Next Generation Firewall

50 Series

Hardware Guide

Models 51 and 51 LTE
Revision A

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

On the Forcepoint support website, 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 on the Forcepoint support website at https://support.forcepoint.com. There, you can access product documentation, Knowledge Base articles, downloads, cases, and contact information.

Models 51 and 51 LTE features

The figures and tables show the appliance components and features.
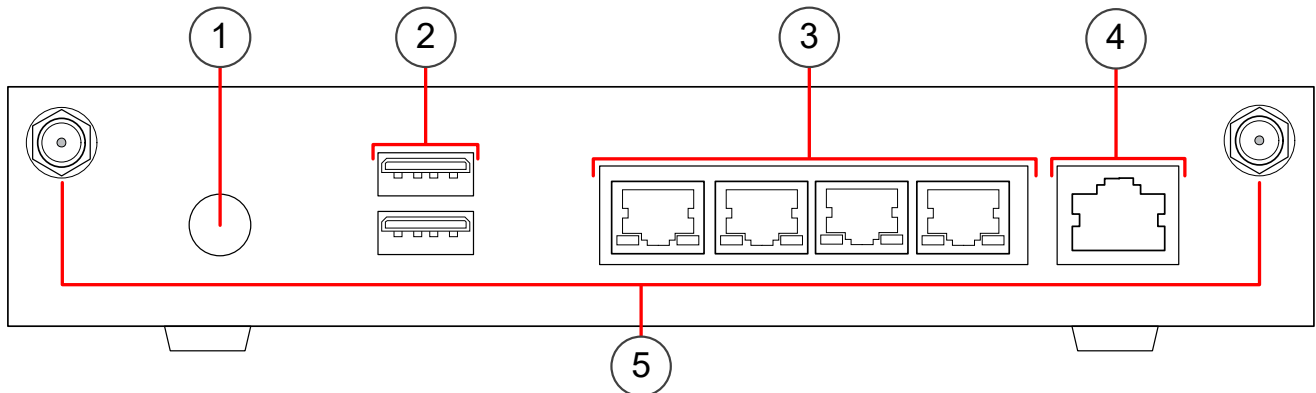
Front panel

This panel has the following parts.
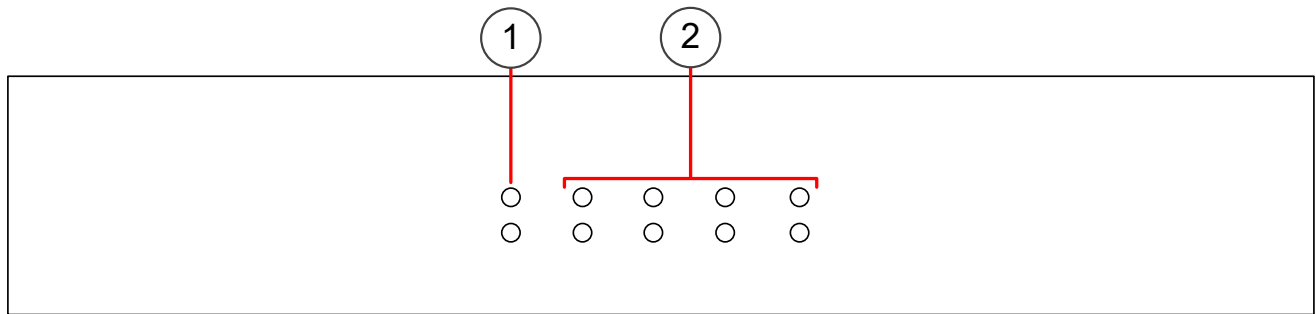
1	Power and disk activity indicators
2	Ethernet interface network activity and link indicators

Back panel
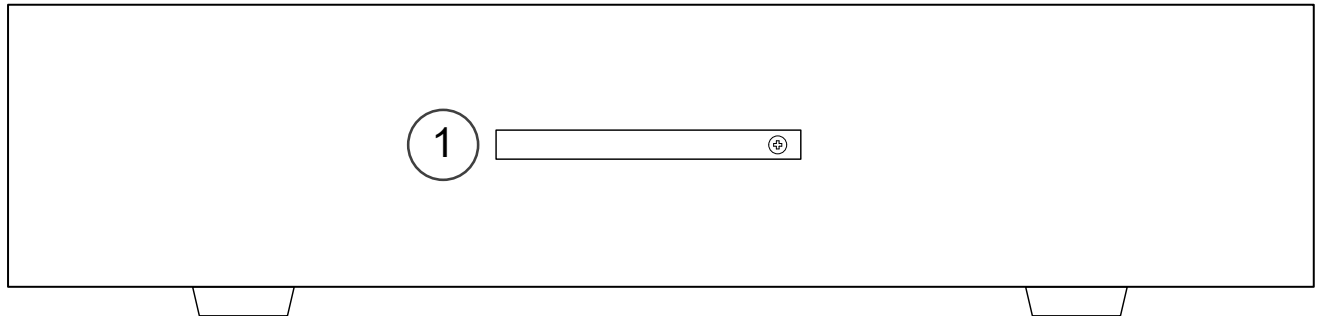
This panel has the following parts.

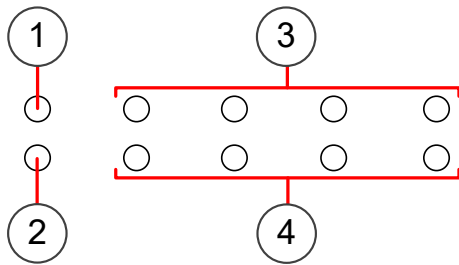| 1	Power connector
2	USB ports
3	Fixed Ethernet ports 0–3 (from left to right)
4	Console port (speed 115,200 bps)
5	(51 LTE only) Antenna connectors for the LTE modem

Side panel

On the 51 LTE model, the SIM card slot is on the left side panel.

| **1** | SIM card slot |

Indicator lights

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

1	Power indicator
2	Disk activity indicator
3	Activity/link indicators for Ethernet ports 0–3 (from left to right)
4	Link speed indicators for Ethernet ports 0–3 (from left to right)

Indicator	Color	Description
Power	Green	Power is supplied to the appliance.
Disk activity	Blue	Flashes on activity.
Activity/link indicators	Green	Link OK. Flashes on activity.
Link speed indicators	Unlit	10 Mbps link.
	Amber	100 Mbps link.
	Green	1 Gbps link.

Ethernet port indicators

Ethernet port indicators show the status and speed of the network ports.
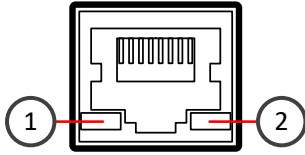
> **1** Activity/link indicator
>
> **2** Link speed indicator

Indicator	Color	Description
Activity/link indicator	Green	Link OK. Flashes on activity.
Link speed indicator	Unlit	10 Mbps link.
	Amber	100 Mbps link.
	Green	1 Gbps link.

Precautions

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

Safety precautions

Read the safety information and follow the procedures whenever you are working with electronic 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.

General safety

Follow these rules to ensure general safety.

- Keep the area around the appliance clean and free of clutter.
- Use a regulating uninterruptible power supply (UPS) to keep your system operating if there is a power failure 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

- Do not open the power adapter casing. Only the manufacturer's qualified technician can access and service power adapters.

- This product is intended only to be powered by the provided UL-listed power adapter marked LPS (Limited Power Source), rated for 12V DC, 2.0A minimum, with a Tma (maximum ambient temperature) of 40°C (104°F). If you need further assistance, contact Forcepoint for further information.

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

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.

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.

> 📝 **Note:** Modem interfaces are only supported on single NGFW Engines in the Firewall/VPN role.

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 9662.

- 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 and network cables and other components, then turn on the appliance.
If the plug-and-play configuration method is not used, the on-site installer must use the USB drive that contains the initial configuration files to configure the NGFW Engine software.

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.

Insert a SIM card

To use the LTE modem in the 51 LTE model, you must insert a separately-purchased SIM card into the appliance.

> **Before you begin**
>
> Before you insert or replace a SIM card, you must turn off the appliance.

The SIM card must be a Mini-SIM card. Full-sized SIM cards, Micro-SIM cards, and Nano-SIM cards are not supported.

> 📝 **Note:** To use the mobile connection for plug-and-play configuration, make sure that the PIN code query is disabled on the SIM card. For more information, see Knowledge Base article 17249.

To complete the initial configuration using other configuration methods when PIN code query is enabled on the SIM card, see Knowledge Base article 17245.

Steps

1) On the left side panel of the appliance, remove the screw that holds the SIM card cover in place, then remove the cover.

2) With the SIM card contacts facing down, insert the SIM card into the slot, then push the card in until it clicks and is locked into place.
To remove the SIM card, push the card in until it clicks and is released, then pull out the card.

3) Replace the SIM card cover, then insert and tighten the screw that holds the cover in place.

Attach the 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 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.

Mount the appliance on a wall

You can mount the appliance on a wall or place the appliance on a flat surface, such as a desk or shelf.

Steps

1) Drill two holes 120mm (4.7 inches) apart in the wall in a vertical or horizontal orientation only.
Make sure you leave enough clearance around the appliance.

2) Insert nylon plugs into the holes, then insert two 3x40mm (4x1½") flat undercut screws into the plugs.

> 📝 **Note:** No nylon plugs or screws are supplied with the appliance.

Make sure that the screws are protruding from the wall to provide a firm mounting point for the appliance.

3) Attach the four provided rubber feet to the bottom of the appliance to aid ventilation.

4) Align the mounting holes on the appliance with the screws, then place the appliance on the screws.
After the appliance is mounted on the wall and you have connected the cables, do not pull on the cables.

> ⚠ **CAUTION:** If you need to disconnect any cables after the appliance is mounted on the wall, hold the appliance in place while you disconnect the cables.

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.

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.

If you use the plug-and-play configuration method, the appliance uses Ethernet port 0 to contact the Installation Server. The ports are numbered 0–3 from left to right.

On the 51 LTE model, the appliance uses modem interface 0 to contact the Installation Server. If modem interface 0 is not available, Ethernet port 0 is used.

Connect the power adapter

Use the power cable to plug in the appliance. When you connect the power, the appliance turns on automatically.

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

3) Connect the power cable to the power connector on the back of the appliance.

If the power cable has a knurled locking nut, tighten the nut to secure the cable in place.

Port settings for plug-and-play configuration method

If you use the plug-and-play configuration method, the appliance uses Ethernet port 0 to contact the Installation Server.

On the 51 LTE model, the appliance uses modem interface 0 to contact the Installation Server. If modem interface 0 is not available, Ethernet port 0 is used. To use the mobile connection for plug-and-play configuration, make sure that the PIN code query is disabled on the SIM card.

The SMC administrator must make sure that the port settings are configured correctly in the Management Client for the initial configuration. To use the plug-and-play configuration method, the interface that corresponds to Ethernet port 0 in the initial configuration must have a dynamic IPv4 address. A dynamic IPv4 address is automatically added when you add a modem interface.

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 power adapter, SIM card, or antennas.

> **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 keyboard to a USB port and a monitor to the VGA port, then press **Enter**.

   - 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.

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 SIM card

You might need to replace the SIM card if you change mobile operators, or if you get a new SIM card from the same mobile operator.

> **Before you begin**
>
> Before you insert or replace a SIM card, you must turn off the appliance.

The SIM card must be a Mini-SIM card. Full-sized SIM cards, Micro-SIM cards, and Nano-SIM cards are not supported.

Steps

1) On the left side panel of the appliance, remove the screw that holds the SIM card cover in place, then remove the cover.

2) To remove the old SIM card, push the card in until it clicks and is released, then pull out the card.

3) With the SIM card contacts facing down, insert the SIM card into the slot, then push the card in until it clicks and is locked into place.

4) Replace the SIM card cover, then insert and tighten the screw that holds the cover in place.

5) Connect the power cable to start up the appliance.

6) If PIN code query is enabled on the new SIM card and the modem interface is used for the management connection, change the PIN code.

> **Note:** If the PIN code for the new SIM card is the same as the PIN code for the old SIM card, it is not necessary to change the PIN code.

  a) Log on to the appliance.
  The user name is `root` and the password is the one you set for the appliance.

  b) To start the NGFW Configuration Wizard, enter the following command:

  ```
  sg-reconfigure
  ```

  c) In the NGFW Configuration Wizard, enter the PIN code.

  d) To restart the appliance, enter the following command:

  ```
  reboot
  ```

e) In the Management Client, enter the PIN code in the modem interface properties, then refresh the policy on the NGFW Engine.

> **Note:** Tasks in the Management Client are intended to be done by the SMC administrator.