# L Commands

This chapter describes the system management commands that begin with L.

# 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 |
|---|---|
| 5.2(1)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)#
```

## Related Commands

| 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 |
|---|---|
| 5.2(1)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)#
```

## Related Commands

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

## Command Default

None

## Command Modes

Global configuration mode

## Command History

| Release | Modification |
|---|---|
| 5.2(1)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
```

## Related Commands

| 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 |
|---|---|
| 5.2(1)N1(1) | This command was introduced. |

## Examples

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

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

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

```
switch(config)# no logging distribute
switch(config)#
```

## Related Commands

| 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 |
|---|---|
| 5.2(1)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
```

## Related Commands

| 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 |
|---|---|
| 5.2(1)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
```

## Related Commands

| 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. |

## Defaults

None

## Command Modes

Global configuration

## SupportedUserRoles

network-admin

## Command History

| Release | Modification |
|---|---|
| 5.2(1)N1(1) | This command was introduced. |

## Usage Guidelines

This command does not require a license.

## Examples

This example shows how to 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)#
```

## Related Commands

| 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 A-1 of Appendix A, "System Message Logging Facilities."<br>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:<br>• **0**—emergency: System unusable<br>• **1**—alert: Immediate action needed<br>• **2**—critical: Critical condition—default level<br>• **3**—error: Error condition<br>• **4**—warning: Warning condition<br>• **5**—notification: Normal but significant condition<br>• **6**—informational: Informational message only<br>• **7**—debugging: Appears during debugging only |

## Command Default

None

## Command Modes

Global configuration mode

## Command History

| Release | Modification |
|---|---|
| 5.2(1)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
```

**Related Commands**

| 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:<br>• **0**—emergency: System unusable<br>• **1**—alert: Immediate action needed<br>• **2**—critical: Critical condition—default level<br>• **3**—error: Error condition<br>• **4**—warning: Warning condition<br>• **5**—notification: Normal but significant condition<br>• **6**—informational: Informational message only<br>• **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 |
|---|---|
| 5.2(1)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
```

## Related Commands

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

## Command Default

None

## Command Modes

Global configuration mode

## Command History

| Release | Modification |
|---|---|
| 5.2(1)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
```

## Related Commands

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

## Command Default

None

## Command Modes

Global configuration mode

## Command History

| Release | Modification |
|---|---|
| 5.2(1)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
```

## Related Commands

| 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:<br>• **0**—emergency: System unusable<br>• **1**—alert: Immediate action needed<br>• **2**—critical: Critical condition—default level<br>• **3**—error: Error condition<br>• **4**—warning: Warning condition<br>• **5**—notification: Normal but significant condition<br>• **6**—informational: Informational message only<br>• **7**—debugging: Appears during debugging only |
| **facility** *facility* | (Optional) Specifies the outgoing *facility*. The facilities are listed in Table A-1 of Appendix A, “System Message Logging Facilities.”<br>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 |
|---|---|
| 5.2(1)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
```

## Related Commands

| 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 |
|---|---|
| 5.2(1)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
```

## Related Commands

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