

Cisco ASA5520

Cisco ASA5520 Series Firewall Adaptive Security Appliance User Manual

Model: ASA5520 with SSM-4GE Module

1. INTRODUCTION

This manual provides essential information for the installation, operation, maintenance, and troubleshooting of the Cisco ASA5520 Series Firewall Adaptive Security Appliance with the 4GE SSM Module. The ASA5520 is a high-performance 1U network security device designed to protect your network infrastructure.

This appliance features 4 10/100/1000 copper interface ports. With the integrated SSM-4GE module, an additional 4 1 Gigabit Ethernet interfaces are provided, resulting in a total of 8 10/100/1000 BaseT interfaces for comprehensive network connectivity and security.

2. SETUP AND INSTALLATION

2.1 Unpacking and Inspection

Carefully unpack the Cisco ASA5520 appliance and its components. Verify that all items listed in the packing list are present and undamaged. Report any discrepancies or damage to your supplier immediately.

2.2 Physical Installation

The ASA5520 is a 1U rack-mountable device. Install the appliance in a standard 19-inch equipment rack using the provided rack-mount kit. Ensure adequate ventilation around the unit to prevent overheating.

- Mount the appliance securely in the rack.
- Connect the power supply to a grounded electrical outlet.
- Connect network cables to the appropriate interfaces.



Figure 2.1: Front view of the Cisco ASA5520 Adaptive Security Appliance. This image shows the front panel of the 1U rack-mountable device, including the Cisco logo and status indicators.

2.3 Initial Network Connections

Identify the network interfaces on the appliance. The ASA5520 includes 4 built-in Gigabit Ethernet ports and an additional 4 Gigabit Ethernet ports provided by the SSM-4GE module. Connect your network infrastructure to these ports as required by your network design.



Figure 2.2: Close-up view of the Cisco 4GE SSM module ports. This image details the four Gigabit Ethernet ports on the SSM-4GE module, labeled LINK and SPD, along with power and status indicators.

Typically, one port will be designated for external (WAN) connectivity and another for internal (LAN) connectivity. Additional ports can be configured for DMZ, VPN, or other network segments.

3. OPERATING INSTRUCTIONS

3.1 Powering On and Initial Boot

After connecting the power cable, the appliance will automatically power on. Observe the front panel LEDs for boot status. The system is ready when the 'STATUS' LED indicates normal operation.

3.2 Accessing the Management Interface

The Cisco ASA5520 can be managed via the Command Line Interface (CLI) using a console cable or SSH, or through the Cisco Adaptive Security Device Manager (ASDM) graphical user interface.

- **CLI Access:** Connect a console cable to the console port and use a terminal emulator (e.g., PuTTY) with settings: 9600 baud, 8 data bits, no parity, 1 stop bit, no flow control.
- **ASDM Access:** Configure an IP address on a management interface and access it via a web browser. Download and launch the ASDM client from the appliance's web interface.

3.3 Basic Configuration

Refer to the Cisco ASA documentation for detailed configuration steps. Key initial configurations include:

- Setting up interface IP addresses and security levels.
- Configuring basic firewall rules (access control lists).
- Setting up NAT/PAT for internet access.
- Changing default passwords for security.

4. MAINTENANCE

4.1 Firmware Updates

Regularly check the Cisco support website for the latest firmware versions. Updating the firmware ensures optimal performance, security, and access to new features. Follow Cisco's recommended upgrade procedures carefully.

4.2 Configuration Backup and Restore

Periodically back up your appliance configuration to an external server (e.g., TFTP, FTP, SCP). This allows for quick recovery in case of configuration errors or system failures.

4.3 Hardware Inspection

Perform periodic visual inspections of the appliance. Ensure all cables are securely connected, ventilation is unobstructed, and no unusual noises or odors are present.

5. TROUBLESHOOTING

5.1 LED Indicators

The front panel LEDs provide status information. Consult the Cisco ASA documentation for a detailed explanation of each LED's state (e.g., Power, Status, Active, Standby, VPN, Flash).

5.2 Common Issues

- **No Power:** Verify power cable connection and power source. Check the power supply unit.
- **No Network Connectivity:** Check physical cable connections, interface status (link/activity LEDs), and network configuration.
- **Cannot Access Management Interface:** Verify IP address configuration, network reachability, and firewall rules that might block access.

5.3 Diagnostic Commands

Use CLI commands such as show interface, show version, show running-config, and ping to diagnose network and system issues.

6. SPECIFICATIONS

The following are key technical specifications for the Cisco ASA5520 Series Firewall Adaptive Security Appliance with 4GE SSM Module (Model: ASA5540-SSM4GE-K9).

Feature	Detail
Model Number	ASA5540-SSM4GE-K9
Form Factor	1U Rack-mountable
Interface Ports	8 x 10/100/1000 BaseT Ethernet (4 built-in, 4 via SSM-4GE module)
Expansion Slot	Occupied by SSM-4GE module
Package Dimensions	17.3 x 14.2 x 3 inches
Item Weight	16.22 pounds
Manufacturer	CISCO SYSTEMS - ENTERPRISE



Figure 6.1: Rear label of the Cisco ASA5520. This image displays the model number (ASA5500 Series, PID VID: ASA5520 V03), FCC compliance, and manufacturer details.

7. WARRANTY INFORMATION

Cisco products typically come with a limited hardware warranty. The specific terms and duration of the warranty may vary based on the region and purchase agreement. For detailed warranty information, please refer to the documentation provided with your purchase or visit the official Cisco website.

Keep your proof of purchase for warranty claims.

8. TECHNICAL SUPPORT

For technical assistance, product documentation, software downloads, and community forums, please visit the official Cisco Support website. You may need your product serial number and a valid service contract to access certain support resources.

Cisco Support Website: www.cisco.com/go/support