

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

Port	Debounce ti	me 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 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 Cisco Feature Navigator.

Feature History for Link Debounce Timer