Cisco WS-C2950C-24

Cisco WS-C2950C-24 Catalyst Switch User Manual

INTRODUCTION

This manual provides essential information for the installation, operation, and maintenance of the Cisco WS-C2950C-24 Catalyst Switch. This device is a 24-port 10/100BASE-TX Fast Ethernet managed rack-mountable switch, featuring two 100BASE-FX fiber optical ports for extended connectivity. Please read these instructions carefully before using the product.

Figure 1: Front view of the Cisco WS-C2950C-24 Catalyst Switch, showing 24 Ethernet ports and two fiber ports.

SETUP

Follow these steps for proper installation of your Cisco Catalyst Switch:

1. **Unpack the Switch:** Carefully remove the switch and all accessories from the packaging. Verify that all components are present.

2. **Mounting:** The switch is designed for rack mounting. Securely install the switch into a standard 19-inch equipment rack using the provided rack-mount kit. Ensure adequate ventilation around the unit.

3. **Connect Power:** Connect the power cord to the switch's power input and then to a grounded AC power outlet. The switch will power on automatically.

4. **Connect Network Cables:**

   - For standard Ethernet connections, connect RJ-45 cables from your network devices to the 24 10/100BASE-TX ports.

   - For fiber optic connections, connect 100BASE-FX fiber cables to the two dedicated fiber ports. Ensure proper fiber type and connector usage.

5. **Initial Configuration Access:** For initial configuration, connect a console cable from your computer's serial port to the switch's console port. Use a terminal emulation program (e.g., PuTTY) with settings: 9600 baud, 8 data bits, no parity, 1 stop bit, no flow control.

OPERATING INSTRUCTIONS

Once the switch is powered on and connected, it will begin forwarding network traffic. The switch operates as a Layer 2 device, managing data link layer traffic.

- **LED Indicators:** Observe the LED indicators on the front panel for status information. Each port has an LED indicating link status and activity. The System LED indicates overall switch health. Refer to the detailed LED guide in the full product documentation for specific meanings.

- **Management Interface:** The switch can be managed via a Command Line Interface (CLI) through the console port or Telnet/SSH, or through a web-based interface if configured. Use the CLI for advanced configurations and troubleshooting.

- **Basic Connectivity:** Ensure that connected devices are powered on and their network interfaces are active. The switch will automatically negotiate speed and duplex settings with connected devices on the 10/100 ports.

MAINTENANCE

Regular maintenance ensures optimal performance and longevity of your switch:

- **Keep Ventilation Clear:** Ensure that the ventilation openings on the switch are not obstructed. Proper airflow is crucial to prevent overheating.

- **Environmental Conditions:** Operate the switch within its specified temperature and humidity ranges. Avoid dusty environments.

- **Firmware Updates:** Periodically check the Cisco website for firmware updates. Applying updates can improve performance, add features, and address security vulnerabilities.

- **Cable Management:** Organize and secure network cables to prevent accidental disconnections and improve airflow.

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the switch. Do not use liquid or aerosol cleaners.

TROUBLESHOOTING

This section addresses common issues you might encounter:

Problem	Possible Cause	Solution
Switch does not power on	No power to the unit; faulty power cord or outlet	Check power cord connection; verify power outlet functionality; try a different power cord.
No link light on a port	Cable not connected; faulty cable; connected device is off or faulty	Ensure cable is securely connected; replace cable; verify connected device is powered on and functioning.
Slow network performance	Duplex mismatch; network congestion; faulty cable	Check port speed and duplex settings on both the switch and the connected device; investigate network traffic; replace cable.
Cannot access management interface	Incorrect IP address; console cable issue; firewall blocking access	Verify IP address and subnet mask; check console cable connection and terminal settings; temporarily disable firewalls for testing.

SPECIFICATIONS

Key technical specifications for the Cisco WS-C2950C-24 Catalyst Switch:

- **Ports:** 24 x 10/100 autosensing Ethernet ports
- **Fiber Ports:** 2 x fixed 100BASE-FX fiber ports
- **Software Image:** Enhanced Software Image (EI)
- **Data Transfer Rate:** 8.8 Gigabits Per Second
- **Interface Type:** RJ45 (for Ethernet ports)
- **Product Dimensions:** 9.53 x 17.52 x 1.73 inches (24.2 x 44.5 x 4.4 cm)
- **Item Weight:** 6.61 pounds (3.0 kg)
- **Model Number:** WS-C2950C-24
- **Brand:** Cisco

WARRANTY AND SUPPORT

For detailed warranty information and technical support, please refer to the official Cisco website or contact Cisco customer service. Product warranty terms and conditions are provided by the manufacturer and may vary based on region and purchase date. Always consult the official Cisco documentation for the most accurate and up-to-date support resources.

You can typically find support resources, including drivers, software, and additional documentation, by visiting the Cisco official website and searching for your product model (WS-C2950C-24).