# **Enable Loopback Detection on a Switch**

# Objective

Loopback Detection (LBD) is a feature that protects against loops by sending out loop protocol packets when it has loop protection enabled. When the switch transmits a loop protocol packet and the port receives the same packet, it shuts down the port that received the packet. Although similar to the Spanning Tree Protocol (STP), LBD is not dependent on STP. The port that received the loop is put on Shut Down state. A trap is then sent, and then the event logged.

## **Applicable Devices**

- Sx250 Series
- Sx350 Series
- SG350X Series
- Sx550X Series

### **Software Version**

• 2.3.5.63

### **Enable Loopback Detection on the Switch**

Step 1. Choose whether to manage the switch or manage the network.

Note: In this example, Switch Management is chosen.

| _           |                                |        |  |  |  |  |
|-------------|--------------------------------|--------|--|--|--|--|
| Application | Switch Mana<br>Network Mar     | gement |  |  |  |  |
| Username:   | CISCO                          |        |  |  |  |  |
| Password:   | Password: •••••                |        |  |  |  |  |
| Language:   | Language: English 🛊            |        |  |  |  |  |
|             | Log In Secure Browsing (HTTPS) |        |  |  |  |  |
|             |                                |        |  |  |  |  |

Step 2. Enter your credentials and then click Log In.

| Application: | Switch Management              |
|--------------|--------------------------------|
| Username:    | cisco                          |
| Password:    |                                |
| Language:    | English 🖨                      |
|              | Log In Secure Browsing (HTTPS) |
|              |                                |

Step 3. Click the Display Mode drop-down list and then choose Advanced.

|         | Basic              |            |
|---------|--------------------|------------|
| English | \$<br>Display Mode | ✓ Advanced |
|         |                    |            |
|         |                    |            |

Step 4. Choose **Port Management > Loopback Detection** Settings.



Step 5. Check the Loopback Detection **Enable** check box.

| Loopback Detection: 🕢 Enable |  |  |  |  |
|------------------------------|--|--|--|--|
| Detection Interval: 25       |  |  |  |  |
| Apply Cancel                 |  |  |  |  |

Step 6. Enter the Detection Interval value.

Note: The valid range is from 10 to 60. The default value is 30. In this example, 25 is entered.

| Loopback Detection: 🗹 Enable |  |
|------------------------------|--|
| Detection Interval: 25       |  |
| Apply Cancel                 |  |

Step 7. Click Apply.

| Loopback Detection: | Enable |
|---------------------|--------|
| Detection Interval: | 25     |
| Apply Cance         |        |

Step 8. (Optional) Click **Save** to save the configuration permanently.



#### **Enable Loopback Detection on the Port**

Step 1. On the Loopback Detection Port Setting Table, click the radio button that corresponds to the port that needs to be configured.

|            | 47        | GE47 | Disabled | Disabled |
|------------|-----------|------|----------|----------|
|            | 48        | GE48 | Disabled | Disabled |
| •          | 49        | XG3  | Disabled | Disabled |
| $\bigcirc$ | 50        | XG4  | Disabled | Disabled |
|            | Copy Sett | ings | Edit     |          |

Note: In this example, XG3 is chosen.

Step 2. Click Edit.

|            | 47        | GE47 | Disabled | Disabled |
|------------|-----------|------|----------|----------|
| $\bigcirc$ | 48        | GE48 | Disabled | Disabled |
| •          | 49        | XG3  | Disabled | Disabled |
| $\bigcirc$ | 50        | XG4  | Disabled | Disabled |
|            | Copy Sett | ings | Edit     |          |

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

| Interface: O Unit 1 + Port XG3 + LAG 1+ |
|---|
| Loopback Detection State:               |
| Apply Close                             |

Step 4. Click Apply.



Step 5. Click **Save** to save the configuration permanently.

| 🚫 Save | cisco | Language: | English | \$ |
|--------|-------|-----------|---------|----|
|        |       |           |         |    |

Step 6. Verify that the Loopback Detection Administrative state is enabled.

| 0          | 47        | GE47 | Disabled | Disabled |
|------------|-----------|------|----------|----------|
| $\bigcirc$ | 48        | GE48 | Disabled | Disabled |
|            | 49        | XG3  | Enabled  | Disabled |
| $\bigcirc$ | 50        | XG4  | Disabled | Disabled |
|            | Copy Sett | ings | Edit     |          |

Step 7. (Optional) Repeat the steps for each port that needs to have LBD enabled.

You should now have successfully enabled loopback detection on your switch.