Configuring Link Debounce Timer

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Restrictions for Link Debounce Timer

- Link Debounce Timer is not available on StackWise Virtual Links (SVL). It is available only on non-SVL links.

Information About Link Debounce Timer

The Link Debounce Timer delays notification of a link down status change. Delayed notification of a link down status change can decrease traffic loss due to network reconfiguration when network ethernet port experiences minor faults in the link.

If the status of a link changes quickly from up to down and then back to up, the Link Debounce Timer suppresses the link down status notification. If the link transitions from up to down, but does not come back up, the Link Debounce Timer delays the link down status notification until the debounce timer expires.

Delayed link down status notification allows a quick port status change and recovery without triggering any of the changes that are necessary when a port goes down. The normal operation of Dense Wavelength Division Multiplexing (DWDM) links includes quick port status changes and recovery during DWDM network reconvergence. Delayed link status notification can also be used to mitigate link flaps because of bad cabling.

You can configure the port debounce timer separately on each LAN port.

Note Enabling the port debounce timer causes link down detections to be delayed, resulting in loss of traffic during the debouncing period. This situation might affect the convergence and reconvergence of some Layer 2 and Layer 3 protocols.

Note This feature is not supported on the C9500-12Q, C9500-16X, C9500-24Q, C9500-40X models of the Cisco Catalyst 9500 Series Switches.

Configuring Link Debounce Timer

To configure Link Debounce Timer on a port, perform this task:

Procedure

	Command or Action	Purpose
Step 1	**enable** **Example:** `Device> enable`	Enables privileged EXEC mode. Enter your password, if prompted.
Step 2	**configure terminal** **Example:** `Device# configure terminal`	Enters global configuration mode.
Step 3	**interface** *interface interface-id* **Example:** `Device(config)# interface fortygigabitEthernet 1/0/10`	Enters interface configuration mode and selects the link to configure.
Step 4	**link debounce** [**time** *debounce-time*] **Example:** `Device(config-if)#link debounce time 360`	Configures the debounce timer in milli seconds. Maximum allowed timer is 1200 ms. The default port debounce timer is 240 ms Link Debounce Timer works in multiples of 120 ms. If the configured timer value is above multiple of 120ms, the system uses the last multiple value of 120ms.
Step 5	**end** **Example:** `Device(config-if)#  end`	Returns to privileged EXEC mode.
Step 6	**show interface** *interface-id* **debounce** or **show interface debounce** **Example:** `Device#show interface debounce`	Verifies the configuration.

Example: Configuring the Link Debounce Timer

The following example shows how to enable Link Debounce Timer on a FortygigabitEthernet port.

```
Device(config)#inter fortygigabitEthernet 1/0/10
Device(config-if)#link debounce time 360
Warning: Enabling debounce feature causes link down detection to be delayed
```

The following examples show how to verify the Link Debounce Timer configuration.

```
Device#show inter fortygigabitEthernet 1/0/10 debounce

Port          Debounce time   Value(ms)
Fo1/0/10      enable               360


Device#show interfaces debounce

Port          Debounce time   Value(ms)
Fo1/0/1       disable
Fo1/0/2       disable
Fo1/0/3       enable          1200
Fo1/0/4       disable
Fo1/0/5       disable
Fo1/0/6       disable
Fo1/0/7       disable
Fo1/0/8       disable
Fo1/0/9       disable
Fo1/0/10      enable          360
Fo1/0/11      disable
Fo1/0/12      enable          240
Fo1/0/13      disable
```

Feature History for Link Debounce Timer

This table provides release and related information for the features explained in this module.

These features are available in all the releases subsequent to the one they were introduced in, unless noted otherwise.

Release	Feature	Feature Information
Cisco IOS XE Bengaluru 17.6.1	Link Debounce Timer	The Link Debounce Timer feature delays notification of a link down status change. Delayed notification of a linkdown status change can decrease traffic loss due to network reconfiguration when network ethernet portexperiences minor faults in the link. Support for this feature was introduced only on the C9500-32C, C9500-32QC, C9500-48Y4C, and C9500-24Y4C models of the Cisco Catalyst 9500 Series Switches.

Use the Cisco Feature Navigator to find information about platform and software image support. To access Cisco Feature Navigator, go to https://cfnng.cisco.com/.