

## **Quick Start Guide**



Cisco Small Business
200 Series Smart Switches

### Welcome

Thank you for choosing the Cisco 200 Series Smart Switch, a Cisco Small Business network communications device. This device is designed to be operational right out-of-the-box as a standard bridge. In the default configuration, it will forward packets between connecting devices after powered up.

#### **Package Contents**

- Cisco SF 200-24, SF 200-24P, SF 200-48, SF 200-48P, SG 200-18, SG 200-26, SG 200-26P, SG 200-50, or SG 200-50P Smart Switch.
- Rackmount Kit.
- Power Cord.
- This Ouick Start Guide.
- Product CD.

This guide will familiarize you with the layout of the smart switch and describe how to deploy the device in your network. For additional information, see <a href="https://www.cisco.com/smb">www.cisco.com/smb</a>.



## **Mounting the Cisco Switch**

There are two ways to mount the switch:

- · Set the switch on a flat surface.
- Mount the switch in a standard rack (1 rack unit high).

Do not mount the device in a location where any of the following conditions exist:

**High Ambient Temperature**—The ambient temperature must not exceed 104 degrees Fahrenheit (40 degrees Centigrade).

**Reduced Air Flow**—Both side panels must be unobstructed to prevent overheating.

**Mechanical Overloading**—The device must be level, stable, and secure to prevent it from sliding or shifting out-of-position.

**Circuit Overloading**—Adding the device to the power outlet must not overload that circuit.

#### **Rack-Mount Placement**

If your switch is rack-mount capable, it will come with a rack-mount kit. To rack-mount the switch in any standard rack, attach the brackets to the sides of the switch with the supplied hardware and secure the brackets.



For stability, load the rack from the bottom to the top, with the heaviest devices on the bottom. A top-heavy rack is likely to be unstable and might tip over.

2

### **Connecting Network Devices**

To connect the smart switch to the network:

- STEP 1 Connect the Ethernet cable to the Ethernet port of a computer, printer, network storage, or other network device.
- STEP 2 Connect the other end of the Ethernet cable to one of the numbered smart switch Ethernet ports.
  - The LED of the port lights if the device connected is active. Refer to Features of the Cisco Small Business Smart Switch, page 7 for details about the different ports and LEDs on each switch.
- STEP 3 Repeat Step 1 and Step 2 for each device you want to connect to the smart switch.

NOTE Cisco recommends using Cat5 or better cable for Gigabit connectivity. When you connect your network devices, do not exceed the maximum cabling distance of 328 feet (100 meters). It can take up to one minute for attached devices or the LAN to be operational after they are connected. This is normal behavior.

#### **Power over Ethernet Considerations**

If your switch is one of the Power over Ethernet (PoE) models, consider the following power requirement:

 As a Power Sourcing Equipment (PSE) device, the switch can deliver a maximum of 15.4 Watts per PoE port to a Powered Device (PD).

#### PoE is available on the following ports:

Model	Ports
SF 200-24P and SG 200-26P	1—6 and 13—18
SF 200-48P and SG 200-50P	1—12 and 25—36

Use the following table to determine the total power budget available for all devices on your switch.

Model	Power Dedicated to PoE
SF 200-24P	100 Watts
SF 200-48P	180 Watts
SG 200-26P	100 Watts
SG 200-50P	180 Watts

## 3

## **Configuring the Cisco Small Business Smart Switch**

#### **Before You Begin**

Verify that a computer with Microsoft Internet Explorer (version 6 or higher) or Firefox (version 2.0 or higher) is available.

#### Accessing and Managing Your Switch Using the Web-Based Interface

In order to access the switch with a web-based interface, you must know the management IP address of the switch. The default configuration of the switch is to use its factory default IP address of **192.168.1.254** until it has obtained an IP address from a DHCP server, or it has been changed to a static IP address.

When the switch is using the factory default IP address, its System LED flashes continuously. When the switch is using a DHCP assigned IP address or an administrator configured static IP address, the System LED lights steady.

**Note** If the smart switch IP address is changed, either by a DHCP server or manually, your access to the smart switch will be lost and you must use the new IP address to configure the device.

To configure the smart switch:

- STEP 1 Power on the computer and the switch.
- STEP 2 Connect the computer to the switch. You can connect to the same IP subnet as the switch by connecting them directly with an

Ethernet cable, or by connecting to the same LAN where the switch is located through other switches. You can also connect your computer to the switch from another IP subnet through one or more IP routers.

- STEP 3 Set up the IP configuration on your computer.
  - a. If the switch is using the default static IP address of 192.168.1.254, you must choose an IP address in the range of 192.168.1.1—192.168.1.253 that is not already being used by another device.
  - b. If the IP addresses will be assigned by DHCP, make sure your DHCP server is running and can be reached from the switch and the computer. You might need to disconnect and reconnect the devices for them to discover their new IP addresses from the DHCP server.

**Note** Details on how to change the IP address on your computer depend upon the type of architecture and operating system you are using. See your computer's local Help and Support functionality and search for "IP Addressing."

- STEP 4 Open a Web browser window. If you are prompted to install an Active-X plug-in when connecting to the device, follow the prompts to accept the plug-in.
- STEP 5 Enter the switch IP address in the address bar and press **Enter**. For example, **http://192.168.1.254**.

The Smart Switch Login page displays.

**STEP 6** Enter the login information:

Username is cisco

Default password is cisco (passwords are case sensitive)

STEP 7 If this is the first time that you have logged on with the default username and password, the *Change Password* page opens. Enter a new administrator password and then click **Apply**.



Make sure that any configuration changes that you made are saved before exiting from the web-based interface by clicking on the **Save** icon, then clicking **Apply**. Exiting before you save your configuration will result in **all** changes being lost.

The **Getting Started** window displays. You are now ready to configure the switch. Refer to the *Cisco Small Business Smart Switch Administration Guide* for further information.

#### **Troubleshoot Your Connection**

If you cannot access your switch from the web-based interface, the switch might not be reachable from your computer. You can test network connections by using the **ping** command. The following section shows how to use "ping" in a Windows environment:

- STEP 1 Open a command window by using Start > Run and enter cmd.
- STEP 2 At the **Command** window prompt enter **ping** and the smart switch IP address. For example **ping 192.168.1.254** (the default IP address of the smart switch).

If you can reach the switch, you should get a reply similar to the following:

```
Pinging 192.168.1.254 with 32 bytes of data: Reply from 192.168.1.254: bytes=32 time<1ms TTL=128
```

If you cannot reach the switch, you should get a reply similar to the following:

```
Pinging 192.168.1.254 with 32 bytes of data: Request timed out.
```

#### **Possible Causes and Resolutions**

#### No Power:

Power up the switch and your computer if they are turned off.

#### Bad Ethernet connection:

Check the LEDs for proper indications. Check the connectors of the Ethernet cable to ensure they are firmly plugged into the switch and your computer.

#### Wrong or conflicting IP address:

Make sure that you are using the correct IP address of the switch. You can verify the current IP address of the switch with your network administrator. The System LED provides an indication of where the switch received the IP address, see Section 4 for details.

Make sure that no other device is using the same IP address as the switch.

#### No IP route:

If the switch and your computer are in different IP subnets, you need one or more routers to route the packets between the two subnets.

#### Unusually long access time:

Due to the spanning tree loop detection logic, adding new connections might take 30 to 60 seconds for the affected interfaces and/or LAN to become operational.



## **Features of the Cisco Small Business Smart Switch**

This section describes the exterior of the smart switches including ports, LEDs, and connections. Not all models will have all of the features described.

#### **Ports**

**RJ-45 Ethernet Ports**—Use these ports to connect network devices, such as computers, printers, and access points, to the switch.

**MiniGBIC (if present)**—The miniGBIC (gigabit interface converter) ports are connection points for miniGBIC modules, so the smart switch can uplink to other switches by using optical fiber.

- MiniGBIC ports are compatible with Cisco miniGBIC modules MGBSX1, MGBLH1, MGBLX1, MGBBX1, MFELX1, MFEFX1, and MFEBX1, as well as other brands of miniGBIC modules.
- MiniGBIC interface is a combination port, shared with one other RJ-45 interface. When the MiniGBIC is active, the adjacent RJ-45 port is disabled.
- The LEDs of the corresponding RJ-45 port flashes green to respond to the miniGBIC interface traffic.

#### **LEDs**

**System LED**—(Green) Lights steady when the switch is powered on, and flashes when booting, performing self tests, and acquiring an IP address. If the LED flashes amber, the switch has detected a hardware failure.

**LINK/ACT LED**—(Green) Located on the left of the port. Lights steady when a link between the corresponding port and another device is detected. Flashes when the port is passing traffic.

**NOTE** The System and LINK/ACT LEDs are on each model of the switch. The following LEDs are only present on switch models that have those capabilities:

**PoE (if present)**—(Amber) Located on the right of the port. Lights steady to indicate that power is being supplied to a device attached to the corresponding port.

**100M LED (if present)**—(Green) Located on the right of the port. Lights steady when another device is connected to the port, is powered on, and a 100 Mbps link is established between the devices. When the LED is off, the connection speed is under 100 Mbps or nothing is cabled to the port.

**Gigabit LED (if present)**—(Green) Located on the right of the port. Lights steady when another device is connected to the port, is powered on, and a 1000 Mbps link is established between the devices. When the LED is off, the connection speed is under 1000 Mbps or nothing is cabled to the port.

**MiniGBIC (if present)**—(Green) Located on the right of the port. Lights steady when a connection is made through the shared RJ-45 port. Flashes when the port is passing traffic.

#### **Additional Features**

The switch might also have a reset button. The switch can be reset by inserting a pin or paper clip into the reset opening. See "Returning the Device to the Factory Default Settings" for details.

#### **Back Panel**

The power port is located on the back panel of the smart switch.

5

# Returning the Device to the Factory Default Settings

To use the **Reset** button to reboot or reset the smart switch, do the following:

- To reboot the smart switch, press the Reset button for less than 10 seconds.
- To **restore** the smart switch configuration to the factory default settings:
  - Disconnect the smart switch from the network or disable all DHCP servers on your network.
  - 2. With the power on, press and hold the **Reset** button for more than 10 seconds.

## Where to Go From Here

6

Support		
Cisco Small Business Support Community	www.cisco.com/go/smallbizsupport	
Cisco Small Business Support and Resources	www.cisco.com/go/smallbizhelp	
Phone Support Contacts	www.cisco.com/en/US/support/tsd_cisco_small_business_support_center_contacts.html	
Cisco Small Business Firmware Downloads	www.cisco.com/go/smallbizfirmware	
	Select a link to download firmware for Cisco Small Business Products. No login is required.	
	Downloads for all other Cisco Small Business products, including Network Storage Systems, are available in the Download area on Cisco.com at www.cisco.com/go/software (registration/login required).	
Product Documentation		
Cisco Small Business Smart Switches	www.cisco.com/go/smallbizsmartswitches	
200 Series Smart Switches Quick Start Guide	www.cisco.com/en/US/docs/switches/lan/csbss/sf20x_sg20x/quick_start/78-19501-01.pdf	
200 Series Smart Switches Administration Guide	www.cisco.com/en/US/docs/switches/lan/csbss/sf20x_sg20x/administration_guide/OL-22849-01.pdf	
Regulatory, Compliance, and Safety Information	www.cisco.com/en/US/docs/switches/lan/ csbms/sfe2000/release/notes/ Class_A_Switches_RCSI.pdf	
Warranty Information	www.cisco.com/go/warranty	
Cisco Small Business		
Cisco Partner Central for Small Business (Partner Login Required)	www.cisco.com/web/partners/sell/smb	
Cisco Small Business Home	www.cisco.com/smb	



**Americas Headquarters** 

Cisco Systems, Inc. 170 West Tasman Drive San Jose, CA 95134-1706 USA

http://www.cisco.com

Small Business Support US: 1-866-606-1866 (Toll Free, 24/7)

Small Business Support Global Contact Numbers

Cisco, Cisco Systems, the Cisco logo, and the Cisco Systems logo are registered trademarks or trademarks of Cisco and/or its affiliates in the United States and certain other countries. All other trademarks mentioned in this document or website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1002R)

© 2010 Cisco Systems, Inc. All rights reserved.