L Commands

This chapter describes the Cisco NX-OS system management commands that begin with the letter L.

lldp holdtime

To configure the amount of time that a receiving device should hold the information sent by your device before discarding it, use the **lldp holdtime** command. To remove the hold time configuration, use the **no** form of this command.

lldp holdtime *seconds*

Syntax Description

seconds	Hold time in seconds. The range is from 10 to 255 seconds.

Defaults

120 seconds

Command Modes

Global configuration mode (config)

SupportedUserRoles

network-admin
network-operator
vdc-admin
vdc-operator

Command History

Release	Modification
5.0(1)	This command was introduced.

Usage Guidelines

Make sure that you are in the correct virtual device context (VDC). To switch VDCs, use the **switchto vdc** command.

This command does not require a license.

Examples

This example shows how to configure the Link Layer Discovery Protocol (LLDP) hold time:

```
switch(config)# lldp holdtime 180
switch(config)#
```

This example shows how to remove the LLDP hold time configuration:

```
switch(config)# no lldp holdtime 180
switch(config)#
```

Related Commands

Command	Description
lldp reinit	Specifies the delay time in seconds for LLDP to initialize on any interface.

Command	Description
lldp timer	Specifies the transmission frequency of LLDP updates in seconds.
show lldp timers	Displays the LLDP holdtime, delay time, and update frequency configuration.

lldp receive

To enable the reception of Link Layer Discovery Protocol (LLDP) packets on an interface, use the **lldp receive** command. To disable the reception of LLDP packets, use the **no** form of this command.

lldp receive

no lldp receive

Syntax Description

This command has no arguments or keywords.

Defaults

None

Command Modes

Interface configuration mode

SupportedUserRoles

network-admin
network-operator
vdc-admin
vdc-operator

Command History

Release	Modification
5.0(1)	This command was introduced.

Usage Guidelines

Make sure that you are in the correct virtual device context (VDC). To switch VDCs, use the **switchto vdc** command.

Make sure that you have globally enabled LLDP on the device.

This command does not require a license.

Examples

This example shows how to enable the reception of LLDP packets on an interface:

```
switch(config)# interface ethernet 6/3
switch(config-if)# lldp receive
switch(config-if)# exit
switch(config)#
```

This example shows how to disable the reception of LLDP packets on an interface:

```
switch(config)# interface ethernet 6/3
switch(config-if)# no lldp receive
switch(config-if)# exit
switch(config)#
```

Related Commands

Command	Description
lldp transmit	Enables the transmission of LLDP packets on an interface.
show lldp interface ethernet	Displays the LLDP configuration on an interface.

lldp reinit

To configure the delay time for the Link Layer Discovery Protocol (LLDP) to initialize on any interface, use the **lldp reinit** command. To remove the LLDP initialization configuration, use the **no** form of this command.

lldp reinit *seconds*

Syntax Description

seconds	Initialize time in seconds. The range is from 1 to 10.

Defaults

2 seconds

Command Modes

Global configuration mode (config)

SupportedUserRoles

network-admin
network-operator
vdc-admin
vdc-operator

Command History

Release	Modification
5.0(1)	This command was introduced.

Usage Guidelines

Make sure that you are in the correct virtual device context (VDC). To switch VDCs, use the **switchto vdc** command.

This command does not require a license.

Examples

This example shows how to configure the delay time for LLDP initialization:

```
switch(config)# lldp reinit 6
switch(config)#
```

This example shows how to remove the LLDP initialization configuration:

```
switch(config)# no lldp reinit 6
switch(config)#
```

Related Commands

Command	Description
lldp holdtime	Specifies the amount of time in seconds that a receiving device should hold the information sent by your device before discarding it.

Command	Description
lldp timer	Specifies the transmission frequency of LLDP updates in seconds.
show lldp timers	Displays the LLDP holdtime, delay time, and update frequency configuration.

lldp timer

To configure the transmission frequency of Link Layer Discovery Protocol (LLDP) updates, use the **lldp timer** command. To remove the transmission frequency configuration for LLDP updates, use the **no** form of this command.

lldp timer *seconds*

Syntax Description

seconds	Transmission frequency in seconds. The range is from 5 to 254.

Defaults

30 seconds

Command Modes

Global configuration mode (config)

SupportedUserRoles

network-admin
network-operator
vdc-admin
vdc-operator

Command History

Release	Modification
5.0(1)	This command was introduced.

Usage Guidelines

Make sure that you are in the correct virtual device context (VDC). To switch VDCs, use the **switchto vdc** command.

This command does not require a license.

Examples

This example shows how to configure the transmission frequency for LLDP updates:

```
switch(config)# lldp timer 45
switch(config)#
```

This example shows how to remove the transmission frequency configuration for LLDP updates:

```
switch(config)# no lldp timer 45
switch(config)#
```

Related Commands

Command	Description
lldp reint	Specifies the delay time in seconds for LLDP to initialize on any interface.
lldp holdtime	Specifies the amount of time in seconds that a receiving device should hold the information sent by your device before discarding it.
show lldp timers	Displays the LLDP holdtime, delay time, and update frequency configuration.

lldp tlv-select

To configure the type, length, and value (TLV) descriptions to send and receive in Link Layer Discovery Protocol (LLDP) packets, use the **lldp tlv-select** command. To remove the TLV configuration, use the **no** form of this command.

lldp tlv-select [**dcbxp** | **management-address** | **port-description** | **port-vlan** | **system-capabilities** | **system-description** | **system-name**]

no lldp tlv-select [**dcbxp** | **management-address** | **port-description** | **port-vlan** | **system-capabilities** | **system-description** | **system-name**]

Syntax Description

dcbxp	(Optional) Specifies the DCBXP TLV.
management-address	(Optional) Specifies the Management Address TLV.
port-description	(Optional) Specifies the Port Description TLV.
port-vlan	(Optional) Specifies the Port VLAN ID TLV.
system-capabilities	(Optional) Specifies the System Capabilities TLV.
system-description	(Optional) Specifies the System Description TLV.
system-name	(Optional) Specifies the System Name TLV.

Defaults

By default, all available TLVs are enabled.

Command Modes

Global configuration mode (config)

SupportedUserRoles

network-admin
network-operator
vdc-admin
vdc-operator

Command History

Release	Modification
5.0(1)	This command was introduced.

Usage Guidelines

Make sure that you are in the correct virtual device context (VDC). To switch VDCs, use the **switchto vdc** command.

This command does not require a license.

Examples

This example shows how to enable the system capabilities TLV:

```
switch(config)# lldp tlv-select system-capabilities
switch(config)#
```

This example shows how to disable the system capabilities TLV:

```
switch(config)# no lldp tlv-select system-capabilities
switch(config)#
```

Related Commands

Command	Description
show lldp tlv-select	Displays the LLDP TLV configuration.
show lldp dcbx interface ethernet	Displays the local DCBX control status.

lldp transmit

To enable the transmission of Link Layer Discovery Protocol (LLDP) packets on an interface, use the **lldp transmit** command. To disable the transmission of LLDP packets, use the **no** form of this command.

lldp transmit

no lldp transmit

Syntax Description

This command has no arguments or keywords.

Defaults

Enabled

Command Modes

Interface configuration mode

SupportedUserRoles

network-admin
vdc-admin

Command History

Release	Modification
5.0(1)	This command was introduced.

Usage Guidelines

Make sure that you are in the correct virtual device context (VDC). To switch VDCs, use the **switchto vdc** command.

Make sure that you have globally enabled the LLDP on the device.

This command does not require a license.

Examples

This example shows how to enable the transmission of LLDP packets on an interface:

```
switch(config)# interface ethernet 7/1
switch(config-if)# lldp transmit
switch(config-if)# exit
switch(config)#
```

This example shows how to disable the transmission of LLDP packets on an interface:

```
switch(config)# interface ethernet 7/1
switch(config-if)# no lldp transmit
switch(config-if)# exit
switch(config)#
```

Related Commands

Command	Description
lldp receive	Enables the reception of LLDP packets on an interface.
show lldp interface ethernet	Displays the LLDP configuration on an interface.

locator-led

To blink an LED on the system, use the **locator-led** command. To restore the default LED state, use the **no** form of this command.

locator-led {**chassis** | **fan** *f-number* | **module** *slot* | **powersupply** *ps-number* | **xbar** *x-number*}

no locator-led {**chassis** | **fan** *f-number* | **module** *slot* | **powersupply** *ps-number* | **xbar** *x-number*}

Syntax Description

chassis	Blinks the chassis LED.
fan *f-number*	Blinks the LED that represents the configured fan number. The range depends on the platform. Use **?** to see the range.
module *slot*	Blinks the module LED. The range depends on the platform. Use **?** to see the range.
powersupply *ps-number*	Blinks the power supply LED. The range depends on the platform. Use **?** to see the range.
xbar *x-number*	Blinks the xbar module LED. The range depends on the platform. Use **?** to see the range.

Defaults

None

Command Modes

Any command mode

SupportedUserRoles

network-admin
network-operator
vdc-admin
vdc-operator

Command History

Release	Modification
4.1(2)	This command was introduced.

Usage Guidelines

Use the **locator-led** command to flash the LED on a component in the system. You can use this blinking LED to identify the component to an administrator in the data center.

This command does not require a license.

Examples

This example shows how to blink the LED for module 4:

```
switch# locator-led module 4
```

Related Commands

Command	Description
show locator-led status	Displays the status of locator LEDs on the system.

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

Defaults

None

Command Modes

Global configuration mode

SupportedUserRoles

network-admin
vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

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
switch(config)#
```

Related Commands

Command	Description
show logging console	Displays the console logging configuration.

logging event

To log interface events, use the **logging event** command.

logging event {**link-status** | **trunk-status**} {**enable** | **default**}

no logging event {**link-status** | **trunk-status**} {**enable** | **default**}

Syntax Description

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

Defaults

None

Command Modes

Global configuration mode

SupportedUserRoles

network-admin
vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to log interface events:

```
switch# configure terminal
switch(config)# logging event link-status default
switch(config)#
```

Related Commands

Command	Description
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 mode

SupportedUserRoles

network-admin
vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Do not configure the cache threshold to a non-default value. Configure the cache interval to a lower value so that the syslog is generated from the cache entry expiry.

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 ip access-list detailed

To enable detailed logging, use the **logging ip access-list detailed** command in global configuration mode. To return to default, use the **no** form of this command.

logging ip access-list detailed

no logging ip access-list detailed

Syntax Description

This command has no keywords or arguments.

Defaults

Detailed access list logging is disabled.

Command Modes

Global configuration

SupportedUserRoles

network-admin
vdc-admin

Command History

Release	Modification
6.2(6)	This command was introduced.

Usage Guidelines

Access list logging information can be displayed to audit the data collected from the logged access-list entry. When detailed logging is enabled by using the **logging ip access-list detailed** command, the following additional parameters are collected along with the currently collected ACL-LOG fields:

- ACL Name
- ACE action (Permit/Deny)
- ACL Applied Interface (Appl Intr)

When detailed logging is enabled, the following additional parameters will be displayed in ACL-LOG cache entry along with the currently collected ACL-LOG fields:

- ACL Name
- ACE Number
- ACE Action (Permit /Deny)
- ACL Direction (Ingress/Egress)
- ACL Filter Type (RACL_IPV4/PACL_MAC/ PACL_IPV4/PBR/VACL)
- ACL Applied Interface

This command does not require a license.

Examples

This example shows how to configure detailed access list logging:

```
switch# config t
switch(config)# logging ip access-list detailed
```

Related Commands

Command	Description
show logging ip access-list cache	Displays information about the IP access list logging cache.

logging level

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

logging level *facility severity-level*

no logging level *facility severity-level*

Syntax Description

facility	Appropriate *facility*. The facilities are listed in the "System Message Logging Facilities" section on page 1. 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

Defaults

None

Command Modes

Global configuration mode

SupportedUserRoles

network-admin
vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

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

```
switch# configure terminal
switch(config)# logging level aaa 2
switch(config)#
```

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: • **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 10485760 bytes and can be configured from 4096 to 10485760 bytes.

Defaults

None

Command Modes

Global configuration mode

SupportedUserRoles

network-admin
vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

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

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

Related Commands

Command	Description
show logging logfile	Displays the log file.

logging message interface type ethernet description

To add the description for physical Ethernet interfaces and subinterfaces in the system message log, use the **logging message interface type ethernet description** command. To disable the printing of the interface description for physical Ethernet interfaces in the system message log, use the **no** form of this command.

logging message interface type ethernet description

no logging message interface type ethernet description

Syntax Description

This command does not have any arguments or password.

Defaults

None

Command Modes

Global configuration mode

SupportedUserRoles

network-admin
vdc-admin

Command History

Release	Modification
5.2(1)	This command was introduced.

Usage Guidelines

Make sure that you are in the correct VDC. To change the VDC, use the **switchto vdc** command.

This command does not require a license.

Examples

This example shows how to add the description for physical Ethernet interfaces and subinterfaces in the system message log:

```
switch# configure terminal
switch(config)# logging message interface type ethernet description
```

This example shows how to disable the printing of the interface description for physical Ethernet interfaces in the system message log:

```
switch# configure terminal
switch(config)# no logging message interface type ethernet description
```

Related Commands

Command	Description
logging monitor	Enables the device to log messages to the monitor based on a specified severity level or higher.
show logging monitor	Displays the monitor logging configuration.

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

Defaults

None

Command Modes

Global configuration mode

SupportedUserRoles

network-admin
vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to enable module log messages:

```
switch# configure terminal
switch(config)# logging module
switch(config)#
```

Related Commands

Command	Description
show logging module	Displays the module logging status.

logging monitor

To log messages to the monitor (terminal line), use the **logging monitor** command to enable the device.

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

Defaults

5

Command Modes

Global configuration mode

SupportedUserRoles

network-admin
vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

This configuration applies to Telnet and SSH sessions.

This command does not require a license.

Examples

This example shows how to enable monitor log messages:

```
switch# configure terminal
switch(config)# logging monitor
switch(config)#
```

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* [**use-vrf** *VRF_name* [**facility** {**auth | authpriv | cron | daemon | ftp | kernel | local0 | local1 | local2 | local3 | local4 | local5 | local6 | local7 | lpr | mail | news | syslog | user | uucp**}]]]

no logging server *host*

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
use-vrf *VRF_name*	(Optional) Specifies the VPN routing and forwarding (VRF) instance. In Cisco NX-OS Release 4.2 or later releases, the default VRF is default.
facility *facility*	(Optional) Specifies the outgoing *facility*. The facilities are listed in the "System Message Logging Facilities" section on page 1. The default outgoing facility is **local7**.

Defaults

None

Command Modes

Global configuration mode

SupportedUserRoles

network-admin
vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

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

```
switch# configure terminal
switch(config)# logging server 172.28.254.253
switch(config)#
```

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

```
switch# configure terminal
switch(config)# logging server syslogA 5
switch(config)#
```

Related Commands

Command	Description
show logging server	Displays the configured syslog servers.

logging source-interface

To enable a source interface whose IP address is displayed in all the log messages, use the **logging source-interface** command.

To disable the source interface, use the **no** form of this command.

logging source-interface *interface*

no logging source-interface *interface*

Syntax Description

interface	The interface whose IP address is displayed in all the log messages.

Defaults

None

Command Modes

Global configuration.

SupportedUserRoles

network-admin
vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.
7.3(0)N1(1)	This command was modified to ensure that the same IP address appears in all messages sent from an individual Cisco NX-OS device.

Usage Guidelines

This command does not require a license.

Examples

This example shows how to specify that the IP address of the loopback 5 interface should be used for all log messages:

```
switch# configure terminal
switch(config)# logging source-interface loopback 5
switch(config)#
```

logging timestamp

To set the logging time stamp units, use the **logging timestamp** command. To reset the logging timestamp 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 time stamp unit in microseconds. The default units are **seconds**.
milliseconds	Specifies the time stamp unit in milliseconds.
seconds	Specifies the time stamp unit in seconds.

Defaults

None

Command Modes

Global configuration mode

SupportedUserRoles

network-admin
vdc-admin

Command History

Release	Modification
4.0(1)	This command was introduced.

Usage Guidelines

This command does not require a license.

Examples

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

```
switch# configure terminal
switch(config)# logging timestamp microseconds
switch(config)#
```

Related Commands

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