

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.

Configuring Link Debounce Timer

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

Procedure

	Command or Action	Purpose
Step 1	enable Example:	Enables privileged EXEC mode. Enter your password, if prompted.
	Device> enable	
Step 2	configure terminal	Enters global configuration mode.
	Example: Device# configure terminal	
Step 3	<pre>interface interface interface-id Example: Device(config)# interface fortygigabitEthernet 1/0/10</pre>	Enters interface configuration mode and selects the link to configure.
Step 4	<pre>link debounce[time debounce-time] Example: Device(config-if)#link debounce time 360</pre>	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	<pre>end Example: Device(config-if)# end</pre>	Returns to privileged EXEC mode.
Step 6	show interface interface-id debounce or show interface debounce	Verifies the configuration.
	Example: Device#show interface debounce	

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

Debounce	time	Value(ms)
disable		
disable		
enable		1200
disable		
enable		360
disable		
enable		240
disable		
	disable disable enable disable disable disable disable disable enable disable	disable enable disable disable disable disable disable disable disable disable enable

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 Amsterdam 17.3.3	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.

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/.

Feature History for Link Debounce Timer