

L Commands

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layer2-switched flow monitor

To associate a flow monitor and a sampler to the switch port input packets, use the later2-switched flow monitor command. To remove the association, use the no form of this command.

layer2-switched flow monitor flow-name input sampler sampler-name no layer2-switched flow monitor flow-name input sampler sampler-name

Syntax Description

flow-name	Name of the flow monitor to associate with the input packets.
input	Specifies that this association applies to input packets only.
sampler sampler-name	The sampler to associate with the input packets.

Command Default

none.

Command Modes

Interface configuration mode (config-if)

Command History

Release	Modification
7.0(0)N1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

You must have already created a flow monitor by using the flow monitor command before you can associate a flow monitor to the switch port input packets.

You must have already created a sampler by using the sampler command before you can associate a sampler to the switch port input packets

Examples

This example shows how to associate a flow monitor and a sampler to the switch port input packets:

```
switch(config)# interface ethernet 1/3
switch(config-if)# layer2-switched flow monitor test-flow-monitor input sampler test-sampler
```

Command	Description
flow monitor	Create a Flexible NetFlow flow monitor.
sampler	Defines a sampler and enters the sampler configuration mode.

logging abort

To discard the pending changes to the syslog server configuration, use the logging abort command.

logging abort

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Examples

This example shows how to discard the changes made to the syslog server configuration:

```
switch(config) # logging distribute
switch(config) # logging abort
switch(config) #
```

Command	Description
logging distribute	Enables the distribution of the syslog server configuration to network switches using the CFS infrastructure.
show logging pending	Displays the pending changes to the syslog server configuration.
show logging status	Displays the logging status.

logging commit

To commit the pending changes to the syslog server configuration for distribution to the switches in the fabric, use the logging commit command.

logging commit

Syntax Description

This command has no arguments or keywords.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Examples

This example shows how to commit the distribution of the syslog server configuration:

```
switch(config) # logging distribute
switch(config) # commit
switch(config) #
```

Command	Description
logging distribute	Enables the distribution of the syslog server configuration to network switches using the CFS infrastructure.
show logging status	Displays the logging status.

logging console

To enable logging messages to the console session, use the logging console command. To disable logging messages to the console session, use the no form of this command.

logging console [severity-level] no logging console

Syntax Description

severity-level	(Optional) Number of the desired severity level at which messages should be logged. Messages at or numerically lower than the specified level are logged. Severity levels are as follows:
	• 0—emergency: System unusable
	• 1—alert: Immediate action needed
	• 2—critical: Critical condition—default level
	• 3—error: Error condition
	• 4—warning: Warning condition
	• 5—notification: Normal but significant condition
	6—informational: Informational message only
	• 7—debugging: Appears during debugging only

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Examples

This example shows how to enable logging messages with a severity level of 4 (warning) or higher to the console session:

```
switch# configure terminal
switch(config)# logging console 4
```

Command	Description
show logging console	Displays the console logging configuration.

logging distribute

To enable the distribution of the syslog server configuration to network switches using the Cisco Fabric Services (CFS) infrastructure, use the logging distribute command. To disable the distribution, use the no form of this command.

logging distribute no logging distribute

Syntax Description

This command has no arguments or keywords.

Command Default

Distribution is disabled.

Command Modes

Global configuration mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Examples

This example shows how to enable the distribution of the syslog server configuration:

 $\verb|switch(config)#| \textbf{logging distribute}|\\$

switch(config)#

This example shows how to disable the distribution of the syslog server configuration:

switch(config)# no logging distribute

switch(config)#

Command	Description
logging abort	Cancels the pending changes to the syslog server configuration.
logging commit	Commits the changes to the syslog server configuration for distribution to the switches in the fabric.
show logging status	Displays the logging status.

logging event

To log interface events, use the logging event command. To disable logging of interface events, use the no form of this command.

logging event port link-status | trunk-status | default | enable no logging event port link-status | trunk-status | default | enable

Syntax Description

link-status	Specifies to log all UP/DOWN and CHANGE messages.
trunk-status	Specifies to log all TRUNK status messages.
default	Specifies to the default logging configuration is used by interfaces not explicitly configured.
enable	Enables the logging to override the port level configuration.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Examples

This example shows how to log interface events:

switch# configure terminal

switch(config) # logging event link-status default

Command	Description
show logging	Displays the logging status.

logging event port

To log events on an interface, use the logging event port command. To disable logging of interface events, use the no form of this command.

logging event port link-status | trunk-status [default] no logging event port link-status | trunk-status

Syntax Description

link-status	Specifies to log all UP/DOWN and CHANGE messages.
trunk-status	Specifies to log all TRUNK status messages.
default	(Optional) Specifies the default logging configuration that is used by interfaces not explicitly configured.

Command Default

None

Command Modes

Interface configuration mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Examples

This example shows how to log interface events:

```
switch# configure terminal
```

switch(config)# interface ethernet 1/1
switch(config-if)# logging event port link-status default

Command	Description
show interface	Displays the interface configuration information.
show logging	Displays the logging status.

logging ip access-list cache

To configure the Optimized ACL Logging (OAL) parameters, use the logging ip access-list cache command. To reset to the default settings, use the no form of this command.

logging ip access-list cache entries num_entries | interval seconds | threshold num_packets no logging ip access-list cache entries num_entries | interval seconds | threshold num_packets

Syntax Description

entries num_entries	Specifies the maximum number of log entries that are cached in the software. The range is from 0 to 1048576. The default value is 8000 entries.
interval seconds	Specifies the maximum time interval before an entry is sent to a syslog. The range is from 5 to 86400. The default value is 300 seconds.
threshold num_packets	Specifies the number of packet matches (hits) before an entry is sent to a syslog. The range is from 0 to 1000000. The default value is 0 packets—rate limiting is off; the system log is not triggered by the number of packet matches.

Command Default

None

Command Modes

Global configuration

network-admin

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to specify the maximum number of log entries that are cached in the software:

```
switch# configure terminal
switch(config)# logging ip access-list cache entries 200
switch(config)#
```

This example shows how to specify the maximum time interval before an entry is sent to the system log:

```
switch# configure terminal
switch(config)# logging ip access-list cache interval 350
switch(config)#
```

This example shows how to specify the number of packet matches before an entry is sent to the system log:

switch# configure terminal
switch(config)# logging ip access-list cache threshold 125
switch(config)#

Command	Description
show logging ip access-list	Displays the status of IP access list logging.

logging level

To enable logging messages from a defined facility that have the specified severity level or higher, use the logging level command. To disable logging messages from a defined facility, use the no form of this command.

logging level facility severity-level no logging level facility severity-level

Syntax Description

facility	Facility. The facilities are listed in Table 1-1 of Appendix 1, "System Message Logging Facilities."
	To apply the same severity level to all facilities, use the all facility.
severity-level	Number of the desired severity level at which messages should be logged. Messages at or numerically lower than the specified level are logged. Severity levels are as follows:
	 0—emergency: System unusable 1—alert: Immediate action needed 2—critical: Critical condition—default level 3—error: Error condition 4—warning: Warning condition 5—notification: Normal but significant condition 6—informational: Informational message only 7—debugging: Appears during debugging only

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Examples

This example shows how to enable logging messages from the AAA facility that have a severity level of 2 or higher:

switch(config)# logging level aaa 2

Command	Description
show logging level	Displays the facility logging level configuration.

logging logfile

To configure the name of the log file used to store system messages and the minimum severity level to log, use the logging logfile command. To disable logging to the log file, use the no form of this command.

logging logfile logfile-name severity-level [size bytes] no logging logfile logfile-name severity-level [size bytes]

Syntax Description

logfile-name	Name of the log file to be used to store system messages.
severity-level	Number of the desired severity level at which messages should be logged. Messages at or numerically lower than the specified level are logged. Severity levels are as follows:
	• 0—emergency: System unusable
	• 1—alert: Immediate action needed
	• 2—critical: Critical condition—default level
	• 3—error: Error condition
	• 4—warning: Warning condition
	• 5—notification: Normal but significant condition
	• 6—informational: Informational message only
	• 7—debugging: Appears during debugging only
size bytes	(Optional) Specifies a maximum file size. The default file size is 4194304 bytes and can be configured from 4096 to 4194304 bytes.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Examples

This example shows how to configure a log file called logfile to store system messages and set its severity level to 4:

switch(config)# logging logfile logfile 4

Command	Description
show logging logfile	Displays the log file.

logging module

To enable module log messages, use the logging module command. To disable module log messages, use the no form of this command.

logging module [severity-level] no logging module

Syntax Description

severity-level	(Optional) Number of the desired severity level at which messages should be logged. Messages at or numerically lower than the specified level are logged. Severity levels are as follows:
	 • 0—emergency: System unusable • 1—alert: Immediate action needed • 2—critical: Critical condition • 3—error: Error condition • 4—warning: Warning condition
	 5—notification: Normal but significant condition—default level 6—informational: Informational message only 7—debugging: Appears during debugging only

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Usage Guidelines

Set a specified severity level or use the default.

Examples

This example shows how to enable module log messages:

switch(config)# logging module

Command	Description
show logging module	Displays the module logging status.

logging monitor

To enable the device to log messages to the monitor (terminal line), use the logging monitor command. To disable monitor log messages, use the no form of this command.

logging monitor [severity-level] no logging monitor

Syntax Description

severity-level

(Optional) Number of the desired severity level at which messages should be logged. Messages at or numerically lower than the specified level are logged. Severity levels are as follows:

• 0—emergency: System unusable
• 1—alert: Immediate action needed
• 2—critical: Critical condition—default level
• 3—error: Error condition
• 4—warning: Warning condition
• 5—notification: Normal but significant condition
• 6—informational: Informational message only
• 7—debugging: Appears during debugging only

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Usage Guidelines

This configuration applies to Telnet and Secure Shell (SSH) sessions.

Examples

This example shows how to enable monitor log messages:

switch(config)# logging monitor

Command	Description
show logging monitor	Displays the status of monitor logging.

logging server

To configure a remote syslog server at the specified hostname or IPv4/IPv6 address, use the logging server command. To disable the remote syslog server, use the no form of this command.

logging server host [severity-level] [facility auth | authpriv | cron | daemon | ftp | kernel | local0 | local1 | local2 | local3 | local4 | local5 | local6 | local7 | lpr | mail | news | syslog | user | uucp | use-vrf vrf_name | management]

no logging server host [severity-level] [facility auth|authpriv|cron|daemon|ftp|kernel|local0|local1|local2|local3|local4|local5|local6|local7|lpr|mail|news|syslog|user|uucp|use-vrf_vrf_name|management]

Syntax Description

host	Hostname or IPv4/IPv6 address of the remote syslog server.
severity-level	(Optional) Number of the desired severity level at which messages should be logged. Messages at or numerically lower than the specified level are logged. Severity levels are as follows:
	• 0—emergency: System unusable
	• 1—alert: Immediate action needed
	• 2—critical: Critical condition—default level
	• 3—error: Error condition
	• 4—warning: Warning condition
	• 5—notification: Normal but significant condition
	6—informational: Informational message only
	• 7—debugging: Appears during debugging only
facility facility	(Optional) Specifies the outgoing facility . The facilities are listed in Table 1-1 of Appendix 1, "System Message Logging Facilities."
	The default outgoing facility is local7.
vrf vrf_name	(Optional) Specifies the virtual routing and forwarding (VRF) to be used in the remote server. The name can be a maximum of 32 alphanumeric characters.
management	Specifies the management VRF. This is the default VRF.

Command Default

The default outgoing facility is local7. The default VRF is management.

Command Modes

Global configuration mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Examples

This example shows how to configure a remote syslog server at a specified IPv4 address, using the default outgoing facility:

switch(config) # logging server 192.168.2.253

This example shows how to configure a remote syslog server at a specified hostname with severity level 5 or higher:

switch(config)# logging server syslogA 5

Command	Description
show logging server	Displays the configured syslog servers.

logging timestamp

To set the logging time-stamp units, use the logging timestamp command. To reset the logging time-stamp units to the default, use the no form of this command.

logging timestamp microseconds | milliseconds | seconds no logging timestamp microseconds | milliseconds | seconds

Syntax Description

microseconds	Specifies the units to use for logging timestamps in microseconds. The default units are seconds.
milliseconds	Specifies the units to use for logging timestamps in milliseconds.
seconds	Specifies the units to use for logging timestamps in seconds. The default units are seconds.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Usage Guidelines

By default, the units are seconds.

Examples

This example shows how to set the logging time-stamp units to microseconds:

switch(config) # logging timestamp microseconds

Command	Description
show logging timestamp	Displays the logging time-stamp configuration.

logging timestamp