



## SNMP Diagnostics

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The Simple Network Management Protocol (SNMP) diagnostics feature allows you to diagnose configuration problems. The feature can be used to troubleshoot, debug connectivity issues, packet loss, and latency in a LAN environment with the help of Cisco command line interface commands.

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## Finding Feature Information

Your software release may not support all the features documented in this module. For the latest caveats and feature information, see [Bug Search Tool](#) and the release notes for your platform and software release. To find information about the features documented in this module, and to see a list of the releases in which each feature is supported, see the feature information table.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to [www.cisco.com/go/cfn](http://www.cisco.com/go/cfn). An account on Cisco.com is not required.

## Information about SNMP Diagnostics

### SNMP Diagnostics

The SNMP Diagnostics feature adds Cisco command line interface commands to display the object identifiers that are recently requested by the network management system, and to display the SNMP debug messages.

# Additional References

## Related Documents

Related Topic	Document Title
Cisco IOS commands	<a href="#">Cisco IOS Master Command List, All Releases</a>
SNMP commands: complete command syntax, command mode, command history, defaults, usage guidelines, and examples	<a href="#">Cisco IOS SNMP Command Reference</a>
Cisco implementation of RFC 1724, RIP Version 2 MIB Extensions	<a href="#">RIPv2 Monitoring with SNMP Using the RFC 1724 MIB Extensions</a> feature module
DSP Operational State Notifications for notifications to be generated when a digital signaling processor (DSP) is used	<a href="#">DSP Operational State Notifications</a> feature module

## Standards and RFCs

Standard/RFC	Title
CBC-DES (DES-56) standard	<i>Symmetric Encryption Protocol</i>
STD: 58	<i>Structure of Management Information Version 2 (SMIPv2)</i>
RFC 1067	<i>A Simple Network Management Protocol</i>
RFC 1091	<i>Telnet terminal-type option</i>
RFC 1098	<i>Simple Network Management Protocol (SNMP)</i>
RFC 1157	<i>Simple Network Management Protocol (SNMP)</i>
RFC 1213	<i>Management Information Base for Network Management of TCP/IP-based internets: MIB-II</i>
RFC 1215	<i>Convention for defining traps for use with the SNMP</i>
RFC 1901	<i>Introduction to Community-based SNMPv2</i>
RFC 1905	<i>Common Management Information Services and Protocol over TCP/IP (CMOT)</i>
RFC 1906	<i>Telnet X Display Location Option</i>
RFC 1908	<i>Simple Network Management Protocol (SNMP)</i>

<b>Standard/RFC</b>	<b>Title</b>
RFC 2104	<i>HMAC: Keyed-Hashing for Message Authentication</i>
RFC 2206	<i>RSVP Management Information Base using SMIPv2</i>
RFC 2213	<i>Integrated Services Management Information Base using SMIPv2</i>
RFC 2214	<i>Integrated Services Management Information Base Guaranteed Service Extensions using SMIPv2</i>
RFC 2271	<i>An Architecture for Describing SNMP Management Frameworks</i>
RFC 2570	<i>Introduction to Version 3 of the Internet-standard Network Management Framework</i>
RFC 2578	<i>Structure of Management Information Version 2 (SMIPv2)</i>
RFC 2579	<i>Textual Conventions for SMIPv2</i>
RFC 2580	<i>Conformance Statements for SMIPv2</i>
RFC 2981	<i>Event MIB</i>
RFC 2982	<i>Distributed Management Expression MIB</i>
RFC 3413	<i>SNMPv3 Applications</i>
RFC 3415	<i>View-based Access Control Model (VACM) for the Simple Network Management Protocol (SNMP)</i>
RFC 3418	<i>Management Information Base (MIB) for the Simple Network Management Protocol (SNMP)</i>

**MIBs**

MIB	MIBs Link
<ul style="list-style-type: none"> <li>• Circuit Interface Identification MIB</li> <li>• Cisco SNMPv2</li> <li>• Ethernet-like Interfaces MIB</li> <li>• Event MIB</li> <li>• Expression MIB Support for Delta, Wildcarding, and Aggregation</li> <li>• Interfaces Group MIB (IF-MIB)</li> <li>• Interfaces Group MIB Enhancements</li> <li>• MIB Enhancements for Universal Gateways and Access Servers</li> <li>• MSDP MIB</li> <li>• NTP MIB</li> <li>• Response Time Monitor MIB</li> <li>• Virtual Switch MIB</li> </ul>	<p>To locate and download MIBs for selected platforms, releases, and feature sets, use Cisco MIB Locator found at the following URL:</p> <p><a href="http://www.cisco.com/go/mibs">http://www.cisco.com/go/mibs</a></p>

**Technical Assistance**

Description	Link
<p>The Cisco Support and Documentation website provides online resources to download documentation, software, and tools. Use these resources to install and configure the software and to troubleshoot and resolve technical issues with Cisco products and technologies. Access to most tools on the Cisco Support and Documentation website requires a Cisco.com user ID and password.</p>	<p><a href="http://www.cisco.com/cisco/web/support/index.html">http://www.cisco.com/cisco/web/support/index.html</a></p>

## Feature Information for SNMP Diagnostics

The following table provides release information about the feature or features described in this module. This table lists only the software release that introduced support for a given feature in a given software release train. Unless noted otherwise, subsequent releases of that software release train also support that feature.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to [http://www.cisco.com/go/featurenavigator](#). An account on Cisco.com is not required.

**Table 1: Feature Information for SNMP Diagnostics**

Feature Name	Releases	Feature Information
SNMP Diagnostics	12.2(33)SRE 12.2(50)SY 12.4(20)T 15.0(1)S	<p>The SNMP Diagnostics feature adds Cisco command line interface commands to display object identifiers recently requested by the network management system, and to display the SNMP debug messages.</p> <p>The following commands were introduced or modified: <b>debug</b>, <b>snmp detail</b>, <b>show snmp stats oid</b>.</p>

