

Feature Support Comparison Between the Cisco Stackable Managed Switches for Hybrid Stacking

Objective

The Hybrid Stacking feature of the Cisco 350X and 550X Series enables you to stack a combination of SG350X and SG350XG, and Sx550X and SG550XG devices together, which allows you to make use of the supported features of all the devices in the stack.

To join a unit to a hybrid stack it must be first configured in Hybrid mode. This is done by setting the Stack Mode to Hybrid Stacking in the Stack Management page, as described below.

The objective of this document is to show the feature support comparison between the SG350X and SG350XG, and Sx550X and SG550XG Stackable Managed Switches.

If you would like information on the actual Configuration, check out this article: [Configure Stack Settings on an SG350X Switch](#).

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

Applicable Devices

- SG350X Series
- SG350XG Series
- Sx550X Series
- SG550XG Series

Software Version

- 2.2.5.68

Change Stacking Mode

Change of stacking mode requires system reboot and changing from Native to Hybrid mode erases device configuration. Before changing from the Native to the Hybrid mode, it is recommended to save the configuration file to an external server (for example via TFTP or HTTP).

Changing from Hybrid Stacking mode to Native Stacking mode does not erase the configuration.

In addition, the 2-4 XG ports of the Sx350X/Sx550X units must be configured as stacking ports, and connected to the SG350XG/SG550XG devices stacking ports.

The feature set of the Sx350X and SG350XG is the same, and similarly the feature set of the Sx550X and SG550XG is the same. However there are a few differences in feature support and table sizes. For these features, hybrid stack supports the lowest denominator for these features/tables. The following is list of differences per each hybrid stack type, and the setting used

in each unit type and in the hybrid stack:

550X and 550XG Feature Support Comparison

Out-of-Band (OOB) Port	Not Supported	Supported	Not Supported
Media Access Control (MAC) table size	16K	64K	16K
Access Control List (ACL) Ternary content-addressable memory (TCAM)	3K – reserved	2K – reserved	2K – reserved
Address Resolution Protocol (ARP) table size	4K – reserved	8K – reserved	4K – reserved
Max MAC table aging	400	630	400

550X and 550XG Feature Support Comparison

OOB Port	Not Supported	Supported	Not Supported
MAC table size	16K	64K	16K
ACL TCAM	1K – reserved	2K – reserved	1K – reserved
Router TCAM	992 (affects also default and Max setting per each type)	7168 (affects also default and Max setting per each type)	992 (affects also default and Max setting per each type)
ARP table size	1K – reserved	8K – reserved	1K – reserved
Number of Multicast groups	2K	4K	2K
Max number of IPv6 interfaces	106	200	106
Max number of IPv6 hosts	210	1776	210
Max Onlink IPv6 Prefix	200	256	200
Max MAC table aging	400	630	400
IPv6 Manual Tunnel/ 6tp4 tunnel/ Intra-Site Automatic Tunnel Addressing Protocol (ISATAP) routing tunnel	Not supported	Supported	Not supported

Consistency of Stack Unit Modes in the Stack

All units in the stack must have the same stack unit mode.

When the stack is initialized, it runs a topology discovery algorithm that collects information on the units of the stack.

After a unit is selected to become the active switch, it can reject its neighbor's request to join the stack if it has an inconsistent stack unit mode. When a unit is rejected because of its stack unit mode, it is logically shutdown (the ports cannot send/receive traffic) and all its LEDs (system, FAN, unit IDs, network ports and stack ports LEDs) are turned on. The information regarding the stack unit mode is displayed as a SYSLOG error in the active switch.

Note that the only way for the unit to recover from this state is by unplugging it from the electrical

source and plugging it back in. This operation must be performed when an affected unit is disconnected from the stack. After this operation, the affected unit mode can be changed to the current stack mode and the unit can be rejoined to the stack.

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