

Stack Setting on ESW2-550X Series Stackable Switches

Objective

The stacking of switches allows the configuration and management of all the switches in the stack as one logical switch. The stack can be thought as a single unit wherein all ports on any of the stacked switches can be used and configured from the Active unit in the stack. ESW2-550X runs on both layer 2 and layer 3 mode.

This article explains how to configure a stack on the ESW2-350G Series Stackable Switches.

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

Selection of the Active switch is depended on some constraints, refer to the article [Active Switch Selection on ESW2-550x Stackable Switches](#) for details.

Applicable Devices

- ESW2-550X
- ESW2-550X-DC

Software Version

- 1.3.0.62

Initial Stack Configuration

Step 1. Log in to the web configuration utility and choose **Administration > System Mode and Stack Management**. The *System Mode and Stack Management* page opens:

System Mode and Stack Management

Operational Status

Stack Mode: Native Stacking
Stack Topology: Chain
System Mode: L3
Stack Master: Unit 1
Master Election Status: Automatic Master Election

Administrative Status

System Mode: L2 Mode L3 Mode

Stack Administrative Settings Table

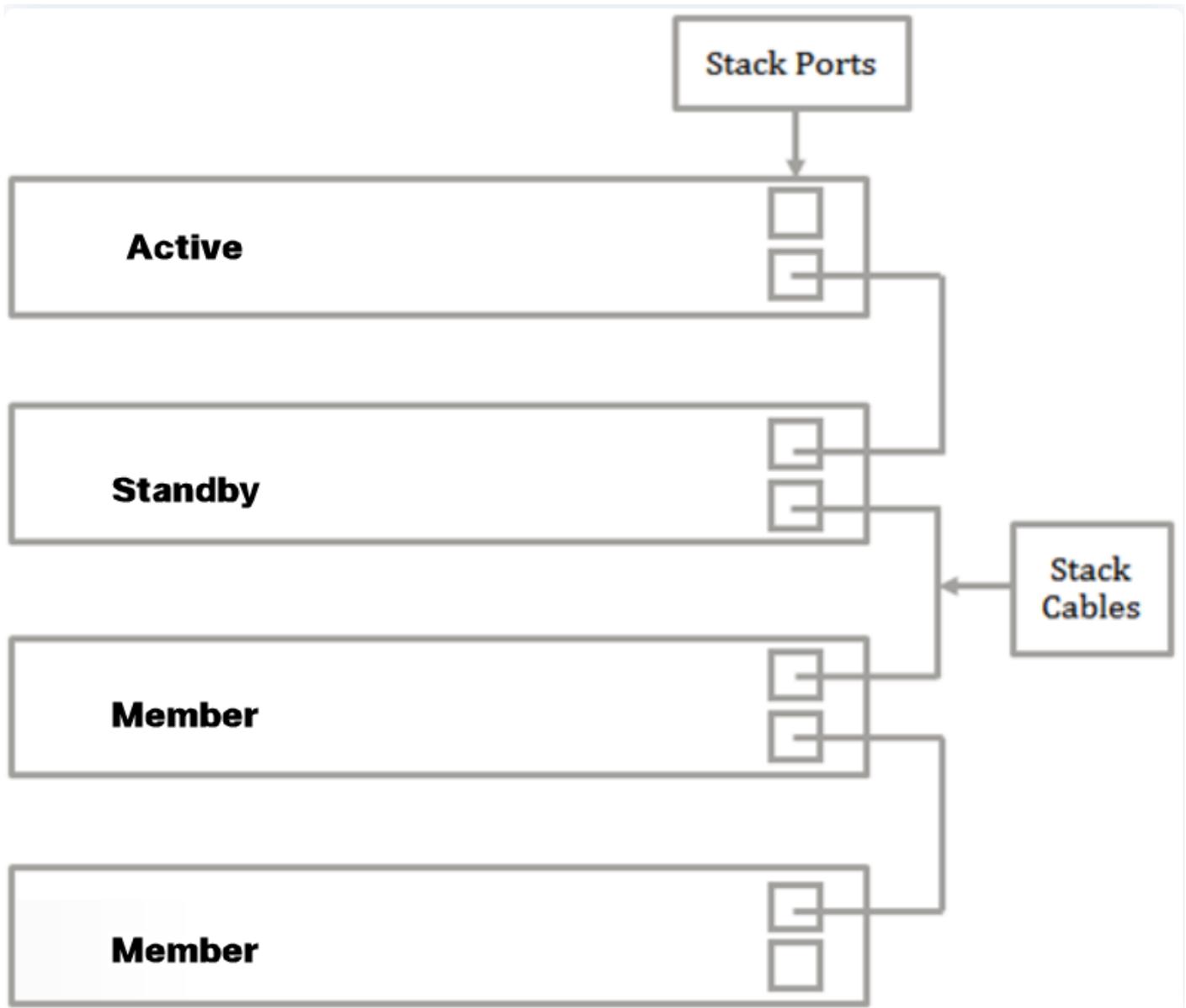
Stack Unit Number	Model Name	Stack Connection 1			Stack Connection 2			Configuration After Reboot			
		Port	Speed	Neighbor	Port	Speed	Neighbor	Stack Unit Mode	Stack Unit Number	Stack Ports	Stack Ports Speed
1	ESW2-550X-48	S1	N/A	N/A	S2	N/A	N/A	Native Stacking	1	S1-S2 5G Stack	Auto

Apply and Reboot Cancel

The Operational Status area displays the following information:

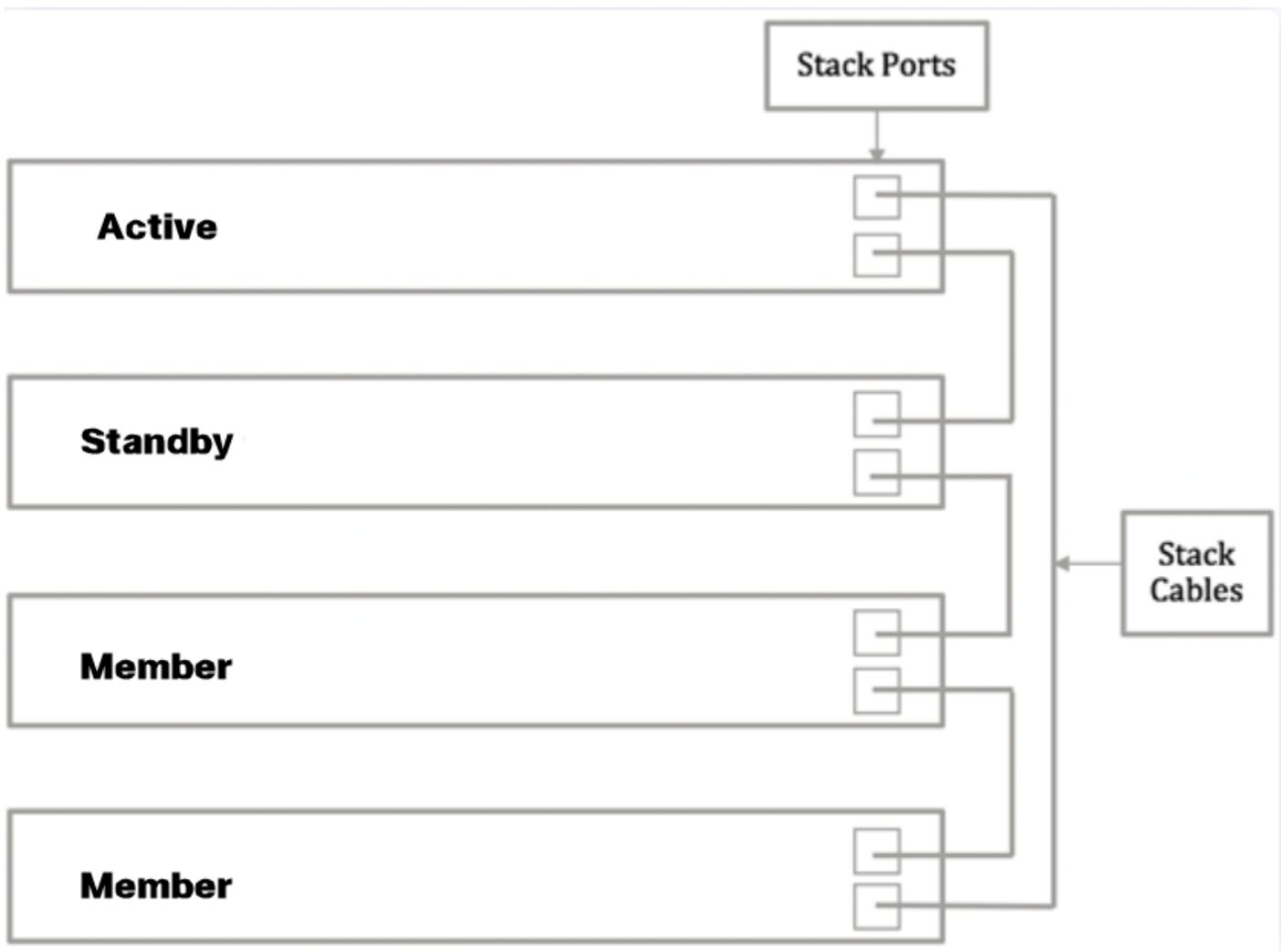
- Stack Mode — Displays whether the device is part of a stack or not.

- Standalone — The switch is not a part of a stack and act alone.
- Native Stacking — The switch is part of a stack and act as Active/Member/Standby based on user configuration.
- Stack Topology — If the switch is part of a stack, this field displays what type of stack topology it is using.



– Chain — The switch is a part of a stack using the chain topology. The illustration below shows an example chain stack topology. A chain stack topology does not have full redundancy. If a stack cable connection fails, two switch stacks will be formed.

The switch stack may differ based on which stack ports are used, how the stack cables are oriented, and the Active switch election process.



– Ring — The switch is part of a stack using the ring topology and has full redundancy. The illustration below shows an example of a ring stack topology. If a stack cable connection fails in the ring topology, the stack will revert to a chain topology but will still act as one stack. Repair or replace the faulty link to return back to a ring topology.

The switch stack may differ based on which stack ports are used, how the stack cables are oriented, and the Active switch election process.

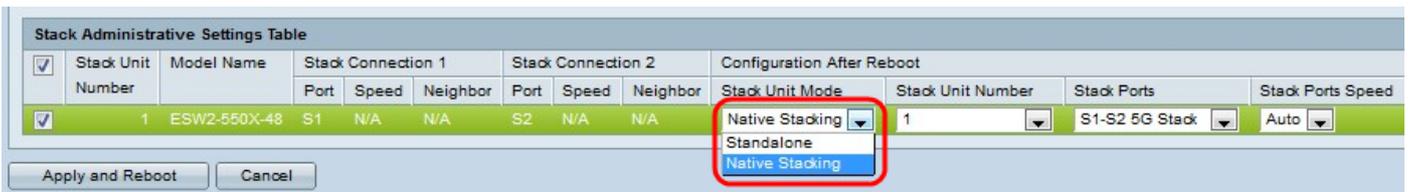
- System Mode — Displays whether the devices in the stack are in Layer 2 or Layer 3 mode. Layer 3 mode supports routing functionalities.
- Active Election Status — Displays how the stack Active unit was chosen. The possible options are:
 - Force Active — Denotes that the Active is user selected and forced.
 - System Up Time — Denotes that the Active is selected based on the number of time segments (Up time). The highest number will be the Active where a segment is 10 minutes.
 - Unit ID — Denotes that the Active is selected based on the lowest Unit ID.
 - MAC Address — Denotes that the Active is selected based on the lowest available MAC address.

Step 2. Check the check box next to the switch that needs to change stack settings for in the Stack Administration Settings Table.

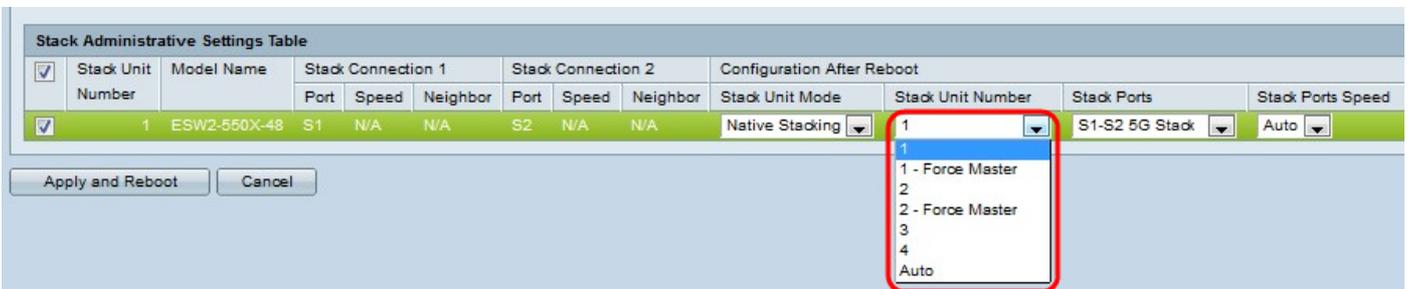
The following information of the switch is displayed:

- Stack Unit Number — The unit ID of the switch in the stack.
- Model Name — The model name of the switch.
- Stack Connection 1 — The information about the port, speed and neighbor to the switch to troubleshoot, configure or to understand the stack connection.
 - Port — Port with which the stack is configured. Example : S1,XG1 etc.
 - Speed — Speed of the connection with which the stack is maintained.
 - Neighbor — Neighbor switch to present switch.

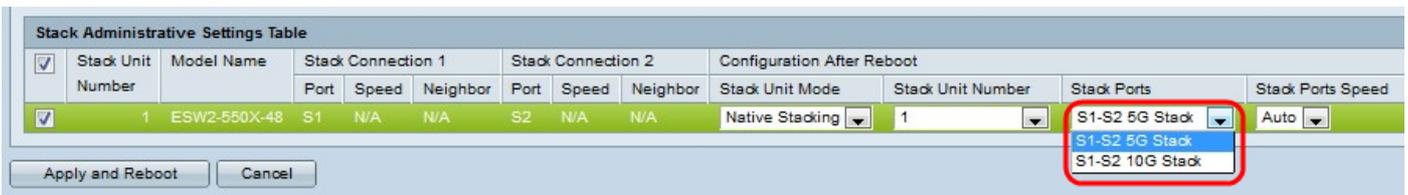
Similar to Stack connection 1, the Stack Connection 2 information would be displayed but Stack Connection 2 information would be of the other switch.



Step 3. Choose **Native Stacking** from the Stack Unit Mode drop-down list.



Step 4. Choose the unit number for the switch in the stack from the Stack Unit Number drop-down list. Choose Auto if you would like the system to number the unit. Choose 1,2,3 to assign the unit to be the designated unit number. Choose 1-Force Active or 2-Force Active to assign the unit number and to make it the Active unit after reboot.



Step 5. Choose the pair of ports on the switch to be used for stacking from the Stack Ports drop-down list.

Optic fiber has to be used for stacking on ESW2-350G series switches.

Stack Administrative Settings Table												
Stack Unit Number	Model Name	Stack Connection 1			Stack Connection 2			Configuration After Reboot				
		Port	Speed	Neighbor	Port	Speed	Neighbor	Stack Unit Mode	Stack Unit Number	Stack Ports	Stack Ports Speed	
<input checked="" type="checkbox"/>	1	ESW2-550X-48	S1	N/A	N/A	S2	N/A	N/A	Native Stacking	1	S1-S2 5G Stack	Auto

Apply and Reboot Cancel

Step 6. Choose the port speed of the stack from the Stack Ports Speed drop-down list. The possible values are 1G (1 Gigabit) and 5G (5 Gigabit). If the connection is 100 Mbps, only 1G option would be available at the drop-down list.

Step 7. Click **Apply and Reboot** to reboot the device with the configured settings. Rebooting the switch takes 1-2 minutes.

System Mode and Stack Management

Operational Status

Stack Mode: Native Stacking
Stack Topology: Chain
System Mode: L3
Stack Master: Unit 1
Master Election Status: Automatic Master Election

Administrative Status

System Mode: L2 Mode L3 Mode

Stack Administrative Settings Table												
Stack Unit Number	Model Name	Stack Connection 1			Stack Connection 2			Configuration After Reboot				
		Port	Speed	Neighbor	Port	Speed	Neighbor	Stack Unit Mode	Stack Unit Number	Stack Ports	Stack Ports Speed	
<input type="checkbox"/>	1	ESW2-550X-48	S1	N/A	N/A	S2	5G	Unit2	Native Stacking	1	S1-S2 5G Stack	Auto
<input checked="" type="checkbox"/>	2	ESW2-550X-48	S1	5G	Unit1	S2	N/A	N/A	Native Stacking	2	S1-S2 5G Stack	Auto

Apply and Reboot Cancel

Step 8. Connect the switches that require stacking by inserting the appropriate cables into the appropriate stacking ports as designated in Step 6. You may then configure the rest of the switches using the above steps.