



SNMP Notification Logging

Feature History

Release	Modification
12.0(22)S	This feature was introduced.
12.2(13)T	This feature was integrated into Cisco IOS Release 12.2(13)T.
12.0(32)S	This feature was integrated into Cisco IOS Release 12.0(32)S.

This document describes the SNMP Notification Logging feature in Cisco IOS Release 12.0(22)S. It includes the following sections:

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Feature Overview

Systems that support Simple Network Management Protocol (SNMP) often need a mechanism for recording notification information as a hedge against lost notifications, whether those are traps or informs that exceed retransmission limits. The Notification Log MIB provides a common infrastructure for other MIBs in the form of a local logging function. The SNMP Notification Logging feature adds Cisco IOS command-line interface (CLI) commands to change the size of the notification log, to set the global ageout value for the log, and to display logging summaries at the command line.



Note

This MIB only supports notification logging on the default log.

Benefits

- Improves notification tracking.
- Provides a central location for tracking all MIBs.

Related Documents

- *Cisco IOS Configuration Fundamentals Command Reference*, Release 12.2
- *Cisco IOS Configuration Fundamentals Configuration Guide*, Release 12.2

Supported Platforms

- Cisco 12000 series

Determining Platform Support Through Cisco Feature Navigator

Cisco IOS software is packaged in feature sets that are supported on specific platforms. To get updated information regarding platform support for this feature, access Cisco Feature Navigator. Cisco Feature Navigator dynamically updates the list of supported platforms as new platform support is added for the feature.

Cisco Feature Navigator is a web-based tool that enables you to quickly determine which Cisco IOS software images support a specific set of features and which features are supported in a specific Cisco IOS image. You can search by feature or release. Under the release section, you can compare releases side by side to display both the features unique to each software release and the features in common.

To access Cisco Feature Navigator, you must have an account on Cisco.com. If you have forgotten or lost your account information, send a blank e-mail to cco-locksmith@cisco.com. An automatic check will verify that your e-mail address is registered with Cisco.com. If the check is successful, account details with a new random password will be e-mailed to you. Qualified users can establish an account on Cisco.com by following the directions found at this URL:

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

Cisco Feature Navigator is updated regularly when major Cisco IOS software releases and technology releases occur. For the most current information, go to the Cisco Feature Navigator home page at the following URL:

<http://www.cisco.com/go/fn>

Availability of Cisco IOS Software Images

Platform support for particular Cisco IOS software releases is dependent on the availability of the software images for those platforms. Software images for some platforms may be deferred, delayed, or changed without prior notice. For updated information about platform support and availability of software images for each Cisco IOS software release, refer to the online release notes or, if supported, Cisco Feature Navigator.

Supported Standards, MIBs, and RFCs

Standards

No new or modified standards are supported by this feature.

MIBs

No new or modified MIBs are supported by this feature.

To locate and download MIBs for selected platforms, Cisco IOS releases, and feature sets, use Cisco MIB Locator found at the following URL:

<http://tools.cisco.com/ITDIT/MIBS/servlet/index>

If Cisco MIB Locator does not support the MIB information that you need, you can also obtain a list of supported MIBs and download MIBs from the Cisco MIBs page at the following URL:

<http://www.cisco.com/public/sw-center/netmgmt/cmtk/mibs.shtml>

To access Cisco MIB Locator, you must have an account on Cisco.com. If you have forgotten or lost your account information, send a blank e-mail to cco-locksmith@cisco.com. An automatic check will verify that your e-mail address is registered with Cisco.com. If the check is successful, account details with a new random password will be e-mailed to you. Qualified users can establish an account on Cisco.com by following the directions found at this URL:

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

RFCs

- RFC3014, *Notification Log MIB*

Configuration Tasks

None

Configuration Examples

None

Command Reference

This section documents new commands. All other commands used with this feature are documented in the Cisco IOS Release 12.2 command reference publications.

New commands

- **show snmp notification-log mib**
- **snmp mib notification-log default**
- **snmp mib notification-log globalageout**
- **snmp mib notification-log globalsize**

show snmp mib notification-log

To display a log summary, including default and named logs, use the **show snmp mib notification-log** command in EXEC mode.

show snmp mib notification-log [all | default]

Syntax Description	all	Notification messages logged in all the logs of the system.
	default	Summary of the default log.

Defaults No default behavior or values.

Command Modes EXEC

Command History	Release	Modification
	12.0(22)S	This command was introduced.
	12.2(13)T	This command was integrated into 12.2(13)T.
	12.0(32)S	This command was integrated into 12.0(32)S.

Examples The following is sample output from the **show snmp mib notification-log** command:

```
router# show snmp mib notification-log

GlobalAgeout 15, GlobalEntryLimit 500
Total Notifications logged in all logs 0
Log Name"", Log entry Limit 500, Notifications logged 0
Logging status enabled
Created by cli
```

snmp mib notification-log default

To create the default log in the MIB, use the **snmp mib notification-log default** command in global configuration mode. To delete the log, use the **no** form of this command.

snmp mib notification-log default [**disable**] [**size** *number*]

no snmp mib notification-log default [**disable**] [**size** *number*]

Syntax Description	Parameter	Description
	disable	(Optional) Log is not allowed to add new notifications to itself.
	size	(Optional) Maximum number of notifications a log can contain.
	<i>number</i>	Number of notifications.

Defaults Logging is enabled.

Command Modes Global configuration

Command History	Release	Modification
	12.0(22)S	This command was introduced.
	12.2(13)T	This command was integrated into 12.2(13)T.
	12.0(32)S	This command was integrated into 12.0(32)S.

Usage Guidelines The **no** form of this command reverts the size to the default and enables logging, and the log will not be destroyed.

Examples The following examples shows how to create a default log with a size of 10:

```
snmp mib notification-log default size 10
```

Related Commands	Command	Description
	show snmp mib notification-log	Provides a summary of logs.
	snmp mib notification-log globalageout	Sets the maximum age for a notification.
	snmp mib notification-log globalsize	Sets the maximum number of notifications allowed in all logs.

snmp mib notification-log globalageout

To set the global ageout for logging a notification, use the **snmp mib notification-log globalageout** command in global configuration mode. To restore the default value, use the **no** form of this command.

snmp mib notification-log globalageout *minutes*

no snmp mib notification-log globalageout *minutes*

Syntax Description	<i>minutes</i>	Maximum age (in minutes) for a notification.
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Defaults	15 minutes
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Command Modes	Global configuration
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Command History	Release	Modification
	12.0(22)S	This command was introduced.
12.2(13)T	This command was integrated into 12.2(13)T.	
12.0(32)S	This command was integrated into 12.0(32)S.	

Usage Guidelines	The notification log MIB logs notifications after they have passed through notification filtering. The agent will have determined the destination target and the parameters.
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Examples	The following example shows how to set the ageout limit to 5 minutes: <pre>snmp mib notification-log globalageout 5</pre>
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Related Commands	Command	Description
	show snmp mib notification-log	Provides a summary of logs.
	snmp mib notification-log default	Creates the default log in the MIB.
	snmp mib notification-log globalsize	Sets the maximum number of notifications allowed in all logs.

snmp mib notification-log globalsize

To set the maximum number of notifications that can be logged in all logs, use the **snmp mib notification-log globalsize** command in global configuration mode. To restore the default value, use the **no** form of this command.

snmp mib notification-log globalsize *number*

no snmp mib notification-log globalsize *number*

Syntax Description	<i>number</i>	Maximum number of notifications.
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Defaults	15000 notifications
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Command Modes	Global Configuration
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Command History	Release	Modification
	12.0(22)S	This command was introduced.
	12.2(13)T	This command was integrated into 12.2(13)T.
	12.0(32)S	This command was integrated into 12.0(32)S.

Examples The following example shows how to set the maximum number of logs to 20:

```
snmp mib notification-log globalsize 20
```

Related Commands	Command	Description
	show snmp mib notification-log	Provides a summary of logs.
	snmp mib notification-log default	Creates the default log in the MIB.
	snmp mib notification-log globalageout	Sets the maximum age for a notification.

Glossary

SNMP—Simple Network Management Protocol. Network management protocol used almost exclusively in TCP/IP networks. SNMP provides a means to monitor and control network devices, and to manage configurations, statistics collection, performance, and security.

VACM—View-based access control mechanism for SNMP. This mechanism is described in RFC2575.

MIB—Management Information Base. The MIBs referred to in this document are MIB modules. These modules contain definitions of management information for use by SNMP network management systems.

Managed system—An SNMP agent.