



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: |
|-----------------|---------------------------------------------------------------------------------------|

| |
|--------------------------------------------------------------------------------------|
| <pre>switch(config)# logging distribute switch(config)# commit switch(config)#</pre> |
|--------------------------------------------------------------------------------------|

| 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 | <i>severity-level</i> (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: <ul style="list-style-type: none">0—emergency: System unusable1—alert: Immediate action needed2—critical: Critical condition—default level3—error: Error condition4—warning: Warning condition5—notification: Normal but significant condition6—informational: Informational message only7—debugging: Appears during debugging only | | | | | |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------|--------------|----------------------|---------------------------------------------|
| Command Default | None | | | | | |
| Command Modes | Global configuration mode | | | | | |
| Command History | <table><tr><th>Release</th><th>Modification</th></tr><tr><td>5.2(1)N1(1)</td><td>This command was introduced.</td></tr></table> | | Release | Modification | 5.2(1)N1(1) | This command was introduced. |
| Release | Modification | | | | | |
| 5.2(1)N1(1) | This command was introduced. | | | | | |
| Examples | <p>This example shows how to enable logging messages with a severity level of 4 (warning) or higher to the console session:</p> <pre>switch# configure terminal switch(config)# logging console 4</pre> | | | | | |
| Related Commands | <table><tr><th>Command</th><th>Description</th></tr><tr><td>show logging console</td><td>Displays the console logging configuration.</td></tr></table> | | Command | Description | show logging console | Displays the console logging configuration. |
| 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 | <p>This example shows how to log interface events:</p> <pre>switch# configure terminal switch(config)# interface ethernet 1/1 switch(config-if)# logging event port link-status default</pre> |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

| 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 <i>num_entries</i> | 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 <i>seconds</i> | 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 <i>num_packets</i> | 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

Supported User Roles 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 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 | <i>facility</i> | Facility. The facilities are listed in Table A-1 of Appendix A, “System Message Logging Facilities.” To apply the same severity level to all facilities, use the all facility. |
| | <i>severity-level</i> | 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: <ul style="list-style-type: none"> • 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 |
|------------------------|----------------|------------------------------|
| | 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 | <i>logfile-name</i> | Name of the log file to be used to store system messages. |
| | <i>severity-level</i> | 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: <ul style="list-style-type: none"> • 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 |
| | <i>size bytes</i> | (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 | <i>severity-level</i> (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: <ul style="list-style-type: none">• 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 | <table><tr><th>Release</th><th>Modification</th></tr><tr><td>5.2(1)N1(1)</td><td>This command was introduced.</td></tr></table> | Release | Modification | 5.2(1)N1(1) | This command was introduced. |
| 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: <pre>switch(config)# logging module</pre> | | | | |
| Related Commands | <table><tr><th>Command</th><th>Description</th></tr><tr><td>show logging module</td><td>Displays the module logging status.</td></tr></table> | Command | Description | show logging module | Displays the module logging status. |
| 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 |
|-------------|------------------------------|
| 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 | |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>host</i> | Hostname or IPv4/IPv6 address of the remote syslog server. |
| <i>severity-level</i> | (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: <ul style="list-style-type: none"> • 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 <i>facility</i> | (Optional) Specifies the outgoing <i>facility</i> . The facilities are listed in Table A-1 of Appendix A, “System Message Logging Facilities.” The default outgoing facility is local7 . |
| vrf <i>vrf_name</i> | (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. |

■ logging timestamp