NETWORKS

DATA CENTER SWITCHES USER MANUAL

FS

Contents

Product Warranty Card

Chapter 1 Introduction

Thank you for purchasing the FS.COM Data Center Switch. The S5800, S5850, S8050-series switches come with complete system software with comprehensive protocols and applications to facilitate rapid service deployment and management for both traditional L2/L3 networks and Data Center networks.

S5800, S5850, S8050-Series Switches

Figure 1-1

Before you begin installing the switch, make sure you have all of the package contents available.

Package Contents

- FS.COM S5800, S5850, S8050 Series Ethernet Switch
- Rackmount Kit
- Console Cable
- Power Cord
- Grounding Cable
- User Manual

⚠ CAUTION: Multiple power sources may be provided. To de-energize, all power connections need to be removed, including RPS cable if provided.

⚠ CAUTION: No user serviceable parts inside. Must be serviced by technically qualified personnel.

This User Manual will familiarize you with the layout of the N-series Cumulus Linux switches and describe how to deploy the device in your network. For additional information, see www.fs.com.

Chapter 2 Mounting the Switch

2.1 Environmental Requirements

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).

Before you begin installing your switch, prepare the installation site. Make sure your operating environment meets the operating environment requirements of the equipment.

Ambient Temperature: Ambient temperature between 0°C and 45°C. No nearby heat sources such as direct sunlight, warm air exhausts, or heaters.

Air Flow: Both side panels must be unobstructed to prevent overheating, adequate airflow in room or wiring closet.

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

Circuit Loading: Adding the device to the power outlet must not overload that circuit.

Grounding: Rack-mounted equipment should be properly grounded to guarantee lightening protection and anti-jamming.

2.2 Rack-Mount Installation

Step 1: Wear ESD-preventive wrist strap, and check the grounding and stability of rack.

Step 2: Fix the tray to a proper position of rack horizontally.

Step 3: Take out screw (complete package with front hangers), and install one end of the Front Mounting Brackets on switch.

Figure 2-1

Step 4: Place switch on the tray horizontally, push it slightly into the rack along the tray, and fix the other end of Front Mounting Brackets upon the front hold strip of rack using screw and its matching floating nut.

Figure 2-2

Installation Recommendations:

When installing a variety of equipment on the same cabinet, it is recommended to install the heavy equipment at the bottom or near the bottom of the cabinet to reduce the center of gravity of the cabinet.

2.3 Install the Switch on a Workbench

In many cases, users do not have a standard 19" rack, so people often place switches on a cleaning working platform.

Such operation is relatively simple, and the only following aspects should be concerned during operation:

• Ensure the working platform is stable and well earthed.

• A 10 cm space around switch is left for heat dissipation.

• Do not place heavy objects on switches.

There are 4 foot pads that come with the device. Paste them onto the bottom near the corners of the switch, as shown below:
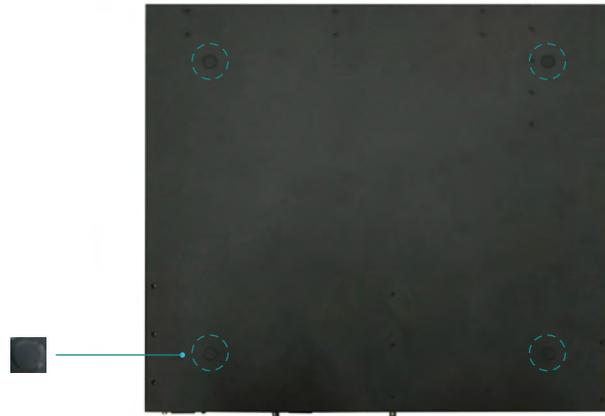
Figure 2-3

Chapter 3 Configuring the Switch

3.1 Building Configuration Platform and Connecting Cable

Connect DB-9 hole-type plug of configuration cable to the serial port for configuring switch. Connect RJ-45 end of configuration cable to the console port of switch.

> Note: Please use the DB-9 to RJ-45 Console cable which we provide together with this device. Use the DB-9 to RJ-45 Console cable from other vendors maybe can't access this device.

3.2 Setting Terminal Parameter (Windows super terminal):

Turn on PC and run emulator program (eg. Windows system has its own super terminal) on PC. Set terminal parameters (take the super terminal setting of Windows XP as an example).

Step 1: Click "Start→Program→Attachment→Communication→Super Terminal" to enter the Super Terminal window and establish a new connection, then a connection description interface will pop up.

Step 2: Type the name of the new connection in the Name text box (For example: Network) and click OK. The following dialog box appears. Select the serial port to be used from the connect using drop-down lists.

Step 3: When the Network Properties dialog box is displayed as shown in following figure. Set
Bits per second to 115200, Data bits to 8, Parity to None, Stop bits to 1, and Flow
control to None. (In other Windows operating systems, bits per second may be described
as baud rate and data stream control may be described as traffic control.)

Step 4: Click OK after setting the serial port parameters and input the user name/password:
admin/admin, then enter the HyperTerminal window.

Step 5: Click Properties in the HyperTerminal window to enter the Network Properties dialog box.
Click the Settings tab, set the emulation to VT100, and then click OK.

> ⚠️ Note: Please use the DB-9 to RJ-45 Console cable which we provide together with this
> device. Use the DB-9 to RJ-45 Console cable from other vendors maybe can't access
> this device.

3.3 Setting Terminal Parameter (SecureCRT from VanDyke Software):

Install the SecureCRT software on PC. Set SecureCRT Serial terminal parameters.

Step 1: Click "Quick Connect" button to enter the SecureCRT quick connect window.

Step 2: Choose the "Serial" as the Protocol.

Step 3: In the Port item, please choose specified COM port that the PC is using. (Here we take
COM4 as an example.)

Step 4: Set Baud rate to 115200, Data bits to 8, Parity to None, Stop bits to 1, and Flow control
to XON/XOFF. Then click Connect button to enter the Serial display interface.

Step 5: If the network advice is connected with PC via Serial cable, you could see the command
line interface (CLI) when you push down the "Enter" button of the PC.

> ⚠️ Note: Please use the DB-9 to RJ-45 Console cable which we provide together with this
> device. Use the DB-9 to RJ-45 Console cable from other vendors maybe can't access
> this device.

Chapter 4 Maintenance and Troubleshooting

4.1 Loading Failure Processing:

After loading fails, the system will keep running in the original version. At this time, users should re-check if physical port connections are good firstly. If some ports are not connected, then re-connect them to ensure that physical connections are correct, and begin re-loading. If physical connections are correct, then check the loading process information displayed on the super terminal to verify if there are input errors. If there are input errors, correct them and re-load. For example, when using TFTP protocol, we enter incorrect IP addresses of Server and Switch, name of loading software, do not specify the correct working path of correct TFTP server and so on; if physical connections are good, and there are no input errors in the loading process but the loading fails finally, please contact agents for help.

4.2 User Password Lost:

If system password is lost or forgotten, the following method can be used to reset password:
1. Enter uBoot operation mode. (See the further information. Refer to the Chapter 7 of Switch Installation Guide on website for how to enter.)
2. Input boot_flash_nopass command to start system in uBoot mode.

> ⚠ Note: Please use the DB-9 to RJ-45 Console cable which we provide together with this device. Use the DB-9 to RJ-45 Console cable from other vendors maybe can't access this device.

4.3 Power System Troubleshooting:

Switch can judge if its power system is faulty according to the PWR indicator on the front panel: when power system works normally, the PWR indicator shall always keep lighting; when the PWR indicator is off, please check if:
1. The power line of switch is connected correctly.
2. EPS of switch matches the power required by switch.
Not all models will have all of the features described.

4.4 Configuration System Troubleshooting:

After the switch is powered on, if system is normal, the startup information will be displayed on the configuration terminal; If the configuration system is faulty, the configuration terminal may display no information or hashes.

4.5 No Information on the Terminal:

After power-on, if no display information on configuration terminal appears, please check if:
The power is normal.
The cable of configuration port (Console) is properly connected. If no problems have been found after the above checks, it is possible that configuration cable is faulty or the parameter setting of terminal (such as super terminal) are incorrect, please check accordingly.
Troubleshooting for the terminal displaying hashes:
If the configuration terminal displays hashes, it is probable that the parameter setting of terminal (such as super terminal) are incorrect Please confirm the parameter setting of terminal (such as super terminal): baud rate: 115200, data bit: 8, parity: no, stop bit: 1, flow control: NA, selecting terminal emulation: VT100.

Hardware Warranty Card

FS ensures our customers that any damage or faulty items due to our workmanship, we will offer a free return within 30-Days from when you receive your goods. This excludes any custom made items or tailored solutions.

What this warranty covers?

This warranty is only available for the original buyer and is not transferable to a third-party.

- Within the first 30 Days of purchase, if for any reason you are not satisfied with your purchase (except custom made items or tailored solutions), simply return it for a refund or replacement.
- Within the first 1 Year of purchase, free repair or maintenance due to manufacturer's defects (including shipping, handling and parts costs).
- Within 20 Years of purchase except for the first 1 year, repairs and maintenance will be charged.

What is NOT covered?

This warranty is non-transferable and does not cover if the product:

- Has been modified and/or altered, or an addition made thereto, except by FS authorized representatives, or as approved by FS in writing.
- Has been painted or physically modified in any way.
- Has been subjected to misuse, abuse, negligence, abnormal or physical stress, including accident.
- Has been damaged or impaired as a result of using third party firmware.
- Has no original FS label, or miss any other original labels.

> **!** NOTE: 4 Years free warranty for PoE+ Series & S2800/S3800/S3900 Series switches; 5 Years free warranty for N Series & S Series switches.

FS sole and exclusive obligation and liability under the foregoing warranty shall be for FS, at its discretion, to repair or replace any product that fails to conform to the above warranty during the warranty period. The expense of removal and reinstallation of any product is not included in this warranty. The warranty period of any repaired or replaced products shall not extend beyond its original warranty expiry.

Return Conditions

If you return for refund or replacement within 30 Days, please make sure that the product must be in new or like-new condition with its original trademark and SN number (the SN number is the unique identification number of every product), manual and accessories that were included when delivered to you. Return for replacement or repair is due to an error on our part (you received an incorrect or defective item, etc.), we will cover the shipping and repair cost and customs duty (for international purchase). Otherwise, you are responsible for these charges of returning or repairing items on your own.

FS offers two channels to process your return request, if you purchase from FS website, you may visit the website and log in to your FS "account "center to start a quick return. If you purchased by emails, you may contact your sales representative or visit our website fs.com to talk with customer service team and obtain an approved Return Materials Authorization (RMA) Number. Products returned without a RMA Number will not be processed and will be returned freight collect or subject to disposal. Information on how to start return can be found at

https://www.fs.com/day_return_policy.html