPLIED" keyword that can be used on the final instance object if it is variable length. When "IMPLIED" is present, that part of the instance does not have a length in front of it.

Note that lexical ordering for variable length instance objects effectively sorts them by length, so your ASCII text index won't come out naturally in alphabetical order.



Cisco Transpath TP MIBs

This chapter describes the Cisco Transpath TP MIBs identifies the TransPath operational component MIBs table and is used to:

- Revise the experimental branch of Cisco MIB tree
- Update the component table
 - Remove the tpComponentIndex
 - Provide better descriptions of the tpComponentId
- Re-design the operational mib

The Cisco Transpath TP MIB definitions include:

- Object Identifiers, page 2-1
- TransPath Main Branches, page 2-1
- Operational Core MIB Objects, page 2-2
- TransPath Operational Component, page 2-2
- Alarm Record Objects, page 2-4
- Transpath Enterprise Specific Traps, page 2-6

Object Identifiers

```
lightspeed      OBJECT IDENTIFIER ::= { enterprises 2496 }
lightspeedProducts OBJECT IDENTIFIER ::= { lightspeed 1 }
transpath       OBJECT IDENTIFIER ::= { lightspeedProducts 1 }
```

TransPath Main Branches

```
tpOperational   OBJECT IDENTIFIER ::= { transpath 1 }
tpProvisioning  OBJECT IDENTIFIER ::= { transpath 2 }
tpMeasurement   OBJECT IDENTIFIER ::= { transpath 3 }
tpTraps         OBJECT IDENTIFIER ::= { transpath 4 }
tpRecords       OBJECT IDENTIFIER ::= { transpath 5 }
```

Operational Core MIB Objects

ciscoTPOperationalMIB MODULE-IDENTITY

TransPath Operational Component

ciscoTPOperationalMIBObjects OBJECT IDENTIFIER ::= { ciscoTPOperationalMIB 1 }

tpCompGroup OBJECT IDENTIFIER ::= { ciscoTPOperationalMIBObjects 1 }

tpAlarmGroup OBJECT IDENTIFIER ::= { ciscoTPOperationalMIBObjects 2 }

tpCompTable OBJECT-TYPE

SYNTAX SEQUENCE OF TpCompTableEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"TransPath operational components table."

::= { tpCompGroup 1 }

tpCompTableEntry OBJECT-TYPE

SYNTAX TpCompTableEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"TransPath component entry definition."

INDEX { tpComponentId }

::= { tpCompTable 1 }

TpCompTableEntry ::=

SEQUENCE

{

tpComponentId INTEGER,

tpComponentType INTEGER,

tpCompParentId INTEGER,

tpCompMMLName DisplayString,

tpCompDesc DisplayString,

tpCompOpStatus DisplayString

}

tpComponentId OBJECT-TYPE

SYNTAX INTEGER (1.. 4294967295)

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"The component identification number. This number consists of two parts, the component type and component instance. The most significant 2-bytes signifies the component type, and the lower 2 bytes is the sequential instance of the type."

::= { tpCompTableEntry 1 }

tpComponentType OBJECT-TYPE

SYNTAX INTEGER (1.. 4294967295)

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"The component type identification number.i"

::= { tpCompTableEntry 2 }

tpCompParentId OBJECT-TYPE

SYNTAX INTEGER (1.. 4294967295)

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"The component parent identification."

::= { tpCompTableEntry 3 }

tpCompMMLName OBJECT-TYPE

SYNTAX DisplayString (SIZE (1.. 20))

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This is a short notation of the component name. It is also the MML (man-machine language) name that can be used in the MML session."

::= { tpCompTableEntry 4 }

tpCompDesc OBJECT-TYPE
 SYNTAX DisplayString (SIZE (0.. 128))
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 "The component description"
 ::= { tpCompTableEntry 5 }

tpCompOpStatus OBJECT-TYPE
 SYNTAX DisplayString (SIZE (0.. 15))
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 "The operational status of the component"
 ::= { tpCompTableEntry 6 }

Alarm Record Objects

tpAlarmObject OBJECT IDENTIFIER ::= { tpRecords 5 }

tpAlarmId OBJECT-TYPE
 SYNTAX INTEGER (1.. 4294967295)
 MAX-ACCESS not-accessible
 STATUS current
 DESCRIPTION
 "The alarm identification"
 ::= { tpAlarmObject 1 }

tpAlarmCatId OBJECT-TYPE
 SYNTAX INTEGER (1.. 90000)
 MAX-ACCESS not-accessible
 STATUS current
 DESCRIPTION
 "The alarm category identification number"
 ::= { tpAlarmObject 2 }

tpAlarmCatName OBJECT-TYPE

SYNTAX DisplayString (SIZE (0.. 15))
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION
 "The alarm category name"
 ::= { tpAlarmObject 3 }

tpAlarmCatDesc OBJECT-TYPE
SYNTAX DisplayString (SIZE (0.. 128))
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION
 "The alarm category description"
 ::= { tpAlarmObject 4 }

tpAlarmSet OBJECT-TYPE
SYNTAX INTEGER
{
 clear (1),
 set (2)
}
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION
 "The alarm set or not."
 ::= { tpAlarmObject 5 }

tpAlarmNotify OBJECT-TYPE
SYNTAX INTEGER
{
 no (1),
 yes (2)
}
MAX-ACCESS read-only
STATUS current
DESCRIPTION
 "The alarm has been notified or not."
 ::= { tpAlarmObject 6 }

tpAlarmSeverity OBJECT-TYPE

SYNTAX INTEGER

```
{
    informational (1),
    minor (2),
    major (3),
    critical (4)
}
```

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"The alarm severity."

::= {tpAlarmObject 7}

tpAlarmReported OBJECT-TYPE

SYNTAX INTEGER

```
{
    no (1),
    yes (2)
}
```

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"The alarm reported."

::= {tpAlarmObject 8}

tpAlarmTime OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"The time when alarm occurred."

::= {tpAlarmObject 9}

Transpath Enterprise Specific Traps

commAlarm NOTIFICATION-TYPE

OBJECTS

```
{
tpAlarmId,
    tpAlarmCatId,
    tpAlarmCatName,
    tpAlarmCatDesc,
    tpAlarmSet,
    tpAlarmNotify,
    tpAlarmSeverity,
    tpAlarmReported,
tpComponentId,
tpComponentType,
tpCompMMLName,
tpCompDesc,
tpCompParentId,
tpAlarmTime
}
```

STATUS current

DESCRIPTION

"Notification of a communication error. This shows which component had failed, the fault type and severity level and the time it occurred from the MIB-II restart time. Because many of the failures need to be described in detail for troubleshooting, an alarm log is written with supplemental information. The trap and log are correlated based on the alarm time."

::= {tpTraps 1}

qualityOfService NOTIFICATION-TYPE

OBJECTS

```
{
tpAlarmId,
    tpAlarmCatId,
    tpAlarmCatName,
    tpAlarmCatDesc,
    tpAlarmSet,
    tpAlarmNotify,
    tpAlarmSeverity,
}
```

```

        tpAlarmReported,
tpComponentId,
tpComponentType,
tpCompMMLName,
tpCompDesc,
tpCompParentId,
        tpAlarmTime
    }
STATUS current
DESCRIPTION
    "Notification when there is a failure in the quality of service.
    This shows which component had failed, its operational status,
    fault type and severity level and the time it occurred from the
    MIB-II restart time. Because many of the failures need to be
    described in detail for troubleshooting, an alarm log is written
    with supplemental information. The trap and log are correlated
    based on the alarm time."
 ::= { tpTraps 2 }

```

```
processingError NOTIFICATION-TYPE
```

```
OBJECTS
```

```
{
```

```

tpAlarmId,
        tpAlarmCatId,
        tpAlarmCatName,
        tpAlarmCatDesc,
        tpAlarmSet,
        tpAlarmNotify,
        tpAlarmSeverity,
        tpAlarmReported,
tpComponentId,
tpComponentType,
tpCompMMLName,
tpCompDesc,
tpCompParentId,
        tpAlarmTime
    }
STATUS current

```

DESCRIPTION

"Notification of a process fault. This shows which component had failed, its operational status, fault type and severity level and the time it occurred from the MIB-II restart time. Because many of the failures need to be described in detail for troubleshooting, an alarm log is written with supplemental information. The trap and log are correlated based on the alarm time."

::= {tpTraps 3}

equipmentError NOTIFICATION-TYPE

OBJECTS

```
{
tpAlarmId,
    tpAlarmCatId,
    tpAlarmCatName,
    tpAlarmCatDesc,
    tpAlarmSet,
    tpAlarmNotify,
    tpAlarmSeverity,
    tpAlarmReported,
tpComponentId,
tpComponentType,
tpCompMMLName,
tpCompDesc,
tpCompParentId,
    tpAlarmTime
}
```

STATUS current

DESCRIPTION

"Notification of an equipment error in the TransPath system. This shows which component had failed, its operational status, fault type and severity level and the time it occurred from the MIB-II restart time. Because many of the failures need to be described in detail for troubleshooting, an alarm log is written with supplemental information. The trap and log are correlated based on the alarm time."

::= {tpTraps 4}

environmentError NOTIFICATION-TYPE

OBJECTS

{

tpAlarmId,

tpAlarmCatId,

tpAlarmCatName,

tpAlarmCatDesc,

tpAlarmSet,

tpAlarmNotify,

tpAlarmSeverity,

tpAlarmReported,

tpComponentId,

tpComponentType,

tpCompMMLName,

tpCompDesc,

tpCompParentId,

tpAlarmTime

}

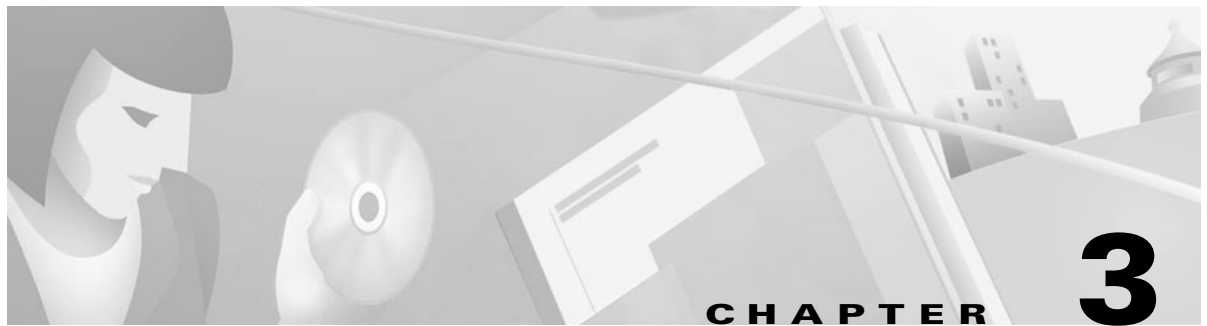
STATUS current

DESCRIPTION

"Notification of an TransPath system.s environment problem.

This shows which component had failed, its operational status, fault type and severity level and the time it occurred from the MIB-II restart time. Because many of the failures need to be described in detail for troubleshooting, an alarm log is written with supplemental information. The trap and log are correlated based on the alarm time."

::= {tpTraps 5}



Cisco TP Measurement MIB

This chapter describes the Cisco TP Measurement MIBs and identifies the time measurement component MIBs.

Measurement-MIB Definitions

The Cisco Measurement MIB definitions are:

- Imports, page 3-2
- Measurement-MIB Definitions, page 3-1
 - TDM Interface Measurements Table, page 3-2
 - TDM Link Measurements Table, page 3-4
 - Auxiliary Signal Service Measurements Table, page 3-10
 - Signaling Service Measurements Table, page 3-12
 - SS7 Signaling Link Measurements Table, page 3-15
 - SS7 Signaling Service Measurements Table, page 3-18
 - ISDN PRI Link Measurements Table, page 3-19
 - SS7 ANSI ISUP Signal Service Measurements Table, page 3-21
 - SS7 ITU TUP Measurements Table, page 3-48
 - SSU ITU NUP Table, page 3-84
 - OVL State Table, page 3-86
 - SystemStat Table, page 3-89
 - TCAP Table, page 3-97
 - SCCP Table, page 3-104
 - CALL Table, page 3-107
 - tpSIPLinkStat Table, page 3-109
 - , page 3-109
 - New TALI Counters Table, page 3-145
 - CAS Table, page 3-154

Imports

```

MODULE-IDENTITY, OBJECT-TYPE,
Counter32, Gauge32, Integer32, TimeTicks    FROM SNMPv2-SMI
MODULE-COMPLIANCE, OBJECT-GROUP            FROM SNMPv2-CONF
TEXTUAL-CONVENTION, DisplayString,
DateAndTime                                FROM SNMPv2-TC
tpMeasurement, tpComponentId FROM CISCO-TRANSPATH-MIB;

```

Measurement MIB Objects

```

ciscoTPMeasurementMIB MODULE-IDENTITY
DESCRIPTION

```

TDM Interface Measurements Table

```

tpTDMIfStatTable OBJECT-TYPE
    SYNTAX SEQUENCE OF TpTDMIfStatTableEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION

```

This table defines line interface statistics.

```
 ::= { tpMeasurement 2 }
```

```

tpTDMIfStatTableEntry OBJECT-TYPE
    SYNTAX TpTDMIfStatTableEntry
    MAX-ACCESS not-accessible
    STATUS current
    DESCRIPTION

```

This table defines line interface statistics

```
INDEX { tpComponentId, tpTDMIfCollectTimeInterval }
```

```
 ::= { tpTDMIfStatTable 1 }
```

```
TpTDMIfStatTableEntry ::=
```

```
SEQUENCE
```

```
{
```

```
    tpTDMIfCollectTimeInterval
```

```
        Counter32,
```

```
    tpTDMIfCollectTime
```

```

    TimeTicks,
    tpTDMIfSevereErrorSec
    Counter32,
    tpTDMIfErrorSec
    Counter32,
    tpTDMIfCodeViolation
    Counter32,
    tpTDMIfFrameSlip
    Counter32
}

```

tpTDMIfCollectTimeInterval OBJECT-TYPE

```

SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION

```

This object shows measurement time interval seconds.

```
 ::= { tpTDMIfStatTableEntry 1 }
```

tpTDMIfCollectTime OBJECT-TYPE

```

SYNTAX TimeTicks
MAX-ACCESS read-only
STATUS current
DESCRIPTION

```

This object shows the time measurement is taken

```
 ::= { tpTDMIfStatTableEntry 2 }
```

tpTDMIfSevereErrorSec OBJECT-TYPE

```

SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION

```

This object shows the severely error second of line interface during the most recent collection interval.

```
 ::= { tpTDMIfStatTableEntry 3 }
```

tpTDMIfErrorSec OBJECT-TYPE

```

SYNTAX Counter32
MAX-ACCESS read-only
STATUS current

```

DESCRIPTION

This object shows the error second of line interface during the most recent collection interval. It is not collected on the ITK card.

::= {tpTDMIfStatTableEntry 4}

tpTDMIfCodeViolation OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“this object shows the coding violation of line interface during the most recent collection interval. It is not collected on the ITK card.”

::= {tpTDMIfStatTableEntry 5}

tpTDMIfFrameSlip OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

This object shows the frame slip of line interface during the most recent collection interval. It is not collected on the ITK card.

::= {tpTDMIfStatTableEntry 6}

TDM Link Measurements Table

tpTDMLinkStatTable OBJECT-TYPE

SYNTAX SEQUENCE OF TpTDMLinkStatTableEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

This table defines signal channel statistics”

::= {tpMeasurement 3}

tpTDMLinkStatTableEntry OBJECT-TYPE

SYNTAX TpTDMLinkStatTableEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

This table defines signal channel statistics”

```
INDEX {tpComponentId,tpTDMLinkCollectTimeInterval}
 ::= {tpTDMLinkStatTable 1}
```

```
TpTDMLinkStatTableEntry ::=
```

```
SEQUENCE
{
  tpTDMLinkCollectTimeInterval
    Counter32,
  tpTDMLinkCollectTime
    TimeTicks,
  tpTDMLinkXmitFrame
    Counter32,
  tpTDMLinkRcvFrame
    Counter32,
  tpTDMLinkRcvBadCRC
    Counter32,
  tpTDMLinkRcvBadFrame
    Counter32,
  tpTDMLinkRcvBadFRMR
    Counter32,
  tpTDMLinkRcvRESET
    Counter32
}
```

```
tpTDMLinkCollectTimeInterval OBJECT-TYPE
```

```
SYNTAX Counter32
```

```
MAX-ACCESS read-only
```

```
STATUS current
```

```
DESCRIPTION
```

```
“This object shows measurement time interval seconds”
```

```
::= {tpTDMLinkStatTableEntry 1}
```

```
tpTDMLinkCollectTime OBJECT-TYPE
```

```
SYNTAX TimeTicks
```

```
MAX-ACCESS read-only
```

```
STATUS current
```

```
DESCRIPTION
```

```
“This object shows the time measurement is taken”
```

::= {tpTDMLinkStatTableEntry 2}

tpTDMLinkXmitFrame OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the total frame transmitted during the most recent collection interval.”

::= {tpTDMLinkStatTableEntry 3}

tpTDMLinkRcvFrame OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the total frame received during the most recent collection interval.”

::= {tpTDMLinkStatTableEntry 4}

tpTDMLinkRcvBadCRC OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the total received badCRC frames during the most recent collection interval.”

::= {tpTDMLinkStatTableEntry 5}

tpTDMLinkRcvBadFrame OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the total bad frames during the most recent collection interval.”

::= {tpTDMLinkStatTableEntry 6}

tpTDMLinkRcvBadFRMR OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the total bad FRMR during the most recent collection interval.”

::= {tpTDMLinkStatTableEntry 7}

tpTDMLinkRcvRESET OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the total RESET during the most recent collection interval.”

::= {tpTDMLinkStatTableEntry 8}

TDM Adapter Measurements Table

tpTDMAAdapterStatTable OBJECT-TYPE

SYNTAX SEQUENCE OF TpTDMAAdapterStatTableEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

“This table defines data link statistics”

::= {tpMeasurement 4}

tpTDMAAdapterStatTableEntry OBJECT-TYPE

SYNTAX TpTDMAAdapterStatTableEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

“This table defines data link statistics”

INDEX {tpComponentId,tpTDMAAdapterCollectTimeInterval}

::= {tpTDMAAdapterStatTable 1}

TpTDMAAdapterStatTableEntry ::=

SEQUENCE

{

tpTDMAAdapterCollectTimeInterval

Counter32,

tpTDMAAdapterCollectTime

TimeTicks,

```

tpTDMAadapterRcvUnsolicited
    Counter32,
tpTDMAadapterRcvSABME
    Counter32,
tpTDMAadapterXmitT200
    Counter32,
tpTDMAadapterRcvBadSeq
    Counter32,
tpTDMAadapterRcvBadResp
    Counter32,
tpTDMAadapterRcvBadSize
    Counter32,
tpTDMAadapterRcvSABMR
    Counter32
}

```

tpTDMAadapterCollectTimeInterval OBJECT-TYPE

```

SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
    "This object shows measurement time interval seconds"
 ::= { tpTDMAadapterStatTableEntry 1 }

```

tpTDMAadapterCollectTime OBJECT-TYPE

```

SYNTAX TimeTicks
MAX-ACCESS read-only
STATUS current
DESCRIPTION
    "This object shows the time measurement is taken"
 ::= { tpTDMAadapterStatTableEntry 2 }

```

tpTDMAadapterRcvUnsolicited OBJECT-TYPE

```

SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION

```

“This object shows the occurrences of unsolicited frames received on data link during the most recent collection interval.”

::= {tpTDMAAdapterStatTableEntry 3}

tpTDMAAdapterRcvSABME OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of SABME rcv on this data link during the most recent collection interval.”

::= {tpTDMAAdapterStatTableEntry 4}

tpTDMAAdapterXmitT200 OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of T200 expires on data link during the most recent collection interval.”

::= {tpTDMAAdapterStatTableEntry 5}

tpTDMAAdapterRcvBadSeq OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of bad N(R) frames during the most recent collection interval.”

::= {tpTDMAAdapterStatTableEntry 6}

tpTDMAAdapterRcvBadResp OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of the bad frame responses during the most recent collection interval.”

::= {tpTDMAAdapterStatTableEntry 7}

tpTDMAadapterRcvBadSize OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of bad frame size during the most recent collection interval.”

::= {tpTDMAadapterStatTableEntry 8}

tpTDMAadapterRcvSABMR OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of DPNSS SABMR rcvd during the most recent collection interval.”

::= {tpTDMAadapterStatTableEntry 9}

Auxiliary Signal Service Measurements Table

tpAuxSigServiceStatTable OBJECT-TYPE

SYNTAX SEQUENCE OF TpAuxSigServiceStatTableEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

“This table defines auxiliary signal path statistics”

::= {tpMeasurement 5}

tpAuxSigServiceStatTableEntry OBJECT-TYPE

SYNTAX TpAuxSigServiceStatTableEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

“This table defines auxiliary signal path statistics”

INDEX {tpComponentId,tpASPCollectTimeInterval}

::= {tpAuxSigServiceStatTable 1}

TpAuxSigServiceStatTableEntry ::=

SEQUENCE

```

{
  tpASPCollectTimeInterval
    Counter32,
  tpASPCollectTime
    TimeTicks,
  tpASPXmitMSG
    Counter32,
  tpASPRcvMSG
    Counter32,
  tpASPRcvConnReq
    Counter32
}

```

tpASPCollectTimeInterval OBJECT-TYPE

```

SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
  "This object shows measurement time interval seconds"
 ::= { tpAuxSigServiceStatTableEntry 1 }

```

tpASPCollectTime OBJECT-TYPE

```

SYNTAX TimeTicks
MAX-ACCESS read-only
STATUS current
DESCRIPTION
  "This object shows measurement time"
 ::= { tpAuxSigServiceStatTableEntry 2 }

```

tpASPXmitMSG OBJECT-TYPE

```

SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION

```

"This object shows messages xmitted on auxiliary signal path during the most recent collection interval."

```

 ::= { tpAuxSigServiceStatTableEntry 3 }

```

tpASPRcvMSG OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows messages received on auxiliary signal path during the most recent collection interval.”

::= {tpAuxSigServiceStatTableEntry 4}

tpASPRcvConnReq OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows number of call init messages on auxiliary signal path”

::= {tpAuxSigServiceStatTableEntry 5}

Signaling Service Measurements Table

tpSigServiceStatTable OBJECT-TYPE

SYNTAX SEQUENCE OF TpSigServiceStatTableEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

“This table defines Signaling Service statistics”

::= {tpMeasurement 6}

tpSigServiceStatTableEntry OBJECT-TYPE

SYNTAX TpSigServiceStatTableEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

“This table defines Signaling Service statistics”

INDEX {tpComponentId,tpSigServiceCollectTimeInterval}

::= {tpSigServiceStatTable 1}

TpSigServiceStatTableEntry ::=

SEQUENCE

{

```

    tpSigServiceCollectTimeInterval
        Counter32,
    tpSigServiceCollectTime
        TimeTicks,
    tpSigServiceRcvCallInitMSG
        Counter32,
    tpSigServiceXmitCallInitMSG
        Counter32,
    tpSigServicePDUIn
        Counter32,
    tpSigServicePDUOut
        Counter32,
    tpSigServiceBLThrhldCtr
        Counter32,
    tpSigServiceCOTFailure
        Counter32
}

tpSigServiceCollectTimeInterval OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This object shows measurement time interval seconds."
    ::= { tpSigServiceStatTableEntry 1 }

tpSigServiceCollectTime OBJECT-TYPE
    SYNTAX TimeTicks
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This object shows Signaling Service measurement time."
    ::= { tpSigServiceStatTableEntry 2 }

tpSigServiceRcvCallInitMSG OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current

```

DESCRIPTION

“This object shows number call init messages received during the most recent collection interval.”

::= {tpSigServiceStatTableEntry 3}

tpSigServiceXmitCallInitMSG OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows number call init messages xmit out during the most recent collection interval.”

::= {tpSigServiceStatTableEntry 4}

tpSigServicePDUIn OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows number of messages received during the most recent collection interval.”

::= {tpSigServiceStatTableEntry 5}

tpSigServicePDUOut OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the number of messages xmit out during the most recent collection interval.”

::= {tpSigServiceStatTableEntry 6}

tpSigServiceBLThrhldCtr OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the number of Blacklist threshold counter during the most recent collection interval.”

::= {tpSigServiceStatTableEntry 7}

tpSigServiceCOTFailure OBJECT-TYPE

SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 “This object shows the number of Cot failures during the most recent collection interval.”
 ::= {tpSigServiceStatTableEntry 8}

SS7 Signaling Link Measurements Table

tpSS7LinkStatTable OBJECT-TYPE
 SYNTAX SEQUENCE OF TpSS7LinkStatTableEntry
 MAX-ACCESS not-accessible
 STATUS current
 DESCRIPTION
 “This table defines SS7Link statistics”
 ::= {tpMeasurement 7}

tpSS7LinkStatTableEntry OBJECT-TYPE
 SYNTAX TpSS7LinkStatTableEntry
 MAX-ACCESS not-accessible
 STATUS current
 DESCRIPTION
 “This table defines SS7Link statistics”
 INDEX {tpComponentId,tpSS7LinkCollectTimeInterval}
 ::= {tpSS7LinkStatTable 1}

TpSS7LinkStatTableEntry ::=

SEQUENCE

{

tpSS7LinkCollectTimeInterval
 Counter32,

tpSS7LinkCollectTime
 TimeTicks,

tpSS7LinkRcvSUErr
 Counter32,

tpSS7LinkXmitSIOTot
 Counter32,

tpSS7LinkRcvSIOTot

```

        Counter32,
tpSS7LinkDurIS
        Counter32,
tpSS7LinkDurUnavail
        Counter32,
tpSS7LinkMessageDropCongest
        Counter32
    }

tpSS7LinkCollectTimeInterval OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This object shows measurement time interval seconds."
    ::= { tpSS7LinkStatTableEntry 1 }

tpSS7LinkCollectTime OBJECT-TYPE
    SYNTAX TimeTicks
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This object shows measurement time."
    ::= { tpSS7LinkStatTableEntry 2 }

tpSS7LinkRcvSUErr OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This object shows occurrences of signaling units rcv total during the most recent collection
interval."
    ::= { tpSS7LinkStatTableEntry 3 }

tpSS7LinkXmitSIOTot OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current

```

DESCRIPTION

“This object shows occurrences of link signaling nits rcv total during the most recent collection interval.”

::= {tpSS7LinkStatTableEntry 4}

tpSS7LinkRcvSIOTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of link realignment (SIF/SIO) tot during the most recent collection interval.”

::= {tpSS7LinkStatTableEntry 5}

tpSS7LinkDurIS OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows seconds of c7 link duration in-service during the most recent collection interval.”

::= {tpSS7LinkStatTableEntry 6}

tpSS7LinkDurUnavail OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows seconds of duration unavailable during the most recent collection interval.”

::= {tpSS7LinkStatTableEntry 7}

tpSS7LinkMessageDropCongest OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows count of messages dropped due to congestion total during the most recent collection interval.”

::= {tpSS7LinkStatTableEntry 8}

SS7 Signaling Service Measurements Table

tpSS7SigServiceStatTable OBJECT-TYPE

SYNTAX SEQUENCE OF TpSS7SigServiceStatTableEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

“This table defines SS7 SignalPath statistics”

::= { tpMeasurement 8 }

tpSS7SigServiceStatTableEntry OBJECT-TYPE

SYNTAX TpSS7SigServiceStatTableEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

“This table defines SS7 SP statistics”

INDEX { tpComponentId, tpSS7SigServiceCollectTimeInterval }

::= { tpSS7SigServiceStatTable 1 }

TpSS7SigServiceStatTableEntry ::=

SEQUENCE

{

tpSS7SigServiceCollectTimeInterval

Counter32,

tpSS7SigServiceCollectTime

TimeTicks,

tpSS7SigServiceDurUnavail

Counter32,

tpSS7SigServiceXmitMessageDropRTE

Counter32

}

tpSS7SigServiceCollectTimeInterval OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows measurement time interval seconds.”

::= {tpSS7SigServiceStatTableEntry 1}

tpSS7SigServiceCollectTime OBJECT-TYPE

SYNTAX TimeTicks

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows measurement time.”

::= {tpSS7SigServiceStatTableEntry 2}

tpSS7SigServiceDurUnavail OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows SP duration unavailable during the most recent collection interval.”

::= {tpSS7SigServiceStatTableEntry 3}

tpSS7SigServiceXmitMessageDropRTE OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows xmitted messages dropped due to routing failure during the most recent collection interval.”

::= {tpSS7SigServiceStatTableEntry 4}

ISDN PRI Link Measurements Table

tpPRILinkStatTable OBJECT-TYPE

SYNTAX SEQUENCE OF TpPRILinkStatTableEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

“This table defines ISDN PRI Link statistics”

::= {tpMeasurement 9}

tpPRILinkStatTableEntry OBJECT-TYPE

SYNTAX TpPRILinkStatTableEntry

```

MAX-ACCESS not-accessible
STATUS current
DESCRIPTION
    "This table defines PRI Link statistics"
INDEX { tpComponentId,tpPRILinkCollectTimeInterval }
 ::= { tpPRILinkStatTable 1 }

TpPRILinkStatTableEntry ::=
SEQUENCE
{
    tpPRILinkCollectTimeInterval
        Counter32,
    tpPRILinkCollectTime
        TimeTicks,
    tpPRILinkChanMateUnavailable
        Counter32
}

tpPRILinkCollectTimeInterval OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
    "This object shows measurement time interval seconds."
 ::= { tpPRILinkStatTableEntry 1 }

tpPRILinkCollectTime OBJECT-TYPE
SYNTAX TimeTicks
MAX-ACCESS read-only
STATUS current
DESCRIPTION
    "This object shows measurement time."
 ::= { tpPRILinkStatTableEntry 2 }

tpPRILinkChanMateUnavailable OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current

```

DESCRIPTION

“This object shows the occurrences of ISDN PRI link channel mate unavail during the most recent collection interval.”

::= {tpPRILinkStatTableEntry 3}

SS7 ANSI ISUP Signal Service Measurements Table

tpISUPSigServiceStatTable OBJECT-TYPE

SYNTAX SEQUENCE OF TpISUPSigServiceStatTableEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

“This table defines ISUP statistics”

::= {tpMeasurement 10}

tpISUPSigServiceStatTableEntry OBJECT-TYPE

SYNTAX TpISUPSigServiceStatTableEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

“This table defines ISUP statistics”

INDEX {tpComponentId,tpISUPSigServiceCollectTimeInterval}

::= {tpISUPSigServiceStatTable 1}

TpISUPSigServiceStatTableEntry ::=

SEQUENCE

{

tpISUPSigServiceCollectTimeInterval

Counter32,

tpISUPSigServiceCollectTime

TimeTicks,

tpISUPSigServiceXmitMsgTot

Counter32,

tpISUPSigServiceRcvMsgTot

Counter32,

tpISUPSigServiceXmitACMTot

Counter32,

tpISUPSigServiceRcvACMTot

Counter32,
tpISUPSigServiceXmitANMTot
Counter32,
tpISUPSigServiceRcvANMTot
Counter32,
tpISUPSigServiceXmitBLOTot
Counter32,
tpISUPSigServiceRcvBLOTot
Counter32,
tpISUPSigServiceXmitBLATot
Counter32,
tpISUPSigServiceRcvBLATot
Counter32,
tpISUPSigServiceXmitCPGTot
Counter32,
tpISUPSigServiceRcvCPGTot
Counter32,
tpISUPSigServiceXmitCGBTot
Counter32,
tpISUPSigServiceRcvCGBTot
Counter32,
tpISUPSigServiceXmitCGBATot
Counter32,
tpISUPSigServiceRcvCGBATot
Counter32,
tpISUPSigServiceXmitGRSTot
Counter32,
tpISUPSigServiceRcvGRSTot
Counter32,
tpISUPSigServiceXmitGRATot
Counter32,
tpISUPSigServiceRcvGRATot
Counter32,
tpISUPSigServiceXmitCGUTot
Counter32,
tpISUPSigServiceRcvCGUTot
Counter32,
tpISUPSigServiceXmitCGUATot

Counter32,
tpISUPSigServiceRcvCGUATot
Counter32,
tpISUPSigServiceXmitCFNTot
Counter32,
tpISUPSigServiceRcvCFNTot
Counter32,
tpISUPSigServiceXmitCONTot
Counter32,
tpISUPSigServiceRcvCONTot
Counter32,
tpISUPSigServiceXmitIAMTot
Counter32,
tpISUPSigServiceRcvIAMTot
Counter32,
tpISUPSigServiceXmitINFTot
Counter32,
tpISUPSigServiceRcvINFTot
Counter32,
tpISUPSigServiceXmitINRTot
Counter32,
tpISUPSigServiceRcvINRTot
Counter32,
tpISUPSigServiceXmitRELTot
Counter32,
tpISUPSigServiceRcvRELTot
Counter32,
tpISUPSigServiceXmitRLCTot
Counter32,
tpISUPSigServiceRcvRLCTot
Counter32,
tpISUPSigServiceXmitRSCTot
Counter32,
tpISUPSigServiceRcvRSCTot
Counter32,
tpISUPSigServiceXmitRESTot
Counter32,
tpISUPSigServiceRcvRESTot

Counter32,
tpISUPSigServiceXmitSAMTot
Counter32,
tpISUPSigServiceRcvSAMTot
Counter32,
tpISUPSigServiceXmitSUSTot
Counter32,
tpISUPSigServiceRcvSUSTot
Counter32,
tpISUPSigServiceXmitUBLTot
Counter32,
tpISUPSigServiceRcvUBLTot
Counter32,
tpISUPSigServiceXmitUBATot
Counter32,
tpISUPSigServiceRcvUBATot
Counter32,
tpISUPSigServiceXmitUSRTot
Counter32,
tpISUPSigServiceRcvUSRTot
Counter32,
tpISUPSigServiceXmitCCRTot
Counter32,
tpISUPSigServiceRcvCCRTot
Counter32,
tpISUPSigServiceXmitCOTTot
Counter32,
tpISUPSigServiceRcvCOTTot
Counter32,
tpISUPSigServiceXmitCQMTot
Counter32,
tpISUPSigServiceRcvCQMTot
Counter32,
tpISUPSigServiceXmitCQRTot
Counter32,
tpISUPSigServiceRcvCQRTot
Counter32,
tpISUPSigServiceXmitCRATot

Counter32,
tpISUPSigServiceRcvCRATot
Counter32,
tpISUPSigServiceXmitCRMTot
Counter32,
tpISUPSigServiceRcvCRMTot
Counter32,
tpISUPSigServiceXmitCVRTot
Counter32,
tpISUPSigServiceRcvCVRTot
Counter32,
tpISUPSigServiceXmitCVTTot
Counter32,
tpISUPSigServiceRcvCVTTot
Counter32,
tpISUPSigServiceXmitEXMTot
Counter32,
tpISUPSigServiceRcvEXMTot
Counter32,
tpISUPSigServiceXmitFACTot
Counter32,
tpISUPSigServiceRcvFACTot
Counter32,
tpISUPSigServiceXmitFOTTot
Counter32,
tpISUPSigServiceRcvFOTTot
Counter32,
tpISUPSigServiceXmitLPATot
Counter32,
tpISUPSigServiceRcvLPATot
Counter32,
tpISUPSigServiceXmitPAMTot
Counter32,
tpISUPSigServiceRcvPAMTot
Counter32,
tpISUPSigServiceXmitUCICTot
Counter32,
tpISUPSigServiceRcvUCICTot

```

        Counter32,
tpISUPSigServiceXmitFAATot
        Counter32,
tpISUPSigServiceRcvFAATot
        Counter32,
tpISUPSigServiceXmitFADTot
        Counter32,
tpISUPSigServiceRcvFADTot
        Counter32,
tpISUPSigServiceXmitFARTot
        Counter32,
tpISUPSigServiceRcvFARTot
        Counter32,
tpISUPSigServiceXmitFRJTot
        Counter32,
tpISUPSigServiceRcvFRJTot
        Counter32,
tpISUPSigServiceXmitSGMTot
        Counter32,
tpISUPSigServiceRcvSGMTot
        Counter32,
tpISUPSigServiceXmitMPMTot
        Counter32,
tpISUPSigServiceRcvMPMTot
        Counter32,
tpISUPSigServiceABNRelTot
        Counter32,
tpISUPSigServiceUNEXMSGTot
        Counter32,
tpISUPSigServiceUNRECMSTot
        Counter32,
tpISUPSigServiceCHANMateUnvailTot
        Counter32,
tpISUPAOCTot
        Counter32
    }

tpISUPSigServiceCollectTimeInterval OBJECT-TYPE

```

SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
 “This object shows measurement time interval seconds.”
 ::= { tpISUPSigServiceStatTableEntry 1 }

tpISUPSigServiceCollectTime OBJECT-TYPE

SYNTAX TimeTicks
MAX-ACCESS read-only
STATUS current
DESCRIPTION
 “This object shows measurement time.”
 ::= { tpISUPSigServiceStatTableEntry 2 }

tpISUPSigServiceXmitMsgTot OBJECT-TYPE

SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
 “This object shows occurrences of message xmitted total during the most recent collection interval.”
 ::= { tpISUPSigServiceStatTableEntry 3 }

tpISUPSigServiceRcvMsgTot OBJECT-TYPE

SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
 “This object shows occurrences of message rec total during the most recent collection interval.”
 ::= { tpISUPSigServiceStatTableEntry 4 }

tpISUPSigServiceXmitACMTot OBJECT-TYPE

SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
 “This object shows occurrences of message ACM xmitted total during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 5}

tpISUPSigServiceRcvACMTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message ACM rev total during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 6}

tpISUPSigServiceXmitANMTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message ANM total during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 7}

tpISUPSigServiceRcvANMTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message ANM total during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 8}

tpISUPSigServiceXmitBLOTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of BLO message total during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 9}

tpISUPSigServiceRcvBLOTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message BLO received total during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 10}

tpISUPSigServiceXmitBLATot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message BLA total during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 11}

tpISUPSigServiceRcvBLATot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message BLA during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 12}

tpISUPSigServiceXmitCPGTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message CPG xmitted during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 13}

tpISUPSigServiceRcvCPGTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message CPG received during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 14}

tpISUPSigServiceXmitCGBTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message CGB xmitted during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 15}

tpISUPSigServiceRcvCGBTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message CGB received during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 16}

tpISUPSigServiceXmitCGBATot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message CGB xmitted during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 17}

tpISUPSigServiceRcvCGBATot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message CGB received during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 18}

tpISUPSigServiceXmitGRSTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message GRS xmitted during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 19}

tpISUPSigServiceRcvGRSTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message GRS received during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 20}

tpISUPSigServiceXmitGRATot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message GRA xmitted during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 21}

tpISUPSigServiceRcvGRATot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message GRA received during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 22}

tpISUPSigServiceXmitCGUTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message CGU xmitted during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 23}

tpISUPSigServiceRcvCGUTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message CGU received during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 24}

tpISUPSigServiceXmitCGUATot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message CGUA xmitted during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 25}

tpISUPSigServiceRcvCGUATot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message CGUA received during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 26}

tpISUPSigServiceXmitCFNTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message CFN xmitted during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 27}

tpISUPSigServiceRcvCFNTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message CFN received during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 28}

tpISUPSigServiceXmitCONTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message CON xmitted during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 29}

tpISUPSigServiceRcvCONTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message CON received during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 30}

tpISUPSigServiceXmitIAMTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message IAM xmitted during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 31}

tpISUPSigServiceRcvIAMTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message IAM received during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 32}

tpISUPSigServiceXmitINFTot OBJECT-TYPE

SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 “This object shows occurrences of message INF xmitted during the most recent collection interval.”
 ::= {tpISUPSigServiceStatTableEntry 33}

tpISUPSigServiceRcvINFToT OBJECT-TYPE

SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 “This object shows occurrences of message INF received during the most recent collection interval.”
 ::= {tpISUPSigServiceStatTableEntry 34}

tpISUPSigServiceXmitINRTot OBJECT-TYPE

SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 “This object shows occurrences of message INR xmitted during the most recent collection interval.”
 ::= {tpISUPSigServiceStatTableEntry 35}

tpISUPSigServiceRcvINRTot OBJECT-TYPE

SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 “This object shows occurrences of message INR received during the most recent collection interval.”
 ::= {tpISUPSigServiceStatTableEntry 36}

tpISUPSigServiceXmitRELTot OBJECT-TYPE

SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 “This object shows occurrences of message REL xmitted during the most recent collection interval.”
 ::= {tpISUPSigServiceStatTableEntry 37}

tpISUPSigServiceRcvRELTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message REL received during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 38}

tpISUPSigServiceXmitRLCTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message RLC xmitted during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 39}

tpISUPSigServiceRcvRLCTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message RLC received during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 40}

tpISUPSigServiceXmitRSCTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message RSC xmitted during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 41}

tpISUPSigServiceRcvRSCTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message RSC received during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 42}

tpISUPSigServiceXmitRESTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message RES xmitted during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 43}

tpISUPSigServiceRcvRESTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message RES received during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 44}

tpISUPSigServiceXmitSAMTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message SAM xmitted during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 45}

tpISUPSigServiceRcvSAMTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message SAM received during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 46}

tpISUPSigServiceXmitSUSTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message SUS xmitted during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 47}

tpISUPSigServiceRcvSUSTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message SUS received during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 48}

tpISUPSigServiceXmitUBLTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message UBL xmitted during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 49}

tpISUPSigServiceRcvUBLTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message UBL received during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 50}

tpISUPSigServiceXmitUBATot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message UBA xmitted during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 51}

tpISUPSigServiceRcvUBATot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message UBA received during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 52}

tpISUPSigServiceXmitUSRTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message USR xmitted during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 53}

tpISUPSigServiceRcvUSRTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message USR received during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 54}

tpISUPSigServiceXmitCCRTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of messageCCR xmitted during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 55}

tpISUPSigServiceRcvCCRTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message CCR received during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 56}

tpISUPSigServiceXmitCOTTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of messageCOT xmitted during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 57}

tpISUPSigServiceRcvCOTTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message COT received during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 58}

tpISUPSigServiceXmitCQMTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message CQM xmitted during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 59}

tpISUPSigServiceRcvCQMTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message CQM received during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 60}

tpISUPSigServiceXmitCQRTot OBJECT-TYPE

SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 “This object shows occurrences of message CQR xmitted during the most recent collection interval.”
 ::= {tpISUPSigServiceStatTableEntry 61}

tpISUPSigServiceRcvCQRTot OBJECT-TYPE

SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 “This object shows occurrences of message CQR received during the most recent collection interval.”
 ::= {tpISUPSigServiceStatTableEntry 62}

tpISUPSigServiceXmitCRATot OBJECT-TYPE

SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 “This object shows occurrences of message CRA xmitted during the most recent collection interval.”
 ::= {tpISUPSigServiceStatTableEntry 63}

tpISUPSigServiceRcvCRATot OBJECT-TYPE

SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 “This object shows occurrences of message CRA received during the most recent collection interval.”
 ::= {tpISUPSigServiceStatTableEntry 64}

tpISUPSigServiceXmitCRMTot OBJECT-TYPE

SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION

“This object shows occurrences of message CRM xmitted during the most recent collection interval.”
 ::= {tpISUPSigServiceStatTableEntry 65 }

tpISUPSigServiceRcvCRMTot OBJECT-TYPE

SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION

“This object shows occurrences of message CRM received during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 66 }

tpISUPSigServiceXmitCVRTot OBJECT-TYPE

SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION

“This object shows occurrences of message CVR xmitted during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 67 }

tpISUPSigServiceRcvCVRTot OBJECT-TYPE

SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION

“This object shows occurrences of message CVR received during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 68 }

tpISUPSigServiceXmitCVTTot OBJECT-TYPE

SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION

“This object shows occurrences of message CVT xmitted during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 69 }

tpISUPSigServiceRcvCVTTot OBJECT-TYPE

SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 “This object shows occurrences of message CVT received during the most recent collection interval.”
 ::= {tpISUPSigServiceStatTableEntry 70}

tpISUPSigServiceXmitEXMTot OBJECT-TYPE

SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 “This object shows occurrences of message EXM xmitted during the most recent collection interval.”
 ::= {tpISUPSigServiceStatTableEntry 71}

tpISUPSigServiceRcvEXMTot OBJECT-TYPE

SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 “This object shows occurrences of message EXM received during the most recent collection interval.”
 ::= {tpISUPSigServiceStatTableEntry 72}

tpISUPSigServiceXmitFACTot OBJECT-TYPE

SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 “This object shows occurrences of message FAC xmitted during the most recent collection interval.”
 ::= {tpISUPSigServiceStatTableEntry 73}

tpISUPSigServiceRcvFACTot OBJECT-TYPE

SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 “This object shows occurrences of message FAC received during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 74}

tpISUPSigServiceXmitFOTTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message FOT xmitted during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 75}

tpISUPSigServiceRcvFOTTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message FOT received during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 76}

tpISUPSigServiceXmitLPATot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message LPA xmitted during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 77}

tpISUPSigServiceRcvLPATot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object show occurrences of message LPA received during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 78}

tpISUPSigServiceXmitPAMTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message PAM xmitted during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 79}

tpISUPSigServiceRcvPAMTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message PAM received during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 80}

tpISUPSigServiceXmitUCICTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message UCIC xmitted during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 81}

tpISUPSigServiceRcvUCICTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message UCIC received during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 82}

tpISUPSigServiceXmitFAATot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message FAA xmitted during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 83}

tpISUPSigServiceRcvFAATot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message FAA received during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 84}

tpISUPSigServiceXmitFADTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message FAD xmitted during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 85}

tpISUPSigServiceRcvFADTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message FAD received during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 86}

tpISUPSigServiceXmitFARTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message FAR xmitted during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 87}

tpISUPSigServiceRcvFARTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message FAR received during the most recent collection interval.”
 ::= {tpISUPSigServiceStatTableEntry 88}

tpISUPSigServiceXmitFRJTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message FRJ xmitted during the most recent collection interval.”
 ::= {tpISUPSigServiceStatTableEntry 89}

tpISUPSigServiceRcvFRJTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message FRJ received during the most recent collection interval.”
 ::= {tpISUPSigServiceStatTableEntry 90}

tpISUPSigServiceXmitSGMTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message SGM xmitted during the most recent collection interval.”
 ::= {tpISUPSigServiceStatTableEntry 91}

tpISUPSigServiceRcvSGMTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message SGM received during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 92}

tpISUPSigServiceXmitMPMTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message MPM xmitted during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 93}

tpISUPSigServiceRcvMPMTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of message MPM received during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 94}

tpISUPSigServiceABNRelTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of abnormal clear msg received during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 95}

tpISUPSigServiceUNEXMSGTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of unexpected msg received during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 96}

tpISUPSigServiceUNRECMSGTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of unrecog msg received during the most recent collection interval.”
 ::= {tpISUPSigServiceStatTableEntry 97}

tpISUPSigServiceCHANMateUnvailTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of Channel Mate Unavailable received during the most recent collection interval.”

::= {tpISUPSigServiceStatTableEntry 98}

tpISUPAOCTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows occurrences of calls that have invoked the Advice-of-Charge feature.”

::= {tpISUPSigServiceStatTableEntry 99}

SS7 ITU TUP Measurements Table

tpTUPSigServiceStatTable OBJECT-TYPE

SYNTAX SEQUENCE OF TpTUPSigServiceStatTableEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

“This table defines Telephone User Part statistics”

::= {tpMeasurement 11}

tpTUPSigServiceStatTableEntry OBJECT-TYPE

SYNTAX TpTUPSigServiceStatTableEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

“This table defines Telephone User Part statistics”

INDEX {tpComponentId,tpTUPSigServiceCollectTimeInterval}

::= {tpTUPSigServiceStatTable 1}

```
TpTUPSigServiceStatTableEntry ::=
SEQUENCE
{
    tpTUPSigServiceCollectTimeInterval
        Counter32,
    tpTUPSigServiceCollectTime
        TimeTicks,
    tpTUPSigServiceXmitMSGTot
        Counter32,
    tpTUPSigServiceRcvMSGTot
        Counter32,
    tpTUPSigServiceXmitACBTot
        Counter32,
    tpTUPSigServiceRcvACBTot
        Counter32,
    tpTUPSigServiceXmitACCTot
        Counter32,
    tpTUPSigServiceRcvACCTot
        Counter32,
    tpTUPSigServiceXmitACMTot
        Counter32,
    tpTUPSigServiceRcvACMTot
        Counter32,
    tpTUPSigServiceXmitADITot
        Counter32,
    tpTUPSigServiceRcvADITot
        Counter32,
    tpTUPSigServiceXmitANCTot
        Counter32,
    tpTUPSigServiceRcvANCTot
        Counter32,
    tpTUPSigServiceXmitANNTot
        Counter32,
    tpTUPSigServiceRcvANNTot
        Counter32,
    tpTUPSigServiceXmitANUTot
        Counter32,
```

tpTUPSigServiceRcvANUTot
Counter32,
tpTUPSigServiceXmitBLOTot
Counter32,
tpTUPSigServiceRcvBLOTot
Counter32,
tpTUPSigServiceXmitBLATot
Counter32,
tpTUPSigServiceRcvBLATot
Counter32,
tpTUPSigServiceXmitCBKTot
Counter32,
tpTUPSigServiceRcvCBKTot
Counter32,
tpTUPSigServiceXmitCCFTot
Counter32,
tpTUPSigServiceRcvCCFTot
Counter32,
tpTUPSigServiceXmitCCLTot
Counter32,
tpTUPSigServiceRcvCCLTot
Counter32,
tpTUPSigServiceXmitCCRTot
Counter32,
tpTUPSigServiceRcvCCRTot
Counter32,
tpTUPSigServiceXmitCFLTot
Counter32,
tpTUPSigServiceRcvCFLTot
Counter32,
tpTUPSigServiceXmitCGCTot
Counter32,
tpTUPSigServiceRcvCGCTot
Counter32,
tpTUPSigServiceXmitCHGTot
Counter32,
tpTUPSigServiceRcvCHGTot
Counter32,

tpTUPSigServiceXmitCLFTot
Counter32,
tpTUPSigServiceRcvCLFTot
Counter32,
tpTUPSigServiceXmitCOTTot
Counter32,
tpTUPSigServiceRcvCOTTot
Counter32,
tpTUPSigServiceXmitDPNTot
Counter32,
tpTUPSigServiceRcvDPNTot
Counter32,
tpTUPSigServiceXmitEUMTot
Counter32,
tpTUPSigServiceRcvEUMTot
Counter32,
tpTUPSigServiceXmitFOTTot
Counter32,
tpTUPSigServiceRcvFOTTot
Counter32,
tpTUPSigServiceXmitGRATot
Counter32,
tpTUPSigServiceRcvGRATot
Counter32,
tpTUPSigServiceXmitGRQTot
Counter32,
tpTUPSigServiceRcvGRQTot
Counter32,
tpTUPSigServiceXmitGRSTot
Counter32,
tpTUPSigServiceRcvGRSTot
Counter32,
tpTUPSigServiceXmitGSMTot
Counter32,
tpTUPSigServiceRcvGSMTot
Counter32,
tpTUPSigServiceXmitHBATot
Counter32,

tpTUPSigServiceRcvHBATot
Counter32,
tpTUPSigServiceXmitHGBTot
Counter32,
tpTUPSigServiceRcvHGBTot
Counter32,
tpTUPSigServiceXmitHGUTot
Counter32,
tpTUPSigServiceRcvHGUTot
Counter32,
tpTUPSigServiceXmitHUATot
Counter32,
tpTUPSigServiceRcvHUATot
Counter32,
tpTUPSigServiceXmitIAITot
Counter32,
tpTUPSigServiceRcvIAITot
Counter32,
tpTUPSigServiceXmitIAMTot
Counter32,
tpTUPSigServiceRcvIAMTot
Counter32,
tpTUPSigServiceXmitLOSTot
Counter32,
tpTUPSigServiceRcvLOSTot
Counter32,
tpTUPSigServiceXmitMALTot
Counter32,
tpTUPSigServiceRcvMALTot
Counter32,
tpTUPSigServiceXmitMBATot
Counter32,
tpTUPSigServiceRcvMBATot
Counter32,
tpTUPSigServiceXmitMGBTot
Counter32,
tpTUPSigServiceRcvMGBTot
Counter32,

tpTUPSigServiceXmitMGUTot
Counter32,
tpTUPSigServiceRcvMGUTot
Counter32,
tpTUPSigServiceXmitMPMTot
Counter32,
tpTUPSigServiceRcvMPMTot
Counter32,
tpTUPSigServiceXmitMUATot
Counter32,
tpTUPSigServiceRcvMUATot
Counter32,
tpTUPSigServiceXmitNNCTot
Counter32,
tpTUPSigServiceRcvNNCTot
Counter32,
tpTUPSigServiceXmitOPRTot
Counter32,
tpTUPSigServiceRcvOPRTot
Counter32,
tpTUPSigServiceXmitRANTot
Counter32,
tpTUPSigServiceRcvRANTot
Counter32,
tpTUPSigServiceXmitRLGTot
Counter32,
tpTUPSigServiceRcvRLGTot
Counter32,
tpTUPSigServiceXmitRSCTot
Counter32,
tpTUPSigServiceRcvRSCTot
Counter32,
tpTUPSigServiceXmitSAMTot
Counter32,
tpTUPSigServiceRcvSAMTot
Counter32,
tpTUPSigServiceXmitSAOTot
Counter32,

tpTUPSigServiceRcvSAOTot
Counter32,
tpTUPSigServiceXmitSBATot
Counter32,
tpTUPSigServiceRcvSBATot
Counter32,
tpTUPSigServiceXmitSECTot
Counter32,
tpTUPSigServiceRcvSECTot
Counter32,
tpTUPSigServiceXmitSGBTot
Counter32,
tpTUPSigServiceRcvSGBTot
Counter32,
tpTUPSigServiceXmitSGUTot
Counter32,
tpTUPSigServiceRcvSGUTot
Counter32,
tpTUPSigServiceXmitSLBTot
Counter32,
tpTUPSigServiceRcvSLBTot
Counter32,
tpTUPSigServiceXmitSSBTot
Counter32,
tpTUPSigServiceRcvSSBTot
Counter32,
tpTUPSigServiceXmitSSTTot
Counter32,
tpTUPSigServiceRcvSSTTot
Counter32,
tpTUPSigServiceXmitSTBTot
Counter32,
tpTUPSigServiceRcvSTBTot
Counter32,
tpTUPSigServiceXmitSUATot
Counter32,
tpTUPSigServiceRcvSUATot
Counter32,

```

tpTUPSigServiceXmitUBATot
    Counter32,
tpTUPSigServiceRcvUBATot
    Counter32,
tpTUPSigServiceXmitUBLTot
    Counter32,
tpTUPSigServiceRcvUBLTot
    Counter32,
tpTUPSigServiceXmitUNNTot
    Counter32,
tpTUPSigServiceRcvUNNTot
    Counter32,
tpTUPSigServiceAbnormalRelTot
    Counter32,
tpTUPSigServiceUnexpectedMSGTot
    Counter32,
tpTUPSigServiceUnrecognisedMSGTot
    Counter32,
tpTUPSigServiceCHANMateUnavailTot
    Counter32
}

tpTUPSigServiceCollectTimeInterval OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This object shows measurement time interval seconds."
    ::= { tpTUPSigServiceStatTableEntry 1 }

tpTUPSigServiceCollectTime OBJECT-TYPE
    SYNTAX TimeTicks
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This object shows measurement time."
    ::= { tpTUPSigServiceStatTableEntry 2 }

```

tpTUPSigServiceXmitMSGTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

MSG xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 3}

tpTUPSigServiceRcvMSGTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

MSG received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 4}

tpTUPSigServiceXmitACBTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

ACB xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 5}

tpTUPSigServiceRcvACBTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

ACB received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 6}

tpTUPSigServiceXmitACCTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

ACC xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 7}

tpTUPSigServiceRcvACCTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart: ACC received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 8}

tpTUPSigServiceXmitACMTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

ACM xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 9}

tpTUPSigServiceRcvACMTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

ACM received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 10}

tpTUPSigServiceXmitADITot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 11}

tpTUPSigServiceRevADITot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
ADI received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 12}

tpTUPSigServiceXmitANCTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
ANC xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 13}

tpTUPSigServiceRevANCTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
ANC received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 14}

tpTUPSigServiceXmitANNTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

ANN xmitted total during the most recent collection interval.”
 ::= {tpTUPSigServiceStatTableEntry 15}

tpTUPSigServiceRcvANNTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

ANN received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 16}

tpTUPSigServiceXmitANUTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

ANU xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 17}

tpTUPSigServiceRcvANUTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

ANU received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 18}

tpTUPSigServiceXmitBLOTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

BLO xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 19}

tpTUPSigServiceRcvBLOTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

BLO received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 20}

tpTUPSigServiceXmitBLATot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

BLA xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 21}

tpTUPSigServiceRcvBLATot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

BLA received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 22}

tpTUPSigServiceXmitCBKTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

CBK xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 23}

tpTUPSigServiceRcvCBKTot OBJECT-TYPE

SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
 “This object shows the occurrences of Telephone UserPart:
 CBK received total during the most recent collection interval.”
::= {tpTUPSigServiceStatTableEntry 24}

tpTUPSigServiceXmitCCFTot OBJECT-TYPE

SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
 “This object shows the occurrences of Telephone UserPart:
 CCF xmitted total during the most recent collection interval.”
::= {tpTUPSigServiceStatTableEntry 25}

tpTUPSigServiceRcvCCFTot OBJECT-TYPE

SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
 “This object shows the occurrences of Telephone UserPart:
 CCF received total during the most recent collection interval.”
::= {tpTUPSigServiceStatTableEntry 26}

tpTUPSigServiceXmitCCLTot OBJECT-TYPE

SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
 “This object shows the occurrences of Telephone UserPart:
 CCL xmitted total during the most recent collection interval.”
::= {tpTUPSigServiceStatTableEntry 27}

tpTUPSigServiceRcvCCLTot OBJECT-TYPE

SYNTAX Counter32
MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

CCL received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 28}

tpTUPSigServiceXmitCCRTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

CCR xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 29}

tpTUPSigServiceRcvCCRTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

CCR received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 30}

tpTUPSigServiceXmitCFLTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

CFL xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 31}

tpTUPSigServiceRcvCFLTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
CFL received total during the most recent collection interval.”
::= {tpTUPSigServiceStatTableEntry 32}

tpTUPSigServiceXmitCGCTot OBJECT-TYPE

SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
CGC xmitted total during the most recent collection interval.”
::= {tpTUPSigServiceStatTableEntry 33}

tpTUPSigServiceRcvCGCTot OBJECT-TYPE

SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
received total during the most recent collection interval.”
::= {tpTUPSigServiceStatTableEntry 34}

tpTUPSigServiceXmitCHGTot OBJECT-TYPE

SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
CHG xmitted total during the most recent collection interval.”
::= {tpTUPSigServiceStatTableEntry 35}

tpTUPSigServiceRcvCHGTot OBJECT-TYPE

SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
CHG received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 36}

tpTUPSigServiceXmitCLFTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
CLF xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 37}

tpTUPSigServiceRevCLFTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 38}

tpTUPSigServiceXmitCOTTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
CLF xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 39}

tpTUPSigServiceRevCOTTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
COT received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 40}

tpTUPSigServiceXmitDPNTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

DPN xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 41}

tpTUPSigServiceRcvDPNTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

DPN received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 42}

tpTUPSigServiceXmitEUMTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

EUM xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 43}

tpTUPSigServiceRcvEUMTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

EUM received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 44}

tpTUPSigServiceXmitFOTTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 “This object shows the occurrences of Telephone UserPart:
 FOT xmitted total during the most recent collection interval.”
 ::= {tpTUPSigServiceStatTableEntry 45}

tpTUPSigServiceRcvFOTTot OBJECT-TYPE
 SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 “This object shows the occurrences of Telephone UserPart:
 FOT received total during the most recent collection interval.”
 ::= {tpTUPSigServiceStatTableEntry 46}

tpTUPSigServiceXmitGRATot OBJECT-TYPE
 SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 “This object shows the occurrences of Telephone UserPart:
 GRA xmitted total during the most recent collection interval.”
 ::= {tpTUPSigServiceStatTableEntry 47}

tpTUPSigServiceRcvGRATot OBJECT-TYPE
 SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 “This object shows the occurrences of Telephone UserPart:
 GRA received total during the most recent collection interval.”
 ::= {tpTUPSigServiceStatTableEntry 48}

tpTUPSigServiceXmitGRQTot OBJECT-TYPE
 SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
GRQ xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 49}

tpTUPSigServiceRcvGRQTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
GRQ received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 50}

tpTUPSigServiceXmitGRSTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
GRS xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 51}

tpTUPSigServiceRcvGRSTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
GRS received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 52}

tpTUPSigServiceXmitGSMTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

GSM xmitted total during the most recent collection interval.”
 ::= {tpTUPSigServiceStatTableEntry 53}

tpTUPSigServiceRcvGSMTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

GSM received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 54}

tpTUPSigServiceXmitHBATot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

HGA xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 55}

tpTUPSigServiceRcvHBATot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

HGA received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 56}

tpTUPSigServiceXmitHGBTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

HGB xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 57}

tpTUPSigServiceRcvHGBTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 58}

tpTUPSigServiceXmitHGUTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
HGU xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 59}

tpTUPSigServiceRcvHGUTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
HGU received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 60}

tpTUPSigServiceXmitHUATot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
HUA xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 61}

tpTUPSigServiceRcvHUATot OBJECT-TYPE

SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 “This object shows the occurrences of Telephone UserPart:
 HUA received total during the most recent collection interval.”
 ::= {tpTUPSigServiceStatTableEntry 62}

tpTUPSigServiceXmitIAITot OBJECT-TYPE

SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 “This object shows the occurrences of Telephone UserPart:
 xmitted total during the most recent collection interval.”
 ::= {tpTUPSigServiceStatTableEntry 63}

tpTUPSigServiceRevIAITot OBJECT-TYPE

SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 “This object shows the occurrences of Telephone UserPart:
 received total during the most recent collection interval.”
 ::= {tpTUPSigServiceStatTableEntry 64}

tpTUPSigServiceXmitIAMTot OBJECT-TYPE

SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 “This object shows the occurrences of Telephone UserPart:
 IAM xmitted total during the most recent collection interval.”
 ::= {tpTUPSigServiceStatTableEntry 65}

tpTUPSigServiceRevIAMTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

IAM received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 66}

tpTUPSigServiceXmitLOSTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

LOS xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 67}

tpTUPSigServiceRcvLOSTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

LOS received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 68}

tpTUPSigServiceXmitMALTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

MAL xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 69}

tpTUPSigServiceRcvMALTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
MAL received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 70}

tpTUPSigServiceXmitMBATot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
MBA xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 71}

tpTUPSigServiceRcvMBATot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
MBA received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 72}

tpTUPSigServiceXmitMGBTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
MGB xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 73}

tpTUPSigServiceRcvMGBTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

MBG received total during the most recent collection interval.”
 ::= {tpTUPSigServiceStatTableEntry 74}

tpTUPSigServiceXmitMGUTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

MGU xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 75}

tpTUPSigServiceRcvMGUTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

MGU received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 76}

tpTUPSigServiceXmitMPMTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

MPM xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 77}

tpTUPSigServiceRcvMPMTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

MPM received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 78}

tpTUPSigServiceXmitMUATot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

MUA xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 79}

tpTUPSigServiceRevMUATot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

MUA received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 80}

tpTUPSigServiceXmitNNCTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

NNC xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 81}

tpTUPSigServiceRevNNCTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

NNC received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 82}

tpTUPSigServiceXmitOPRTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

OPR xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 83}

tpTUPSigServiceRcvOPRTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

OPR received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 84}

tpTUPSigServiceXmitRANTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

RAN xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 85}

tpTUPSigServiceRcvRANTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

RAN received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 86}

tpTUPSigServiceXmitRLGTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 “This object shows the occurrences of Telephone UserPart:
 RLG xmitted total during the most recent collection interval.”
 ::= {tpTUPSigServiceStatTableEntry 87}

tpTUPSigServiceRcvRLGTot OBJECT-TYPE
 SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 “This object shows the occurrences of Telephone UserPart:
 RLG received total during the most recent collection interval.”
 ::= {tpTUPSigServiceStatTableEntry 88}

tpTUPSigServiceXmitRSCTot OBJECT-TYPE
 SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 “This object shows the occurrences of Telephone UserPart:
 RSC xmitted total during the most recent collection interval.”
 ::= {tpTUPSigServiceStatTableEntry 89}

tpTUPSigServiceRcvRSCTot OBJECT-TYPE
 SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 “This object shows the occurrences of Telephone UserPart:
 RSC received total during the most recent collection interval.”
 ::= {tpTUPSigServiceStatTableEntry 90}

tpTUPSigServiceXmitSAMTot OBJECT-TYPE
 SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
 SAM xmitted total during the most recent collection interval.”
 ::= {tpTUPSigServiceStatTableEntry 91 }

tpTUPSigServiceRcvSAMTot OBJECT-TYPE

SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
 SAM received total during the most recent collection interval.”
 ::= {tpTUPSigServiceStatTableEntry 92 }

tpTUPSigServiceXmitSAOTot OBJECT-TYPE

SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
 SAO xmitted total during the most recent collection interval.”
 ::= {tpTUPSigServiceStatTableEntry 93 }

tpTUPSigServiceRcvSAOTot OBJECT-TYPE

SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
 SAO received total during the most recent collection interval.”
 ::= {tpTUPSigServiceStatTableEntry 94 }

tpTUPSigServiceXmitSBATot OBJECT-TYPE

SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
SBA xmitted total during the most recent collection interval.”
::= {tpTUPSigServiceStatTableEntry 95}

tpTUPSigServiceRcvSBATot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
SBA received total during the most recent collection interval.”
::= {tpTUPSigServiceStatTableEntry 96}

tpTUPSigServiceXmitSECTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
SEC xmitted total during the most recent collection interval.”
::= {tpTUPSigServiceStatTableEntry 97}

tpTUPSigServiceRcvSECTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
SEC received total during the most recent collection interval.”
::= {tpTUPSigServiceStatTableEntry 98}

tpTUPSigServiceXmitSGBTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
SGB xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 99}

tpTUPSigServiceRcvSGBTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 100}

tpTUPSigServiceXmitSGUTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
SGU xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 101}

tpTUPSigServiceRcvSGUTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
SGU received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 102}

tpTUPSigServiceXmitSLBTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
SLB xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 103}

tpTUPSigServiceRcvSLBTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
SLB received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 104}

tpTUPSigServiceXmitSSBTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
SSB xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 105}

tpTUPSigServiceRcvSSBTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
SSB received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 106}

tpTUPSigServiceXmitSSTTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
SST xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 107}

tpTUPSigServiceRcvSSTTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

SST received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 108}

tpTUPSigServiceXmitSTBTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

STB xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 109}

tpTUPSigServiceRcvSTBTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

STB received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 110}

tpTUPSigServiceXmitSUATot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 111}

tpTUPSigServiceRcvSUATot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
SUA received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 112}

tpTUPSigServiceXmitUBATot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
UBA xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 113}

tpTUPSigServiceRcvUBATot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
UBA received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 114}

tpTUPSigServiceXmitUBLTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
UBL xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 115}

tpTUPSigServiceRcvUBLTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

UBL received total during the most recent collection interval.”
 ::= {tpTUPSigServiceStatTableEntry 116}

tpTUPSigServiceXmitUNNTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

UNN xmitted total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 117}

tpTUPSigServiceRcvUNNTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

UNN received total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 118}

tpTUPSigServiceAbnormalRelTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

abnormal release total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 119}

tpTUPSigServiceUnexpectedMSGTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:

unexpected message total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 120}

tpTUPSigServiceUnrecognisedMSGTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
unrecognised message total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 121}

tpTUPSigServiceCHANMateUnavailTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the occurrences of Telephone UserPart:
Channel Mate Unavailable total during the most recent collection interval.”

::= {tpTUPSigServiceStatTableEntry 122}

SSU ITU NUP Table

tpNUPSigServiceStatTable OBJECT-TYPE

SYNTAX SEQUENCE OF TpNUPSigServiceStatTableEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

“This table defines National UserPart statistics”

::= {tpMeasurement 12}

tpNUPSigServiceStatTableEntry OBJECT-TYPE

SYNTAX TpNUPSigServiceStatTableEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

“This table defines National UserPart statistics”

```
INDEX {tpComponentId,tpNUPSigServiceCollectTimeInterval}
 ::= {tpNUPSigServiceStatTable 1}
```

```
TpNUPSigServiceStatTableEntry ::=
SEQUENCE
{
  tpNUPSigServiceCollectTimeInterval
    Counter32,
  tpNUPSigServiceCollectTime
    TimeTicks,
  tpNUPSigServiceXmitMSGTot
    Counter32,
  tpNUPSigServiceRcvMSGTot
    Counter32,
  tpNUPSigServiceUnexpectedMSGTot
    Counter32
}
```

```
tpNUPSigServiceCollectTimeInterval OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
  “This object shows measurement time interval seconds.”
 ::= {tpNUPSigServiceStatTableEntry 1}
```

```
tpNUPSigServiceCollectTime OBJECT-TYPE
SYNTAX TimeTicks
MAX-ACCESS read-only
STATUS current
DESCRIPTION
  “This object shows measurement time.”
 ::= {tpNUPSigServiceStatTableEntry 2}
```

```
tpNUPSigServiceXmitMSGTot OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
```

STATUS current

DESCRIPTION

“This object shows National UserPart:messages xmitted total during the most recent collection interval.”

::= {tpNUPSigServiceStatTableEntry 3}

tpNUPSigServiceRcvMSGTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows National Userpart:message received total during the most recent collection interval.”

::= {tpNUPSigServiceStatTableEntry 4}

tpNUPSigServiceUnexpectedMSGTot OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows National UserPart:unexpected msgs totals during the most recent collection interval.”

::= {tpNUPSigServiceStatTableEntry 5}

OVL State Table

tpOVLStatTable OBJECT-TYPE

SYNTAX SEQUENCE OF TpOVLStatTableEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

“This table defines OverLoad statistics”

::= {tpMeasurement 13}

tpOVLStatTableEntry OBJECT-TYPE

SYNTAX TpOVLStatTableEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

“This table defines overload statistics”

INDEX {tpComponentId,tpOVLCollectTimeInterval}

::= {tpOVLStatTable 1}

TpOVLStatTableEntry ::=

SEQUENCE

{

tpOVLCollectTimeInterval

Counter32,

tpOVLCollectTime

TimeTicks,

tpOVLLv1DurOverload

Counter32,

tpOVLLv2DurOverload

Counter32,

tpOVLLv3DurOverload

Counter32,

tpOVLCallFailure

Counter32

}

tpOVLCollectTimeInterval OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows measurement time interval seconds during the most recent collection interval.”

::= {tpOVLStatTableEntry 1}

tpOVLCollectTime OBJECT-TYPE

SYNTAX TimeTicks

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows measurement time during the most recent collection interval.”

::= {tpOVLStatTableEntry 2}

tpOVLLvl1DurOverload OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows Overload: Minutes in level1 overload condition. “

::= {tpOVLStatTableEntry 3}

tpOVLLvl2DurOverload OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows Overload: Minutes in level2 overload condition. “

::= {tpOVLStatTableEntry 4}

tpOVLLvl3DurOverload OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows Overload: Minutes in level3 overload condition during the most recent collection interval.”

::= {tpOVLStatTableEntry 5}

tpOVLCallFailure OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows Overload: Calls rejected due to overload condition. “

::= {tpOVLStatTableEntry 6}

SystemStat Table

tpSystemStatTable OBJECT-TYPE

SYNTAX SEQUENCE OF TpSystemStatTableEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

“This table defines User defined statistics”

::= { tpMeasurement 14 }

tpSystemStatTableEntry OBJECT-TYPE

SYNTAX TpSystemStatTableEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

“This table defines user defined statistics”

INDEX { tpComponentId, tpSystemCollectTimeInterval }

::= { tpSystemStatTable 1 }

TpSystemStatTableEntry ::=

SEQUENCE

{

tpSystemCollectTimeInterval

Counter32,

tpSystemCollectTime

TimeTicks,

tpSystemCDBXmit

Counter32,

tpSystemUserCount1

Counter32,

tpSystemUserCount2

Counter32,

tpSystemUserCount3

Counter32,

tpSystemUserCount4

Counter32,

tpSystemUserCount5

Counter32,

tpSystemUserCount6
Counter32,
tpSystemUserCount7
Counter32,
tpSystemUserCount8
Counter32,
tpSystemUserCount9
Counter32,
tpSystemUserCount10
Counter32,
tpSystemUserCount11
Counter32,
tpSystemUserCount12
Counter32,
tpSystemUserCount13
Counter32,
tpSystemUserCount14
Counter32,
tpSystemUserCount15
Counter32,
tpSystemUserCount16
Counter32,
tpSystemUserCount17
Counter32,
tpSystemUserCount18
Counter32,
tpSystemUserCount19
Counter32,
tpSystemUserCount20
Counter32,
tpSystemUserCount21
Counter32,
tpSystemUserCount22
Counter32,
tpSystemUserCount23
Counter32,
tpSystemUserCount24
Counter32,

```
    tpSystemUserCount25
      Counter32
  }

tpSystemCollectTimeInterval OBJECT-TYPE
  SYNTAX Counter32
  MAX-ACCESS read-only
  STATUS current
  DESCRIPTION
    "This object shows measurement time interval seconds."
  ::= { tpSystemStatTableEntry 1 }

tpSystemCollectTime OBJECT-TYPE
  SYNTAX TimeTicks
  MAX-ACCESS read-only
  STATUS current
  DESCRIPTION
    "This object shows measur time."
  ::= { tpSystemStatTableEntry 2 }

tpSystemCDBXmit OBJECT-TYPE
  SYNTAX Counter32
  MAX-ACCESS read-only
  STATUS current
  DESCRIPTION
    "This object shows measurement of CDBs transmitted during the most recent collection interval."
  ::= { tpSystemStatTableEntry 3 }

tpSystemUserCount1 OBJECT-TYPE
  SYNTAX Counter32
  MAX-ACCESS read-only
  STATUS current
  DESCRIPTION
    "This object shows the user defined counter value during the most recent collection interval."
  ::= { tpSystemStatTableEntry 4 }

tpSystemUserCount2 OBJECT-TYPE
  SYNTAX Counter32
```

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the user defined counter value during the most recent collection interval.”

::= {tpSystemStatTableEntry 5}

tpSystemUserCount3 OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the user defined counter value during the most recent collection interval.”

::= {tpSystemStatTableEntry 6}

tpSystemUserCount4 OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the user defined counter value during the most recent collection interval.”

::= {tpSystemStatTableEntry 7}

tpSystemUserCount5 OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the user defined counter value during the most recent collection interval.”

::= {tpSystemStatTableEntry 8}

tpSystemUserCount6 OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the user defined counter value during the most recent collection interval.”

::= {tpSystemStatTableEntry 9}

tpSystemUserCount7 OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the user defined counter value during the most recent collection interval.”

::= {tpSystemStatTableEntry 10}

tpSystemUserCount8 OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the user defined counter value during the most recent collection interval.”

::= {tpSystemStatTableEntry 11}

tpSystemUserCount9 OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the user defined counter value during the most recent collection interval.”

::= {tpSystemStatTableEntry 12}

tpSystemUserCount10 OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the user defined counter value during the most recent collection interval.”

::= {tpSystemStatTableEntry 13}

tpSystemUserCount11 OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the user defined counter value during the most recent collection interval.”

::= {tpSystemStatTableEntry 14}

tpSystemUserCount12 OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the user defined counter value during the most recent collection interval.”

::= {tpSystemStatTableEntry 15}

tpSystemUserCount13 OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the user defined counter value during the most recent collection interval.”

::= {tpSystemStatTableEntry 16}

tpSystemUserCount14 OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the user defined counter value during the most recent collection interval.”

::= {tpSystemStatTableEntry 17}

tpSystemUserCount15 OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the user defined counter value during the most recent collection interval.”

::= {tpSystemStatTableEntry 18}

tpSystemUserCount16 OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the user defined counter value during the most recent collection interval.”
::= {tpSystemStatTableEntry 19}

tpSystemUserCount17 OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the user defined counter value during the most recent collection interval.”
::= {tpSystemStatTableEntry 20}

tpSystemUserCount18 OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the user defined counter value during the most recent collection interval.”
::= {tpSystemStatTableEntry 21}

tpSystemUserCount19 OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the user defined counter value during the most recent collection interval.”
::= {tpSystemStatTableEntry 22}

tpSystemUserCount20 OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows the user defined counter value during the most recent collection interval.”
::= {tpSystemStatTableEntry 23}

tpSystemUserCount21 OBJECT-TYPE

SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 “This object shows the user defined counter value during the most recent collection interval.”
 ::= {tpSystemStatTableEntry 24}

tpSystemUserCount22 OBJECT-TYPE
 SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 “This object shows the user defined counter value during the most recent collection interval.”
 ::= {tpSystemStatTableEntry 25}

tpSystemUserCount23 OBJECT-TYPE
 SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 “This object shows the user defined counter value during the most recent collection interval.”
 ::= {tpSystemStatTableEntry 26}

tpSystemUserCount24 OBJECT-TYPE
 SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 “This object shows the user defined counter value during the most recent collection interval.”
 ::= {tpSystemStatTableEntry 27}

tpSystemUserCount25 OBJECT-TYPE
 SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION
 “This object shows the user defined counter value during the most recent collection interval.”
 ::= {tpSystemStatTableEntry 28}

TCAP Table

tpTCAPTable OBJECT-TYPE

SYNTAX SEQUENCE OF TpTCAPTableEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

“This table defines TCAP statistics”

::= { tpMeasurement 15 }

tpTCAPTableEntry OBJECT-TYPE

SYNTAX TpTCAPTableEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

“This table defines TCAP statistics”

INDEX { tpComponentId, tpTCAPCollectTimeInterval }

::= { tpTCAPTable 1 }

TpTCAPTableEntry ::=

SEQUENCE

{

tpTCAPCollectTimeInterval

Counter32,

tpTCAPCollectTime

TimeTicks,

tpTCAPMSGXmit

Counter32,

tpTCAPQWPXmit

Counter32,

tpTCAPRSPXmit

Counter32,

tpTCAPUNIXmit

Counter32,

tpTCAPABTXmit

Counter32,

```

tpTCAPMSGRcv
    Counter32,
tpTCAPQWPRcv
    Counter32,
tpTCAPRSPRcv
    Counter32,
tpTCAPUNIRcv
    Counter32,
tpTCAPMSGDrop
    Counter32,
tpTCAPMSGUnrec
    Counter32,
tpTCAPABTRcv
    Counter32,
tpTCAPBeginXmit
    Counter32,
tpTCAPBeginRcv
    Counter32,
tpTCAPEndXmit
    Counter32,
tpTCAPEndRcv
    Counter32,
tpTCAPContinueXmit
    Counter32,
tpTCAPContinueRcv
    Counter32,
tpTCAPConvXmit
    Counter32,
tpTCAPConvRcv
    Counter32
}

tpTCAPCollectTimeInterval OBJECT-TYPE
    SYNTAX Counter32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "This object shows measurement time interval seconds."

```

::= {tpTCAPTableEntry 1}

tpTCAPCollectTime OBJECT-TYPE

SYNTAX TimeTicks

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows measur time.”

::= {tpTCAPTableEntry 2}

tpTCAPMSGXmit OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows measurement TCAP: Total TCAP messages xmitted during the most recent collection interval.”

::= {tpTCAPTableEntry 3}

tpTCAPQWPXmit OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows measurement ANSI TCAP: Total Query with permission xmitted during the most recent collection interval.”

::= {tpTCAPTableEntry 4}

tpTCAPRSPXmit OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows measurement ANSI TCAP: Total Response messages xmitted during the most recent collection interval.”

::= {tpTCAPTableEntry 5}

tpTCAPUNIXmit OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows measurement TCAP: Total Unidirectional messages xmitted during the most recent collection interval.”

::= {tpTCAPTableEntry 6}

tpTCAPABTXmit OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows measurement ANSI TCAP: Total Abort messages xmitted during the most recent collection interval.”

::= {tpTCAPTableEntry 7}

tpTCAPMSGRcv OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows measurement TCAP: Total TCAP messages received during the most recent collection interval.”

::= {tpTCAPTableEntry 8}

tpTCAPQWPRcv OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows measurement ANSI TCAP: Total Query with permission received during the most recent collection interval.”

::= {tpTCAPTableEntry 9}

tpTCAPRSPRcv OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows measurement ANSI TCAP: Total Response messages received during the most recent collection interval.”

::= {tpTCAPTableEntry 10}

tpTCAPUNIRcv OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows measurement TCAP: Total Unidirectional messages received during the most recent collection interval.”

::= {tpTCAPTableEntry 11}

tpTCAPMSGDrop OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows measurement TCAP: Total Messages dropped during the most recent collection interval.”

::= {tpTCAPTableEntry 12}

tpTCAPMSGUnrec OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows measurement TCAP: Total unrecognized messages during the most recent collection interval.”

::= {tpTCAPTableEntry 13}

tpTCAPABTRcv OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows measurement ANSI TCAP: TotalAbort messages received during the most recent collection interval.”

::= {tpTCAPTableEntry 14}

tpTCAPBeginXmit OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“Total Number of TCAP BEGIN messages transmitted. This measurement is valid only for ETSI and ITU TCAP during the most recent collection interval.”

::= {tpTCAPTableEntry 15}

tpTCAPBeginRcv OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“Total Number of TCAP BEGIN messages received. This measurement is valid only for ETSI and ITU TCAP”

::= {tpTCAPTableEntry 16}

tpTCAPEndXmit OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“Total Number of TCAP END messages transmitted. This measurement is valid only for ETSI and ITU TCAP during the most recent collection interval.”

::= {tpTCAPTableEntry 17}

tpTCAPEndRcv OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“Total Number of TCAP END messages received. This measurement is valid only for ETSI and ITU TCAP during the most recent collection interval.”

::= {tpTCAPTableEntry 18}

tpTCAPContinueXmit OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“Total Number of TCAP CONTINUE messages transmitted. This measurement is valid only for ETSI and ITU TCAP”

::= {tpTCAPTableEntry 19}

tpTCAPContinueRcv OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“Total Number of TCAP CONVERSATION messages received. This measurement is valid only for ANSI TCAP”

::= {tpTCAPTableEntry 20}

tpTCAPConvXmit OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“Total Number of TCAP CONVERSATION messages transmitted. This measurement is valid only for ANSI TCAP”

::= {tpTCAPTableEntry 21}

tpTCAPConvRcv OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“Total Number of TCAP CONVERSATION messages received. This measurement is valid only for ANSI TCAP”

::= {tpTCAPTableEntry 22}

SCCP Table

tpSCCPTable OBJECT-TYPE

SYNTAX SEQUENCE OF TpSCCPTableEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

“This table defines SCCP statistics”

::= {tpMeasurement 16}

tpSCCPTableEntry OBJECT-TYPE

SYNTAX TpSCCPTableEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

“This table defines SCCP statistics”

INDEX {tpComponentId,tpSCCPCollectTimeInterval}

::= {tpSCCPTable 1}

TpSCCPTableEntry ::=

SEQUENCE

{

tpSCCPCollectTimeInterval

Counter32,

tpSCCPCollectTime

TimeTicks,

tpSCCPRoutingFailure

Counter32,

tpSCCPUDTXmit

Counter32,

tpSCCPUDTSXmit

Counter32,

tpSCCPUDTRcv

```

        Counter32,
    tpSCCPUDTSRcv
        Counter32,
    tpSCCPTotalMsg
        Counter32
}

```

tpSCCPCollectTimeInterval OBJECT-TYPE

```

SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
    "This object shows measurement time interval seconds."
 ::= {tpSCCPTableEntry 1}

```

tpSCCPCollectTime OBJECT-TYPE

```

SYNTAX TimeTicks
MAX-ACCESS read-only
STATUS current
DESCRIPTION
    "This object shows measur time."
 ::= {tpSCCPTableEntry 2}

```

tpSCCPRoutingFailure OBJECT-TYPE

```

SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
    "This object shows measurement SCCP: Total routing failures during the most recent collection interval."
 ::= {tpSCCPTableEntry 3}

```

tpSCCPUDTXmit OBJECT-TYPE

```

SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION

```

“This object shows measurement SCCP: Total unit data messages xmitted during the most recent collection interval.”

::= {tpSCCPTableEntry 4}

tpSCCPUDTSXmit OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows measurement SCCP: Total unit data sevice messages xmitted during the most recent collection interval.”

::= {tpSCCPTableEntry 5}

tpSCCPUDTRcv OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows measurement SCCP: Total unit data messages received during the most recent collection interval.”

::= {tpSCCPTableEntry 6}

tpSCCPUDTSRcv OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows measurement SCCP: Total unit data sevice messages received during the most recent collection interval.”

::= {tpSCCPTableEntry 7}

tpSCCPTotalMsg OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows measurement SCCP: Total messages handled during the most recent collection interval.”

::= {tpSCCPTableEntry 8}

CALL Table

tpCALLTable OBJECT-TYPE

SYNTAX SEQUENCE OF TpCALLTableEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

“This table defines CALL statistics”

::= {tpMeasurement 17}

tpCALLTableEntry OBJECT-TYPE

SYNTAX TpCALLTableEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

“This table defines CALL statistics”

INDEX {tpComponentId,tpCALLCollectTimeInterval}

::= {tpCALLTable 1}

TpCALLTableEntry ::=

SEQUENCE

{

tpCALLCollectTimeInterval

Counter32,

tpCALLCollectTime

TimeTicks,

tpCALLSuccCallTOT

Counter32,

tpCALLFailCallTOT

Counter32,

tpCALLRUFailCallTOT

Counter32,

tpCALLORFailCallTOT

Counter32,

tpCALLOLFailCallTOT

Counter32

}

tpCALLCollectTimeInterval OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows measurement time interval seconds.”

::= {tpCALLTableEntry 1}

tpCALLCollectTime OBJECT-TYPE

SYNTAX TimeTicks

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows measur time.”

::= {tpCALLTableEntry 2}

tpCALLSuccCallTOT OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows measurement: Total Successful Calls during the most recent collection interval.”

::= {tpCALLTableEntry 3}

tpCALLFailCallTOT OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows measurement: Total Failed Calls during the most recent collection interval.”

::= {tpCALLTableEntry 4}

tpCALLRUFailCallTOT OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows measurement: Failed calls caused by Resource-Unavailable during the most recent collection interval.”

::= {tpCALLTableEntry 5}

tpCALLORFailCallTOT OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows measurement: Failed Calls of other cause code during the most recent collection interval.”

::= {tpCALLTableEntry 6}

tpCALLOLFailCallTOT OBJECT-TYPE

SYNTAX Counter32

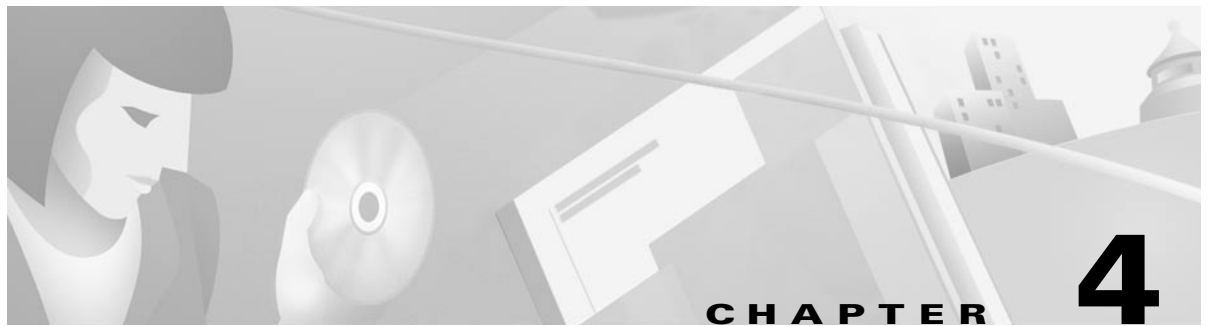
MAX-ACCESS read-only

STATUS current

DESCRIPTION

“This object shows measurement: Failed Calls of overload condition during the most recent collection interval.”

::= {tpCALLTableEntry 7}



Host-Resources MIB Definitions

This chapter describes the host resource MIBs and is used to identify the manufacturer, model, and version of a specific hardware or software product. It is suggested that these object identifiers are allocated such that all products from a particular manufacturer are registered under a subtree distinct to that manufacturer. In addition, all versions of a product should be registered under a subtree distinct to that product. With this strategy, a management station may uniquely determine the manufacturer and/or model of a product whose productID is unknown to the management station. Objects of this type may be useful for inventory purposes or for automatically detecting incompatibilities or version mismatches between various hardware and software components on a system.

Imports

```
OBJECT-TYPE          FROM RFC-1212
DisplayString        FROM RFC1213-MIB
TimeTicks, Counter, Gauge      FROM RFC1155-SMI;
host OBJECT IDENTIFIER ::= { mib-2 25 }
hrSystem OBJECT IDENTIFIER ::= { host 1 }
hrStorage OBJECT IDENTIFIER ::= { host 2 }
hrDevice OBJECT IDENTIFIER ::= { host 3 }
hrSWRun OBJECT IDENTIFIER ::= { host 4 }
hrSWRunPerf OBJECT IDENTIFIER ::= { host 5 }
hrSWInstalled OBJECT IDENTIFIER ::= { host 6 }
```

Textual Conventions

Table 4-1 provides the textual conventions used for this set of MIB objects.



Note

f only local time is known, then timezone information (fields 8-10) is not present. The Host Resources System Group

I

Table 4-1 Host Resource MIB Object Text Conventions

Item	Description	Values			
Truth value	Boolean ::= INTEGER	{ true(1), false(2) }			
Memory size	Expressed in units of 1024bytes	2048			
KBytes	::= INTEGER	(0..2147483647)			
ProductID	For example, the product ID for the ACME 4860 66MHz clock doubled processor might be: enterprises.acme.acmeProcessors.a4860DX2.MHz66 A software product might be registered as: enterprises.acme.acmeOperatingSystems.acmeDOS.six(6).one(1)	N/A			
DateAndTime	::= OCTET STRING (SIZE (8 11)) This is a date-time specification for the local time of day. This data type is intended to provide a consistent method of reporting date information.	Field	Octet	Content	Range
		1	1-2	year	0..65536 ¹
		2	3	month	1..12
		3	4	day	1..31
		4	5	hour	0..23
		5	6	minutes	0..59
		6	7	seconds	0..60 ²
		7	8	deci-seconds	0..9
		8	9	direction from UTC	“+” / “-” ³
		9	10	UTC	0..11
10	11	minutes from UTC	0..59		
InternationalDisplayString	::= OCTET STRING	This data type is used to model textual information in some character set. A network management station should use a local algorithm to determine which character set is in use and how it should be displayed. Note that this character set may be encoded with more than one octet per symbol, but will most often be NVT ASCII.			

1. In network byte order
2. Use 60 for leap-second
3. In ascii notation

Host System MIBs

Implementation of this group is mandatory for all host systems.

hrSystemUptime OBJECT-TYPE

SYNTAX TimeTicks

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The amount of time since this host was last initialized. Note that this is different from sysUpTime in MIB-II [3] because sysUpTime is the uptime of the network management portion of the system.”

::= { hrSystem 1 }

hrSystemDate OBJECT-TYPE

SYNTAX DateAndTime

ACCESS read-write

STATUS mandatory

DESCRIPTION

“The host’s notion of the local date and time of day.”

::= { hrSystem 2 }

hrSystemInitialLoadDevice OBJECT-TYPE

SYNTAX INTEGER (1..2147483647)

ACCESS read-write

STATUS mandatory

DESCRIPTION

“The index of the hrDeviceEntry for the device from which this host is configured to load its initial operating system configuration.”

::= { hrSystem 3 }

hrSystemInitialLoadParameters OBJECT-TYPE

SYNTAX InternationalDisplayString (SIZE (0..128))

ACCESS read-write

STATUS mandatory

DESCRIPTION

“This object contains the parameters (e.g. a pathname and parameter) supplied to the load device when requesting the initial operating system configuration from that device.”

```
::= { hrSystem 4 }
```

hrSystemNumUsers OBJECT-TYPE

SYNTAX Gauge

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of user sessions for which this host is storing state information. A session is a collection of processes requiring a single act of user authentication and possibly subject to collective job control.”

```
::= { hrSystem 5 }
```

hrSystemProcesses OBJECT-TYPE

SYNTAX Gauge

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of process contexts currently loaded or running on this system.”

```
::= { hrSystem 6 }
```

hrSystemMaxProcesses OBJECT-TYPE

SYNTAX INTEGER (0..2147483647)

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The maximum number of process contexts this system can support. If there is no fixed maximum, the value should be zero. On systems that have a fixed maximum, this object can help diagnose failures that occur when this maximum is reached.”

```
::= { hrSystem 7 }
```

The Host Resources Storage Group

Implementation of this group is mandatory for all host systems.

Registration for some storage types, for use with hrStorageType

hrStorageTypes OBJECT IDENTIFIER ::= { hrStorage 1 }

hrStorageOther OBJECT IDENTIFIER ::= { hrStorageTypes 1 }

```

hrStorageRam          OBJECT IDENTIFIER ::= { hrStorageTypes 2 }
hrStorageVirtualMemory is temporary storage of swapped or paged memory
hrStorageVirtualMemory OBJECT IDENTIFIER ::= { hrStorageTypes 3 }
hrStorageFixedDisk    OBJECT IDENTIFIER ::= { hrStorageTypes 4 }
hrStorageRemovableDisk OBJECT IDENTIFIER ::= { hrStorageTypes 5 }
hrStorageFloppyDisk   OBJECT IDENTIFIER ::= { hrStorageTypes 6 }
hrStorageCompactDisc  OBJECT IDENTIFIER ::= { hrStorageTypes 7 }
hrStorageRamDisk      OBJECT IDENTIFIER ::= { hrStorageTypes 8 }

```

hrMemorySize OBJECT-TYPE

SYNTAX KBytes

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The amount of physical main memory contained by the host.”

::= { hrStorage 2 }

hrStorageTable OBJECT-TYPE

SYNTAX SEQUENCE OF HrStorageEntry

ACCESS not-accessible

STATUS mandatory

DESCRIPTION

“The (conceptual) table of logical storage areas on the host.

An entry shall be placed in the storage table for each logical area of storage that is allocated and has fixed resource limits. The amount of storage represented in an entity is the amount actually usable by the requesting entity, and excludes loss due to formatting or file system reference information.

These entries are associated with logical storage areas, as might be seen by an application, rather than physical storage entities which are typically seen by an operating system. Storage such as tapes and floppies without file systems on them are typically not allocated in chunks by the operating system to requesting applications, and therefore shouldn't appear in this table. Examples of valid storage for this table include disk partitions, file systems, ram (for some architectures this is further segmented into regular memory, extended memory, and so on), backing store for virtual memory ('swap space').

This table is intended to be a useful diagnostic for 'out of memory' and 'out of buffers' types of failures. In addition, it can be a useful performance monitoring tool for tracking memory, disk, or buffer usage.”

::= { hrStorage 3 }

hrStorageEntry OBJECT-TYPE

SYNTAX HrStorageEntry

ACCESS not-accessible

STATUS mandatory

DESCRIPTION

“A (conceptual) entry for one logical storage area

on the host. As an example, an instance of the
hrStorageType object might be named
hrStorageType.3”

```
INDEX { hrStorageIndex }
```

```
::= { hrStorageTable 1 }
```

```
HrStorageEntry ::= SEQUENCE {
    hrStorageIndex      INTEGER,
    hrStorageType       OBJECT IDENTIFIER,
    hrStorageDescr      DisplayString,
    hrStorageAllocationUnits  INTEGER,
    hrStorageSize       INTEGER,
    hrStorageUsed       INTEGER,
    hrStorageAllocationFailures Counter
}
```

```
hrStorageIndex OBJECT-TYPE
```

```
SYNTAX INTEGER (1..2147483647)
```

```
ACCESS read-only
```

```
STATUS mandatory
```

```
DESCRIPTION
```

“A unique value for each logical storage area
contained by the host.”

```
::= { hrStorageEntry 1 }
```

```
hrStorageType OBJECT-TYPE
```

```
SYNTAX OBJECT IDENTIFIER
```

```
ACCESS read-only
```

```
STATUS mandatory
```

```
DESCRIPTION
```

“The type of storage represented by this entry.”

```
::= { hrStorageEntry 2 }
```

```
hrStorageDescr OBJECT-TYPE
```

```
SYNTAX DisplayString
```

```
ACCESS read-only
```

```
STATUS mandatory
```

```
DESCRIPTION
```

“A description of the type and instance of the storage described by this entry.”

::= { hrStorageEntry 3 }

hrStorageAllocationUnits OBJECT-TYPE

SYNTAX INTEGER (1..2147483647)

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The size, in bytes, of the data objects allocated from this pool. If this entry is monitoring sectors, blocks, buffers, or packets, for example, this number will commonly be greater than one. Otherwise this number will typically be one.”

::= { hrStorageEntry 4 }

hrStorageSize OBJECT-TYPE

SYNTAX INTEGER (0..2147483647)

ACCESS read-write

STATUS mandatory

DESCRIPTION

“The size of the storage represented by this entry, in units of hrStorageAllocationUnits.”

::= { hrStorageEntry 5 }

hrStorageUsed OBJECT-TYPE

SYNTAX INTEGER (0..2147483647)

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The amount of the storage represented by this entry that is allocated, in units of hrStorageAllocationUnits.”

::= { hrStorageEntry 6 }

hrStorageAllocationFailures OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of requests for storage represented by this entry that could not be honored due to not enough storage. It should be noted that as this object has a SYNTAX of Counter, that it does not have a defined initial value. However, it is recommended that this object be initialized to zero.”

::= { hrStorageEntry 7 }

Host Resources Device Group

Implementation of this group is mandatory for all host systems.

The device group is useful for identifying and diagnosing the devices on a system. The hrDeviceTable contains common information for any type of device. In addition, some devices have device-specific tables for more detailed information. Additional tables may be defined in the future for other device types.

Registration for some device types, for use with hrDeviceType

hrDeviceTypes	OBJECT IDENTIFIER ::= { hrDevice 1 }
hrDeviceOther	OBJECT IDENTIFIER ::= { hrDeviceTypes 1 }
hrDeviceUnknown	OBJECT IDENTIFIER ::= { hrDeviceTypes 2 }
hrDeviceProcessor	OBJECT IDENTIFIER ::= { hrDeviceTypes 3 }
hrDeviceNetwork	OBJECT IDENTIFIER ::= { hrDeviceTypes 4 }
hrDevicePrinter	OBJECT IDENTIFIER ::= { hrDeviceTypes 5 }
hrDeviceDiskStorage	OBJECT IDENTIFIER ::= { hrDeviceTypes 6 }
hrDeviceVideo	OBJECT IDENTIFIER ::= { hrDeviceTypes 10 }
hrDeviceAudio	OBJECT IDENTIFIER ::= { hrDeviceTypes 11 }
hrDeviceCoprocessor	OBJECT IDENTIFIER ::= { hrDeviceTypes 12 }
hrDeviceKeyboard	OBJECT IDENTIFIER ::= { hrDeviceTypes 13 }
hrDeviceModem	OBJECT IDENTIFIER ::= { hrDeviceTypes 14 }
hrDeviceParallelPort	OBJECT IDENTIFIER ::= { hrDeviceTypes 15 }
hrDevicePointing	OBJECT IDENTIFIER ::= { hrDeviceTypes 16 }
hrDeviceSerialPort	OBJECT IDENTIFIER ::= { hrDeviceTypes 17 }
hrDeviceTape	OBJECT IDENTIFIER ::= { hrDeviceTypes 18 }
hrDeviceClock	OBJECT IDENTIFIER ::= { hrDeviceTypes 19 }
hrDeviceVolatileMemory	OBJECT IDENTIFIER ::= { hrDeviceTypes 20 }

hrDeviceNonVolatileMemory OBJECT IDENTIFIER ::= { hrDeviceTypes 21 }

hrDeviceTable OBJECT-TYPE

SYNTAX SEQUENCE OF HrDeviceEntry

ACCESS not-accessible

STATUS mandatory

DESCRIPTION

“The (conceptual) table of devices contained by the host.”

::= { hrDevice 2 }

hrDeviceEntry OBJECT-TYPE

SYNTAX HrDeviceEntry

ACCESS not-accessible

STATUS mandatory

DESCRIPTION

“A (conceptual) entry for one device contained by the host. As an example, an instance of the hrDeviceType object might be named hrDeviceType.3

INDEX { hrDeviceIndex }

::= { hrDeviceTable 1 }

HrDeviceEntry ::= SEQUENCE {

hrDeviceIndex	INTEGER,
hrDeviceType	OBJECT IDENTIFIER,
hrDeviceDescr	DisplayString,
hrDeviceID	ProductID,
hrDeviceStatus	INTEGER,
hrDeviceErrors	Counter

}

hrDeviceIndex OBJECT-TYPE

SYNTAX INTEGER (1..2147483647)

ACCESS read-only

STATUS mandatory

DESCRIPTION

A unique value for each device contained by the host. The value for each device must remain constant at least from one re-initialization of theagent to the next re-initialization.

::= { hrDeviceEntry 1 }

hrDeviceType OBJECT-TYPE

SYNTAX OBJECT IDENTIFIER

ACCESS read-only

STATUS mandatory

DESCRIPTION

“An indication of the type of device. If this value is ‘hrDeviceProcessor { hrDeviceTypes 3 }’ then an entry exists in the hrProcessorTable which corresponds to this device.

If this value is ‘hrDeviceNetwork { hrDeviceTypes 4 }’, then an entry exists in the hrNetworkTable which corresponds to this device.

If this value is ‘hrDevicePrinter { hrDeviceTypes 5 }’, then an entry exists in the hrPrinterTable which corresponds to this device.

If this value is ‘hrDeviceDiskStorage { hrDeviceTypes 6 }’, then an entry exists in the hrDiskStorageTable which corresponds to this device.”

```
::= { hrDeviceEntry 2 }
```

hrDeviceDescr OBJECT-TYPE

SYNTAX DisplayString (SIZE (0..64))

ACCESS read-only

STATUS mandatory

DESCRIPTION

“A textual description of this device, including the device’s manufacturer and revision, and optionally, its serial number.”

```
::= { hrDeviceEntry 3 }
```

hrDeviceID OBJECT-TYPE

SYNTAX ProductID

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The product ID for this device.”

::= { hrDeviceEntry 4 }

hrDeviceStatus OBJECT-TYPE

SYNTAX INTEGER {

unknown(1),

running(2),

warning(3),

testing(4),

down(5)

}

ACCESS read-only

STATUS mandatory

DESCRIPTION

The current operational state of the device described by this row of the table. A value unknown(1) indicates that the current state of the device is unknown. running(2) indicates that the device is up and running and that no unusual error conditions are known. The warning(3) state indicates that agent has been informed of an unusual error condition by the operational software (e.g., a disk device driver) but that the device is still ‘operational’. An example would be high number of soft errors on a disk. A value of testing(4), indicates that the device is not available for use because it is in the testing state. The state of down(5) is used only when the agent has been informed that the device is not available for any use.”

::= { hrDeviceEntry 5 }

hrDeviceErrors OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

The number of errors detected on this device. It should be noted that as this object has a SYNTAX of Counter, that it does not have a defined initial value. However, it is recommended that this object be initialized to zero.

::= { hrDeviceEntry 6 }

hrProcessorTable OBJECT-TYPE

SYNTAX SEQUENCE OF HrProcessorEntry

ACCESS not-accessible

STATUS mandatory

DESCRIPTION

“The (conceptual) table of processors contained by the host.

Note that this table is potentially sparse: a (conceptual) entry exists only if the correspondent value of the hrDeviceType object is 'hrDeviceProcessor'."

::= { hrDevice 3 }

hrProcessorEntry OBJECT-TYPE

SYNTAX HrProcessorEntry

ACCESS not-accessible

STATUS mandatory

DESCRIPTION

"A (conceptual) entry for one processor contained by the host. The hrDeviceIndex in the index represents the entry in the hrDeviceTable that corresponds to the hrProcessorEntry.

As an example of how objects in this table are named, an instance of the hrProcessorFrwID object might be named hrProcessorFrwID.3"

INDEX { hrDeviceIndex }

::= { hrProcessorTable 1 }

HrProcessorEntry ::= SEQUENCE {

hrProcessorFrwID ProductID,

hrProcessorLoad INTEGER

}

hrProcessorFrwID OBJECT-TYPE

SYNTAX ProductID

ACCESS read-only

STATUS mandatory

DESCRIPTION

"The product ID of the firmware associated with the processor."

::= { hrProcessorEntry 1 }

hrProcessorLoad OBJECT-TYPE

SYNTAX INTEGER (0..100)

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The average, over the last minute, of the percentage of time that this processor was not idle.”

::= { hrProcessorEntry 2 }

hrNetworkTable OBJECT-TYPE

SYNTAX SEQUENCE OF HrNetworkEntry

ACCESS not-accessible

STATUS mandatory

DESCRIPTION

“The (conceptual) table of network devices contained by the host.

Note that this table is potentially sparse: a (conceptual) entry exists only if the correspondent value of the hrDeviceType object is ‘hrDeviceNetwork’.”

::= { hrDevice 4 }

hrNetworkEntry OBJECT-TYPE

SYNTAX HrNetworkEntry

ACCESS not-accessible

STATUS mandatory

DESCRIPTION

“A (conceptual) entry for one network device contained by the host. The hrDeviceIndex in the index represents the entry in the hrDeviceTable that corresponds to the hrNetworkEntry.

As an example of how objects in this table are named, an instance of the hrNetworkIfIndex object might be named hrNetworkIfIndex.3”

INDEX { hrDeviceIndex }

::= { hrNetworkTable 1 }

HrNetworkEntry ::= SEQUENCE {

hrNetworkIfIndex INTEGER

```
}

```

```
hrNetworkIfIndex OBJECT-TYPE

```

```
SYNTAX INTEGER

```

```
ACCESS read-only

```

```
STATUS mandatory

```

```
DESCRIPTION

```

```
    "The value of ifIndex which corresponds to this
    network device."
```

```
::= { hrNetworkEntry 1 }
```

```
hrPrinterTable OBJECT-TYPE

```

```
SYNTAX SEQUENCE OF HrPrinterEntry

```

```
ACCESS not-accessible

```

```
STATUS mandatory

```

```
DESCRIPTION

```

```
    "The (conceptual) table of printers local to the
    host.
```

```

    Note that this table is potentially sparse: a
    (conceptual) entry exists only if the correspondent
    value of the hrDeviceType object is
    'hrDevicePrinter'."
```

```
::= { hrDevice 5 }
```

```
hrPrinterEntry OBJECT-TYPE

```

```
SYNTAX HrPrinterEntry

```

```
ACCESS not-accessible

```

```
STATUS mandatory

```

```
DESCRIPTION

```

```
    "A (conceptual) entry for one printer local to the
    host. The hrDeviceIndex in the index represents
    the entry in the hrDeviceTable that corresponds to
    the hrPrinterEntry.
```

```

    As an example of how objects in this table are
    named, an instance of the hrPrinterStatus object
    might be named hrPrinterStatus.3"
```

```
INDEX { hrDeviceIndex }
```

```
::= { hrPrinterTable 1 }
```

```
HrPrinterEntry ::= SEQUENCE {
    hrPrinterStatus      INTEGER,
    hrPrinterDetectedErrorState OCTET STRING
}
```

hrPrinterStatus OBJECT-TYPE

```
SYNTAX INTEGER {
    other(1),
    unknown(2),
    idle(3),
    printing(4),
    warmup(5)
}
```

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The current status of this printer device. When in the idle(1), printing(2), or warmup(3) state, the corresponding hrDeviceStatus should be running(2) or warning(3). When in the unknown state, the corresponding hrDeviceStatus should be unknown(1).”

```
::= { hrPrinterEntry 1 }
```

hrPrinterDetectedErrorState OBJECT-TYPE

```
SYNTAX OCTET STRING
```

ACCESS read-only

STATUS mandatory

DESCRIPTION

“This object represents any error conditions detected by the printer. The error conditions are encoded as bits in an octet string, with the following definitions:

	Condition	Bit #	hrDeviceStatus
lowPaper	0	warning(3)	

```

noPaper      1    down(5)
lowToner     2    warning(3)
noToner      3    down(5)
doorOpen     4    down(5)
jammed       5    down(5)
offline      6    down(5)
serviceRequested 7    warning(3)

```

If multiple conditions are currently detected and the hrDeviceStatus would not otherwise be unknown(1) or testing(4), the hrDeviceStatus shall correspond to the worst state of those indicated, where down(5) is worse than warning(3) which is worse than running(2).

Bits are numbered starting with the most significant bit of the first byte being bit 0, the least significant bit of the first byte being bit 7, the most significant bit of the second byte being bit 8, and so on. A one bit encodes that the condition was detected, while a zero bit encodes that the condition was not detected.

This object is useful for alerting an operator to specific warning or error conditions that may occur, especially those requiring human intervention.”

```
 ::= { hrPrinterEntry 2 }
```

hrDiskStorageTable OBJECT-TYPE

SYNTAX SEQUENCE OF HrDiskStorageEntry

ACCESS not-accessible

STATUS mandatory

DESCRIPTION

“The (conceptual) table of long-term storage devices contained by the host. In particular, disk devices accessed remotely over a network are not included here.

Note that this table is potentially sparse: a (conceptual) entry exists only if the correspondent value of the hrDeviceType object is ‘hrDeviceDiskStorage’.”

```
 ::= { hrDevice 6 }
```

hrDiskStorageEntry OBJECT-TYPE

SYNTAX HrDiskStorageEntry

ACCESS not-accessible

STATUS mandatory

DESCRIPTION

“A (conceptual) entry for one long-term storage device contained by the host. The hrDeviceIndex in the index represents the entry in the hrDeviceTable that corresponds to the hrDiskStorageEntry. As an example, an instance of the hrDiskStorageCapacity object might be named hrDiskStorageCapacity.3”

INDEX { hrDeviceIndex }

::= { hrDiskStorageTable 1 }

HrDiskStorageEntry ::= SEQUENCE {

hrDiskStorageAccess INTEGER,

hrDiskStorageMedia INTEGER,

hrDiskStorageRemoveable Boolean,

hrDiskStorageCapacity KBytes

}

hrDiskStorageAccess OBJECT-TYPE

SYNTAX INTEGER {

readWrite(1),

readOnly(2)

}

ACCESS read-only

STATUS mandatory

DESCRIPTION

“An indication if this long-term storage device is readable and writable or only readable. This should reflect the media type, any write-protect mechanism, and any device configuration that affects the entire device.”

::= { hrDiskStorageEntry 1 }

hrDiskStorageMedia OBJECT-TYPE

SYNTAX INTEGER {

```

        other(1),
        unknown(2),
        hardDisk(3),
        floppyDisk(4),
        opticalDiskROM(5),
        opticalDiskWORM(6), -- Write Once Read Many
        opticalDiskRW(7),
        ramDisk(8)
    }
ACCESS read-only
STATUS mandatory
DESCRIPTION
    "An indication of the type of media used in this
    long-term storage device."
 ::= { hrDiskStorageEntry 2 }

```

hrDiskStorageRemoveable OBJECT-TYPE

```

SYNTAX Boolean
ACCESS read-only
STATUS mandatory
DESCRIPTION
    "Denotes whether or not the disk media may be
    removed from the drive."
 ::= { hrDiskStorageEntry 3 }

```

hrDiskStorageCapacity OBJECT-TYPE

```

SYNTAX KBytes
ACCESS read-only
STATUS mandatory
DESCRIPTION
    "The total size for this long-term storage device."
 ::= { hrDiskStorageEntry 4 }

```

hrPartitionTable OBJECT-TYPE

```

SYNTAX SEQUENCE OF HrPartitionEntry
ACCESS not-accessible
STATUS mandatory
DESCRIPTION

```

“The (conceptual) table of partitions for long-term storage devices contained by the host. In particular, partitions accessed remotely over a network are not included here.”

```
::= { hrDevice 7 }
```

hrPartitionEntry OBJECT-TYPE

SYNTAX HrPartitionEntry

ACCESS not-accessible

STATUS mandatory

DESCRIPTION

“A (conceptual) entry for one partition. The hrDeviceIndex in the index represents the entry in the hrDeviceTable that corresponds to the hrPartitionEntry.

As an example of how objects in this table are named, an instance of the hrPartitionSize object might be named hrPartitionSize.3.1”

INDEX { hrDeviceIndex, hrPartitionIndex }

```
::= { hrPartitionTable 1 }
```

HrPartitionEntry ::= SEQUENCE {

```
    hrPartitionIndex      INTEGER,
    hrPartitionLabel      InternationalDisplayString,
    hrPartitionID         OCTET STRING,
    hrPartitionSize       KBytes,
    hrPartitionFSIndex    INTEGER
}
```

hrPartitionIndex OBJECT-TYPE

SYNTAX INTEGER (1..2147483647)

ACCESS read-only

STATUS mandatory

DESCRIPTION

“A unique value for each partition on this long-term storage device. The value for each long-term storage device must remain constant at least from

one re-initialization of the agent to the next re-initialization.”

::= { hrPartitionEntry 1 }

hrPartitionLabel OBJECT-TYPE

SYNTAX InternationalDisplayString (SIZE (0..128))

ACCESS read-only

STATUS mandatory

DESCRIPTION

“A textual description of this partition.”

::= { hrPartitionEntry 2 }

hrPartitionID OBJECT-TYPE

SYNTAX OCTET STRING

ACCESS read-only

STATUS mandatory

DESCRIPTION

“A descriptor which uniquely represents this partition to the responsible operating system. On some systems, this might take on a binary representation.”

::= { hrPartitionEntry 3 }

hrPartitionSize OBJECT-TYPE

SYNTAX KBytes

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The size of this partition.”

::= { hrPartitionEntry 4 }

hrPartitionFSIndex OBJECT-TYPE

SYNTAX INTEGER (0..2147483647)

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The index of the file system mounted on this partition. If no file system is mounted on this partition, then this value shall be zero. Note

that multiple partitions may point to one file system, denoting that that file system resides on those partitions. Multiple file systems may not reside on one partition.”

```
::= { hrPartitionEntry 5 }
```

File System Table

hrFSTable OBJECT-TYPE

SYNTAX SEQUENCE OF HrFSEntry

ACCESS not-accessible

STATUS mandatory

DESCRIPTION

“The (conceptual) table of file systems local to this host or remotely mounted from a file server. File systems that are in only one user’s environment on a multi-user system will not be included in this table.”

```
::= { hrDevice 8 }
```

hrFSEntry OBJECT-TYPE

SYNTAX HrFSEntry

ACCESS not-accessible

STATUS mandatory

DESCRIPTION

“A (conceptual) entry for one file system local to this host or remotely mounted from a file server. File systems that are in only one user’s environment on a multi-user system will not be included in this table.

As an example of how objects in this table are named, an instance of the hrFSMountPoint object might be named hrFSMountPoint.3”

```
INDEX { hrFSIndex }
```

```
::= { hrFSTable 1 }
```

-- Registration for some popular File System types,

-- for use with hrFSType.

```

hrFSTypes          OBJECT IDENTIFIER ::= { hrDevice 9 }
hrFSOther          OBJECT IDENTIFIER ::= { hrFSTypes 1 }
hrFSUnknown        OBJECT IDENTIFIER ::= { hrFSTypes 2 }
hrFSBerkeleyFFS    OBJECT IDENTIFIER ::= { hrFSTypes 3 }
hrFSSys5FS         OBJECT IDENTIFIER ::= { hrFSTypes 4 }

```

DOS

```

hrFSFat            OBJECT IDENTIFIER ::= { hrFSTypes 5 }
-- OS/2 High Performance File System
hrFSHPFS           OBJECT IDENTIFIER ::= { hrFSTypes 6 }

```

Macintosh Hierarchical File System

```

hrFSHFS            OBJECT IDENTIFIER ::= { hrFSTypes 7 }

```

Macintosh File System

```

hrFSMFS            OBJECT IDENTIFIER ::= { hrFSTypes 8 }

```

Windows NT

```

hrFSNTFS           OBJECT IDENTIFIER ::= { hrFSTypes 9 }
hrFSVNode           OBJECT IDENTIFIER ::= { hrFSTypes 10 }
hrFSJournaled       OBJECT IDENTIFIER ::= { hrFSTypes 11 }

```

CD File systems

```

hrFSiso9660         OBJECT IDENTIFIER ::= { hrFSTypes 12 }
hrFSRockRidge        OBJECT IDENTIFIER ::= { hrFSTypes 13 }
hrFSNFS              OBJECT IDENTIFIER ::= { hrFSTypes 14 }
hrFSNetware          OBJECT IDENTIFIER ::= { hrFSTypes 15 }

```

Andrew File System

```

hrFSAFS             OBJECT IDENTIFIER ::= { hrFSTypes 16 }

```

OSF DCE Distributed File System

```

hrFSDFS             OBJECT IDENTIFIER ::= { hrFSTypes 17 }
hrFSAppleshare      OBJECT IDENTIFIER ::= { hrFSTypes 18 }
hrFSRFS              OBJECT IDENTIFIER ::= { hrFSTypes 19 }

```

Data General

hrFSDGCFS OBJECT IDENTIFIER ::= { hrFSTypes 20 }

SVR4 Boot File System

hrFSBFS OBJECT IDENTIFIER ::= { hrFSTypes 21 }

```
HrFSEntry ::= SEQUENCE {
    hrFSIndex          INTEGER,
    hrFSMountPoint     InternationalDisplayString,
    hrFSRemoteMountPoint InternationalDisplayString,
    hrFSType           OBJECT IDENTIFIER,
    hrFSAccess         INTEGER,
    hrFSBootable       Boolean,
    hrFSStorageIndex   INTEGER,
    hrFSLastFullBackupDate DateAndTime,
    hrFSLastPartialBackupDate DateAndTime
}
```

hrFSIndex OBJECT-TYPE

SYNTAX INTEGER (1..2147483647)

ACCESS read-only

STATUS mandatory

DESCRIPTION

“A unique value for each file system local to this host. The value for each file system must remain constant at least from one re-initialization of the agent to the next re-initialization.”

::= { hrFSEntry 1 }

hrFSMountPoint OBJECT-TYPE

SYNTAX InternationalDisplayString (SIZE(0..128))

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The path name of the root of this file system.”

::= { hrFSEntry 2 }

hrFSRemoteMountPoint OBJECT-TYPE

SYNTAX InternationalDisplayString (SIZE(0..128))

ACCESS read-only

STATUS mandatory

DESCRIPTION

“A description of the name and/or address of the server that this file system is mounted from.

This may also include parameters such as the mount point on the remote file system. If this is not a remote file system, this string should have a length of zero.”

::= { hrFSEntry 3 }

hrFSType OBJECT-TYPE

SYNTAX OBJECT IDENTIFIER

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The value of this object identifies the type of this file system.”

::= { hrFSEntry 4 }

hrFSAccess OBJECT-TYPE

SYNTAX INTEGER {

readWrite(1),

readOnly(2)

}

ACCESS read-only

STATUS mandatory

DESCRIPTION

“An indication if this file system is logically configured by the operating system to be readable and writable or only readable. This does not represent any local access-control policy, except one that is applied to the file system as a whole.”

::= { hrFSEntry 5 }

hrFSBootable OBJECT-TYPE

SYNTAX Boolean

ACCESS read-only

STATUS mandatory

DESCRIPTION

“A flag indicating whether this file system is bootable.”

::= { hrFSEntry 6 }

hrFSStorageIndex OBJECT-TYPE

SYNTAX INTEGER (0..2147483647)

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The index of the hrStorageEntry that represents information about this file system. If there is no such information available, then this value shall be zero. The relevant storage entry will be useful in tracking the percent usage of this file system and diagnosing errors that may occur when it runs out of space.”

::= { hrFSEntry 7 }

hrFSLastFullBackupDate OBJECT-TYPE

SYNTAX DateAndTime

ACCESS read-write

STATUS mandatory

DESCRIPTION

“The last date at which this complete file system was copied to another storage device for backup. This information is useful for ensuring that backups are being performed regularly.

If this information is not known, then this variable shall have the value corresponding to January 1, year 0000, 00:00:00.0, which is encoded as (hex)'00 00 01 01 00 00 00 00'.”

::= { hrFSEntry 8 }

hrFSLastPartialBackupDate OBJECT-TYPE

SYNTAX DateAndTime

ACCESS read-write

STATUS mandatory

DESCRIPTION

“The last date at which a portion of this file system was copied to another storage device for backup. This information is useful for ensuring that backups are being performed regularly.

If this information is not known, then this variable shall have the value corresponding to January 1, year 0000, 00:00:00.0, which is encoded as (hex)'00 00 01 01 00 00 00 00'.”

::= { hrFSEntry 9 }

Host Resources Running Software Group

Implementation of this group is optional.

The hrSWRunTable contains an entry for each distinct piece of software that is running or loaded into physical or virtual memory in preparation for running. This includes the host's operating system, device drivers, and applications.

hrSWOSIndex OBJECT-TYPE

SYNTAX INTEGER (1..2147483647)

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The value of the hrSWRunIndex for the hrSWRunEntry that represents the primary operating system running on this host. This object is useful for quickly and uniquely identifying that primary operating system.”

::= { hrSWRun 1 }

hrSWRunTable OBJECT-TYPE

SYNTAX SEQUENCE OF HrSWRunEntry

ACCESS not-accessible

STATUS mandatory

DESCRIPTION

“The (conceptual) table of software running on the host.”

```
::= { hrSWRun 2 }
```

hrSWRunEntry OBJECT-TYPE

SYNTAX HrSWRunEntry

ACCESS not-accessible

STATUS mandatory

DESCRIPTION

“A (conceptual) entry for one piece of software running on the host. Note that because the installed software table only contains information for software stored locally on this host, not every piece of running software will be found in the installed software table. This is true of software that was loaded and run from a non-local source, such as a network-mounted file system.

As an example of how objects in this table are named, an instance of the hrSWRunName object might be named hrSWRunName.1287”

INDEX { hrSWRunIndex }

```
::= { hrSWRunTable 1 }
```

HrSWRunEntry ::= SEQUENCE {

```
    hrSWRunIndex    INTEGER,
    hrSWRunName     InternationalDisplayString,
    hrSWRunID       ProductID,
    hrSWRunPath     InternationalDisplayString,
    hrSWRunParameters InternationalDisplayString,
    hrSWRunType     INTEGER,
    hrSWRunStatus   INTEGER
}
```

hrSWRunIndex OBJECT-TYPE

SYNTAX INTEGER (1..2147483647)

ACCESS read-only

STATUS mandatory

DESCRIPTION

“A unique value for each piece of software running on the host. Wherever possible, this should be the system’s native, unique identification number.”

::= { hrSWRunEntry 1 }

hrSWRunName OBJECT-TYPE

SYNTAX InternationalDisplayString (SIZE (0..64))

ACCESS read-only

STATUS mandatory

DESCRIPTION

“A textual description of this running piece of software, including the manufacturer, revision, and the name by which it is commonly known. If this software was installed locally, this should be the same string as used in the corresponding hrSWInstalledName.”

::= { hrSWRunEntry 2 }

hrSWRunID OBJECT-TYPE

SYNTAX ProductID

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The product ID of this running piece of software.”

::= { hrSWRunEntry 3 }

hrSWRunPath OBJECT-TYPE

SYNTAX InternationalDisplayString (SIZE(0..128))

ACCESS read-only

STATUS mandatory

DESCRIPTION

A description of the location on long-term storage (e.g. a disk drive) from which this software was loaded.

::= { hrSWRunEntry 4 }

hrSWRunParameters OBJECT-TYPE

SYNTAX InternationalDisplayString (SIZE(0..128))
ACCESS read-only
STATUS mandatory
DESCRIPTION
 “A description of the parameters supplied to this
 software when it was initially loaded.”
::= { hrSWRunEntry 5 }

hrSWRunType OBJECT-TYPE

SYNTAX INTEGER {
 unknown(1),
 operatingSystem(2),
 deviceDriver(3),
 application(4)
}
ACCESS read-only
STATUS mandatory
DESCRIPTION
 “The type of this software.”
::= { hrSWRunEntry 6 }

hrSWRunStatus OBJECT-TYPE

SYNTAX INTEGER {
 running(1),
 runnable(2), -- waiting for resource (CPU, memory, IO)
 notRunnable(3), -- loaded but waiting for event
 invalid(4) -- not loaded
}
ACCESS read-write
STATUS mandatory
DESCRIPTION
 “The status of this running piece of software.
 Setting this value to invalid(4) shall cause this
 software to stop running and to be unloaded.”
::= { hrSWRunEntry 7 }

Host Resources Running Software Performance Group

Implementation of this group is optional.

The hrSWRunPerfTable contains an entry corresponding to each entry in the hrSWRunTable.

hrSWRunPerfTable OBJECT-TYPE

SYNTAX SEQUENCE OF HrSWRunPerfEntry

ACCESS not-accessible

STATUS mandatory

DESCRIPTION

“The (conceptual) table of running software performance metrics.”

::= { hrSWRunPerf 1 }

hrSWRunPerfEntry OBJECT-TYPE

SYNTAX HrSWRunPerfEntry

ACCESS not-accessible

STATUS mandatory

DESCRIPTION

“A (conceptual) entry containing software performance metrics. As an example, an instance of the hrSWRunPerfCPU object might be named hrSWRunPerfCPU.1287”

INDEX { hrSWRunIndex } -- This table augments information in
-- the hrSWRunTable.

::= { hrSWRunPerfTable 1 }

HrSWRunPerfEntry ::= SEQUENCE {

hrSWRunPerfCPU INTEGER,

hrSWRunPerfMem KBytes

}

hrSWRunPerfCPU OBJECT-TYPE

SYNTAX INTEGER

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of centi-seconds of the total system’s

CPU resources consumed by this process. Note that on a multi-processor system, this value may increment by more than one centi-second in one centi-second of real (wall clock) time.”

```
::= { hrSWRunPerfEntry 1 }
```

hrSWRunPerfMem OBJECT-TYPE

SYNTAX KBytes

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total amount of real system memory allocated to this process.”

```
::= { hrSWRunPerfEntry 2 }
```

Host Resources Installed Software Group

Implementation of this group is optional.

The hrSWInstalledTable contains an entry for each piece of software installed in long-term storage (e.g. a disk drive) locally on this host. Note that this does not include software loadable remotely from a network server.

This table is useful for identifying and inventorying software on a host and for diagnosing incompatibility and version mismatch problems between various pieces of hardware and software.

hrSWInstalledLastChange OBJECT-TYPE

SYNTAX TimeTicks

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The value of sysUpTime when an entry in the hrSWInstalledTable was last added, renamed, or deleted. Because this table is likely to contain many entries, polling of this object allows a management station to determine when re-downloading of the table might be useful.”

```
::= { hrSWInstalled 1 }
```

hrSWInstalledLastUpdateTime OBJECT-TYPE

SYNTAX TimeTicks

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The value of sysUpTime when the hrSWInstalledTable was last completely updated. Because caching of this data will be a popular implementation strategy, retrieval of this object allows a management station to obtain a guarantee that no data in this table is older than the indicated time.”

::= { hrSWInstalled 2 }

hrSWInstalledTable OBJECT-TYPE

SYNTAX SEQUENCE OF HrSWInstalledEntry

ACCESS not-accessible

STATUS mandatory

DESCRIPTION

“The (conceptual) table of software installed on this host.

::= { hrSWInstalled 3 }

hrSWInstalledEntry OBJECT-TYPE

SYNTAX HrSWInstalledEntry

ACCESS not-accessible

STATUS mandatory

DESCRIPTION

“A (conceptual) entry for a piece of software installed on this host.

As an example of how objects in this table are named, an instance of the hrSWInstalledName object might be named hrSWInstalledName.96”

INDEX { hrSWInstalledIndex }

::= { hrSWInstalledTable 1 }

HrSWInstalledEntry ::= SEQUENCE {

hrSWInstalledIndex INTEGER,

hrSWInstalledName InternationalDisplayString,

hrSWInstalledID ProductID,

```
    hrSWInstalledType    INTEGER,  
    hrSWInstalledDate    DateAndTime  
}
```

hrSWInstalledIndex OBJECT-TYPE

SYNTAX INTEGER (1..2147483647)

ACCESS read-only

STATUS mandatory

DESCRIPTION

“A unique value for each piece of software installed on the host. This value shall be in the range from 1 to the number of pieces of software installed on the host.”

::= { hrSWInstalledEntry 1 }

hrSWInstalledName OBJECT-TYPE

SYNTAX InternationalDisplayString (SIZE (0..64))

ACCESS read-only

STATUS mandatory

DESCRIPTION

“A textual description of this installed piece of software, including the manufacturer, revision, the name by which it is commonly known, and optionally, its serial number.”

::= { hrSWInstalledEntry 2 }

hrSWInstalledID OBJECT-TYPE

SYNTAX ProductID

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The product ID of this installed piece of software.”

::= { hrSWInstalledEntry 3 }

hrSWInstalledType OBJECT-TYPE

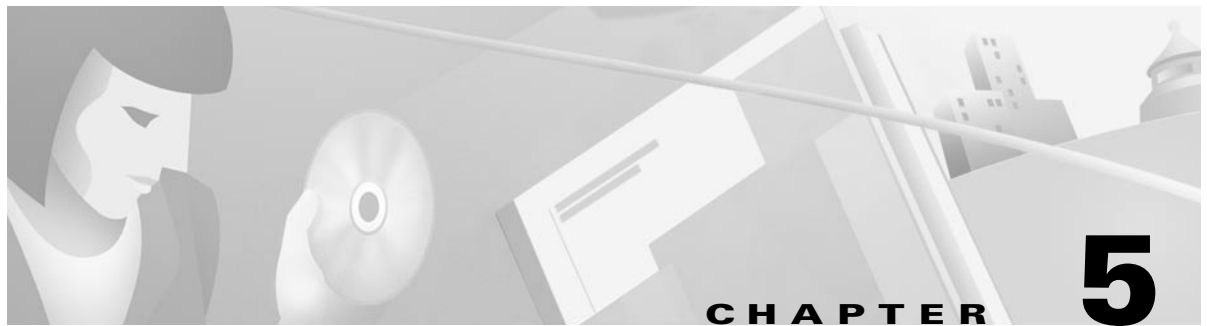
SYNTAX INTEGER {

unknown(1),

```
        operatingSystem(2),
        deviceDriver(3),
        application(4)
    }
ACCESS read-only
STATUS mandatory
DESCRIPTION
    "The type of this software."
 ::= { hrSWInstalledEntry 4 }
```

hrSWInstalledDate OBJECT-TYPE

```
SYNTAX DateAndTime
ACCESS read-only
STATUS mandatory
DESCRIPTION
    "The last-modification date of this application as
    it would appear in a directory listing."
 ::= { hrSWInstalledEntry 5 }
```



Critical Application MIBs

This chapter provides a set of objects used for managing critical application processes. Critical application MIBs are represented by a string containing the full path to the binary as well as command line parameters that are passed to the standard command line shell of the operating system and used to invoke an external command.

Object Identifier

```
critAppTable OBJECT IDENTIFIER ::= { critApp 1 }
```

Critical Application MIBS

```
critAppProcTable OBJECT-TYPE
SYNTAX SEQUENCE OF CritAppProcEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "A table describing critical processes."
::= { critAppTable 1 }
```

```
critAppProcEntry OBJECT-TYPE
SYNTAX CritAppProcEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION
An entry in the critical process table.
INDEX { critAppIndex }
::= { critAppProcTable 1 }
```

```
CritAppProcEntry ::= SEQUENCE {
critAppIndex Integer32,
```

```

critAppName      DisplayString,
critAppProcID    Integer32,
critAppStartCommand  CritAppCommandLine,
critAppTerminateCommand CritAppCommandLine,
critAppAdminStatus  INTEGER,
critAppOperStatus  INTEGER,
critAppRestartOnExit TruthValue,
critAppRestartInterval TimeInterval,
critAppLastRestart  TimeStamp,
critAppRestarts     Counter32,
critAppLastExitStatus Integer32,
critAppTrapOnDown   TruthValue,
critAppTrapOnUp     TruthValue,
critAppFindProc     TruthValue,
critAppRowStatus    RowStatus
}

```

critAppIndex OBJECT-TYPE

SYNTAX Integer32 (1..2147483647)

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION "A numeric index for the critical application table."

::= { critAppProcEntry 1 }

critAppName OBJECT-TYPE

SYNTAX DisplayString

MAX-ACCESS read-create

STATUS current

DESCRIPTION "The name of the application. If critAppFindProc is true then this must be the last component of the execed pathname.

Otherwise, it is arbitrary."

::= { critAppProcEntry 2 }

critAppProcID OBJECT-TYPE

SYNTAX Integer32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

The process ID of the critical application, if running. 0 indicates that the process is not currently running.

DEFVAL { 0 }

::= { critAppProcEntry 3 }

critAppStartCommand OBJECT-TYPE

SYNTAX CritAppCommandLine

MAX-ACCESS read-create

STATUS current

DESCRIPTION "The command used in order to start the application."

::= { critAppProcEntry 4 }

critAppTerminateCommand OBJECT-TYPE

SYNTAX CritAppCommandLine

MAX-ACCESS read-create

STATUS current

DESCRIPTION

The command used in order to terminate the application. At invocation time, the environment variable CRITAPP_PID will contain the process ID of the application to be terminated. If the empty string is given, a reasonable default method is used for terminating the application."

DEFVAL { "" }

::= { critAppProcEntry 5 }

critAppAdminStatus OBJECT-TYPE

SYNTAX INTEGER{up(1),down(2)}

MAX-ACCESS read-create

STATUS current

DESCRIPTION

This variable reflects whether the application is supposed to be running (up) or not (down). By setting this variable, an attempt to start and/or terminate the application according to this table:

critApp	critApp		
OperStatus	AdminStatus	attempted action	
-----	-----	-----	
down	up	start	
up	down	termination	

Otherwise, the set will have no effect. Note that the critAppAdminStatus only reflects intended status and not actual status."

```
::= { critAppProcEntry 8 }
```

critAppOperStatus OBJECT-TYPE

SYNTAX INTEGER{up(1),down(2)}

MAX-ACCESS read-only

STATUS current

DESCRIPTION "This variable indicates whether or not the application is actually running (up) or not running (down). This variable is read-only and is controlled by the implementing agent based on the actual status of the application."

```
::= { critAppProcEntry 9 }
```

critAppRestartOnExit OBJECT-TYPE

SYNTAX TruthValue

MAX-ACCESS read-create

STATUS current

DESCRIPTION "This variable determines whether or not the application should be restarted when it exits."

```
::= { critAppProcEntry 10 }
```

critAppRestartInterval OBJECT-TYPE

SYNTAX TimeInterval

MAX-ACCESS read-create

STATUS current

DESCRIPTION "Automatic restarts of the application will be limited to one attempt within the time interval specified by this variable."

DEFVAL { 500 }

```
::= { critAppProcEntry 12 }
```

critAppLastRestart OBJECT-TYPE

SYNTAX TimeStamp

MAX-ACCESS read-only

STATUS current

DESCRIPTION "The value of sysUpTime.0 at the last time the application was started."

DEFVAL { 0 }

```
::= { critAppProcEntry 13 }
```

critAppRestarts OBJECT-TYPE
SYNTAX Counter32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The total number of times the application has been started."
 ::= { critAppProcEntry 14 }

critAppLastExitStatus OBJECT-TYPE
SYNTAX Integer32
MAX-ACCESS read-only
STATUS current
DESCRIPTION "The exit status of the application the last time it exited."
DEFVAL { 0 }
 ::= { critAppProcEntry 15 }

critAppTrapOnDown OBJECT-TYPE
SYNTAX TruthValue
MAX-ACCESS read-create
STATUS current
DESCRIPTION "This value determines if a critAppDown trap should be sent
whenever an application has gone down (exited)."
DEFVAL { true }
 ::= { critAppProcEntry 16 }

critAppTrapOnUp OBJECT-TYPE
SYNTAX TruthValue
MAX-ACCESS read-create
STATUS current
DESCRIPTION "This value determines if a critAppUp trap should be sent
when an application has come up."
DEFVAL { false }
 ::= { critAppProcEntry 17 }

critAppFindProc OBJECT-TYPE
SYNTAX TruthValue
MAX-ACCESS read-create
STATUS current

DESCRIPTION “This value determines if the critApp subagent attempts to locate a running copy of the program on startup rather than starting a new one.”

DEFVAL { false }

::= { critAppProcEntry 19 }

critAppRowStatus OBJECT-TYPE

SYNTAX RowStatus

MAX-ACCESS read-create

STATUS current

DESCRIPTION “A row status object for the critical application table.”

::= { critAppProcEntry 25 }

critAppGlobals OBJECT IDENTIFIER ::= { critApp 2 }

critAppTrapWhenAllRunning OBJECT-TYPE

SYNTAX TruthValue

MAX-ACCESS read-write

STATUS current

DESCRIPTION “This variable determines if a critAppAllRunningTrap should be send when all critical applications are up.”

::= { critAppGlobals 1 }

critAppTrapWhenNotAllRunning OBJECT-TYPE

SYNTAX TruthValue

MAX-ACCESS read-write

STATUS current

DESCRIPTION “This variable determines if a critAppNotAllRunningTrap should be send when at least one application is down.”

::= { critAppGlobals 2 }

critAppTraps OBJECT IDENTIFIER ::= { critApp 3 }

critAppDown NOTIFICATION-TYPE

OBJECTS { critAppName, critAppProcID, critAppLastExitStatus }

STATUS current

DESCRIPTION “This trap means that the application corresponding to
critAppIndex changed status to down (exited.)”

::= { critAppTraps 1 }

critAppUp NOTIFICATION-TYPE

OBJECTS { critAppName, critAppProcID }

STATUS current

DESCRIPTION “This trap means that the application corresponding to
critAppIndex changed status to up.”

::= { critAppTraps 2 }

critAppAllRunning NOTIFICATION-TYPE

STATUS current

DESCRIPTION “This trap means that all applications are up.”

::= { critAppTraps 4 }

critAppNotAllRunning NOTIFICATION-TYPE

STATUS current

DESCRIPTION “This trap means that at least one applications is
down.”

::= { critAppTraps 5 }

-- units of conformance

critAppMIBGroups

OBJECT IDENTIFIER ::= { critApp 4 }

critAppLeafObjects OBJECT-GROUP

OBJECTS {

critAppName,
critAppProcID,
critAppStartCommand,
critAppTerminateCommand,
critAppAdminStatus,
critAppOperStatus,
critAppRestartOnExit,
critAppRestartInterval,
critAppLastRestart,

```

critAppRestarts,
critAppLastExitStatus,
critAppTrapOnDown,
critAppTrapOnUp,
critAppFindProc,
critAppRowStatus,
critAppTrapWhenAllRunning,
critAppTrapWhenNotAllRunning
}
STATUS current
DESCRIPTION
  "Leaf objects of the critApp MIB"
 ::= { critAppMIBGroups 1 }

```

FS.MY

File system MIBs are a set of objects for monitoring filesystem utilization.

```
 ::= { snmpResearchMIBs 39 }
```

Object Identifiers

```

siFsMonObjects OBJECT IDENTIFIER ::= { siFsMonitor 1 }
siFsMonNotifications OBJECT IDENTIFIER ::= { siFsMonitor 2 }

```

FS.MY

siFsMonGlobalPollInterval OBJECT-TYPE

SYNTAX Integer32

MAX-ACCESS read-write

STATUS current

DESCRIPTION "The period, in seconds, when the filesystems should be checked to see if any exceed the threshold. A value of 0 indicates not to poll based on this value."

```
 ::= { siFsMonObjects 1 }
```

siFsMonGlobalPollNow OBJECT-TYPE

SYNTAX TruthValue

MAX-ACCESS read-write

```

STATUS    current
DESCRIPTION "Setting this object to true(1) will cause the filesystems
            to be checked to see if they exceed a threshold. The primary
            purpose of this variable is for use with the disman schedule
            MIB."
 ::= { siFsMonObjects 2 }

```

siFsMonitorTable OBJECT-TYPE

```

SYNTAX    SEQUENCE OF SiFsMonitorEntry
MAX-ACCESS not-accessible
STATUS    current
DESCRIPTION "A table to configure which filesystems are to be monitored."
 ::= { siFsMonObjects 10 }

```

siFsMonitorEntry OBJECT-TYPE

```

SYNTAX    SiFsMonitorEntry
MAX-ACCESS not-accessible
STATUS    current
DESCRIPTION "An entry in the siFsMonitorTable."
INDEX { siFsMonIndex }
 ::= { siFsMonitorTable 1 }

```

```

SiFsMonitorEntry ::= SEQUENCE {
    siFsMonIndex          Integer32,
    siFsMonName           DisplayString,
    siFsMonDescr         DisplayString,
    siFsMonThreshold     Integer32,
    siFsMonSeverity      INTEGER,
    siFsMonCurrentUtilization Integer32,
    siFsMonTrapWhenAboveThreshold TruthValue,
    siFsMonTrapWhenBelowThreshold TruthValue,
    siFsMonCommandWhenAboveThreshold DisplayString,
    siFsMonPollInterval  Integer32,
    siFsMonPollNow       TruthValue,
    siFsMonOwner         DisplayString,
    siFsMonRowStatus     RowStatus
}

```

siFsMonIndex OBJECT-TYPE

SYNTAX Integer32(1..2147483647)
 MAX-ACCESS not-accessible
 STATUS current
 DESCRIPTION "A numeric index for the siFsMonitorTable."
 ::= { siFsMonitorEntry 1 }

siFsMonName OBJECT-TYPE

SYNTAX DisplayString
 MAX-ACCESS read-create
 STATUS current
 DESCRIPTION "The name of the filesystem to be monitored."
 ::= { siFsMonitorEntry 2 }

siFsMonDescr OBJECT-TYPE

SYNTAX DisplayString
 MAX-ACCESS read-create
 STATUS current
 DESCRIPTION "A textual description of this entry."
 ::= { siFsMonitorEntry 3 }

siFsMonThreshold OBJECT-TYPE

SYNTAX Integer32
 MAX-ACCESS read-create
 STATUS current
 DESCRIPTION "The percentage full at which an event will be triggered."
 ::= { siFsMonitorEntry 4 }

siFsMonSeverity OBJECT-TYPE

SYNTAX INTEGER{warning(1),critical(2)}
 MAX-ACCESS read-create
 STATUS current
 DESCRIPTION "The severity determines which trap will be sent when the
 threshold is exceeded."
 ::= { siFsMonitorEntry 6 }

siFsMonCurrentUtilization OBJECT-TYPE

SYNTAX Integer32

MAX-ACCESS read-only
STATUS current
DESCRIPTION “The percentage of disk space currently in use on
this filesystem.”
::= { siFsMonitorEntry 7 }

siFsMonTrapWhenAboveThreshold OBJECT-TYPE

SYNTAX TruthValue
MAX-ACCESS read-create
STATUS current
DESCRIPTION “This value determines if a trap should be sent when the
threshold is exceeded.”
::= { siFsMonitorEntry 8 }

siFsMonTrapWhenBelowThreshold OBJECT-TYPE

SYNTAX TruthValue
MAX-ACCESS read-create
STATUS current
DESCRIPTION “This value determines if a trap should be sent when the
filesystem utilization falls below the threshold.”
::= { siFsMonitorEntry 10 }

siFsMonCommandWhenAboveThreshold OBJECT-TYPE

SYNTAX DisplayString
MAX-ACCESS read-create
STATUS current
DESCRIPTION “A command to execute when the threshold is exceeded. A
zero-length octet string indicates that no command will
be executed.”
::= { siFsMonitorEntry 12 }

siFsMonPollInterval OBJECT-TYPE

SYNTAX Integer32
MAX-ACCESS read-create
STATUS current
DESCRIPTION “The period, in seconds, when this filesystem should be
checked to see if it exceeds the threshold. A value of
0 indicates not to poll based on this value.”

::= { siFsMonitorEntry 16 }

siFsMonPollNow OBJECT-TYPE

SYNTAX TruthValue

MAX-ACCESS read-create

STATUS current

DESCRIPTION "Setting this object to true(1) will cause this filesystem to be checked to see if it exceeds a threshold. The primary purpose of this variable is for use with the disman schedule MIB."

::= { siFsMonitorEntry 17 }

siFsMonOwner OBJECT-TYPE

SYNTAX DisplayString

MAX-ACCESS read-create

STATUS current

DESCRIPTION "The entity that configured this entry and is therefore using the resources assigned to it."

::= { siFsMonitorEntry 27 }

siFsMonRowStatus OBJECT-TYPE

SYNTAX RowStatus

MAX-ACCESS read-create

STATUS current

DESCRIPTION "A RowStatus object for the filesystem monitor table."

::= { siFsMonitorEntry 28 }

siFsTable OBJECT-TYPE

SYNTAX SEQUENCE OF SiFsEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION "The filesystem table"

::= { siFsMonObjects 11 }

siFsEntry OBJECT-TYPE

SYNTAX SiFsEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION “An entry in the filesystem table.”

INDEX { siFsIndex }

::= { siFsTable 1 }

```
SiFsEntry ::= SEQUENCE {
    siFsIndex          Integer32,
    siFsFilesystem     DisplayString,
    siFsMountPoint     DisplayString,
    siFsSize           Integer32,
    siFsUsed           Integer32,
    siFsAvail          Integer32,
    siFsCapacity       Integer32
}
```

siFsIndex OBJECT-TYPE

SYNTAX Integer32(1..2147483647)

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION “A numeric index for the filesystem table.”

::= { siFsEntry 1 }

siFsFilesystem OBJECT-TYPE

SYNTAX DisplayString

MAX-ACCESS read-only

STATUS current

DESCRIPTION “The filesystem name.”

::= { siFsEntry 2 }

siFsMountPoint OBJECT-TYPE

SYNTAX DisplayString

MAX-ACCESS read-only

STATUS current

DESCRIPTION “The filesystem mount point.”

::= { siFsEntry 3 }

siFsSize OBJECT-TYPE

SYNTAX Integer32

MAX-ACCESS read-only

STATUS current
 DESCRIPTION "The total space allocated in the file system."
 ::= { siFsEntry 4 }

siFsUsed OBJECT-TYPE

SYNTAX Integer32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION "The amount of space allocated to existing files."
 ::= { siFsEntry 5 }

siFsAvail OBJECT-TYPE

SYNTAX Integer32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION "The total amount of space available for the
 creation of new files by unprivileged users."
 ::= { siFsEntry 6 }

siFsCapacity OBJECT-TYPE

SYNTAX Integer32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION "the percentage of normally available
 space that is currently allocated to all
 files on the file system."
 ::= { siFsEntry 7 }

siFsExceptionsTable OBJECT-TYPE

SYNTAX SEQUENCE OF SiFsExceptionsEntry
 MAX-ACCESS not-accessible
 STATUS current
 DESCRIPTION "A table of filesystems which are currently above the
 threshold."
 ::= { siFsMonObjects 12 }

siFsExceptionsEntry OBJECT-TYPE

SYNTAX SiFsExceptionsEntry

```

MAX-ACCESS not-accessible
STATUS current
DESCRIPTION "An entry in the siFsExceptionsTable."
INDEX { siFsMonIndex }
 ::= { siFsExceptionsTable 1 }

```

```

SiFsExceptionsEntry ::= SEQUENCE {
    siFsExceptionName      DisplayString,
    siFsExceptionThreshold Integer32,
    siFsExceptionCurrentValue Integer32
}

```

```

siFsExceptionName OBJECT-TYPE
    SYNTAX DisplayString
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION "The filesystem name."
    ::= { siFsExceptionsEntry 1 }

```

```

siFsExceptionThreshold OBJECT-TYPE
    SYNTAX Integer32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION "The threshold which has been exceeded."
    ::= { siFsExceptionsEntry 2 }

```

```

siFsExceptionCurrentValue OBJECT-TYPE
    SYNTAX Integer32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION "The current percent utilization of the filesystem."
    ::= { siFsExceptionsEntry 3 }

```

```
-- The siFsMonNotifications Group
```

```

siFsAboveWarningThreshold NOTIFICATION-TYPE
    OBJECTS { siFsMonName, siFsMonThreshold, siFsMonCurrentValue }

```

```

STATUS    current
DESCRIPTION "A trap indicating that the threshold was exceeded in a
            row where the severity is set to warning."
 ::= { siFsMonNotifications 1 }

```

siFsAboveCriticalThreshold NOTIFICATION-TYPE

```

OBJECTS   { siFsMonName, siFsMonThreshold, siFsMonCurrentUtilization }
STATUS    current
DESCRIPTION "A trap indicating that the threshold was exceeded in a
            row where the severity is set to critical."
 ::= { siFsMonNotifications 2 }

```

siFsBelowWarningThreshold NOTIFICATION-TYPE

```

OBJECTS   { siFsMonName, siFsMonThreshold, siFsMonCurrentUtilization }
STATUS    current
DESCRIPTION "A trap indicating that the percent utilization has dropped
            back below the threshold in a row where the severity is set
            to warning."
 ::= { siFsMonNotifications 3 }

```

siFsBelowCriticalThreshold NOTIFICATION-TYPE

```

OBJECTS   { siFsMonName, siFsMonThreshold, siFsMonCurrentUtilization }
STATUS    current
DESCRIPTION "A trap indicating that the percent utilization has dropped
            back below the threshold in a row where the severity is set
            to critical."
 ::= { siFsMonNotifications 4 }

```

END

MIB-2.MY

This data type is used to model media addresses. For many types of media, this will be in a binary representation. For example, an ethernet address would be represented as a string of 6 octets.

Groups in MIB-II

```

system    OBJECT IDENTIFIER ::= { mib-2 1 }
interfaces OBJECT IDENTIFIER ::= { mib-2 2 }
at OBJECT IDENTIFIER ::= { mib-2 3 }
ip        OBJECT IDENTIFIER ::= { mib-2 4 }
icmp      OBJECT IDENTIFIER ::= { mib-2 5 }
tcp       OBJECT IDENTIFIER ::= { mib-2 6 }
udp       OBJECT IDENTIFIER ::= { mib-2 7 }
egp       OBJECT IDENTIFIER ::= { mib-2 8 }

```

Historical

```

cmot      OBJECT IDENTIFIER ::= { mib-2 9 }
transmission OBJECT IDENTIFIER ::= { mib-2 10 }
snmp      OBJECT IDENTIFIER ::= { mib-2 11 }

```

System group

Implementation of the System group is mandatory for all systems. If an agent is not configured to have a value for any of these variables, a string of length 0 is returned.

```

sysDescr OBJECT-TYPE
    SYNTAX  DisplayString (SIZE (0..255))
    ACCESS  read-only
    STATUS  mandatory
    DESCRIPTION
        "A textual description of the entity. This value
        should include the full name and version
        identification of the system's hardware type,
        software operating-system, and networking
        software. It is mandatory that this only contain
        printable ASCII characters."
    ::= { system 1 }

sysObjectID OBJECT-TYPE
    SYNTAX  OBJECT IDENTIFIER
    ACCESS  read-only

```

STATUS mandatory

DESCRIPTION

“The vendor’s authoritative identification of the network management subsystem contained in the entity. This value is allocated within the SMI enterprises subtree (1.3.6.1.4.1) and provides an easy and unambiguous means for determining ‘what kind of box’ is being managed. For example, if vendor ‘Flintstones, Inc.’ was assigned the subtree 1.3.6.1.4.1.4242, it could assign the identifier 1.3.6.1.4.1.4242.1.1 to its ‘Fred Router’.”

::= { system 2 }

sysUpTime OBJECT-TYPE

SYNTAX TimeTicks

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The time (in hundredths of a second) since the network management portion of the system was last re-initialized.”

::= { system 3 }

sysContact OBJECT-TYPE

SYNTAX DisplayString (SIZE (0..255))

ACCESS read-write

STATUS mandatory

DESCRIPTION

“The textual identification of the contact person for this managed node, together with information on how to contact this person.”

::= { system 4 }

sysName OBJECT-TYPE

SYNTAX DisplayString (SIZE (0..255))

ACCESS read-write

STATUS mandatory

DESCRIPTION

“An administratively-assigned name for this managed node. By convention, this is the node’s fully-qualified domain name.”

::= { system 5 }

sysLocation OBJECT-TYPE

SYNTAX DisplayString (SIZE (0..255))

ACCESS read-write

STATUS mandatory

DESCRIPTION

“The physical location of this node (e.g., ‘telephone closet, 3rd floor’).”

::= { system 6 }

sysServices OBJECT-TYPE

SYNTAX INTEGER (0..127)

ACCESS read-only

STATUS mandatory

DESCRIPTION

“A value which indicates the set of services that this entity primarily offers.

The value is a sum. This sum initially takes the value zero, Then, for each layer, L, in the range 1 through 7, that this node performs transactions for, 2 raised to $(L - 1)$ is added to the sum. For example, a node which performs primarily routing functions would have a value of 4 ($2^{(3-1)}$). In contrast, a node which is a host offering application services would have a value of 72 ($2^{(4-1)} + 2^{(7-1)}$). Note that in the context of the Internet suite of protocols, values should be calculated accordingly:

layer functionality

1 physical (e.g., repeaters)

2 datalink/subnetwork (e.g., bridges)

- 3 internet (e.g., IP gateways)
- 4 end-to-end (e.g., IP hosts)
- 7 applications (e.g., mail relays)

For systems including OSI protocols, layers 5 and 6 may also be counted.”

::= { system 7 }

Interfaces group

Implementation of the Interfaces group is mandatory for all systems.

ifNumber OBJECT-TYPE

SYNTAX INTEGER

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of network interfaces (regardless of their current state) present on this system.”

::= { interfaces 1 }

Interfaces table

The Interfaces table contains information on the entity’s interfaces. Each interface is thought of as being attached to a ‘subnetwork’. Note that this term should not be confused with ‘subnet’ which refers to an addressing partitioning scheme used in the Internet suite of protocols.

ifTable OBJECT-TYPE

SYNTAX SEQUENCE OF IfEntry

ACCESS not-accessible

STATUS mandatory

DESCRIPTION

“A list of interface entries. The number of entries is given by the value of ifNumber.”

::= { interfaces 2 }

ifEntry OBJECT-TYPE

SYNTAX IfEntry

ACCESS not-accessible

STATUS mandatory

DESCRIPTION

“An interface entry containing objects at the subnetwork layer and below for a particular interface.”

INDEX { ifIndex }

::= { ifTable 1 }

IfEntry ::=

SEQUENCE {

ifIndex

INTEGER,

ifDescr

DisplayString,

ifType

INTEGER,

ifMtu

INTEGER,

ifSpeed

Gauge,

ifPhysAddress

PhysAddress,

ifAdminStatus

INTEGER,

ifOperStatus

INTEGER,

ifLastChange

TimeTicks,

ifInOctets

Counter,

ifInUcastPkts

Counter,

ifInNUcastPkts

Counter,

ifInDiscards

Counter,

ifInErrors

```

        Counter,
ifInUnknownProtos
        Counter,
ifOutOctets
        Counter,
ifOutUcastPkts
        Counter,
ifOutNUcastPkts
        Counter,
ifOutDiscards
        Counter,
ifOutErrors
        Counter,
ifOutQLen
        Gauge,
ifSpecific
        OBJECT IDENTIFIER
}

```

```

ifIndex OBJECT-TYPE
    SYNTAX INTEGER
    ACCESS read-only
    STATUS mandatory
DESCRIPTION
    "A unique value for each interface. Its value
    ranges between 1 and the value of ifNumber. The
    value for each interface must remain constant at
    least from one re-initialization of the entity's
    network management system to the next re-
    initialization."
 ::= { ifEntry 1 }

```

```

ifDescr OBJECT-TYPE
    SYNTAX DisplayString (SIZE (0..255))
    ACCESS read-only
    STATUS mandatory
DESCRIPTION
    "A textual string containing information about the

```

interface. This string should include the name of the manufacturer, the product name and the version of the hardware interface.”

```
::= { ifEntry 2 }
```

ifType OBJECT-TYPE

```
SYNTAX INTEGER {
```

```
    other(1),      -- none of the following
    regular1822(2),
    hdh1822(3),
    ddn-x25(4),
    rfc877-x25(5),
    ethernet-csmacd(6),
    iso88023-csmacd(7),
    iso88024-tokenBus(8),
    iso88025-tokenRing(9),
    iso88026-man(10),
    starLan(11),
    proteon-10Mbit(12),
    proteon-80Mbit(13),
    hyperchannel(14),
    fddi(15),
    lapb(16),
    sdlc(17),
    ds1(18),       -- T-1
    e1(19),        -- european equiv. of T-1
    basicISDN(20),
    primaryISDN(21), -- proprietary serial
    propPointToPointSerial(22),
    ppp(23),
    softwareLoopback(24),
    eon(25),       -- CLNP over IP [11]
    ethernet-3Mbit(26),

    nsip(27),     -- XNS over IP
    slip(28),     -- generic SLIP
```

```

        ultra(29),      -- ULTRA technologies
        ds3(30),       -- T-3
        sip(31),       -- SMDS
        frame-relay(32)
    }
ACCESS read-only
STATUS mandatory
DESCRIPTION
    "The type of interface, distinguished according to
    the physical/link protocol(s) immediately 'below'
    the network layer in the protocol stack."
 ::= { ifEntry 3 }

```

ifMtu OBJECT-TYPE

```

SYNTAX INTEGER
ACCESS read-only
STATUS mandatory
DESCRIPTION
    "The size of the largest datagram which can be
    sent/received on the interface, specified in
    octets. For interfaces that are used for
    transmitting network datagrams, this is the size
    of the largest network datagram that can be sent
    on the interface."
 ::= { ifEntry 4 }

```

ifSpeed OBJECT-TYPE

```

SYNTAX Gauge
ACCESS read-only
STATUS mandatory
DESCRIPTION
    "An estimate of the interface's current bandwidth
    in bits per second. For interfaces which do not
    vary in bandwidth or for those where no accurate
    estimation can be made, this object should contain
    the nominal bandwidth."
 ::= { ifEntry 5 }

```

ifPhysAddress OBJECT-TYPE

SYNTAX PhysAddress

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The interface’s address at the protocol layer immediately ‘below’ the network layer in the protocol stack. For interfaces which do not have

such an address (e.g., a serial line), this object should contain an octet string of zero length.”

::= { ifEntry 6 }

ifAdminStatus OBJECT-TYPE

SYNTAX INTEGER {

up(1), -- ready to pass packets

down(2),

testing(3) -- in some test mode

}

ACCESS read-write

STATUS mandatory

DESCRIPTION

“The desired state of the interface. The testing(3) state indicates that no operational packets can be passed.”

::= { ifEntry 7 }

ifOperStatus OBJECT-TYPE

SYNTAX INTEGER {

up(1), -- ready to pass packets

down(2),

testing(3) -- in some test mode

}

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The current operational state of the interface.

The testing(3) state indicates that no operational packets can be passed.”

::= { ifEntry 8 }

ifLastChange OBJECT-TYPE

SYNTAX TimeTicks

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The value of sysUpTime at the time the interface entered its current operational state. If the current state was entered prior to the last re-initialization of the local network management subsystem, then this object contains a zero value.”

::= { ifEntry 9 }

ifInOctets OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of octets received on the interface, including framing characters.”

::= { ifEntry 10 }

ifInUcastPkts OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of subnetwork-unicast packets delivered to a higher-layer protocol.”

::= { ifEntry 11 }

ifInNUcastPkts OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of non-unicast (i.e., subnetwork-broadcast or subnetwork-multicast) packets delivered to a higher-layer protocol.”

::= { ifEntry 12 }

ifInDiscards OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of inbound packets which were chosen to be discarded even though no errors had been detected to prevent their being deliverable to a higher-layer protocol. One possible reason for discarding such a packet could be to free up buffer space.”

::= { ifEntry 13 }

ifInErrors OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of inbound packets that contained errors preventing them from being deliverable to a higher-layer protocol.”

::= { ifEntry 14 }

ifInUnknownProtos OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of packets received via the interface which were discarded because of an unknown or unsupported protocol.”

::= { ifEntry 15 }

ifOutOctets OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of octets transmitted out of the interface, including framing characters.”

::= { ifEntry 16 }

ifOutUcastPkts OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of packets that higher-level protocols requested be transmitted to a subnetwork-unicast address, including those that were discarded or not sent.”

::= { ifEntry 17 }

ifOutNUcastPkts OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of packets that higher-level protocols requested be transmitted to a non-

unicast (i.e., a subnetwork-broadcast or subnetwork-multicast) address, including those that were discarded or not sent.”

::= { ifEntry 18 }

ifOutDiscards OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of outbound packets which were chosen

to be discarded even though no errors had been detected to prevent their being transmitted. One possible reason for discarding such a packet could be to free up buffer space.”

::= { ifEntry 19 }

ifOutErrors OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of outbound packets that could not be transmitted because of errors.”

::= { ifEntry 20 }

ifOutQLen OBJECT-TYPE

SYNTAX Gauge

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The length of the output packet queue (in packets).”

::= { ifEntry 21 }

ifSpecific OBJECT-TYPE

SYNTAX OBJECT IDENTIFIER

ACCESS read-only

STATUS mandatory

DESCRIPTION

“A reference to MIB definitions specific to the particular media being used to realize the interface. For example, if the interface is realized by an ethernet, then the value of this object refers to a document defining objects specific to ethernet. If this information is not present, its value should be set to the OBJECT IDENTIFIER { 0 0 }, which is a syntatically valid object identifier, and any conformant implementation of ASN.1 and BER must be able to generate and recognize this value.”

::= { ifEntry 22 }

-- the Address Translation group

-- Implementation of the Address Translation group is
 -- mandatory for all systems. Note however that this group
 -- is deprecated by MIB-II. That is, it is being included

-- solely for compatibility with MIB-I nodes, and will most
 -- likely be excluded from MIB-III nodes. From MIB-II and
 -- onwards, each network protocol group contains its own
 -- address translation tables.

-- The Address Translation group contains one table which is
 -- the union across all interfaces of the translation tables
 -- for converting a NetworkAddress (e.g., an IP address) into
 -- a subnetwork-specific address. For lack of a better term,
 -- this document refers to such a subnetwork-specific address
 -- as a 'physical' address.

```
-- Examples of such translation tables are: for broadcast
-- media where ARP is in use, the translation table is
-- equivalent to the ARP cache; or, on an X.25 network where
-- non-algorithmic translation to X.121 addresses is
-- required, the translation table contains the
-- NetworkAddress to X.121 address equivalences.
```

atTable OBJECT-TYPE

SYNTAX SEQUENCE OF AtEntry

ACCESS not-accessible

STATUS deprecated

DESCRIPTION

“The Address Translation tables contain the NetworkAddress to ‘physical’ address equivalences. Some interfaces do not use translation tables for determining address equivalences (e.g., DDN-X.25 has an algorithmic method); if all interfaces are of this type, then the Address Translation table is empty, i.e., has zero entries.”

```
::= { at 1 }
```

atEntry OBJECT-TYPE

SYNTAX AtEntry

ACCESS not-accessible

STATUS deprecated

DESCRIPTION

“Each entry contains one NetworkAddress to ‘physical’ address equivalence.”

```
INDEX { atIfIndex,
        atNetAddress }
```

```
::= { atTable 1 }
```

AtEntry ::=

```
SEQUENCE {
    atIfIndex
    INTEGER,
```

```

    atPhysAddress
        PhysAddress,
    atNetAddress
        NetworkAddress
}

```

atIfIndex OBJECT-TYPE

SYNTAX INTEGER

ACCESS read-write

STATUS deprecated

DESCRIPTION

“The interface on which this entry’s equivalence is effective. The interface identified by a particular value of this index is the same interface as identified by the same value of ifIndex.”

```
::= { atEntry 1 }
```

atPhysAddress OBJECT-TYPE

SYNTAX PhysAddress

ACCESS read-write

STATUS deprecated

DESCRIPTION

“The media-dependent ‘physical’ address.

Setting this object to a null string (one of zero length) has the effect of invalidating the corresponding entry in the atTable object. That is, it effectively disassociates the interface identified with said entry from the mapping identified with said entry. It is an implementation-specific matter as to whether the agent removes an invalidated entry from the table. Accordingly, management stations must be prepared to receive tabular information from agents that corresponds to entries not currently in use. Proper interpretation of such entries requires examination of the relevant atPhysAddress object.”

```
::= { atEntry 2 }
```

atNetAddress OBJECT-TYPE

SYNTAX NetworkAddress

ACCESS read-write

STATUS deprecated

DESCRIPTION

“The NetworkAddress (e.g., the IP address) corresponding to the media-dependent ‘physical’ address.”

```
::= { atEntry 3 }
```

-- the IP group

-- Implementation of the IP group is mandatory for all
-- systems.

ipForwarding OBJECT-TYPE

SYNTAX INTEGER {

forwarding(1), -- acting as a gateway

not-forwarding(2) -- NOT acting as a gateway

}

ACCESS read-write

STATUS mandatory

DESCRIPTION

“The indication of whether this entity is acting as an IP gateway in respect to the forwarding of datagrams received by, but not addressed to, this entity. IP gateways forward datagrams. IP hosts do not (except those source-routed via the host).

Note that for some managed nodes, this object may take on only a subset of the values possible.

Accordingly, it is appropriate for an agent to

return a 'badValue' response if a management station attempts to change this object to an inappropriate value.”

::= { ip 1 }

ipDefaultTTL OBJECT-TYPE

SYNTAX INTEGER

ACCESS read-write

STATUS mandatory

DESCRIPTION

“The default value inserted into the Time-To-Live field of the IP header of datagrams originated at this entity, whenever a TTL value is not supplied by the transport layer protocol.”

::= { ip 2 }

ipInReceives OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of input datagrams received from interfaces, including those received in error.”

::= { ip 3 }

ipInHdrErrors OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of input datagrams discarded due to errors in their IP headers, including bad checksums, version number mismatch, other format errors, time-to-live exceeded, errors discovered in processing their IP options, etc.”

::= { ip 4 }

ipInAddrErrors OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of input datagrams discarded because the IP address in their IP header’s destination field was not a valid address to be received at this entity. This count includes invalid addresses (e.g., 0.0.0.0) and addresses of unsupported Classes (e.g., Class E). For entities which are not IP Gateways and therefore do not forward datagrams, this counter includes datagrams discarded because the destination address was not a local address.”

::= { ip 5 }

ipForwDatagrams OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of input datagrams for which this entity was not their final IP destination, as a result of which an attempt was made to find a route to forward them to that final destination. In entities which do not act as IP Gateways, this counter will include only those packets which were Source-Routed via this entity, and the Source-Route option processing was successful.”

::= { ip 6 }

ipInUnknownProtos OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of locally-addressed datagrams received successfully but discarded because of an unknown or unsupported protocol.”

::= { ip 7 }

ipInDiscards OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of input IP datagrams for which no problems were encountered to prevent their continued processing, but which were discarded (e.g., for lack of buffer space). Note that this counter does not include any datagrams discarded while awaiting re-assembly.”

::= { ip 8 }

ipInDelivers OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of input datagrams successfully delivered to IP user-protocols (including ICMP).”

::= { ip 9 }

ipOutRequests OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of IP datagrams which local IP user-protocols (including ICMP) supplied to IP in requests for transmission. Note that this counter does not include any datagrams counted in

ipForwDatagrams.”
 ::= { ip 10 }

ipOutDiscards OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of output IP datagrams for which no

problem was encountered to prevent their transmission to their destination, but which were discarded (e.g., for lack of buffer space). Note that this counter would include datagrams counted in ipForwDatagrams if any such packets met this (discretionary) discard criterion.”

::= { ip 11 }

ipOutNoRoutes OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of IP datagrams discarded because no route could be found to transmit them to their destination. Note that this counter includes any packets counted in ipForwDatagrams which meet this ‘no-route’ criterion. Note that this includes any datagrams which a host cannot route because all of its default gateways are down.”

::= { ip 12 }

ipReasmTimeout OBJECT-TYPE

SYNTAX INTEGER

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The maximum number of seconds which received fragments are held while they are awaiting reassembly at this entity.”

::= { ip 13 }

ipReasmReqds OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of IP fragments received which needed to be reassembled at this entity.”

::= { ip 14 }

ipReasmOKs OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of IP datagrams successfully reassembled.”

::= { ip 15 }

ipReasmFails OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of failures detected by the IP reassembly algorithm (for whatever reason: timed out, errors, etc). Note that this is not necessarily a count of discarded IP fragments since some algorithms (notably the algorithm in RFC 815) can lose track of the number of fragments by combining them as they are received.”

::= { ip 16 }

ipFragOKs OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of IP datagrams that have been successfully fragmented at this entity.”

::= { ip 17 }

ipFragFails OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of IP datagrams that have been discarded because they needed to be fragmented at this entity but could not be, e.g., because their Don't Fragment flag was set.”

::= { ip 18 }

ipFragCreates OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of IP datagram fragments that have been generated as a result of fragmentation at this entity.”

::= { ip 19 }

-- the IP address table

-- The IP address table contains this entity's IP addressing

-- information.

ipAddrTable OBJECT-TYPE

SYNTAX SEQUENCE OF IpAddrEntry

ACCESS not-accessible

STATUS mandatory

DESCRIPTION

“The table of addressing information relevant to
this entity’s IP addresses.”

::= { ip 20 }

ipAddrEntry OBJECT-TYPE

SYNTAX IpAddrEntry

ACCESS not-accessible

STATUS mandatory

DESCRIPTION

“The addressing information for one of this
entity’s IP addresses.”

INDEX { ipAdEntAddr }

::= { ipAddrTable 1 }

IpAddrEntry ::=

SEQUENCE {

ipAdEntAddr

IpAddress,

ipAdEntIfIndex

INTEGER,

ipAdEntNetMask

IpAddress,

ipAdEntBcastAddr

INTEGER,

ipAdEntReasmMaxSize

INTEGER (0..65535)

}

ipAdEntAddr OBJECT-TYPE

SYNTAX IpAddress

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The IP address to which this entry’s addressing information pertains.”

::= { ipAddrEntry 1 }

ipAdEntIfIndex OBJECT-TYPE

SYNTAX INTEGER

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The index value which uniquely identifies the interface to which this entry is applicable. The interface identified by a particular value of this index is the same interface as identified by the same value of ifIndex.”

::= { ipAddrEntry 2 }

ipAdEntNetMask OBJECT-TYPE

SYNTAX IpAddress

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The subnet mask associated with the IP address of this entry. The value of the mask is an IP address with all the network bits set to 1 and all the hosts bits set to 0.”

::= { ipAddrEntry 3 }

ipAdEntBcastAddr OBJECT-TYPE

SYNTAX INTEGER

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The value of the least-significant bit in the IP

broadcast address used for sending datagrams on the (logical) interface associated with the IP address of this entry. For example, when the Internet standard all-ones broadcast address is used, the value will be 1. This value applies to both the subnet and network broadcasts addresses used by the entity on this (logical) interface.”

```
::= { ipAddrEntry 4 }
```

ipAdEntReasmMaxSize OBJECT-TYPE

SYNTAX INTEGER (0..65535)

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The size of the largest IP datagram which this entity can re-assemble from incoming IP fragmented datagrams received on this interface.”

```
::= { ipAddrEntry 5 }
```

```
-- the IP routing table
```

```
-- The IP routing table contains an entry for each route
```

```
-- presently known to this entity.
```

ipRouteTable OBJECT-TYPE

SYNTAX SEQUENCE OF IpRouteEntry

ACCESS not-accessible

STATUS mandatory

DESCRIPTION

“This entity’s IP Routing table.”

```
::= { ip 21 }
```

ipRouteEntry OBJECT-TYPE

SYNTAX IpRouteEntry

ACCESS not-accessible

STATUS mandatory

DESCRIPTION

“A route to a particular destination.”

INDEX { ipRouteDest }

::= { ipRouteTable 1 }

```
IpRouteEntry ::=
SEQUENCE {
    ipRouteDest
        IpAddress,
    ipRouteIfIndex
        INTEGER,
    ipRouteMetric1
        INTEGER,
    ipRouteMetric2
        INTEGER,
    ipRouteMetric3
        INTEGER,
    ipRouteMetric4
        INTEGER,
    ipRouteNextHop
        IpAddress,
    ipRouteType
        INTEGER,
    ipRouteProto
        INTEGER,
    ipRouteAge
        INTEGER,
    ipRouteMask
        IpAddress,
    ipRouteMetric5
        INTEGER,

    ipRouteInfo
        OBJECT IDENTIFIER
}
```

ipRouteDest OBJECT-TYPE

SYNTAX IpAddress

ACCESS read-write

STATUS mandatory

DESCRIPTION

“The destination IP address of this route. An entry with a value of 0.0.0.0 is considered a default route. Multiple routes to a single destination can appear in the table, but access to such multiple entries is dependent on the table-access mechanisms defined by the network management protocol in use.”

::= { ipRouteEntry 1 }

ipRouteIfIndex OBJECT-TYPE

SYNTAX INTEGER

ACCESS read-write

STATUS mandatory

DESCRIPTION

“The index value which uniquely identifies the local interface through which the next hop of this route should be reached. The interface identified by a particular value of this index is the same interface as identified by the same value of ifIndex.”

::= { ipRouteEntry 2 }

ipRouteMetric1 OBJECT-TYPE

SYNTAX INTEGER

ACCESS read-write

STATUS mandatory

DESCRIPTION

“The primary routing metric for this route. The semantics of this metric are determined by the routing-protocol specified in the route’s ipRouteProto value. If this metric is not used, its value should be set to -1.”

::= { ipRouteEntry 3 }

ipRouteMetric2 OBJECT-TYPE

SYNTAX INTEGER

ACCESS read-write

STATUS mandatory

DESCRIPTION

“An alternate routing metric for this route. The semantics of this metric are determined by the routing-protocol specified in the route’s ipRouteProto value. If this metric is not used, its value should be set to -1.”

::= { ipRouteEntry 4 }

ipRouteMetric3 OBJECT-TYPE

SYNTAX INTEGER

ACCESS read-write

STATUS mandatory

DESCRIPTION

“An alternate routing metric for this route. The semantics of this metric are determined by the routing-protocol specified in the route’s ipRouteProto value. If this metric is not used, its value should be set to -1.”

::= { ipRouteEntry 5 }

ipRouteMetric4 OBJECT-TYPE

SYNTAX INTEGER

ACCESS read-write

STATUS mandatory

DESCRIPTION

“An alternate routing metric for this route. The semantics of this metric are determined by the routing-protocol specified in the route’s ipRouteProto value. If this metric is not used, its value should be set to -1.”

::= { ipRouteEntry 6 }

ipRouteNextHop OBJECT-TYPE

SYNTAX IpAddress

ACCESS read-write

STATUS mandatory

DESCRIPTION

“The IP address of the next hop of this route.

(In the case of a route bound to an interface which is realized via a broadcast media, the value of this field is the agent’s IP address on that interface.)”

::= { ipRouteEntry 7 }

ipRouteType OBJECT-TYPE

SYNTAX INTEGER {

other(1), -- none of the following

invalid(2), -- an invalidated route

-- route to directly

direct(3), -- connected (sub-)network

-- route to a non-local

indirect(4) -- host/network/sub-network

}

ACCESS read-write

STATUS mandatory

DESCRIPTION

“The type of route. Note that the values direct(3) and indirect(4) refer to the notion of direct and indirect routing in the IP architecture.

Setting this object to the value invalid(2) has the effect of invalidating the corresponding entry in the ipRouteTable object. That is, it effectively disassociates the destination

identified with said entry from the route
 identified with said entry. It is an
 implementation-specific matter as to whether the
 agent removes an invalidated entry from the table.
 Accordingly, management stations must be prepared
 to receive tabular information from agents that
 corresponds to entries not currently in use.
 Proper interpretation of such entries requires
 examination of the relevant ipRouteType object.”

```
::= { ipRouteEntry 8 }
```

ipRouteProto OBJECT-TYPE

```
SYNTAX INTEGER {
```

```
    other(1),    -- none of the following
```

```
                -- non-protocol information,
```

```
                -- e.g., manually configured
```

```
    local(2),   -- entries
```

```
                -- set via a network
```

```
    netmgmt(3), -- management protocol
```

```
                -- obtained via ICMP,
```

```
    icmp(4),    -- e.g., Redirect
```

```
                -- the remaining values are
```

```
                -- all gateway routing
```

```
                -- protocols
```

```
    egp(5),
```

```
    ggp(6),
```

```
    hello(7),
```

```
    rip(8),
```

```
    is-is(9),
```

```
    es-is(10),
```

```

        ciscoIgrp(11),
        bbnSpfIgp(12),
        ospf(13),
        bgp(14)
    }
ACCESS read-only
STATUS mandatory
DESCRIPTION
    "The routing mechanism via which this route was
    learned. Inclusion of values for gateway routing
    protocols is not intended to imply that hosts
    should support those protocols."
 ::= { ipRouteEntry 9 }

```

ipRouteAge OBJECT-TYPE

```

SYNTAX INTEGER
ACCESS read-write
STATUS mandatory
DESCRIPTION
    "The number of seconds since this route was last
    updated or otherwise determined to be correct.
    Note that no semantics of 'too old' can be implied
    except through knowledge of the routing protocol
    by which the route was learned."
 ::= { ipRouteEntry 10 }

```

ipRouteMask OBJECT-TYPE

```

SYNTAX IpAddress
ACCESS read-write
STATUS mandatory
DESCRIPTION
    "Indicate the mask to be logical-ANDed with the
    destination address before being compared to the
    value in the ipRouteDest field. For those systems
    that do not support arbitrary subnet masks, an
    agent constructs the value of the ipRouteMask by
    determining whether the value of the correspondent
    ipRouteDest field belong to a class-A, B, or C

```

network, and then using one of:

mask	network
255.0.0.0	class-A
255.255.0.0	class-B
255.255.255.0	class-C

If the value of the ipRouteDest is 0.0.0.0 (a default route), then the mask value is also 0.0.0.0. It should be noted that all IP routing subsystems implicitly use this mechanism.”

::= { ipRouteEntry 11 }

ipRouteMetric5 OBJECT-TYPE

SYNTAX INTEGER

ACCESS read-write

STATUS mandatory

DESCRIPTION

“An alternate routing metric for this route. The semantics of this metric are determined by the routing-protocol specified in the route’s ipRouteProto value. If this metric is not used, its value should be set to -1.”

::= { ipRouteEntry 12 }

ipRouteInfo OBJECT-TYPE

SYNTAX OBJECT IDENTIFIER

ACCESS read-only

STATUS mandatory

DESCRIPTION

“A reference to MIB definitions specific to the particular routing protocol which is responsible for this route, as determined by the value specified in the route’s ipRouteProto value. If this information is not present, its value should

be set to the OBJECT IDENTIFIER { 0 0 }, which is a syntatically valid object identifier, and any conformant implementation of ASN.1 and BER must be able to generate and recognize this value.”

```
::= { ipRouteEntry 13 }
```

```
-- the IP Address Translation table
```

```
-- The IP address translation table contain the IpAddress to
-- ‘physical’ address equivalences. Some interfaces do not
-- use translation tables for determining address
-- equivalences (e.g., DDN-X.25 has an algorithmic method);
-- if all interfaces are of this type, then the Address
-- Translation table is empty, i.e., has zero entries.
```

```
ipNetToMediaTable OBJECT-TYPE
```

```
SYNTAX SEQUENCE OF IpNetToMediaEntry
```

```
ACCESS not-accessible
```

```
STATUS mandatory
```

```
DESCRIPTION
```

“The IP Address Translation table used for mapping from IP addresses to physical addresses.”

```
::= { ip 22 }
```

```
ipNetToMediaEntry OBJECT-TYPE
```

```
SYNTAX IpNetToMediaEntry
```

```
ACCESS not-accessible
```

```
STATUS mandatory
```

```
DESCRIPTION
```

“Each entry contains one IpAddress to ‘physical’ address equivalence.”

```
INDEX { ipNetToMediaIfIndex,
        ipNetToMediaNetAddress }
```

```
::= { ipNetToMediaTable 1 }
```

```
IpNetToMediaEntry ::=
  SEQUENCE {
    ipNetToMediaIfIndex
      INTEGER,
    ipNetToMediaPhysAddress
      PhysAddress,
    ipNetToMediaNetAddress
      IpAddress,
    ipNetToMediaType
      INTEGER
  }
```

ipNetToMediaIfIndex OBJECT-TYPE

SYNTAX INTEGER

ACCESS read-write

STATUS mandatory

DESCRIPTION

“The interface on which this entry’s equivalence is effective. The interface identified by a particular value of this index is the same interface as identified by the same value of ifIndex.”

::= { ipNetToMediaEntry 1 }

ipNetToMediaPhysAddress OBJECT-TYPE

SYNTAX PhysAddress

ACCESS read-write

STATUS mandatory

DESCRIPTION

“The media-dependent ‘physical’ address.”

::= { ipNetToMediaEntry 2 }

ipNetToMediaNetAddress OBJECT-TYPE

SYNTAX IpAddress

ACCESS read-write

STATUS mandatory

DESCRIPTION

“The IpAddress corresponding to the media-dependent ‘physical’ address.”

::= { ipNetToMediaEntry 3 }

ipNetToMediaType OBJECT-TYPE

SYNTAX INTEGER {

other(1), -- none of the following

invalid(2), -- an invalidated mapping

dynamic(3),

static(4)

}

ACCESS read-write

STATUS mandatory

DESCRIPTION

“The type of mapping.

Setting this object to the value invalid(2) has the effect of invalidating the corresponding entry in the ipNetToMediaTable. That is, it effectively disassociates the interface identified with said entry from the mapping identified with said entry. It is an implementation-specific matter as to whether the agent removes an invalidated entry from the table. Accordingly, management stations must be prepared to receive tabular information from agents that corresponds to entries not currently in use. Proper interpretation of such entries requires examination of the relevant ipNetToMediaType object.”

::= { ipNetToMediaEntry 4 }

-- additional IP objects

ipRoutingDiscards OBJECT-TYPE

```
SYNTAX Counter
ACCESS read-only
STATUS mandatory
DESCRIPTION
    "The number of routing entries which were chosen
    to be discarded even though they are valid. One
    possible reason for discarding such an entry could
    be to free-up buffer space for other routing

    entries."
 ::= { ip 23 }

-- the ICMP group

-- Implementation of the ICMP group is mandatory for all
-- systems.

icmpInMsgs OBJECT-TYPE
    SYNTAX Counter
    ACCESS read-only
    STATUS mandatory
    DESCRIPTION
        "The total number of ICMP messages which the
        entity received. Note that this counter includes
        all those counted by icmpInErrors."
 ::= { icmp 1 }

icmpInErrors OBJECT-TYPE
    SYNTAX Counter
    ACCESS read-only
    STATUS mandatory
    DESCRIPTION
        "The number of ICMP messages which the entity
        received but determined as having ICMP-specific
        errors (bad ICMP checksums, bad length, etc.)."
```

::= { icmp 2 }

icmpInDestUnreachs OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of ICMP Destination Unreachable messages received.”

::= { icmp 3 }

icmpInTimeExcds OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of ICMP Time Exceeded messages received.”

::= { icmp 4 }

icmpInParmProbs OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of ICMP Parameter Problem messages received.”

::= { icmp 5 }

icmpInSrcQuenchs OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of ICMP Source Quench messages received.”

::= { icmp 6 }

icmpInRedirects OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of ICMP Redirect messages received.”

::= { icmp 7 }

icmpInEchos OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of ICMP Echo (request) messages received.”

::= { icmp 8 }

icmpInEchoReps OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of ICMP Echo Reply messages received.”

::= { icmp 9 }

icmpInTimestamps OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of ICMP Timestamp (request) messages received.”
 ::= { icmp 10 }

icmpInTimestampReps OBJECT-TYPE

SYNTAX Counter
ACCESS read-only
STATUS mandatory
DESCRIPTION
“The number of ICMP Timestamp Reply messages received.”
 ::= { icmp 11 }

icmpInAddrMasks OBJECT-TYPE

SYNTAX Counter
ACCESS read-only
STATUS mandatory
DESCRIPTION
“The number of ICMP Address Mask Request messages received.”
 ::= { icmp 12 }

icmpInAddrMaskReps OBJECT-TYPE

SYNTAX Counter
ACCESS read-only
STATUS mandatory
DESCRIPTION
“The number of ICMP Address Mask Reply messages received.”
 ::= { icmp 13 }

icmpOutMsgs OBJECT-TYPE

SYNTAX Counter
ACCESS read-only
STATUS mandatory
DESCRIPTION
“The total number of ICMP messages which this entity attempted to send. Note that this counter

includes all those counted by icmpOutErrors.”

::= { icmp 14 }

icmpOutErrors OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of ICMP messages which this entity did not send due to problems discovered within ICMP

such as a lack of buffers. This value should not include errors discovered outside the ICMP layer such as the inability of IP to route the resultant datagram. In some implementations there may be no types of error which contribute to this counter’s value.”

::= { icmp 15 }

icmpOutDestUnreachs OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of ICMP Destination Unreachable messages sent.”

::= { icmp 16 }

icmpOutTimeExcds OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of ICMP Time Exceeded messages sent.”

::= { icmp 17 }

icmpOutParmProbs OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of ICMP Parameter Problem messages sent.”

::= { icmp 18 }

icmpOutSrcQuenchs OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of ICMP Source Quench messages sent.”

::= { icmp 19 }

icmpOutRedirects OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of ICMP Redirect messages sent. For a

host, this object will always be zero, since hosts do not send redirects.”

::= { icmp 20 }

icmpOutEchos OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of ICMP Echo (request) messages sent.”

::= { icmp 21 }

icmpOutEchoReps OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of ICMP Echo Reply messages sent.”

::= { icmp 22 }

icmpOutTimestamps OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of ICMP Timestamp (request) messages sent.”

::= { icmp 23 }

icmpOutTimestampReps OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of ICMP Timestamp Reply messages sent.”

::= { icmp 24 }

icmpOutAddrMasks OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of ICMP Address Mask Request messages sent.”

::= { icmp 25 }

```

icmpOutAddrMaskReps OBJECT-TYPE
    SYNTAX Counter
    ACCESS read-only
    STATUS mandatory
    DESCRIPTION
        "The number of ICMP Address Mask Reply messages
        sent."
    ::= { icmp 26 }

```

```

-- the TCP group

-- Implementation of the TCP group is mandatory for all
-- systems that implement the TCP.

-- Note that instances of object types that represent
-- information about a particular TCP connection are
-- transient; they persist only as long as the connection
-- in question.

```

```

tcpRtoAlgorithm OBJECT-TYPE
    SYNTAX INTEGER {
        other(1), -- none of the following

        constant(2), -- a constant rto
        rsre(3), -- MIL-STD-1778, Appendix B
        vanj(4) -- Van Jacobson's algorithm [10]
    }
    ACCESS read-only
    STATUS mandatory
    DESCRIPTION
        "The algorithm used to determine the timeout value
        used for retransmitting unacknowledged octets."
    ::= { tcp 1 }

```

```

tcpRtoMin OBJECT-TYPE

```

SYNTAX INTEGER

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The minimum value permitted by a TCP implementation for the retransmission timeout, measured in milliseconds. More refined semantics for objects of this type depend upon the algorithm used to determine the retransmission timeout. In particular, when the timeout algorithm is rsre(3), an object of this type has the semantics of the LBOUND quantity described in RFC 793.”

::= { tcp 2 }

tcpRtoMax OBJECT-TYPE

SYNTAX INTEGER

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The maximum value permitted by a TCP implementation for the retransmission timeout, measured in milliseconds. More refined semantics for objects of this type depend upon the algorithm used to determine the retransmission timeout. In particular, when the timeout algorithm is rsre(3), an object of this type has the semantics of the UBOUND quantity described in RFC 793.”

::= { tcp 3 }

tcpMaxConn OBJECT-TYPE

SYNTAX INTEGER

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The limit on the total number of TCP connections the entity can support. In entities where the maximum number of connections is dynamic, this object should contain the value -1.”

::= { tcp 4 }

tcpActiveOpens OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of times TCP connections have made a direct transition to the SYN-SENT state from the CLOSED state.”

::= { tcp 5 }

tcpPassiveOpens OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of times TCP connections have made a direct transition to the SYN-RCVD state from the LISTEN state.”

::= { tcp 6 }

tcpAttemptFails OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of times TCP connections have made a direct transition to the CLOSED state from either the SYN-SENT state or the SYN-RCVD state, plus the number of times TCP connections have made a direct transition to the LISTEN state from the SYN-RCVD

state.”
 ::= { tcp 7 }

tcpEstabResets OBJECT-TYPE

SYNTAX Counter
ACCESS read-only
STATUS mandatory

DESCRIPTION

“The number of times TCP connections have made a direct transition to the CLOSED state from either the ESTABLISHED state or the CLOSE-WAIT state.”

::= { tcp 8 }

tcpCurrEstab OBJECT-TYPE

SYNTAX Gauge
ACCESS read-only
STATUS mandatory

DESCRIPTION

“The number of TCP connections for which the current state is either ESTABLISHED or CLOSE-WAIT.”

::= { tcp 9 }

tcpInSegs OBJECT-TYPE

SYNTAX Counter
ACCESS read-only
STATUS mandatory

DESCRIPTION

“The total number of segments received, including those received in error. This count includes segments received on currently established connections.”

::= { tcp 10 }

tcpOutSegs OBJECT-TYPE

SYNTAX Counter
ACCESS read-only
STATUS mandatory

DESCRIPTION

“The total number of segments sent, including those on current connections but excluding those containing only retransmitted octets.”

::= { tcp 11 }

tcpRetransSegs OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of segments retransmitted - that is, the number of TCP segments transmitted containing one or more previously transmitted octets.”

::= { tcp 12 }

-- the TCP Connection table

-- The TCP connection table contains information about this
 -- entity's existing TCP connections.

tcpConnTable OBJECT-TYPE

SYNTAX SEQUENCE OF TcpConnEntry

ACCESS not-accessible

STATUS mandatory

DESCRIPTION

“A table containing TCP connection-specific information.”

::= { tcp 13 }

tcpConnEntry OBJECT-TYPE

SYNTAX TcpConnEntry

ACCESS not-accessible

STATUS mandatory

DESCRIPTION

“Information about a particular current TCP connection. An object of this type is transient, in that it ceases to exist when (or soon after) the connection makes the transition to the CLOSED state.”

INDEX { tcpConnLocalAddress,
tcpConnLocalPort,
tcpConnRemAddress,
tcpConnRemPort }
::= { tcpConnTable 1 }

TcpConnEntry ::=

```
SEQUENCE {
  tcpConnState
    INTEGER,
  tcpConnLocalAddress
    IpAddress,
  tcpConnLocalPort
    INTEGER (0..65535),
  tcpConnRemAddress
    IpAddress,
  tcpConnRemPort
    INTEGER (0..65535)
}
```

tcpConnState OBJECT-TYPE

```
SYNTAX INTEGER {
  closed(1),
  listen(2),
  synSent(3),
  synReceived(4),
  established(5),
  finWait1(6),
```

```

        finWait2(7),
        closeWait(8),
        lastAck(9),
        closing(10),
        timeWait(11),
        deleteTCB(12)
    }

```

ACCESS read-write

STATUS mandatory

DESCRIPTION

“The state of this TCP connection.

The only value which may be set by a management station is deleteTCB(12). Accordingly, it is appropriate for an agent to return a ‘badValue’ response if a management station attempts to set this object to any other value.

If a management station sets this object to the value deleteTCB(12), then this has the effect of deleting the TCB (as defined in RFC 793) of the corresponding connection on the managed node, resulting in immediate termination of the connection.

As an implementation-specific option, a RST

segment may be sent from the managed node to the other TCP endpoint (note however that RST segments are not sent reliably).”

```
 ::= { tcpConnEntry 1 }
```

tcpConnLocalAddress OBJECT-TYPE

SYNTAX IpAddress

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The local IP address for this TCP connection. In the case of a connection in the listen state which is willing to accept connections for any IP interface associated with the node, the value 0.0.0.0 is used.”

::= { tcpConnEntry 2 }

tcpConnLocalPort OBJECT-TYPE

SYNTAX INTEGER (0..65535)

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The local port number for this TCP connection.”

::= { tcpConnEntry 3 }

tcpConnRemAddress OBJECT-TYPE

SYNTAX IpAddress

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The remote IP address for this TCP connection.”

::= { tcpConnEntry 4 }

tcpConnRemPort OBJECT-TYPE

SYNTAX INTEGER (0..65535)

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The remote port number for this TCP connection.”

::= { tcpConnEntry 5 }

-- additional TCP objects

tcpInErrs OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of segments received in error
(e.g., bad TCP checksums).”

::= { tcp 14 }

tcpOutRsts OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of TCP segments sent containing the
RST flag.”

::= { tcp 15 }

-- the UDP group

-- Implementation of the UDP group is mandatory for all

-- systems which implement the UDP.

udpInDatagrams OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of UDP datagrams delivered to
UDP users.”

::= { udp 1 }

udpNoPorts OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of received UDP datagrams for which there was no application at the destination port.”

::= { udp 2 }

udpInErrors OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The number of received UDP datagrams that could not be delivered for reasons other than the lack of an application at the destination port.”

::= { udp 3 }

udpOutDatagrams OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of UDP datagrams sent from this entity.”

::= { udp 4 }

-- the UDP Listener table

-- The UDP listener table contains information about this
-- entity's UDP end-points on which a local application is
-- currently accepting datagrams.

udpTable OBJECT-TYPE

SYNTAX SEQUENCE OF UdpEntry

ACCESS not-accessible

STATUS mandatory

DESCRIPTION

“A table containing UDP listener information.”
 ::= { udp 5 }

udpEntry OBJECT-TYPE

SYNTAX UdpEntry
 ACCESS not-accessible
 STATUS mandatory
 DESCRIPTION

“Information about a particular current UDP listener.”

INDEX { udpLocalAddress, udpLocalPort }
 ::= { udpTable 1 }

UdpEntry ::=

SEQUENCE {
 udpLocalAddress
 IpAddress,
 udpLocalPort
 INTEGER (0..65535)
 }

udpLocalAddress OBJECT-TYPE

SYNTAX IpAddress
 ACCESS read-only
 STATUS mandatory
 DESCRIPTION

“The local IP address for this UDP listener. In

the case of a UDP listener which is willing to accept datagrams for any IP interface associated with the node, the value 0.0.0.0 is used.”

::= { udpEntry 1 }

udpLocalPort OBJECT-TYPE

SYNTAX INTEGER (0..65535)
 ACCESS read-only

```
STATUS mandatory
DESCRIPTION
    "The local port number for this UDP listener."
 ::= { udpEntry 2 }

-- the EGP group

-- Implementation of the EGP group is mandatory for all
-- systems which implement the EGP.

egpInMsgs OBJECT-TYPE
    SYNTAX Counter
    ACCESS read-only
    STATUS mandatory
    DESCRIPTION
        "The number of EGP messages received without
        error."
 ::= { egp 1 }

egpInErrors OBJECT-TYPE
    SYNTAX Counter
    ACCESS read-only
    STATUS mandatory
    DESCRIPTION
        "The number of EGP messages received that proved
        to be in error."
 ::= { egp 2 }

egpOutMsgs OBJECT-TYPE
    SYNTAX Counter
    ACCESS read-only
    STATUS mandatory
    DESCRIPTION
        "The total number of locally generated EGP
        messages."
 ::= { egp 3 }
```

```

egpOutErrors OBJECT-TYPE
    SYNTAX Counter

    ACCESS read-only
    STATUS mandatory
    DESCRIPTION
        "The number of locally generated EGP messages not
        sent due to resource limitations within an EGP
        entity."
    ::= { egp 4 }

-- the EGP Neighbor table

-- The EGP neighbor table contains information about this
-- entity's EGP neighbors.

egpNeighTable OBJECT-TYPE
    SYNTAX SEQUENCE OF EgpNeighEntry
    ACCESS not-accessible
    STATUS mandatory
    DESCRIPTION
        "The EGP neighbor table."
    ::= { egp 5 }

egpNeighEntry OBJECT-TYPE
    SYNTAX EgpNeighEntry
    ACCESS not-accessible
    STATUS mandatory
    DESCRIPTION
        "Information about this entity's relationship with
        a particular EGP neighbor."
    INDEX { egpNeighAddr }
    ::= { egpNeighTable 1 }

EgpNeighEntry ::=

```

```
SEQUENCE {
    egpNeighState
        INTEGER,
    egpNeighAddr
        IpAddress,
    egpNeighAs
        INTEGER,
    egpNeighInMsgs
        Counter,
    egpNeighInErrs
        Counter,
    egpNeighOutMsgs
        Counter,
    egpNeighOutErrs
        Counter,

    egpNeighInErrMsgs
        Counter,
    egpNeighOutErrMsgs
        Counter,
    egpNeighStateUps
        Counter,
    egpNeighStateDowns
        Counter,
    egpNeighIntervalHello
        INTEGER,
    egpNeighIntervalPoll
        INTEGER,
    egpNeighMode
        INTEGER,
    egpNeighEventTrigger
        INTEGER
}

egpNeighState OBJECT-TYPE
    SYNTAX INTEGER {
```

```

        idle(1),
        acquisition(2),
        down(3),
        up(4),
        cease(5)
    }
ACCESS read-only
STATUS mandatory
DESCRIPTION
    "The EGP state of the local system with respect to
    this entry's EGP neighbor. Each EGP state is
    represented by a value that is one greater than
    the numerical value associated with said state in
    RFC 904."
 ::= { egpNeighEntry 1 }

```

egpNeighAddr OBJECT-TYPE

```

SYNTAX IpAddress
ACCESS read-only
STATUS mandatory
DESCRIPTION
    "The IP address of this entry's EGP neighbor."
 ::= { egpNeighEntry 2 }

```

egpNeighAs OBJECT-TYPE

```

SYNTAX INTEGER
ACCESS read-only
STATUS mandatory

```

DESCRIPTION

```

    "The autonomous system of this EGP peer. Zero
    should be specified if the autonomous system
    number of the neighbor is not yet known."
 ::= { egpNeighEntry 3 }

```

egpNeighInMsgs OBJECT-TYPE

SYNTAX Counter
ACCESS read-only
STATUS mandatory
DESCRIPTION
 “The number of EGP messages received without error
 from this EGP peer.”
::= { egpNeighEntry 4 }

egpNeighInErrs OBJECT-TYPE

SYNTAX Counter
ACCESS read-only
STATUS mandatory
DESCRIPTION
 “The number of EGP messages received from this EGP
 peer that proved to be in error (e.g., bad EGP
 checksum).”
::= { egpNeighEntry 5 }

egpNeighOutMsgs OBJECT-TYPE

SYNTAX Counter
ACCESS read-only
STATUS mandatory
DESCRIPTION
 “The number of locally generated EGP messages to
 this EGP peer.”
::= { egpNeighEntry 6 }

egpNeighOutErrs OBJECT-TYPE

SYNTAX Counter
ACCESS read-only
STATUS mandatory
DESCRIPTION
 “The number of locally generated EGP messages not
 sent to this EGP peer due to resource limitations
 within an EGP entity.”
::= { egpNeighEntry 7 }

egpNeighInErrMsgs OBJECT-TYPE

SYNTAX Counter
ACCESS read-only
STATUS mandatory

DESCRIPTION

“The number of EGP-defined error messages received from this EGP peer.”

::= { egpNeighEntry 8 }

egpNeighOutErrMsgs OBJECT-TYPE

SYNTAX Counter
ACCESS read-only
STATUS mandatory

DESCRIPTION

“The number of EGP-defined error messages sent to this EGP peer.”

::= { egpNeighEntry 9 }

egpNeighStateUps OBJECT-TYPE

SYNTAX Counter
ACCESS read-only
STATUS mandatory

DESCRIPTION

“The number of EGP state transitions to the UP state with this EGP peer.”

::= { egpNeighEntry 10 }

egpNeighStateDowns OBJECT-TYPE

SYNTAX Counter
ACCESS read-only
STATUS mandatory

DESCRIPTION

“The number of EGP state transitions from the UP state to any other state with this EGP peer.”

::= { egpNeighEntry 11 }

egpNeighIntervalHello OBJECT-TYPE

SYNTAX INTEGER

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The interval between EGP Hello command retransmissions (in hundredths of a second). This represents the t1 timer as defined in RFC 904.”

::= { egpNeighEntry 12 }

egpNeighIntervalPoll OBJECT-TYPE

SYNTAX INTEGER

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The interval between EGP poll command

retransmissions (in hundredths of a second). This represents the t3 timer as defined in RFC 904.”

::= { egpNeighEntry 13 }

egpNeighMode OBJECT-TYPE

SYNTAX INTEGER { active(1), passive(2) }

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The polling mode of this EGP entity, either passive or active.”

::= { egpNeighEntry 14 }

egpNeighEventTrigger OBJECT-TYPE

SYNTAX INTEGER { start(1), stop(2) }

ACCESS read-write

STATUS mandatory

DESCRIPTION

“A control variable used to trigger operator-

initiated Start and Stop events. When read, this variable always returns the most recent value that `egpNeighEventTrigger` was set to. If it has not been set since the last initialization of the network management subsystem on the node, it returns a value of 'stop'.

When set, this variable causes a Start or Stop event on the specified neighbor, as specified on pages 8-10 of RFC 904. Briefly, a Start event causes an Idle peer to begin neighbor acquisition and a non-Idle peer to reinitiate neighbor acquisition. A stop event causes a non-Idle peer to return to the Idle state until a Start event occurs, either via `egpNeighEventTrigger` or otherwise.”

```
::= { egpNeighEntry 15 }
```

```
-- additional EGP objects
```

```
egpAs OBJECT-TYPE
```

```
SYNTAX INTEGER
```

```
ACCESS read-only
```

```
STATUS mandatory
```

```
DESCRIPTION
```

```
    “The autonomous system number of this EGP entity.”
```

```
::= { egp 6 }
```

```
-- the Transmission group
```

```
-- Based on the transmission media underlying each interface
```

```
-- on a system, the corresponding portion of the Transmission
```

```
-- group is mandatory for that system.
```

```

-- When Internet-standard definitions for managing
-- transmission media are defined, the transmission group is
-- used to provide a prefix for the names of those objects.

-- Typically, such definitions reside in the experimental
-- portion of the MIB until they are “proven”, then as a
-- part of the Internet standardization process, the
-- definitions are accordingly elevated and a new object
-- identifier, under the transmission group is defined. By
-- convention, the name assigned is:
--
-- type OBJECT IDENTIFIER ::= { transmission number }
--
-- where “type” is the symbolic value used for the media in
-- the ifType column of the ifTable object, and “number” is
-- the actual integer value corresponding to the symbol.

-- the SNMP group

-- Implementation of the SNMP group is mandatory for all
-- systems which support an SNMP protocol entity. Some of
-- the objects defined below will be zero-valued in those
-- SNMP implementations that are optimized to support only
-- those functions specific to either a management agent or
-- a management station. In particular, it should be
-- observed that the objects below refer to an SNMP entity,
-- and there may be several SNMP entities residing on a
-- managed node (e.g., if the node is hosting acting as
-- a management station).

snmpInPkts OBJECT-TYPE
    SYNTAX Counter
    ACCESS read-only
    STATUS mandatory
    DESCRIPTION
        “The total number of Messages delivered to the
        SNMP entity from the transport service.”

```

::= { snmp 1 }

snmpOutPkts OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of SNMP Messages which were passed from the SNMP protocol entity to the transport service.”

::= { snmp 2 }

snmpInBadVersions OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of SNMP Messages which were delivered to the SNMP protocol entity and were for an unsupported SNMP version.”

::= { snmp 3 }

snmpInBadCommunityNames OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of SNMP Messages delivered to the SNMP protocol entity which used a SNMP community name not known to said entity.”

::= { snmp 4 }

snmpInBadCommunityUses OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of SNMP Messages delivered to the SNMP protocol entity which represented an SNMP operation which was not allowed by the SNMP community named in the Message.”

::= { snmp 5 }

snmpInASNParseErrs OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of ASN.1 or BER errors encountered by the SNMP protocol entity when decoding received SNMP Messages.”

::= { snmp 6 }

-- { snmp 7 } is not used

snmpInTooBigs OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of SNMP PDUs which were delivered to the SNMP protocol entity and for which the value of the error-status field is ‘tooBig’.”

::= { snmp 8 }

snmpInNoSuchNames OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of SNMP PDUs which were delivered to the SNMP protocol entity and for which the value of the error-status field is ‘noSuchName’.”

```
::= { snmp 9 }
```

snmpInBadValues OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of SNMP PDUs which were delivered to the SNMP protocol entity and for which the value of the error-status field is ‘badValue’.”

```
::= { snmp 10 }
```

snmpInReadOnly OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number valid SNMP PDUs which were delivered to the SNMP protocol entity and for which the value of the error-status field is ‘readOnly’. It should be noted that it is a protocol error to generate an SNMP PDU which contains the value ‘readOnly’ in the error-status field, as such this object is provided as a means of detecting incorrect implementations of the

SNMP.”

```
::= { snmp 11 }
```

snmpInGenErrs OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of SNMP PDUs which were delivered to the SNMP protocol entity and for which the value of the error-status field is ‘genErr’.”

::= { snmp 12 }

snmpInTotalReqVars OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of MIB objects which have been retrieved successfully by the SNMP protocol entity as the result of receiving valid SNMP Get-Request and Get-Next PDUs.”

::= { snmp 13 }

snmpInTotalSetVars OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of MIB objects which have been altered successfully by the SNMP protocol entity as the result of receiving valid SNMP Set-Request PDUs.”

::= { snmp 14 }

snmpInGetRequests OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of SNMP Get-Request PDUs which

have been accepted and processed by the SNMP
protocol entity.”
 ::= { snmp 15 }

snmpInGetNexts OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of SNMP Get-Next PDUs which have
been accepted and processed by the SNMP protocol
entity.”

::= { snmp 16 }

snmpInSetRequests OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of SNMP Set-Request PDUs which
have been accepted and processed by the SNMP
protocol entity.”

::= { snmp 17 }

snmpInGetResponses OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of SNMP Get-Response PDUs which
have been accepted and processed by the SNMP
protocol entity.”

::= { snmp 18 }

snmpInTraps OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of SNMP Trap PDUs which have been accepted and processed by the SNMP protocol entity.”

::= { snmp 19 }

snmpOutTooBigs OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of SNMP PDUs which were generated by the SNMP protocol entity and for which the value of the error-status field is ‘tooBig.’”

::= { snmp 20 }

snmpOutNoSuchNames OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of SNMP PDUs which were generated by the SNMP protocol entity and for which the value of the error-status is ‘noSuchName’.”

::= { snmp 21 }

snmpOutBadValues OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of SNMP PDUs which were generated by the SNMP protocol entity and for which the value of the error-status field is ‘badValue’.”

::= { snmp 22 }

-- { snmp 23 } is not used

snmpOutGenErrs OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of SNMP PDUs which were generated by the SNMP protocol entity and for which the value of the error-status field is ‘genErr’.”

::= { snmp 24 }

snmpOutGetRequests OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of SNMP Get-Request PDUs which have been generated by the SNMP protocol entity.”

::= { snmp 25 }

snmpOutGetNexts OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of SNMP Get-Next PDUs which have been generated by the SNMP protocol entity.”

::= { snmp 26 }

snmpOutSetRequests OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of SNMP Set-Request PDUs which have been generated by the SNMP protocol entity.”

::= { snmp 27 }

snmpOutGetResponses OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of SNMP Get-Response PDUs which have been generated by the SNMP protocol entity.”

::= { snmp 28 }

snmpOutTraps OBJECT-TYPE

SYNTAX Counter

ACCESS read-only

STATUS mandatory

DESCRIPTION

“The total number of SNMP Trap PDUs which have been generated by the SNMP protocol entity.”

::= { snmp 29 }

snmpEnableAuthenTraps OBJECT-TYPE

SYNTAX INTEGER { enabled(1), disabled(2) }

ACCESS read-write

STATUS mandatory

DESCRIPTION

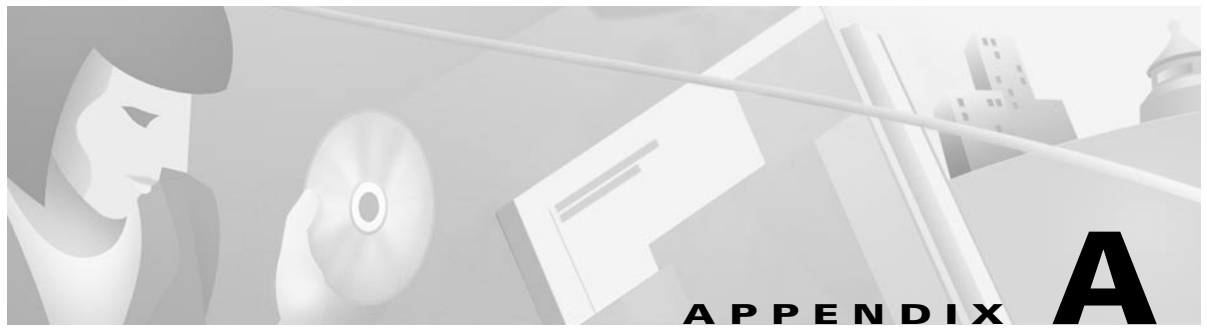
“Indicates whether the SNMP agent process is permitted to generate authentication-failure

traps. The value of this object overrides any configuration information; as such, it provides a means whereby all authentication-failure traps may be disabled.

Note that it is strongly recommended that this object be stored in non-volatile memory so that it remains constant between re-initializations of the network management system.”

```
::= { snmp 30 }
```

```
END
```



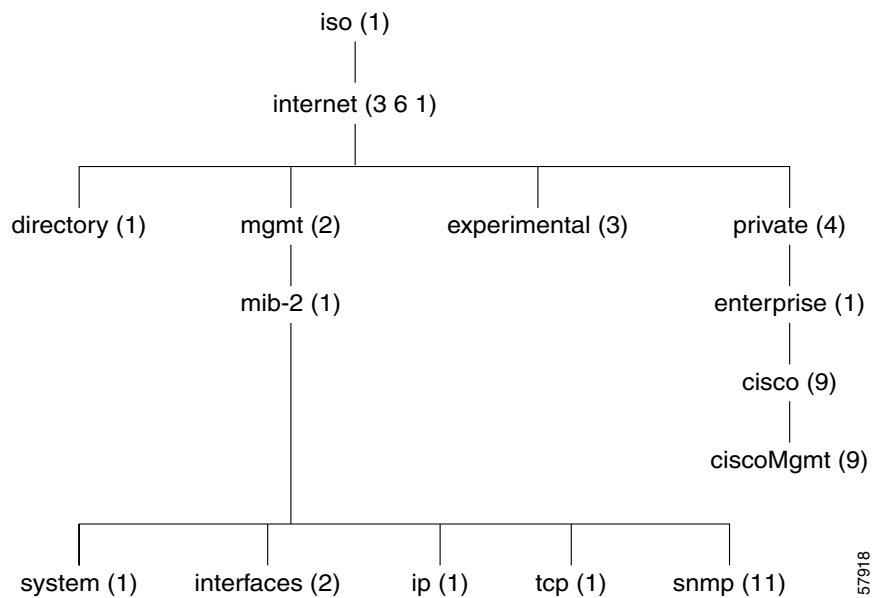
SNMPINFO.dat

Introduction

An object identifier uniquely designates any point in the hierarchical tree, whether object or branch point. An object identifier may be expressed as a series of integers or text strings. The numeric form is used in the protocol and represents the object name and the text form is the object descriptor. This is called an object identifier definition or OID.

The diagram shown in Figure A-1 is the MIB tree from its root, "iso", to some of its lower branches. The branches of primary interest are "mgmt" and "private." The mgmt branch contains standard MIBs and the private branch contains enterprise MIBs. Private enterprises obtain branch number assignments from the Internet Assigned Numbers Authority (IANA). Cisco developers obtain branch number assignments in the Cisco branch from the Cisco Assigned Numbers Authority (CANA). The following OIDs all refer to the same place in the tree: iso.internet.mgmt.mib-2.system 1.3.6.1.2.1.1 and iso.internet.2.1.1.

Figure A-1 MIB Tree



57918

An object is a leaf on such a tree. For example, sysDescr is an object in the System branch of MIB-II. The unique identification of an object comprises the list of branch points down to the object plus an instance identifier. The instance identifier for an ordinary, single instance (scalar) object is always zero, so the full OID for sysDescr is: iso.internet.mgmt.mib-2.system.sysdescr.0, or, numerically: 1.3.6.1.2.1.1.1.0

The natural sorting of objects in the tree is called lexical ordering. This simply means that object identifiers fall into natural, ascending numerical order. This is of particular importance when using the GetNext protocol operation, as it takes an OID or partial OID as input and returns the lexically next object from the MIB according to lexical order.

iso	1	nonLeaf	
org	1.3	nonLeaf	
dod	1.3.6	nonLeaf	
internet	1.3.6.1	nonLeaf	
directory	1.3.6.1.1	nonLeaf	
mgmt	1.3.6.1.2	nonLeaf	
mib_2	1.3.6.1.2.1	nonLeaf	
system	1.3.6.1.2.1.1	nonLeaf	
sysDescr	1.3.6.1.2.1.1.1	OctetString(0..255)	read-only
sysObjectID	1.3.6.1.2.1.1.2	ObjectID	read-only
sysUpTime	1.3.6.1.2.1.1.3	TimeTicks	read-only
sysContact	1.3.6.1.2.1.1.4	OctetString(0..255)	read-write
sysName	1.3.6.1.2.1.1.5	OctetString(0..255)	read-write
sysLocation	1.3.6.1.2.1.1.6	OctetString(0..255)	read-write
sysServices	1.3.6.1.2.1.1.7	INTEGER(0..127)	read-only
sysORLastChange	1.3.6.1.2.1.1.8	TimeTicks	read-only
sysORTable	1.3.6.1.2.1.1.9	Aggregate	not-accessible
sysOREntry	1.3.6.1.2.1.1.9.1	Aggregate	not-accessible
sysORIndex	1.3.6.1.2.1.1.9.1.1	INTEGER(1..2147483647)	not-accessible
sysORID	1.3.6.1.2.1.1.9.1.2	ObjectID	read-only
sysORDescr	1.3.6.1.2.1.1.9.1.3	OctetString(0..255)	read-only
sysORUpTime	1.3.6.1.2.1.1.9.1.4	TimeTicks	read-only
interfaces	1.3.6.1.2.1.2	nonLeaf	
ifNumber	1.3.6.1.2.1.2.1	INTEGER	read-only
ifTable	1.3.6.1.2.1.2.2	Aggregate	not-accessible
ifEntry	1.3.6.1.2.1.2.2.1	Aggregate	not-accessible
ifIndex	1.3.6.1.2.1.2.2.1.1	INTEGER	read-only
ifDescr	1.3.6.1.2.1.2.2.1.2	OctetString	read-only
ifType	1.3.6.1.2.1.2.2.1.3	INTEGER	read-only
(
1	other		

```

2 regular1822
3 hdh1822
4 ddn_x25
5 rfc877_x25
6 ethernet_csmacd
7 iso88023_csmacd
8 iso88024_tokenBus
9 iso88025_tokenRing
10 iso88026_man
11 starLan
12 proteon_10Mbit
13 proteon_80Mbit
14 hyperchannel
15 fddi
16 lapb
17 sdlc
18 ds1
19 e1
20 basicISDN
21 primaryISDN
22 propPointToPointSerial
23 ppp
24 softwareLoopback
25 eon
26 ethernet_3Mbit
27 nsip
28 slip
29 ultra
30 ds3
31 sip
32 frame_relay
)
ifMtu          1.3.6.1.2.1.2.2.1.4    INTEGER      read-only
ifSpeed        1.3.6.1.2.1.2.2.1.5    Gauge       read-only
ifPhysAddress  1.3.6.1.2.1.2.2.1.6    OctetString read-only
ifAdminStatus 1.3.6.1.2.1.2.2.1.7    INTEGER      read-write
(
1 up

```

```

    2 down
    3 testing
)
ifOperStatus      1.3.6.1.2.1.2.2.1.8      INTEGER      read-only
(
    1 up
    2 down
    3 testing
)
ifLastChange      1.3.6.1.2.1.2.2.1.9      TimeTicks    read-only
ifInOctets        1.3.6.1.2.1.2.2.1.10     Counter      read-only
ifInUcastPkts    1.3.6.1.2.1.2.2.1.11     Counter      read-only
ifInNUcastPkts   1.3.6.1.2.1.2.2.1.12     Counter      read-only
ifInDiscards     1.3.6.1.2.1.2.2.1.13     Counter      read-only
ifInErrors       1.3.6.1.2.1.2.2.1.14     Counter      read-only
ifInUnknownProtos 1.3.6.1.2.1.2.2.1.15     Counter      read-only
ifOutOctets      1.3.6.1.2.1.2.2.1.16     Counter      read-only
ifOutUcastPkts  1.3.6.1.2.1.2.2.1.17     Counter      read-only
ifOutNUcastPkts 1.3.6.1.2.1.2.2.1.18     Counter      read-only
ifOutDiscards   1.3.6.1.2.1.2.2.1.19     Counter      read-only
ifOutErrors     1.3.6.1.2.1.2.2.1.20     Counter      read-only
ifOutQLen       1.3.6.1.2.1.2.2.1.21     Gauge        read-only
ifSpecific       1.3.6.1.2.1.2.2.1.22     ObjectID     read-only
at               1.3.6.1.2.1.3          nonLeaf
atTable         1.3.6.1.2.1.3.1          Aggregate    not-accessible
atEntry        1.3.6.1.2.1.3.1.1        Aggregate    not-accessible
atIfIndex       1.3.6.1.2.1.3.1.1.1          INTEGER      read-write
atPhysAddress   1.3.6.1.2.1.3.1.1.2          OctetString  read-write
atNetAddress    1.3.6.1.2.1.3.1.1.3          NetworkAddress read-write
ip              1.3.6.1.2.1.4          nonLeaf
ipForwarding    1.3.6.1.2.1.4.1          INTEGER      read-write
(
    1 forwarding
    2 not_forwarding
)
ipDefaultTTL    1.3.6.1.2.1.4.2          INTEGER      read-write
ipInReceives    1.3.6.1.2.1.4.3          Counter      read-only
ipInHdrErrors   1.3.6.1.2.1.4.4          Counter      read-only

```

ipInAddrErrors	1.3.6.1.2.1.4.5	Counter	read-only
ipForwDatagrams	1.3.6.1.2.1.4.6	Counter	read-only
ipInUnknownProtos	1.3.6.1.2.1.4.7	Counter	read-only
ipInDiscards	1.3.6.1.2.1.4.8	Counter	read-only
ipInDelivers	1.3.6.1.2.1.4.9	Counter	read-only
ipOutRequests	1.3.6.1.2.1.4.10	Counter	read-only
ipOutDiscards	1.3.6.1.2.1.4.11	Counter	read-only
ipOutNoRoutes	1.3.6.1.2.1.4.12	Counter	read-only
ipReasmTimeout	1.3.6.1.2.1.4.13	INTEGER	read-only
ipReasmReqds	1.3.6.1.2.1.4.14	Counter	read-only
ipReasmOKs	1.3.6.1.2.1.4.15	Counter	read-only
ipReasmFails	1.3.6.1.2.1.4.16	Counter	read-only
ipFragOKs	1.3.6.1.2.1.4.17	Counter	read-only
ipFragFails	1.3.6.1.2.1.4.18	Counter	read-only
ipFragCreates	1.3.6.1.2.1.4.19	Counter	read-only
ipAddrTable	1.3.6.1.2.1.4.20	Aggregate	not-accessible
ipAddrEntry	1.3.6.1.2.1.4.20.1	Aggregate	not-accessible
ipAdEntAddr	1.3.6.1.2.1.4.20.1.1	IpAddress	read-only
ipAdEntIfIndex	1.3.6.1.2.1.4.20.1.2	INTEGER	read-only
ipAdEntNetMask	1.3.6.1.2.1.4.20.1.3	IpAddress	read-only
ipAdEntBcastAddr	1.3.6.1.2.1.4.20.1.4	INTEGER	read-only
ipAdEntReasmMaxSize	1.3.6.1.2.1.4.20.1.5	INTEGER(0..65535)	read-only
ipRouteTable	1.3.6.1.2.1.4.21	Aggregate	not-accessible
ipRouteEntry	1.3.6.1.2.1.4.21.1	Aggregate	not-accessible
ipRouteDest	1.3.6.1.2.1.4.21.1.1	IpAddress	read-write
ipRouteIfIndex	1.3.6.1.2.1.4.21.1.2	INTEGER	read-write
ipRouteMetric1	1.3.6.1.2.1.4.21.1.3	INTEGER	read-write
ipRouteMetric2	1.3.6.1.2.1.4.21.1.4	INTEGER	read-write
ipRouteMetric3	1.3.6.1.2.1.4.21.1.5	INTEGER	read-write
ipRouteMetric4	1.3.6.1.2.1.4.21.1.6	INTEGER	read-write
ipRouteNextHop	1.3.6.1.2.1.4.21.1.7	IpAddress	read-write
ipRouteType	1.3.6.1.2.1.4.21.1.8	INTEGER	read-write
(
1	other		
2	invalid		
3	direct		
4	indirect		
)			

```

ipRouteProto      1.3.6.1.2.1.4.21.1.9      INTEGER      read-only
(
  1 other
  2 local
  3 netmgmt
  4 icmp
  5 egp
  6 ggp
  7 hello
  8 rip
  9 is_is
  10 es_is
  11 ciscoIgrp
  12 bbnSpfIgp
  13 ospf
  14 bgp
)
ipRouteAge        1.3.6.1.2.1.4.21.1.10      INTEGER      read-write
ipRouteMask       1.3.6.1.2.1.4.21.1.11      IPAddress     read-write
ipRouteMetric5    1.3.6.1.2.1.4.21.1.12      INTEGER      read-write
ipRouteInfo       1.3.6.1.2.1.4.21.1.13      ObjectID     read-only
ipNetToMediaTable 1.3.6.1.2.1.4.22          Aggregate     not-accessible
ipNetToMediaEntry 1.3.6.1.2.1.4.22.1        Aggregate     not-accessible
ipNetToMediaIfIndex 1.3.6.1.2.1.4.22.1.1      INTEGER      read-write
ipNetToMediaPhysAddress 1.3.6.1.2.1.4.22.1.2      OctetString  read-write
ipNetToMediaNetAddress 1.3.6.1.2.1.4.22.1.3      IPAddress     read-write
ipNetToMediaType  1.3.6.1.2.1.4.22.1.4      INTEGER      read-write
(
  1 other
  2 invalid
  3 dynamic
  4 static
)
ipRoutingDiscards 1.3.6.1.2.1.4.23          Counter      read-only
icmp              1.3.6.1.2.1.5              nonLeaf
icmpInMsgs        1.3.6.1.2.1.5.1            Counter      read-only
icmpInErrors      1.3.6.1.2.1.5.2            Counter      read-only
icmpInDestUnreachs 1.3.6.1.2.1.5.3            Counter      read-only

```

icmpInTimeExcds	1.3.6.1.2.1.5.4	Counter	read-only
icmpInParmProbs	1.3.6.1.2.1.5.5	Counter	read-only
icmpInSrcQuenchs	1.3.6.1.2.1.5.6	Counter	read-only
icmpInRedirects	1.3.6.1.2.1.5.7	Counter	read-only
icmpInEchos	1.3.6.1.2.1.5.8	Counter	read-only
icmpInEchoReps	1.3.6.1.2.1.5.9	Counter	read-only
icmpInTimestamps	1.3.6.1.2.1.5.10	Counter	read-only
icmpInTimestampReps	1.3.6.1.2.1.5.11	Counter	read-only
icmpInAddrMasks	1.3.6.1.2.1.5.12	Counter	read-only
icmpInAddrMaskReps	1.3.6.1.2.1.5.13	Counter	read-only
icmpOutMsgs	1.3.6.1.2.1.5.14	Counter	read-only
icmpOutErrors	1.3.6.1.2.1.5.15	Counter	read-only
icmpOutDestUnreachs	1.3.6.1.2.1.5.16	Counter	read-only
icmpOutTimeExcds	1.3.6.1.2.1.5.17	Counter	read-only
icmpOutParmProbs	1.3.6.1.2.1.5.18	Counter	read-only
icmpOutSrcQuenchs	1.3.6.1.2.1.5.19	Counter	read-only
icmpOutRedirects	1.3.6.1.2.1.5.20	Counter	read-only
icmpOutEchos	1.3.6.1.2.1.5.21	Counter	read-only
icmpOutEchoReps	1.3.6.1.2.1.5.22	Counter	read-only
icmpOutTimestamps	1.3.6.1.2.1.5.23	Counter	read-only
icmpOutTimestampReps	1.3.6.1.2.1.5.24	Counter	read-only
icmpOutAddrMasks	1.3.6.1.2.1.5.25	Counter	read-only
icmpOutAddrMaskReps	1.3.6.1.2.1.5.26	Counter	read-only
tcp	1.3.6.1.2.1.6	nonLeaf	
tcpRtoAlgorithm	1.3.6.1.2.1.6.1	INTEGER	read-only
(
1	other		
2	constant		
3	rsre		
4	vanj		
)			
tcpRtoMin	1.3.6.1.2.1.6.2	INTEGER	read-only
tcpRtoMax	1.3.6.1.2.1.6.3	INTEGER	read-only
tcpMaxConn	1.3.6.1.2.1.6.4	INTEGER	read-only
tcpActiveOpens	1.3.6.1.2.1.6.5	Counter	read-only
tcpPassiveOpens	1.3.6.1.2.1.6.6	Counter	read-only
tcpAttemptFails	1.3.6.1.2.1.6.7	Counter	read-only
tcpEstabResets	1.3.6.1.2.1.6.8	Counter	read-only

tcpCurrEstab	1.3.6.1.2.1.6.9	Gauge	read-only
tcpInSegs	1.3.6.1.2.1.6.10	Counter	read-only
tcpOutSegs	1.3.6.1.2.1.6.11	Counter	read-only
tcpRetransSegs	1.3.6.1.2.1.6.12	Counter	read-only
tcpConnTable	1.3.6.1.2.1.6.13	Aggregate	not-accessible
tcpConnEntry	1.3.6.1.2.1.6.13.1	Aggregate	not-accessible
tcpConnState	1.3.6.1.2.1.6.13.1.1	INTEGER	read-write
(
1	closed		
2	listen		
3	synSent		
4	synReceived		
5	established		
6	finWait1		
7	finWait2		
8	closeWait		
9	lastAck		
10	closing		
11	timeWait		
12	deleteTCB		
)			
tcpConnLocalAddress	1.3.6.1.2.1.6.13.1.2	IpAddress	read-only
tcpConnLocalPort	1.3.6.1.2.1.6.13.1.3	INTEGER(0..65535)	read-only
tcpConnRemAddress	1.3.6.1.2.1.6.13.1.4	IpAddress	read-only
tcpConnRemPort	1.3.6.1.2.1.6.13.1.5	INTEGER(0..65535)	read-only
tcpInErrs	1.3.6.1.2.1.6.14	Counter	read-only
tcpOutRsts	1.3.6.1.2.1.6.15	Counter	read-only
udp	1.3.6.1.2.1.7	nonLeaf	
udpInDatagrams	1.3.6.1.2.1.7.1	Counter	read-only
udpNoPorts	1.3.6.1.2.1.7.2	Counter	read-only
udpInErrors	1.3.6.1.2.1.7.3	Counter	read-only
udpOutDatagrams	1.3.6.1.2.1.7.4	Counter	read-only
udpTable	1.3.6.1.2.1.7.5	Aggregate	not-accessible
udpEntry	1.3.6.1.2.1.7.5.1	Aggregate	not-accessible
udpLocalAddress	1.3.6.1.2.1.7.5.1.1	IpAddress	read-only
udpLocalPort	1.3.6.1.2.1.7.5.1.2	INTEGER(0..65535)	read-only
egp	1.3.6.1.2.1.8	nonLeaf	
egpInMsgs	1.3.6.1.2.1.8.1	Counter	read-only

egpInErrors	1.3.6.1.2.1.8.2	Counter	read-only
egpOutMsgs	1.3.6.1.2.1.8.3	Counter	read-only
egpOutErrors	1.3.6.1.2.1.8.4	Counter	read-only
egpNeighTable	1.3.6.1.2.1.8.5	Aggregate	not-accessible
egpNeighEntry	1.3.6.1.2.1.8.5.1	Aggregate	not-accessible
egpNeighState	1.3.6.1.2.1.8.5.1.1	INTEGER	read-only
(
1	idle		
2	acquisition		
3	down		
4	up		
5	cease		
)			
egpNeighAddr	1.3.6.1.2.1.8.5.1.2	IpAddress	read-only
egpNeighAs	1.3.6.1.2.1.8.5.1.3	INTEGER	read-only
egpNeighInMsgs	1.3.6.1.2.1.8.5.1.4	Counter	read-only
egpNeighInErrs	1.3.6.1.2.1.8.5.1.5	Counter	read-only
egpNeighOutMsgs	1.3.6.1.2.1.8.5.1.6	Counter	read-only
egpNeighOutErrs	1.3.6.1.2.1.8.5.1.7	Counter	read-only
egpNeighInErrMsgs	1.3.6.1.2.1.8.5.1.8	Counter	read-only
egpNeighOutErrMsgs	1.3.6.1.2.1.8.5.1.9	Counter	read-only
egpNeighStateUps	1.3.6.1.2.1.8.5.1.10	Counter	read-only
egpNeighStateDowns	1.3.6.1.2.1.8.5.1.11	Counter	read-only
egpNeighIntervalHello	1.3.6.1.2.1.8.5.1.12	INTEGER	read-only
egpNeighIntervalPoll	1.3.6.1.2.1.8.5.1.13	INTEGER	read-only
egpNeighMode	1.3.6.1.2.1.8.5.1.14	INTEGER	read-only
(
1	active		
2	passive		
)			
egpNeighEventTrigger	1.3.6.1.2.1.8.5.1.15	INTEGER	read-write
(
1	start		
2	stop		
)			
egpAs	1.3.6.1.2.1.8.6	INTEGER	read-only
transmission	1.3.6.1.2.1.10	nonLeaf	
snmp	1.3.6.1.2.1.11	nonLeaf	

snmpInPkts	1.3.6.1.2.1.11.1	Counter32	read-only
snmpOutPkts	1.3.6.1.2.1.11.2	Counter32	read-only
snmpInBadVersions	1.3.6.1.2.1.11.3	Counter32	read-only
snmpInBadCommunityNames	1.3.6.1.2.1.11.4	Counter32	read-only
snmpInBadCommunityUses	1.3.6.1.2.1.11.5	Counter32	read-only
snmpInASNParseErrs	1.3.6.1.2.1.11.6	Counter32	read-only
snmpInTooBigs	1.3.6.1.2.1.11.8	Counter32	read-only
snmpInNoSuchNames	1.3.6.1.2.1.11.9	Counter32	read-only
snmpInBadValues	1.3.6.1.2.1.11.10	Counter32	read-only
snmpInReadOnlyS	1.3.6.1.2.1.11.11	Counter32	read-only
snmpInGenErrs	1.3.6.1.2.1.11.12	Counter32	read-only
snmpInTotalReqVars	1.3.6.1.2.1.11.13	Counter32	read-only
snmpInTotalSetVars	1.3.6.1.2.1.11.14	Counter32	read-only
snmpInGetRequests	1.3.6.1.2.1.11.15	Counter32	read-only
snmpInGetNexts	1.3.6.1.2.1.11.16	Counter32	read-only
snmpInSetRequests	1.3.6.1.2.1.11.17	Counter32	read-only
snmpInGetResponses	1.3.6.1.2.1.11.18	Counter32	read-only
snmpInTraps	1.3.6.1.2.1.11.19	Counter32	read-only
snmpOutTooBigs	1.3.6.1.2.1.11.20	Counter32	read-only
snmpOutNoSuchNames	1.3.6.1.2.1.11.21	Counter32	read-only
snmpOutBadValues	1.3.6.1.2.1.11.22	Counter32	read-only
snmpOutGenErrs	1.3.6.1.2.1.11.24	Counter32	read-only
snmpOutGetRequests	1.3.6.1.2.1.11.25	Counter32	read-only
snmpOutGetNexts	1.3.6.1.2.1.11.26	Counter32	read-only
snmpOutSetRequests	1.3.6.1.2.1.11.27	Counter32	read-only
snmpOutGetResponses	1.3.6.1.2.1.11.28	Counter32	read-only
snmpOutTraps	1.3.6.1.2.1.11.29	Counter32	read-only
snmpEnableAuthenTraps	1.3.6.1.2.1.11.30	INTEGER	read-write
(
1	enabled		
2	disabled		
)			
snmpSilentDrops	1.3.6.1.2.1.11.31	Counter32	read-only
snmpProxyDrops	1.3.6.1.2.1.11.32	Counter32	read-only
host	1.3.6.1.2.1.25	nonLeaf	
hrSystem	1.3.6.1.2.1.25.1	nonLeaf	
hrSystemUptime	1.3.6.1.2.1.25.1.1	TimeTicks	read-only
hrSystemDate	1.3.6.1.2.1.25.1.2	OctetString	read-write

hrSystemInitialLoadDevice	1.3.6.1.2.1.25.1.3	INTEGER(1..2147483647)	read-write
hrSystemInitialLoadParameters	1.3.6.1.2.1.25.1.4	OctetString	read-write
hrSystemNumUsers	1.3.6.1.2.1.25.1.5	Gauge	read-only
hrSystemProcesses	1.3.6.1.2.1.25.1.6	Gauge	read-only
hrSystemMaxProcesses	1.3.6.1.2.1.25.1.7	INTEGER(0..2147483647)	read-only
hrStorage	1.3.6.1.2.1.25.2	nonLeaf	
hrStorageTypes	1.3.6.1.2.1.25.2.1	nonLeaf	
hrStorageOther	1.3.6.1.2.1.25.2.1.1	nonLeaf	
hrStorageRam	1.3.6.1.2.1.25.2.1.2	nonLeaf	
hrStorageVirtualMemory	1.3.6.1.2.1.25.2.1.3	nonLeaf	
hrStorageFixedDisk	1.3.6.1.2.1.25.2.1.4	nonLeaf	
hrStorageRemovableDisk	1.3.6.1.2.1.25.2.1.5	nonLeaf	
hrStorageFloppyDisk	1.3.6.1.2.1.25.2.1.6	nonLeaf	
hrStorageCompactDisc	1.3.6.1.2.1.25.2.1.7	nonLeaf	
hrStorageRamDisk	1.3.6.1.2.1.25.2.1.8	nonLeaf	
hrMemorySize	1.3.6.1.2.1.25.2.2	INTEGER(0..2147483647)	read-only
hrStorageTable	1.3.6.1.2.1.25.2.3	Aggregate	not-accessible
hrStorageEntry	1.3.6.1.2.1.25.2.3.1	Aggregate	not-accessible
hrStorageIndex	1.3.6.1.2.1.25.2.3.1.1	INTEGER(1..2147483647)	read-only
hrStorageType	1.3.6.1.2.1.25.2.3.1.2	ObjectID	read-only
hrStorageDescr	1.3.6.1.2.1.25.2.3.1.3	OctetString(0..255)	read-only
hrStorageAllocationUnits	1.3.6.1.2.1.25.2.3.1.4	INTEGER(1..2147483647)	read-only
hrStorageSize	1.3.6.1.2.1.25.2.3.1.5	INTEGER(0..2147483647)	read-write
hrStorageUsed	1.3.6.1.2.1.25.2.3.1.6	INTEGER(0..2147483647)	read-only
hrStorageAllocationFailures	1.3.6.1.2.1.25.2.3.1.7	Counter	read-only
hrDevice	1.3.6.1.2.1.25.3	nonLeaf	
hrDeviceTypes	1.3.6.1.2.1.25.3.1	nonLeaf	
hrDeviceOther	1.3.6.1.2.1.25.3.1.1	nonLeaf	
hrDeviceUnknown	1.3.6.1.2.1.25.3.1.2	nonLeaf	
hrDeviceProcessor	1.3.6.1.2.1.25.3.1.3	nonLeaf	
hrDeviceNetwork	1.3.6.1.2.1.25.3.1.4	nonLeaf	
hrDevicePrinter	1.3.6.1.2.1.25.3.1.5	nonLeaf	
hrDeviceDiskStorage	1.3.6.1.2.1.25.3.1.6	nonLeaf	
hrDeviceVideo	1.3.6.1.2.1.25.3.1.10	nonLeaf	
hrDeviceAudio	1.3.6.1.2.1.25.3.1.11	nonLeaf	
hrDeviceCoprocessor	1.3.6.1.2.1.25.3.1.12	nonLeaf	
hrDeviceKeyboard	1.3.6.1.2.1.25.3.1.13	nonLeaf	
hrDeviceModem	1.3.6.1.2.1.25.3.1.14	nonLeaf	

hrDeviceParallelPort	1.3.6.1.2.1.25.3.1.15	nonLeaf	
hrDevicePointing	1.3.6.1.2.1.25.3.1.16	nonLeaf	
hrDeviceSerialPort	1.3.6.1.2.1.25.3.1.17	nonLeaf	
hrDeviceTape	1.3.6.1.2.1.25.3.1.18	nonLeaf	
hrDeviceClock	1.3.6.1.2.1.25.3.1.19	nonLeaf	
hrDeviceVolatileMemory	1.3.6.1.2.1.25.3.1.20	nonLeaf	
hrDeviceNonVolatileMemory	1.3.6.1.2.1.25.3.1.21	nonLeaf	
hrDeviceTable	1.3.6.1.2.1.25.3.2	Aggregate	not-accessible
hrDeviceEntry	1.3.6.1.2.1.25.3.2.1	Aggregate	not-accessible
hrDeviceIndex	1.3.6.1.2.1.25.3.2.1.1	INTEGER(1..2147483647)	read-only
hrDeviceType	1.3.6.1.2.1.25.3.2.1.2	ObjectID	read-only
hrDeviceDescr	1.3.6.1.2.1.25.3.2.1.3	OctetString(0..64)	read-only
hrDeviceID	1.3.6.1.2.1.25.3.2.1.4	ObjectID	read-only
hrDeviceStatus	1.3.6.1.2.1.25.3.2.1.5	INTEGER	read-only
(
1	unknown		
2	running		
3	warning		
4	testing		
5	down		
)			
hrDeviceErrors	1.3.6.1.2.1.25.3.2.1.6	Counter	read-only
hrProcessorTable	1.3.6.1.2.1.25.3.3	Aggregate	not-accessible
hrProcessorEntry	1.3.6.1.2.1.25.3.3.1	Aggregate	not-accessible
hrProcessorFrwID	1.3.6.1.2.1.25.3.3.1.1	ObjectID	read-only
hrProcessorLoad	1.3.6.1.2.1.25.3.3.1.2	INTEGER(0..100)	read-only
hrNetworkTable	1.3.6.1.2.1.25.3.4	Aggregate	not-accessible
hrNetworkEntry	1.3.6.1.2.1.25.3.4.1	Aggregate	not-accessible
hrNetworkIfIndex	1.3.6.1.2.1.25.3.4.1.1	INTEGER	read-only
hrPrinterTable	1.3.6.1.2.1.25.3.5	Aggregate	not-accessible
hrPrinterEntry	1.3.6.1.2.1.25.3.5.1	Aggregate	not-accessible
hrPrinterStatus	1.3.6.1.2.1.25.3.5.1.1	INTEGER	read-only
(
1	other		
2	unknown		
3	idle		
4	printing		
5	warmup		

```

)
hrPrinterDetectedErrorState 1.3.6.1.2.1.25.3.5.1.2    OctetString    read-only
hrDiskStorageTable 1.3.6.1.2.1.25.3.6    Aggregate    not-accessible
hrDiskStorageEntry 1.3.6.1.2.1.25.3.6.1    Aggregate    not-accessible
hrDiskStorageAccess 1.3.6.1.2.1.25.3.6.1.1    INTEGER    read-only
(
  1 readWrite
  2 readOnly
)
hrDiskStorageMedia 1.3.6.1.2.1.25.3.6.1.2    INTEGER    read-only
(
  1 other
  2 unknown
  3 hardDisk
  4 floppyDisk
  5 opticalDiskROM
  6 opticalDiskWORM
  7 opticalDiskRW
  8 ramDisk
)
hrDiskStorageRemoveable 1.3.6.1.2.1.25.3.6.1.3    INTEGER    read-only
(
  1 true
  2 false
)
hrDiskStorageCapacity 1.3.6.1.2.1.25.3.6.1.4    INTEGER(0..2147483647) read-only
hrPartitionTable 1.3.6.1.2.1.25.3.7    Aggregate    not-accessible
hrPartitionEntry 1.3.6.1.2.1.25.3.7.1    Aggregate    not-accessible
hrPartitionIndex 1.3.6.1.2.1.25.3.7.1.1    INTEGER(1..2147483647) read-only
hrPartitionLabel 1.3.6.1.2.1.25.3.7.1.2    OctetString    read-only
hrPartitionID 1.3.6.1.2.1.25.3.7.1.3    OctetString    read-only
hrPartitionSize 1.3.6.1.2.1.25.3.7.1.4    INTEGER(0..2147483647) read-only
hrPartitionFSIndex 1.3.6.1.2.1.25.3.7.1.5    INTEGER(0..2147483647) read-only
hrFSSTable 1.3.6.1.2.1.25.3.8    Aggregate    not-accessible
hrFSSEntry 1.3.6.1.2.1.25.3.8.1    Aggregate    not-accessible
hrFSIndex 1.3.6.1.2.1.25.3.8.1.1    INTEGER(1..2147483647) read-only
hrFSMountPoint 1.3.6.1.2.1.25.3.8.1.2    OctetString    read-only
hrFSRemoteMountPoint 1.3.6.1.2.1.25.3.8.1.3    OctetString    read-only

```

hrFSType	1.3.6.1.2.1.25.3.8.1.4	ObjectID	read-only
hrFSAccess	1.3.6.1.2.1.25.3.8.1.5	INTEGER	read-only
(
1 readWrite			
2 readOnly			
)			
hrFSBootable	1.3.6.1.2.1.25.3.8.1.6	INTEGER	read-only
(
1 true			
2 false			
)			
hrFSStorageIndex	1.3.6.1.2.1.25.3.8.1.7	INTEGER(0..2147483647)	read-only
hrFSLastFullBackupDate	1.3.6.1.2.1.25.3.8.1.8	OctetString	read-write
hrFSLastPartialBackupDate	1.3.6.1.2.1.25.3.8.1.9	OctetString	read-write
hrFSTypes	1.3.6.1.2.1.25.3.9	nonLeaf	
hrFSOther	1.3.6.1.2.1.25.3.9.1	nonLeaf	
hrFSUnknown	1.3.6.1.2.1.25.3.9.2	nonLeaf	
hrFSBerkeleyFFS	1.3.6.1.2.1.25.3.9.3	nonLeaf	
hrFSSys5FS	1.3.6.1.2.1.25.3.9.4	nonLeaf	
hrFSFat	1.3.6.1.2.1.25.3.9.5	nonLeaf	
hrFSHPFS	1.3.6.1.2.1.25.3.9.6	nonLeaf	
hrFSHFS	1.3.6.1.2.1.25.3.9.7	nonLeaf	
hrFSMFS	1.3.6.1.2.1.25.3.9.8	nonLeaf	
hrFSNTFS	1.3.6.1.2.1.25.3.9.9	nonLeaf	
hrFSVNode	1.3.6.1.2.1.25.3.9.10	nonLeaf	
hrFSJournaled	1.3.6.1.2.1.25.3.9.11	nonLeaf	
hrFSiso9660	1.3.6.1.2.1.25.3.9.12	nonLeaf	
hrFSRockRidge	1.3.6.1.2.1.25.3.9.13	nonLeaf	
hrFSNFS	1.3.6.1.2.1.25.3.9.14	nonLeaf	
hrFSNetware	1.3.6.1.2.1.25.3.9.15	nonLeaf	
hrFSAFS	1.3.6.1.2.1.25.3.9.16	nonLeaf	
hrFSDFS	1.3.6.1.2.1.25.3.9.17	nonLeaf	
hrFSAppleshare	1.3.6.1.2.1.25.3.9.18	nonLeaf	
hrFSRFS	1.3.6.1.2.1.25.3.9.19	nonLeaf	
hrFSDGCFS	1.3.6.1.2.1.25.3.9.20	nonLeaf	
hrFSBFS	1.3.6.1.2.1.25.3.9.21	nonLeaf	
hrSWRun	1.3.6.1.2.1.25.4	nonLeaf	
hrSWOSIndex	1.3.6.1.2.1.25.4.1	INTEGER(1..2147483647)	read-only

hrSWRunTable	1.3.6.1.2.1.25.4.2	Aggregate	not-accessible
hrSWRunEntry	1.3.6.1.2.1.25.4.2.1	Aggregate	not-accessible
hrSWRunIndex	1.3.6.1.2.1.25.4.2.1.1	INTEGER(1..2147483647)	read-only
hrSWRunName	1.3.6.1.2.1.25.4.2.1.2	OctetString	read-only
hrSWRunID	1.3.6.1.2.1.25.4.2.1.3	ObjectID	read-only
hrSWRunPath	1.3.6.1.2.1.25.4.2.1.4	OctetString	read-only
hrSWRunParameters	1.3.6.1.2.1.25.4.2.1.5	OctetString	read-only
hrSWRunType	1.3.6.1.2.1.25.4.2.1.6	INTEGER	read-only
(
1	unknown		
2	operatingSystem		
3	deviceDriver		
4	application		
)			
hrSWRunStatus	1.3.6.1.2.1.25.4.2.1.7	INTEGER	read-write
(
1	running		
2	runnable		
3	notRunnable		
4	invalid		
)			
hrSWRunPerf	1.3.6.1.2.1.25.5	nonLeaf	
hrSWRunPerfTable	1.3.6.1.2.1.25.5.1	Aggregate	not-accessible
hrSWRunPerfEntry	1.3.6.1.2.1.25.5.1.1	Aggregate	not-accessible
hrSWRunPerfCPU	1.3.6.1.2.1.25.5.1.1.1	INTEGER	read-only
hrSWRunPerfMem	1.3.6.1.2.1.25.5.1.1.2	INTEGER(0..2147483647)	read-only
hrSWInstalled	1.3.6.1.2.1.25.6	nonLeaf	
hrSWInstalledLastChange	1.3.6.1.2.1.25.6.1	TimeTicks	read-only
hrSWInstalledLastUpdateTime	1.3.6.1.2.1.25.6.2	TimeTicks	read-only
hrSWInstalledTable	1.3.6.1.2.1.25.6.3	Aggregate	not-accessible
hrSWInstalledEntry	1.3.6.1.2.1.25.6.3.1	Aggregate	not-accessible
hrSWInstalledIndex	1.3.6.1.2.1.25.6.3.1.1	INTEGER(1..2147483647)	read-only
hrSWInstalledName	1.3.6.1.2.1.25.6.3.1.2	OctetString	read-only
hrSWInstalledID	1.3.6.1.2.1.25.6.3.1.3	ObjectID	read-only
hrSWInstalledType	1.3.6.1.2.1.25.6.3.1.4	INTEGER	read-only
(
1	unknown		
2	operatingSystem		

```

    3 deviceDriver
    4 application
)
hrSWInstalledDate 1.3.6.1.2.1.25.6.3.1.5 OctetString read-only
sysApplMIB 1.3.6.1.2.1.54 nonLeaf
sysApplOBJ 1.3.6.1.2.1.54.1 nonLeaf
sysApplInstalled 1.3.6.1.2.1.54.1.1 nonLeaf
sysApplInstallPkgTable 1.3.6.1.2.1.54.1.1.1 Aggregate not-accessible
sysApplInstallPkgEntry 1.3.6.1.2.1.54.1.1.1.1 Aggregate not-accessible
sysApplInstallPkgIndex 1.3.6.1.2.1.54.1.1.1.1.1 Unsigned32 not-accessible
sysApplInstallPkgManufacturer 1.3.6.1.2.1.54.1.1.1.1.2 OctetString(0..255) read-only
sysApplInstallPkgProductName 1.3.6.1.2.1.54.1.1.1.1.3 OctetString(0..255) read-only
sysApplInstallPkgVersion 1.3.6.1.2.1.54.1.1.1.1.4 OctetString(0..255) read-only
sysApplInstallPkgSerialNumber 1.3.6.1.2.1.54.1.1.1.1.5 OctetString(0..255) read-only
sysApplInstallPkgDate 1.3.6.1.2.1.54.1.1.1.1.6 OctetString read-only
sysApplInstallPkgLocation 1.3.6.1.2.1.54.1.1.1.1.7 OctetString(0..1024) read-only
sysApplInstallElmtTable 1.3.6.1.2.1.54.1.1.2 Aggregate not-accessible
sysApplInstallElmtEntry 1.3.6.1.2.1.54.1.1.2.1 Aggregate not-accessible
sysApplInstallElmtIndex 1.3.6.1.2.1.54.1.1.2.1.1 Unsigned32 not-accessible
sysApplInstallElmtName 1.3.6.1.2.1.54.1.1.2.1.2 OctetString(0..255) read-only
sysApplInstallElmtType 1.3.6.1.2.1.54.1.1.2.1.3 INTEGER read-only
(
    1 unknown
    2 nonexecutable
    3 operatingSystem
    4 deviceDriver
    5 application
)
sysApplInstallElmtDate 1.3.6.1.2.1.54.1.1.2.1.4 OctetString read-only
sysApplInstallElmtPath 1.3.6.1.2.1.54.1.1.2.1.5 OctetString(0..1024) read-only
sysApplInstallElmtSizeHigh 1.3.6.1.2.1.54.1.1.2.1.6 Unsigned32 read-only
sysApplInstallElmtSizeLow 1.3.6.1.2.1.54.1.1.2.1.7 Unsigned32 read-only
sysApplInstallElmtRole 1.3.6.1.2.1.54.1.1.2.1.8 Bits read-write
(
    0 executable
    1 exclusive
    2 primary
    3 required

```

```

    4 dependent
    5 unknown
)
sysApplInstallElmtModifyDate 1.3.6.1.2.1.54.1.1.2.1.9    OctetString    read-only
sysApplInstallElmtCurSizeHigh 1.3.6.1.2.1.54.1.1.2.1.10    Unsigned32    read-only
sysApplInstallElmtCurSizeLow 1.3.6.1.2.1.54.1.1.2.1.11    Unsigned32    read-only
sysApplRun          1.3.6.1.2.1.54.1.2          nonLeaf
sysApplRunTable    1.3.6.1.2.1.54.1.2.1          Aggregate    not-accessible
sysApplRunEntry    1.3.6.1.2.1.54.1.2.1.1          Aggregate    not-accessible
sysApplRunIndex    1.3.6.1.2.1.54.1.2.1.1.1          Unsigned32    not-accessible
sysApplRunStarted  1.3.6.1.2.1.54.1.2.1.1.2          OctetString    read-only
sysApplRunCurrentState 1.3.6.1.2.1.54.1.2.1.1.3          INTEGER      read-only
(
    1 running
    2 runnable
    3 waiting
    4 exiting
    5 other
)
sysApplPastRunTable 1.3.6.1.2.1.54.1.2.2          Aggregate    not-accessible
sysApplPastRunEntry 1.3.6.1.2.1.54.1.2.2.1          Aggregate    not-accessible
sysApplPastRunIndex 1.3.6.1.2.1.54.1.2.2.1.1          Unsigned32    not-accessible
sysApplPastRunStarted 1.3.6.1.2.1.54.1.2.2.1.2          OctetString    read-only
sysApplPastRunExitState 1.3.6.1.2.1.54.1.2.2.1.3          INTEGER      read-only
(
    1 complete
    2 failed
    3 other
)
sysApplPastRunTimeEnded 1.3.6.1.2.1.54.1.2.2.1.4          OctetString    read-only
sysApplElmtRunTable 1.3.6.1.2.1.54.1.2.3          Aggregate    not-accessible
sysApplElmtRunEntry 1.3.6.1.2.1.54.1.2.3.1          Aggregate    not-accessible
sysApplElmtRunInstallPkg 1.3.6.1.2.1.54.1.2.3.1.1          Unsigned32    not-accessible
sysApplElmtRunInvocID 1.3.6.1.2.1.54.1.2.3.1.2          Unsigned32    not-accessible
sysApplElmtRunIndex 1.3.6.1.2.1.54.1.2.3.1.3          Unsigned32    not-accessible
sysApplElmtRunInstallIID 1.3.6.1.2.1.54.1.2.3.1.4          Unsigned32    read-only
sysApplElmtRunTimeStarted 1.3.6.1.2.1.54.1.2.3.1.5          OctetString    read-only
sysApplElmtRunState 1.3.6.1.2.1.54.1.2.3.1.6          INTEGER      read-only

```

```

(
  1 running
  2 runnable
  3 waiting
  4 exiting
  5 other
)

sysAppElmtRunName 1.3.6.1.2.1.54.1.2.3.1.7 OctetString(0..1024) read-only
sysAppElmtRunParameters 1.3.6.1.2.1.54.1.2.3.1.8 OctetString(0..255) read-only
sysAppElmtRunCPU 1.3.6.1.2.1.54.1.2.3.1.9 TimeTicks read-only
sysAppElmtRunMemory 1.3.6.1.2.1.54.1.2.3.1.10 Gauge32 read-only
sysAppElmtRunNumFiles 1.3.6.1.2.1.54.1.2.3.1.11 Gauge32 read-only
sysAppElmtRunUser 1.3.6.1.2.1.54.1.2.3.1.12 OctetString(0..255) read-only
sysAppElmtPastRunTable 1.3.6.1.2.1.54.1.2.4 Aggregate not-accessible
sysAppElmtPastRunEntry 1.3.6.1.2.1.54.1.2.4.1 Aggregate not-accessible
sysAppElmtPastRunInvocID 1.3.6.1.2.1.54.1.2.4.1.1 Unsigned32 not-accessible
sysAppElmtPastRunIndex 1.3.6.1.2.1.54.1.2.4.1.2 Unsigned32 not-accessible
sysAppElmtPastRunInstallID 1.3.6.1.2.1.54.1.2.4.1.3 Unsigned32 read-only
sysAppElmtPastRunTimeStarted 1.3.6.1.2.1.54.1.2.4.1.4 OctetString read-only
sysAppElmtPastRunTimeEnded 1.3.6.1.2.1.54.1.2.4.1.5 OctetString read-only
sysAppElmtPastRunName 1.3.6.1.2.1.54.1.2.4.1.6 OctetString(0..1024) read-only
sysAppElmtPastRunParameters 1.3.6.1.2.1.54.1.2.4.1.7 OctetString(0..255) read-only
sysAppElmtPastRunCPU 1.3.6.1.2.1.54.1.2.4.1.8 TimeTicks read-only
sysAppElmtPastRunMemory 1.3.6.1.2.1.54.1.2.4.1.9 Unsigned32 read-only
sysAppElmtPastRunNumFiles 1.3.6.1.2.1.54.1.2.4.1.10 Unsigned32 read-only
sysAppElmtPastRunUser 1.3.6.1.2.1.54.1.2.4.1.11 OctetString(0..255) read-only
sysAppIPastRunMaxRows 1.3.6.1.2.1.54.1.2.5 Unsigned32 read-write
sysAppIPastRunTableRemItems 1.3.6.1.2.1.54.1.2.6 Counter32 read-only
sysAppIPastRunTblTimeLimit 1.3.6.1.2.1.54.1.2.7 Unsigned32 read-write
sysAppIElemPastRunMaxRows 1.3.6.1.2.1.54.1.2.8 Unsigned32 read-write
sysAppIElemPastRunTableRemItems 1.3.6.1.2.1.54.1.2.9 Counter32 read-only
sysAppIElemPastRunTblTimeLimit 1.3.6.1.2.1.54.1.2.10 Unsigned32 read-write
sysAppIAgentPollInterval 1.3.6.1.2.1.54.1.2.11 Unsigned32 read-write
sysAppIMap 1.3.6.1.2.1.54.1.3 nonLeaf
sysAppIMapTable 1.3.6.1.2.1.54.1.3.1 Aggregate not-accessible
sysAppIMapEntry 1.3.6.1.2.1.54.1.3.1.1 Aggregate not-accessible
sysAppIMapInstallElmtIndex 1.3.6.1.2.1.54.1.3.1.1.1 Unsigned32 not-accessible
sysAppIMapInstallPkgIndex 1.3.6.1.2.1.54.1.3.1.1.2 Unsigned32 read-only

```

sysApplNotifications	1.3.6.1.2.1.54.2	nonLeaf	
sysApplConformance	1.3.6.1.2.1.54.3	nonLeaf	
sysApplMIBCompliances	1.3.6.1.2.1.54.3.1	nonLeaf	
sysApplMIBCompliance	1.3.6.1.2.1.54.3.1.1	nonLeaf	
sysApplMIBGroups	1.3.6.1.2.1.54.3.2	nonLeaf	
sysApplInstalledGroup	1.3.6.1.2.1.54.3.2.1	nonLeaf	
sysApplRunGroup	1.3.6.1.2.1.54.3.2.2	nonLeaf	
sysApplMapGroup	1.3.6.1.2.1.54.3.2.3	nonLeaf	
schedMIB	1.3.6.1.2.1.63	nonLeaf	
schedObjects	1.3.6.1.2.1.63.1	nonLeaf	
schedLocalTime	1.3.6.1.2.1.63.1.1	OctetString(11..11)	read-only
schedTable	1.3.6.1.2.1.63.1.2	Aggregate	not-accessible
schedEntry	1.3.6.1.2.1.63.1.2.1	Aggregate	not-accessible
schedOwner	1.3.6.1.2.1.63.1.2.1.1	OctetString(0..32)	not-accessible
schedName	1.3.6.1.2.1.63.1.2.1.2	OctetString(1..32)	not-accessible
schedDescr	1.3.6.1.2.1.63.1.2.1.3	OctetString(0..255)	read-create
schedInterval	1.3.6.1.2.1.63.1.2.1.4	Unsigned32	read-create
schedWeekDay	1.3.6.1.2.1.63.1.2.1.5	Bits	read-create
(
0	sunday		
1	monday		
2	tuesday		
3	wednesday		
4	thursday		
5	friday		
6	saturday		
)			
schedMonth	1.3.6.1.2.1.63.1.2.1.6	Bits	read-create
(
0	january		
1	february		
2	march		
3	april		
4	may		
5	june		
6	july		
7	august		
8	september		

```
    9  october
    10 november
    11 december
)
schedDay      1.3.6.1.2.1.63.1.2.1.7  Bits      read-create
(
  0  d1
  1  d2
  2  d3
  3  d4
  4  d5
  5  d6
  6  d7
  7  d8
  8  d9
  9  d10
 10  d11
 11  d12
 12  d13
 13  d14
 14  d15
 15  d16
 16  d17
 17  d18
 18  d19
 19  d20
 20  d21
 21  d22
 22  d23
 23  d24
 24  d25
 25  d26
 26  d27
 27  d28
 28  d29
 29  d30
 30  d31
 31  r1
```

```
32 r2
33 r3
34 r4
35 r5
36 r6
37 r7
38 r8
39 r9
40 r10
41 r11
42 r12
43 r13
44 r14
45 r15
46 r16
47 r17
48 r18
49 r19
50 r20
51 r21
52 r22
53 r23
54 r24
55 r25
56 r26
57 r27
58 r28
59 r29
60 r30
61 r31
)
schedHour      1.3.6.1.2.1.63.1.2.1.8      Bits      read-create
(
0 h0
1 h1
2 h2
3 h3
4 h4
```

```

5 h5
6 h6
7 h7
8 h8
9 h9
10 h10
11 h11
12 h12
13 h13
14 h14
15 h15
16 h16
17 h17
18 h18
19 h19
20 h20
21 h21
22 h22
23 h23
)
schedMinute      1.3.6.1.2.1.63.1.2.1.9      Bits      read-create
(
0 m0
1 m1
2 m2
3 m3
4 m4
5 m5
6 m6
7 m7
8 m8
9 m9
10 m10
11 m11
12 m12
13 m13
14 m14
15 m15

```

16 m16
17 m17
18 m18
19 m19
20 m20
21 m21
22 m22
23 m23
24 m24
25 m25
26 m26
27 m27
28 m28
29 m29
30 m30
31 m31
32 m32
33 m33
34 m34
35 m35
36 m36
37 m37
38 m38
39 m39
40 m40
41 m41
42 m42
43 m43
44 m44
45 m45
46 m46
47 m47
48 m48
49 m49
50 m50
51 m51
52 m52
53 m53

```

54 m54
55 m55
56 m56
57 m57
58 m58
59 m59
)
schedContextName 1.3.6.1.2.1.63.1.2.1.10 OctetString(0..32) read-create
schedVariable 1.3.6.1.2.1.63.1.2.1.11 ObjectID read-create
schedValue 1.3.6.1.2.1.63.1.2.1.12 Integer32 read-create
schedType 1.3.6.1.2.1.63.1.2.1.13 INTEGER read-create
(
  1 periodic
  2 calendar
  3 oneshot
)
schedAdminStatus 1.3.6.1.2.1.63.1.2.1.14 INTEGER read-create
(
  1 enabled
  2 disabled
)
schedOperStatus 1.3.6.1.2.1.63.1.2.1.15 INTEGER read-only
(
  1 enabled
  2 disabled
  3 finished
)
schedFailures 1.3.6.1.2.1.63.1.2.1.16 Counter32 read-only
schedLastFailure 1.3.6.1.2.1.63.1.2.1.17 INTEGER read-only
(
  -1 noResponse
  0 noError
  1 tooBig
  2 noSuchName
  3 badValue
  4 readOnly
  5 genErr
  6 noAccess

```

```

7 wrongType
8 wrongLength
9 wrongEncoding
10 wrongValue
11 noCreation
12 inconsistentValue
13 resourceUnavailable
14 commitFailed
15 undoFailed
16 authorizationError
17 notWritable
18 inconsistentName
)
schedLastFailed 1.3.6.1.2.1.63.1.2.1.18 OctetString read-only
schedStorageType 1.3.6.1.2.1.63.1.2.1.19 INTEGER read-create
(
  1 other
  2 volatile
  3 nonVolatile
  4 permanent
  5 readOnly
)
schedRowStatus 1.3.6.1.2.1.63.1.2.1.20 INTEGER read-create
(
  1 active
  2 notInService
  3 notReady
  4 createAndGo
  5 createAndWait
  6 destroy
)
schedNotifications 1.3.6.1.2.1.63.2 nonLeaf
schedTraps 1.3.6.1.2.1.63.2.0 nonLeaf
schedActionFailure 1.3.6.1.2.1.63.2.0.1 nonLeaf
schedConformance 1.3.6.1.2.1.63.3 nonLeaf
schedCompliances 1.3.6.1.2.1.63.3.1 nonLeaf
schedCompliance 1.3.6.1.2.1.63.3.1.1 nonLeaf
schedGroups 1.3.6.1.2.1.63.3.2 nonLeaf

```

schedGroup	1.3.6.1.2.1.63.3.2.1	nonLeaf	
schedCalendarGroup	1.3.6.1.2.1.63.3.2.2	nonLeaf	
schedNotificationsGroup	1.3.6.1.2.1.63.3.2.3	nonLeaf	
scriptMIB	1.3.6.1.2.1.64	nonLeaf	
smObjects	1.3.6.1.2.1.64.1	nonLeaf	
smLangTable	1.3.6.1.2.1.64.1.1	Aggregate	not-accessible
smLangEntry	1.3.6.1.2.1.64.1.1.1	Aggregate	not-accessible
smLangIndex	1.3.6.1.2.1.64.1.1.1.1	Integer32(1..2147483647)	not-accessible
smLangLanguage	1.3.6.1.2.1.64.1.1.1.2	ObjectID	read-only
smLangVersion	1.3.6.1.2.1.64.1.1.1.3	OctetString(0..32)	read-only
smLangVendor	1.3.6.1.2.1.64.1.1.1.4	ObjectID	read-only
smLangRevision	1.3.6.1.2.1.64.1.1.1.5	OctetString(0..32)	read-only
smLangDescr	1.3.6.1.2.1.64.1.1.1.6	OctetString(0..255)	read-only
smExtsnTable	1.3.6.1.2.1.64.1.2	Aggregate	not-accessible
smExtsnEntry	1.3.6.1.2.1.64.1.2.1	Aggregate	not-accessible
smExtsnIndex	1.3.6.1.2.1.64.1.2.1.1	Integer32(1..2147483647)	not-accessible
smExtsnExtension	1.3.6.1.2.1.64.1.2.1.2	ObjectID	read-only
smExtsnVersion	1.3.6.1.2.1.64.1.2.1.3	OctetString(0..32)	read-only
smExtsnVendor	1.3.6.1.2.1.64.1.2.1.4	ObjectID	read-only
smExtsnRevision	1.3.6.1.2.1.64.1.2.1.5	OctetString(0..32)	read-only
smExtsnDescr	1.3.6.1.2.1.64.1.2.1.6	OctetString(0..255)	read-only
smScriptObjects	1.3.6.1.2.1.64.1.3	nonLeaf	
smScriptTable	1.3.6.1.2.1.64.1.3.1	Aggregate	not-accessible
smScriptEntry	1.3.6.1.2.1.64.1.3.1.1	Aggregate	not-accessible
smScriptOwner	1.3.6.1.2.1.64.1.3.1.1.1	OctetString(0..32)	not-accessible
smScriptName	1.3.6.1.2.1.64.1.3.1.1.2	OctetString(0..255)	not-accessible
smScriptDescr	1.3.6.1.2.1.64.1.3.1.1.3	OctetString(0..255)	read-create
smScriptLanguage	1.3.6.1.2.1.64.1.3.1.1.4	Integer32(0..2147483647)	read-create
smScriptSource	1.3.6.1.2.1.64.1.3.1.1.5	OctetString(0..255)	read-create
smScriptAdminStatus	1.3.6.1.2.1.64.1.3.1.1.6	INTEGER	read-create
(
1	enabled		
2	disabled		
3	editing		
)			
smScriptOperStatus	1.3.6.1.2.1.64.1.3.1.1.7	INTEGER	read-only
(
1	enabled		

```

2 disabled
3 editing
4 retrieving
5 compiling
6 noSuchScript
7 accessDenied
8 wrongLanguage
9 wrongVersion
10 compilationFailed
11 noResourcesLeft
12 unknownProtocol
13 protocolFailure
14 genericError
)
smScriptStorageType 1.3.6.1.2.1.64.1.3.1.1.8 INTEGER read-create
(
1 other
2 volatile
3 nonVolatile
4 permanent
5 readOnly
)
smScriptRowStatus 1.3.6.1.2.1.64.1.3.1.1.9 INTEGER read-create
(
1 active
2 notInService
3 notReady
4 createAndGo
5 createAndWait
6 destroy
)
smCodeTable 1.3.6.1.2.1.64.1.3.2 Aggregate not-accessible
smCodeEntry 1.3.6.1.2.1.64.1.3.2.1 Aggregate not-accessible
smCodeIndex 1.3.6.1.2.1.64.1.3.2.1.1 Unsigned32 not-accessible
smCodeText 1.3.6.1.2.1.64.1.3.2.1.2 OctetString(1..1024) read-create
smCodeRowStatus 1.3.6.1.2.1.64.1.3.2.1.3 INTEGER read-create
(
1 active

```

```

2  notInService
3  notReady
4  createAndGo
5  createAndWait
6  destroy
)
smRunObjects      1.3.6.1.2.1.64.1.4      nonLeaf
smLaunchTable     1.3.6.1.2.1.64.1.4.1     Aggregate    not-accessible
smLaunchEntry     1.3.6.1.2.1.64.1.4.1.1   Aggregate    not-accessible
smLaunchOwner     1.3.6.1.2.1.64.1.4.1.1.1 OctetString(0..32) not-accessible
smLaunchName      1.3.6.1.2.1.64.1.4.1.1.2 OctetString(1..32) not-accessible
smLaunchScriptOwner 1.3.6.1.2.1.64.1.4.1.1.3 OctetString(0..32) read-create
smLaunchScriptName 1.3.6.1.2.1.64.1.4.1.1.4 OctetString(0..32) read-create
smLaunchArgument  1.3.6.1.2.1.64.1.4.1.1.5 OctetString  read-create
smLaunchMaxRunning 1.3.6.1.2.1.64.1.4.1.1.6 Unsigned32   read-create
smLaunchMaxCompleted 1.3.6.1.2.1.64.1.4.1.1.7 Unsigned32   read-create
smLaunchLifeTime  1.3.6.1.2.1.64.1.4.1.1.8 INTEGER(0..2147483647) read-create
smLaunchExpireTime 1.3.6.1.2.1.64.1.4.1.1.9 INTEGER(0..2147483647) read-create
smLaunchStart     1.3.6.1.2.1.64.1.4.1.1.10 Integer32(0..2147483647) read-create
smLaunchControl   1.3.6.1.2.1.64.1.4.1.1.11 INTEGER      read-create
(
1  abort
2  suspend
3  resume
4  nop
)
smLaunchAdminStatus 1.3.6.1.2.1.64.1.4.1.1.12 INTEGER      read-create
(
1  enabled
2  disabled
)
smLaunchOperStatus  1.3.6.1.2.1.64.1.4.1.1.13 INTEGER      read-only
(
1  enabled
2  disabled
)
smLaunchRunIndexNext 1.3.6.1.2.1.64.1.4.1.1.14 Integer32(1..2147483647) read-only
smLaunchStorageType 1.3.6.1.2.1.64.1.4.1.1.15 INTEGER      read-create

```

```

(
  1 other
  2 volatile
  3 nonVolatile
  4 permanent
  5 readOnly
)
smLaunchRowStatus 1.3.6.1.2.1.64.1.4.1.1.16 INTEGER read-create
(
  1 active
  2 notInService
  3 notReady
  4 createAndGo
  5 createAndWait
  6 destroy
)
smRunTable 1.3.6.1.2.1.64.1.4.2 Aggregate not-accessible
smRunEntry 1.3.6.1.2.1.64.1.4.2.1 Aggregate not-accessible
smRunIndex 1.3.6.1.2.1.64.1.4.2.1.1 Integer32(1..2147483647) not-accessible
smRunArgument 1.3.6.1.2.1.64.1.4.2.1.2 OctetString read-only
smRunStartTime 1.3.6.1.2.1.64.1.4.2.1.3 OctetString read-only
smRunEndTime 1.3.6.1.2.1.64.1.4.2.1.4 OctetString read-only
smRunLifeTime 1.3.6.1.2.1.64.1.4.2.1.5 INTEGER(0..2147483647) read-write
smRunExpireTime 1.3.6.1.2.1.64.1.4.2.1.6 INTEGER(0..2147483647) read-write
smRunExitCode 1.3.6.1.2.1.64.1.4.2.1.7 INTEGER read-only
(
  1 noError
  2 halted
  3 lifeTimeExceeded
  4 noResourcesLeft
  5 languageError
  6 runtimeError
  7 invalidArgument
  8 securityViolation
  9 genericError
)
smRunResult 1.3.6.1.2.1.64.1.4.2.1.8 OctetString read-only
smRunControl 1.3.6.1.2.1.64.1.4.2.1.9 INTEGER read-write

```

```

(
  1 abort
  2 suspend
  3 resume
  4 nop
)
smRunState      1.3.6.1.2.1.64.1.4.2.1.10  INTEGER      read-only
(
  1 initializing
  2 executing
  3 suspending
  4 suspended
  5 resuming
  6 aborting
  7 terminated
)
smRunError      1.3.6.1.2.1.64.1.4.2.1.11  OctetString(0..255) read-only
smNotifications 1.3.6.1.2.1.64.2                    nonLeaf
smTraps         1.3.6.1.2.1.64.2.0          nonLeaf
smScriptAbort   1.3.6.1.2.1.64.2.0.1              nonLeaf
smScriptResult  1.3.6.1.2.1.64.2.0.2              nonLeaf
smConformance  1.3.6.1.2.1.64.3                    nonLeaf
smCompliances   1.3.6.1.2.1.64.3.1                nonLeaf
smCompliance    1.3.6.1.2.1.64.3.1.1            nonLeaf
smGroups        1.3.6.1.2.1.64.3.2          nonLeaf
smLanguageGroup 1.3.6.1.2.1.64.3.2.1              nonLeaf
smScriptGroup   1.3.6.1.2.1.64.3.2.2              nonLeaf
smCodeGroup     1.3.6.1.2.1.64.3.2.3              nonLeaf
smLaunchGroup   1.3.6.1.2.1.64.3.2.4              nonLeaf
smRunGroup      1.3.6.1.2.1.64.3.2.5              nonLeaf
smNotificationsGroup 1.3.6.1.2.1.64.3.2.6            nonLeaf
ianaLanguages   1.3.6.1.2.1.73                    nonLeaf
ianaLangJavaByteCode 1.3.6.1.2.1.73.1                nonLeaf
ianaLangTcl     1.3.6.1.2.1.73.2                    nonLeaf
ianaLangPerl    1.3.6.1.2.1.73.3                    nonLeaf
ianaLangScheme  1.3.6.1.2.1.73.4                    nonLeaf
ianaLangSRSL    1.3.6.1.2.1.73.5                    nonLeaf
ianaLangPSL     1.3.6.1.2.1.73.6                    nonLeaf

```

ianaLangSMSL	1.3.6.1.2.1.73.7	nonLeaf
experimental	1.3.6.1.3	nonLeaf
private	1.3.6.1.4	nonLeaf
enterprises	1.3.6.1.4.1	nonLeaf
unix	1.3.6.1.4.1.4	nonLeaf
agents	1.3.6.1.4.1.4.1	nonLeaf
fourBSD_isode	1.3.6.1.4.1.4.1.2	nonLeaf
peers	1.3.6.1.4.1.4.3	nonLeaf
unixd	1.3.6.1.4.1.4.3.1	nonLeaf
cisco	1.3.6.1.4.1.9	nonLeaf
ciscoProducts	1.3.6.1.4.1.9.1	nonLeaf
local	1.3.6.1.4.1.9.2	nonLeaf
temporary	1.3.6.1.4.1.9.3	nonLeaf
pakmon	1.3.6.1.4.1.9.4	nonLeaf
workgroup	1.3.6.1.4.1.9.5	nonLeaf
otherEnterprises	1.3.6.1.4.1.9.6	nonLeaf
ciscoAgentCapability	1.3.6.1.4.1.9.7	nonLeaf
ciscoConfig	1.3.6.1.4.1.9.8	nonLeaf
ciscoMgmt	1.3.6.1.4.1.9.9	nonLeaf
ciscoExperiment	1.3.6.1.4.1.9.10	nonLeaf
ciscoAdmin	1.3.6.1.4.1.9.11	nonLeaf
ciscoProxy	1.3.6.1.4.1.9.11.1	nonLeaf
ciscoPartyProxy	1.3.6.1.4.1.9.11.1.1	nonLeaf
ciscoContextProxy	1.3.6.1.4.1.9.11.1.2	nonLeaf
ciscoRptrGroupObjectID	1.3.6.1.4.1.9.11.2	nonLeaf
ciscoUnknownRptrGroup	1.3.6.1.4.1.9.11.2.1	nonLeaf
cisco2505RptrGroup	1.3.6.1.4.1.9.11.2.2	nonLeaf
cisco2507RptrGroup	1.3.6.1.4.1.9.11.2.3	nonLeaf
cisco2516RptrGroup	1.3.6.1.4.1.9.11.2.4	nonLeaf
ciscoWsx5020RptrGroup	1.3.6.1.4.1.9.11.2.5	nonLeaf
ciscoChipSets	1.3.6.1.4.1.9.11.3	nonLeaf
ciscoChipSetSaint1	1.3.6.1.4.1.9.11.3.1	nonLeaf
ciscoChipSetSaint2	1.3.6.1.4.1.9.11.3.2	nonLeaf
ciscoChipSetSaint3	1.3.6.1.4.1.9.11.3.3	nonLeaf
ciscoChipSetSaint4	1.3.6.1.4.1.9.11.3.4	nonLeaf
ciscoModules	1.3.6.1.4.1.9.12	nonLeaf
lightstream	1.3.6.1.4.1.9.13	nonLeaf
cisoworks	1.3.6.1.4.1.9.14	nonLeaf

newport	1.3.6.1.4.1.9.15	nonLeaf
ciscoPartnerProducts	1.3.6.1.4.1.9.16	nonLeaf
snmpResearch	1.3.6.1.4.1.99	nonLeaf
snmpResearchNode	1.3.6.1.4.1.99.1	nonLeaf
snmpResearchAgent	1.3.6.1.4.1.99.1.1	nonLeaf
snmpResearchUNIXAgent	1.3.6.1.4.1.99.1.1.1	nonLeaf
snmpResearchSnmpd	1.3.6.1.4.1.99.1.1.1.1	nonLeaf
snmpResearchProxyAgent	1.3.6.1.4.1.99.1.1.2	nonLeaf
snmpResearchLb100Proxy	1.3.6.1.4.1.99.1.1.2.1	nonLeaf
snmpResearchEMANATEMasterAgent	1.3.6.1.4.1.99.1.1.3	nonLeaf
solarisEMANATEMasterAgent	1.3.6.1.4.1.99.1.1.3.1	nonLeaf
solarisTCPEMANATEMasterAgent	1.3.6.1.4.1.99.1.1.3.2	nonLeaf
solarisx86TCPEMANATEMasterAgent	1.3.6.1.4.1.99.1.1.3.3	nonLeaf
sunosEMANATEMasterAgent	1.3.6.1.4.1.99.1.1.3.4	nonLeaf
dguxEMANATEMasterAgent	1.3.6.1.4.1.99.1.1.3.5	nonLeaf
hpuxEMANATEMasterAgent	1.3.6.1.4.1.99.1.1.3.6	nonLeaf
vxworksEMANATEMasterAgent	1.3.6.1.4.1.99.1.1.3.7	nonLeaf
hpvtEMANATEMasterAgent	1.3.6.1.4.1.99.1.1.3.8	nonLeaf
aixEMANATEMasterAgent	1.3.6.1.4.1.99.1.1.3.9	nonLeaf
sco3EMANATEMasterAgent	1.3.6.1.4.1.99.1.1.3.10	nonLeaf
ntEMANATEMasterAgent	1.3.6.1.4.1.99.1.1.3.11	nonLeaf
win31EMANATEMasterAgent	1.3.6.1.4.1.99.1.1.3.12	nonLeaf
dynixEMANATEMasterAgent	1.3.6.1.4.1.99.1.1.3.13	nonLeaf
osf1EMANATEMasterAgent	1.3.6.1.4.1.99.1.1.3.14	nonLeaf
ncrEMANATEMasterAgent	1.3.6.1.4.1.99.1.1.3.15	nonLeaf
sco5EMANATEMasterAgent	1.3.6.1.4.1.99.1.1.3.16	nonLeaf
solarisx86EMANATEMasterAgent	1.3.6.1.4.1.99.1.1.3.17	nonLeaf
freebsdEMANATEMasterAgent	1.3.6.1.4.1.99.1.1.3.18	nonLeaf
irixEMANATEMasterAgent	1.3.6.1.4.1.99.1.1.3.19	nonLeaf
os2EMANATEMasterAgent	1.3.6.1.4.1.99.1.1.3.20	nonLeaf
unixwareEMANATEMasterAgent	1.3.6.1.4.1.99.1.1.3.21	nonLeaf
bsdIEMANATEMasterAgent	1.3.6.1.4.1.99.1.1.3.22	nonLeaf
sinixEMANATEMasterAgent	1.3.6.1.4.1.99.1.1.3.23	nonLeaf
ftxEMANATEMasterAgent	1.3.6.1.4.1.99.1.1.3.24	nonLeaf
hpux10EMANATEMasterAgent	1.3.6.1.4.1.99.1.1.3.25	nonLeaf
dguxx86EMANATEMasterAgent	1.3.6.1.4.1.99.1.1.3.26	nonLeaf
unixware21EMANATEMasterAgent	1.3.6.1.4.1.99.1.1.3.27	nonLeaf
linuxEMANATEMasterAgent	1.3.6.1.4.1.99.1.1.3.28	nonLeaf

osf4EMANATEMasterAgent	1.3.6.1.4.1.99.1.1.3.29	nonLeaf	
hpux11EMANATEMasterAgent	1.3.6.1.4.1.99.1.1.3.30	nonLeaf	
nextEMANATEMasterAgent	1.3.6.1.4.1.99.1.1.3.31	nonLeaf	
netbsdEMANATEMasterAgent	1.3.6.1.4.1.99.1.1.3.32	nonLeaf	
openvmsEMANATEMasterAgent	1.3.6.1.4.1.99.1.1.3.33	nonLeaf	
snmpResearchLTxxxAgent	1.3.6.1.4.1.99.1.1.4	nonLeaf	
snmpResearchLT301Agent	1.3.6.1.4.1.99.1.1.4.1	nonLeaf	
snmpResearchVarVersion	1.3.6.1.4.1.99.2	nonLeaf	
snmpResearchMIBs	1.3.6.1.4.1.99.12	nonLeaf	
psMIB	1.3.6.1.4.1.99.12.2	nonLeaf	
testMIB	1.3.6.1.4.1.99.12.3	nonLeaf	
snmpResearchload	1.3.6.1.4.1.99.12.4	nonLeaf	
oldExamples	1.3.6.1.4.1.99.12.5	nonLeaf	
dmiTestMIB	1.3.6.1.4.1.99.12.6	nonLeaf	
emacs2	1.3.6.1.4.1.99.12.7	nonLeaf	
sample	1.3.6.1.4.1.99.12.8	nonLeaf	
etc	1.3.6.1.4.1.99.12.9	nonLeaf	
spakes	1.3.6.1.4.1.99.12.10	nonLeaf	
demo	1.3.6.1.4.1.99.12.12	nonLeaf	
newV2ip	1.3.6.1.4.1.99.12.13	nonLeaf	
newV2udp	1.3.6.1.4.1.99.12.14	nonLeaf	
newV2tcp	1.3.6.1.4.1.99.12.15	nonLeaf	
clusterMIB	1.3.6.1.4.1.99.12.16	nonLeaf	
instanceRep	1.3.6.1.4.1.99.12.17	nonLeaf	
brassMIB	1.3.6.1.4.1.99.12.18	nonLeaf	
srExamples	1.3.6.1.4.1.99.12.19	nonLeaf	
srBasics	1.3.6.1.4.1.99.12.19.1	nonLeaf	
srProductFeatures	1.3.6.1.4.1.99.12.19.2	nonLeaf	
latin	1.3.6.1.4.1.99.12.21	nonLeaf	
processControl	1.3.6.1.4.1.99.12.23	nonLeaf	
ltHardware	1.3.6.1.4.1.99.12.25	nonLeaf	
alias	1.3.6.1.4.1.99.12.27	nonLeaf	
softTrap	1.3.6.1.4.1.99.12.28	nonLeaf	
critApp	1.3.6.1.4.1.99.12.29	nonLeaf	
critAppTable	1.3.6.1.4.1.99.12.29.1	nonLeaf	
critAppProcTable	1.3.6.1.4.1.99.12.29.1.1	Aggregate	not-accessible
critAppProcEntry	1.3.6.1.4.1.99.12.29.1.1.1	Aggregate	not-accessible
critAppIndex	1.3.6.1.4.1.99.12.29.1.1.1.1	Integer32(1..2147483647)	not-accessible

```

critAppName      1.3.6.1.4.1.99.12.29.1.1.1.2  OctetString(0..255) read-create
critAppProcID    1.3.6.1.4.1.99.12.29.1.1.1.3  Integer32      read-only
critAppStartCommand 1.3.6.1.4.1.99.12.29.1.1.1.4  OctetString(0..255) read-create
critAppTerminateCommand 1.3.6.1.4.1.99.12.29.1.1.1.5  OctetString(0..255) read-create
critAppAdminStatus 1.3.6.1.4.1.99.12.29.1.1.1.8  INTEGER        read-create
(
  1 up
  2 down
)
critAppOperStatus 1.3.6.1.4.1.99.12.29.1.1.1.9  INTEGER        read-only
(
  1 up
  2 down
)
critAppRestartOnExit 1.3.6.1.4.1.99.12.29.1.1.1.10  INTEGER        read-create
(
  1 true
  2 false
)
critAppRestartInterval 1.3.6.1.4.1.99.12.29.1.1.1.12  INTEGER(0..2147483647) read-create
critAppLastRestart 1.3.6.1.4.1.99.12.29.1.1.1.13  TimeTicks      read-only
critAppRestarts    1.3.6.1.4.1.99.12.29.1.1.1.14  Counter32      read-only
critAppLastExitStatus 1.3.6.1.4.1.99.12.29.1.1.1.15  Integer32      read-only
critAppTrapOnDown  1.3.6.1.4.1.99.12.29.1.1.1.16  INTEGER        read-create
(
  1 true
  2 false
)
critAppTrapOnUp    1.3.6.1.4.1.99.12.29.1.1.1.17  INTEGER        read-create
(
  1 true
  2 false
)
critAppFindProc    1.3.6.1.4.1.99.12.29.1.1.1.19  INTEGER        read-create
(
  1 true
  2 false
)

```

```

critAppRowStatus      1.3.6.1.4.1.99.12.29.1.1.1.25  INTEGER      read-create
(
  1  active
  2  notInService
  3  notReady
  4  createAndGo
  5  createAndWait
  6  destroy
)
critAppGlobals        1.3.6.1.4.1.99.12.29.2      nonLeaf
critAppTrapWhenAllRunning 1.3.6.1.4.1.99.12.29.2.1  INTEGER      read-write
(
  1  true
  2  false
)
critAppTrapWhenNotAllRunning 1.3.6.1.4.1.99.12.29.2.2  INTEGER      read-write
(
  1  true
  2  false
)
critAppTraps          1.3.6.1.4.1.99.12.29.3      nonLeaf
critAppDown           1.3.6.1.4.1.99.12.29.3.1    nonLeaf
critAppUp             1.3.6.1.4.1.99.12.29.3.2    nonLeaf
critAppAllRunning     1.3.6.1.4.1.99.12.29.3.4    nonLeaf
critAppNotAllRunning  1.3.6.1.4.1.99.12.29.3.5    nonLeaf
critAppMIBGroups      1.3.6.1.4.1.99.12.29.4      nonLeaf
critAppLeafObjects    1.3.6.1.4.1.99.12.29.4.1    nonLeaf
htmlpage              1.3.6.1.4.1.99.12.30      nonLeaf
htmlGlobals           1.3.6.1.4.1.99.12.30.1    nonLeaf
htmlConsistencyCheck  1.3.6.1.4.1.99.12.30.1.1  INTEGER      read-write
(
  1  consistent
  2  verify
)
htmlPages             1.3.6.1.4.1.99.12.30.2    nonLeaf
htmlPageSetSerialNo  1.3.6.1.4.1.99.12.30.2.1  INTEGER(0..2147483647) read-write
htmlPageTable         1.3.6.1.4.1.99.12.30.2.2  Aggregate    not-accessible
htmlPageEntry         1.3.6.1.4.1.99.12.30.2.2.1  Aggregate    not-accessible

```

```

htmlPageName      1.3.6.1.4.1.99.12.30.2.2.1.1  OctetString(0..255) not-accessible
htmlPageTitle     1.3.6.1.4.1.99.12.30.2.2.1.2  OctetString(0..255) read-create
htmlPageAddressInfo 1.3.6.1.4.1.99.12.30.2.2.1.3  OctetString(0..255) read-create
htmlPageLastUpdated 1.3.6.1.4.1.99.12.30.2.2.1.4  OctetString(0..255) read-create
htmlPageBodyArgs  1.3.6.1.4.1.99.12.30.2.2.1.5  OctetString(0..255) read-create
htmlPageOwner     1.3.6.1.4.1.99.12.30.2.2.1.6  OctetString(0..127) read-create
htmlPageStorageType 1.3.6.1.4.1.99.12.30.2.2.1.7  INTEGER      read-create
(
  1 other
  2 volatile
  3 nonVolatile
  4 permanent
  5 readOnly
)
htmlPageStatus    1.3.6.1.4.1.99.12.30.2.2.1.8  INTEGER      read-create
(
  1 active
  2 notInService
  3 notReady
  4 createAndGo
  5 createAndWait
  6 destroy
)
htmlPageAutoGenHeader 1.3.6.1.4.1.99.12.30.2.2.1.9  INTEGER      read-create
(
  1 true
  2 false
)
htmlParameters    1.3.6.1.4.1.99.12.30.3      nonLeaf
htmlPageParameterTable 1.3.6.1.4.1.99.12.30.3.1    Aggregate    not-accessible
htmlPageParameterEntry 1.3.6.1.4.1.99.12.30.3.1.1  Aggregate    not-accessible
htmlPageParameterName 1.3.6.1.4.1.99.12.30.3.1.1.1 OctetString(0..255) not-accessible
htmlPageParameterDefault 1.3.6.1.4.1.99.12.30.3.1.1.2 OctetString(0..255) read-create
htmlPageParameterStorageType 1.3.6.1.4.1.99.12.30.3.1.1.3 INTEGER      read-create
(
  1 other
  2 volatile
  3 nonVolatile

```

```

    4 permanent
    5 readOnly
)
htmlPageParameterStatus 1.3.6.1.4.1.99.12.30.3.1.1.4 INTEGER read-create
(
    1 active
    2 notInService
    3 notReady
    4 createAndGo
    5 createAndWait
    6 destroy
)
htmlContents 1.3.6.1.4.1.99.12.30.4 nonLeaf
htmlPageContentTable 1.3.6.1.4.1.99.12.30.4.1 Aggregate not-accessible
htmlPageContentEntry 1.3.6.1.4.1.99.12.30.4.1.1 Aggregate not-accessible
htmlPageContentIndex 1.3.6.1.4.1.99.12.30.4.1.1.1 INTEGER(1..65535) not-accessible
htmlPageContentText 1.3.6.1.4.1.99.12.30.4.1.1.2 OctetString(0..255) read-create
htmlPageContentStorageType 1.3.6.1.4.1.99.12.30.4.1.1.3 INTEGER read-create
(
    1 other
    2 volatile
    3 nonVolatile
    4 permanent
    5 readOnly
)
htmlPageContentStatus 1.3.6.1.4.1.99.12.30.4.1.1.4 INTEGER read-create
(
    1 active
    2 notInService
    3 notReady
    4 createAndGo
    5 createAndWait
    6 destroy
)
phoneSwitch 1.3.6.1.4.1.99.12.31 nonLeaf
httpToSnmpAuthMappingMIB 1.3.6.1.4.1.99.12.32 nonLeaf
srCommunityMIB 1.3.6.1.4.1.99.12.33 nonLeaf
srCommunitySpinLock 1.3.6.1.4.1.99.12.33.1 INTEGER(0..2147483647) read-write

```

```

srCommunityTable      1.3.6.1.4.1.99.12.33.2      Aggregate      not-accessible
srCommunityEntry      1.3.6.1.4.1.99.12.33.2.1      Aggregate      not-accessible
srCommunityAuthSnmpID 1.3.6.1.4.1.99.12.33.2.1.1      OctetString(12..12) read-create
srCommunityName       1.3.6.1.4.1.99.12.33.2.1.2      OctetString(1..255) not-accessible
srCommunityGroupName  1.3.6.1.4.1.99.12.33.2.1.3      OctetString    read-create
srCommunityContextSnmpID 1.3.6.1.4.1.99.12.33.2.1.4      OctetString(12..12) read-create
srCommunityContextName 1.3.6.1.4.1.99.12.33.2.1.5      OctetString    read-create
srCommunityTransportLabel 1.3.6.1.4.1.99.12.33.2.1.6      OctetString(0..255) read-create
srCommunityMemoryType 1.3.6.1.4.1.99.12.33.2.1.7      INTEGER        read-create
(
  1 other
  2 volatile
  3 nonVolatile
  4 permanent
  5 readOnly
)
srCommunityStatus     1.3.6.1.4.1.99.12.33.2.1.8      INTEGER        read-create
(
  1 active
  2 notInService
  3 notReady
  4 createAndGo
  5 createAndWait
  6 destroy
)
srCommunityGroup      1.3.6.1.4.1.99.12.33.3          nonLeaf
srAgtTest              1.3.6.1.4.1.99.12.34            nonLeaf
usmTargetTagMIB        1.3.6.1.4.1.99.12.35            nonLeaf
usmTargetTagObjects    1.3.6.1.4.1.99.12.35.1          nonLeaf
usmTargetTagTable     1.3.6.1.4.1.99.12.35.1.1        Aggregate      not-accessible
usmTargetTagEntry     1.3.6.1.4.1.99.12.35.1.1.1      Aggregate      not-accessible
usmTargetTag           1.3.6.1.4.1.99.12.35.1.1.1.1    OctetString(0..255) read-create
usmTargetTagConformance 1.3.6.1.4.1.99.12.35.3          nonLeaf
tgtAddressMaskMIB     1.3.6.1.4.1.99.12.36            nonLeaf
tgtAddressMaskObjects  1.3.6.1.4.1.99.12.36.1          nonLeaf
tgtAddressMaskTable   1.3.6.1.4.1.99.12.36.1.1        Aggregate      not-accessible
tgtAddressMaskEntry   1.3.6.1.4.1.99.12.36.1.1.1      Aggregate      not-accessible
tgtAddressMask         1.3.6.1.4.1.99.12.36.1.1.1.1    OctetString(1..255) read-create

```

```

tgtAddressMaskConformance 1.3.6.1.4.1.99.12.36.3 nonLeaf
siServiceMIB 1.3.6.1.4.1.99.12.38 nonLeaf
siFsMonitor 1.3.6.1.4.1.99.12.39 nonLeaf
siFsMonObjects 1.3.6.1.4.1.99.12.39.1 nonLeaf
siFsMonGlobalPollInterval 1.3.6.1.4.1.99.12.39.1.1 Integer32 read-write
siFsMonGlobalPollNow 1.3.6.1.4.1.99.12.39.1.2 INTEGER read-write
(
  1 true
  2 false
)
siFsMonitorTable 1.3.6.1.4.1.99.12.39.1.10 Aggregate not-accessible
siFsMonitorEntry 1.3.6.1.4.1.99.12.39.1.10.1 Aggregate not-accessible
siFsMonIndex 1.3.6.1.4.1.99.12.39.1.10.1.1 Integer32(1..2147483647) not-accessible
siFsMonName 1.3.6.1.4.1.99.12.39.1.10.1.2 OctetString(0..255) read-create
siFsMonDescr 1.3.6.1.4.1.99.12.39.1.10.1.3 OctetString(0..255) read-create
siFsMonThreshold 1.3.6.1.4.1.99.12.39.1.10.1.4 Integer32 read-create
siFsMonSeverity 1.3.6.1.4.1.99.12.39.1.10.1.6 INTEGER read-create
(
  1 warning
  2 critical
)
siFsMonCurrentUtilization 1.3.6.1.4.1.99.12.39.1.10.1.7 Integer32 read-only
siFsMonTrapWhenAboveThreshold 1.3.6.1.4.1.99.12.39.1.10.1.8 INTEGER read-create
(
  1 true
  2 false
)
siFsMonTrapWhenBelowThreshold 1.3.6.1.4.1.99.12.39.1.10.1.10 INTEGER read-create
(
  1 true
  2 false
)
siFsMonCommandWhenAboveThreshold 1.3.6.1.4.1.99.12.39.1.10.1.12 OctetString(0..255)
read-create
siFsMonPollInterval 1.3.6.1.4.1.99.12.39.1.10.1.16 Integer32 read-create
siFsMonPollNow 1.3.6.1.4.1.99.12.39.1.10.1.17 INTEGER read-create
(
  1 true

```

```

    2 false
)
siFsMonOwner      1.3.6.1.4.1.99.12.39.1.10.1.27 OctetString(0..255) read-create
siFsMonRowStatus  1.3.6.1.4.1.99.12.39.1.10.1.28 INTEGER      read-create
(
    1 active
    2 notInService
    3 notReady
    4 createAndGo
    5 createAndWait
    6 destroy
)
siFsTable          1.3.6.1.4.1.99.12.39.1.11 Aggregate not-accessible
siFsEntry          1.3.6.1.4.1.99.12.39.1.11.1 Aggregate not-accessible
siFsIndex          1.3.6.1.4.1.99.12.39.1.11.1.1 Integer32(1..2147483647) not-accessible
siFsFilesystem    1.3.6.1.4.1.99.12.39.1.11.1.2 OctetString(0..255) read-only
siFsMountPoint    1.3.6.1.4.1.99.12.39.1.11.1.3 OctetString(0..255) read-only
siFsSize          1.3.6.1.4.1.99.12.39.1.11.1.4 Integer32 read-only
siFsUsed          1.3.6.1.4.1.99.12.39.1.11.1.5 Integer32 read-only
siFsAvail         1.3.6.1.4.1.99.12.39.1.11.1.6 Integer32 read-only
siFsCapacity      1.3.6.1.4.1.99.12.39.1.11.1.7 Integer32 read-only
siFsExceptionsTable 1.3.6.1.4.1.99.12.39.1.12 Aggregate not-accessible
siFsExceptionsEntry 1.3.6.1.4.1.99.12.39.1.12.1 Aggregate not-accessible
siFsExceptionName  1.3.6.1.4.1.99.12.39.1.12.1.1 OctetString(0..255) read-only
siFsExceptionThreshold 1.3.6.1.4.1.99.12.39.1.12.1.2 Integer32 read-only
siFsExceptionCurrentValue 1.3.6.1.4.1.99.12.39.1.12.1.3 Integer32 read-only
siFsMonNotifications 1.3.6.1.4.1.99.12.39.2 nonLeaf
siFsAboveWarningThreshold 1.3.6.1.4.1.99.12.39.2.1 nonLeaf
siFsAboveCriticalThreshold 1.3.6.1.4.1.99.12.39.2.2 nonLeaf
siFsBelowWarningThreshold 1.3.6.1.4.1.99.12.39.2.3 nonLeaf
siFsBelowCriticalThreshold 1.3.6.1.4.1.99.12.39.2.4 nonLeaf
siLog              1.3.6.1.4.1.99.12.40 nonLeaf
siLogObjects       1.3.6.1.4.1.99.12.40.1 nonLeaf
siLogGlobalPollInterval 1.3.6.1.4.1.99.12.40.1.1 Integer32 read-create
siLogGlobalPollNow 1.3.6.1.4.1.99.12.40.1.2 INTEGER read-create
(
    1 true
    2 false

```

```

)
siLogTable      1.3.6.1.4.1.99.12.40.1.3   Aggregate   not-accessible
siLogEntry      1.3.6.1.4.1.99.12.40.1.3.1   Aggregate   not-accessible
siLogTableIndex 1.3.6.1.4.1.99.12.40.1.3.1.1   Integer32(1..2147483647) not-accessible
siLogDescr      1.3.6.1.4.1.99.12.40.1.3.1.2   OctetString(0..255) read-create
siLogName       1.3.6.1.4.1.99.12.40.1.3.1.3   OctetString(0..255) read-create
siLogMatchPattern 1.3.6.1.4.1.99.12.40.1.3.1.4   OctetString(0..255) read-create
siLogMatchAllExceptPattern 1.3.6.1.4.1.99.12.40.1.3.1.5   INTEGER      read-create
(
  1 true
  2 false
)
siLogStartPosition 1.3.6.1.4.1.99.12.40.1.3.1.7   Integer32    read-create
siLogStopPosition  1.3.6.1.4.1.99.12.40.1.3.1.8   Integer32    read-create
siLogMatches        1.3.6.1.4.1.99.12.40.1.3.1.9   Integer32    read-only
siLogCommandOnMatch 1.3.6.1.4.1.99.12.40.1.3.1.10   OctetString(0..255) read-create
siLogTrapOnMatch    1.3.6.1.4.1.99.12.40.1.3.1.11   INTEGER      read-create
(
  1 true
  2 false
)
siLogSize          1.3.6.1.4.1.99.12.40.1.3.1.12   Integer32    read-only
siLogMaxSize       1.3.6.1.4.1.99.12.40.1.3.1.13   Integer32    read-create
siLogCommandOnMaxSize 1.3.6.1.4.1.99.12.40.1.3.1.14   OctetString(0..255) read-create
siLogTrapOnMaxSize 1.3.6.1.4.1.99.12.40.1.3.1.15   INTEGER      read-create
(
  1 true
  2 false
)
siLogPollInterval  1.3.6.1.4.1.99.12.40.1.3.1.16   Integer32    read-create
siLogPollNow        1.3.6.1.4.1.99.12.40.1.3.1.17   INTEGER      read-create
(
  1 true
  2 false
)
siLogOwner          1.3.6.1.4.1.99.12.40.1.3.1.27   OctetString(0..255) read-create
siLogRowStatus      1.3.6.1.4.1.99.12.40.1.3.1.28   INTEGER      read-create
(

```

```

1 active
2 notInService
3 notReady
4 createAndGo
5 createAndWait
6 destroy
)
siLogTraps 1.3.6.1.4.1.99.12.40.2 nonLeaf
siLogTrapTextLine 1.3.6.1.4.1.99.12.40.2.1 OctetString(0..255) accessible-for-notify
siLogMatchTrap 1.3.6.1.4.1.99.12.40.2.2 nonLeaf
siLogMaxSizeTrap 1.3.6.1.4.1.99.12.40.2.3 nonLeaf
smExtensionMIB 1.3.6.1.4.1.99.12.41 nonLeaf
smeObjects 1.3.6.1.4.1.99.12.41.1 nonLeaf
smeScalars 1.3.6.1.4.1.99.12.41.1.1 nonLeaf
smeExecutionTimer 1.3.6.1.4.1.99.12.41.1.1.1 Unsigned32 read-write
smeExecutionSteps 1.3.6.1.4.1.99.12.41.1.1.2 Integer32 read-write
smeExecutionInterleave 1.3.6.1.4.1.99.12.41.1.1.3 Integer32 read-write
smeTables 1.3.6.1.4.1.99.12.41.1.2 nonLeaf
smeCompileErrorTable 1.3.6.1.4.1.99.12.41.1.2.1 Aggregate not-accessible
smeCompileErrorEntry 1.3.6.1.4.1.99.12.41.1.2.1.1 Aggregate not-accessible
smeCompileErrorMessage 1.3.6.1.4.1.99.12.41.1.2.1.1.1 OctetString(0..255) read-only
smeResultTable 1.3.6.1.4.1.99.12.41.1.2.2 Aggregate not-accessible
smeResultEntry 1.3.6.1.4.1.99.12.41.1.2.2.1 Aggregate not-accessible
smeResultIndex 1.3.6.1.4.1.99.12.41.1.2.2.1.1 Unsigned32 not-accessible
smeResultOID 1.3.6.1.4.1.99.12.41.1.2.2.1.2 ObjectID read-only
smeResultType 1.3.6.1.4.1.99.12.41.1.2.2.1.3 INTEGER read-only
(
1 error
2 null
3 integer32
4 counter32
5 gauge32
6 timeticks
7 ipaddress
8 octetstring
9 objectid
10 counter64
)

```

smeResultInteger32Value	1.3.6.1.4.1.99.12.41.1.2.2.1.4	Integer32	read-only
smeResultCounter32Value	1.3.6.1.4.1.99.12.41.1.2.2.1.5	Counter32	read-only
smeResultGauge32Value	1.3.6.1.4.1.99.12.41.1.2.2.1.6	Gauge32	read-only
smeResultTimeTicksValue	1.3.6.1.4.1.99.12.41.1.2.2.1.7	TimeTicks	read-only
smeResultIpAddressValue	1.3.6.1.4.1.99.12.41.1.2.2.1.8	IpAddress	read-only
smeResultOctetStringValue	1.3.6.1.4.1.99.12.41.1.2.2.1.9	OctetString(0..2048)	read-only
smeResultObjectIDValue	1.3.6.1.4.1.99.12.41.1.2.2.1.10	ObjectID	read-only
smeResultCounter64Value	1.3.6.1.4.1.99.12.41.1.2.2.1.13	Counter64	read-only
smeNotifications	1.3.6.1.4.1.99.12.41.2	nonLeaf	
smeConformance	1.3.6.1.4.1.99.12.41.3	nonLeaf	
smeCompliances	1.3.6.1.4.1.99.12.41.3.1	nonLeaf	
smeCompliance	1.3.6.1.4.1.99.12.41.3.1.1	nonLeaf	
smeGroups	1.3.6.1.4.1.99.12.41.3.2	nonLeaf	
smeScalarGroup	1.3.6.1.4.1.99.12.41.3.2.1	nonLeaf	
smeCompileGroup	1.3.6.1.4.1.99.12.41.3.2.2	nonLeaf	
smeResultGroup	1.3.6.1.4.1.99.12.41.3.2.3	nonLeaf	
siCIAgentEval	1.3.6.1.4.1.99.12.42	nonLeaf	
siCIAgentEvalExpiredMsg	1.3.6.1.4.1.99.12.42.1	nonLeaf	
siCIAgentEvalExpiredTrap	1.3.6.1.4.1.99.12.42.10	nonLeaf	
srPrograms	1.3.6.1.4.1.99.13	nonLeaf	
srExperimental	1.3.6.1.4.1.99.15	nonLeaf	
srExperimentalMIBs	1.3.6.1.4.1.99.15.1	nonLeaf	
httpSecurityMIB	1.3.6.1.4.1.99.15.1.1	nonLeaf	
httpSecStats	1.3.6.1.4.1.99.15.1.1.1	nonLeaf	
httpStatsNoAuthentications	1.3.6.1.4.1.99.15.1.1.1.1	Counter32	read-only
httpStatsUnknownUserNames	1.3.6.1.4.1.99.15.1.1.1.2	Counter32	read-only
httpStatsWrongPasswords	1.3.6.1.4.1.99.15.1.1.1.3	Counter32	read-only
httpUser	1.3.6.1.4.1.99.15.1.1.2	nonLeaf	
httpUserSpinLock	1.3.6.1.4.1.99.15.1.1.2.1	INTEGER(0..2147483647)	read-write
httpMaxUserNameLength	1.3.6.1.4.1.99.15.1.1.2.2	Integer32(0..32)	read-only
httpUserNameTable	1.3.6.1.4.1.99.15.1.1.2.3	Aggregate	not-accessible
httpUserNameEntry	1.3.6.1.4.1.99.15.1.1.2.3.1	Aggregate	not-accessible
httpUserName	1.3.6.1.4.1.99.15.1.1.2.3.1.1	OctetString(1..32)	not-accessible
httpUserGroupName	1.3.6.1.4.1.99.15.1.1.2.3.1.2	OctetString(0..32)	read-create
httpUserPasswordChange	1.3.6.1.4.1.99.15.1.1.2.3.1.3	OctetString	read-create
httpUserNovel	1.3.6.1.4.1.99.15.1.1.2.3.1.4	OctetString(0..20)	read-create
httpUserTransportLabel	1.3.6.1.4.1.99.15.1.1.2.3.1.5	OctetString(0..255)	read-create
httpUserCloneFrom	1.3.6.1.4.1.99.15.1.1.2.3.1.6	ObjectID(12..266)	read-create

```

httpUserStorageType 1.3.6.1.4.1.99.15.1.1.2.3.1.7 INTEGER read-create
(
  1 other
  2 volatile
  3 nonVolatile
  4 permanent
  5 readOnly
)
httpUserStatus 1.3.6.1.4.1.99.15.1.1.2.3.1.8 INTEGER read-create
(
  1 active
  2 notInService
  3 notReady
  4 createAndGo
  5 createAndWait
  6 destroy
)
sslConfig 1.3.6.1.4.1.99.15.1.1.3 nonLeaf
sslVersion 1.3.6.1.4.1.99.15.1.1.3.1 OctetString(2..2) read-only
sslSupportedCipherSuites 1.3.6.1.4.1.99.15.1.1.3.2 Bits read-only
(
  1 noneOfTheBelow
  2 sslNullWithNullNull
  3 sslRsaWithNullMd5
  4 sslRsaWithNullSha
  5 sslRsaExportWithRc440Md5
  6 sslRsaWithRc4128Md5
  7 sslRsaWithRc4128Sha
  8 sslRsaExportWithRc2Cbc40Md5
  9 sslRsaWithIdeaCbcSha
  10 sslRsaExportWithDes40CbcSha
  11 sslRsaWithDesCbcSha
  12 sslRsaWith3DesEdeCbcSha
  13 sslDhDssExportWithDes40CbcSha
  14 sslDhDssWithDesCbcSha
  15 sslDhDssWith3DesEdeCbcSha
  16 sslDhRsaExportWithDES40CbcSha
  17 sslDhRsaWithDesCbcSha
)

```

```

18 sslDhRsaWith3DesEdeCbcSha
19 sslDheDssExportWithDes40CbcSha
20 sslDheDssWithDesCbcSha
21 sslDheDssWith3DesEdeCbcSha
22 sslDheRsaExportWithDes40CbcSha
23 sslDheRsaWithDesCbcSha
24 sslDheRsaWith3DesEdeCbcSha
25 sslDhAnonExportWithRc440Md5
26 sslDhAnonWithRc4128Md5
27 sslDhAnonExportWithDes40CbcSha
28 sslDhAnonWithDesCbcSha
29 sslDhAnonWith3DesEdeCbcSha
30 sslFortezzaDmsWithNullSha
31 sslFortezzaDmsWithFortezzaCbcSha
32 sslV2Rc4128WithMd5
33 sslV2Rc4128Export40WithMd5
34 sslV2Rc2Cbc128CbcWithMd5
35 sslV2Rc2Cbc128CbcExport40WithMd5
36 sslV2Idea128CbcWithMd5
37 sslV2Des64CbcWithMd5
38 sslV2Des192Ede3CcdWithMd5

```

)

```

sslCipherSuiteSpinLock 1.3.6.1.4.1.99.15.1.1.3.3  INTEGER(0..2147483647) read-write
sslCipherSuiteTable 1.3.6.1.4.1.99.15.1.1.3.4  Aggregate not-accessible
sslCipherSuiteEntry 1.3.6.1.4.1.99.15.1.1.3.4.1  Aggregate not-accessible
sslCipherSuiteIndex 1.3.6.1.4.1.99.15.1.1.3.4.1.1  Integer32(0..255) not-accessible
sslCipherSuite 1.3.6.1.4.1.99.15.1.1.3.4.1.2  INTEGER read-create

```

(

```

1 noneOfTheBelow
2 sslNullWithNullNull
3 sslRsaWithNullMd5
4 sslRsaWithNullSha
5 sslRsaExportWithRc440Md5
6 sslRsaWithRc4128Md5
7 sslRsaWithRc4128Sha
8 sslRsaExportWithRc2Cbc40Md5
9 sslRsaWithIdeaCbcSha
10 sslRsaExportWithDes40CbcSha

```

```

11 sslRsaWithDesCbcSha
12 sslRsaWith3DesEdeCbcSha
13 sslDhDssExportWithDes40CbcSha
14 sslDhDssWithDesCbcSha
15 sslDhDssWith3DesEdeCbcSha
16 sslDhRsaExportWithDES40CbcSha
17 sslDhRsaWithDesCbcSha
18 sslDhRsaWith3DesEdeCbcSha
19 sslDheDssExportWithDes40CbcSha
20 sslDheDssWithDesCbcSha
21 sslDheDssWith3DesEdeCbcSha
22 sslDheRsaExportWithDes40CbcSha
23 sslDheRsaWithDesCbcSha
24 sslDheRsaWith3DesEdeCbcSha
25 sslDhAnonExportWithRc440Md5
26 sslDhAnonWithRc4128Md5
27 sslDhAnonExportWithDes40CbcSha
28 sslDhAnonWithDesCbcSha
29 sslDhAnonWith3DesEdeCbcSha
30 sslFortezzaDmsWithNullSha
31 sslFortezzaDmsWithFortezzaCbcSha
32 sslV2Rc4128WithMd5
33 sslV2Rc4128Export40WithMd5
34 sslV2Rc2Cbc128CbcWithMd5
35 sslV2Rc2Cbc128CbcExport40WithMd5
36 sslV2Idea128CbcWithMd5
37 sslV2Des64CbcWithMd5
38 sslV2Des192Ede3CcdWithMd5
)
sslCipherSuitePriority 1.3.6.1.4.1.99.15.1.1.3.4.1.3 Integer32(0..255) read-create
sslCipherSuiteStorageType 1.3.6.1.4.1.99.15.1.1.3.4.1.4 INTEGER read-create
(
  1 other
  2 volatile
  3 nonVolatile
  4 permanent
  5 readOnly
)

```

```

sslCipherSuiteStatus 1.3.6.1.4.1.99.15.1.1.3.4.1.5 INTEGER read-create
(
  1 active
  2 notInService
  3 notReady
  4 createAndGo
  5 createAndWait
  6 destroy
)
sslServerCertificate 1.3.6.1.4.1.99.15.1.1.3.5 OctetString(0..65535) read-write
httpSecMIBConformance 1.3.6.1.4.1.99.15.1.1.4 nonLeaf
httpSecMIBCompliances 1.3.6.1.4.1.99.15.1.1.4.1 nonLeaf
httpSecMIBhttpAuthStaticCompliance 1.3.6.1.4.1.99.15.1.1.4.1.1 nonLeaf
httpSecMIBhttpAuthPermanentCompliance 1.3.6.1.4.1.99.15.1.1.4.1.2 nonLeaf
httpSecMIBhttpAuthFullCompliance 1.3.6.1.4.1.99.15.1.1.4.1.3 nonLeaf
httpSecMIBhttpSSLPrivStaticCompliance 1.3.6.1.4.1.99.15.1.1.4.1.4 nonLeaf
httpSecMIBhttpSSLPrivPermanentCompliance 1.3.6.1.4.1.99.15.1.1.4.1.5 nonLeaf
httpSecMIBhttpSSLPrivFullCompliance 1.3.6.1.4.1.99.15.1.1.4.1.6 nonLeaf
httpSecMIBGroups 1.3.6.1.4.1.99.15.1.1.4.2 nonLeaf
httpSecMIBStatsGroup 1.3.6.1.4.1.99.15.1.1.4.2.1 nonLeaf
httpSecMIBUserNameInfoGroup 1.3.6.1.4.1.99.15.1.1.4.2.2 nonLeaf
httpSecMIBUserParametersGroup 1.3.6.1.4.1.99.15.1.1.4.2.3 nonLeaf
httpSecMIBPasswordUpdateGroup 1.3.6.1.4.1.99.15.1.1.4.2.4 nonLeaf
httpSecMIBUserCreationGroup 1.3.6.1.4.1.99.15.1.1.4.2.5 nonLeaf
httpSecMIBSslInfoGroup 1.3.6.1.4.1.99.15.1.1.4.2.6 nonLeaf
httpSecMIBSslConfigGroup 1.3.6.1.4.1.99.15.1.1.4.2.7 nonLeaf
reconfigMIB 1.3.6.1.4.1.99.15.1.2 nonLeaf
reconfigAgent 1.3.6.1.4.1.99.15.1.2.1 nonLeaf
reconfigNextAvailableRow 1.3.6.1.4.1.99.15.1.2.1.1 Integer32 read-only
reconfigTable 1.3.6.1.4.1.99.15.1.2.1.2 Aggregate not-accessible
reconfigEntry 1.3.6.1.4.1.99.15.1.2.1.2.1 Aggregate not-accessible
reconfigIndex 1.3.6.1.4.1.99.15.1.2.1.2.1.1 Integer32 not-accessible
reconfigFileType 1.3.6.1.4.1.99.15.1.2.1.2.1.2 INTEGER read-create
(
  1 noneOfTheBelow
  2 mibTreeFile
  3 snmpdCnfFile
)

```

```

reconfigFromFile 1.3.6.1.4.1.99.15.1.2.1.2.1.3 OctetString(0..255) read-create
reconfigAction 1.3.6.1.4.1.99.15.1.2.1.2.1.4 INTEGER read-create
(
  1 noneOfTheBelow
  2 merge
  3 reload
)
reconfigState 1.3.6.1.4.1.99.15.1.2.1.2.1.5 INTEGER read-only
(
  1 neverRun
  2 inProgress
  3 completed
)
reconfigError 1.3.6.1.4.1.99.15.1.2.1.2.1.6 INTEGER read-only
(
  1 noError
  2 unspecifiedError
  3 noSuchFile
  4 permissionDenied
  5 syntaxError
)
reconfigErrorMsg 1.3.6.1.4.1.99.15.1.2.1.2.1.7 OctetString(0..255) read-only
reconfigStatus 1.3.6.1.4.1.99.15.1.2.1.2.1.8 INTEGER read-create
(
  1 active
  2 notInService
  3 notReady
  4 createAndGo
  5 createAndWait
  6 destroy
)
loadSubagent 1.3.6.1.4.1.99.15.1.2.2 nonLeaf
srSmExt 1.3.6.1.4.1.99.15.1.3 nonLeaf
eventMIB 1.3.6.1.4.1.99.15.1.5 nonLeaf
eventMIBObjects 1.3.6.1.4.1.99.15.1.5.1 nonLeaf
mteTrigger 1.3.6.1.4.1.99.15.1.5.1.1 nonLeaf
mteTriggerFailures 1.3.6.1.4.1.99.15.1.5.1.1.1 Counter32 read-only
mteTriggerTable 1.3.6.1.4.1.99.15.1.5.1.1.2 Aggregate not-accessible

```

```

mteTriggerEntry 1.3.6.1.4.1.99.15.1.5.1.1.2.1 Aggregate not-accessible
mteTriggerName 1.3.6.1.4.1.99.15.1.5.1.1.2.1.1 OctetString(1..64) not-accessible
mteTriggerComment 1.3.6.1.4.1.99.15.1.5.1.1.2.1.2 OctetString(0..255) read-create
mteTriggerTest 1.3.6.1.4.1.99.15.1.5.1.1.2.1.3 INTEGER read-create
(
  1 boolean
  2 threshold
)
mteTriggerValueID 1.3.6.1.4.1.99.15.1.5.1.1.2.1.4 ObjectID read-create
mteTriggerValueIDWildcard 1.3.6.1.4.1.99.15.1.5.1.1.2.1.5 INTEGER read-create
(
  1 true
  2 false
)
mteTriggerTargetTag 1.3.6.1.4.1.99.15.1.5.1.1.2.1.6 OctetString(0..255) read-create
mteTriggerContextName 1.3.6.1.4.1.99.15.1.5.1.1.2.1.7 OctetString(0..255) read-create
mteTriggerContextNameWildcard 1.3.6.1.4.1.99.15.1.5.1.1.2.1.8 INTEGER read-create
(
  1 true
  2 false
)
mteTriggerFrequency 1.3.6.1.4.1.99.15.1.5.1.1.2.1.9 Integer32(0..65535) read-create
mteTriggerBooleanStartup 1.3.6.1.4.1.99.15.1.5.1.1.2.1.10 INTEGER read-create
(
  1 true
  2 false
)
mteTriggerThresholdStartup 1.3.6.1.4.1.99.15.1.5.1.1.2.1.11 INTEGER read-create
(
  1 rising
  2 falling
  3 risingOrFalling
)
mteTriggerRisingThreshold 1.3.6.1.4.1.99.15.1.5.1.1.2.1.12 Integer32 read-create
mteTriggerFallingThreshold 1.3.6.1.4.1.99.15.1.5.1.1.2.1.13 Integer32 read-create
mteTriggerEvent 1.3.6.1.4.1.99.15.1.5.1.1.2.1.14 OctetString(0..64) read-create
mteTriggerRisingEvent 1.3.6.1.4.1.99.15.1.5.1.1.2.1.15 OctetString(0..64) read-create
mteTriggerFallingEvent 1.3.6.1.4.1.99.15.1.5.1.1.2.1.16 OctetString(0..64) read-create

```

```

mteTriggerObjects 1.3.6.1.4.1.99.15.1.5.1.1.2.1.17 OctetString(0..64) read-create
mteTriggerStatus 1.3.6.1.4.1.99.15.1.5.1.1.2.1.18 INTEGER read-create
(
  1 active
  2 notInService
  3 notReady
  4 createAndGo
  5 createAndWait
  6 destroy
)
mteTriggerObjectTable 1.3.6.1.4.1.99.15.1.5.1.1.3 Aggregate not-accessible
mteTriggerObjectEntry 1.3.6.1.4.1.99.15.1.5.1.1.3.1 Aggregate not-accessible
mteTriggerObjectName 1.3.6.1.4.1.99.15.1.5.1.1.3.1.1 OctetString(1..64) not-accessible
mteTriggerObjectIndex 1.3.6.1.4.1.99.15.1.5.1.1.3.1.2 Unsigned32 not-accessible
mteTriggerObjectID 1.3.6.1.4.1.99.15.1.5.1.1.3.1.3 ObjectID read-create
mteTriggerObjectIDWildcard 1.3.6.1.4.1.99.15.1.5.1.1.3.1.4 INTEGER read-create
(
  1 true
  2 false
)
mteTriggerObjectStatus 1.3.6.1.4.1.99.15.1.5.1.1.3.1.5 INTEGER read-create
(
  1 active
  2 notInService
  3 notReady
  4 createAndGo
  5 createAndWait
  6 destroy
)
mteEvent 1.3.6.1.4.1.99.15.1.5.1.2 nonLeaf
mteEventFailures 1.3.6.1.4.1.99.15.1.5.1.2.1 Counter32 read-only
mteEventTable 1.3.6.1.4.1.99.15.1.5.1.2.2 Aggregate not-accessible
mteEventEntry 1.3.6.1.4.1.99.15.1.5.1.2.2.1 Aggregate not-accessible
mteEventName 1.3.6.1.4.1.99.15.1.5.1.2.2.1.1 OctetString(1..64) not-accessible
mteEventComment 1.3.6.1.4.1.99.15.1.5.1.2.2.1.2 OctetString(0..255) read-create
mteEventActions 1.3.6.1.4.1.99.15.1.5.1.2.2.1.3 Bits read-create
(
  1 notification

```

```

    2 set
)
mteEventNotification 1.3.6.1.4.1.99.15.1.5.1.2.2.1.4 ObjectID read-create
mteEventObjects 1.3.6.1.4.1.99.15.1.5.1.2.2.1.5 OctetString(0..64) read-create
mteEventSetObject 1.3.6.1.4.1.99.15.1.5.1.2.2.1.6 ObjectID read-create
mteEventSetObjectWildcard 1.3.6.1.4.1.99.15.1.5.1.2.2.1.7 INTEGER read-create
(
    1 true
    2 false
)
mteEventSetValue 1.3.6.1.4.1.99.15.1.5.1.2.2.1.8 Integer32 read-create
mteEventSetTargetTag 1.3.6.1.4.1.99.15.1.5.1.2.2.1.9 OctetString(0..255) read-create
mteEventSetContextName 1.3.6.1.4.1.99.15.1.5.1.2.2.1.10 OctetString(0..255) read-create
mteEventSetContextNameWildcard 1.3.6.1.4.1.99.15.1.5.1.2.2.1.11 INTEGER read-create
(
    1 true
    2 false
)
mteEventStatus 1.3.6.1.4.1.99.15.1.5.1.2.2.1.12 INTEGER read-create
(
    1 active
    2 notInService
    3 notReady
    4 createAndGo
    5 createAndWait
    6 destroy
)
eventMIBNotificationPrefix 1.3.6.1.4.1.99.15.1.5.2 nonLeaf
eventMIBNotifications 1.3.6.1.4.1.99.15.1.5.2.0 nonLeaf
mteTriggerSenseAlarm 1.3.6.1.4.1.99.15.1.5.2.0.1 nonLeaf
mteTriggerRisingAlarm 1.3.6.1.4.1.99.15.1.5.2.0.2 nonLeaf
mteTriggerFallingAlarm 1.3.6.1.4.1.99.15.1.5.2.0.3 nonLeaf
mteTriggerFailureAlarm 1.3.6.1.4.1.99.15.1.5.2.0.4 nonLeaf
mteEventSetFailureAlarm 1.3.6.1.4.1.99.15.1.5.2.0.5 nonLeaf
eventMIBNotificationObjects 1.3.6.1.4.1.99.15.1.5.2.1 nonLeaf
mteHotTrigger 1.3.6.1.4.1.99.15.1.5.2.1.1 OctetString(0..255) accessible-for-notify
mteHotTargetName 1.3.6.1.4.1.99.15.1.5.2.1.2 OctetString(0..255) accessible-for-notify
mteHotContextName 1.3.6.1.4.1.99.15.1.5.2.1.3 OctetString(0..255) accessible-for-notify

```

```

mteHotOID      1.3.6.1.4.1.99.15.1.5.2.1.4  ObjectID      accessible-for-notify
mteHotValue    1.3.6.1.4.1.99.15.1.5.2.1.5  Integer32     accessible-for-notify
mteFailedReason 1.3.6.1.4.1.99.15.1.5.2.1.6  INTEGER       accessible-for-notify
(
  1 tooBig
  2 noSuchName
  3 badValue
  4 readOnly
  5 genErr
  6 noAccess
  7 wrongType
  8 wrongLength
  9 wrongEncoding
  10 wrongValue
  11 noCreation
  12 inconsistentValue
  13 resourceUnavailable
  14 commitFailed
  15 undoFailed
  16 authorizationError
  17 notWritable
  18 inconsistentName
  101 localResourceLack
  102 badDestination
  103 noAck
)
srExperimentalDomains 1.3.6.1.4.1.99.15.2      nonLeaf
httpTCPIPDomain      1.3.6.1.4.1.99.15.2.1    nonLeaf
secureIntelligence   1.3.6.1.4.1.99.16        nonLeaf
enterpol              1.3.6.1.4.1.99.16.1      nonLeaf
enterpolEvents        1.3.6.1.4.1.99.16.1.1    nonLeaf
enterpolStatusEvents  1.3.6.1.4.1.99.16.1.1.1  nonLeaf
enterpolPingFailed    1.3.6.1.4.1.99.16.1.1.1  nonLeaf
mlmMIB                1.3.6.1.4.1.99.42        nonLeaf
lightspeed            1.3.6.1.4.1.2496         nonLeaf
lightspeedProducts    1.3.6.1.4.1.2496.1       nonLeaf
transpath             1.3.6.1.4.1.2496.1.1     nonLeaf
tpOperational         1.3.6.1.4.1.2496.1.1.1   nonLeaf

```

```

ciscoTPOperationalMIB 1.3.6.1.4.1.2496.1.1.1.1 nonLeaf
ciscoTPOperationalMIBObjects 1.3.6.1.4.1.2496.1.1.1.1 nonLeaf
tpCompGroup 1.3.6.1.4.1.2496.1.1.1.1.1 nonLeaf
tpCompTable 1.3.6.1.4.1.2496.1.1.1.1.1.1 Aggregate not-accessible
tpCompTableEntry 1.3.6.1.4.1.2496.1.1.1.1.1.1.1 Aggregate not-accessible
tpComponentId 1.3.6.1.4.1.2496.1.1.1.1.1.1.1.1 INTEGER not-accessible
tpComponentType 1.3.6.1.4.1.2496.1.1.1.1.1.1.1.1.2 INTEGER read-only
tpCompParentId 1.3.6.1.4.1.2496.1.1.1.1.1.1.1.1.3 INTEGER read-only
tpCompMMLName 1.3.6.1.4.1.2496.1.1.1.1.1.1.1.1.4 OctetString(1..20) read-only
tpCompDesc 1.3.6.1.4.1.2496.1.1.1.1.1.1.1.1.5 OctetString(0..128) read-only
tpCompOpStatus 1.3.6.1.4.1.2496.1.1.1.1.1.1.1.1.6 OctetString(0..15) read-only
tpAlarmGroup 1.3.6.1.4.1.2496.1.1.1.1.2 nonLeaf
tpProvisioning 1.3.6.1.4.1.2496.1.1.2 nonLeaf
tpMeasurement 1.3.6.1.4.1.2496.1.1.3 nonLeaf
ciscoTPMeasurementMIB 1.3.6.1.4.1.2496.1.1.3.1 nonLeaf
tpTDMIfStatTable 1.3.6.1.4.1.2496.1.1.3.2 Aggregate not-accessible
tpTDMIfStatTableEntry 1.3.6.1.4.1.2496.1.1.3.2.1 Aggregate not-accessible
tpTDMIfCollectTimeInterval 1.3.6.1.4.1.2496.1.1.3.2.1.1 Counter32 read-only
tpTDMIfCollectTime 1.3.6.1.4.1.2496.1.1.3.2.1.2 TimeTicks read-only
tpTDMIfSevereErrorSec 1.3.6.1.4.1.2496.1.1.3.2.1.3 Counter32 read-only
tpTDMIfErrorSec 1.3.6.1.4.1.2496.1.1.3.2.1.4 Counter32 read-only
tpTDMIfCodeViolation 1.3.6.1.4.1.2496.1.1.3.2.1.5 Counter32 read-only
tpTDMIfFrameSlip 1.3.6.1.4.1.2496.1.1.3.2.1.6 Counter32 read-only
tpTDMLinkStatTable 1.3.6.1.4.1.2496.1.1.3.3 Aggregate not-accessible
tpTDMLinkStatTableEntry 1.3.6.1.4.1.2496.1.1.3.3.1 Aggregate not-accessible
tpTDMLinkCollectTimeInterval 1.3.6.1.4.1.2496.1.1.3.3.1.1 Counter32 read-only
tpTDMLinkCollectTime 1.3.6.1.4.1.2496.1.1.3.3.1.2 TimeTicks read-only
tpTDMLinkXmitFrame 1.3.6.1.4.1.2496.1.1.3.3.1.3 Counter32 read-only
tpTDMLinkRcvFrame 1.3.6.1.4.1.2496.1.1.3.3.1.4 Counter32 read-only
tpTDMLinkRcvBadCRC 1.3.6.1.4.1.2496.1.1.3.3.1.5 Counter32 read-only
tpTDMLinkRcvBadFrame 1.3.6.1.4.1.2496.1.1.3.3.1.6 Counter32 read-only
tpTDMLinkRcvBadFRMR 1.3.6.1.4.1.2496.1.1.3.3.1.7 Counter32 read-only
tpTDMLinkRcvRESET 1.3.6.1.4.1.2496.1.1.3.3.1.8 Counter32 read-only
tpTDMAdapterStatTable 1.3.6.1.4.1.2496.1.1.3.4 Aggregate not-accessible
tpTDMAdapterStatTableEntry 1.3.6.1.4.1.2496.1.1.3.4.1 Aggregate not-accessible
tpTDMAdapterCollectTimeInterval 1.3.6.1.4.1.2496.1.1.3.4.1.1 Counter32 read-only
tpTDMAdapterCollectTime 1.3.6.1.4.1.2496.1.1.3.4.1.2 TimeTicks read-only
tpTDMAdapterRcvUnsolicited 1.3.6.1.4.1.2496.1.1.3.4.1.3 Counter32 read-only

```

tpTDMAadapterRcvSABME	1.3.6.1.4.1.2496.1.1.3.4.1.4	Counter32	read-only
tpTDMAadapterXmitT200	1.3.6.1.4.1.2496.1.1.3.4.1.5	Counter32	read-only
tpTDMAadapterRcvBadSeq	1.3.6.1.4.1.2496.1.1.3.4.1.6	Counter32	read-only
tpTDMAadapterRcvBadResp	1.3.6.1.4.1.2496.1.1.3.4.1.7	Counter32	read-only
tpTDMAadapterRcvBadSize	1.3.6.1.4.1.2496.1.1.3.4.1.8	Counter32	read-only
tpTDMAadapterRcvSABMR	1.3.6.1.4.1.2496.1.1.3.4.1.9	Counter32	read-only
tpAuxSigServiceStatTable	1.3.6.1.4.1.2496.1.1.3.5	Aggregate	not-accessible
tpAuxSigServiceStatTableEntry	1.3.6.1.4.1.2496.1.1.3.5.1	Aggregate	not-accessible
tpASPCollectTimeInterval	1.3.6.1.4.1.2496.1.1.3.5.1.1	Counter32	read-only
tpASPCollectTime	1.3.6.1.4.1.2496.1.1.3.5.1.2	TimeTicks	read-only
tpASPXmitMSG	1.3.6.1.4.1.2496.1.1.3.5.1.3	Counter32	read-only
tpASPRcvMSG	1.3.6.1.4.1.2496.1.1.3.5.1.4	Counter32	read-only
tpASPRcvConnReq	1.3.6.1.4.1.2496.1.1.3.5.1.5	Counter32	read-only
tpSigServiceStatTable	1.3.6.1.4.1.2496.1.1.3.6	Aggregate	not-accessible
tpSigServiceStatTableEntry	1.3.6.1.4.1.2496.1.1.3.6.1	Aggregate	not-accessible
tpSigServiceCollectTimeInterval	1.3.6.1.4.1.2496.1.1.3.6.1.1	Counter32	read-only
tpSigServiceCollectTime	1.3.6.1.4.1.2496.1.1.3.6.1.2	TimeTicks	read-only
tpSigServiceRcvCallInitMSG	1.3.6.1.4.1.2496.1.1.3.6.1.3	Counter32	read-only
tpSigServiceXmitCallInitMSG	1.3.6.1.4.1.2496.1.1.3.6.1.4	Counter32	read-only
tpSigServicePDUIn	1.3.6.1.4.1.2496.1.1.3.6.1.5	Counter32	read-only
tpSigServicePDUOut	1.3.6.1.4.1.2496.1.1.3.6.1.6	Counter32	read-only
tpSigServiceBLThrhdCtr	1.3.6.1.4.1.2496.1.1.3.6.1.7	Counter32	read-only
tpSigServiceCOTFailure	1.3.6.1.4.1.2496.1.1.3.6.1.8	Counter32	read-only
tpSS7LinkStatTable	1.3.6.1.4.1.2496.1.1.3.7	Aggregate	not-accessible
tpSS7LinkStatTableEntry	1.3.6.1.4.1.2496.1.1.3.7.1	Aggregate	not-accessible
tpSS7LinkCollectTimeInterval	1.3.6.1.4.1.2496.1.1.3.7.1.1	Counter32	read-only
tpSS7LinkCollectTime	1.3.6.1.4.1.2496.1.1.3.7.1.2	TimeTicks	read-only
tpSS7LinkRcvSUErr	1.3.6.1.4.1.2496.1.1.3.7.1.3	Counter32	read-only
tpSS7LinkXmitSIOTot	1.3.6.1.4.1.2496.1.1.3.7.1.4	Counter32	read-only
tpSS7LinkRcvSIOTot	1.3.6.1.4.1.2496.1.1.3.7.1.5	Counter32	read-only
tpSS7LinkDurIS	1.3.6.1.4.1.2496.1.1.3.7.1.6	Counter32	read-only
tpSS7LinkDurUnavail	1.3.6.1.4.1.2496.1.1.3.7.1.7	Counter32	read-only
tpSS7LinkMessageDropCongest	1.3.6.1.4.1.2496.1.1.3.7.1.8	Counter32	read-only
tpSS7SigServiceStatTable	1.3.6.1.4.1.2496.1.1.3.8	Aggregate	not-accessible
tpSS7SigServiceStatTableEntry	1.3.6.1.4.1.2496.1.1.3.8.1	Aggregate	not-accessible
tpSS7SigServiceCollectTimeInterval	1.3.6.1.4.1.2496.1.1.3.8.1.1	Counter32	read-only
tpSS7SigServiceCollectTime	1.3.6.1.4.1.2496.1.1.3.8.1.2	TimeTicks	read-only
tpSS7SigServiceDurUnavail	1.3.6.1.4.1.2496.1.1.3.8.1.3	Counter32	read-only

tpSS7SigServiceXmitMessageDropRTE	1.3.6.1.4.1.2496.1.1.3.8.1.4	Counter32	read-only
tpPRILinkStatTable	1.3.6.1.4.1.2496.1.1.3.9	Aggregate	not-accessible
tpPRILinkStatTableEntry	1.3.6.1.4.1.2496.1.1.3.9.1	Aggregate	not-accessible
tpPRILinkCollectTimeInterval	1.3.6.1.4.1.2496.1.1.3.9.1.1	Counter32	read-only
tpPRILinkCollectTime	1.3.6.1.4.1.2496.1.1.3.9.1.2	TimeTicks	read-only
tpPRILinkChanMateUnavailable	1.3.6.1.4.1.2496.1.1.3.9.1.3	Counter32	read-only
tpISUPSigServiceStatTable	1.3.6.1.4.1.2496.1.1.3.10	Aggregate	not-accessible
tpISUPSigServiceStatTableEntry	1.3.6.1.4.1.2496.1.1.3.10.1	Aggregate	not-accessible
tpISUPSigServiceCollectTimeInterval	1.3.6.1.4.1.2496.1.1.3.10.1.1	Counter32	read-only
tpISUPSigServiceCollectTime	1.3.6.1.4.1.2496.1.1.3.10.1.2	TimeTicks	read-only
tpISUPSigServiceXmitMsgTot	1.3.6.1.4.1.2496.1.1.3.10.1.3	Counter32	read-only
tpISUPSigServiceRcvMsgTot	1.3.6.1.4.1.2496.1.1.3.10.1.4	Counter32	read-only
tpISUPSigServiceXmitACMTot	1.3.6.1.4.1.2496.1.1.3.10.1.5	Counter32	read-only
tpISUPSigServiceRcvACMTot	1.3.6.1.4.1.2496.1.1.3.10.1.6	Counter32	read-only
tpISUPSigServiceXmitANMTot	1.3.6.1.4.1.2496.1.1.3.10.1.7	Counter32	read-only
tpISUPSigServiceRcvANMTot	1.3.6.1.4.1.2496.1.1.3.10.1.8	Counter32	read-only
tpISUPSigServiceXmitBLOTot	1.3.6.1.4.1.2496.1.1.3.10.1.9	Counter32	read-only
tpISUPSigServiceRcvBLOTot	1.3.6.1.4.1.2496.1.1.3.10.1.10	Counter32	read-only
tpISUPSigServiceXmitBLATot	1.3.6.1.4.1.2496.1.1.3.10.1.11	Counter32	read-only
tpISUPSigServiceRcvBLATot	1.3.6.1.4.1.2496.1.1.3.10.1.12	Counter32	read-only
tpISUPSigServiceXmitCPGTot	1.3.6.1.4.1.2496.1.1.3.10.1.13	Counter32	read-only
tpISUPSigServiceRcvCPGTot	1.3.6.1.4.1.2496.1.1.3.10.1.14	Counter32	read-only
tpISUPSigServiceXmitCGBTot	1.3.6.1.4.1.2496.1.1.3.10.1.15	Counter32	read-only
tpISUPSigServiceRcvCGBTot	1.3.6.1.4.1.2496.1.1.3.10.1.16	Counter32	read-only
tpISUPSigServiceXmitCGBATot	1.3.6.1.4.1.2496.1.1.3.10.1.17	Counter32	read-only
tpISUPSigServiceRcvCGBATot	1.3.6.1.4.1.2496.1.1.3.10.1.18	Counter32	read-only
tpISUPSigServiceXmitGRSTot	1.3.6.1.4.1.2496.1.1.3.10.1.19	Counter32	read-only
tpISUPSigServiceRcvGRSTot	1.3.6.1.4.1.2496.1.1.3.10.1.20	Counter32	read-only
tpISUPSigServiceXmitGRATot	1.3.6.1.4.1.2496.1.1.3.10.1.21	Counter32	read-only
tpISUPSigServiceRcvGRATot	1.3.6.1.4.1.2496.1.1.3.10.1.22	Counter32	read-only
tpISUPSigServiceXmitCGUTot	1.3.6.1.4.1.2496.1.1.3.10.1.23	Counter32	read-only
tpISUPSigServiceRcvCGUTot	1.3.6.1.4.1.2496.1.1.3.10.1.24	Counter32	read-only
tpISUPSigServiceXmitCGUATot	1.3.6.1.4.1.2496.1.1.3.10.1.25	Counter32	read-only
tpISUPSigServiceRcvCGUATot	1.3.6.1.4.1.2496.1.1.3.10.1.26	Counter32	read-only
tpISUPSigServiceXmitCFNTot	1.3.6.1.4.1.2496.1.1.3.10.1.27	Counter32	read-only
tpISUPSigServiceRcvCFNTot	1.3.6.1.4.1.2496.1.1.3.10.1.28	Counter32	read-only
tpISUPSigServiceXmitCONTot	1.3.6.1.4.1.2496.1.1.3.10.1.29	Counter32	read-only
tpISUPSigServiceRcvCONTot	1.3.6.1.4.1.2496.1.1.3.10.1.30	Counter32	read-only

tpISUPSigServiceXmitIAMTot	1.3.6.1.4.1.2496.1.1.3.10.1.31	Counter32	read-only
tpISUPSigServiceRcvIAMTot	1.3.6.1.4.1.2496.1.1.3.10.1.32	Counter32	read-only
tpISUPSigServiceXmitINFTot	1.3.6.1.4.1.2496.1.1.3.10.1.33	Counter32	read-only
tpISUPSigServiceRcvINFTot	1.3.6.1.4.1.2496.1.1.3.10.1.34	Counter32	read-only
tpISUPSigServiceXmitINRTot	1.3.6.1.4.1.2496.1.1.3.10.1.35	Counter32	read-only
tpISUPSigServiceRcvINRTot	1.3.6.1.4.1.2496.1.1.3.10.1.36	Counter32	read-only
tpISUPSigServiceXmitRELTot	1.3.6.1.4.1.2496.1.1.3.10.1.37	Counter32	read-only
tpISUPSigServiceRcvRELTot	1.3.6.1.4.1.2496.1.1.3.10.1.38	Counter32	read-only
tpISUPSigServiceXmitRLCTot	1.3.6.1.4.1.2496.1.1.3.10.1.39	Counter32	read-only
tpISUPSigServiceRcvRLCTot	1.3.6.1.4.1.2496.1.1.3.10.1.40	Counter32	read-only
tpISUPSigServiceXmitRSCTot	1.3.6.1.4.1.2496.1.1.3.10.1.41	Counter32	read-only
tpISUPSigServiceRcvRSCTot	1.3.6.1.4.1.2496.1.1.3.10.1.42	Counter32	read-only
tpISUPSigServiceXmitRESTot	1.3.6.1.4.1.2496.1.1.3.10.1.43	Counter32	read-only
tpISUPSigServiceRcvRESTot	1.3.6.1.4.1.2496.1.1.3.10.1.44	Counter32	read-only
tpISUPSigServiceXmitSAMTot	1.3.6.1.4.1.2496.1.1.3.10.1.45	Counter32	read-only
tpISUPSigServiceRcvSAMTot	1.3.6.1.4.1.2496.1.1.3.10.1.46	Counter32	read-only
tpISUPSigServiceXmitSUSTot	1.3.6.1.4.1.2496.1.1.3.10.1.47	Counter32	read-only
tpISUPSigServiceRcvSUSTot	1.3.6.1.4.1.2496.1.1.3.10.1.48	Counter32	read-only
tpISUPSigServiceXmitUBLTot	1.3.6.1.4.1.2496.1.1.3.10.1.49	Counter32	read-only
tpISUPSigServiceRcvUBLTot	1.3.6.1.4.1.2496.1.1.3.10.1.50	Counter32	read-only
tpISUPSigServiceXmitUBATot	1.3.6.1.4.1.2496.1.1.3.10.1.51	Counter32	read-only
tpISUPSigServiceRcvUBATot	1.3.6.1.4.1.2496.1.1.3.10.1.52	Counter32	read-only
tpISUPSigServiceXmitUSRTot	1.3.6.1.4.1.2496.1.1.3.10.1.53	Counter32	read-only
tpISUPSigServiceRcvUSRTot	1.3.6.1.4.1.2496.1.1.3.10.1.54	Counter32	read-only
tpISUPSigServiceXmitCCRTot	1.3.6.1.4.1.2496.1.1.3.10.1.55	Counter32	read-only
tpISUPSigServiceRcvCCRTot	1.3.6.1.4.1.2496.1.1.3.10.1.56	Counter32	read-only
tpISUPSigServiceXmitCOTTot	1.3.6.1.4.1.2496.1.1.3.10.1.57	Counter32	read-only
tpISUPSigServiceRcvCOTTot	1.3.6.1.4.1.2496.1.1.3.10.1.58	Counter32	read-only
tpISUPSigServiceXmitCQMTot	1.3.6.1.4.1.2496.1.1.3.10.1.59	Counter32	read-only
tpISUPSigServiceRcvCQMTot	1.3.6.1.4.1.2496.1.1.3.10.1.60	Counter32	read-only
tpISUPSigServiceXmitCQRTot	1.3.6.1.4.1.2496.1.1.3.10.1.61	Counter32	read-only
tpISUPSigServiceRcvCQRTot	1.3.6.1.4.1.2496.1.1.3.10.1.62	Counter32	read-only
tpISUPSigServiceXmitCRATot	1.3.6.1.4.1.2496.1.1.3.10.1.63	Counter32	read-only
tpISUPSigServiceRcvCRATot	1.3.6.1.4.1.2496.1.1.3.10.1.64	Counter32	read-only
tpISUPSigServiceXmitCRMTot	1.3.6.1.4.1.2496.1.1.3.10.1.65	Counter32	read-only
tpISUPSigServiceRcvCRMTot	1.3.6.1.4.1.2496.1.1.3.10.1.66	Counter32	read-only
tpISUPSigServiceXmitCVRTot	1.3.6.1.4.1.2496.1.1.3.10.1.67	Counter32	read-only
tpISUPSigServiceRcvCVRTot	1.3.6.1.4.1.2496.1.1.3.10.1.68	Counter32	read-only

tpISUPSigServiceXmitCVTTot	1.3.6.1.4.1.2496.1.1.3.10.1.69	Counter32	read-only
tpISUPSigServiceRcvCVTTot	1.3.6.1.4.1.2496.1.1.3.10.1.70	Counter32	read-only
tpISUPSigServiceXmitEXMTot	1.3.6.1.4.1.2496.1.1.3.10.1.71	Counter32	read-only
tpISUPSigServiceRcvEXMTot	1.3.6.1.4.1.2496.1.1.3.10.1.72	Counter32	read-only
tpISUPSigServiceXmitFACTot	1.3.6.1.4.1.2496.1.1.3.10.1.73	Counter32	read-only
tpISUPSigServiceRcvFACTot	1.3.6.1.4.1.2496.1.1.3.10.1.74	Counter32	read-only
tpISUPSigServiceXmitFOTTot	1.3.6.1.4.1.2496.1.1.3.10.1.75	Counter32	read-only
tpISUPSigServiceRcvFOTTot	1.3.6.1.4.1.2496.1.1.3.10.1.76	Counter32	read-only
tpISUPSigServiceXmitLPATot	1.3.6.1.4.1.2496.1.1.3.10.1.77	Counter32	read-only
tpISUPSigServiceRcvLPATot	1.3.6.1.4.1.2496.1.1.3.10.1.78	Counter32	read-only
tpISUPSigServiceXmitPAMTot	1.3.6.1.4.1.2496.1.1.3.10.1.79	Counter32	read-only
tpISUPSigServiceRcvPAMTot	1.3.6.1.4.1.2496.1.1.3.10.1.80	Counter32	read-only
tpISUPSigServiceXmitUCICTot	1.3.6.1.4.1.2496.1.1.3.10.1.81	Counter32	read-only
tpISUPSigServiceRcvUCICTot	1.3.6.1.4.1.2496.1.1.3.10.1.82	Counter32	read-only
tpISUPSigServiceXmitFAATot	1.3.6.1.4.1.2496.1.1.3.10.1.83	Counter32	read-only
tpISUPSigServiceRcvFAATot	1.3.6.1.4.1.2496.1.1.3.10.1.84	Counter32	read-only
tpISUPSigServiceXmitFADTot	1.3.6.1.4.1.2496.1.1.3.10.1.85	Counter32	read-only
tpISUPSigServiceRcvFADTot	1.3.6.1.4.1.2496.1.1.3.10.1.86	Counter32	read-only
tpISUPSigServiceXmitFARTot	1.3.6.1.4.1.2496.1.1.3.10.1.87	Counter32	read-only
tpISUPSigServiceRcvFARTot	1.3.6.1.4.1.2496.1.1.3.10.1.88	Counter32	read-only
tpISUPSigServiceXmitFRJTot	1.3.6.1.4.1.2496.1.1.3.10.1.89	Counter32	read-only
tpISUPSigServiceRcvFRJTot	1.3.6.1.4.1.2496.1.1.3.10.1.90	Counter32	read-only
tpISUPSigServiceXmitSGMTot	1.3.6.1.4.1.2496.1.1.3.10.1.91	Counter32	read-only
tpISUPSigServiceRcvSGMTot	1.3.6.1.4.1.2496.1.1.3.10.1.92	Counter32	read-only
tpISUPSigServiceXmitMPMTot	1.3.6.1.4.1.2496.1.1.3.10.1.93	Counter32	read-only
tpISUPSigServiceRcvMPMTot	1.3.6.1.4.1.2496.1.1.3.10.1.94	Counter32	read-only
tpISUPSigServiceABNRelTot	1.3.6.1.4.1.2496.1.1.3.10.1.95	Counter32	read-only
tpISUPSigServiceUNEXMSGTot	1.3.6.1.4.1.2496.1.1.3.10.1.96	Counter32	read-only
tpISUPSigServiceUNRECMSGTot	1.3.6.1.4.1.2496.1.1.3.10.1.97	Counter32	read-only
tpISUPSigServiceCHANMateUnvailTot	1.3.6.1.4.1.2496.1.1.3.10.1.98	Counter32	read-only
tpISUPAOCTot	1.3.6.1.4.1.2496.1.1.3.10.1.99	Counter32	read-only
tpTUPSigServiceStatTable	1.3.6.1.4.1.2496.1.1.3.11	Aggregate	not-accessible
tpTUPSigServiceStatTableEntry	1.3.6.1.4.1.2496.1.1.3.11.1	Aggregate	not-accessible
tpTUPSigServiceCollectTimeInterval	1.3.6.1.4.1.2496.1.1.3.11.1.1	Counter32	read-only
tpTUPSigServiceCollectTime	1.3.6.1.4.1.2496.1.1.3.11.1.2	TimeTicks	read-only
tpTUPSigServiceXmitMSGTot	1.3.6.1.4.1.2496.1.1.3.11.1.3	Counter32	read-only
tpTUPSigServiceRcvMSGTot	1.3.6.1.4.1.2496.1.1.3.11.1.4	Counter32	read-only
tpTUPSigServiceXmitACBTot	1.3.6.1.4.1.2496.1.1.3.11.1.5	Counter32	read-only

tpTUPSigServiceRcvACBTot	1.3.6.1.4.1.2496.1.1.3.11.1.6	Counter32	read-only
tpTUPSigServiceXmitACCTot	1.3.6.1.4.1.2496.1.1.3.11.1.7	Counter32	read-only
tpTUPSigServiceRcvACCTot	1.3.6.1.4.1.2496.1.1.3.11.1.8	Counter32	read-only
tpTUPSigServiceXmitACMTot	1.3.6.1.4.1.2496.1.1.3.11.1.9	Counter32	read-only
tpTUPSigServiceRcvACMTot	1.3.6.1.4.1.2496.1.1.3.11.1.10	Counter32	read-only
tpTUPSigServiceXmitADITot	1.3.6.1.4.1.2496.1.1.3.11.1.11	Counter32	read-only
tpTUPSigServiceRcvADITot	1.3.6.1.4.1.2496.1.1.3.11.1.12	Counter32	read-only
tpTUPSigServiceXmitANCTot	1.3.6.1.4.1.2496.1.1.3.11.1.13	Counter32	read-only
tpTUPSigServiceRcvANCTot	1.3.6.1.4.1.2496.1.1.3.11.1.14	Counter32	read-only
tpTUPSigServiceXmitANNTot	1.3.6.1.4.1.2496.1.1.3.11.1.15	Counter32	read-only
tpTUPSigServiceRcvANNTot	1.3.6.1.4.1.2496.1.1.3.11.1.16	Counter32	read-only
tpTUPSigServiceXmitANUTot	1.3.6.1.4.1.2496.1.1.3.11.1.17	Counter32	read-only
tpTUPSigServiceRcvANUTot	1.3.6.1.4.1.2496.1.1.3.11.1.18	Counter32	read-only
tpTUPSigServiceXmitBLOTot	1.3.6.1.4.1.2496.1.1.3.11.1.19	Counter32	read-only
tpTUPSigServiceRcvBLOTot	1.3.6.1.4.1.2496.1.1.3.11.1.20	Counter32	read-only
tpTUPSigServiceXmitBLATot	1.3.6.1.4.1.2496.1.1.3.11.1.21	Counter32	read-only
tpTUPSigServiceRcvBLATot	1.3.6.1.4.1.2496.1.1.3.11.1.22	Counter32	read-only
tpTUPSigServiceXmitCBKTot	1.3.6.1.4.1.2496.1.1.3.11.1.23	Counter32	read-only
tpTUPSigServiceRcvCBKTot	1.3.6.1.4.1.2496.1.1.3.11.1.24	Counter32	read-only
tpTUPSigServiceXmitCCFTot	1.3.6.1.4.1.2496.1.1.3.11.1.25	Counter32	read-only
tpTUPSigServiceRcvCCFTot	1.3.6.1.4.1.2496.1.1.3.11.1.26	Counter32	read-only
tpTUPSigServiceXmitCCLTot	1.3.6.1.4.1.2496.1.1.3.11.1.27	Counter32	read-only
tpTUPSigServiceRcvCCLTot	1.3.6.1.4.1.2496.1.1.3.11.1.28	Counter32	read-only
tpTUPSigServiceXmitCCRTot	1.3.6.1.4.1.2496.1.1.3.11.1.29	Counter32	read-only
tpTUPSigServiceRcvCCRTot	1.3.6.1.4.1.2496.1.1.3.11.1.30	Counter32	read-only
tpTUPSigServiceXmitCFLTot	1.3.6.1.4.1.2496.1.1.3.11.1.31	Counter32	read-only
tpTUPSigServiceRcvCFLTot	1.3.6.1.4.1.2496.1.1.3.11.1.32	Counter32	read-only
tpTUPSigServiceXmitCGCTot	1.3.6.1.4.1.2496.1.1.3.11.1.33	Counter32	read-only
tpTUPSigServiceRcvCGCTot	1.3.6.1.4.1.2496.1.1.3.11.1.34	Counter32	read-only
tpTUPSigServiceXmitCHGTot	1.3.6.1.4.1.2496.1.1.3.11.1.35	Counter32	read-only
tpTUPSigServiceRcvCHGTot	1.3.6.1.4.1.2496.1.1.3.11.1.36	Counter32	read-only
tpTUPSigServiceXmitCLFTot	1.3.6.1.4.1.2496.1.1.3.11.1.37	Counter32	read-only
tpTUPSigServiceRcvCLFTot	1.3.6.1.4.1.2496.1.1.3.11.1.38	Counter32	read-only
tpTUPSigServiceXmitCOTTot	1.3.6.1.4.1.2496.1.1.3.11.1.39	Counter32	read-only
tpTUPSigServiceRcvCOTTot	1.3.6.1.4.1.2496.1.1.3.11.1.40	Counter32	read-only
tpTUPSigServiceXmitDPNTot	1.3.6.1.4.1.2496.1.1.3.11.1.41	Counter32	read-only
tpTUPSigServiceRcvDPNTot	1.3.6.1.4.1.2496.1.1.3.11.1.42	Counter32	read-only
tpTUPSigServiceXmitEUMTot	1.3.6.1.4.1.2496.1.1.3.11.1.43	Counter32	read-only

tpTUPSigServiceRcvEUMTot	1.3.6.1.4.1.2496.1.1.3.11.1.44	Counter32	read-only
tpTUPSigServiceXmitFOTTot	1.3.6.1.4.1.2496.1.1.3.11.1.45	Counter32	read-only
tpTUPSigServiceRcvFOTTot	1.3.6.1.4.1.2496.1.1.3.11.1.46	Counter32	read-only
tpTUPSigServiceXmitGRATot	1.3.6.1.4.1.2496.1.1.3.11.1.47	Counter32	read-only
tpTUPSigServiceRcvGRATot	1.3.6.1.4.1.2496.1.1.3.11.1.48	Counter32	read-only
tpTUPSigServiceXmitGRQTot	1.3.6.1.4.1.2496.1.1.3.11.1.49	Counter32	read-only
tpTUPSigServiceRcvGRQTot	1.3.6.1.4.1.2496.1.1.3.11.1.50	Counter32	read-only
tpTUPSigServiceXmitGRSTot	1.3.6.1.4.1.2496.1.1.3.11.1.51	Counter32	read-only
tpTUPSigServiceRcvGRSTot	1.3.6.1.4.1.2496.1.1.3.11.1.52	Counter32	read-only
tpTUPSigServiceXmitGSMTot	1.3.6.1.4.1.2496.1.1.3.11.1.53	Counter32	read-only
tpTUPSigServiceRcvGSMTot	1.3.6.1.4.1.2496.1.1.3.11.1.54	Counter32	read-only
tpTUPSigServiceXmitHBATot	1.3.6.1.4.1.2496.1.1.3.11.1.55	Counter32	read-only
tpTUPSigServiceRcvHBATot	1.3.6.1.4.1.2496.1.1.3.11.1.56	Counter32	read-only
tpTUPSigServiceXmitHGBTot	1.3.6.1.4.1.2496.1.1.3.11.1.57	Counter32	read-only
tpTUPSigServiceRcvHGBTot	1.3.6.1.4.1.2496.1.1.3.11.1.58	Counter32	read-only
tpTUPSigServiceXmitHGUTot	1.3.6.1.4.1.2496.1.1.3.11.1.59	Counter32	read-only
tpTUPSigServiceRcvHGUTot	1.3.6.1.4.1.2496.1.1.3.11.1.60	Counter32	read-only
tpTUPSigServiceXmitHUATot	1.3.6.1.4.1.2496.1.1.3.11.1.61	Counter32	read-only
tpTUPSigServiceRcvHUATot	1.3.6.1.4.1.2496.1.1.3.11.1.62	Counter32	read-only
tpTUPSigServiceXmitIAITot	1.3.6.1.4.1.2496.1.1.3.11.1.63	Counter32	read-only
tpTUPSigServiceRcvIAITot	1.3.6.1.4.1.2496.1.1.3.11.1.64	Counter32	read-only
tpTUPSigServiceXmitIAMTot	1.3.6.1.4.1.2496.1.1.3.11.1.65	Counter32	read-only
tpTUPSigServiceRcvIAMTot	1.3.6.1.4.1.2496.1.1.3.11.1.66	Counter32	read-only
tpTUPSigServiceXmitLOSTot	1.3.6.1.4.1.2496.1.1.3.11.1.67	Counter32	read-only
tpTUPSigServiceRcvLOSTot	1.3.6.1.4.1.2496.1.1.3.11.1.68	Counter32	read-only
tpTUPSigServiceXmitMALTot	1.3.6.1.4.1.2496.1.1.3.11.1.69	Counter32	read-only
tpTUPSigServiceRcvMALTot	1.3.6.1.4.1.2496.1.1.3.11.1.70	Counter32	read-only
tpTUPSigServiceXmitMBATot	1.3.6.1.4.1.2496.1.1.3.11.1.71	Counter32	read-only
tpTUPSigServiceRcvMBATot	1.3.6.1.4.1.2496.1.1.3.11.1.72	Counter32	read-only
tpTUPSigServiceXmitMGBTot	1.3.6.1.4.1.2496.1.1.3.11.1.73	Counter32	read-only
tpTUPSigServiceRcvMGBTot	1.3.6.1.4.1.2496.1.1.3.11.1.74	Counter32	read-only
tpTUPSigServiceXmitMGUTot	1.3.6.1.4.1.2496.1.1.3.11.1.75	Counter32	read-only
tpTUPSigServiceRcvMGUTot	1.3.6.1.4.1.2496.1.1.3.11.1.76	Counter32	read-only
tpTUPSigServiceXmitMPMTot	1.3.6.1.4.1.2496.1.1.3.11.1.77	Counter32	read-only
tpTUPSigServiceRcvMPMTot	1.3.6.1.4.1.2496.1.1.3.11.1.78	Counter32	read-only
tpTUPSigServiceXmitMUATot	1.3.6.1.4.1.2496.1.1.3.11.1.79	Counter32	read-only
tpTUPSigServiceRcvMUATot	1.3.6.1.4.1.2496.1.1.3.11.1.80	Counter32	read-only
tpTUPSigServiceXmitNNCTot	1.3.6.1.4.1.2496.1.1.3.11.1.81	Counter32	read-only

tpTUPSigServiceRcvNNCTot	1.3.6.1.4.1.2496.1.1.3.11.1.82	Counter32	read-only
tpTUPSigServiceXmitOPRTot	1.3.6.1.4.1.2496.1.1.3.11.1.83	Counter32	read-only
tpTUPSigServiceRcvOPRTot	1.3.6.1.4.1.2496.1.1.3.11.1.84	Counter32	read-only
tpTUPSigServiceXmitRANTot	1.3.6.1.4.1.2496.1.1.3.11.1.85	Counter32	read-only
tpTUPSigServiceRcvRANTot	1.3.6.1.4.1.2496.1.1.3.11.1.86	Counter32	read-only
tpTUPSigServiceXmitRLGTot	1.3.6.1.4.1.2496.1.1.3.11.1.87	Counter32	read-only
tpTUPSigServiceRcvRLGTot	1.3.6.1.4.1.2496.1.1.3.11.1.88	Counter32	read-only
tpTUPSigServiceXmitRSCTot	1.3.6.1.4.1.2496.1.1.3.11.1.89	Counter32	read-only
tpTUPSigServiceRcvRSCTot	1.3.6.1.4.1.2496.1.1.3.11.1.90	Counter32	read-only
tpTUPSigServiceXmitSAMTot	1.3.6.1.4.1.2496.1.1.3.11.1.91	Counter32	read-only
tpTUPSigServiceRcvSAMTot	1.3.6.1.4.1.2496.1.1.3.11.1.92	Counter32	read-only
tpTUPSigServiceXmitSAOTot	1.3.6.1.4.1.2496.1.1.3.11.1.93	Counter32	read-only
tpTUPSigServiceRcvSAOTot	1.3.6.1.4.1.2496.1.1.3.11.1.94	Counter32	read-only
tpTUPSigServiceXmitSBATot	1.3.6.1.4.1.2496.1.1.3.11.1.95	Counter32	read-only
tpTUPSigServiceRcvSBATot	1.3.6.1.4.1.2496.1.1.3.11.1.96	Counter32	read-only
tpTUPSigServiceXmitSECTot	1.3.6.1.4.1.2496.1.1.3.11.1.97	Counter32	read-only
tpTUPSigServiceRcvSECTot	1.3.6.1.4.1.2496.1.1.3.11.1.98	Counter32	read-only
tpTUPSigServiceXmitSGBTot	1.3.6.1.4.1.2496.1.1.3.11.1.99	Counter32	read-only
tpTUPSigServiceRcvSGBTot	1.3.6.1.4.1.2496.1.1.3.11.1.100	Counter32	read-only
tpTUPSigServiceXmitSGUTot	1.3.6.1.4.1.2496.1.1.3.11.1.101	Counter32	read-only
tpTUPSigServiceRcvSGUTot	1.3.6.1.4.1.2496.1.1.3.11.1.102	Counter32	read-only
tpTUPSigServiceXmitSLBTot	1.3.6.1.4.1.2496.1.1.3.11.1.103	Counter32	read-only
tpTUPSigServiceRcvSLBTot	1.3.6.1.4.1.2496.1.1.3.11.1.104	Counter32	read-only
tpTUPSigServiceXmitSSBTot	1.3.6.1.4.1.2496.1.1.3.11.1.105	Counter32	read-only
tpTUPSigServiceRcvSSBTot	1.3.6.1.4.1.2496.1.1.3.11.1.106	Counter32	read-only
tpTUPSigServiceXmitSSTTot	1.3.6.1.4.1.2496.1.1.3.11.1.107	Counter32	read-only
tpTUPSigServiceRcvSSTTot	1.3.6.1.4.1.2496.1.1.3.11.1.108	Counter32	read-only
tpTUPSigServiceXmitSTBTot	1.3.6.1.4.1.2496.1.1.3.11.1.109	Counter32	read-only
tpTUPSigServiceRcvSTBTot	1.3.6.1.4.1.2496.1.1.3.11.1.110	Counter32	read-only
tpTUPSigServiceXmitSUATot	1.3.6.1.4.1.2496.1.1.3.11.1.111	Counter32	read-only
tpTUPSigServiceRcvSUATot	1.3.6.1.4.1.2496.1.1.3.11.1.112	Counter32	read-only
tpTUPSigServiceXmitUBATot	1.3.6.1.4.1.2496.1.1.3.11.1.113	Counter32	read-only
tpTUPSigServiceRcvUBATot	1.3.6.1.4.1.2496.1.1.3.11.1.114	Counter32	read-only
tpTUPSigServiceXmitUBLTot	1.3.6.1.4.1.2496.1.1.3.11.1.115	Counter32	read-only
tpTUPSigServiceRcvUBLTot	1.3.6.1.4.1.2496.1.1.3.11.1.116	Counter32	read-only
tpTUPSigServiceXmitUNNTot	1.3.6.1.4.1.2496.1.1.3.11.1.117	Counter32	read-only
tpTUPSigServiceRcvUNNTot	1.3.6.1.4.1.2496.1.1.3.11.1.118	Counter32	read-only
tpTUPSigServiceAbnormalRelTot	1.3.6.1.4.1.2496.1.1.3.11.1.119	Counter32	read-only

tpTUPSigServiceUnexpectedMSGTot	1.3.6.1.4.1.2496.1.1.3.11.1.120	Counter32	read-only
tpTUPSigServiceUnrecognisedMSGTot	1.3.6.1.4.1.2496.1.1.3.11.1.121	Counter32	read-only
tpTUPSigServiceCHANMateUnavilTot	1.3.6.1.4.1.2496.1.1.3.11.1.122	Counter32	read-only
tpNUPSigServiceStatTable	1.3.6.1.4.1.2496.1.1.3.12	Aggregate	not-accessible
tpNUPSigServiceStatTableEntry	1.3.6.1.4.1.2496.1.1.3.12.1	Aggregate	not-accessible
tpNUPSigServiceCollectTimeInterval	1.3.6.1.4.1.2496.1.1.3.12.1.1	Counter32	read-only
tpNUPSigServiceCollectTime	1.3.6.1.4.1.2496.1.1.3.12.1.2	TimeTicks	read-only
tpNUPSigServiceXmitMSGTot	1.3.6.1.4.1.2496.1.1.3.12.1.3	Counter32	read-only
tpNUPSigServiceRcvMSGTot	1.3.6.1.4.1.2496.1.1.3.12.1.4	Counter32	read-only
tpNUPSigServiceUnexpectedMSGTot	1.3.6.1.4.1.2496.1.1.3.12.1.5	Counter32	read-only
tpOVLStatTable	1.3.6.1.4.1.2496.1.1.3.13	Aggregate	not-accessible
tpOVLStatTableEntry	1.3.6.1.4.1.2496.1.1.3.13.1	Aggregate	not-accessible
tpOVLCollectTimeInterval	1.3.6.1.4.1.2496.1.1.3.13.1.1	Counter32	read-only
tpOVLCollectTime	1.3.6.1.4.1.2496.1.1.3.13.1.2	TimeTicks	read-only
tpOVLlvl1DurOverload	1.3.6.1.4.1.2496.1.1.3.13.1.3	Counter32	read-only
tpOVLlvl2DurOverload	1.3.6.1.4.1.2496.1.1.3.13.1.4	Counter32	read-only
tpOVLlvl3DurOverload	1.3.6.1.4.1.2496.1.1.3.13.1.5	Counter32	read-only
tpOVLCallFailure	1.3.6.1.4.1.2496.1.1.3.13.1.6	Counter32	read-only
tpSystemStatTable	1.3.6.1.4.1.2496.1.1.3.14	Aggregate	not-accessible
tpSystemStatTableEntry	1.3.6.1.4.1.2496.1.1.3.14.1	Aggregate	not-accessible
tpSystemCollectTimeInterval	1.3.6.1.4.1.2496.1.1.3.14.1.1	Counter32	read-only
tpSystemCollectTime	1.3.6.1.4.1.2496.1.1.3.14.1.2	TimeTicks	read-only
tpSystemCDBXmit	1.3.6.1.4.1.2496.1.1.3.14.1.3	Counter32	read-only
tpSystemUserCount1	1.3.6.1.4.1.2496.1.1.3.14.1.4	Counter32	read-only
tpSystemUserCount2	1.3.6.1.4.1.2496.1.1.3.14.1.5	Counter32	read-only
tpSystemUserCount3	1.3.6.1.4.1.2496.1.1.3.14.1.6	Counter32	read-only
tpSystemUserCount4	1.3.6.1.4.1.2496.1.1.3.14.1.7	Counter32	read-only
tpSystemUserCount5	1.3.6.1.4.1.2496.1.1.3.14.1.8	Counter32	read-only
tpSystemUserCount6	1.3.6.1.4.1.2496.1.1.3.14.1.9	Counter32	read-only
tpSystemUserCount7	1.3.6.1.4.1.2496.1.1.3.14.1.10	Counter32	read-only
tpSystemUserCount8	1.3.6.1.4.1.2496.1.1.3.14.1.11	Counter32	read-only
tpSystemUserCount9	1.3.6.1.4.1.2496.1.1.3.14.1.12	Counter32	read-only
tpSystemUserCount10	1.3.6.1.4.1.2496.1.1.3.14.1.13	Counter32	read-only
tpSystemUserCount11	1.3.6.1.4.1.2496.1.1.3.14.1.14	Counter32	read-only
tpSystemUserCount12	1.3.6.1.4.1.2496.1.1.3.14.1.15	Counter32	read-only
tpSystemUserCount13	1.3.6.1.4.1.2496.1.1.3.14.1.16	Counter32	read-only
tpSystemUserCount14	1.3.6.1.4.1.2496.1.1.3.14.1.17	Counter32	read-only
tpSystemUserCount15	1.3.6.1.4.1.2496.1.1.3.14.1.18	Counter32	read-only

tpSystemUserCount16	1.3.6.1.4.1.2496.1.1.3.14.1.19	Counter32	read-only
tpSystemUserCount17	1.3.6.1.4.1.2496.1.1.3.14.1.20	Counter32	read-only
tpSystemUserCount18	1.3.6.1.4.1.2496.1.1.3.14.1.21	Counter32	read-only
tpSystemUserCount19	1.3.6.1.4.1.2496.1.1.3.14.1.22	Counter32	read-only
tpSystemUserCount20	1.3.6.1.4.1.2496.1.1.3.14.1.23	Counter32	read-only
tpSystemUserCount21	1.3.6.1.4.1.2496.1.1.3.14.1.24	Counter32	read-only
tpSystemUserCount22	1.3.6.1.4.1.2496.1.1.3.14.1.25	Counter32	read-only
tpSystemUserCount23	1.3.6.1.4.1.2496.1.1.3.14.1.26	Counter32	read-only
tpSystemUserCount24	1.3.6.1.4.1.2496.1.1.3.14.1.27	Counter32	read-only
tpSystemUserCount25	1.3.6.1.4.1.2496.1.1.3.14.1.28	Counter32	read-only
tpTCAPTable	1.3.6.1.4.1.2496.1.1.3.15	Aggregate	not-accessible
tpTCAPTableEntry	1.3.6.1.4.1.2496.1.1.3.15.1	Aggregate	not-accessible
tpTCAPCollectTimeInterval	1.3.6.1.4.1.2496.1.1.3.15.1.1	Counter32	read-only
tpTCAPCollectTime	1.3.6.1.4.1.2496.1.1.3.15.1.2	TimeTicks	read-only
tpTCAPMSGXmit	1.3.6.1.4.1.2496.1.1.3.15.1.3	Counter32	read-only
tpTCAPQWPXmit	1.3.6.1.4.1.2496.1.1.3.15.1.4	Counter32	read-only
tpTCAPRSPXmit	1.3.6.1.4.1.2496.1.1.3.15.1.5	Counter32	read-only
tpTCAPUNIXmit	1.3.6.1.4.1.2496.1.1.3.15.1.6	Counter32	read-only
tpTCAPABTXmit	1.3.6.1.4.1.2496.1.1.3.15.1.7	Counter32	read-only
tpTCAPMSGRcv	1.3.6.1.4.1.2496.1.1.3.15.1.8	Counter32	read-only
tpTCAPQWPRcv	1.3.6.1.4.1.2496.1.1.3.15.1.9	Counter32	read-only
tpTCAPRSPRcv	1.3.6.1.4.1.2496.1.1.3.15.1.10	Counter32	read-only
tpTCAPUNIRcv	1.3.6.1.4.1.2496.1.1.3.15.1.11	Counter32	read-only
tpTCAPMSGDrop	1.3.6.1.4.1.2496.1.1.3.15.1.12	Counter32	read-only
tpTCAPMSGUnrec	1.3.6.1.4.1.2496.1.1.3.15.1.13	Counter32	read-only
tpTCAPABTRcv	1.3.6.1.4.1.2496.1.1.3.15.1.14	Counter32	read-only
tpTCAPBeginXmit	1.3.6.1.4.1.2496.1.1.3.15.1.15	Counter32	read-only
tpTCAPBeginRcv	1.3.6.1.4.1.2496.1.1.3.15.1.16	Counter32	read-only
tpTCAPEndXmit	1.3.6.1.4.1.2496.1.1.3.15.1.17	Counter32	read-only
tpTCAPEndRcv	1.3.6.1.4.1.2496.1.1.3.15.1.18	Counter32	read-only
tpTCAPContinueXmit	1.3.6.1.4.1.2496.1.1.3.15.1.19	Counter32	read-only
tpTCAPContinueRcv	1.3.6.1.4.1.2496.1.1.3.15.1.20	Counter32	read-only
tpTCAPConvXmit	1.3.6.1.4.1.2496.1.1.3.15.1.21	Counter32	read-only
tpTCAPConvRcv	1.3.6.1.4.1.2496.1.1.3.15.1.22	Counter32	read-only
tpSCCPTable	1.3.6.1.4.1.2496.1.1.3.16	Aggregate	not-accessible
tpSCCPTableEntry	1.3.6.1.4.1.2496.1.1.3.16.1	Aggregate	not-accessible
tpSCCPCollectTimeInterval	1.3.6.1.4.1.2496.1.1.3.16.1.1	Counter32	read-only
tpSCCPCollectTime	1.3.6.1.4.1.2496.1.1.3.16.1.2	TimeTicks	read-only

tpSCCPRoutingFailure	1.3.6.1.4.1.2496.1.1.3.16.1.3	Counter32	read-only
tpSCCPUPTXmit	1.3.6.1.4.1.2496.1.1.3.16.1.4	Counter32	read-only
tpSCCPUDTSXmit	1.3.6.1.4.1.2496.1.1.3.16.1.5	Counter32	read-only
tpSCCPUDTSRcv	1.3.6.1.4.1.2496.1.1.3.16.1.6	Counter32	read-only
tpSCCPUDTSRcv	1.3.6.1.4.1.2496.1.1.3.16.1.7	Counter32	read-only
tpSCCPTotalMsg	1.3.6.1.4.1.2496.1.1.3.16.1.8	Counter32	read-only
tpCALLTable	1.3.6.1.4.1.2496.1.1.3.17	Aggregate	not-accessible
tpCALLTableEntry	1.3.6.1.4.1.2496.1.1.3.17.1	Aggregate	not-accessible
tpCALLCollectTimeInterval	1.3.6.1.4.1.2496.1.1.3.17.1.1	Counter32	read-only
tpCALLCollectTime	1.3.6.1.4.1.2496.1.1.3.17.1.2	TimeTicks	read-only
tpCALLSuccCallTOT	1.3.6.1.4.1.2496.1.1.3.17.1.3	Counter32	read-only
tpCALLFailCallTOT	1.3.6.1.4.1.2496.1.1.3.17.1.4	Counter32	read-only
tpCALLRUFailCallTOT	1.3.6.1.4.1.2496.1.1.3.17.1.5	Counter32	read-only
tpCALLORFailCallTOT	1.3.6.1.4.1.2496.1.1.3.17.1.6	Counter32	read-only
tpCALLOLFailCallTOT	1.3.6.1.4.1.2496.1.1.3.17.1.7	Counter32	read-only
tpSIPLinkStatTable	1.3.6.1.4.1.2496.1.1.3.18	Aggregate	not-accessible
tpSIPLinkStatTableEntry	1.3.6.1.4.1.2496.1.1.3.18.1	Aggregate	not-accessible
tpSIPLinkCollectTimeInterval	1.3.6.1.4.1.2496.1.1.3.18.1.1	Counter32	read-only
tpSIPLinkCollectTime	1.3.6.1.4.1.2496.1.1.3.18.1.2	TimeTicks	read-only
tpSIPLinkMessageXmit	1.3.6.1.4.1.2496.1.1.3.18.1.3	Counter32	read-only
tpSIPLinkMessageRcv	1.3.6.1.4.1.2496.1.1.3.18.1.4	Counter32	read-only
tpSIPLinkXmitFailures	1.3.6.1.4.1.2496.1.1.3.18.1.5	Counter32	read-only
tpSIPLinkRcvFailures	1.3.6.1.4.1.2496.1.1.3.18.1.6	Counter32	read-only
tpSIPLinkDNSQueries	1.3.6.1.4.1.2496.1.1.3.18.1.7	Counter32	read-only
tpSIPLinkDNSQueryTO	1.3.6.1.4.1.2496.1.1.3.18.1.8	Counter32	read-only
tpSIPLinkUnresolvedURL	1.3.6.1.4.1.2496.1.1.3.18.1.9	Counter32	read-only
tpSIPLinkNewDNSEntries	1.3.6.1.4.1.2496.1.1.3.18.1.10	Counter32	read-only
tpSIPLinkPurgedDnsEntries	1.3.6.1.4.1.2496.1.1.3.18.1.11	Counter32	read-only
tpSIPLinkRefreshedDnsEntries	1.3.6.1.4.1.2496.1.1.3.18.1.12	Counter32	read-only
tpSIPLinkICMPerrors	1.3.6.1.4.1.2496.1.1.3.18.1.13	Counter32	read-only
tpSIPSigServiceStatTable	1.3.6.1.4.1.2496.1.1.3.19	Aggregate	not-accessible
tpSIPSigServiceStatTableEntry	1.3.6.1.4.1.2496.1.1.3.19.1	Aggregate	not-accessible
tpSIPSigServiceCollectTimeInterval	1.3.6.1.4.1.2496.1.1.3.19.1.1	Counter32	read-only
tpSIPSigServiceCollectTime	1.3.6.1.4.1.2496.1.1.3.19.1.2	TimeTicks	read-only
tpSIPSigServiceTotMsgXmit	1.3.6.1.4.1.2496.1.1.3.19.1.3	Counter32	read-only
tpSIPSigServiceTotMsgRcv	1.3.6.1.4.1.2496.1.1.3.19.1.4	Counter32	read-only
tpSIPSigServiceINVITERexmit	1.3.6.1.4.1.2496.1.1.3.19.1.5	Counter32	read-only
tpSIPSigServiceBYERexmit	1.3.6.1.4.1.2496.1.1.3.19.1.6	Counter32	read-only

tpSIPSigServiceCANCELRexmit	1.3.6.1.4.1.2496.1.1.3.19.1.7	Counter32	read-only
tpSIPSigServiceREGISTERRexmit	1.3.6.1.4.1.2496.1.1.3.19.1.8	Counter32	read-only
tpSIPSigServiceRESPONSERexmit	1.3.6.1.4.1.2496.1.1.3.19.1.9	Counter32	read-only
tpSIPSigServiceMsgRexmit	1.3.6.1.4.1.2496.1.1.3.19.1.10	Counter32	read-only
tpSIPSigServiceInvalidMsgRcv	1.3.6.1.4.1.2496.1.1.3.19.1.11	Counter32	read-only
tpSIPSigServiceINVITEXmit	1.3.6.1.4.1.2496.1.1.3.19.1.12	Counter32	read-only
tpSIPSigServiceINVITERcv	1.3.6.1.4.1.2496.1.1.3.19.1.13	Counter32	read-only
tpSIPSigServiceACKXmit	1.3.6.1.4.1.2496.1.1.3.19.1.14	Counter32	read-only
tpSIPSigServiceACKRcv	1.3.6.1.4.1.2496.1.1.3.19.1.15	Counter32	read-only
tpSIPSigServiceBYEXmit	1.3.6.1.4.1.2496.1.1.3.19.1.16	Counter32	read-only
tpSIPSigServiceBYERcv	1.3.6.1.4.1.2496.1.1.3.19.1.17	Counter32	read-only
tpSIPSigServiceCANCELXmit	1.3.6.1.4.1.2496.1.1.3.19.1.18	Counter32	read-only
tpSIPSigServiceCANCELRcv	1.3.6.1.4.1.2496.1.1.3.19.1.19	Counter32	read-only
tpSIPSigServiceREGISTERXmit	1.3.6.1.4.1.2496.1.1.3.19.1.20	Counter32	read-only
tpSIPSigServiceREGISTERRcv	1.3.6.1.4.1.2496.1.1.3.19.1.21	Counter32	read-only
tpSIPSigServiceOPTIONXmit	1.3.6.1.4.1.2496.1.1.3.19.1.22	Counter32	read-only
tpSIPSigServiceOPTIONRcv	1.3.6.1.4.1.2496.1.1.3.19.1.23	Counter32	read-only
tpSIPSigService100Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.24	Counter32	read-only
tpSIPSigService100Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.25	Counter32	read-only
tpSIPSigService180Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.26	Counter32	read-only
tpSIPSigService180Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.27	Counter32	read-only
tpSIPSigService181Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.28	Counter32	read-only
tpSIPSigService181Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.29	Counter32	read-only
tpSIPSigService182Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.30	Counter32	read-only
tpSIPSigService182Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.31	Counter32	read-only
tpSIPSigService183Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.32	Counter32	read-only
tpSIPSigService183Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.33	Counter32	read-only
tpSIPSigService200Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.34	Counter32	read-only
tpSIPSigService200Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.35	Counter32	read-only
tpSIPSigService300Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.36	Counter32	read-only
tpSIPSigService300Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.37	Counter32	read-only
tpSIPSigService301Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.38	Counter32	read-only
tpSIPSigService301Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.39	Counter32	read-only
tpSIPSigService302Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.40	Counter32	read-only
tpSIPSigService302Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.41	Counter32	read-only
tpSIPSigService305Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.42	Counter32	read-only
tpSIPSigService305Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.43	Counter32	read-only
tpSIPSigService380Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.44	Counter32	read-only

tpSIPSigService380Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.45	Counter32	read-only
tpSIPSigService400Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.46	Counter32	read-only
tpSIPSigService400Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.47	Counter32	read-only
tpSIPSigService401Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.48	Counter32	read-only
tpSIPSigService401Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.49	Counter32	read-only
tpSIPSigService402Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.50	Counter32	read-only
tpSIPSigService402Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.51	Counter32	read-only
tpSIPSigService403Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.52	Counter32	read-only
tpSIPSigService403Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.53	Counter32	read-only
tpSIPSigService404Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.54	Counter32	read-only
tpSIPSigService404Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.55	Counter32	read-only
tpSIPSigService405Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.56	Counter32	read-only
tpSIPSigService405Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.57	Counter32	read-only
tpSIPSigService406Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.58	Counter32	read-only
tpSIPSigService406Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.59	Counter32	read-only
tpSIPSigService407Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.60	Counter32	read-only
tpSIPSigService407Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.61	Counter32	read-only
tpSIPSigService408Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.62	Counter32	read-only
tpSIPSigService408Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.63	Counter32	read-only
tpSIPSigService409Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.64	Counter32	read-only
tpSIPSigService409Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.65	Counter32	read-only
tpSIPSigService410Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.66	Counter32	read-only
tpSIPSigService410Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.67	Counter32	read-only
tpSIPSigService411Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.68	Counter32	read-only
tpSIPSigService411Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.69	Counter32	read-only
tpSIPSigService413Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.70	Counter32	read-only
tpSIPSigService413Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.71	Counter32	read-only
tpSIPSigService414Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.72	Counter32	read-only
tpSIPSigService414Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.73	Counter32	read-only
tpSIPSigService415Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.74	Counter32	read-only
tpSIPSigService415Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.75	Counter32	read-only
tpSIPSigService420Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.76	Counter32	read-only
tpSIPSigService420Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.77	Counter32	read-only
tpSIPSigService480Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.78	Counter32	read-only
tpSIPSigService480Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.79	Counter32	read-only
tpSIPSigService481Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.80	Counter32	read-only
tpSIPSigService481Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.81	Counter32	read-only
tpSIPSigService482Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.82	Counter32	read-only

tpSIPSigService482Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.83	Counter32	read-only
tpSIPSigService483Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.84	Counter32	read-only
tpSIPSigService483Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.85	Counter32	read-only
tpSIPSigService484Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.86	Counter32	read-only
tpSIPSigService484Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.87	Counter32	read-only
tpSIPSigService485Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.88	Counter32	read-only
tpSIPSigService485Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.89	Counter32	read-only
tpSIPSigService486Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.90	Counter32	read-only
tpSIPSigService486Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.91	Counter32	read-only
tpSIPSigService487Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.92	Counter32	read-only
tpSIPSigService487Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.93	Counter32	read-only
tpSIPSigService500Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.94	Counter32	read-only
tpSIPSigService500Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.95	Counter32	read-only
tpSIPSigService501Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.96	Counter32	read-only
tpSIPSigService501Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.97	Counter32	read-only
tpSIPSigService502Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.98	Counter32	read-only
tpSIPSigService502Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.99	Counter32	read-only
tpSIPSigService503Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.100	Counter32	read-only
tpSIPSigService503Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.101	Counter32	read-only
tpSIPSigService504Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.102	Counter32	read-only
tpSIPSigService504Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.103	Counter32	read-only
tpSIPSigService505Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.104	Counter32	read-only
tpSIPSigService505Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.105	Counter32	read-only
tpSIPSigService600Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.106	Counter32	read-only
tpSIPSigService600Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.107	Counter32	read-only
tpSIPSigService603Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.108	Counter32	read-only
tpSIPSigService603Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.109	Counter32	read-only
tpSIPSigService604Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.110	Counter32	read-only
tpSIPSigService604Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.111	Counter32	read-only
tpSIPSigService606Xmit	1.3.6.1.4.1.2496.1.1.3.19.1.112	Counter32	read-only
tpSIPSigService606Rcv	1.3.6.1.4.1.2496.1.1.3.19.1.113	Counter32	read-only
tpSIPSigServicePRACKRexmit	1.3.6.1.4.1.2496.1.1.3.19.1.114	Counter32	read-only
tpSIPSigServicePRACKXmit	1.3.6.1.4.1.2496.1.1.3.19.1.115	Counter32	read-only
tpSIPSigServicePRACKRcv	1.3.6.1.4.1.2496.1.1.3.19.1.116	Counter32	read-only
tpTALITable	1.3.6.1.4.1.2496.1.1.3.20	Aggregate	not-accessible
tpTALITableEntry	1.3.6.1.4.1.2496.1.1.3.20.1	Aggregate	not-accessible
tpTALICollectTimeInterval	1.3.6.1.4.1.2496.1.1.3.20.1.1	Counter32	read-only
tpTALICollectTime	1.3.6.1.4.1.2496.1.1.3.20.1.2	TimeTicks	read-only

tpTALISCCPXmit	1.3.6.1.4.1.2496.1.1.3.20.1.3	Counter32	read-only
tpTALISCCPRcv	1.3.6.1.4.1.2496.1.1.3.20.1.4	Counter32	read-only
tpTALIISUPXmit	1.3.6.1.4.1.2496.1.1.3.20.1.5	Counter32	read-only
tpTALIISUPRcv	1.3.6.1.4.1.2496.1.1.3.20.1.6	Counter32	read-only
tpTALIMTP3Xmit	1.3.6.1.4.1.2496.1.1.3.20.1.7	Counter32	read-only
tpTALIMTP3Rcv	1.3.6.1.4.1.2496.1.1.3.20.1.8	Counter32	read-only
tpTALITESTXmit	1.3.6.1.4.1.2496.1.1.3.20.1.9	Counter32	read-only
tpTALITESTRcv	1.3.6.1.4.1.2496.1.1.3.20.1.10	Counter32	read-only
tpTALIALLOXmit	1.3.6.1.4.1.2496.1.1.3.20.1.11	Counter32	read-only
tpTALIALLORcv	1.3.6.1.4.1.2496.1.1.3.20.1.12	Counter32	read-only
tpTALIPROHXmit	1.3.6.1.4.1.2496.1.1.3.20.1.13	Counter32	read-only
tpTALIPROHRcv	1.3.6.1.4.1.2496.1.1.3.20.1.14	Counter32	read-only
tpTALIPROAXmit	1.3.6.1.4.1.2496.1.1.3.20.1.15	Counter32	read-only
tpTALIPROARcv	1.3.6.1.4.1.2496.1.1.3.20.1.16	Counter32	read-only
tpTALIMONIXmit	1.3.6.1.4.1.2496.1.1.3.20.1.17	Counter32	read-only
tpTALIMONIRcv	1.3.6.1.4.1.2496.1.1.3.20.1.18	Counter32	read-only
tpTALIMONAXmit	1.3.6.1.4.1.2496.1.1.3.20.1.19	Counter32	read-only
tpTALIMONARcv	1.3.6.1.4.1.2496.1.1.3.20.1.20	Counter32	read-only
tpTALIRKRPXmit	1.3.6.1.4.1.2496.1.1.3.20.1.21	Counter32	read-only
tpTALIRKRPRcv	1.3.6.1.4.1.2496.1.1.3.20.1.22	Counter32	read-only
tpTALIMGMTXmit	1.3.6.1.4.1.2496.1.1.3.20.1.23	Counter32	read-only
tpTALIMGMTRcv	1.3.6.1.4.1.2496.1.1.3.20.1.24	Counter32	read-only
tpTALIXmitTotal	1.3.6.1.4.1.2496.1.1.3.20.1.25	Counter32	read-only
tpTALIVALIDRcv	1.3.6.1.4.1.2496.1.1.3.20.1.26	Counter32	read-only
tpTALIINVALIDRcv	1.3.6.1.4.1.2496.1.1.3.20.1.27	Counter32	read-only
tpTALIRspTable	1.3.6.1.4.1.2496.1.1.3.21	Aggregate	not-accessible
tpTALIRspTableEntry	1.3.6.1.4.1.2496.1.1.3.21.1	Aggregate	not-accessible
tpTALIRspCollectTimeInterval	1.3.6.1.4.1.2496.1.1.3.21.1.1	Counter32	read-only
tpTALIRspCollectTime	1.3.6.1.4.1.2496.1.1.3.21.1.2	TimeTicks	read-only
tpTALIRspMinTime	1.3.6.1.4.1.2496.1.1.3.21.1.3	Counter32	read-only
tpTALIRspAvgTime	1.3.6.1.4.1.2496.1.1.3.21.1.4	Counter32	read-only
tpTALIRspMaxTime	1.3.6.1.4.1.2496.1.1.3.21.1.5	Counter32	read-only
tpCASTable	1.3.6.1.4.1.2496.1.1.3.22	Aggregate	not-accessible
tpCASTableEntry	1.3.6.1.4.1.2496.1.1.3.22.1	Aggregate	not-accessible
tpCASCollectTimeInterval	1.3.6.1.4.1.2496.1.1.3.22.1.1	Counter32	read-only
tpCASCollectTime	1.3.6.1.4.1.2496.1.1.3.22.1.2	TimeTicks	read-only
tpCASAttCallInTOT	1.3.6.1.4.1.2496.1.1.3.22.1.3	Counter32	read-only
tpCASSuccCallInTOT	1.3.6.1.4.1.2496.1.1.3.22.1.4	Counter32	read-only

tpCASAAttCallOutTOT	1.3.6.1.4.1.2496.1.1.3.22.1.5	Counter32	read-only
tpCASSuccCallOutTOT	1.3.6.1.4.1.2496.1.1.3.22.1.6	Counter32	read-only
tpCASSZRAttCallInTOT	1.3.6.1.4.1.2496.1.1.3.22.1.7	Counter32	read-only
tpCASSZRSuccCallInTOT	1.3.6.1.4.1.2496.1.1.3.22.1.8	Counter32	read-only
tpCASSZRAttCallOutTOT	1.3.6.1.4.1.2496.1.1.3.22.1.9	Counter32	read-only
tpCASSZRSuccCallOutTOT	1.3.6.1.4.1.2496.1.1.3.22.1.10	Counter32	read-only
tpCASInUnexpMsg	1.3.6.1.4.1.2496.1.1.3.22.1.11	Counter32	read-only
tpTraps	1.3.6.1.4.1.2496.1.1.4	nonLeaf	
commAlarm	1.3.6.1.4.1.2496.1.1.4.1	nonLeaf	
qualityOfService	1.3.6.1.4.1.2496.1.1.4.2	nonLeaf	
processingError	1.3.6.1.4.1.2496.1.1.4.3	nonLeaf	
equipmentError	1.3.6.1.4.1.2496.1.1.4.4	nonLeaf	
environmentError	1.3.6.1.4.1.2496.1.1.4.5	nonLeaf	
tpRecords	1.3.6.1.4.1.2496.1.1.5	nonLeaf	
tpAlarmObject	1.3.6.1.4.1.2496.1.1.5.5	nonLeaf	
tpAlarmId	1.3.6.1.4.1.2496.1.1.5.5.1	INTEGER	not-accessible
tpAlarmCatId	1.3.6.1.4.1.2496.1.1.5.5.2	INTEGER(1..90000)	not-accessible
tpAlarmCatName	1.3.6.1.4.1.2496.1.1.5.5.3	OctetString(0..15)	not-accessible
tpAlarmCatDesc	1.3.6.1.4.1.2496.1.1.5.5.4	OctetString(0..128)	not-accessible
tpAlarmSet	1.3.6.1.4.1.2496.1.1.5.5.5	INTEGER	not-accessible
(
1 clear			
2 set			
)			
tpAlarmNotify	1.3.6.1.4.1.2496.1.1.5.5.6	INTEGER	read-only
(
1 no			
2 yes			
)			
tpAlarmSeverity	1.3.6.1.4.1.2496.1.1.5.5.7	INTEGER	not-accessible
(
1 informational			
2 minor			
3 major			
4 critical			
)			
tpAlarmReported	1.3.6.1.4.1.2496.1.1.5.5.8	INTEGER	not-accessible
(

```

1 no
2 yes
)
tpAlarmTime      1.3.6.1.4.1.2496.1.1.5.5.9 Counter32 not-accessible
security         1.3.6.1.5 nonLeaf
snmpV2          1.3.6.1.6 nonLeaf
snmpDomains     1.3.6.1.6.1 nonLeaf
snmpUDPDomain   1.3.6.1.6.1.1 nonLeaf
snmpCLNSDomain  1.3.6.1.6.1.2 nonLeaf
snmpCONSDomain  1.3.6.1.6.1.3 nonLeaf
snmpDDPDomain   1.3.6.1.6.1.4 nonLeaf
snmpIPXDomain   1.3.6.1.6.1.5 nonLeaf
snmpProxys      1.3.6.1.6.2 nonLeaf
rfc1157Proxy    1.3.6.1.6.2.1 nonLeaf
rfc1157Domain   1.3.6.1.6.2.1.1 nonLeaf
snmpModules     1.3.6.1.6.3 nonLeaf
snmpMIB         1.3.6.1.6.3.1 nonLeaf
snmpMIBObjects  1.3.6.1.6.3.1.1 nonLeaf
snmpTrap        1.3.6.1.6.3.1.1.4 nonLeaf
snmpTrapOID     1.3.6.1.6.3.1.1.4.1 ObjectID accessible-for-notify
snmpTrapEnterprise 1.3.6.1.6.3.1.1.4.3 ObjectID accessible-for-notify
snmpTraps       1.3.6.1.6.3.1.1.5 nonLeaf
coldStart       1.3.6.1.6.3.1.1.5.1 nonLeaf
warmStart       1.3.6.1.6.3.1.1.5.2 nonLeaf
authenticationFailure 1.3.6.1.6.3.1.1.5.5 nonLeaf
snmpSet         1.3.6.1.6.3.1.1.6 nonLeaf
snmpSetSerialNo 1.3.6.1.6.3.1.1.6.1 INTEGER(0..2147483647) read-write
snmpMIBConformance 1.3.6.1.6.3.1.2 nonLeaf
snmpMIBCompliances 1.3.6.1.6.3.1.2.1 nonLeaf
snmpBasicCompliance 1.3.6.1.6.3.1.2.1.2 nonLeaf
snmpMIBGroups   1.3.6.1.6.3.1.2.2 nonLeaf
snmpSetGroup    1.3.6.1.6.3.1.2.2.5 nonLeaf
systemGroup     1.3.6.1.6.3.1.2.2.6 nonLeaf
snmpGroup       1.3.6.1.6.3.1.2.2.8 nonLeaf
snmpCommunityGroup 1.3.6.1.6.3.1.2.2.9 nonLeaf
snmpObsoleteGroup 1.3.6.1.6.3.1.2.2.10 nonLeaf
snmpFrameworkMIB 1.3.6.1.6.3.10 nonLeaf
snmpFrameworkAdmin 1.3.6.1.6.3.10.1 nonLeaf

```

snmpAuthProtocols	1.3.6.1.6.3.10.1.1	nonLeaf	
usmNoAuthProtocol	1.3.6.1.6.3.10.1.1.1	nonLeaf	
usmHMACMD5AuthProtocol	1.3.6.1.6.3.10.1.1.2	nonLeaf	
usmHMACSHAAuthProtocol	1.3.6.1.6.3.10.1.1.3	nonLeaf	
snmpPrivProtocols	1.3.6.1.6.3.10.1.2	nonLeaf	
usmNoPrivProtocol	1.3.6.1.6.3.10.1.2.1	nonLeaf	
usmDESPrivProtocol	1.3.6.1.6.3.10.1.2.2	nonLeaf	
snmpFrameworkMIBObjects	1.3.6.1.6.3.10.2	nonLeaf	
snmpEngine	1.3.6.1.6.3.10.2.1	nonLeaf	
snmpEngineID	1.3.6.1.6.3.10.2.1.1	OctetString(1..32)	read-only
snmpEngineBoots	1.3.6.1.6.3.10.2.1.2	INTEGER(1..2147483647)	read-only
snmpEngineTime	1.3.6.1.6.3.10.2.1.3	INTEGER(0..2147483647)	read-only
snmpEngineMaxMessageSize	1.3.6.1.6.3.10.2.1.4	INTEGER(484..2147483647)	read-only
snmpFrameworkMIBConformance	1.3.6.1.6.3.10.3	nonLeaf	
snmpFrameworkMIBCompliances	1.3.6.1.6.3.10.3.1	nonLeaf	
snmpFrameworkMIBCompliance	1.3.6.1.6.3.10.3.1.1	nonLeaf	
snmpFrameworkMIBGroups	1.3.6.1.6.3.10.3.2	nonLeaf	
snmpEngineGroup	1.3.6.1.6.3.10.3.2.1	nonLeaf	
snmpMPDMIB	1.3.6.1.6.3.11	nonLeaf	
snmpMPDAdmin	1.3.6.1.6.3.11.1	nonLeaf	
snmpMPDMIBObjects	1.3.6.1.6.3.11.2	nonLeaf	
snmpMPDStats	1.3.6.1.6.3.11.2.1	nonLeaf	
snmpUnknownSecurityModels	1.3.6.1.6.3.11.2.1.1	Counter32	read-only
snmpInvalidMsgs	1.3.6.1.6.3.11.2.1.2	Counter32	read-only
snmpUnknownPDUHandlers	1.3.6.1.6.3.11.2.1.3	Counter32	read-only
snmpMPDMIBConformance	1.3.6.1.6.3.11.3	nonLeaf	
snmpMPDMIBCompliances	1.3.6.1.6.3.11.3.1	nonLeaf	
snmpMPDCompliance	1.3.6.1.6.3.11.3.1.1	nonLeaf	
snmpMPDMIBGroups	1.3.6.1.6.3.11.3.2	nonLeaf	
snmpMPDGroup	1.3.6.1.6.3.11.3.2.1	nonLeaf	
snmpTargetMIB	1.3.6.1.6.3.12	nonLeaf	
snmpTargetObjects	1.3.6.1.6.3.12.1	nonLeaf	
snmpTargetSpinLock	1.3.6.1.6.3.12.1.1	INTEGER(0..2147483647)	read-write
snmpTargetAddrTable	1.3.6.1.6.3.12.1.2	Aggregate	not-accessible
snmpTargetAddrEntry	1.3.6.1.6.3.12.1.2.1	Aggregate	not-accessible
snmpTargetAddrName	1.3.6.1.6.3.12.1.2.1.1	OctetString(1..32)	not-accessible
snmpTargetAddrTDomain	1.3.6.1.6.3.12.1.2.1.2	ObjectID	read-create
snmpTargetAddrTAddress	1.3.6.1.6.3.12.1.2.1.3	OctetString(1..255)	read-create

```

snmpTargetAddrTimeout 1.3.6.1.6.3.12.1.2.1.4    INTEGER(0..2147483647) read-create
snmpTargetAddrRetryCount 1.3.6.1.6.3.12.1.2.1.5    Integer32(0..255) read-create
snmpTargetAddrTagList 1.3.6.1.6.3.12.1.2.1.6    OctetString(0..255) read-create
snmpTargetAddrParams 1.3.6.1.6.3.12.1.2.1.7    OctetString(1..32) read-create
snmpTargetAddrStorageType 1.3.6.1.6.3.12.1.2.1.8    INTEGER    read-create
(
  1 other
  2 volatile
  3 nonVolatile
  4 permanent
  5 readOnly
)
snmpTargetAddrRowStatus 1.3.6.1.6.3.12.1.2.1.9    INTEGER    read-create
(
  1 active
  2 notInService
  3 notReady
  4 createAndGo
  5 createAndWait
  6 destroy
)
snmpTargetParamsTable 1.3.6.1.6.3.12.1.3    Aggregate    not-accessible
snmpTargetParamsEntry 1.3.6.1.6.3.12.1.3.1    Aggregate    not-accessible
snmpTargetParamsName 1.3.6.1.6.3.12.1.3.1.1    OctetString(1..32) not-accessible
snmpTargetParamsMPModel 1.3.6.1.6.3.12.1.3.1.2    INTEGER(0..2147483647) read-create
snmpTargetParamsSecurityModel 1.3.6.1.6.3.12.1.3.1.3    INTEGER(0..2147483647) read-create
snmpTargetParamsSecurityName 1.3.6.1.6.3.12.1.3.1.4    OctetString(0..255) read-create
snmpTargetParamsSecurityLevel 1.3.6.1.6.3.12.1.3.1.5    INTEGER    read-create
(
  1 noAuthNoPriv
  2 authNoPriv
  3 authPriv
)
snmpTargetParamsStorageType 1.3.6.1.6.3.12.1.3.1.6    INTEGER    read-create
(
  1 other
  2 volatile
  3 nonVolatile

```

```

    4 permanent
    5 readOnly
)
snmpTargetParamsRowStatus 1.3.6.1.6.3.12.1.3.1.7    INTEGER    read-create
(
    1 active
    2 notInService
    3 notReady
    4 createAndGo
    5 createAndWait
    6 destroy
)
snmpUnavailableContexts 1.3.6.1.6.3.12.1.4        Counter32    read-only
snmpUnknownContexts 1.3.6.1.6.3.12.1.5          Counter32    read-only
snmpTargetConformance 1.3.6.1.6.3.12.3          nonLeaf
snmpTargetCompliances 1.3.6.1.6.3.12.3.1        nonLeaf
snmpTargetCommandResponderCompliance 1.3.6.1.6.3.12.3.1.1    nonLeaf
snmpTargetGroups 1.3.6.1.6.3.12.3.2            nonLeaf
snmpTargetBasicGroup 1.3.6.1.6.3.12.3.2.1      nonLeaf
snmpTargetResponseGroup 1.3.6.1.6.3.12.3.2.2    nonLeaf
snmpTargetCommandResponderGroup 1.3.6.1.6.3.12.3.2.3    nonLeaf
snmpNotificationMIB 1.3.6.1.6.3.13              nonLeaf
snmpNotifyObjects 1.3.6.1.6.3.13.1             nonLeaf
snmpNotifyTable 1.3.6.1.6.3.13.1.1            Aggregate    not-accessible
snmpNotifyEntry 1.3.6.1.6.3.13.1.1.1         Aggregate    not-accessible
snmpNotifyName 1.3.6.1.6.3.13.1.1.1.1        OctetString(1..32) not-accessible
snmpNotifyTag 1.3.6.1.6.3.13.1.1.1.2         OctetString(0..255) read-create
snmpNotifyType 1.3.6.1.6.3.13.1.1.1.3        INTEGER    read-create
(
    1 trap
    2 inform
)
snmpNotifyStorageType 1.3.6.1.6.3.13.1.1.1.4    INTEGER    read-create
(
    1 other
    2 volatile
    3 nonVolatile
    4 permanent

```

```

    5 readOnly
)
snmpNotifyRowStatus 1.3.6.1.6.3.13.1.1.5    INTEGER    read-create
(
    1 active
    2 notInService
    3 notReady
    4 createAndGo
    5 createAndWait
    6 destroy
)
snmpNotifyFilterProfileTable 1.3.6.1.6.3.13.1.2    Aggregate    not-accessible
snmpNotifyFilterProfileEntry 1.3.6.1.6.3.13.1.2.1    Aggregate    not-accessible
snmpNotifyFilterProfileName 1.3.6.1.6.3.13.1.2.1.1    OctetString(1..32) read-create
snmpNotifyFilterProfileStorType 1.3.6.1.6.3.13.1.2.1.2    INTEGER    read-create
(
    1 other
    2 volatile
    3 nonVolatile
    4 permanent
    5 readOnly
)
snmpNotifyFilterProfileRowStatus 1.3.6.1.6.3.13.1.2.1.3    INTEGER    read-create
(
    1 active
    2 notInService
    3 notReady
    4 createAndGo
    5 createAndWait
    6 destroy
)
snmpNotifyFilterTable 1.3.6.1.6.3.13.1.3    Aggregate    not-accessible
snmpNotifyFilterEntry 1.3.6.1.6.3.13.1.3.1    Aggregate    not-accessible
snmpNotifyFilterSubtree 1.3.6.1.6.3.13.1.3.1.1    ObjectID    not-accessible
snmpNotifyFilterMask 1.3.6.1.6.3.13.1.3.1.2    OctetString(0..16) read-create
snmpNotifyFilterType 1.3.6.1.6.3.13.1.3.1.3    INTEGER    read-create
(
    1 included

```

```

    2 excluded
  )
  snmpNotifyFilterStorageType 1.3.6.1.6.3.13.1.3.1.4    INTEGER    read-create
  (
    1 other
    2 volatile
    3 nonVolatile
    4 permanent
    5 readOnly
  )
  snmpNotifyFilterRowStatus 1.3.6.1.6.3.13.1.3.1.5    INTEGER    read-create
  (
    1 active
    2 notInService
    3 notReady
    4 createAndGo
    5 createAndWait
    6 destroy
  )
  snmpNotifyConformance 1.3.6.1.6.3.13.3    nonLeaf
  snmpNotifyCompliances 1.3.6.1.6.3.13.3.1    nonLeaf
  snmpNotifyBasicCompliance 1.3.6.1.6.3.13.3.1.1    nonLeaf
  snmpNotifyBasicFiltersCompliance 1.3.6.1.6.3.13.3.1.2    nonLeaf
  snmpNotifyFullCompliance 1.3.6.1.6.3.13.3.1.3    nonLeaf
  snmpNotifyGroups 1.3.6.1.6.3.13.3.2    nonLeaf
  snmpNotifyGroup 1.3.6.1.6.3.13.3.2.1    nonLeaf
  snmpNotifyFilterGroup 1.3.6.1.6.3.13.3.2.2    nonLeaf
  snmpProxyMIB 1.3.6.1.6.3.14    nonLeaf
  snmpProxyObjects 1.3.6.1.6.3.14.1    nonLeaf
  snmpProxyTable 1.3.6.1.6.3.14.1.2    Aggregate    not-accessible
  snmpProxyEntry 1.3.6.1.6.3.14.1.2.1    Aggregate    not-accessible
  snmpProxyName 1.3.6.1.6.3.14.1.2.1.1    OctetString(1..32)    not-accessible
  snmpProxyType 1.3.6.1.6.3.14.1.2.1.2    INTEGER    read-create
  (
    1 read
    2 write
    3 trap
    4 inform
  )

```

```

)
snmpProxyContextEngineID 1.3.6.1.6.3.14.1.2.1.3    OctetString(1..32) read-create
snmpProxyContextName 1.3.6.1.6.3.14.1.2.1.4      OctetString(0..255) read-create
snmpProxyTargetParamsIn 1.3.6.1.6.3.14.1.2.1.5    OctetString(0..255) read-create
snmpProxySingleTargetOut 1.3.6.1.6.3.14.1.2.1.6    OctetString(0..255) read-create
snmpProxyMultipleTargetOut 1.3.6.1.6.3.14.1.2.1.7    OctetString(0..255) read-create
snmpProxyStorageType 1.3.6.1.6.3.14.1.2.1.8      INTEGER      read-create
(
  1 other
  2 volatile
  3 nonVolatile
  4 permanent
  5 readOnly
)
snmpProxyRowStatus 1.3.6.1.6.3.14.1.2.1.9      INTEGER      read-create
(
  1 active
  2 notInService
  3 notReady
  4 createAndGo
  5 createAndWait
  6 destroy
)
snmpProxyConformance 1.3.6.1.6.3.14.3          nonLeaf
snmpProxyCompliances 1.3.6.1.6.3.14.3.1        nonLeaf
snmpProxyCompliance 1.3.6.1.6.3.14.3.1.1      nonLeaf
snmpProxyGroups      1.3.6.1.6.3.14.3.2        nonLeaf
snmpProxyGroup       1.3.6.1.6.3.14.3.2.3      nonLeaf
snmpUsmMIB           1.3.6.1.6.3.15          nonLeaf
usmMIBObjects        1.3.6.1.6.3.15.1        nonLeaf
usmStats              1.3.6.1.6.3.15.1.1      nonLeaf
usmStatsUnsupportedSecLevels 1.3.6.1.6.3.15.1.1.1 Counter32  read-only
usmStatsNotInTimeWindows 1.3.6.1.6.3.15.1.1.2 Counter32  read-only
usmStatsUnknownUserNames 1.3.6.1.6.3.15.1.1.3 Counter32  read-only
usmStatsUnknownEngineIDs 1.3.6.1.6.3.15.1.1.4 Counter32  read-only
usmStatsWrongDigests 1.3.6.1.6.3.15.1.1.5 Counter32  read-only
usmStatsDecryptionErrors 1.3.6.1.6.3.15.1.1.6 Counter32  read-only
usmUser              1.3.6.1.6.3.15.1.2      nonLeaf

```

usmUserSpinLock	1.3.6.1.6.3.15.1.2.1	INTEGER(0..2147483647)	read-write
usmUserTable	1.3.6.1.6.3.15.1.2.2	Aggregate	not-accessible
usmUserEntry	1.3.6.1.6.3.15.1.2.2.1	Aggregate	not-accessible
usmUserEngineID	1.3.6.1.6.3.15.1.2.2.1.1	OctetString(1..32)	not-accessible
usmUserName	1.3.6.1.6.3.15.1.2.2.1.2	OctetString(1..32)	not-accessible
usmUserSecurityName	1.3.6.1.6.3.15.1.2.2.1.3	OctetString(0..255)	read-only
usmUserCloneFrom	1.3.6.1.6.3.15.1.2.2.1.4	ObjectID	read-create
usmUserAuthProtocol	1.3.6.1.6.3.15.1.2.2.1.5	ObjectID	read-create
usmUserAuthKeyChange	1.3.6.1.6.3.15.1.2.2.1.6	OctetString	read-create
usmUserOwnAuthKeyChange	1.3.6.1.6.3.15.1.2.2.1.7	OctetString	read-create
usmUserPrivProtocol	1.3.6.1.6.3.15.1.2.2.1.8	ObjectID	read-create
usmUserPrivKeyChange	1.3.6.1.6.3.15.1.2.2.1.9	OctetString	read-create
usmUserOwnPrivKeyChange	1.3.6.1.6.3.15.1.2.2.1.10	OctetString	read-create
usmUserPublic	1.3.6.1.6.3.15.1.2.2.1.11	OctetString(0..32)	read-create
usmUserStorageType	1.3.6.1.6.3.15.1.2.2.1.12	INTEGER	read-create
(
1	other		
2	volatile		
3	nonVolatile		
4	permanent		
5	readOnly		
)			
usmUserStatus	1.3.6.1.6.3.15.1.2.2.1.13	INTEGER	read-create
(
1	active		
2	notInService		
3	notReady		
4	createAndGo		
5	createAndWait		
6	destroy		
)			
usmMIBConformance	1.3.6.1.6.3.15.2	nonLeaf	
usmMIBCompliances	1.3.6.1.6.3.15.2.1	nonLeaf	
usmMIBCompliance	1.3.6.1.6.3.15.2.1.1	nonLeaf	
usmMIBGroups	1.3.6.1.6.3.15.2.2	nonLeaf	
usmMIBBasicGroup	1.3.6.1.6.3.15.2.2.1	nonLeaf	
snmpVacmMIB	1.3.6.1.6.3.16	nonLeaf	
vacmMIBObjects	1.3.6.1.6.3.16.1	nonLeaf	

```

vacmContextTable 1.3.6.1.6.3.16.1.1 Aggregate not-accessible
vacmContextEntry 1.3.6.1.6.3.16.1.1.1 Aggregate not-accessible
vacmContextName 1.3.6.1.6.3.16.1.1.1.1 OctetString(0..32) read-only
vacmSecurityToGroupTable 1.3.6.1.6.3.16.1.2 Aggregate not-accessible
vacmSecurityToGroupEntry 1.3.6.1.6.3.16.1.2.1 Aggregate not-accessible
vacmSecurityModel 1.3.6.1.6.3.16.1.2.1.1 INTEGER(1..2147483647) not-accessible
vacmSecurityName 1.3.6.1.6.3.16.1.2.1.2 OctetString(1..32) not-accessible
vacmGroupName 1.3.6.1.6.3.16.1.2.1.3 OctetString(1..32) read-create
vacmSecurityToGroupStorageType 1.3.6.1.6.3.16.1.2.1.4 INTEGER read-create
(
  1 other
  2 volatile
  3 nonVolatile
  4 permanent
  5 readOnly
)
vacmSecurityToGroupStatus 1.3.6.1.6.3.16.1.2.1.5 INTEGER read-create
(
  1 active
  2 notInService
  3 notReady
  4 createAndGo
  5 createAndWait
  6 destroy
)
vacmAccessTable 1.3.6.1.6.3.16.1.4 Aggregate not-accessible
vacmAccessEntry 1.3.6.1.6.3.16.1.4.1 Aggregate not-accessible
vacmAccessContextPrefix 1.3.6.1.6.3.16.1.4.1.1 OctetString(0..32) not-accessible
vacmAccessSecurityModel 1.3.6.1.6.3.16.1.4.1.2 INTEGER(0..2147483647) not-accessible
vacmAccessSecurityLevel 1.3.6.1.6.3.16.1.4.1.3 INTEGER not-accessible
(
  1 noAuthNoPriv
  2 authNoPriv
  3 authPriv
)
vacmAccessContextMatch 1.3.6.1.6.3.16.1.4.1.4 INTEGER read-create
(
  1 exact

```

```

    2 prefix
)
vacmAccessReadViewName 1.3.6.1.6.3.16.1.4.1.5    OctetString(0..32) read-create
vacmAccessWriteViewName 1.3.6.1.6.3.16.1.4.1.6    OctetString(0..32) read-create
vacmAccessNotifyViewName 1.3.6.1.6.3.16.1.4.1.7    OctetString(0..32) read-create
vacmAccessStorageType 1.3.6.1.6.3.16.1.4.1.8    INTEGER    read-create
(
    1 other
    2 volatile
    3 nonVolatile
    4 permanent
    5 readOnly
)
vacmAccessStatus 1.3.6.1.6.3.16.1.4.1.9    INTEGER    read-create
(
    1 active
    2 notInService
    3 notReady
    4 createAndGo
    5 createAndWait
    6 destroy
)
vacmMIBViews 1.3.6.1.6.3.16.1.5    nonLeaf
vacmViewSpinLock 1.3.6.1.6.3.16.1.5.1    INTEGER(0..2147483647) read-write
vacmViewTreeFamilyTable 1.3.6.1.6.3.16.1.5.2    Aggregate    not-accessible
vacmViewTreeFamilyEntry 1.3.6.1.6.3.16.1.5.2.1    Aggregate    not-accessible
vacmViewTreeFamilyViewName 1.3.6.1.6.3.16.1.5.2.1.1    OctetString(1..32) not-accessible
vacmViewTreeFamilySubtree 1.3.6.1.6.3.16.1.5.2.1.2    ObjectID    not-accessible
vacmViewTreeFamilyMask 1.3.6.1.6.3.16.1.5.2.1.3    OctetString(0..16) read-create
vacmViewTreeFamilyType 1.3.6.1.6.3.16.1.5.2.1.4    INTEGER    read-create
(
    1 included
    2 excluded
)
vacmViewTreeFamilyStorageType 1.3.6.1.6.3.16.1.5.2.1.5    INTEGER    read-create
(
    1 other
    2 volatile

```

```

    3 nonVolatile
    4 permanent
    5 readOnly
)
vacmViewTreeFamilyStatus 1.3.6.1.6.3.16.1.5.2.1.6    INTEGER    read-create
(
    1 active
    2 notInService
    3 notReady
    4 createAndGo
    5 createAndWait
    6 destroy
)
vacmMIBConformance    1.3.6.1.6.3.16.2    nonLeaf
vacmMIBCompliances    1.3.6.1.6.3.16.2.1    nonLeaf
vacmMIBCompliance    1.3.6.1.6.3.16.2.1.1    nonLeaf
vacmMIBGroups        1.3.6.1.6.3.16.2.2    nonLeaf
vacmBasicGroup       1.3.6.1.6.3.16.2.2.1    nonLeaf
snmpCommunityMIB     1.3.6.1.6.3.18    nonLeaf
snmpCommunityMIBObjects 1.3.6.1.6.3.18.1    nonLeaf
snmpCommunityTable   1.3.6.1.6.3.18.1.1    Aggregate    not-accessible
snmpCommunityEntry   1.3.6.1.6.3.18.1.1.1    Aggregate    not-accessible
snmpCommunityIndex   1.3.6.1.6.3.18.1.1.1.1    OctetString(1..32) not-accessible
snmpCommunityName    1.3.6.1.6.3.18.1.1.1.2    OctetString(1..64) read-create
snmpCommunitySecurityName 1.3.6.1.6.3.18.1.1.1.3    OctetString(0..255) read-create
snmpCommunityContextEngineID 1.3.6.1.6.3.18.1.1.1.4    OctetString(1..32) read-create
snmpCommunityContextName 1.3.6.1.6.3.18.1.1.1.5    OctetString(0..255) read-create
snmpCommunityTransportTag 1.3.6.1.6.3.18.1.1.1.6    OctetString(0..255) read-create
snmpCommunityStorageType 1.3.6.1.6.3.18.1.1.1.7    INTEGER    read-create
(
    1 other
    2 volatile
    3 nonVolatile
    4 permanent
    5 readOnly
)
snmpCommunityStatus 1.3.6.1.6.3.18.1.1.1.8    INTEGER    read-create
(

```

```

1 active
2 notInService
3 notReady
4 createAndGo
5 createAndWait
6 destroy
)
snmpTargetAddrExtTable 1.3.6.1.6.3.18.1.2      Aggregate    not-accessible
snmpTargetAddrExtEntry 1.3.6.1.6.3.18.1.2.1    Aggregate    not-accessible
snmpTargetAddrTMask   1.3.6.1.6.3.18.1.2.1.1    OctetString(0..255) read-create
snmpTargetAddrMMS     1.3.6.1.6.3.18.1.2.1.2    Integer32(484..65535) read-create
snmpTrapAddress       1.3.6.1.6.3.18.1.3        IPAddress     accessible-for-notify
snmpTrapCommunity    1.3.6.1.6.3.18.1.4        OctetString   accessible-for-notify
snmpCommunityMIBConformance 1.3.6.1.6.3.18.2        nonLeaf
snmpCommunityMIBCompliances 1.3.6.1.6.3.18.2.1      nonLeaf
snmpCommunityMIBCompliance 1.3.6.1.6.3.18.2.1.1    nonLeaf
snmpCommunityMIBGroups 1.3.6.1.6.3.18.2.2        nonLeaf
snmpCommunityObjectGroup 1.3.6.1.6.3.18.2.2.1    nonLeaf
v2AdminMIB            1.3.6.1.6.3.1134          nonLeaf
v2AdminSnmpScalars   1.3.6.1.6.3.1134.1        nonLeaf
snmpID                1.3.6.1.6.3.1134.1.1      OctetString(12..12) read-only
snmpMaxMessageSize   1.3.6.1.6.3.1134.1.3      Integer32(484..2147483647) read-only
maxIdentityNameLength 1.3.6.1.6.3.1134.1.4      Integer32(1..255) read-only
maxGroupNameLength   1.3.6.1.6.3.1134.1.5      Integer32(1..255) read-only
maxV2ContextNameLength 1.3.6.1.6.3.1134.1.6      Integer32(1..255) read-only
maxViewTreeNameLength 1.3.6.1.6.3.1134.1.7      Integer32(1..255) read-only
maxTransportLabelLength 1.3.6.1.6.3.1134.1.8      Integer32(1..255) read-only
v2AdminStats         1.3.6.1.6.3.1134.2        nonLeaf
v2AdminStatsUnknownSPIs 1.3.6.1.6.3.1134.2.1      Counter32     read-only
v2AdminStatsUnknownContexts 1.3.6.1.6.3.1134.2.2      Counter32     read-only
v2AdminStatsUnavailableContexts 1.3.6.1.6.3.1134.2.3      Counter32     read-only
v2AdminStatsCacheMisses 1.3.6.1.6.3.1134.2.4      Counter32     read-only
v2ContextTable       1.3.6.1.6.3.1134.3        Aggregate     not-accessible
v2ContextEntry       1.3.6.1.6.3.1134.3.1      Aggregate     not-accessible
v2ContextSnmpID      1.3.6.1.6.3.1134.3.1.1    OctetString(12..12) not-accessible
v2ContextName        1.3.6.1.6.3.1134.3.1.2    OctetString(1..255) not-accessible
v2ContextLocalEntity 1.3.6.1.6.3.1134.3.1.3    OctetString(0..255) read-create
v2ContextLocalTime   1.3.6.1.6.3.1134.3.1.4    INTEGER       read-create

```

```

(
  1 currentTime
  2 restartTime
)
v2ContextMemoryType 1.3.6.1.6.3.1134.3.1.5 INTEGER read-create
(
  1 other
  2 volatile
  3 nonVolatile
  4 permanent
  5 readOnly
)
v2ContextStatus 1.3.6.1.6.3.1134.3.1.6 INTEGER read-create
(
  1 active
  2 notInService
  3 notReady
  4 createAndGo
  5 createAndWait
  6 destroy
)
v2AdminViewTree 1.3.6.1.6.3.1134.4 nonLeaf
viewTreeSpinLock 1.3.6.1.6.3.1134.4.1 INTEGER(0..2147483647) read-write
viewTreeTable 1.3.6.1.6.3.1134.4.2 Aggregate not-accessible
viewTreeEntry 1.3.6.1.6.3.1134.4.2.1 Aggregate not-accessible
viewTreeName 1.3.6.1.6.3.1134.4.2.1.1 OctetString(1..255) not-accessible
viewTreeSubTree 1.3.6.1.6.3.1134.4.2.1.2 ObjectID not-accessible
viewTreeMask 1.3.6.1.6.3.1134.4.2.1.3 OctetString(0..16) read-create
viewTreeType 1.3.6.1.6.3.1134.4.2.1.4 INTEGER read-create
(
  1 included
  2 excluded
)
viewTreeMemoryType 1.3.6.1.6.3.1134.4.2.1.5 INTEGER read-create
(
  1 other
  2 volatile
  3 nonVolatile

```

```

    4 permanent
    5 readOnly
)
viewTreeStatus      1.3.6.1.6.3.1134.4.2.1.6    INTEGER      read-create
(
    1 active
    2 notInService
    3 notReady
    4 createAndGo
    5 createAndWait
    6 destroy
)
v2AdminAccessControl 1.3.6.1.6.3.1134.5          nonLeaf
acSpinLock          1.3.6.1.6.3.1134.5.1          INTEGER(0..2147483647) read-write
acTable             1.3.6.1.6.3.1134.5.2          Aggregate    not-accessible
acEntry             1.3.6.1.6.3.1134.5.2.1        Aggregate    not-accessible
acSPI               1.3.6.1.6.3.1134.5.2.1.1      INTEGER      not-accessible
(
    1 snmpv1
    2 snmpv2C
    3 maint
    4 usecNoAuth
    5 usecAuth
    6 usecPriv
)
acGroupName         1.3.6.1.6.3.1134.5.2.1.2          OctetString(1..255) not-accessible
acContextName       1.3.6.1.6.3.1134.5.2.1.3          OctetString(1..255) not-accessible
acContextNameMask   1.3.6.1.6.3.1134.5.2.1.4          OctetString(0..32) read-create
acPrivs             1.3.6.1.6.3.1134.5.2.1.5          INTEGER      read-create
(
    1 nothing
    2 readOnly
    3 readWrite
)
acReadViewName      1.3.6.1.6.3.1134.5.2.1.6          OctetString(0..255) read-create
acWriteViewName     1.3.6.1.6.3.1134.5.2.1.7          OctetString(0..255) read-create
acMemoryType        1.3.6.1.6.3.1134.5.2.1.8          INTEGER      read-create
(

```

```

1 other
2 volatile
3 nonVolatile
4 permanent
5 readOnly
)
acStatus      1.3.6.1.6.3.1134.5.2.1.9    INTEGER      read-create
(
1 active
2 notInService
3 notReady
4 createAndGo
5 createAndWait
6 destroy
)
v2AdminTransport  1.3.6.1.6.3.1134.6          nonLeaf
transportSpinLock 1.3.6.1.6.3.1134.6.1        INTEGER(0..2147483647) read-write
transportTable    1.3.6.1.6.3.1134.6.3        Aggregate    not-accessible
transportEntry    1.3.6.1.6.3.1134.6.3.1      Aggregate    not-accessible
transportLabel    1.3.6.1.6.3.1134.6.3.1.1    OctetString(1..255) not-accessible
transportSubindex 1.3.6.1.6.3.1134.6.3.1.2    INTEGER(0..2147483647) not-accessible
transportDomain   1.3.6.1.6.3.1134.6.3.1.3    ObjectID     read-create
transportAddress  1.3.6.1.6.3.1134.6.3.1.4    OctetString(0..255) read-create
transportReceiveMask 1.3.6.1.6.3.1134.6.3.1.5    OctetString(0..255) read-create
transportMMS      1.3.6.1.6.3.1134.6.3.1.6    Integer32(484..2147483647) read-create
transportMemoryType 1.3.6.1.6.3.1134.6.3.1.7    INTEGER      read-create
(
1 other
2 volatile
3 nonVolatile
4 permanent
5 readOnly
)
transportStatus  1.3.6.1.6.3.1134.6.3.1.8    INTEGER      read-create
(
1 active
2 notInService
3 notReady

```

```

4 createAndGo
5 createAndWait
6 destroy
)
v2AdminNotify      1.3.6.1.6.3.1134.7      nonLeaf
notifySpinLock     1.3.6.1.6.3.1134.7.1    INTEGER(0..2147483647) read-write
notifyTable        1.3.6.1.6.3.1134.7.2    Aggregate      not-accessible
notifyEntry        1.3.6.1.6.3.1134.7.2.1  Aggregate      not-accessible
notifyIndex        1.3.6.1.6.3.1134.7.2.1.1  INTEGER(0..2147483647) not-accessible
notifySPI          1.3.6.1.6.3.1134.7.2.1.2  INTEGER        read-create
(
1 snmpv1
2 snmpv2C
3 maint
4 usecNoAuth
5 usecAuth
6 usecPriv
)
notifyIdentityName 1.3.6.1.6.3.1134.7.2.1.3  OctetString(1..255) read-create
notifyTransportLabel 1.3.6.1.6.3.1134.7.2.1.4  OctetString(0..255) read-create
notifyContextName  1.3.6.1.6.3.1134.7.2.1.5  OctetString(1..255) read-create
notifyViewName     1.3.6.1.6.3.1134.7.2.1.6  OctetString(1..255) read-create
notifyMemoryType   1.3.6.1.6.3.1134.7.2.1.7  INTEGER        read-create
(
1 other
2 volatile
3 nonVolatile
4 permanent
5 readOnly
)
notifyStatus        1.3.6.1.6.3.1134.7.2.1.8  INTEGER        read-create
(
1 active
2 notInService
3 notReady
4 createAndGo
5 createAndWait
6 destroy

```

```

)
notifyInformParametersTable 1.3.6.1.6.3.1134.7.3      Aggregate      not-accessible
notifyInformParametersEntry 1.3.6.1.6.3.1134.7.3.1    Aggregate      not-accessible
notifyConfirm      1.3.6.1.6.3.1134.7.3.1.1    INTEGER      read-create
(
  1 true
  2 false
)
notifyAuthSnmpID   1.3.6.1.6.3.1134.7.3.1.2    OctetString(12..12) read-create
notifyTimeout      1.3.6.1.6.3.1134.7.3.1.3    Integer32(1..2147483647) read-create
notifyMaxRetry     1.3.6.1.6.3.1134.7.3.1.4    Integer32(0..2147483647) read-create
v2AdminProxy      1.3.6.1.6.3.1134.8      nonLeaf
proxyForwardingTable 1.3.6.1.6.3.1134.8.2      Aggregate      not-accessible
proxyForwardingEntry 1.3.6.1.6.3.1134.8.2.1    Aggregate      not-accessible
proxyIndex        1.3.6.1.6.3.1134.8.2.1.1    INTEGER(0..2147483647) not-accessible
proxyType         1.3.6.1.6.3.1134.8.2.1.2    INTEGER      read-create
(
  1 gnb
  2 set
  3 trap
  4 inform
)
proxySPIIn        1.3.6.1.6.3.1134.8.2.1.3    INTEGER      read-create
(
  1 snmpv1
  2 snmpv2C
  3 maint
  4 usecNoAuth
  5 usecAuth
  6 usecPriv
)
proxyAuthSnmpIDIn 1.3.6.1.6.3.1134.8.2.1.4    OctetString(12..12) read-create
proxyIdentityNameIn 1.3.6.1.6.3.1134.8.2.1.5    OctetString(1..255) read-create
proxyContextSnmpIDIn 1.3.6.1.6.3.1134.8.2.1.6    OctetString(12..12) read-create
proxyContextNameIn 1.3.6.1.6.3.1134.8.2.1.7    OctetString(1..255) read-create
proxySPIOut       1.3.6.1.6.3.1134.8.2.1.8    INTEGER      read-create
(
  1 snmpv1

```

```

2 snmpv2C
3 maint
4 usecNoAuth
5 usecAuth
6 usecPriv
)
proxyIdentityNameOut 1.3.6.1.6.3.1134.8.2.1.10 OctetString(0..255) read-create
proxyTransportLabelOut 1.3.6.1.6.3.1134.8.2.1.11 OctetString(0..255) read-create
proxyMemoryType 1.3.6.1.6.3.1134.8.2.1.12 INTEGER read-create
(
1 other
2 volatile
3 nonVolatile
4 permanent
5 readOnly
)
proxyStatus 1.3.6.1.6.3.1134.8.2.1.13 INTEGER read-create
(
1 active
2 notInService
3 notReady
4 createAndGo
5 createAndWait
6 destroy
)
v2AdminMIBConformance 1.3.6.1.6.3.1134.10 nonLeaf
v2AdminMIBCompliances 1.3.6.1.6.3.1134.10.1 nonLeaf
v2AdminMIBBasicAgentCompliance 1.3.6.1.6.3.1134.10.1.1 nonLeaf
v2AdminMIBBasicAgentWithTransportCheckingCompliance 1.3.6.1.6.3.1134.10.1.2 nonLeaf
v2AdminMIBBasicAgentWithTrapsCompliance 1.3.6.1.6.3.1134.10.1.3 nonLeaf
v2AdminMIBBasicAgentWithProxyCompliance 1.3.6.1.6.3.1134.10.1.4 nonLeaf
v2AdminMIBBasicAgentWithTrapsAndProxyCompliance 1.3.6.1.6.3.1134.10.1.5 nonLeaf
v2AdminMIBDualRoleEntityCompliance 1.3.6.1.6.3.1134.10.1.6 nonLeaf
v2AdminMIBGroups 1.3.6.1.6.3.1134.10.2 nonLeaf
v2AdminBasicGroup 1.3.6.1.6.3.1134.10.2.1 nonLeaf
v2AdminTransportGroup 1.3.6.1.6.3.1134.10.2.2 nonLeaf
v2AdminTrapGroup 1.3.6.1.6.3.1134.10.2.3 nonLeaf
v2AdminProxyGroup 1.3.6.1.6.3.1134.10.2.4 nonLeaf

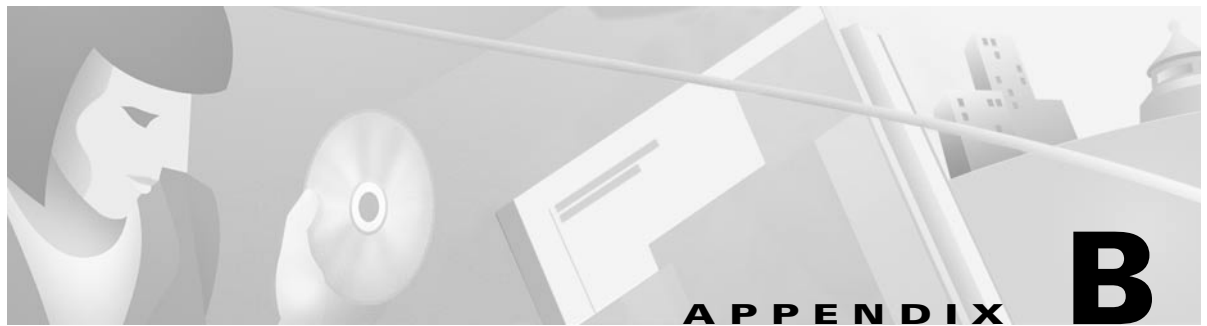
```

```

v2AdminInformGroup 1.3.6.1.6.3.1134.10.2.5 nonLeaf
usecMIB 1.3.6.1.6.3.1135 nonLeaf
usecScalars 1.3.6.1.6.3.1135.1 nonLeaf
snmpBoots 1.3.6.1.6.3.1135.1.1 Integer32(-1..2147483647) read-only
snmpTime 1.3.6.1.6.3.1135.1.2 Integer32(0..2147483647) read-only
usecStats 1.3.6.1.6.3.1135.2 nonLeaf
usecStatsNotInTimeWindows 1.3.6.1.6.3.1135.2.1 Counter32 read-only
usecStatsUnknownUserNames 1.3.6.1.6.3.1135.2.2 Counter32 read-only
usecStatsWrongDigestValues 1.3.6.1.6.3.1135.2.3 Counter32 read-only
usecStatsBadPrivacys 1.3.6.1.6.3.1135.2.4 Counter32 read-only
usecUser 1.3.6.1.6.3.1135.3 nonLeaf
userSpinLock 1.3.6.1.6.3.1135.3.1 INTEGER(0..2147483647) read-write
maxUserNameLength 1.3.6.1.6.3.1135.3.2 Integer32(0..255) read-only
userNameTable 1.3.6.1.6.3.1135.3.3 Aggregate not-accessible
userNameEntry 1.3.6.1.6.3.1135.3.3.1 Aggregate not-accessible
userAuthSnmpID 1.3.6.1.6.3.1135.3.3.1.1 OctetString(12..12) not-accessible
userName 1.3.6.1.6.3.1135.3.3.1.2 OctetString(1..32) not-accessible
userGroupName 1.3.6.1.6.3.1135.3.3.1.3 OctetString(0..32) read-create
userAuthChange 1.3.6.1.6.3.1135.3.3.1.4 OctetString read-create
userPrivChange 1.3.6.1.6.3.1135.3.3.1.5 OctetString read-create
userNovel 1.3.6.1.6.3.1135.3.3.1.6 OctetString(0..20) read-create
userTransportLabel 1.3.6.1.6.3.1135.3.3.1.7 OctetString(0..255) read-create
userCloneFrom 1.3.6.1.6.3.1135.3.3.1.8 ObjectID(14..268) read-create
userMemoryType 1.3.6.1.6.3.1135.3.3.1.9 INTEGER read-create
(
  1 other
  2 volatile
  3 nonVolatile
  4 permanent
  5 readOnly
)
userStatus 1.3.6.1.6.3.1135.3.3.1.10 INTEGER read-create
(
  1 active
  2 notInService
  3 notReady
  4 createAndGo
  5 createAndWait

```

```
    6 destroy
)
usecMIBConformance 1.3.6.1.6.3.1135.4 nonLeaf
usecMIBCompliances 1.3.6.1.6.3.1135.4.1 nonLeaf
usecMIBNoAuthCompliance 1.3.6.1.6.3.1135.4.1.1 nonLeaf
usecMIBAuthCompliance 1.3.6.1.6.3.1135.4.1.2 nonLeaf
usecMIBPrivCompliance 1.3.6.1.6.3.1135.4.1.3 nonLeaf
usecMIBGroups 1.3.6.1.6.3.1135.4.2 nonLeaf
usecNoAuthGroup 1.3.6.1.6.3.1135.4.2.1 nonLeaf
usecAuthGroup 1.3.6.1.6.3.1135.4.2.2 nonLeaf
usecPrivGroup 1.3.6.1.6.3.1135.4.2.3 nonLeaf
```



Cisco Enterprise Structure of Management Information

Introduction

This chapter provides a set of objects used for the structure of management information for the Cisco enterprise and consists of new object identifier definition (OID) assignments for Cisco REPEATER MIB and others.

Cisco Structured Management Information MIBs

ciscoProducts OBJECT-IDENTITY

STATUS current

DESCRIPTION

ciscoProducts is the root OBJECT IDENTIFIER from which sysObjectID values are assigned. Actual values are defined in CISCO-PRODUCTS-MIB.

::= { cisco 1 }

local OBJECT-IDENTITY

STATUS current

DESCRIPTION

“Subtree beneath which pre-10.2 MIBS were built.”

::= { cisco 2 }

temporary OBJECT-IDENTITY

STATUS current

DESCRIPTION

Subtree beneath which pre-10.2 experiments were placed.

::= { cisco 3 }

pakmon OBJECT-IDENTITY

STATUScurrent

DESCRIPTION

Reserved for pakmon

::= { cisco 4 }

workgroup OBJECT-IDENTITY

STATUScurrent

DESCRIPTION

“subtree reserved for use by the Workgroup Business Unit.

::= { cisco 5 }

otherEnterprises OBJECT-IDENTITY

STATUScurrent

DESCRIPTION

This provides a root object identifier from which mibs produced by other companies may be placed. MIBs produced by other enterprises are typically implemented with the object identifiers as defined in the MIB, but if the MIB is deemed to be uncontrolled, we may reroot the mib at this subtree in order to have a controlled version.

::= { cisco 6 }

ciscoAgentCapability OBJECT-IDENTITY

STATUScurrent

DESCRIPTION

ciscoAgentCapability provides a root object identifier from which AGENT-CAPABILITIES values may be assigned.

::= { cisco 7 }

ciscoConfig OBJECT-IDENTITY

STATUScurrent

DESCRIPTION

ciscoConfig is the main subtree for configuration mibs.

::= { cisco 8 }

ciscoMgmt OBJECT-IDENTITY

STATUScurrent

DESCRIPTION

ciscoMgmt is the main subtree for new mib development.

::= { cisco 9 }

ciscoExperiment OBJECT-IDENTITY

STATUScurrent

DESCRIPTION

ciscoExperiment provides a root object identifier from which experimental mibs may be temporarily based. MIBs are typically based here if they fall in one of two categories

1. IETF work-in-process mibs which have not been assigned a permanent object identifier by the IANA.
2. Cisco work-in-process which has not been assigned a permanent object identifier by the cisco assigned number authority, typically because the mib is not ready for deployment.



Note

Support for mibs in the ciscoExperiment subtree will be deleted when a permanent object identifier assignment is made.

::= { cisco 10 }

ciscoAdmin OBJECT-IDENTITY

STATUScurrent

DESCRIPTION

ciscoAdmin is reserved for administratively assigned OBJECT IDENTIFIERS, i.e. those not associated with MIB objects”

::= { cisco 11 }

ciscoModules OBJECT-IDENTITY

STATUScurrent

DESCRIPTION

ciscoModules provides a root object identifier from which MODULE-IDENTITY values may be assigned.

::= { cisco 12 }

lightstream OBJECT-IDENTITY

STATUScurrent

DESCRIPTION

subtree reserved for use by Lightstream

::= { cisco 13 }

ciscoworks OBJECT-IDENTITY

STATUScurrent

DESCRIPTION

cisoworks provides a root object identifier beneath which mibs applicable to the CiscoWorks family of network management products are defined.

```
::= { cisco 14 }
```

newport OBJECT-IDENTITY

STATUScurrent

DESCRIPTION

subtree reserved for use by the former Newport Systems Solutions, now a portion of the Access Business Unit.

```
::= { cisco 15 }
```

ciscoPartnerProducts OBJECT-IDENTITY

STATUS current

DESCRIPTION

ciscoPartnerProducts is the root OBJECT IDENTIFIER from which partner sysObjectID values may be assigned. Such sysObjectID values are composed of the ciscoPartnerProducts prefix, followed by a single identifier that is unique for each partner, followed by the value of sysObjectID of the Cisco product from which partner product is derived.



Note

The chassisPartner MIB object defines the value of the identifier assigned to each partner.

```
::= { cisco 16 }
```

ciscoAdmin assignments

ciscoProxy OBJECT-IDENTITY

STATUScurrent

DESCRIPTION

ciscoProxy OBJECT IDENTIFIERS are used to uniquely name party mib records created to proxy for SNMPv1.

```
::= { ciscoAdmin 1 }
```

```
ciscoPartyProxyOBJECT IDENTIFIER ::= { ciscoProxy 1 }
```

```
ciscoContextProxyOBJECT IDENTIFIER ::= { ciscoProxy 2 }
```

Administrative assignments for repeaters

ciscoRptrGroupObjectID OBJECT-IDENTITY

STATUScurrent

DESCRIPTION

ciscoRptrGroupObjectID OBJECT IDENTIFIERS are used to uniquely identify groups of repeater ports for use by the SNMP-REPEATER-MIB (RFC 1516) rptrGroupObjectID object.

::= { ciscoAdmin 2 }

ciscoUnknownRptrGroup OBJECT-IDENTITY

STATUScurrent

DESCRIPTION

The identity of an unknown repeater port group.

::= { ciscoRptrGroupObjectID 1 }

cisco2505RptrGroup OBJECT-IDENTITY

STATUS current

DESCRIPTION

The authoritative identity of the Cisco 2505 repeater port group.

::= { ciscoRptrGroupObjectID 2 }

cisco2507RptrGroup OBJECT-IDENTITY

STATUScurrent

DESCRIPTION

The authoritative identity of the Cisco 2507 repeater port group.

::= { ciscoRptrGroupObjectID 3 }

cisco2516RptrGroup OBJECT-IDENTITY

STATUScurrent

DESCRIPTION

The authoritative identity of the Cisco 2516 repeater port group.

::= { ciscoRptrGroupObjectID 4 }

ciscoWsx5020RptrGroup OBJECT-IDENTITY

STATUScurrent

DESCRIPTION

The authoritative identity of the wsx5020 repeater port group.

::= { ciscoRptrGroupObjectID 5 }

Administrative assignments for chip sets

ciscoChipSets OBJECT-IDENTITY

STATUScurrent

DESCRIPTION

Numerous media-specific MIBS have an object, defined as an OBJECT IDENTIFIER, which is the identity of the chipset realizing the interface. Cisco-specific chipsets have their OBJECT IDENTIFIERS assigned under this subtree.

::= { ciscoAdmin 3 }

ciscoChipSetSaint1 OBJECT-IDENTITY

STATUS current

DESCRIPTION

The identity of the Rev 1 SAINT ethernet chipset manufactured for cisco by LSI Logic.”

::= { ciscoChipSets 1 }

ciscoChipSetSaint2 OBJECT-IDENTITY

STATUS current

DESCRIPTION

The identity of the Rev 2 SAINT ethernet chipset manufactured for cisco by LSI Logic.”

::= { ciscoChipSets 2 }

ciscoChipSetSaint3 OBJECT-IDENTITY

STATUS current

DESCRIPTION

The identity of the Rev 3 SAINT ethernet chipset manufactured for cisco by Plessey.”

::= { ciscoChipSets 3 }

ciscoChipSetSaint4 OBJECT-IDENTITY

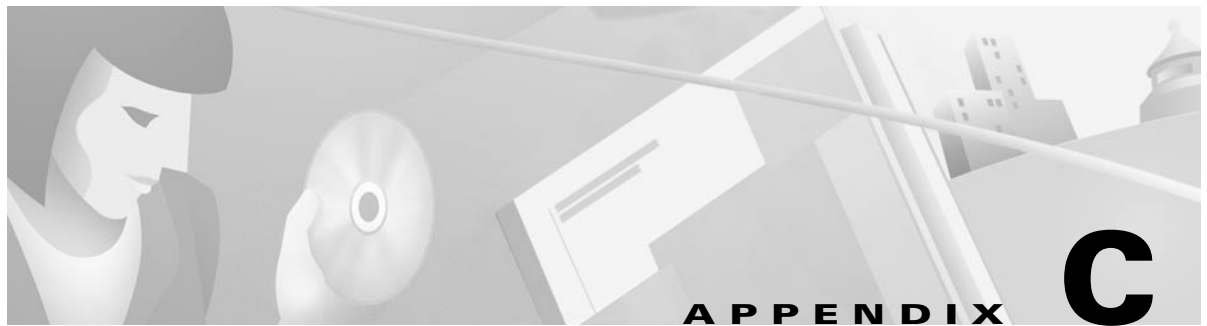
STATUS current

DESCRIPTION

The identity of the Rev 4 SAINT ethernet chipset manufactured for cisco by Mitsubishi.”

::= { ciscoChipSets 4 }

END



SNMP TARGET MIB

This chapter describes the SNMP Target MIBs and is used to define MIB objects. SNMP target MIBs provide mechanisms to remotely configure the parameters used by an SNMP entity for the generation of SNMP messages.

An object of this type contains a single tag value which is used to select a set of entries in a table. A tag value is an arbitrary string of octets, but may not contain a delimiter character. Delimiter characters are defined to be one of the following:

- ASCII space character (0x20).
- ASCII TAB character (0x09).
- ASCII carriage return (CR) character (0x0D).
- ASCII line feed (LF) character (0x0B).

Delimiter characters are used to separate tag values in a tag list. Only a single delimiter character may occur between two tag values. A tag value may not have a zero length. These constraints imply certain restrictions on the contents of this object:

- There cannot be a leading or trailing delimiter character.
- There cannot be multiple adjacent delimiter characters.
- Some examples of valid tag lists are:
 - An empty string
 - acme router
 - host manager station



Note

Although a tag value may not have a length of zero, an empty string is still valid. This indicates an empty list (i.e. there are no tag values in the list).

The use of the tag list to select table entries is application and MIB specific. Typically, an application will provide one or more tag values, and any entry which contains some combination of these tag values will be selected.

Object Identifiers

The following objects define target MIBs:

- snmpTargetObjects OBJECT IDENTIFIER ::= { snmpTargetMIB 1 }

- snmpTargetConformance OBJECT IDENTIFIER ::= { snmpTargetMIB 3 }

snmpTargetObjects group

snmpTargetSpinLock OBJECT-TYPE

SYNTAX TestAndIncr

MAX-ACCESS read-write

STATUS current

DESCRIPTION

This object is used to facilitate modification of table entries in the SNMP-TARGET-MIB module by multiple managers. In particular, it is useful when modifying the value of the snmpTargetAddrTagList object. The procedure for modifying the snmpTargetAddrTagList object is as follows:

- Retrieve the value of snmpTargetSpinLock and of snmpTargetAddrTagList.
- Generate a new value for snmpTargetAddrTagList.
- Set the value of snmpTargetSpinLock to the retrieved value, and the value of snmpTargetAddrTagList to the new value. If the set fails for the snmpTargetSpinLock object, go back to step 1.

::= { snmpTargetObjects 1 }

snmpTargetAddrTable OBJECT-TYPE

SYNTAX SEQUENCE OF SnmpTargetAddrEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

“A table of transport addresses to be used in the generation of SNMP messages.”

::= { snmpTargetObjects 2 }

snmpTargetAddrEntry OBJECT-TYPE

SYNTAX SnmpTargetAddrEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

A transport address to be used in the generation of SNMP operations. Entries in the snmpTargetAddrTable are created and deleted using the snmpTargetAddrRowStatus object.

INDEX { IMPLIED snmpTargetAddrName }

::= { snmpTargetAddrTable 1 }

SnmpTargetAddrEntry ::= SEQUENCE {

snmpTargetAddrName SnmpAdminString,

```

snmpTargetAddrTDomain    TDomain,
snmpTargetAddrTAddress   TAddress,
snmpTargetAddrTimeout    TimeInterval,
snmpTargetAddrRetryCount Integer32,
snmpTargetAddrTagList    SnmpTagList,
snmpTargetAddrParams     SnmpAdminString,
snmpTargetAddrStorageType StorageType,
snmpTargetAddrRowStatus  RowStatus
}

```

snmpTargetAddrName OBJECT-TYPE

```

SYNTAX    SnmpAdminString (SIZE(1..32))
MAX-ACCESS not-accessible
STATUS    current
DESCRIPTION

```

The locally arbitrary, but unique identifier associated with this snmpTargetAddrEntry.”

```
 ::= { snmpTargetAddrEntry 1 }
```

snmpTargetAddrTDomain OBJECT-TYPE

```

SYNTAX    TDomain
MAX-ACCESS read-create
STATUS    current
DESCRIPTION

```

This object indicates the transport type of the address contained in the snmpTargetAddrTAddress object.

```
 ::= { snmpTargetAddrEntry 2 }
```

snmpTargetAddrTAddress OBJECT-TYPE

```

SYNTAX    TAddress
MAX-ACCESS read-create
STATUS    current
DESCRIPTION

```

This object contains a transport address. The format of this address depends on the value of the snmpTargetAddrTDomain object.

```
 ::= { snmpTargetAddrEntry 3 }
```

snmpTargetAddrTimeout OBJECT-TYPE

```

SYNTAX    TimeInterval

```

MAX-ACCESS read-create

STATUS current

DESCRIPTION

This object should reflect the expected maximum round trip time for communicating with the transport address defined by this row. When a message is sent to this address, and a response (if one is expected) is not received within this time period, an implementation may assume that the response will not be delivered.



Note

The time interval that an application waits for a response may actually be derived from the value of this object. The method for deriving the actual time interval is implementation dependent. One such method is to derive the expected round trip time based on a particular retransmission algorithm and on the number of timeouts which have occurred. The type of message may also be considered when deriving expected round trip times for retransmissions. For example, if a message is being sent with a securityLevel that indicates both authentication and privacy, the derived value may be increased to compensate for extra processing time spent during authentication and encryption processing.

DEFVAL { 1500 }

::= { snmpTargetAddrEntry 4 }

snmpTargetAddrRetryCount OBJECT-TYPE

SYNTAX Integer32 (0..255)

MAX-ACCESS read-create

STATUS current

DESCRIPTION

This object specifies a default number of retries to be attempted when a response is not received for a generated message. An application may provide its own retry count, in which case the value of this object is ignored.

DEFVAL { 3 }

::= { snmpTargetAddrEntry 5 }

snmpTargetAddrTagList OBJECT-TYPE

SYNTAX SmpTagList

MAX-ACCESS read-create

STATUS current

DESCRIPTION

This object contains a list of tag values which are used to select target addresses for a particular operation.

::= { snmpTargetAddrEntry 6 }

snmpTargetAddrParams OBJECT-TYPE

SYNTAX SmpAdminString (SIZE(1..32))

MAX-ACCESS read-create

STATUS current

DESCRIPTION

The value of this object identifies an entry in the snmpTargetParamsTable. The identified entry contains SNMP parameters to be used when generating messages to be sent to this transport address.”

::= { snmpTargetAddrEntry 7 }

snmpTargetAddrStorageType OBJECT-TYPE

SYNTAX StorageType

MAX-ACCESS read-create

STATUS current

DESCRIPTION

The storage type for this conceptual row.

::= { snmpTargetAddrEntry 8 }

snmpTargetAddrRowStatus OBJECT-TYPE

SYNTAX RowStatus

MAX-ACCESS read-create

STATUS current

DESCRIPTION

The status of this conceptual row. To create a row in this table, a manager must set this object to either createAndGo(4) or createAndWait(5). Until instances of all corresponding columns are appropriately configured, the value of the corresponding instance of the snmpTargetAddrRowStatus column is ‘notReady’..

In particular, a newly created row cannot be made active until the corresponding snmpTargetAddrTDomain and snmpTargetAddrTAddress have both been set. The following objects may not be modified while the value of this object is active(1):

snmpTargetAddrTDomain

snmpTargetAddrTAddress”

::= { snmpTargetAddrEntry 9 }

snmpTargetParamsTable OBJECT-TYPE

SYNTAX SEQUENCE OF SnmpTargetParamsEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

A table of SNMP target information to be used in the generation of SNMP messages.

::= { snmpTargetObjects 3 }

snmpTargetParamsEntry OBJECT-TYPE

SYNTAX SnmpTargetParamsEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

A set of SNMP target information. Entries in the snmpTargetParamsTable are created and deleted using the snmpTargetParamsRowStatus object.

INDEX { IMPLIED snmpTargetParamsName }

::= { snmpTargetParamsTable 1 }

SnmpTargetParamsEntry ::= SEQUENCE {

snmpTargetParamsName SnmpAdminString,

snmpTargetParamsMPModel SnmpMessageProcessingModel,

snmpTargetParamsSecurityModel SnmpSecurityModel,

snmpTargetParamsSecurityName SnmpAdminString,

snmpTargetParamsSecurityLevel SnmpSecurityLevel,

snmpTargetParamsStorageType StorageType,

snmpTargetParamsRowStatus RowStatus

}

snmpTargetParamsName OBJECT-TYPE

SYNTAX SnmpAdminString (SIZE(1..32))

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

The locally arbitrary, but unique identifier associated with this snmpTargetParamsEntry.

::= { snmpTargetParamsEntry 1 }

snmpTargetParamsMPModel OBJECT-TYPE

SYNTAX SnmpMessageProcessingModel

MAX-ACCESS read-create

STATUS current

DESCRIPTION

The Message Processing Model to be used when generating SNMP messages using this entry.

::= { snmpTargetParamsEntry 2 }

snmpTargetParamsSecurityModel OBJECT-TYPE

SYNTAX SnmpSecurityModel (0..254 | 256..2147483647)

MAX-ACCESS read-create

STATUS current

DESCRIPTION

The Security Model to be used when generating SNMP messages using this entry.

::= { snmpTargetParamsEntry 3 }

snmpTargetParamsSecurityName OBJECT-TYPE

SYNTAX SnmpAdminString

MAX-ACCESS read-create

STATUS current

DESCRIPTION

The securityName which identifies the Principal on whose behalf SNMP messages will be generated using this entry.

::= { snmpTargetParamsEntry 4 }

snmpTargetParamsSecurityLevel OBJECT-TYPE

SYNTAX SnmpSecurityLevel

MAX-ACCESS read-create

STATUS current

DESCRIPTION

The Level of Security to be used when generating SNMP messages using this entry.

::= { snmpTargetParamsEntry 5 }

snmpTargetParamsStorageType OBJECT-TYPE

SYNTAX StorageType

MAX-ACCESS read-create

STATUS current

DESCRIPTION

The storage type for this conceptual row.

::= { snmpTargetParamsEntry 6 }

snmpTargetParamsRowStatus OBJECT-TYPE

SYNTAX RowStatus

MAX-ACCESS read-create

STATUS current

DESCRIPTION

The status of this conceptual row. To create a row in this table, a manager must set this object to either createAndGo(4) or createAndWait(5). Until instances of all corresponding columns are appropriately configured, the value of the corresponding instance of the snmpTargetParamsRowStatus column is 'notReady'. A newly created row cannot be made active until all of the corresponding object have been set:

snmpTargetParamsMPModel,
 snmpTargetParamsSecurityModel,
 snmpTargetParamsSecurityName,
 and snmpTargetParamsSecurityLevel

The following objects may not be modified while the value of this object is active(1):

snmpTargetParamsMPModel
 snmpTargetParamsSecurityModel
 snmpTargetParamsSecurityName
 snmpTargetParamsSecurityLevel”
 ::= { snmpTargetParamsEntry 7 }

snmpUnavailableContexts OBJECT-TYPE

SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION

The total number of packets received by the SNMP engine which were dropped because the context contained in the message was unavailable.

::= { snmpTargetObjects 4 }

snmpUnknownContexts OBJECT-TYPE

SYNTAX Counter32
 MAX-ACCESS read-only
 STATUS current
 DESCRIPTION

The total number of packets received by the SNMP engine which were dropped because the context contained in the message was unknown.

::= { snmpTargetObjects 5 }

Conformance information

snmpTargetCompliances OBJECT IDENTIFIER ::= { snmpTargetConformance 1 }
 snmpTargetGroups OBJECT IDENTIFIER ::= { snmpTargetConformance 2 }

Compliance statements

snmpTargetCommandResponderCompliance MODULE-COMPLIANCE

STATUS current

DESCRIPTION

The compliance statement for SNMP entities which include a command responder application.

MODULE -- This Module

MANDATORY-GROUPS { snmpTargetCommandResponderGroup }

::= { snmpTargetCompliances 1 }

snmpTargetBasicGroup OBJECT-GROUP

OBJECTS {

snmpTargetSpinLock,
 snmpTargetAddrTDomain,
 snmpTargetAddrTAddress,
 snmpTargetAddrTagList,
 snmpTargetAddrParams,
 snmpTargetAddrStorageType,
 snmpTargetAddrRowStatus,
 snmpTargetParamsMPModel,
 snmpTargetParamsSecurityModel,
 snmpTargetParamsSecurityName,
 snmpTargetParamsSecurityLevel,
 snmpTargetParamsStorageType,
 snmpTargetParamsRowStatus

}

STATUS current

DESCRIPTION

A collection of objects providing basic remote configuration of management targets.

::= { snmpTargetGroups 1 }

snmpTargetResponseGroup OBJECT-GROUP

OBJECTS {

snmpTargetAddrTimeout,
 snmpTargetAddrRetryCount

}

STATUS current

DESCRIPTION

A collection of objects providing remote configuration of management targets for applications which generate SNMP messages for which a response message would be expected.

```
::= { snmpTargetGroups 2 }
```

```
snmpTargetCommandResponderGroup OBJECT-GROUP
```

```
OBJECTS {
```

```
    snmpUnavailableContexts,
```

```
    snmpUnknownContexts
```

```
}
```

```
STATUS    current
```

```
DESCRIPTION
```

A collection of objects required for command responder applications, used for counting error conditions.

```
::= { snmpTargetGroups 3 }
```

Numerics

34548

1H_Head1

SNMP Description 1-4

57860

1H_Head1

Before You Start 1-5

82429

1H_Head1

Feature Overview 1-2

A

Audience v

C

Cisco ix, 2-1

Contacting ix

D

Document v, vi, vii

Documentation vii, viii

documentation

suite of vii

I

Imports 3-2

M

Measurement 3-1

Media Gateway Controller MIB Guide 1-2

Media Gateway Controller MIB Guide Overview 1-2

N

note, description of vii

O

Obtaining vii, viii

Ordering viii

S

SNMP 1-6

T

Technical ix

W

World vii