Enable Loopback Detection on the Cisco 220 Series Smart Plus Switches

Objective

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.

This article aims to show how to enable Loopback Detection on the Cisco 220 Series Smart Plus Switches.
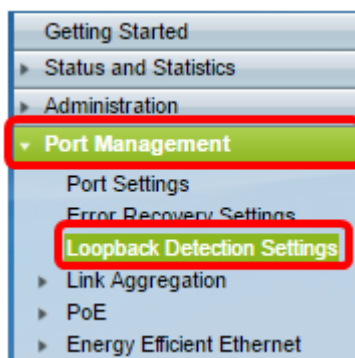
Applicable Devices

- Sx220 Series

Software Version

- 1.1.0.14

Enable Loopback Detection

Step 1. Log in to the switch web-based utility and choose **Port Management > Loopback Detection Settings**.

Step 2. Check the **Enable** check box for Loopback Detection.

Loopback Detection Settings

Loopback Detection: ✓ Enable

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

Apply   Cancel

Step 3. Enter a value in the *Detection Interval* field. This would set the time interval in seconds between LBD packets.
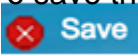

Loopback Detection Settings

Loopback Detection: ✓ Enable

Detection Interval: 25   sec (Range: 1 - 60, Default: 30)

Apply   Cancel

Note: In this example, 25 is used.

Step 4. Click **Apply**.

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.

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**.
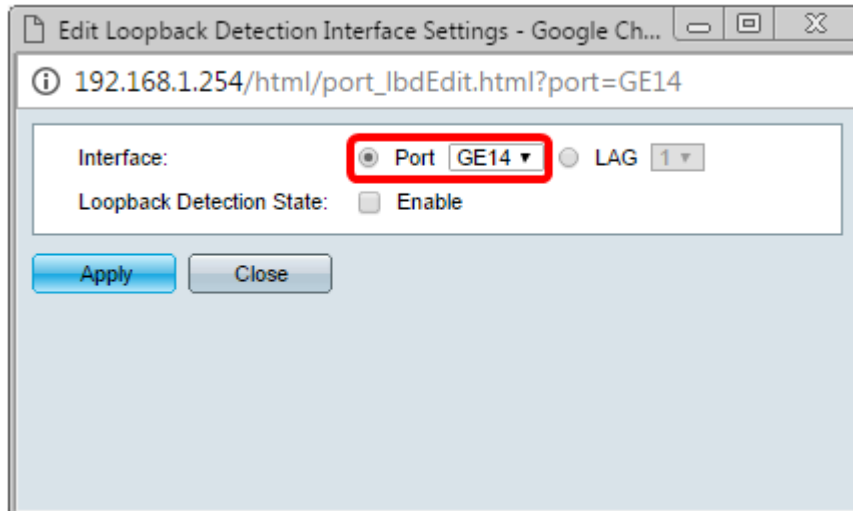

○	11	GE11	Disabled	Inactive
○	12	GE12	Disabled	Inactive
○	13	GE13	Disabled	Inactive
⦿	14	GE14	Disabled	Inactive
○	15	GE15	Disabled	Inactive
○	16	GE16	Disabled	Inactive
○	17	GE17	Disabled	Inactive
○	18	GE18	Disabled	Inactive
○	19	GE19	Disabled	Inactive
○	20	GE20	Disabled	Inactive
○	21	GE21	Disabled	Inactive
○	22	GE22	Disabled	Inactive
○	23	GE23	Disabled	Inactive
○	24	GE24	Disabled	Inactive
○	25	GE25	Disabled	Inactive
○	26	GE26	Disabled	Inactive

Copy Settings...   Edit...

Note: In this example, Port GE14 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.
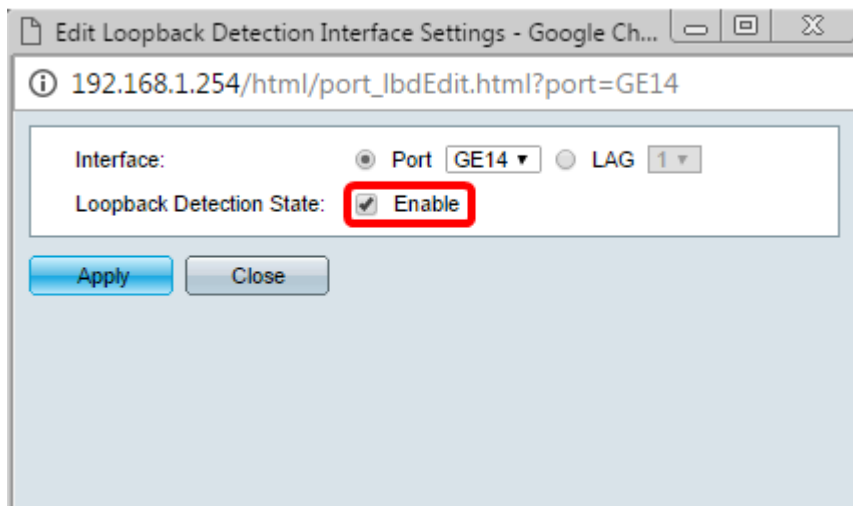

Step 3. Check the **Enable** check box for Loopback Detection State.

Step 4. Click **Apply**.

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.

Step 6. Return to **Port Management > Loopback Detection Settings** window to verify your configuration. The Loopback Detection Administrative State should now show **Enabled** and the Operational State should now be **Active**.

Loopback Detection Port Setting Table

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

	Entry No.	Interface	Loopback Detection State	
			Administrative	Operational
○	1	GE1	Disabled	Inactive
○	2	GE2	Disabled	Inactive
○	3	GE3	Enabled	Inactive
○	4	GE4	Disabled	Inactive
○	5	GE5	Disabled	Inactive
○	6	GE6	Disabled	Inactive
○	7	GE7	Enabled	Inactive
○	8	GE8	Disabled	Inactive
○	9	GE9	Disabled	Inactive
○	10	GE10	Disabled	Inactive
○	11	GE11	Disabled	Inactive
○	12	GE12	Disabled	Inactive
○	13	GE13	Disabled	Inactive
●	14	GE14	Enabled	Active
○	15	GE15	Disabled	Inactive
○	16	GE16	Disabled	Inactive

Step 7. Repeat Steps 1 to 4 for each port that you want LBD to be enabled.

You should now have successfully enabled Loopback Detection on specific ports on your switch.