



Cisco Firepower 1010 Hardware Installation Guide

First Published: 2019-07-24 **Last Modified:** 2019-09-01

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Features

The Cisco Firepower 1010 security appliance is an NGFW desktop product in the Cisco Firepower family of devices with PoE+ and L2 switch support.



Note

The PoE+ and L2 switch features are supported in a future software release.

The Firepower 1010 supports Cisco Firepower software version 6.4 and later. See the Cisco Firepower Compatibility Guide, which provides Cisco Firepower software and hardware compatibility, including operating system and hosting environment requirements, for each supported Firepower version.

See Product ID Numbers, on page 10 for a list of the product IDs (PIDs) associated with the Firepower 1010.

The following figure shows the Cisco Firepower 1010.

Figure 1: Firepower 1010



The following table lists the features for the Firepower 1010.

Table 1: Firepower 1010 Features

| Feature | Description |
|----------------|--|
| Form factor | 1 RU |
| Mounting | Desktop mount |
| | Wall mount (Cisco part number 69-100647-01) |
| | Rack mount (Cisco part number 69-100648-01) |
| Airflow | Side-to-side |
| | No fan |
| Processor | One 4-core Intel CPU |
| Memory | 8-GB DDR4 DRAM |
| Boot partition | 8 GB (internal) |
| L2 switch | Marvell SOHO 88E6390 |
| | Note Supported in a future software release |
| Management | One Gigabit Ethernet RJ-45 10/100/1000 BaseT |
| port | Restricted to network management access; connect with an RJ-45 cable |
| Console port | One RJ-45 |
| | Use to access management through an external system |
| USB Mini B | One USB Mini B |
| port | Use to access management through an external system |
| USB port | One USB 3.0 Type A |
| | Use to attach an external device such as storage |

| Network ports | Eight Gigabit Ethernet RJ-45 10/100/1000 BaseT |
|-----------------|---|
| | Each RJ-45 (8P8C) copper port supports auto MDI/X as well as auto-negotiation for interface speed, duplex, and other negotiated parameters, and are MDI/MDIX-compliant. |
| | The ports are numbered (from top to bottom, left to right) 1, 2, 3, 4, 5, 6, 7, 8. Each port includes a pair of LEDs, one each for connection status and link status. The ports are named and numbered Gigabit Ethernet 1/1 through Gigabit Ethernet 1/8. |
| | Note You can use ports 7 and 8 as PoE+ ports. PoE+ is supported in a future software release. |
| PoE+ controller | Yes |
| card | Note Ports 7 and 8 are PoE+ ports. Supported in a future software release. |
| Lock slot | Yes |
| | Accepts a standard Kensington T-bar locking mechanism for securing the chassis |
| Reset button | Yes |
| | A small recessed button that if pressed for longer than three seconds resets the chassis to its default state following the next reboot. Configuration variables are reset to factory default, but the flash is not erased and no files are removed. |
| Power switch | No |
| | To shut down the Firepower 1010, remove the AC power supply. |
| | Note To shut down the Firepower 1010 gracefully, see the "Power Off the Device" topic for FDM and FMC in the Cisco Firepower 1010 Getting Started Guide. |
| Power cord | Yes |
| socket | The chassis is powered on when you plug in the AC power supply. |
| AC power | One external AC power supply |
| supply | The power supply has a total of 115 W of power. There is 55 W of +12-V system power and 60 W of -53.5-V PoE power. |
| | Note PoE+ is supported in a future software release. |
| | Note Use the power supply (part number 341-100765-01) that shipped with the chassis. It supports PoE+. |
| Storage | One 200-GB M.2 SATA SSD drive |
| | The drive is used by the software; there is no user access to the drive. |
| | The drive is not field-replaceable; you must return the chassis to Cisco for drive replacement. |
| Rubber feet | Four rubber feet on the bottom of the chassis |
| | Note The rubber feet are needed for proper cooling. Do not remove them. |
| | |

Console Ports

The Firepower 1010 has two external console ports, a standard RJ-45 port and a USB Mini B serial port. Only one console port can be active at a time. When a cable is plugged into the USB console port, the RJ-45 port becomes inactive. Conversely, when the USB cable is removed from the USB port, the RJ-45 port becomes active. The console ports do not have any hardware flow control. You can use the CLI to configure the chassis through either serial console port by using a terminal server or a terminal emulation program on a computer.

- RJ-45 (8P8C) port—Supports RS-232 signaling to an internal UART controller. The RJ-45 console port does not support a remote dial-in modem. You can use a standard management cable (Cisco part number 72-3383-01) to convert the RJ45-to-DB9 connection if necessary.
- USB Mini B port—Lets you connect to a USB port on an external computer. For Linux and Macintosh systems, no special driver is required. For Windows systems, you must download and install a USB driver (available on software.cisco.com). You can plug and unplug the USB cable from the console port without affecting Windows HyperTerminal operations. We recommend shielded USB cables with properly terminated shields. Baud rates for the USB console port are 1200, 2400, 4800, 9600, 19200, 38400, 57600, and 115200 bps.



Note

For Windows operating systems, you must install a Cisco Windows USB Console Driver on any PC connected to the console port before using the USB console port. See Connect to the Console Port with Microsoft Windows for information on installing the driver.

External Flash Storage

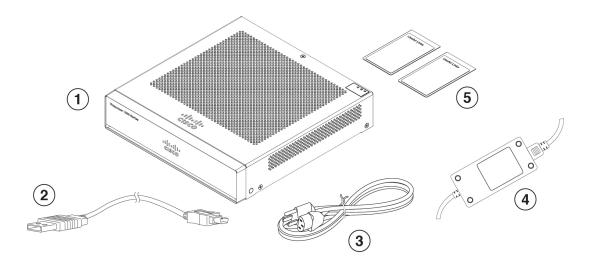
The chassis contains a standard USB Type A port that you can use to attach an external device. The USB port can provide output power of 5 V and up to a maximum of 1A (5 USB power units).

- External USB drive (optional)—You can use the external USB Type A port to attach a data-storage device. The external USB drive identifier is *disk1*. When the chassis is powered on, a connected USB drive is mounted as disk1 and is available for you to use. Additionally, the file-system commands that are available to disk0 are also available to disk1, including **copy**, **format**, **delete**, **mkdir**, **pwd**, **cd**, and so on.
- FAT-32 File System—The Firepower 1010 only supports FAT-32-formatted file systems for the external USB drive. If you insert an external USB drive that is not in FAT-32 format, the system mounting process fails, and you receive an error message. You can enter the command **format disk1:** to format the partition to FAT-32 and mount the partition to disk1 again; however, data might be lost.

Package Contents

The following figure shows the package contents for the Firepower 1010. Note that the contents are subject to change and your exact contents might contain additional or fewer items.

Figure 2: Firepower 1010 Package Contents

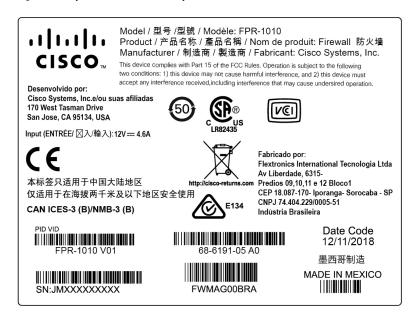


| 1 | Chassis | 2 | USB console cable (Type A to Type B) |
|---|---|---|--------------------------------------|
| 3 | Power cord | 4 | Power supply |
| 5 | Useful Links Cisco Firepower 1010 The steps in the Useful Links document send you to the documentation you need to install, set up, and configure your 1010. Start Here Cisco Firepower 1010 for Firepower Threat Defense This document tells how to cable and set up the FTD using Firepower Device Manager (FDM) (a simplified, single device manager included on the device). | | |

Serial Number Location

You can view the serial number and additional model information on the compliance label located on the bottom of the chassis. The following figure shows a sample compliance label.

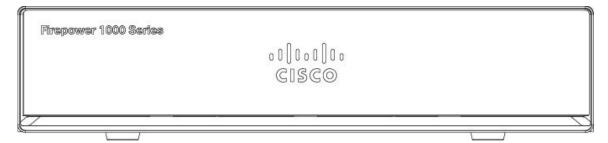
Figure 3: Compliance Label on the Firepower Chassis



Front Panel

The following figure shows the front panel of the Firepower 1010. Note that there are no connectors or LEDs on the front panel.

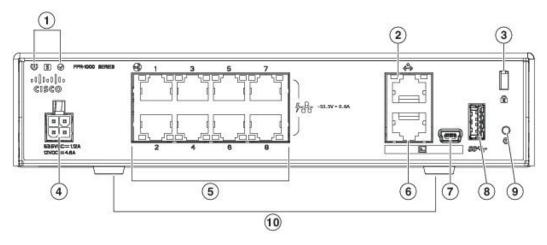
Figure 4: Firepower 1010 Front Panel



Rear Panel

The following figure shows the rear panel of the Firepower 1010. See Status LEDs, on page 7 for a description of the LEDs.

Figure 5: Firepower 1010 Rear Panel



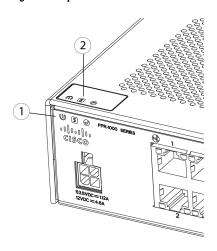
| 1 | Status LEDs | 2 | Management port |
|---|--------------------|----|-------------------|
| 3 | Lock slot | 4 | Power cord socket |
| 5 | Network data ports | 6 | Console port |
| 7 | USB Mini B port | 8 | USB Type A port |
| 9 | Reset button | 10 | Rubber feet |

Status LEDs

Facing the rear of the chassis, the LEDs are located on the top left edge (facing the front of the chassis, they are in the back right corner of the top). The network port LEDs are at the top sides of each network port.

The following figure shows the status LEDs on the rear panel and on the cover of the chassis.

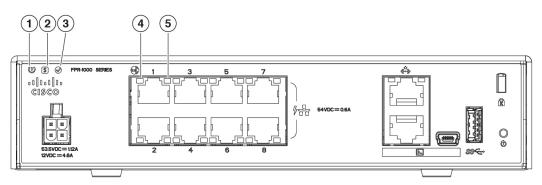
Figure 6: Firepower 1010 Status LEDs



1 Power, Status, and Active LEDs on rear of chassis 2 Power, Status, and Active LEDs on top of chassis

The following figure shows all of the LEDs on the rear panel and describes their states.

Figure 7: Firepower 1010 Rear Panel LEDs



Power supply status:

Off —Power supply off.

Green—Power supply on.

Amber—Critical alarm indicating one or more of the following:

Major failure of a hardware or software component.

Over-temperature condition.

Power voltage outside the tolerance range.

| 3 | Active | 4 | Network |
|---|---|---|-------------------------------------|
| | Status of the failover pair: | | Status of the network ports. |
| | Off— Failover is not operational. | | Link status (L): |
| | Green—Failover pair operating normally. | | Off—No link, or port is not in use. |
| | The LED is green always unless the chassis in a high availability pair. | | Green—Link established. |
| | • Amber—When the chassis is in a high | | Green, flashing—Link activity. |
| | availability pair, the LED is amber for the | | |
| | standby unit. | | |
| 5 | Network | | |
| | Status of the network ports. | | |
| | Connection-speed status (S): | | |
| | • Green, flashing—One flash every three seconds = 10 Mbps. | | |
| | • Green, flashing—Two rapid flashes = 100 Mbps. | | |
| | • Green, flashing—Three rapid flashes = 1000 Mbps. | | |

Hardware Specifications

The following table contains hardware specifications for the Firepower 1010.

Table 2: Firepower 1010 Hardware Specifications

| Dimensions (H x W x D) | 1.82 x 7.85 x 8.07 in. (4.62 x 19.94 x 20.50 cm) | | | |
|------------------------|--|---|--|--|
| Weight | 3 lb (1.36 kg) | | | |
| System power | 30 W | | | |
| | 1 | duding any PoE devices connected to the chassis. 55 W is the maximum for the power supply. | | |
| | Note PoE+ is supported in a future software release. | | | |
| | Note | Use the power supply (part number 341-100765-01) that shipped with the chassis. It supports PoE+. | | |
| Temperature | Operating: 32 to 104°F (0 to 40°C) | | | |
| | Derate the maximum operating temperature 1.5° C per 1000 ft above sea level. | | | |
| | Nonoperating: -13 to 158°F (-25 to 70°C) maximum altitude is 40,000 ft | | | |

| Humidity | Operating: 90% |
|----------------|---------------------------------------|
| | Nonoperating: 10 to 90% |
| Altitude | Operating: 0 to 9843 (3000 m) |
| | Nonoperating: 0 to 15,000 ft (4570 m) |
| Acoustic noise | 0 dBa |

Product ID Numbers

The following table lists the field-replaceable PIDs associated with the Firepower 1010. The spare components are ones that you can order and replace yourself. If any internal components fail, you must RMA the entire chassis. See the **show inventory** command in the Cisco Firepower Threat Defense Command Reference or the Cisco ASA Series Command Reference to display a list of the PIDs for your Firepower 1010.

Table 3: Firepower 1010 PIDs

| PID | Description | |
|--------------------|---|--|
| FPR1010-NGFW-K9 | Cisco Firepower 1010 NGFW desktop appliance | |
| FPR1K-DT-ACY-KIT | Cisco Firepower 1010 accessory kit | |
| FPR1K-DT-PWR-AC | Cisco Firepower 1010 115-W power supply | |
| FPR1K-DT-PWR-AC= | Cisco Firepower 1010 115-W power supply (spare) | |
| FPR1K-DT-RACK-MNT= | Cisco Firepower 1010 rack-mount kit (spare) | |
| FPR1K-DT-WALL-MNT= | Cisco Firepower 1010 wall-mount kit (spare) | |

Power Cord Specifications

Each power supply has a separate power cord. Standard power cords or jumper power cords are available for connection to the security appliance. The jumper power cords for use in racks are available as an optional alternative to the standard power cords.

If you do not order the optional power cord with the system, you are responsible for selecting the appropriate power cord for the product. Using a incompatible power cord with this product may result in electrical safety hazard. Orders delivered to Argentina, Brazil, and Japan must have the appropriate power cord ordered with the system.

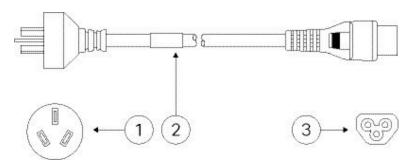


Note

Only the approved power cords or jumper power cords provided with the chassis are supported.

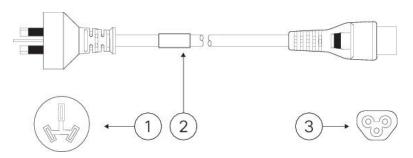
The following power cords are supported.

Figure 8: Argentina (CAB-AC-C5-ARG)



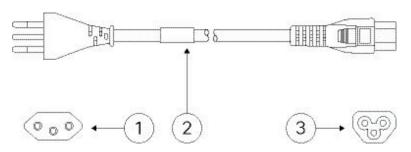
| | 1 | Plug: IRAM 2073 | 2 | Cord set rating: 2.5 A, 250 V |
|---|---|-------------------------|---|-------------------------------|
| : | 3 | Connector: IEC 60320/C5 | | |

Figure 9: Australia (CAB-AC-C5-AUS)



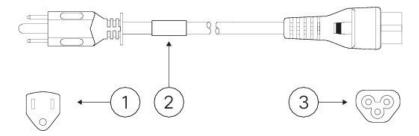
| 1 | Plug: AUS 10S3 | 2 | Cord set rating: 2.5 A, 250 V |
|---|-------------------------|---|-------------------------------|
| 3 | Connector: IEC 60320/C5 | | |

Figure 10: Brazil (CAB-AC-C5-BRA)



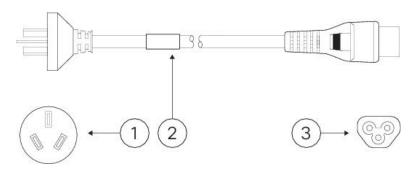
| 1 | Plug: NBR 14136 | 2 | Cord set rating: 2.5 A, 250 V |
|---|-------------------------|---|-------------------------------|
| 3 | Connector: IEC 60320/C5 | | |

Figure 11: Canada (CAB-AC-C5)



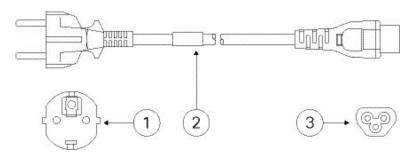
| 1 | 1 | Plug: NEMA 5-15P | 2 | Cord set rating: 2.5 A, 125 V |
|---|---|-------------------------|---|-------------------------------|
| 3 | 3 | Connector: IEC 60320/C5 | | |

Figure 12: China (CAB-AC-C5-CHI)



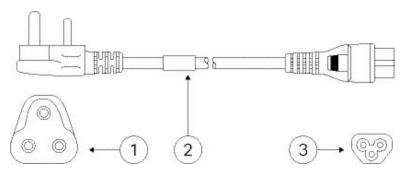
| 1 | Plug: GB 2099.1 | 2 | Cord set rating: 2.5 A, 250 V |
|---|-------------------------|---|-------------------------------|
| 3 | Connector: IEC 60320/C5 | | |

Figure 13: Europe (CAB-AC-C5-EUR)



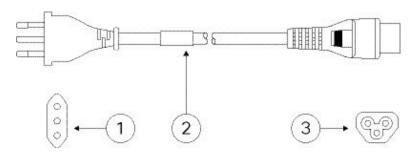
| 1 | Plug: CEE 7 VII | 2 | Cord set rating: 2.5 A, 250 V |
|---|-------------------------|---|-------------------------------|
| 3 | Connector: IEC 60320/C5 | | |

Figure 14: India (CAB-AC-C5-IND)



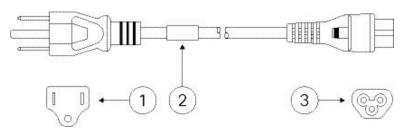
| 1 | Plug: IS 1293 | 2 | Cord set rating: 2.5 A, 250 V |
|---|-------------------------|---|-------------------------------|
| 3 | Connector: IEC 60320/C5 | | |

Figure 15: Italy (CAB-AC-C5-ITA)



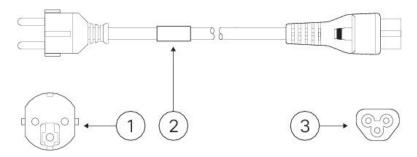
| 1 | Plug: CEI 23-06/VII | 2 | Cord set rating: 2.5 A, 250 V |
|---|-------------------------|---|-------------------------------|
| 3 | Connector: IEC 60320/C5 | | |

Figure 16: Japan (CAB-AC-C5-JAP)



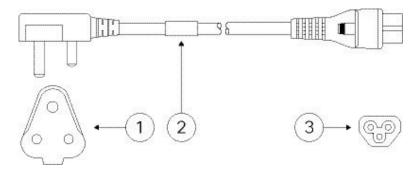
|] | 1 | Plug: JIS C8303 | 2 | Cord set rating: 3 A, 125 V |
|---|---|-------------------------|---|-----------------------------|
| 3 | 3 | Connector: IEC 60320/C5 | | |

Figure 17: Korea (CAB-AC-C5-KOR)



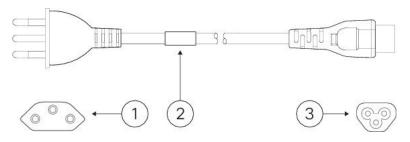
| | 1 | Plug: KSC 83205 | 2 | Cord set rating: 3.0 A, 250 V | |
|---|---|-------------------------|---|-------------------------------|--|
| • | 3 | Connector: IEC 60320/C5 | | | |

Figure 18: South Africa (CAB-AC-C5-SAF)



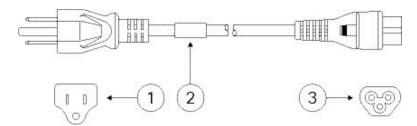
| 1 | Plug: SABS 164-1 | 2 | Cord set rating: 2.5 A, 250 V |
|---|-------------------------|---|-------------------------------|
| 3 | Connector: IEC 60320/C5 | | |

Figure 19: Switzerland (CAB-AC-C5-SWI)



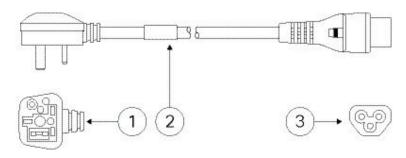
| 1 | Plug: SEV 1011 | 2 | Cord set rating: 2.5 A, 250 V |
|---|-------------------------|---|-------------------------------|
| 3 | Connector: IEC 60320/C5 | | |

Figure 20: Taiwan (CAB-AC-C5-TWN)



| 1 | Plug: CNS 10917-2 | 2 | Cord set rating: 2.5 A, 125 V |
|---|-------------------------|---|-------------------------------|
| 3 | Connector: IEC 60320/C5 | | |

Figure 21: United Kingdom (CAB-AC-C5-UK)



| 1 | Plug: BS1363A/SS145 | 2 | Cord set rating: 2.5 A, 250 V |
|---|-------------------------|---|-------------------------------|
| 3 | Connector: IEC 60320/C5 | | |

Power Cord Specifications



Installation Preparation

- Installation Warnings, on page 17
- Position the Chassis, on page 20
- Safety Recommendations, on page 20
- Maintain Safety with Electricity, on page 21
- Prevent ESD Damage, on page 21
- Site Environment, on page 22
- Site Considerations, on page 22
- Power Supply Considerations, on page 22
- Rack Configuration Considerations, on page 23

Installation Warnings

Be sure to read the Regulatory and Compliance Information document before installing the chassis.

Take note of the following warnings:



Warning

Statement 1071—Warning Definition

IMPORTANT SAFETY INSTRUCTIONS

This warning symbol means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents. Use the statement number provided at the end of each warning to locate its translation in the translated safety warnings that accompanied this device.

SAVE THESE INSTRUCTIONS



Warning

Statement 12—Power Supply Disconnection Warning

Before working on a chassis or working near power supplies, unplug the power cord on AC units; disconnect the power at the circuit breaker on DC units.



Warning

Statement 19—TN Power Warning

The device is designed to work with TN power systems.



Warning

Statement 43—Jewelry Removal Warning

Before working on equipment that is connected to power lines, remove jewelry (including rings, necklaces, and watches). Metal objects will heat up when connected to power and ground and can cause serious burns or weld the metal object to the terminals.



Warning

Statement 94—Wrist Strap Warning

During this procedure, wear grounding wrist straps to avoid ESD damage to the card. Do not directly touch the backplane with your hand or any metal tool, or you could shock yourself.



Warning

Statement 1004—Installation Instructions

Read the installation instructions before using, installing or connecting the system to the power source.



Warning

Statement 1005—Circuit Breaker

This product relies on the building's installation for short-circuit (overcurrent) protection. Ensure that the protective device is rated not greater than: 20 A, 120 V, and 16 A, 250 V



Warning

Statement 1017—Restricted Area

This unit is intended for installation in restricted access areas. A restricted access area can be accessed by skilled, instructed or qualified personnel.



Warning

Statement 1021—SELV Circuit

To avoid electric shock, do not connect safety extra-low voltage (SELV) circuits to telephone-network voltage (TNV) circuits. LAN ports contain SELV circuits, and WAN ports contain TNV circuits. Some LAN and WAN ports both use RJ-45 connectors. Use caution when connecting cables.



Warning

Statement 1024—Ground Conductor

This equipment must be grounded. To reduce the risk of electric shock, never defeat the ground conductor or operate the equipment in the absence of a suitably installed ground conductor. Contact the appropriate electrical inspection authority or an electrician if you are uncertain that suitable grounding is available.



Warning

Statement 1028—More Than One Power Supply

This unit might have more than one power supply connection. All connections must be removed to de-energize the unit.



Warning

Statement 1029—Blank Faceplates and Cover Panels

Blank faceplates and cover panels serve three important functions: they prevent exposure to hazardous voltages and currents inside the chassis; they contain electromagnetic interference (EMI) that might disrupt other equipment; and they direct the flow of cooling air through the chassis. Do not operate the system unless all cards, faceplates, front covers, and rear covers are in place.



Warning

Statement 1030—Equipment Installation

Only trained and qualified personnel should be allowed to install, replace, or service this equipment.



Warning

Statement 1040—Product Disposal

Ultimate disposal of this product should be handled according to all national laws and regulations.



Warning

Statement 1045—Short-Circuit Protection

This product requires short-circuit (overcurrent) protection to be provided as part of the building installation. Install only in accordance with national and local wiring regulations.



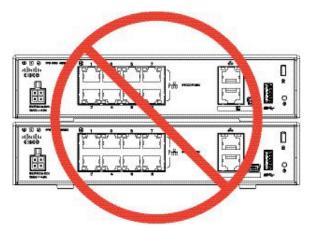
Warning

Statement 1074—Comply with Local and National Electrical Codes

To reduce risk of electric shock or fire, installation of the equipment must comply with local and national electrical codes.

Position the Chassis

See Desktop-Mount the Chassis, on page 26 for information on desktop-mounting the chassis.





Caution

Do not stack the chassis on top of another chassis. If you stack the units, they will overheat, which causes the units to power cycle.

Whether positioning the chassis on a desktop, on a closet shelf, or mounting it on a wall, consider the following:

- Be sure to choose an area where the chassis is out of the way to make sure it is not bumped or accidentally dislodged. The chassis has feet on the bottom so it does not sit flush where placed, thus allowing proper air circulation through and around it. Make sure that the chassis is not tightly enclosed or crowded by other objects that might impede proper circulation.
- Choose a location that lets you easily bring the power cord and Ethernet and console cables to the chassis, with plenty of slack and yet tucked away, so they cannot be inadvertently unplugged.

Safety Recommendations

Observe these safety guidelines:

- Keep the area clear and dust free before, during, and after installation.
- Keep tools away from walkways, where you and others might trip over them.
- Do not wear loose clothing or jewelry, such as earrings, bracelets, or chains that could get caught in the chassis.
- Wear safety glasses if you are working under any conditions that might be hazardous to your eyes.
- Do not perform any action that creates a potential hazard to people or makes the equipment unsafe.
- Never attempt to lift an object that is too heavy for one person.

Maintain Safety with Electricity



Warning

Before working on a chassis, be sure the power cord is unplugged.

Be sure to read the Regulatory and Compliance Information document before installing the chassis.

Follow these guidelines when working on equipment powered by electricity:

- Before beginning procedures that require access to the interior of the chassis, locate the emergency power-off switch for the room in which you are working. Then, if an electrical accident occurs, you can act quickly to turn off the power.
- Do not work alone if potentially hazardous conditions exist anywhere in your work space.
- Never assume that power is disconnected; always check.
- Look carefully for possible hazards in your work area, such as moist floors, ungrounded power extension cables, frayed power cords, and missing safety grounds.
- If an electrical accident occurs:
 - Use caution; do not become a victim yourself.
 - Disconnect power from the system.
 - If possible, send another person to get medical aid. Otherwise, assess the condition of the victim, and then call for help.
 - Determine whether the person needs rescue breathing or external cardiac compressions; then take appropriate action.
- Use the chassis within its marked electrical ratings and product usage instructions.
- The chassis is equipped with an AC-input power supply, which is shipped with a three-wire electrical cord with a grounding-type plug that fits into a grounding-type power outlet only. Do not circumvent this safety feature. Equipment grounding should comply with local and national electrical codes.

Prevent ESD Damage

ESD occurs when electronic components are improperly handled, and it can damage equipment and impair electrical circuitry, which can result in intermittent or complete failure of your equipment.

Always follow ESD-prevention procedures when removing and replacing components. Ensure that the chassis is electrically connected to an earth ground. Wear an ESD-preventive wrist strap, ensuring that it makes good skin contact. Connect the grounding clip to an unpainted surface of the chassis frame to safely ground ESD voltages. To properly guard against ESD damage and shocks, the wrist strap and cord must operate effectively. If no wrist strap is available, ground yourself by touching the metal part of the chassis.

For safety, periodically check the resistance value of the antistatic strap, which should be between one and 10 megohms.

Site Environment

You can place the chassis on a desktop, on the wall, or in a rack. The location of the chassis and the layout of the equipment rack or wiring room are extremely important for proper system operation. Placing equipment too close together with inadequate ventilation and inaccessible panels can cause system malfunctions and shutdowns. Improper placement can also make it difficult for you to access the chassis for maintenance.



Warning

Under no circumstances should you stack one chassis on top of one another. This disrupts cooling air flow to the chassis and causes damage to the hardware.

See Hardware Specifications, on page 9 for information about physical specifications.

To avoid equipment failures and reduce the possibility of environmentally caused shutdowns, plan the site layout and equipment locations carefully. If you are currently experiencing shutdowns or unusually high error rates with your existing equipment, these considerations may help you isolate the cause of failures and prevent future problems.

Site Considerations

Considering the following helps you plan an acceptable operating environment for the chassis, and avoid environmentally-caused equipment failures.

- Electrical equipment generates heat. Ambient air temperature might not be adequate to cool equipment
 to acceptable operating temperatures without adequate circulation. Make sure that the room in which
 you operate your system has adequate air circulation.
- Ensure that the chassis cover is secure. The chassis is designed to allow cooling air to flow effectively within it. An open chassis allows air leaks, which may interrupt and redirect the flow of cooling air from the internal components.
- Always follow ESD-prevention procedures to avoid damage to equipment. Damage from static discharge can cause immediate or intermittent equipment failure.

Power Supply Considerations

See Features, on page 1 and Hardware Specifications, on page 9 for more detailed information about the power supply in the chassis.

When installing the chassis, consider the following:

- Check the power at the site before installing the chassis to ensure that it is free of spikes and noise. Install a power conditioner, if necessary, to ensure proper voltages and power levels in the appliance-input voltage.
- Install proper grounding for the site to avoid damage from lightning and power surges.
- The chassis does not have a user-selectable operating range. Refer to the label on the chassis for the correct appliance input-power requirement.

- Several styles of AC-input power supply cords are available for the chassis; make sure that you have the correct style for your site.
- Install an uninterruptible power source for your site, if possible.

Rack Configuration Considerations

See Rack-Mount the Chassis, on page 29 for the procedure for rack-mounting the chassis.

Consider the following when planning a rack configuration:

- If you are mounting a chassis in an open rack, make sure that the rack frame does not block the intake or exhaust ports.
- Be sure enclosed racks have adequate ventilation. Make sure that the rack is not overly congested as each chassis generates heat. An enclosed rack should have louvered sides and a fan to provide cooling air.
- In an enclosed rack with a ventilation fan in the top, heat generated by equipment near the bottom of the rack can be drawn upward and into the intake ports of the equipment above it in the rack. Ensure that you provide adequate ventilation for equipment at the bottom of the rack.
- Baffles can help to isolate exhaust air from intake air, which also helps to draw cooling air through the chassis. The best placement of the baffles depends on the airflow patterns in the rack. Experiment with different arrangements to position the baffles effectively.

Rack Configuration Considerations

Mount the Chassis

- Unpack and Inspect the Chassis, on page 25
- Desktop-Mount the Chassis, on page 26
- Wall-Mount the Chassis, on page 26
- Rack-Mount the Chassis, on page 29

Unpack and Inspect the Chassis



Note

The chassis is thoroughly inspected before shipment. If any damage occurred during transportation or any items are missing, contact your customer service representative immediately. Keep the shipping container in case you need to send the chassis back due to damage.

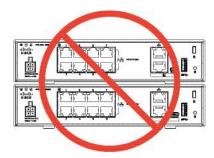
See Package Contents, on page 4 for a list of what shipped with the chassis.

- **Step 1** Remove the chassis from its cardboard container and save all packaging material.
- Step 2 Compare the shipment to the equipment list provided by your customer service representative. Verify that you have all items
- **Step 3** Check for damage and report any discrepancies or damage to your customer service representative. Have the following information ready:
 - Invoice number of shipper (see the packing slip)
 - Model and serial number of the damaged unit
 - · Description of damage
 - Effect of damage on the installation

Desktop-Mount the Chassis

You can mount the chassis on a desktop by placing it on a desk in a horizontal position. Make sure there are no blockages or obstructions within one inch of the top of the chassis or within .5 inch of the sides and back, so that nothing interferes with cooling. Do not remove the rubber feet included with the chassis. They are also needed for proper cooling.

Figure 22: Desk Top Mount the Chassis





Caution

Do not stack one chassis on top of another chassis. If you stack the units, they will overheat, which causes the units to power cycle.

What to do next

Install the cables according to your default software configuration as described in the Getting Started Guide for your software version.

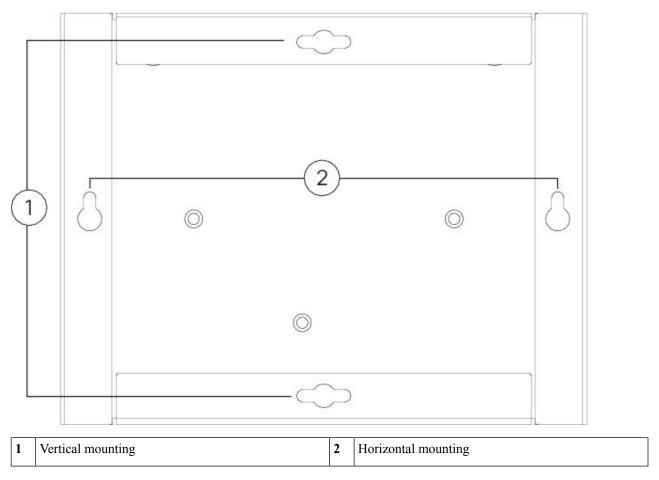
Wall-Mount the Chassis

You can purchase an optional wall-mount kit (part number 69-100647-01). You can wall-mount the chassis left-, right-, or rear panel-side up. You can use the wall-mount bracket to mark the holes for mounting it on the wall. The wall-mount bracket is 7.682 x 6 inches. You need to make two level marks on the wall where you want to hang the chassis. For vertical orientation (rear panel up), the holes should be 6.826 inches apart. For side to side orientation, the holes should be 5.134 inches apart.

Follow these steps to mount your chassis on a wall.

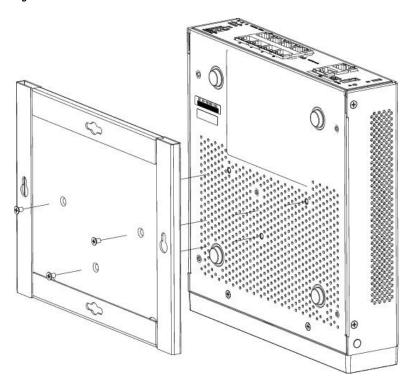
- **Step 1** Choose an orientation (left-, right-, or rear panel-side up) and a location on the wall for the chassis.
- Step 2 Use a pencil, ruler, and level to mark locations for the two mounting screws. You can use the wall-mount bracket itself to mark either the top holes or the side holes.

Figure 23: Wall-Mount Bracket



Step 3 Attach the wall-mount bracket to the chassis using the three M3.0 x 6 mmL screws that came in the kit.

Figure 24: Attach the Wall-Mount Bracket to the Chassis



- Step 4 Use the two Cisco-provided screws to drill into a stud, or use the anchors from the dry-wall kit to hang it into dry wall.

 If you are mounting the chassis onto something other than drywall, such as wood or sheet metal, anchors may not be required.
- Step 5 Drill a hole into the wall at each mark that you made in Step 2.These holes should be slightly smaller in diameter than anchors if you are using them. The recommended drill hole size is 3/16 inches.
- **Step 6** Insert the anchors into the holes if needed, and be sure they are properly seated.
- **Step 7** Fasten each screw into its anchor until it protrudes about 1/4 inch.
- **Step 8** Pick up the chassis, align the screws in the anchors with the holes in the bottom of the wall-mount bracket, move the chassis toward the wall until the screw heads are in the wall-mount bracket, and then slide it down until it rests on the screws.

Caution Do not mount the chassis with the rear panel facing downward. This orientation is not supported.

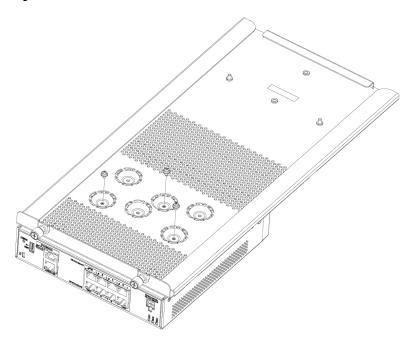
What to do next

Install the cables according to your default software configuration as described in the Getting Started Guide for your software version.

Rack-Mount the Chassis

- **Step 1** Place the chassis with the top facing down on a large, stable work area. .
- **Step 2** Invert the sliding shelf and position it on the chassis. You can mount the chassis with the front or rear panel facing front.

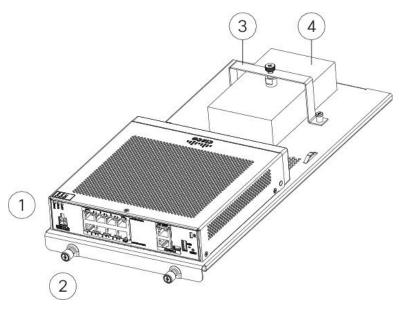
Figure 25: Install the Rack-Mount Shelf on the Chassis



- Step 3 Adjust the position of the chassis and the shelf until the three mounting holes in the dimples in the bottom of the shelf are aligned with the mounting holes in the bottom of the chassis.
- **Step 4** Tighten the captive screws to lock the chassis into place on the rack-mount shelf.
- **Step 5** Carefully turn the rack-mount shelf right-side up.
- Install the power supply and bracket behind the chassis. Tighten the three screws on the bracket to secure it to the rack shelf. You can tighten the thumb screw on the top of the bracket to secure the power supply. The bracket flexes when the power supply is properly secured.

Caution If you are using a torque screw driver or drill do not use more than 4 in-lbs.

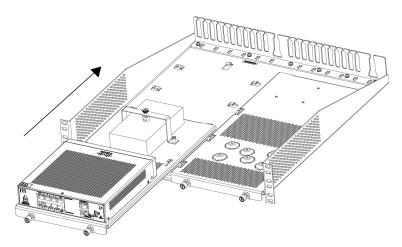
Figure 26: Install the Power Supply Bracket and Power Supply in the Rack-Mount Shelf



| 1 | Chassis | 2 | Rack-mount shelf |
|---|-------------------------------|---|------------------|
| 3 | Power supply securing bracket | 4 | Power supply |

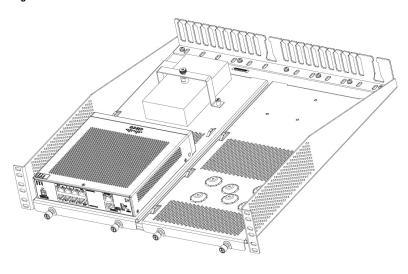
Step 7 Slide the rack-mount shelf into the rack.

Figure 27: Slide Rack-Mount Shelf into Rack



Step 8 The chassis is now rack-mounted. Repeat Steps 1 through 7 to rack-mount a second chassis.

Figure 28: Rack-Mounted Chassis



What to do next

Install the cables according to your default software configuration as described in the Getting Started Guide for your software version.

Rack-Mount the Chassis

Connect to the Console Port

- Connect to the Console Port with Microsoft Windows, on page 33
- Connect to the Console Port with Mac OS X, on page 35
- Connect to the Console Port with Linux, on page 35

Connect to the Console Port with Microsoft Windows

You must install a USB device driver the first time a Microsoft Windows-based PC is connected to the USB console port on the chassis, otherwise the connection fails.

To uninstall the driver, use the Add Remove Programs utility or the Setup-exe program.

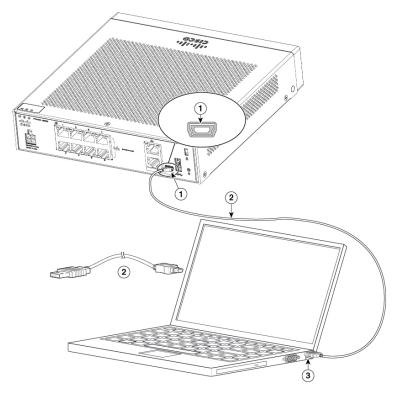


Note

Disconnect the console terminal before uninstalling the driver.

- **Step 1** Obtain the appropriate driver (Cisco_usbconsole_driver_X_X_zip, where X is a revision number) for your model from the Cisco Download Software site, USB Console Software category.
- **Step 2** Install the driver.
- **Step 3** Connect a 5-pin USB Mini B to the console port as shown in the following figure.

Figure 29: Firepower 1010 Console Port Connection



| 1 | USB Mini B console port | 2 | USB Mini B to USB Type A console cable |
|---|-------------------------|---|--|
| 3 | USB Type A | | |

- Step 4 Connect the end of the cable with the DB-9 connector (or USB Type A) to the terminal or PC. If your terminal or PC has a console port that does not accommodate a DB-9 connector, you must provide an appropriate adapter for that port. The LED for the console port turns green and within a few moments the Found New Hardware Wizard appears.
- **Step 5** Follow the instructions to complete the driver installation.
- **Step 6** To communicate with the chassis, start a terminal emulator application. This software should be configured with the following parameters:
 - 9600 baud
 - 8 data bits
 - no parity
 - 1 stop bit
 - · no flow control

Connect to the Console Port with Mac OS X

Follow these steps to connect a Mac OS X system USB port to the console using the built-in OS X Terminal utility, or alternatively you can use a separate terminal emulator application.

- Step 1 Use the Finder to go to Applications > Utilities > Terminal.
- **Step 2** Connect the OS X USB port to the chassis.
- **Step 3** Enter the following commands to find the OS X USB port number:

Example:

```
macbook:user$ cd /dev
macbook:user$ ls -ltr /dev/*usb*
crw-rw-rw- 1 root wheel 9, 66 Apr 1 16:46 tty.usbmodem1a21
DT-macbook:dev user$
```

Step 4 Connect to the USB port with the following command followed by the chassis USB port speed:

Example

macbook:user\$ screen /dev/tty.usbmodem1a21 9600

Step 5 Enter **Ctrl-a** followed by **d** to disconnect the OS X USB console from the Terminal window.

Connect to the Console Port with Linux

Follow these steps to connect a Linux system USB port to the console using the built-in Linux Terminal utility.

- **Step 1** Open the Linux Terminal window.
- **Step 2** Connect the Linux USB port to the chassis.
- **Step 3** Enter the following commands to find the Linux USB port number:

Example:

```
root@usb-suse# cd /dev
root@usb-suse /dev# ls -ltr *ACM*
crw-r--r- 1 root root 188, 0 Jan 14 18:02 ttyACM0
root@usb-suse /dev#
```

Step 4 Connect to the USB port with the following command followed by the chassis USB port speed

Example:

```
root@usb-suse /dev# screen /dev/ttyACM0 9600
```

Step 5 To disconnect the Linux USB console from the Terminal window, enter **Ctrl-a** followed by: then **quit**.

Connect to the Console Port with Linux