Arista DCS-7050T-64-R

Arista DCS-7050T-64-R Network Switch User Manual

Model: DCS-7050T-64-R

1. Introduction

This manual provides essential instructions for the installation, operation, maintenance, and troubleshooting of the Arista DCS-7050T-64-R network switch. Please read this manual thoroughly before using the device to ensure proper functionality and safety.

2. Safety Information

Observe the following safety precautions to prevent injury and damage to the device:

- Ensure proper grounding for the device.
- Do not operate the switch in environments with excessive heat, humidity, or dust.
- Disconnect power before performing any maintenance or installation procedures.
- Only qualified personnel should perform installation and servicing.
- Use appropriate lifting techniques when handling the switch due to its weight.

3. Package Contents

Verify that all items are present and undamaged upon unpacking. If any items are missing or damaged, contact your supplier.

Image 1: Arista DCS-7050T-64-R Network Switch with included accessories. The image displays the main switch unit, two power supply units, two power cables, a console cable (light blue), and four fan modules.

The package should include:

- Arista DCS-7050T-64-R Network Switch Unit
- Power Supply Units (x2)
- Power Cords (x2)
- Console Cable (RJ45 to DB9 or similar)
- Fan Modules (x4, typically hot-swappable)
- Rack Mount Kit (screws, brackets - not explicitly shown but standard for rack switches)

4. Setup

4.1 Physical Installation

The DCS-7050T-64-R is designed for rack mounting. Ensure the rack is stable and has adequate space for airflow. This model features rear-to-front airflow, meaning cool air enters from the rear and exits from the front. Maintain proper clearance for ventilation.

1. Attach the provided rack-mount brackets to the sides of the switch using the included screws.
2. Secure the switch into a standard 19-inch equipment rack using appropriate rack screws.
3. Ensure the switch is level and securely fastened.

4.2 Connecting Power

The switch supports dual AC power supplies for redundancy.

1. Insert the power supply units into their respective bays at the rear of the switch. Ensure they click into place.
2. Connect the power cords to the power supply units.
3. Plug the other end of the power cords into grounded AC power outlets.
4. Verify that the power supply LEDs illuminate, indicating power is supplied.

4.3 Connecting Network Cables

The switch features 48x RJ45 1/10GBASE-T ports and 4x QSFP+ ports.

- **RJ45 Ports:** Connect standard Ethernet cables (Cat6a or better for 10GBASE-T) to the RJ45 ports for server, storage, or workstation connectivity.
- **QSFP+ Ports:** Use QSFP+ transceivers and fiber optic cables or QSFP+ direct attach cables for high-speed uplink connections to other switches or core network devices.

4.4 Initial Configuration (Console Access)

For initial setup and configuration, connect to the switch via the console port.

1. Connect the provided console cable (RJ45 end) to the console port on the switch.
2. Connect the DB9 end of the console cable to a serial port on a computer. If your computer lacks a serial port, use a USB-to-serial adapter.
3. Open a terminal emulation program (e.g., PuTTY, Tera Term) on your computer.
4. Configure the serial port settings:
    - **Baud Rate:** 9600
    - **Data Bits:** 8
    - **Parity:** None
    - **Stop Bits:** 1
    - **Flow Control:** None
5. Power on the switch. The boot sequence will display in the terminal window.
6. Follow the on-screen prompts to perform initial configuration, including setting an IP address for management access.

5. Operating the Switch

5.1 LED Indicators

The switch features various LED indicators to provide status information:

- **System LED:** Indicates overall system status (e.g., green for normal, amber for warning, red for critical).
- **Port LEDs:** Indicate link status and activity for each network port (e.g., green for link, blinking for activity, amber for specific link speeds or errors).
- **Power Supply LEDs:** Indicate the status of each power supply unit.
- **Fan LEDs:** Indicate the operational status of the fan modules.

Refer to the Arista EOS (Extensible Operating System) documentation for a detailed explanation of all LED states.

5.2 Management Interfaces

The Arista DCS-7050T-64-R can be managed via:

- **Command Line Interface (CLI):** Accessible via console, SSH, or Telnet. This is the primary method for advanced configuration and monitoring.
- **Web-based Graphical User Interface (GUI):** If enabled, accessible via a web browser by entering the switch's IP address.
- **SNMP:** For network management systems to monitor the switch.

Consult the Arista EOS Configuration Guide for detailed instructions on configuring and managing the switch.

6. Maintenance

6.1 Cleaning

Regular cleaning helps maintain optimal performance and extends the lifespan of the switch.

- Power off the switch and disconnect all cables before cleaning.
- Use a soft, dry, lint-free cloth to wipe the exterior surfaces.
- Use compressed air to remove dust from ventilation openings and fan modules. Do not use liquid cleaners directly on the switch.

6.2 Firmware Updates

Periodically check the Arista Networks website for the latest EOS firmware updates. Firmware updates can provide new features, performance improvements, and security patches. Always follow Arista's recommended update procedures to avoid system disruption.

6.3 Component Replacement

The Arista DCS-7050T-64-R features hot-swappable power supplies and fan modules. This allows for replacement without powering down the entire switch.

- **Power Supply Replacement:** To replace a power supply, disconnect its power cord, press the release latch, and slide the unit out. Insert the new power supply until it clicks into place and reconnect the power cord.
- **Fan Module Replacement:** To replace a fan module, press the release tab and pull the module out. Insert the new fan module until it is fully seated.

Ensure replacement components are compatible with your switch model.

7. Troubleshooting

This section provides solutions to common issues. For more complex problems, consult Arista Networks support or your renewed product supplier.

Problem	Possible Cause	Solution
Switch does not power on.	No power to power supply, faulty power cord, faulty power supply.	Verify power cords are securely connected and outlets are functional. Check power supply LEDs. Try a different power cord or power supply.
Port LED is off or amber.	No link, incorrect cable, faulty transceiver, port disabled.	Check cable connection at both ends. Ensure correct cable type (e.g., Cat6a for 10GBASE-T). Verify transceiver is seated correctly. Check port status in CLI (show interfaces status).
Network connectivity issues.	Incorrect VLAN configuration, IP address conflict, routing issues, faulty cable.	Verify VLAN assignments and IP configurations. Check routing tables. Test cables. Use CLI commands like ping, traceroute, show ip interface brief.
Fan noise is excessive or fan LED is amber/red.	Fan module failure, dust accumulation, high operating temperature.	Inspect fan modules for obstructions. Clean dust from vents. Ensure proper airflow in the rack. Replace faulty fan module.

8. Specifications

Feature	Detail
Model Number	DCS-7050T-64-R

Feature	Detail
Brand	Arista
Manufacturer	ARISTA NETWORKS HARDWARE
Ports	48x RJ45 1/10GBASE-T, 4x QSFP+
Airflow	Rear-to-Front
Power Supplies	Dual AC (Redundant)
Interface Type	RJ45, SFP+ (QSFP+ ports support SFP+ with breakout cables)
Compatible Devices	Desktop, Laptop, Printer (General network devices)
Case Material	Metal
Package Dimensions	18 x 18 x 18 inches (Approximate shipping dimensions)
UPC / GTIN	683332308442

9. Warranty and Support

This product is offered as an Amazon Renewed item. Amazon Renewed products are professionally inspected and tested to work and look like new. They are eligible for replacement or refund under the Amazon Renewed Guarantee if you are not satisfied with your purchase.

For specific support related to the renewed condition or purchase, please contact Amazon Renewed customer service or the third-party seller (Network Hardware Depot, in this case) directly. For technical documentation and advanced support regarding the Arista EOS software and hardware, refer to the official Arista Networks website and support resources.