Enable Loopback Detection on the Cisco Business Series Switches

Objective

This article aims to show how to enable Loopback Detection on the Cisco Business 220, 250, and 350 Series Switches.

Introduction

Loopback Detection (LBD) is a feature on the switch that provides protection against loops by transmitting loop protocol packets out of ports where loop protection has been enabled. When the switch sends out a loop protocol packet and then receives the same packet, it shuts down the port that received the packet.

LBD operates independently of Spanning Tree Protocol (STP). After a loop is discovered, the port that received the loops is placed in the Shut Down state. A trap is sent and the event is logged. Network administrators can define a Detection Interval that sets the time interval between LBD packets.

The following conditions must be set in order for LBD to be active on a specified port:

- LBD is globally enabled.
- LBD is enabled on the specific port.
- Port Operational status is up.
- Port is in STP Forwarding or Disabled state.

Applicable Devices | Software Version

- CBS220 series [(Data Sheet)](#) | 2.0.0.17
- CBS250 [(DataSheet)](#) | 3.1.0.57 [(Download latest)](#)
- CBS350 [(Data Sheet)](#) | 3.1.0.57 [(Download latest)](#)
- CBS350-2X [(Data Sheet)](#) | 3.1.0.57 [(Download latest)](#)
- CBS350-4X [(Data Sheet)](#) | 3.1.0.57 [(Download latest)](#)

Enable Loopback Detection

Step 1

Log in to the switch web-based utility and choose **Port Management > Loopback Detection Settings**.
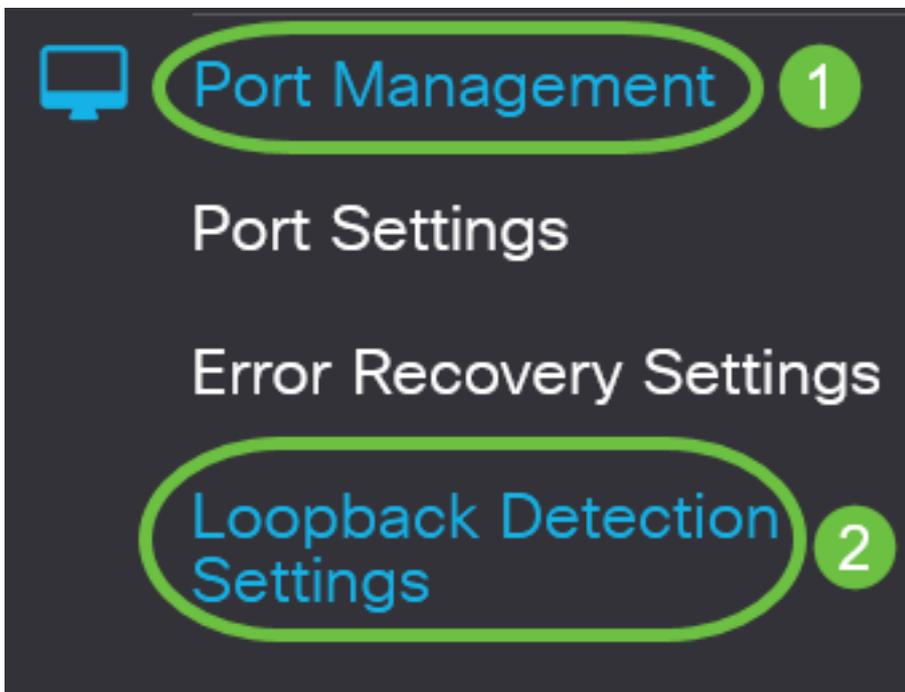
For CBS 250 and 350 series switches, choose **Advanced** settings from the drop-down menu at the top.

Step 2

Check the **Enable** check box for *Loopback Detection*.

Step 3

Enter a value in the *Detection Interval* field. This would set the time interval in seconds between LBD packets.

Loopback Detection Settings

Loopback Detection: ☑ Enable

⚙ Detection Interval: **30** (Range: 1 - 60, Default: 30)

In this example, 30 is used.

Step 4

Click **Apply**.

Loopback Detection Settings   [Apply]   [Cancel]

Loopback Detection: ☑ Enable

⚙ Detection Interval: 30   (Range: 1 - 60, Default: 30)

Step 5

To save the configuration permanently, go to the Copy/Save Configuration page or click the **Save** icon at the upper portion of the page.

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Loopback Detection Settings

Enable Loopback Detection on the Port

Step 1

Under the *Loopback Detection Port Setting Table*, click on the radio button of the port that you want to configure then click **Edit**.

Loopback Detection Port Setting Table

Filter: *Interface Type* equals to Port [Go]

	Entry No.	Port	Loopback Detection State Administrative	Operational
○	1	GE1	Disabled	Inactive
◉	2	GE2	Disabled	Inactive
○	3	GE3	Disabled	Inactive

In this example, Port GE2 is chosen.

Step 2

The *Edit Loopback Detection Interface Settings* window will then appear. From the *Interface* drop-down list, make sure the specified port is the one you chose in Step 1. Otherwise, click the drop-down arrow and choose the right port.

Edit Loopback Detection Interface Settings

Interface: ◉ Port GE2 ○ LAG LAG1

Loopback Detection State: ☐ Enable

Step 3

Check the **Enable** check box for *Loopback Detection State*.

Edit Loopback Detection Interface Settings

Interface: ● Port GE2 ▾ ○ LAG LAG1 ▾

Loopback Detection State: ☑ Enable

Step 4

Click **Apply**.

Edit Loopback Detection Interface Settings   ✕

Interface: ● Port GE2 ▾ ○ LAG LAG1 ▾

Loopback Detection State: ☑ Enable

Apply   Close

Step 5

To save the configuration permanently, go to the Copy/Save Configuration page or click the **Save** icon at the upper portion of the page.

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Loopback Detection Settings

Step 6

Return to **Port Management > Loopback Detection Settings** window to verify your configuration. The Loopback Detection *Administrative* State and *Operational* State should now show **Enabled**.

Loopback Detection Port Setting Table

Filter: *Interface Type* equals to Port ▾ Go

Step 7

Repeat Steps 1 to 4 for each port that you want LBD to be enabled.

Conclusion

You have now successfully enabled LBD on specific ports on your Cisco Business 220, 250, or 350 series switch.