Forcepoint

# Next Generation Firewall

## Models 330, 331, 335, 335W

## 330 Series

Hardware Guide

Revision B

Contents



# Introduction

Thank you for choosing a Forcepoint appliance.

Familiarize yourself with the appliance ports and indicators and learn how to install the appliance safely.

# Find product documentation

In the Forcepoint Customer Hub, you can find information about a released product, including product documentation, technical articles, and more.

You can get additional information and support for your product in the Forcepoint Customer Hub at https://support.forcepoint.com/s/. There, you can access product documentation, release notes, Knowledge Base articles, downloads, cases, and contact information.

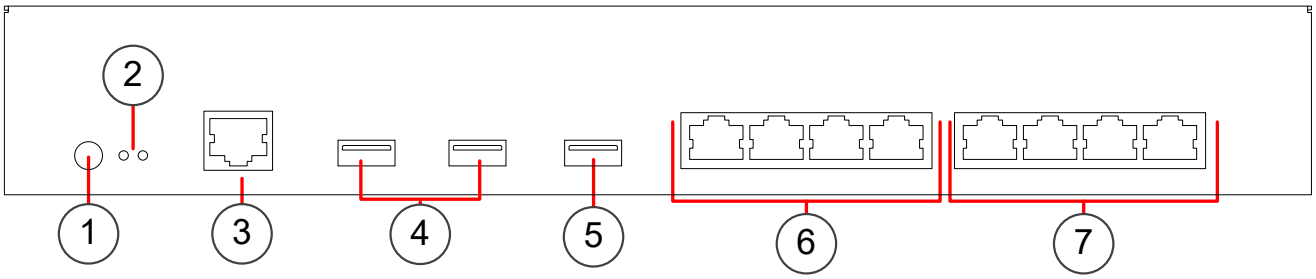
You might need to log on to access the Forcepoint Customer Hub. If you do not yet have credentials, create a customer account. To create a customer account, navigate to the Customer Hub Home page, and then click the **Create Account** link.

# Model 330 and 331 features

The figures and tables show the appliance components and features.

## Front panel

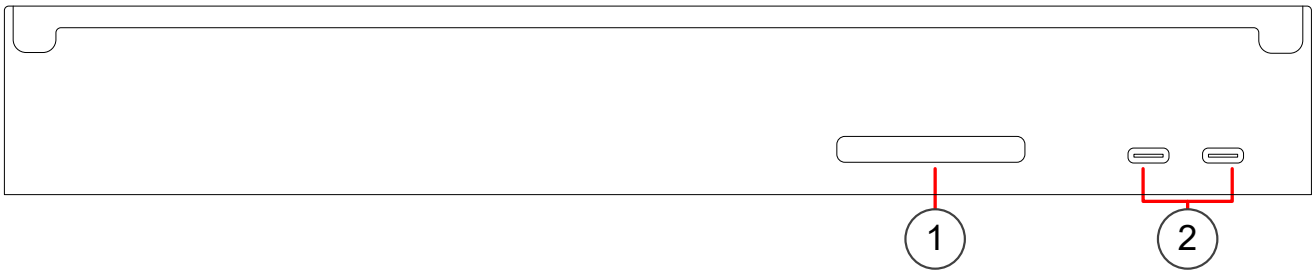
This panel has the following parts.




1. Power button. The indicator on the button shows if the power is on.
2. Indicator lights
3. Console port (speed 115,200 bps)
4. USB port
5. USB 3.0 port
6. Fixed Ethernet ports 0-3. From left to right, numbered eth0, eth1, eth2, and eth3.
7. Fixed Ethernet ports 4-7. From left to right, numbered eth4, eth5, eth6, and eth7.

## Back panel

This panel has the following parts.




1. CFast Card
2. 19V DC power connectors A and B from left to right

**CAUTION**

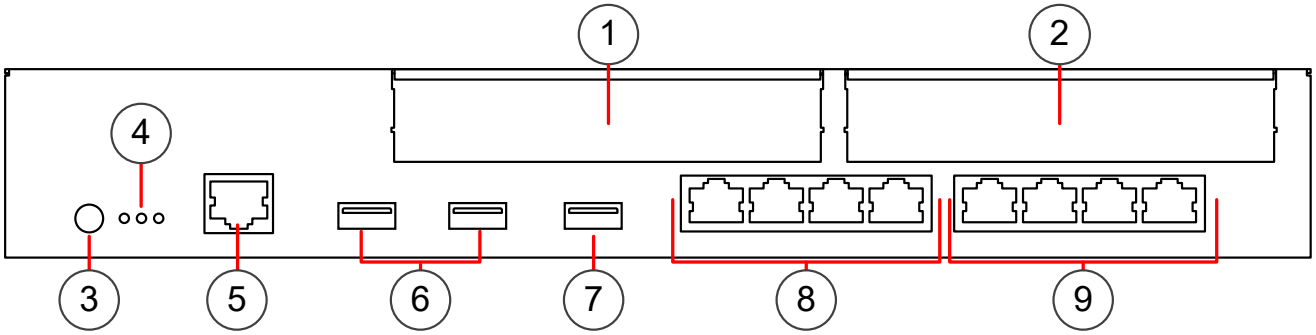
The power connectors are intended to provide power to the Forcepoint appliance only. Do not connect other devices to the power connectors. Use only the power adapter delivered with the Forcepoint appliance to power the appliance.

# Model 335 and 335W features

The figures and tables show the appliance components and features.

## Front panel

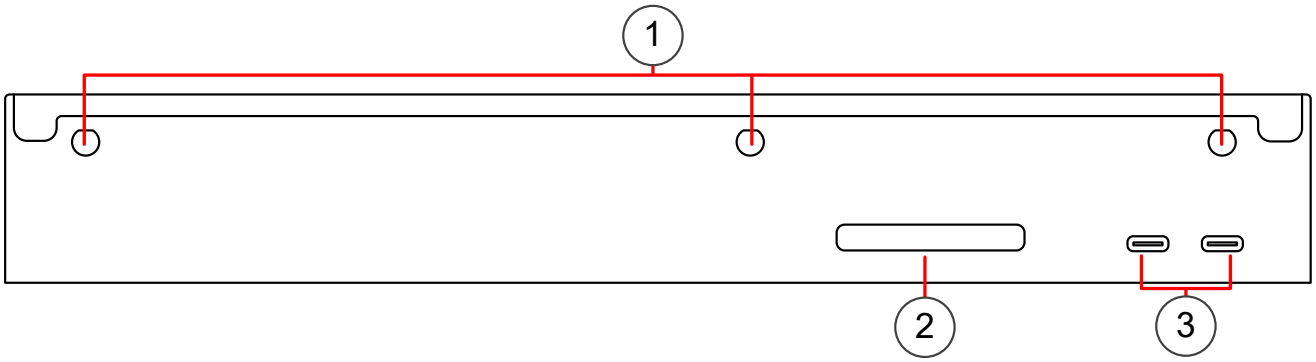
This panel has the following parts.




1. Interface module slot 1
2. Interface module slot 2
3. Power button. The indicator on the button shows if the power is on.
4. Indicator lights
5. Console port (speed 115,200 bps)
6. USB port
7. USB 3.0 port
8. Fixed Ethernet ports 0-3 that belong to slot 0. From left to right, numbered eth0_0, eth0_1, eth0_2, and eth0_3.
9. Fixed Ethernet ports 4-7 that belong to slot 0. From left to right, numbered eth0_4, eth0_5, eth0_6, and eth0_7.

# Back panel

This panel has the following parts.




1 (Model 335W only) Antenna connectors

2 CFast Card

3 19V DC power connectors A and B from left to right

**CAUTION**

The power connectors are intended to provide power to the Forcepoint appliance only. Do not connect other devices to the power connectors. Use only the power adapter delivered with the Forcepoint appliance to power the appliance.

# Indicator lights

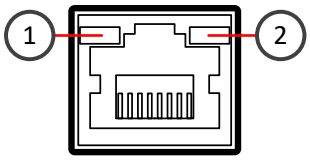
Indicator lights show the status of the appliance and any fixed Ethernet ports.

| Icon | Indicator | Color | Description |
|---|---|---|---|
| | Power | Green | The appliance is running. |
| | | Red | The appliance is in a standby state. |
| | Software status | Flashing amber | Initial contact between the NGFW Engine and the Management Server has not yet been established. |
| | | Solid amber | The NGFW Engine is in the offline state for one of the following reasons:<br>■ Initial contact between the NGFW Engine and the Management Server has been established but the NGFW Engine is not yet processing traffic.<br>■ The NGFW Engine has been commanded to go offline. |
| | | Green | The NGFW Engine is in the online state and processing traffic. |

| Icon | Indicator | Color | Description |
|---|---|---|---|
|  | Management connectivity | Green | A network connection between the NGFW appliance and the Management Server has been established. |
|  | Wireless status (Model 335W only) | Green | The wireless interface is configured as a wireless access point and is active. |

# Ethernet port indicators

Ethernet port indicators show the status and speed of the network ports.




1 Activity/link indicator

2 Link speed indicator

| Indicator | Color | Description |
|---|---|---|
| Activity/link indicator | Green | Steady when link is present. Flashes on activity. |
| | | |
| Link speed indicator | Unlit | 10 Mbps link. |
| | Amber | 100 Mbps link. |
| | Green | 1 Gbps link. |

# Ethernet port names for appliances with interface modules

Ethernet port names are based on the slot and port numbers.

The first number in the name represents the slot on the appliance. The second number represents the port on the slot. For example, eth2_0 is located on port 0 of slot 2.

| Component | Slot number | Port numbers |
|---|---|---|
| Fixed Ethernet ports | 0 | eth0_0, eth0_1, eth0_2, eth0_3, eth0_4, eth0_5, eth0_6, and eth0_7 from left to right. |
| Interface module ports | 1–2 from left to right | The port numbers start from 0 and increase from left to right. For example, the port farthest to the left in slot 1 is eth1_0. |

# Supported interface modules

Forcepoint NGFW appliances support the following types of interface modules. For a list of all available interface modules and compatibility information, see Knowledge Base article 6224.

**Note**

Do not remove any stickers from modules — they contain important information.

**Copper modules**

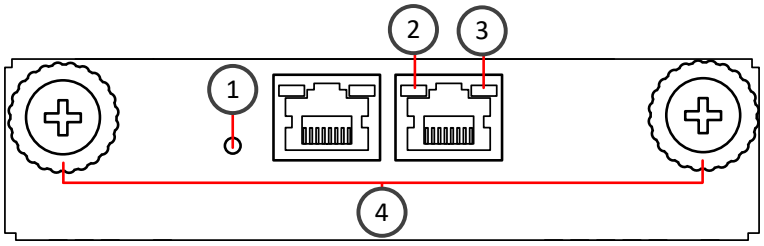
| Module | Identifier | Appliance models |
|---|---|---|
| 2 port gigabit Ethernet bypass mini | MMGE2B | 335 and 335W |
| 4 port gigabit Ethernet mini | MMGE4 | 335 and 335W |
| 4 port Fast Ethernet Switch mini | MMFESW4 | 335 and 335W |

**SFP modules**

| Module | Identifier | Appliance models |
|---|---|---|
| 1 port gigabit Ethernet SFP mini | MMGESFP | 335 and 335W |
| 2 port gigabit Ethernet SFP mini | MMGESFP2 | 335 and 335W |

# MMGE2B module

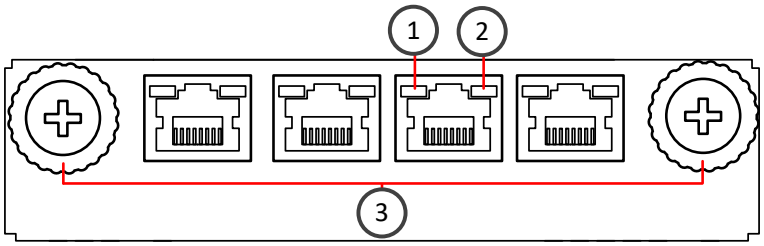
The MMGE2B module is a two-port gigabit bypass copper mini module.




| Number | Component | Color | Description |
|---|---|---|---|
| 1 | Bypass indicator | Amber | Bypass mode. |
| 2 | Activity/link indicator | Green | Link OK, flashes on activity. |
| 3 | Link speed indicator | Green | 1 Gbps link. |
| | | Amber | 100 Mbps link. |
| 4 | Thumbscrews | N/A | N/A |

# MMGE4 module

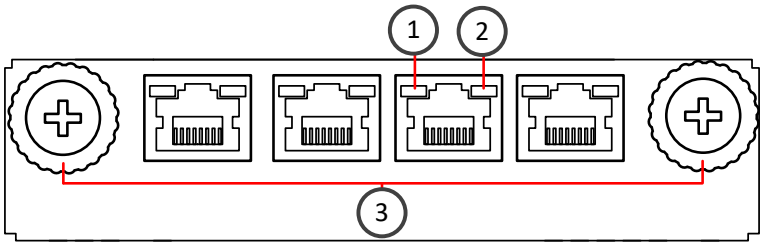
The MMGE4 module is a quad-port gigabit interface module.




| Number | Component | Color | Description |
|---|---|---|---|
| 1 | Activity/link indicator | Green | Link OK, flashes on activity. |
| 2 | Link speed indicator | Green | 1 Gbps link. |
| | | Amber | 10 Mbps or 100 Mbps link. |
| 3 | Thumbscrews | N/A | N/A |

# MMFESW4 module

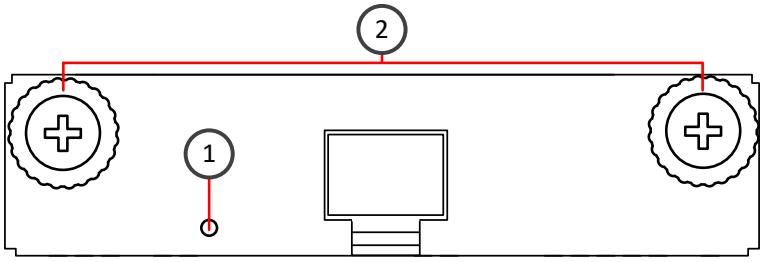
The MMFESW4 module is a quad-port 100 megabit switch mini module.




| Number | Component | Color | Description |
|---|---|---|---|
| 1 | Activity/link indicator | Green | Link OK, flashes on activity. |
| 2 | Link speed indicator | Amber | 10 Mbps or 100 Mbps link. |
| 3 | Thumbscrews | N/A | N/A |

# MMGESFP module

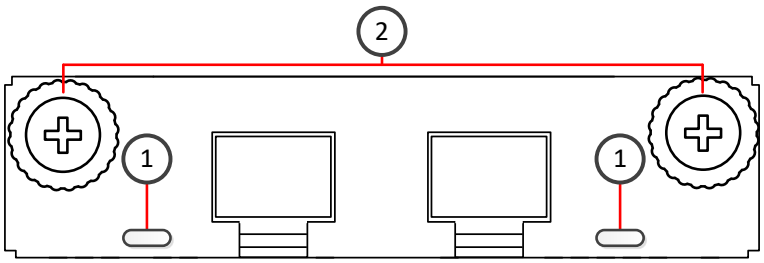
The MMGESFP module is a single-port gigabit interface SFP mini module.



| Number | Component | Color | Description |
|---|---|---|---|
| 1 | Activity/link/link speed indicator | Green | 1 Gbps link (other speeds not supported), flashes on activity. |
| 2 | Thumbscrews | N/A | N/A |

## MMGESFP2 module

The MMGESFP2 module is a two-port gigabit interface SFP mini module.




| Number | Component | Color | Description |
|---|---|---|---|
| 1 | Activity/link/link speed indicators | Green | 1 Gbps link (other speeds not supported), flashes on activity. |
| 2 | Thumbscrews | N/A | N/A |

# Precautions

The precautions provide safety guidance when working with Forcepoint appliances and electrical equipment.

**CAUTION**

Forcepoint appliances cannot be serviced by end users. Never open the appliance covers for any reason. Doing so can lead to serious injury and void the hardware warranty.

For additional safety information, see the *Forcepoint Product Safety and Regulatory Compliance Guide*.

## General safety precautions

Read the safety information and follow these rules to ensure general safety whenever you are working with electronic equipment.

- Keep the area around the appliance clean and free of clutter.
- Use a regulating uninterruptible power supply (UPS) to keep your system operating during power failures and to protect the appliance from power surges and voltage spikes.
- If you need to turn off or unplug the appliance, always wait at least five seconds before turning on or plugging in the appliance again.

# Operating precautions

Follow these precautions when operating the appliance.

- Do not open the power adapter casing. Only the manufacturer's qualified technician can access and service power adapters.
- For this specific appliance model, it is recommended to use the power supply that is shipped with the appliance or additional spare unit from Forcepoint.

# WLAN precautions

Model 335W has WLAN support. Data traffic by a wireless connection might allow unauthorized third parties to receive data. Take the necessary steps to secure your radio network.

See https://www.wi-fi.org for information about securing your WLAN.

Restrictions and requirements might apply for authorizing wireless devices. Check with your local authorities for additional information.

# Electrical safety precautions

Follow basic electrical safety precautions to protect yourself from harm and the appliance from damage.

- Know the locations of the power on/off button and the emergency turn-off switch, disconnection switch, or electrical outlet for the room. If an electrical accident occurs, you can quickly turn off power to the system.
- When working with high-voltage components, do not work alone.
- When working with electrical equipment that is turned on, use only one hand. This is to avoid making a complete circuit, which causes an electric shock. Use extreme caution when using metal tools, which can easily damage any electrical components or circuit boards the tools come into contact with.
- Do not use mats designed to decrease electrostatic discharge as protection from electric shock. Instead, use rubber mats that have been designed as electrical insulators.
- If the power supply cable includes a grounding plug, the plug must be plugged into a grounded electrical outlet.
- Use only the power cable or cables supplied with the appliance.

**Note**

On appliances that have two power supplies, we recommend that you use both power supplies for redundancy.

# Install the appliance

There are several tasks that must be completed before the appliance is installed.

These tasks and the installation of the appliance might be done by the same person or by different persons:

- The Security Management Center (SMC) administrator is responsible for the tasks that are needed before the appliance is installed.
- The on-site installer is responsible for installing the appliance.

For more information, see the *Forcepoint Next Generation Firewall Installation Guide*.

To prepare for the appliance installation, the SMC administrator must do the following:

1) If the SMC has not yet been installed, install the SMC.

**Important**

Do not install the SMC on the NGFW appliance.

The SMC can manage many NGFW appliances.

2) In the Management Client component of the SMC, create and configure the NGFW Engine element that represents the appliance.

3) In the Management Client component of the SMC, save the initial configuration.
The SMC administrator must either:

- Upload the initial configuration to the Installation Server for plug-and-play configuration of the appliance.

**Note**

There are additional requirements for plug-and play configuration. See Knowledge Base article 8248.

- Give the on-site installer a USB drive that contains an initial configuration file for each appliance.

The on-site installer must do the following:

1) Inspect the appliance, delivery box, and all components included in the shipment.

**Important**

Do not use damaged appliances or components.

2) Connect all necessary power, network cables and other components, and then press the power button to turn on the appliance.
If the plug-and-play configuration method is not used, the on-site installer must insert the USB drive that contains the initial configuration files to configure the NGFW Engine software to an USB port before the appliance is turned on.

   By default, only one power supply is shipped with the appliance. However, an additional power supply can be ordered and connected for redundancy.

   Power supply monitoring is automatically enabled when the appliance is powered on using two power adapters. When power supply monitoring is enabled and only one power supply is present, a warning is provided in SMC engine info status pane.

3) When you have finished installing the appliance, inform the SMC administrator so that the administrator can check the status of the appliance in the Management Client.

# Rack-mount the appliance

The rack-mounting procedure varies depending on the type of rack unit. If needed, see the documentation for your rack unit.

Instead of rack-mounting the appliance, you can also place the appliance on a flat surface, such as a desk or shelf.

Determine the placement of each component in the rack.

- Install the heaviest components on the bottom of the rack first. Install components from the bottom to the top.
- The appliance must be connected to a grounded power outlet.
- Use a UPS to protect the appliance from power surges and voltage spikes, and to keep your system operating if there is a power failure.
- To maintain proper cooling, always keep the front door of the rack and all panels and components on the appliances closed when not servicing.

# Install the appliance in a two or four-post rack

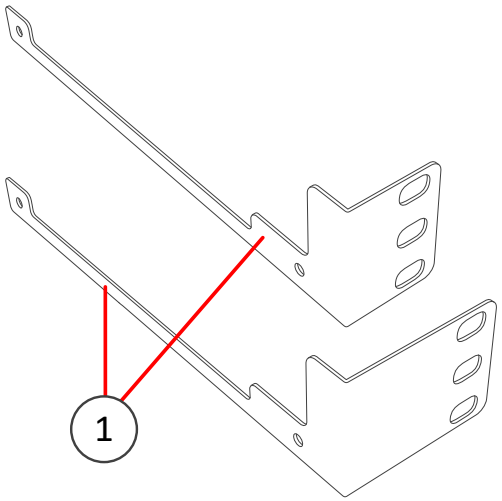
Use the rack-mounting brackets to secure the appliance in the rack.

The bracket and screws are not included by default. You can order them separately. When you install the appliance in a four-post rack, only two posts are used.

## Steps

1) Locate the brackets for the rack installation.

   The bracket delivery includes two side brackets of different sizes.




| | |
|---|---|
| 1 | Side brackets |

2) Unscrew the pair of screws from both sides of the appliance.

**CAUTION**

Do not reuse these screws for attaching the brackets. The screws are not long enough to properly attach the brackets.

3) Attach the side brackets to the sides of the appliance with two screws through the holes in the side of each bracket.

   The narrow part of the bracket attaches toward the back of the appliance.

**CAUTION**

Use two screws to attach each rack-mounting bracket to the appliance. Using only a single screw does not provide sufficient support and can damage the appliance.

4) Attach each bracket to the rack with three screws through the holes in the front of the bracket: one screw through the top hole, the second through the middle hole, and the third through the bottom hole.

**CAUTION**

Use at least two screws to attach each rack-mounting bracket to the rack. Using fewer screws might not provide sufficient support and can damage the appliance.

# Install an interface module

If you have interface modules, install them in the appliance.

## Before you begin

Read the safety precautions and make sure any interface modules you install are the correct type for your appliance.

**CAUTION**

To avoid damaging the modules or the appliance, do not install or remove any interface modules if the appliance is turned on.

**Note**

We recommend fastening a grounding strap to your wrist so that it contacts your bare skin and attaching the other end of the strap to the appliance.

## Steps

1) Locate the slot to install the module in.

2) If the interface slot is covered with a plate, unfasten the thumbscrews that attach the plate to the interface module slot.

3) Remove the plate.

   Store the plate for later use in case you want to use the appliance without an interface module.

4) Push the module into the slot.

The module is seated correctly when the front panel of the module is even with the front panel of the appliance.

**Note**

If the module has a sticker, make sure that the sticker faces up.

**Important**

Do not insert the module in the wrong orientation. Inserting the modules incorrectly might damage the appliance and the modules and voids the warranty.

5) Push and hold the thumbscrews on the module, then tighten them to secure the module in place.

# Connect the cables

Connect the network and power cables.

Use at least CAT5e-rated cables for gigabit networks. Always use standard cabling methods. Use crossover cables to connect the appliance to hosts and straight cables to connect the appliance to switches or hubs. For more information, see the *Forcepoint Next Generation Firewall Installation Guide*.

Network interfaces at both ends of each cable must have identical speed and duplex settings. These settings include the automatic negotiation setting. If one end of the cable uses autonegotiation, the other end must also use autonegotiation. Gigabit standards require interfaces to use autonegotiation. Fixed settings are not allowed at gigabit speeds.

The settings for inline interfaces must be identical for all four interfaces. The pair on the appliance and the interfaces on the two devices connecting to the appliance must have the same speed and duplex settings configured.

# Ethernet port mapping

For appliances that have removable interface modules, Ethernet port names are based on the slot and port numbers.

The first number in the name represents the slot on the appliance, and the second number represents the port on the slot. For example, eth2_0 is located on port 0 of slot 2.

- Slot 0 is used for the fixed Ethernet ports.
- Slots 1 and higher are used for the ports on the interface modules.
  The port numbers start at 0 and increase from left to right.

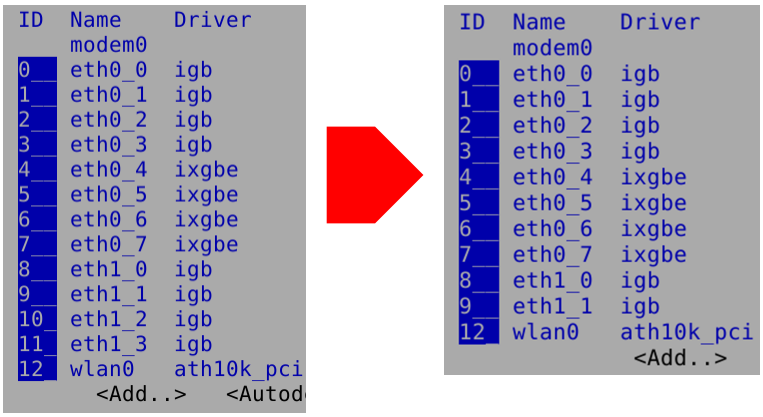
During the initial configuration of the appliance, you map the Ethernet ports to the interface IDs that you defined in the Management Client.

The NGFW Configuration Wizard shows the mapping between the interface IDs and port names. In the command line version of the NGFW Configuration Wizard, Interface IDs appear in the **ID** column and port names appear in the **Name** column.

This mapping can change if you replace an interface module. If the new module has more Ethernet ports, the interface IDs for the new ports start from the next free interface ID number.

*Example:* You have thirteen interfaces numbered 0–12, which includes a four-port module installed in slot 1. If you replace the four-port module installed in slot 1 with a two-port module, eth1_2 with ID 10 and eth1_3 with ID 11 are removed.

**Example before and after ID mapping**




# Attach antennas

If antennas were provided with the appliance, attach the antennas to the appliance.

## Before you begin

Before you attach or replace the antennas, you must turn off the appliance.

## Steps

1) Locate the antennas included in the appliance delivery.
2) Attach the wireless LAN antennas to the connectors on the back panel of the appliance.
3) Tighten the knurled nuts at the base of the antennas to secure them firmly to the appliance.
4) While holding the base of the antennas, position the antennas.

# Connect network cables

Ethernet ports are mapped to interface IDs during the initial configuration. Determine which Ethernet ports to use for connecting to your networks.

## Steps

1) Connect network cables to the Ethernet ports.

   Web based NGFW Configuration Wizard runs on port labeled as LAN (port 2).

# Connect network cables to SFP ports

If you installed an SFP interface module on the appliance or the appliance has an integrated SFP port, insert the copper or fiber-optic SFP transceiver into the port, then connect the cables.

## Steps

1) Insert the SFP transceiver in the port slot until you feel the connector on the transceiver snap into place.

**Note**

Make sure that the latch on the SFP transceiver is up when you insert the SFP transceiver in the port slot.

2) If the SFP transceiver has a rubber plug, remove the plug.

3) Connect the copper or fiber-optic cable to the SFP transceiver.

**Note**

Each SFP port must match the wavelength specifications at the other end of the cable. The cable must not exceed the stipulated cable length for reliable communications.

# Connect the power adapter

Use the power cable to plug in the appliance.

**Note**

We recommend using a UPS to ensure continuous operation and minimize the risk of damage to the appliance in case of sudden loss of power.

## Steps

1) Attach a suitable power plug for your region to the power adapter.
Standard power plugs for several regions are included with the delivery.

2) Connect the power cable to either one of the two power connectors on the back of the appliance.

**CAUTION**

The power adapter delivered with the appliance is intended for Forcepoint appliances only. Do not connect the power adapter to any other devices.

3) Plug the power adapter into a grounded, high-quality power strip that offers protection from electrical noise and power surges.

# Maintenance

Some Forcepoint NGFW appliances ship with replaceable components.

## Turn off the appliance

Most Forcepoint NGFW appliance hardware components are not hot-swappable. Turn off the appliance from the NGFW Engine command line.

Turn off the appliance and disconnect power before replacing the CFast card or interface modules.

**Tip**

The SMC administrator can also turn off the appliance remotely using the Management Client. For more information, see the *Forcepoint Next Generation Firewall Product Guide*.

### Steps

1) Connect to the NGFW Engine command line.

   Depending on the appliance type, use one of the following options:

   - Connect a computer running a terminal emulator program to the appliance console port, then press **Enter**.
   - Connect using SSH.

     **Note**

     SSH access is not enabled by default.
   - Connect a keyboard to a USB port and a monitor to the VGA port, then press **Enter**.

2) Enter the logon credentials.

   The user name is `root` and the password is the one you set for the appliance.

3) Enter the following command:

   ```
   halt
   ```

4) Wait until the power indicator light turns red or is unlit, then unplug all power cables from the appliance.

## Replace the CFast card

Replace the CFast card with another card that you received from Forcepoint.

**Note**

We recommend fastening a grounding strap to your wrist so that it contacts your bare skin and attaching the other end of the strap to the appliance.

### Steps

1) Turn off the appliance and disconnect any power cables.
2) Locate the CFast card on your appliance.
3) If there is still tape covering the CFast card, remove the tape.
4) Gently push in the CFast card to release the card from the slot.
5) Position the replacement CFast card. Turn the end with the slots toward the appliance. The wider slot must be on the left.
6) Insert the new CFast card into the slot and gently push to lock the card into place.
7) Reconfigure the appliance for the replacement CFast card. See the initial configuration information in the *Forcepoint Next Generation Firewall Installation Guide*.

## Replace an interface module

Replace an interface module with the same type or a different type of module.

If the appliance was delivered with a plate that covered the interface slot, you can alternatively cover the interface slot with the plate instead of replacing the interface module with another module.

**Note**

We recommend fastening a grounding strap to your wrist so that it contacts your bare skin and attaching the other end of the strap to the appliance.

### Steps

1) Turn off the appliance and disconnect any power cables.
2) To release the module, unscrew the thumbscrews.
3) Carefully pull the module out of the slot.
4) Insert the new module.
5) Push and hold the thumbscrews on the module, then tighten them to secure the module in place.
6) Connect the cables and plug the power cables to the system and to the wall outlets.

7) Turn on the appliance.

**CAUTION**

To ensure proper cooling, do not turn on the appliance if you have not installed an interface module or a placeholder module in each slot.

8) Update the interface configuration.

a) On the command line of the NGFW Engine, enter the following command to start the NGFW Configuration Wizard:

```
sg-reconfigure
```

b) In the network interface configuration options, make sure that the autodetected information is correct and that all interfaces have been detected.

If autodetection fails, add network drivers manually. For detailed instructions, see the *Forcepoint Next Generation Firewall Installation Guide*.

c) If the number of ports in the new module differs from the old module, adjust the mapping of interfaces to interface IDs.

**CAUTION**

Do not select the **Clear** action when modifying interface IDs in the NGFW Configuration Wizard on the command line. Selecting **Clear** removes all mapping information between interface IDs and Ethernet ports, and restores the default values.

d) On the **Prepare for Management Contact** page, highlight **Finish**, then press **Enter**.

e) If the number of ports in the new module differs from the old module, modify the interface definitions in the Management Client, then refresh the policy to transfer the interface changes to the engine.

Make sure to use the same interface IDs that you mapped to the interfaces in the NGFW Configuration Wizard for the interface definitions in the Management Client.

# Reattach the cover plate to the interface module slot

Reattach the module cover plate if there is no module in the slot.

**CAUTION**

Do not turn on the appliance if a slot is empty or uncovered. Using the appliance without an interface module or the cover plate can damage the appliance and voids the warranty.

**Note**

We recommend fastening a grounding strap to your wrist so that it contacts your bare skin and attaching the other end of the strap to the appliance.

### Steps

1) Turn off the appliance.
2) Remove the interface module from the interface module slot.
3) Locate the tab at the lower left corner of the plate.
4) Insert the tab into the hole in the lower left corner of the slot casing.
5) Slide the plate inward until it covers the slot and the thumbscrew in the plate aligns with the screw hole to the right of the slot.
6) Push and hold the thumbscrews on the plate, then tighten them to secure the plate in place.

## Remove SFP transceivers

You can remove or replace SFP transceivers.

**CAUTION**

Invisible laser radiation is emitted from the end of a fiber-optic cable and from the fiber port. Do not stare into the beam and avoid direct exposure to the beam.

**Note**

We recommend fastening a grounding strap to your wrist so that it contacts your bare skin and attaching the other end of the strap to the appliance.

### Steps

1) Disconnect the cable from the SFP transceiver.
2) Pull down the latch on the transceiver, then carefully pull the SFP transceiver out of the port slot.
3) If needed, insert a replacement SFP transceiver in the slot.

# Compliance information

Forcepoint NGFW appliances that have wireless support are in compliance with certain EU directives and FCC standards for wireless devices intended for home and office use.

This information is valid for all dual band products (2.4 GHz, IEEE 802.11b/g/n, and 5 GHz, IEEE 802.11a/n/ac).

The supported channels and frequencies are listed by country in the Management Client. The wireless configuration is transferred to the appliance when you install the policy on the NGFW Engine.

## EU Directives

This appliance is in compliance with:

- EMC directive 2014/30/EU
- LVD directive 2014/35/EU
- RED directive 2014/53/EU

The frequencies and maximum transmitted power in the EU are:

- 2.41–2.47 GHz: 16.35 dBm (EIRP)
- 5.18–5.24 GHz: 16.74 dBm (EIRP)

Operations in the 5150–5250 MHz band are restricted to indoor usage only.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | AT | BE | BG | HR | CY | CZ | DK |
| | EE | FI | FR | DE | EL | HU | IE |
| | IT | LV | LT | LU | MT | NL | PL |
| | PT | RO | SK | SI | ES | SE | UK |

## FCC Standards

This appliance is in compliance with FCC Part 15.

# Applied technologies

The appliance uses these technologies.

- **Radio spectrum** — Sub-bands 2412-2462 MHz, 5180-5240 MHz, and 5745-5825 MHz
- **Safety** — Dual band products
- **Electromagnetic Compatibility (EMC)** — Dual band products

# National restrictions and requirements for authorization

It is recommended to check with your local authorities for the latest status of national requirements for 2.4 GHz and 5 GHz wireless LANs.

# Industry Canada statement

**1** This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

1) this device may not cause interference, and

2) this device must accept any interference, including interference that may cause undesired operation of the device.

**1** Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1) l'appareil ne doit pas produire de brouillage, et

2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

**2** This Class B digital apparatus complies with Canadian ICES-003.

**2** Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

**3** This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter, except tested built-in radios.

**3** Cet appareil et son antenne ne doivent pas être situés ou fonctionner en conjonction avec une autre antenne ou un autre émetteur, exception faites des radios intégrées qui ont été testées.

**4** The County Code Selection feature is disabled for products marketed in the US/ Canada.

**4** La fonction de sélection de l'indicatif du pays est désactivée pour les produits commercialisés aux États-Unis et au Canada.

This radio transmitter (identify the device by certification number) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Cet émetteur radio (identifier l'appareil par numéro de certification) a été approuvé par l'industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous avec le gain maximum admissible indiqué. Types d'antennes non inclus dans cette liste, ayant un gain supérieur au gain maximum indiqué pour cette type, sont strictement interdits pour une utilisation avec cet appareil.

| List of antenna information | | | | Peak EIRP |
|---|---|---|---|---|
| **Components** | **Frequency (MHz)** | **Antenna type** | **Brand** | **Main** |
| WLAN | 2410–2470 | Dipole | WANSHIH | 1.9 dBi |
| WLAN | 5150–5250 | Dipole | WANSHIH | 1.6 dBi |
| WLAN | 5500–5850 | Dipole | WANSHIH | 1.9 dBi |

**Radiation Exposure Statement:**

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

**Déclaration d'exposition aux radiations:**

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

**Caution:**

1) the device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

2) for devices with detachable antenna(s), the maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits as appropriate;

**Avertissement:**

1) les dispositifs fonctionnant dans la bande de 5 150 à 5 250 MHz sont réservés uniquement pour une utilisatin à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux

2) pour les dispositifs munis d'antennes amovibles, le gain maximal d'antenne permis (pour les dispositifs utilisant la bande de 5 725 à 5 850 MHz) doit être conforme à la limite de la p.i.r.e. spécifiée, selon le cas;

# Federal Communication Commission Interference Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**FCC Caution:**

- Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.
- This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

**Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

**Note**

The country code selection is for non-US model only and is not available to all US model. Per FCC regulation, all WiFi product marketed in US must fixed to US operation channels only.

**Radio frequency statement for Brazil:**

Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados.

Published 10 July 2024