L Commands

lacp suspend-individual

To enable Link Aggregation Control Protocol (LACP) port suspension on a port channel, use the **lacp suspend-individual** command. To disable port suspension on a port channel interface, use the **no** form of this command.

lacp suspend-individual

no lacp suspend-individual

Syntax Description

This command has no arguments or keywords.

Command Default

Disabled

Command Modes

Interface configuration mode

Command History

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

Usage Guidelines

LACP sets a port to the suspended state if it does not receive an LACP bridge protocol data unit (BPDU) from the peer ports in a port channel. This can cause some servers to fail to boot up as they require LACP to logically bring up the port.

This command does not require a license.

Examples

This example shows how to enable LACP port suspension on a port channel:

```
switch# configure terminal
switch(config)# interface port-channel 100
switch(config-if)# shutdown
switch(config-if)# lacp suspend-individual
switch(config-if)#
```

This example shows how to disable LACP port suspension on a port channel:

```
switch# configure terminal
switch(config)# interface port-channel 100
switch(config-if)# shutdown
switch(config-if)# no lacp suspend-individual
switch(config-if)#
```

Related Commands

Command	Description
show lacp	Displays LACP information.

Command	Description
show running-config	Displays the running system configuration.

lacp system-priority

To set the system priority of the switch for the Link Aggregation Control Protocol (LACP), use the **lacp system-priority** command. To return the system priority to the default value, use the **no** form of this command.

lacp system-priority *priority*

no lacp system-priority

Syntax Description

priority	Priority for the physical interfaces. The range of valid numbers is from 1 to 65535 .

Command Default

System priority value is 32768.

Command Modes

Global configuration mode

Command History

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

Usage Guidelines

Each device that runs LACP has an LACP system priority value. You can configure a value between 1 and 65535. LACP uses the system priority with the MAC address to form the system ID and also during negotiation with other systems.

When setting the priority, note that a *higher* number means a *lower* priority.

Examples

This example shows how to set the LACP system priority for the device to 2500:

```
switch(config)# lacp system-priority 2500
```

Related Commands

Command	Description
show lacp	Displays LACP information.

link debounce

To enable the debounce timer on an interface, use the **link debounce** command. To disable the timer, use the **no** form of this command.

link debounce [**time** *milliseconds*]

no link debounce

Syntax Description

milliseconds	(Optional) Specifies the extended debounce timer. The range is from 0 to 5000 milliseconds. A value of 0 milliseconds disables the debounce time.

Command Default

None

Command Modes

Interface configuration mode

Command History

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

Usage Guidelines

The port debounce time is the amount of time that an interface waits to notify the supervisor of a link going down. During this time, the interface waits to see if the link comes back up. The wait period is a time when traffic is stopped.

Caution When you enable the debounce timer, link up and link down detections are delayed, resulting in a loss of traffic during the debounce period. This situation might affect the convergence of some protocols.

Examples

This example shows how to enable the debounce timer and set the debounce time to 1000 milliseconds for an Ethernet interface:

```
switch# configure terminal

switch(config)# interface ethernet 1/1
switch(config-if)# link debounce time 1000
```

This example shows how to disable the debounce timer for an Ethernet interface:

```
switch(config-if)# no link debounce
```

Related Commands

Command	Description
show interface ethernet	Displays the interface configuration information.
show interface debounce	Displays the debounce time information for all interfaces.

load-interval

To change the sampling interval for statistics collections on interfaces, use the **load-interval** command. To return to the default sampling interval, use the **no** form of this command.

load-interval [**counter** {**1**| **2**| **3**}] *seconds*

no load-interval [**counter** {**1**| **2**| **3**}] [*seconds*]

Syntax Description

1 | **2** | **3**	Specifies the number of counters configured on the interface.
seconds	Specifies the interval between sampling statistics on the interface. The range is from 60 to 300 seconds for VLAN network interfaces, and the range is from 30 to 300 seconds for Ethernet and port-channel interfaces.

Command Default

1—30 seconds; 60 seconds for VLAN network interface

2—300 seconds

3—not configured

Command Modes

Interface configuration mode

Command History

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

Usage Guidelines

Use the load-interval command to obtain bit-rate and packet-rate statistics for three different durations.

You can set the statistics collection intervals on the following types of interfaces:

- Ethernet interfaces
- Port-channel interfaces
- VLAN network interfaces

You cannot use this command on the management interface or subinterfaces.

This command sets the sampling interval for such statistics as packet rate and bit rate on the specified interface.

This command does not require a license.

Examples

This example shows how to set the three sample intervals for the Ethernet port 3/1:

```
switch# configure terminal
switch(config)# interface ethernet 3/1
switch(config-if)# load-interval counter 1 60
switch(config-if)# load-interval counter 2 135
switch(config-if)# load-interval counter 3 225
```

Related Commands

Command	Description
show interface	Displays information about the interface.

lacp graceful-convergence

To configure port channel Link Aggregation Control Protocol (LACP) graceful convergence, use the **lacp graceful-convergence** command. To disable graceful convergence on a port channel interface, use the **no** form of this command.

lacp graceful-convergence

no lacp graceful-convergence

Syntax Description

This command has no arguments or keywords.

Command Default

Enabled

Command Modes

Interface configuration mode

Command History

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

Usage Guidelines

You can use this command only on a port channel interface that is in an administratively down state. You cannot configure (or disable) LACP graceful convergence on a port chanel that is in an administratively up state. If you do so, you will see the following error message:

```
ERROR: Cannot set/reset lacp graceful-convergence for port-channel10 that is admin up
```

Note To avoid port suspension, we recommend that you disable graceful convergence on LACP ports on a peer switch that is not running Cisco NX-OS.

This command does not require a license.

Examples

This example shows how to enable LACP graceful convergence on a port channel:

```
switch# configure terminal
switch(config)# interface port-channel 100
switch(config-if)# shutdown
switch(config-if)# lacp graceful-convergence
switch(config-if)#
```

This example shows how to disable LACP graceful convergence on a port channel:

```
switch# configure terminal
switch(config)# interface port-channel 100
switch(config-if)# no lacp graceful-convergence
switch(config-if)#
```

Related Commands

Command	Description
show lacp	Displays LACP information.
show running-config	Displays the running system configuration.

lacp port-priority

To set the priority for the physical interfaces for the Link Aggregation Control Protocol (LACP), use the **lacp port-priority** command. To return the port priority to the default value, use the **no** form of this command.

lacp port-priority *priority*

no lacp port-priority

Syntax Description

priority	Priority for the physical interfaces. The range of valid numbers is from 1 to 65535.

Command Default

System priority value is 32768.

Command Modes

Interface configuration mode

Command History

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

Usage Guidelines

Each port configured to use LACP has an LACP port priority. You can configure a value between 1 and 65535. LACP uses the port priority in combination with the port number to form the port identifier. The port priority is used with the port number to form the port identifier. The port priority is used to decide which ports should be put into standby mode when there is a hardware limitation that prevents all compatible ports from aggregating.

Note When setting the priority, note that a *higher* number means a *lower* priority.

Examples

This example shows how to set the LACP port priority for the interface to 2000:

```
switch# configure terminal
switch(config)# interface ethernet 1/5
switch(config-if)# lacp port-priority 2000
switch(config-if)#
```

Related Commands

Command	Description
show lacp	Displays LACP information.

lacp rate fast

To configure the rate at which control packets are sent by the Link Aggregation Control Protocol (LACP), use the **lacp rate fast** command. To restore the rate to 30 seconds, use the **no** form of this command or the **lacp rate normal** command.

lacp rate fast

no lacp rate

no lacp rate fast

lacp rate normal

Syntax Description

This command has no arguments or keywords.

Command Default

1 second

Command Modes

Interface configuration mode

Command History

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

Usage Guidelines

You must enable LACP before using this command.

You can configure the LACP rate fast feature on the LACP ports of a Cisco Nexus device or a Cisco Nexus Fabric Extender that is connected to a Cisco Nexus device.

The LACP rate fast feature is used to set the rate (once every second) at which the LACP control packets are sent to an LACP-supported interface. The normal rate at which LACP packets are sent is 30 seconds.

Examples

This example shows how to configure the LACP fast rate feature on a specified Ethernet interface:

```
switch(config)# interface ethernet 1/1
switch(config-if)# lacp rate fast
```

This example shows how to remove the LACP fast rate configuration from a specified Ethernet interface:

```
switch(config)# interface ethernet 1/1
switch(config-if)# no lacp rate fast
```

Related Commands

Command	Description
feature lacp	Enables or disables LACP on the switch.
interface ethernet	Enters Ethernet interface configuration mode.
show lacp	Displays the LACP configuration information.

lacp short-timeout

To configure short time-out for Link Aggregation Control Protocol (LACP) fast rate, use the **lacp short-timeout** command. To restore the default time-out to 15 seconds, use the **no** form of this command.

lacp short-timeout *timeout-value*

no lacp short-timeout

Syntax Description

timeout-value	Short time-out value for **lacp rate fast** command . The valid range is from 3 to 15 seconds.

Command Default

The default time-out value is 15 seconds.

Command Modes

Global configuration mode

Command History

Release	Modification
7.3(0)N1(1)	This command was introduced.

Usage Guidelines

You must enable LACP rate fast before using this command.

You can configure the LACP rate fast feature on the LACP ports of a Cisco Nexus 5000 Series switch or a Cisco Nexus 2000 Series Fabric Extender that is connected to a Cisco Nexus 5000 Series switch.

The LACP short-time out command is used to modify the timeout value for **lacp rate fast** command from the default 15 seconds to 3 seconds. Setting the timeout value to 3 seconds enables Cisco Nexus devices to adhere to the IEEE802.3ad standards and achieve failure detection within 3 seconds when a member link fails.

Note LACP short timeout of 3 seconds for rate fast is not supported on FEX interfaces.

Examples

This example shows how to configure the LACP short-timeout for fast rate feature:

```
switch(config)# lacp short-timeout 3
```

This example shows how to restore the default lacp short-timeout value for the LACP fast rate feature:

```
switch(config)# no lacp short-timeout
```

Note The default short-timeout value (15) is not displayed in the running configuration.

Related Commands

Command	Description
feature lacp	Enables or disables LACP on the switch.
lacp fast rate	Configures the rate at which packets are sent by LACP.
show lacp	Displays the LACP configuration information.