Quick Start Guide

Cisco Small Business
SFE/SGE Managed Switches

Package Contents

- SFE/SGE Series Switch
- Power Cord
- Mounting Hardware
- Rubber Feet for Desktop Mounting
- Serial Cable
- Quick Start Guide
- SFE/SGE Series CD

1 Before You Begin

This guide is designed to familiarize you with the general layout of the switches, and how to begin installing them in a standard configuration. Your particular switch model may not have all of the features or functionality described in this guide. For more detailed information on the individual switches, see the *SFE/SGE Managed Switch Administration Guide*.

Before you begin installing the switch, make sure you have all of the package contents available, access to the *SFE/SGE Managed Switch Administration Guide*, and a PC with Microsoft Internet Explorer 6.0 or later, for using web-based system management tools.

NOTE The switch is configured to operate in a stack by default. If you are installing the switch in standalone mode, you must change the switch configuration. Refer to the stacking chapter of the *SFE/SGE Managed Switch Administration Guide* and to Section 3 of this guide.

Switch Location Considerations

The switch can be placed on a desktop or mounted in a rack. If you choose the desktop option, install the four rubber feet (included) on the bottom of the switch.

CAUTION Wall-mounting the switch is discouraged due to the size and weight of the device.

Rack Mount Installation Tips

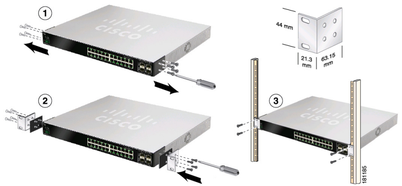
- **Ambient Temperature**—To prevent the switch from overheating, do not operate the switch in an area that exceeds an ambient temperature of 104°F (40°C)
- **Size**—The switch can be mounted in any standard size, 19-inch wide rack. Each switch requires 1 rack unit (RU) of space.
- **Reduced Air Flow**—If you install the switch in a rack, be sure that there is adequate air flow as required.
- **Mechanical Loading**—Be sure that the switch is level and stable when you mount the switch in a rack to avoid any hazardous condition.
- **Circuit Overloading**—Do not overload the power outlet or circuit when installing multiple devices in a rack.
- **Reliable Grounding**—Be sure that the switch is grounded and uses suitable electrical supply connections.

To mount the Ethernet switch, follow these instructions:

STEP 1 Remove the four screws from each side of the front of the switch. Retain the screws for re-installation. Do not remove the four screws from each side of the back of the switch.

STEP 2 Place one of the supplied spacers on the side of the switch so the four holes align to the screw holes. Place a rack mount bracket next to the spacer and reinstall the four screws removed in step 1.

NOTE If your screws are not long enough to reattach the bracket with the spacer in place, attach the bracket directly to the case without the spacer.



STEP 3 After the mounting hardware has been securely attached, the switch is now ready to be installed into a standard 19-inch rack as shown.

CAUTION 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 may tip over.

2 Getting to Know the Switch

This guide covers the following products:

- SFE2000/P
- SGE2000/P
- SFE2010/P
- SGE2010/P

Switch Ports and LEDs

The LEDs and network ports are located on the front panel of the switch. Refer to the Port Descriptions table, for details on port functionality.

NOTE The P in the model name indicates that the switch provides Power over Ethernet (PoE) to connected devices.

Port Descriptions

Port	Description
Switch Ports	The switch is equipped with auto-sensing, Ethernet (802.3) network ports which use RJ-45 connectors. The Ethernet ports support network speeds of 10 Mbps, 100 Mbps, or 1000 Mbps. They can operate in half-duplex and full-duplex modes. Auto-sensing technology enables each port to automatically detect the speed and duplex mode of a connected device, and to adjust both accordingly. These ports are typically used for devices such as PCs, servers, IP phones and Access Points.
Uplink Ports	These ports are typically used for connecting to other switches, routers, or network backbone devices. The mini-GBIC ports are considered uplink ports.
mini-GBIC Ports	The mini-GBIC (Gigabit Interface Converter) port is a connection point for a mini-GBIC expansion module, allowing the switch to be uplinked via fiber to another switch. Each mini-GBIC port provides a link to a high-speed network segment or individual workstation at speeds of up to 1000 Mbps.

Port LEDs

LINK/ACT—Each green LED lights up when a connection is made through its corresponding port. It flashes when the corresponding port is active.

SPEED—On non-PoE switches, a green LED indicates that the port is operating at the maximum speed (Fast Ethernet or Gigabit Ethernet).

PoE—On PoE switches, a green LED indicates that PoE is active on that port. The switch can deliver a maximum of 15.4 Watts to a PoE port. See the *SFE/SGE Managed Switch Administration Guide* for platform PoE power limitations.

Switch LEDs

PWR—A green LED lights up and remains lit when the switch is powered on.

FAN—A green LED lights up to indicate that the cooling fan is operating properly. A flashing red LED indicates that the cooling fan has failed.

RPS—A green LED lights up to indicate that RPS is connected and operating properly. A flashing red LED indicates an RPS fault.

MST—A green LED indicates that this switch is a stack master.

Stack ID—A green LED indicates that this switch is stacked and the corresponding number indicates its stack ID.

Other Features

Reset—The switch can be reset by inserting a pin or paper clip into the RESET opening.

RPS—A connector for a Redundant Power Supply is located on the back of the switch.

Power—The Power port is where you will connect the power cord.

Console—The Console port is where you can connect a serial cable to a PC's serial port for configuration using a terminal emulation program.

CAUTION If the RESET switch is pressed for more than 10 seconds, the switch will reset to its default settings. All customized user settings will be lost.

3 Stacking the Switches

Before setting up stacked switches in your network, see the *Managing Stacking* chapter in the *SFE/SGE Managed Switch Administration Guide*.

Switches can operate in two different modes, Stack mode and Stand-Alone mode. In Stack mode, a switch operates as a member of an organized group of switches known as a stack. A stack consists of one Stack Master control switch, one Master Backup switch and Stack Member switches. A total of 192 ports can be integrated in a stack. You cannot mix GE and FE switches in a stack.

NOTE By default, a switch is in stack mode and the Unit ID assignment is Auto. A stacking port functions as a regular ethernet port when the switch is in Stand-Alone mode, or if it is replaced by another stacking port through configuration

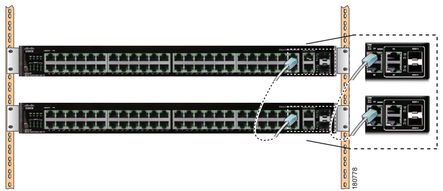
The following table shows the default stacking ports and the configurable stacking ports:

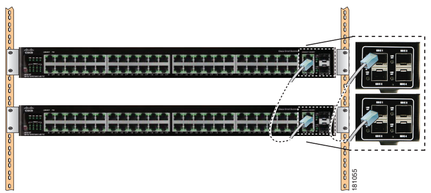
Model	Default Stacking Port	Configurable Stacking Port
SFE2000	G1, G2	G3/GBIC1, G4/GBIC 2
SGE2000	12/GBIC 3, 24/GBIC 4	N/A
SFE2010	G1, G2	GBIC 1, GBIC 2
SGE2010	24/GBIC 3, 48/GBIC4	N/A

If you manually assign a Unit ID to one unit, you should manually assign Unit IDs to *all* units. Using both system-assigned and manually-assigned IDs in your network can impact system performance.

Changing the stacking mode of a switch requires a reboot of the switch.

The following diagrams illustrate the SFE and the SGE devices in a stack:





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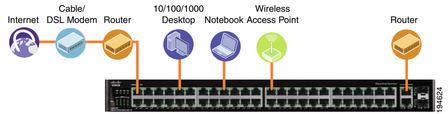
4 Connecting Devices

For an example of a possible network configuration, see the application diagram shown below.



Perform the steps in this section to connect devices to the switch.

STEP 1 Connect devices such as a PC, IP Phone, Access Point, or a Server to one of the numbered ports on the switch using an Ethernet cable.

STEP 2 Connect uplink devices, such as a Cisco Small Business RV082, WRVS4400N, or another type of router to one of the uplink ports on the switch using an Ethernet cable.

NOTE Cisco strongly recommends using Cat5E or better cable. When you connect your network devices, make sure you don't exceed the maximum cabling distance of 100 meters (328 feet).

STEP 3 If you are using the mini-GBIC port, insert the mini-GBIC module to the mini-GBIC port. For more instructions about the mini-GBIC module, see the instructions that came with the module.

STEP 4 If required, power on the devices connected to the switch. The corresponding LED for each active port will light up on the switch.

STEP 5 You are now ready to begin configuring the switch. For details, refer to the *SFE/SGE Managed Switch Administration Guide*.

5 Getting Started with the Configuration

This section contains information for starting to provision the switch features. The switch can be configured in three ways — over IP using the embedded Web GUI, over IP using Telnet (simple configuration and diagnostics), and using the console port.

The default static IP address is 192.168.1.254 and the default management VLAN for the static IP address is VLAN 1. The default user name is *admin* and the default password is *admin*.

To configure the switch over IP with Web GUI and Telnet:

STEP 1 Connect a PC to any of the non-stacking ethernet ports with an Ethernet cable.

STEP 2 Open a web browser. Cisco recommends Internet Explorer version 7 or later, or FireFox version 3. If you are prompted to install an Active-X plugin when connecting to the switch, follow the prompts to accept the plugin.

STEP 3 Enter the IP address of the switch in the address bar and press **Enter**. For example, if the switch is using the default IP address, enter **http://192.168.1.254.** The *Login Page* opens.

STEP 4 Enter a user name and password. Passwords are both case sensitive and alpha-numeric.

STEP 5 Click **Login**. The *Switch Configuration Utility System Dashboard* Window appears.

You are now ready to configure the switch. Refer to the *SFE/SGE Managed Switch Administration Guide* for further information.

To configure the switch by using the console port:

STEP 1 Connect a PC to the switch console port using the console port cable provided.

STEP 2 Start a console port utility such as HyperTerminal on the PC.

STEP 3 Configure the utility with the following parameters:

- 115200 bits per second
- 8 data bits
- no parity
- 1 stop bit
- no flow control

STEP 4 Enter a user name and password. Passwords are both case sensitive and alpha-numeric.

You are now ready to configure the switch. Refer to the *SFE/SGE Managed Switch Administration Guide* for further information.

6 Where to Go From here

Support	
Cisco Small Business Support Community	www.cisco.com/go/smallbizsupport
Online Technical Support and Documentation (Login Required)	www.cisco.com/support
Phone Support Contacts	www.cisco.com/en/US/support/tsd_cisco_small_business_support_center_contacts.html
Software Downloads (Login Required)	Go to tools.cisco.com/support/downloads, and enter the model number in the Software Search box.
Product Documentation	
Cisco Small Business Series Smart Gigabit Ethernet Switch Documentation	www.cisco.com/en/US/products/ps9967/tsd_products_support_series_home.html
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
Marketplace	www.cisco.com/go/marketplace