Configure Stack Settings on an SG350X Switch

Objective

This article provides instructions on how to configure stack settings on your switch. Stacked switches are then collectively managed as a single logical device. In some cases, stack ports can become members in a stack of Link Aggregation Groups (LAGs) increasing the bandwidth of the stack interfaces.

If you are unfamiliar with the terms used below, check out [Cisco Business: Glossary of New Terms](#).

For further details on stacking, [click here to view the article - What is Stacking?](#)

Applicable Devices
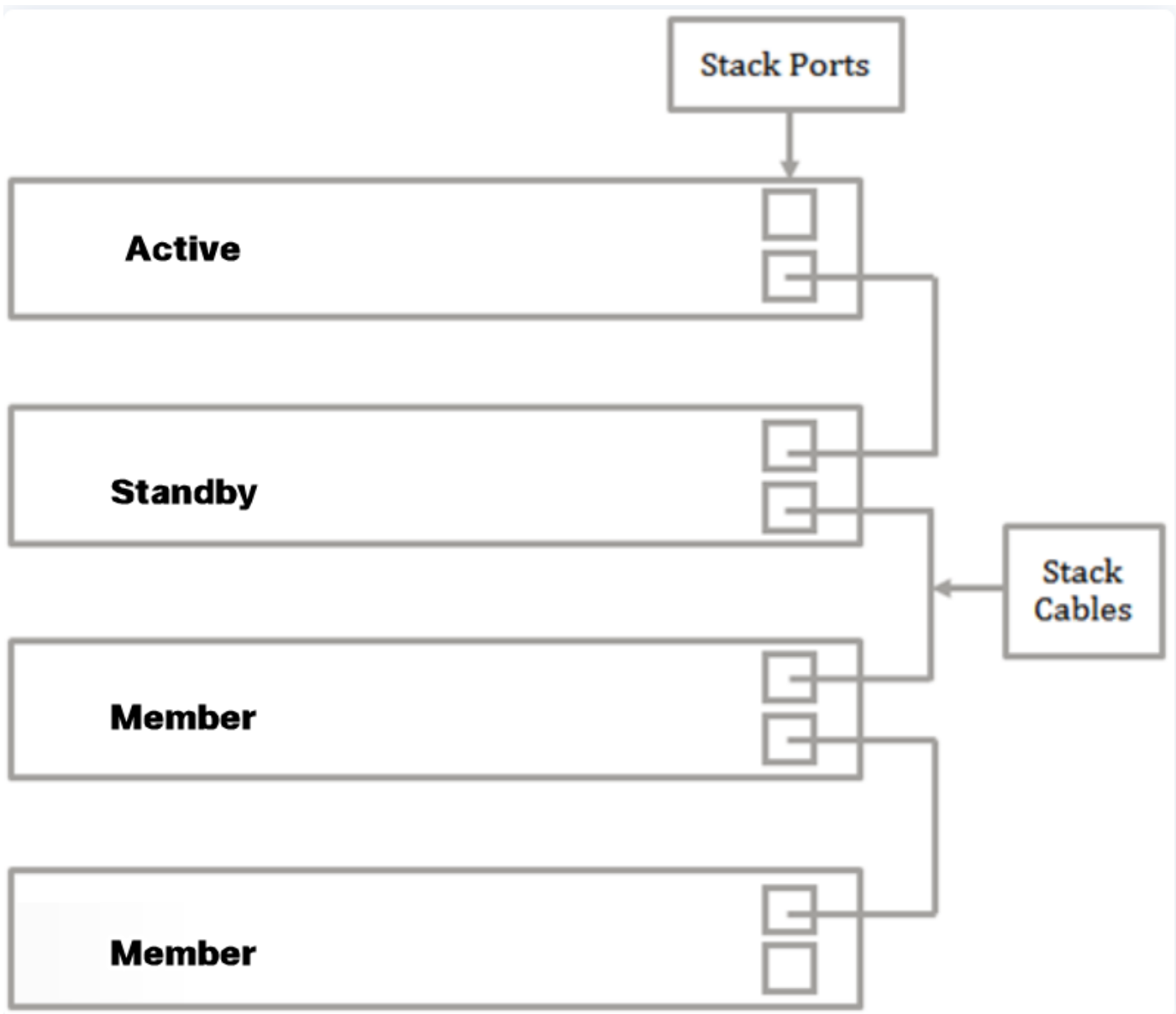
- SG350X Series

Software Version

- 2.2.5.68

Configure Stack Settings on a Switch

Connect the Switches

Step 1. Determine the stack that you would like to configure. The options are:

- Chain — Each unit is connected to the neighboring unit, but there is no cable connection between the first and last unit. The image below shows a chain topology of a four-unit stack:

- Ring — Each unit is connected to the neighboring unit. The last unit is connected to the first unit. The image below shows a ring topology of a four-unit stack:
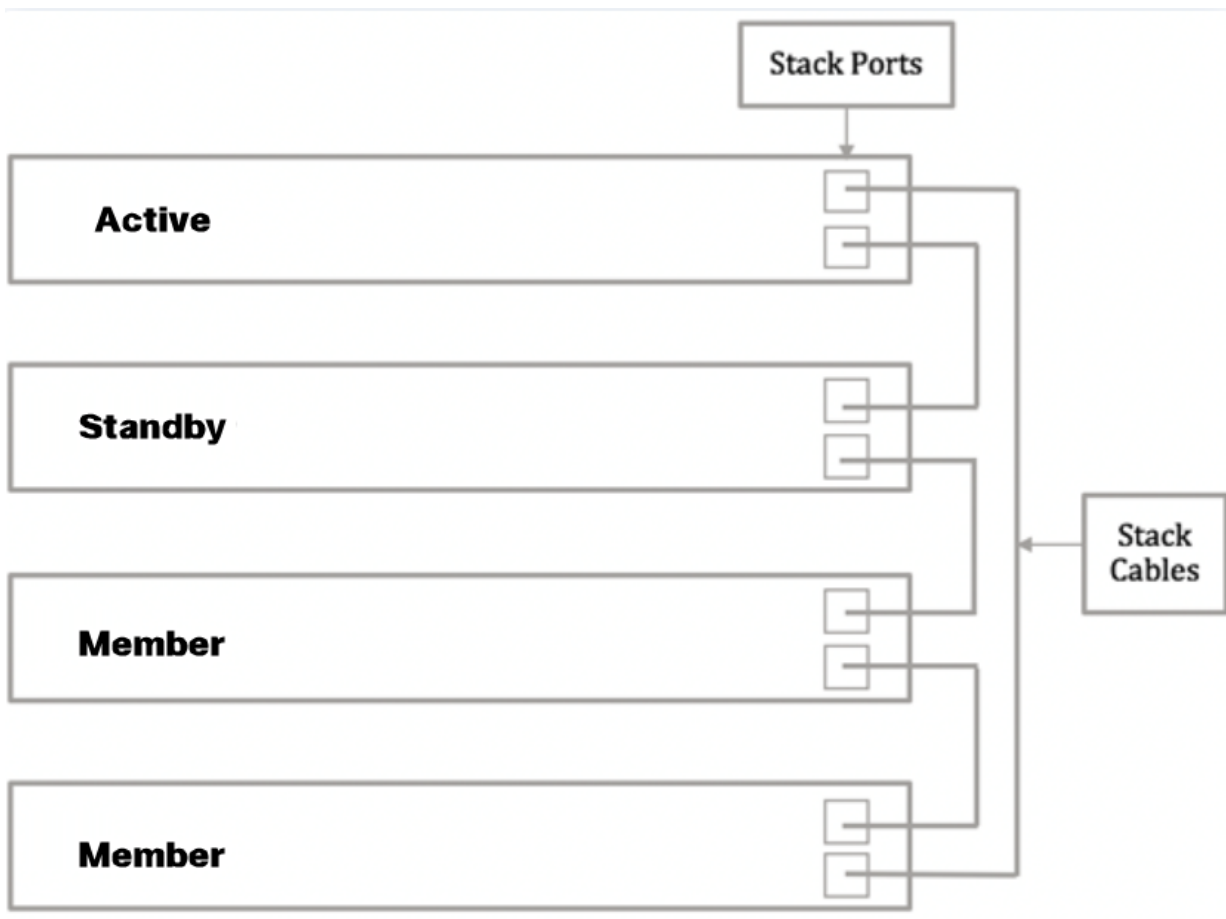
Step 2. Connect one end of a Small Form-Factor Pluggable (SFP) into the SFP+, XG3, or XG4 port of your switch.

In this example, the cable is connected to XG3 port of the switch. It is also possible to stack switches using conventional Ethernet cables on the XG1 and XG2 ports. Performance offered is similar at short ranges, however for cable runs longer than 100 meters, SFP provides less latency and greater reliability.

Step 3. Connect the other end of the SFP+ cable into the SFP+, XG3 or XG4 port of your switch.

In this example, the cable is connected to XG3 port of the switch.

Step 4. Repeat Steps 2 to 3 to the remaining switches.

You should now have connected your switches according to your desired topology.

Configure Stack Settings on the Active Switch

Active Selection Process

The Active unit is selected from the Active-enabled units (1 or 2). The factors in selecting the Active unit are taken into account in the following priority:

- System Up Time — The Active-enabled units exchange up-time, which is measured in segments of 10 minutes. The unit with the higher number of segments is selected. If both units have the same number of time segments, and the unit ID of one of the units was set manually while the unit ID of the other was set automatically, the unit with the manually-defined unit ID is selected; otherwise the unit with the lowest unit ID is selected. If both units IDs are the same, the unit with the lowest MAC address is chosen.
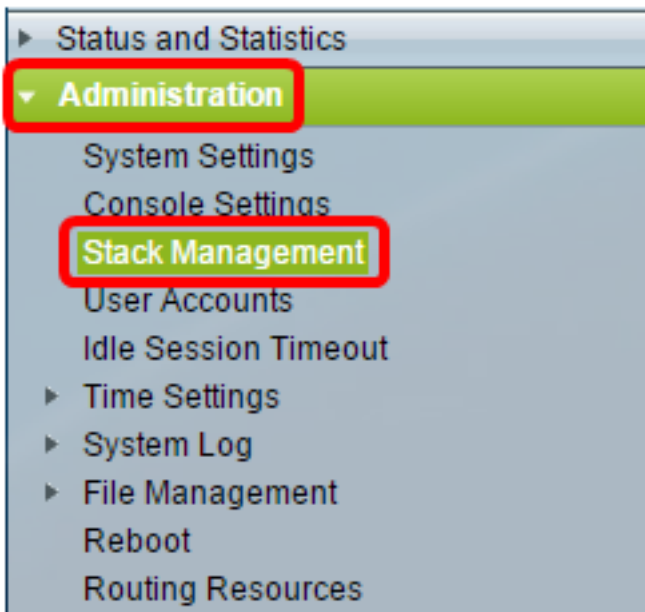
The up time of the Standby unit is retained when it is selected as Active in the switch failover process.

- Unit ID — If both units have the same number of time segments, the unit with the lowest unit ID is selected.
- MAC Address — If both units IDs are the same, the unit with the lowest MAC address is chosen.

For a stack to operate, it must have a Active unit. A Active unit assumes the Active role. The stack must contain a Unit 1 and/or Unit 2 after the Active switch selection process. Otherwise, the stack and all its units are partially shut down, not as a complete power-off, but with traffic-passing capabilities halted.

Follow these steps to configure stack settings on the Active switch:

Step 1. Log in to the web-based utility of your switch then choose **Administration > Stack Management**.
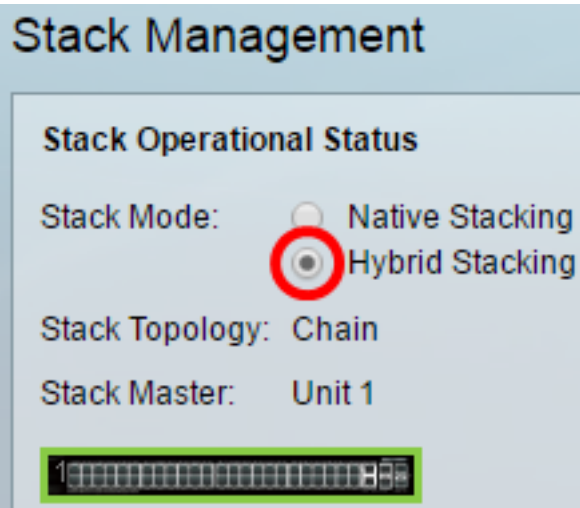
Alternatively, you can click the **Manage Stack** option under Initial Setup in the Getting Started page.

Step 2. Click an option for the Stack Mode. The options are:

- Native Stacking — The switch is part of a stack in which all of the units are of the same type.
- Hybrid Stacking — The switch is part of a stack that can consist of either mixed types of Sx350 devices or mixed types of Sx550 devices, but not a mix of Sx350 and Sx550 devices.

In this example, Hybrid Stacking is chosen.

The Stack Topology displays whether the topology of the stack is chain or ring. In this example, the topology is Chain.

The Stack Active switch displays the unit ID of the Active unit of the stack. In this example, the switch being configured (Unit 1) is the Active of the stack.

Step 3. Click at least two ports to configure as stacking ports. Include the port that is connected to the other switch.
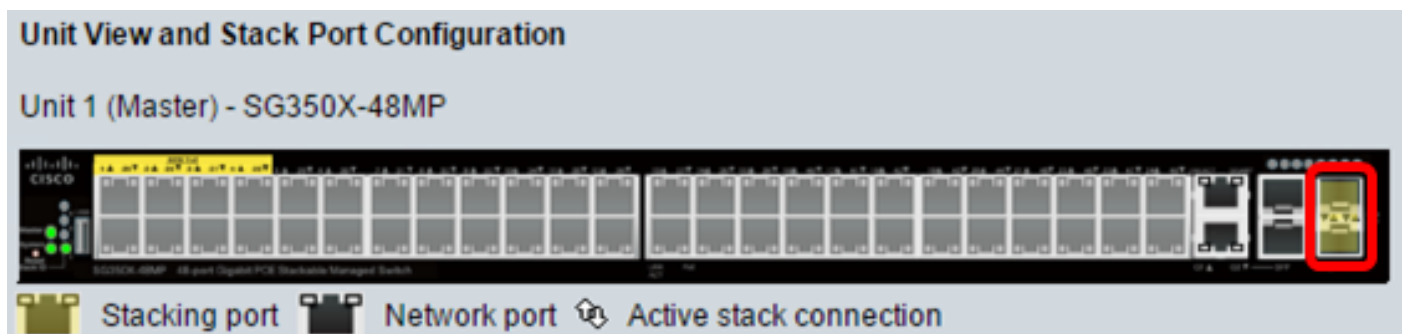
In this example, XG3 and XG4 are chosen.

Step 4. Choose a unit ID from the drop-down list or choose Auto to have the unit ID be assigned by the system.
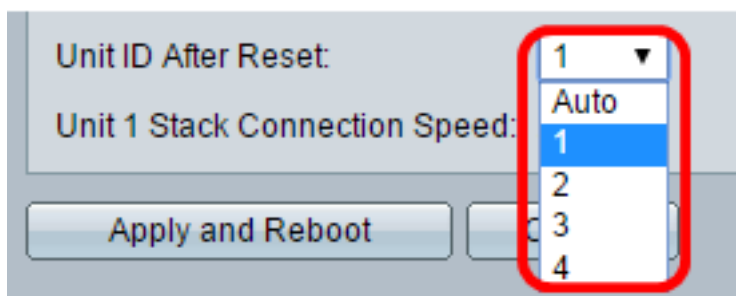
In this example, 1 is chosen.

The Unit x Stack Connection Speed displays the speed of the stack connection.

Step 5. Click **Apply and Reboot**.

Stack Management

Stack Operational Status

Stack Mode: ○ Native Stacking
⦿ Hybrid Stacking

Stack Topology: Chain

Stack Master: Unit 1

Unit View and Stack Port Configuration

Unit 1 (Master) - SG350X-48MP

🖳 Stacking port 🖳 Network port ⬡ Active stack connection

Unit ID After Reset: [1 ▼]

Unit 1 Stack Connection Speed: Auto

[Apply and Reboot]   [Cancel]

Step 6. Once prompted by the popup message, click **OK**. The settings are copied to the running configuration file and the stack is rebooted.

Changing the system mode will delete the startup configuration file and immediately reset the device. It is highly recommended that you back up the configuration file before proceeding.

Would you like to continue?

[OK]   [Cancel]

Step 7. Log in to the web-based utility of your switch.

You will be required to configure new password for better protection of your network.

Step 8. Enter the user password of the switch in the *Old Password* field.

Step 9. Enter the new password in the *New Password* and *Confirm Password* fields.

Step 10. (Optional) Check the **Disable** Password Complexity Enforcement check box to bypass the password strength requirements.
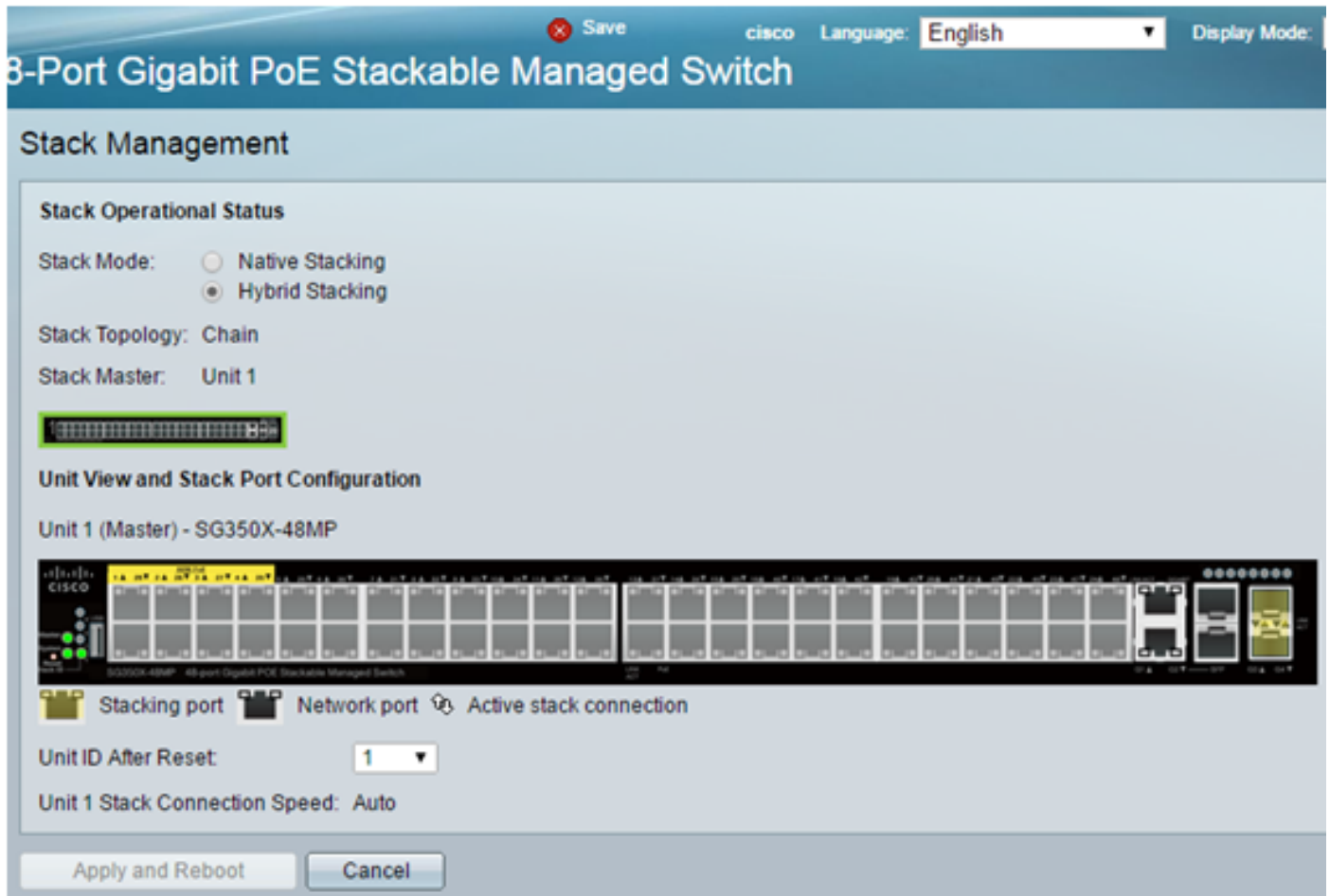

To learn how to configure the Password Strength security feature of the switch, click here for instructions.

Step 11. Click **Apply** to apply the configuration.

Step 12. Choose **Administration > Stack Management**.

The switch should display the configured settings on the Active switch.

You should now have configured the stack settings of your Active unit.

Configure Stack Settings on the Standby or Member Switch

Step 1. Log in to the web-based utility of your switch then choose **Administration > Stack Management**.

Alternatively, you can click the **Manage Stack** option under Initial Setup in the Getting Started page.

Step 2. Click an option for the Stack Mode. The options are:

- Native Stacking — The switch is part of a stack in which all of the units are of the same type.
- Hybrid Stacking — The switch is part of a stack that can consist of either mixed types of Sx350 devices or mixed types of Sx550 devices, but not a mix of Sx350 and Sx550 devices.

In this example, Hybrid Stacking is chosen.

The Stack Topology displays whether the topology of the stack is chain or ring.

The Stack Active displays the unit ID of the Active unit of the stack.

Step 3. Click at least two ports to configure as stacking ports. Include the port that is connected to the other switch.
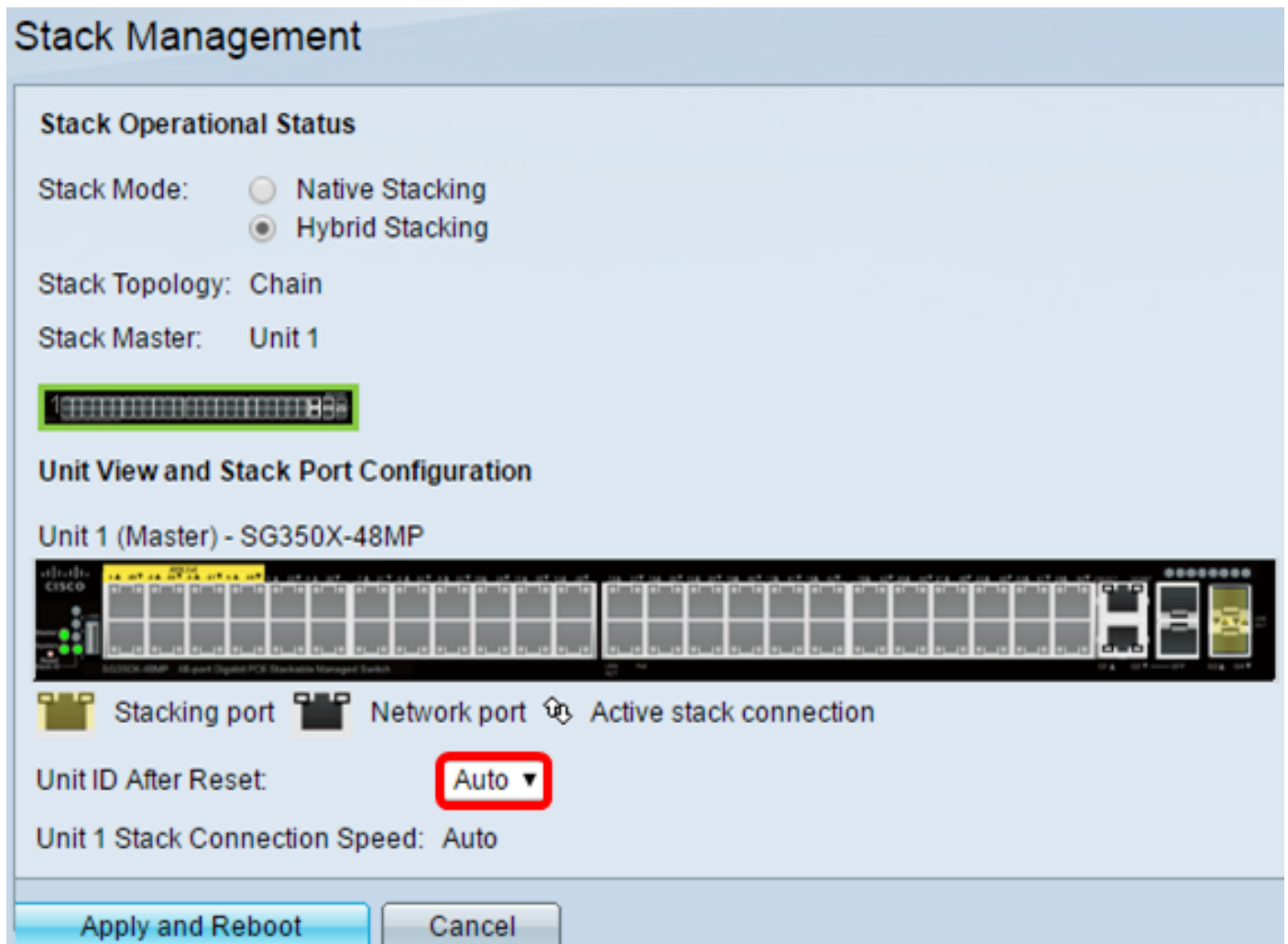

In this example, XG3 and XG4 are chosen.

Step 4. Choose a unit ID from the drop-down list or choose Auto to have the unit ID be assigned by the system.

In this example, Auto is chosen.

The Unit x Stack Connection Speed displays the speed of the stack connection.

Step 5. Click **Apply and Reboot**.

Step 6. Once prompted by the popup message, click **OK**.

The switch will reboot and apply the configuration settings.

Step 7. Log in to the web-based utility of your Active switch then choose **Administration > Stack Management**.

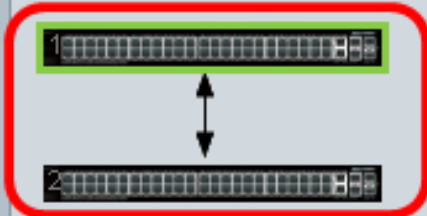The Stack Management page of the Active switch should display the configured switch.

Stack Management

Stack Operational Status

Stack Mode: ○ Native Stacking
       ⦿ Hybrid Stacking

Stack Topology: Chain

Stack Master: Unit 1

Unit View and Stack Port Configuration

Unit 1 (Master) - SG350X-48MP

▦ Stacking port   ▦ Network port   ⬗ Active stack connection

Unit ID After Reset: 1   ▼

Unit 1 Stack Connection Speed: Auto

[Apply and Reboot]   [Cancel]

Step 8. Click the Standby switch to check the configured settings. The configured ports should display the Stacking port and Active stack connection icons.

Step 9. Repeat Steps 1 to 8 to configure the Member units.

You should now have configured the stack settings on your switches.

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