C H A P T E R **3**

# Installing the Adaptive Security Appliance

## Installing the Adaptive Security Appliance

This section describes how to rack-mount and install the adaptive security appliance. You can mount the adaptive security appliance in a 19-inch rack (with a 17.5- or 17.75-inch opening).



**Warning**   **To prevent bodily injury when mounting or servicing this unit in a rack, you must take special precautions to ensure that the system remains stable. The following guidelines are provided to ensure your safety: This unit should be mounted at the bottom of the rack if it is the only unit in the rack.When mounting this unit in a partially filled rack, load the rack from the bottom to the top with the heaviest component at the bottom of the rack.If the rack is provided with stabilizing devices, install the stabilizers before mounting or servicing the unit in the rack.** Statement 1006

The following information can help plan equipment rack installation:

- Allow clearance around the rack for maintenance.
- If the rack contains stabilizing devices, install the stabilizers prior to mounting or servicing the unit in the rack.
- When mounting a device in an enclosed rack, ensure adequate ventilation. Do not overcrowd an enclosed rack. Make sure that the rack is not congested, because each unit generates heat.
- When mounting a device in an open rack, make sure that the rack frame does not block the intake or exhaust ports.
- If the rack contains only one unit, mount the unit at the bottom of the rack.
- If the rack is partially filled, load the rack from the bottom to the top, with the heaviest component at the bottom of the rack.

This section contains the following topics:
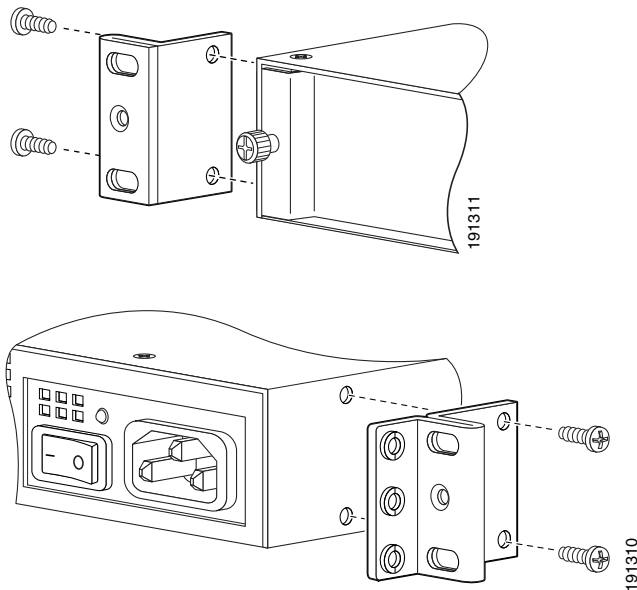
# Rack-Mounting the Chassis

Use the mounting brackets to mount the chassis to the front or the back of the rack, with the front panel or the rear panel of the chassis facing outward. The part number for ordering a rack-mount kit for the Cisco ASA 5510, Cisco ASA 5520, Cisco ASA 5540, and Cisco ASA 5550 is ASA5500-HW=. To rack-mount the chassis, perform the following steps:

**Step 1**    Attach the rack-mount brackets to the chassis using the supplied screws. Attach the brackets to the holes as shown in Figure 3-1. After the brackets are secured to the chassis, you can rack-mount it.
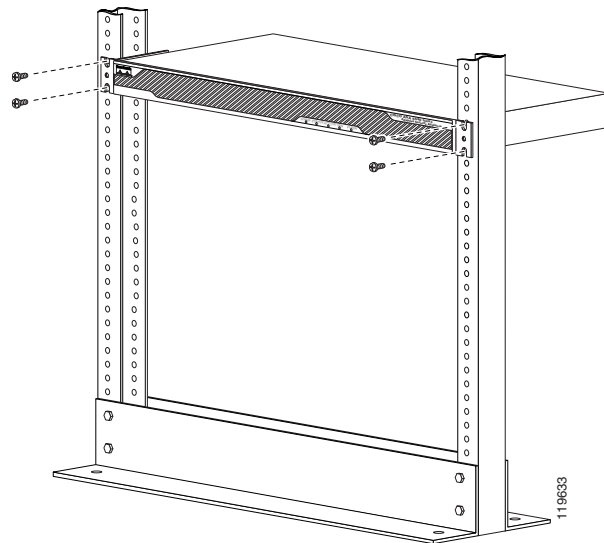
**Note**    Figure 3-1 shows the rack mounting brackets attached to the rear of the chassis while Figure 3-2 shows the rack mounting brackets attached to the front of the chassis. You can attach the mounting brackets to the front or the rear of the chassis so that you can have the front panel or the rear panel of the chassis facing outward. Figure 3-1 shows the brackets attached to the rear so you can see how that configuration appears while Figure 3-2 shows the brackets attached to the front so that you can see how that configuration appears. In Step 1 and Step 2, you will choose to have either the brackets rear mounted or front mounted but not both.

*Figure 3-1        Installing the Right and Left Brackets*



**Step 2**    Attach the chassis to the rack using the supplied screws, as shown in Figure 3-2.
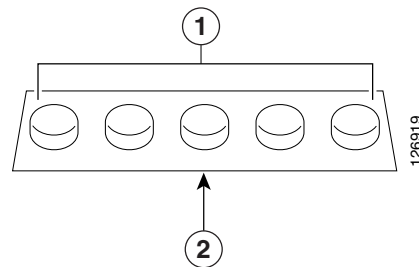
**Figure 3-2**        **Rack-Mounting the Chassis**



To remove the chassis from the rack, remove the screws that attach the chassis to the rack, and then remove the chassis.
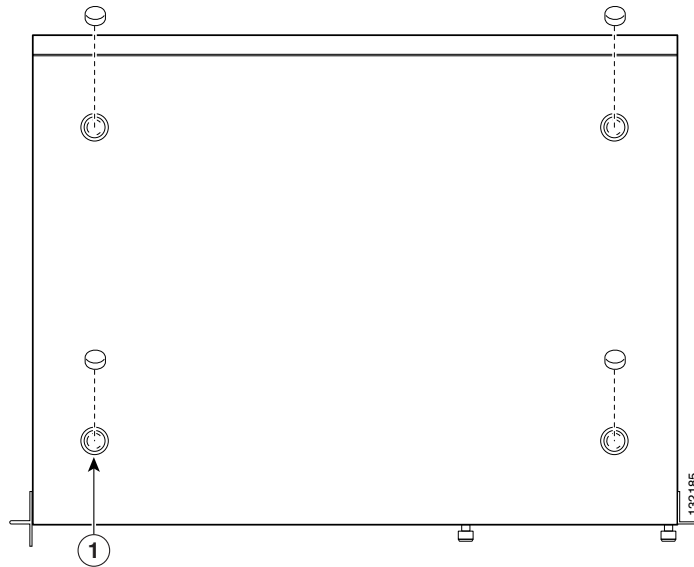
# Setting the Chassis on a Desktop

To set the chassis on a desktop, perform the following steps:

**Step 1**      Locate the rubber feet on the black adhesive strip that shipped with the chassis.

**Figure 3-3**        **Identifying the Rubber Feet**



| 1 | Rubber feet | 2 | Black adhesive strip |
|---|-------------|---|----------------------|

**Step 2**      Place the chassis upside down, on a smooth, flat surface.

**Step 3**      Peel off the rubber feet from the black adhesive strip and press them adhesive-side down onto the bottom four corners of the chassis, see Figure 3-4.

*Figure 3-4*          *Attaching the Rubber Feet*



| **1** | Rubber feet |
|-------|-------------|

**Step 4**      Place the chassis right-side up on a flat, smooth, secure surface.

**Step 5**      Connect the interface cables. See the "Connecting the Interface Cables" section on page 3-4 for more information.

# Connecting the Interface Cables

This section describes how to connect the cables to the Console, Management, 4GE SSM, and SSM ports. In this document, SSM refers to an intelligent SSM, the AIP SSM or CSC SSM.

**Note**      You can use any unused Ethernet interface on the device as the failover link. The failover link interface is not configured as a normal networking interface; it should only be used for the failover link. You can connect the LAN-based failover link by using a dedicated switch with no hosts or routers on the link or by using a crossover Ethernet cable to link the units directly. For more information, see the *Cisco Security Appliance Command Line Configuration Guide*.

**Warning**      **Only trained and qualified personnel should install, replace, or service this equipment.** Statement 49

**Caution**      Read the safety warnings in the Regulatory Compliance and Safety Information for the Cisco ASA 5505 Adaptive Security Appliance and follow proper safety procedures when performing these steps.

**Note** The RJ-45 Auxiliary port (labeled AUX on the chassis) is reserved for internal use at Cisco. The port is not functional in shipping versions of the chassis; therefore, customers cannot connect to this port to run the adaptive security appliance CLI.

To connect cables to the ports perform the following steps:

**Step 1** Place the chassis on a flat, stable surface, or in a rack (if you are rack-mounting it.)

**Step 2** Before connecting a computer or terminal to the ports, check to determine the baud rate of the serial port. The baud rate must match the default baud rate (9600 baud) of the Console port of the adaptive security appliance. Set up the terminal as follows: 9600 baud (default), 8 data bits, no parity, 1 stop bits, and Flow Control (FC) = Hardware.

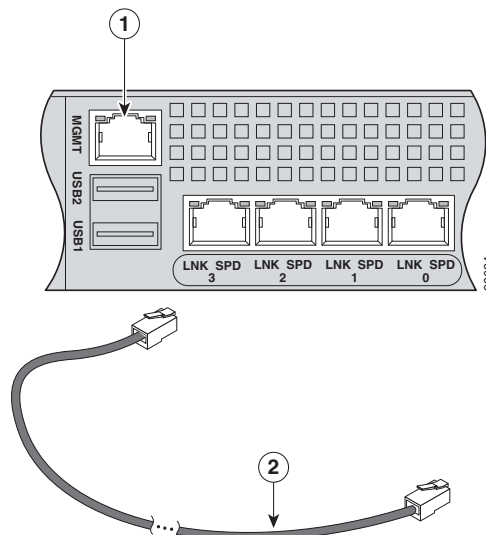**Step 3** Connect the cables to the ports.

**a.** Management port

The adaptive security appliance has a dedicated management interface referred to as the Management0/0 port. The Management0/0 port is a Fast Ethernet interface with a dedicated port used only for traffic management.

**Note** You can configure any interface to be a management-only interface using the **management-only** command. You can also disable management-only mode on the management interface. For more information about this command, see the **management-only** command in the *Cisco Security Appliance Command Reference*.

– Connect one RJ-45 connector to the Management0/0 port, as shown in Figure 3-5.

– Connect the other end of the Ethernet cable to the management port on your computer or network device.

*Figure 3-5*      *Connecting to the Management Port*



| **1** | Management port | **2** | RJ-45 to RJ-45 Ethernet cable |
|---|---|---|---|

**b.** Console port

– Connect the serial console cable as shown in Figure 3-6. The console cable has a DB-9 connector on one end for the serial port on your computer, and the other end is an RJ-45 connector.

– Connect the RJ-45 connector to the Console port on the adaptive security appliance.

– Connect the other end of the cable, the DB-9 connector, to the console port on your computer.

*Figure 3-6        Connecting to the Console Cable*

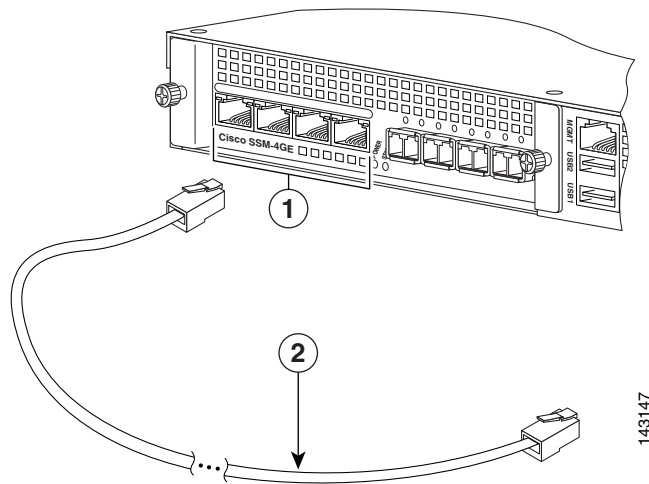| 1 | RJ-45 Console port | 2 | RJ-45 to DB-9 console cable |
|---|---|---|---|

   **c.** 4GE SSM

- Ethernet port

    - Connect one RJ-45 connector to the Ethernet port of the 4GE SSM.

    - Connect the other end of the Ethernet cable to your network device, such as a router, switch or hub.

**Note**  The 4GE SSM is optional, this connection is necessary only if you have installed the 4GE SSM on the adaptive security appliance.

*Figure 3-7     Connecting to the RJ-45 port*



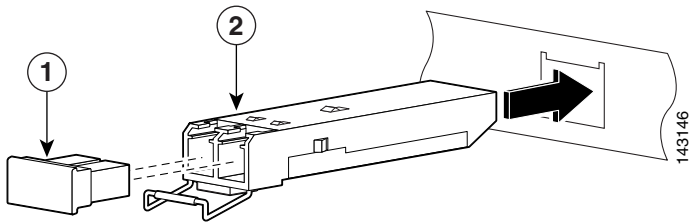| 1 | Ethernet ports | 2 | RJ-45 connector |
|---|----------------|---|-----------------|

**Note**  When using the 4GE SSM you can use the same numbered copper ports (RJ-45) and the SFP ports at the same time. Use the **media-type** command in interface configuration mode to set the media type to copper or fiber Gigabit Ethernet. For a complete description of the command syntax, see the *Cisco ASA 5500 Series Command Reference*.

- SFP modules

    - Insert and slide the SFP module into the SFP port until you hear a click. The click indicates that the SFP module is locked into the port.

    - Remove the optical port plugs from the installed SFP as shown in Figure 3-8.
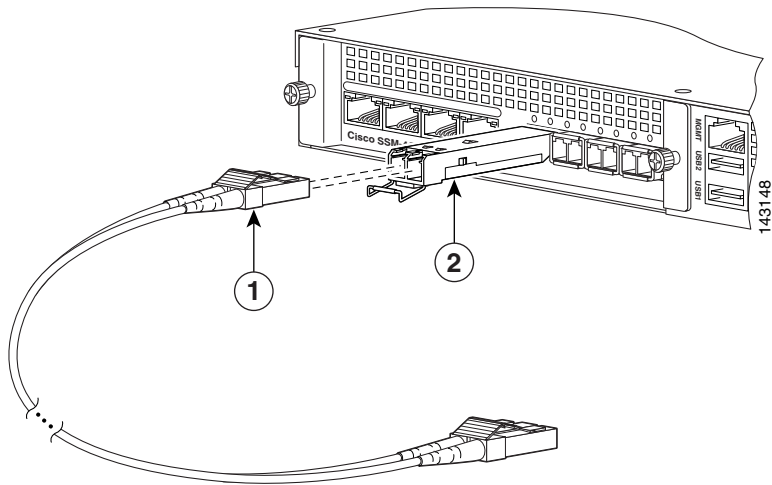
*Figure 3-8*        *Removing the Optical Port Plug*

| 1 | Optical port plug | 2 | SFP module |
|---|-------------------|---|------------|

- – Connect the LC connector to the SFP module as shown in Figure 3-9.

*Figure 3-9*        *Connecting the LC Connector*

| 1 | LC connector | 2 | SFP module |
|---|--------------|---|------------|

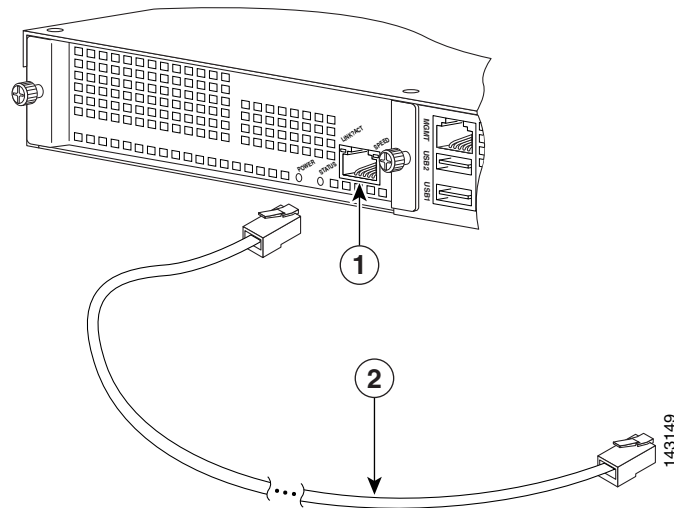- – Connect the other end to your network devices, such as routers, switches, or hubs.

**d.** SSM

– Connect one RJ-45 connector to the management port on the SSM, as shown in Figure 3-10.

– Connect the other end of the RJ-45 cable to your network devices.

**Note**    SSMs are optional, this connection is necessary only if you have installed an SSM on the adaptive security appliance.
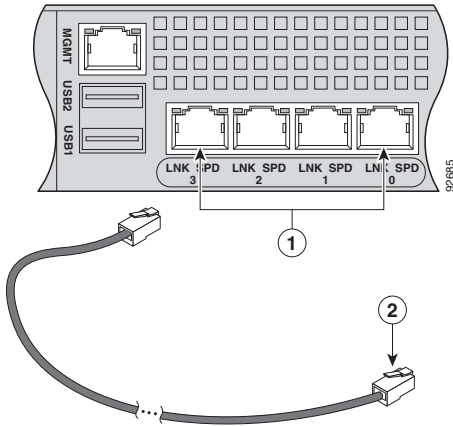
*Figure 3-10    Connecting to the Management Port*



| 1 | SSM management port | 2 | RJ-45 to RJ-45 cable |
|---|---------------------|---|----------------------|

**e.** Ethernet ports

– Connect the RJ-45 connector to the Ethernet port.

– Connect the other end of the Ethernet cable to your network device, such as a router, switch or hub.

*Figure 3-11      Connecting Cables to Network Interfaces*



| 1 | RJ-45 Ethernet ports | 2 | RJ-45 connector |

**Step 4**    Connect the power cord to the adaptive security appliance and plug the other end to the power source. For information on powering on a DC model, see the "Installing the DC Model" section on page 4-7.

**Step 5**    Power on the chassis.