Smartport Best Practices for Sx250, Sx350, SG350X, and Sx550X Series Switches

Objective:

The objective of this document is to explain some best practices when dealing with Smartports on Sx250, Sx350, SG350X, and Sx550X series switches.

Applicable Devices | Software Version

- Sx250 Series | 2.5.7 (download latest)
- Sx350 Series | 2.5.7 (download latest)
- SG350X Series | 2.5.7 (download latest)
- Sx550X Series | 2.5.7 (download latest)

Introduction

Let's talk about the Smartport feature and if it is right for you!

As you may know, Smartports apply a preconfigured setup to a switch port based on the type of device that you connect. Auto Smartport lets the switch apply these configurations to interfaces automatically when it detects the device.

Smartports have preset configurations for a printer, desktop, guest, server, host, IP camera, IP phone, switch, router, and wireless access points.

Smartports are beneficial if you aren't setting up VLANs and you aren't sure what device you will be putting into the ports. That being said, if you are setting up VLANs and you know what devices will go into the ports, you may run into problems with the Smartport feature and you may want to <u>disable Smartport globally</u>.

In many other situations, the Smartport feature can be a huge time-saver in a network. However, there may be times, even in a simple network, that it causes issues and makes things more complicated. We will sort through some options so you can configure the Smartport feature most effectively on your network.

For many of you, this feature was enabled on your switch by default. Keep reading to learn more.

How to know if your Smartport feature is enabled

Check your firmware version

If you have firmware version 2.5.5.47 and earlier, the Smartport feature is enabled by

default. So, unless you changed this setting, it is enabled.

If you have a 2.4.5.47 (or earlier) firmware version and you upgrade to the latest (released February 2021) 2.5.7 version (or later when available), the default setting will remain with the Smartport feature enabled.

If you purchase a router that has the 2.5.7 firmware version (or later), the firmware will have the Smartport feature **disabled** by default. This change was made because some customers didn't necessarily want to use the Smartport feature or it was causing an issue with connectivity and customers didn't realize it was enabled.

If you would like detailed steps for upgrading firmware, check out Upgrade Firmware on a Switch.

Manually check to see if the Smartport feature is enabled

If you aren't sure if you have the feature enabled, you can check.

Step 1

Navigate to **Smartport > Properties**.



Step 2

At this location, you can view the Smartport settings or simply <u>disable the feature</u> if you choose.

Properties Telephony OUI is currently disabled. Auto Smartport and Telephony OUI are mutually exclusive.						
Administrative Auto Smartport: Disable Enable Enable by Auto Voice VLAN 	Operational Auto Smartport: Enabled					
Apply Cancel						

Step 3 (Optional)

For more options, change Display Mode from Basic to Advanced. This is located in the

top-right corner of your screen.

	n aliah		Display Made	Advenced	Logout	About
Language:	ngiisn	\sim	Display Mode:	Advanced V	Logout	ADOUL
				Basic		
				Advanced		

Step	4	(Opt	tiona	I)
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Make adjustments that best fit your network. Click Apply.

Properties Telephony OUI is currently disabled. Auto Smartport and Telephony OUI are mutually exclusive.								
Administrative Auto Smartport:	••••	Disable Enable Enable by Auto Voice VLAN	Operational Auto Smartport:	Enabled				
Auto Smartport Device Detection Method:		CDP	Operational CDP Status:	Enabled				
		LLDP	Operational LLDP Status:	Enabled				
Auto Smartport Device Detection:		Host IP Phone IP Phone + Desktop Switch Router Wireless Access Point						
Apply Cancel								

Step 5

To permanently save your configurations, click **Save** on the top right of your screen.



Options for the Smartport feature

If you are unaware of what devices will be connected to switch or unaware of the network topology, as in what devices will be in the network, Smartport may be an effective option. In order to increase the efficacy of Smartport, you can enable or disable it by individual port, or globally for all ports.

Configuring by port

If you are unaware of what device will be connected, identify which port the device will be connected to and configure the port.

Step 1

Log into the Switch.

սիսիս Switch cisco	Application: Switch Management V Username:
	 Password: Language: English Log In Secure Browsing (HTTPS)
© 2011-2017 Cisco Systems, Inc. Cisco, Cisco Systems, and the Cis United States and certain other co	All Rights Reserved. sco Systems logo are registered trademarks or trademarks of Cisco Systems, Inc. and/or its affiliates in the untries.

Step 2

Once in the Web User Interface (UI), change Display Mode from *Basic* to *Advanced*. This is located in the top-right corner of your screen.

Language:	English	~	Display Mode:	Advanced ~	Logout	About
				Basic		
				Advanced		

Step 3

Choose **Smartport > Properties**.



Step 4

Select *Disable* next to *Administrative Auto Smartport*, to disable the Smartport globally on the switch. Click **Apply**.

This will disable the Smartport on all interfaces but will not affect manual VLAN configurations.

Properties								
Telephony OUI is currently disabled. Auto Smartport and Telephony OUI are mutually exclusive.								
Administrative Auto Smartport:	Disable Enable Enable by Auto Voice VLAN	Operational Auto Smartport:	Disabled					
Auto Smartport Device Detection Method:	CDP	Operational CDP Status:	Enabled					
		Operational LLDP Status:	Enabled					
Auto Smartport Device Detection:	 Host ✓ IP Phone ✓ IP Phone + Desktop ✓ Switch Router ✓ Wireless Access Point 							
Apply Cancel								



Go to Smartport > Interface Settings.

Getting Started
Dashboard
Configuration Wizards
Search
 Status and Statistics
 Administration
 Port Management
✓ Smartport 1
Properties
Smartport Type Settings
Interface Settings (2)
 VLAN Management

Step 6

Once on Smartport interface settings, choose a port and click Edit.

0	7	GE7	
0	1 8	GE8	
0	9	GE9	
\bigcirc	10	GE10	2
	Copy Sett	Edit	

Step 7

Choose Auto Smartport on that interface if you are unaware of what type of device may be connected and that port will not be part of a VLAN.

ajaji Cisco	Edit Interface Settings - Google C	Chrome	—		×
Í	cisco.com/assets/sol/sb/Sv	vitches_Emulators_v2_2_015/smart/port_settings_e.htm			
Γ	Interface:	● Unit 1 ▼ Port GE1 ▼ ◯ LAG 1 ∨			
	Smartport Type: IP Phone Smartport Application: Auto Smartport				
	Smartport Application Method:	Static			
	Persistent Status:	Enable			
	Macro Parameters				
	Parameter 1 Name:	\$max_hosts			
	Parameter 1 Value:	10			
	Parameter 1 Description:	The maximum number of allowed devices on the port			
	Parameter 2 Name:	\$native_vlan			
	Parameter 2 Value:	1			
	Parameter 2 Description:	The untag VLAN which will be configured on the port			
	Parameter 3 Name:	\$voice_vlan			
	Parameter 3 Value: 1				
	2 peter 3 Description:	The voice VLAN ID			
C	Apply Close	Reset			

Step 8

To permanently save your configurations, click **Save** on the top right of your screen.



Enable or disable the Smartport feature on all ports

Step 1

Choose **Smartport > Properties**.



Step 2

Make sure you are in *Advanced* mode. This is located in the top-right corner of your screen.



Select *Enable* or *Disable* next to *Administrative Auto Smartport*, to enable or disable the Smartport globally on the switch. Click the **Apply** button.

This will enable or disable the Smartport feature on all interfaces. If you choose to enable the feature, this may affect manual VLAN configurations.

Properties				
Telephony OUI is currently disabled. Auto Sm	nartp	ort and Telephony OUI are mutually	v exclusive.	
Administrative Auto Smartport:		Disable Enable Enable by Auto Voice VLAN	Operational Auto Smartport:	Enabled
Auto Smartport Device Detection Method:		CDP	Operational CDP Status:	Enabled
		LLDP	Operational LLDP Status:	Enabled
Auto Smartport Device Detection:		Host IP Phone IP Phone + Desktop Switch Router Wireless Access Point		
Apply Cancel				



To permanently save your configurations, click **Save** on the top right of your screen.



Conclusion

Smartport can be very convenient and can eliminate a lot of guesswork on unknown networks. This guide went over the best ways to configure Smartport in case it may be efficient for your network. If you encounter problems with your Smartports, check out **Troubleshoot Smartports on your Sx250, Sx350, SG350X, or Sx550X Series** <u>Switch</u>.