

Platform Guide: i800 Series

MAN-0672-00



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Platform Overview

About i800 Series models

The i800 Series platform is a powerful system that is designed specifically for application delivery performance and scalability.

Note: The i800 Series platform shares hardware and certification approvals with the i2000 Series platform. Therefore, it is possible that information displayed in the LCD, GUI, or command line interface might reference the i2000 Series platform. This is expected and does not impact operation of the i800 Series platform.

For more information, please see the data sheet at www.f5.com/pdf/products/big-ip-platforms-datasheet.pdf.

About the platform

Before you install this platform, review information about the controls and ports located on both the front and back of the platform.

On the front of the platform, you can use the LCD touchscreen to view information about, manage, and reset the system. You can also use the front-panel LEDs to assess the condition of the system.



Figure 1: Front view of the i800 Series platform

1. 10/100/1000-BaseT capable management port
2. Hi-Speed USB port
3. Console serial port
4. Serial (hard-wired) failover port
5. 1GbE SFP ports (4)
6. 10GbE SFP+ ports (2)
7. Indicator LEDs
8. 2.2 inch LCD touchscreen

The back of the i800 Series platform includes one power supply, one power blank, and a chassis ground terminal.



Figure 2: Back view of the i800 Series AC-powered platform

1. Power input panel 1 (AC power receptacle)
2. Power blank
3. Chassis ground terminal

Hardware included with the platform

This platform includes all of the hardware components listed here.

Quantity	Hardware
1 or 2	Power cables (black), AC power only, per platform configuration. Might include multiple power cable types if product is delivered outside of the US/Canada. By default, these platforms include one power supply and power cable: i800 Series.
1	RJ45 to RJ45 failover cable, CAT 5 crossover (blue)
1	RJ45 to DB9 console port cable (beige)
1	RJ45F to RJ45M rolled adapter (beige)
1	Quick-install rail kit
2	Rail lock brackets
4	M3 x 6mm flathead screws, black with patch
2	#8-32 pan head screws, steel zinc

Peripheral hardware required

For each platform, you might need to provide additional peripheral hardware. If you plan to remotely administer the system, it would be helpful to have a workstation already connected to the same subnet as the management interface.

Type of hardware	Description
Network hubs, switches, or connectors to connect to the platform network interfaces	You must provide networking devices that are compatible with the network interface ports on the platform. You can use 10/100/1000/10000-Megabit switches.
External USB CD/DVD drive or USB flash drive	You can use any USB-certified CD/DVD mass storage device or a USB flash drive for installing upgrades and for system recovery. <i>Note: External CD/DVD drives must be externally powered.</i>
Serial console	You can remotely manage the platform by connecting to a serial console terminal server through the console port. <i>Important: In the event that network access is impaired or not yet configured, the serial console might be the only way to access the unit. You should perform all installations and upgrades using the serial console, as these procedures require reboots, in which network connectivity is lost temporarily.</i>
Management workstation on the same IP network as the platform	You can use the default platform configuration if you have a management workstation set up.

About LCD menus

The touchscreen LCD provides the ability to manage the unit without attaching a console or network cable. You can configure the display options to meet your needs. There are four menu options available on the LCD.

Note: When using the LCD to configure the unit, be sure to use the Commit option to save all settings.

System menu

You can use the System menu to reboot, reset, halt, power off, or power on the system.

Option	Description
Soft Reboot	Performs a graceful reboot of the unit.
Hard Reset	Performs a hard reset on the unit.
Halt	Halts or shuts down the unit.
Power Off	Powers off the unit.
Power On	Powers on the unit.

Alerts menu

You can use the Alerts menu to view system alerts by priority, or to clear all alerts from the LCD.

Option	Description
Emergency	Displays alerts that match the Emergency priority.
Critical	Displays alerts that match the Critical priority.
Error	Displays alerts that match the Error priority.
Warning	Displays alerts that match the Warning priority.
Alert	Displays alerts that match the Alert priority.
Info	Displays alerts that match the Informational priority.

Options menu

You can use the Options menu to configure the LCD brightness and enable/disable the chassis locator LED.

Option	Description
Display	Adjusts LCD backlight brightness.
Locator LED	Controls the use of the chassis locator feature, which causes the F5® logo ball on the chassis front panel to flash on and off. Select from these options: <ul style="list-style-type: none"> • OFF (default) • ON

Setup menu

You can use the Setup menu to configure the management interface, AOM management interface, and serial port baud rate.

Option	Description
Management	<p>Changes the management interface information. Select from these options:</p> <ul style="list-style-type: none"> Type indicates whether to use an IPv4 or IPv6 address. DHCP indicates whether DHCP is enabled or disabled (default). IP Address sets the management interface IP address and routing prefix. You can use an IPv4 or IPv6 address. Gateway sets the default route for the management interface. This route is necessary if you plan to manage the unit from a different subnetwork.
AOM Management	<p>Changes the AOM management interface information. Select from these options:</p> <ul style="list-style-type: none"> Type indicates that the AOM management interface uses an IPv4 address. DHCP indicates whether DHCP is enabled or disabled (default). IP Address sets the management interface IP address and routing prefix. You can use only an IPv4 address. Gateway sets the default route for the management interface. This route is necessary if you plan to manage the unit from a different subnetwork.
Baud Rate	<p>Changes the baud rate of the management serial port. Select from these options:</p> <ul style="list-style-type: none"> 9600 19200 (default) 38400 57600 115200

About using the LCD

To manage the platform using the LCD menu options, tap the touchscreen LCD to put it into menu mode. The LCD is operational even when the Host is powered off, provided that Always-On Management and the LCD are fully booted.

Important: *It might take a few minutes for the LCD to become operational when the system is started from a powered off state.*

Note: *When using the LCD to configure the unit, be sure to use the **Commit** option to save all settings.*

Reboot the unit

You can use the touchscreen LCD to perform a soft reboot of the unit.

1. Touch the screen to activate the LCD menus.



2. Tap **System**.

The System screen displays.



3. On the System screen, tap **Soft Reboot**.
4. Tap **Confirm** to reboot the unit.

Reset the unit

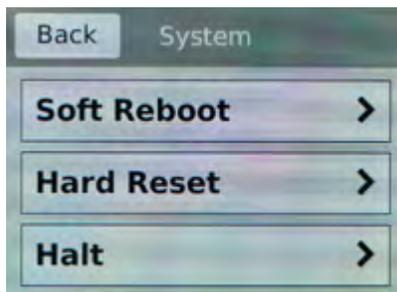
You can use the touchscreen LCD to perform a hard reset of the unit.

1. Touch the screen to activate the LCD menus.



2. Tap **System**.

The System screen displays.

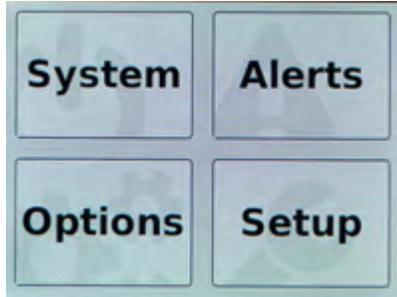


3. On the System screen, tap **Hard Reset**.
4. Tap **Confirm** to reset the unit.

Halt the unit

You can use the touchscreen LCD to halt the unit.

1. Touch the screen to activate the LCD menus.



2. Tap **System**.

The System screen displays.



3. On the System screen, tap **Halt**.
4. Tap **Confirm** to halt the unit.

Power off/on the unit

You can use the touchscreen LCD to power the unit off and on.

1. Touch the screen to activate the LCD menus.



2. Tap **System**.

The System screen displays.



3. On the System screen, swipe to scroll down and tap **Power Off** or **Power On**.



4. Tap **Confirm** to power off/on the unit.

Clear alerts

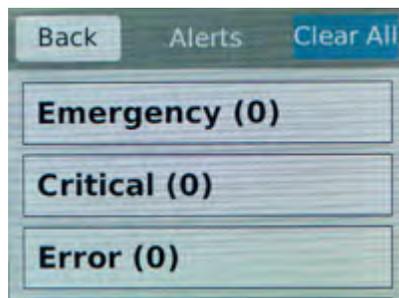
You can use the touchscreen LCD to clear alerts from the LCD.

1. Touch the screen to activate the LCD menus.



2. Tap **Alerts**.

The Alerts screen displays.

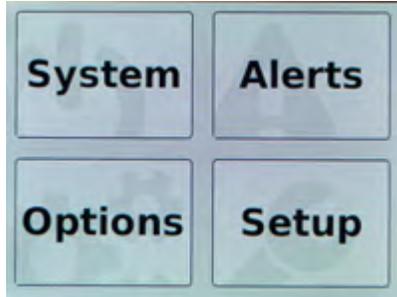


3. On the Alerts screen, clear either all alerts or alerts of a specific priority:
 - To clear all alerts, tap **Clear All**.
 - To clear only alerts of only a specific priority, tap the priority name to view alerts with that priority, and then tap **Clear**.

Configure LCD brightness

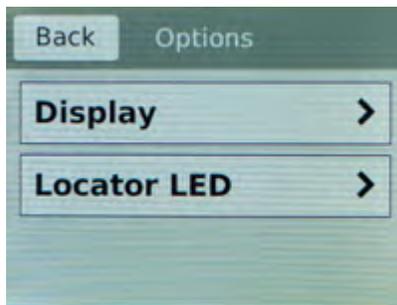
You can use the touchscreen LCD to adjust the brightness of the display.

1. Touch the screen to activate the LCD menus.



2. Tap **Options**.

The Options screen displays.



3. Tap **Display**.

The Brightness screen displays.



4. Use the left and right arrows to adjust the brightness of the LCD in real-time.
5. Click **Back** to return to the previous screen.

Enable/Disable the chassis locator LED

You can use the touchscreen LCD to enable and disable the chassis locator LED.

1. Touch the screen to activate the LCD menus.



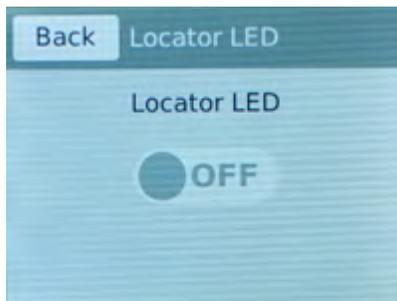
2. Tap **Options**.

The Options screen displays.



3. Click **Locator LED**.

The Locator LED screen displays.



4. Tap to enable or disable the chassis locator LED.

About platform LEDs

The behavior of the various LEDs on the platform indicate the status of the system or component.

Status LED

The status LED indicates the operating state of the system.

State	Description
off/none	System is powered down.
green solid	System is running in normal mode. Also indicates that the system is in an Active state of a device group.
amber solid	System is running in an impaired mode or is operating in one of these conditions: <ul style="list-style-type: none"> It is in the standby power state

State	Description
	<ul style="list-style-type: none"> It is powered on and in the process of booting to TMOS[®] It is powered on, but offline, such as when booted to the End-User Diagnostic (EUD) It is booted to TMOS and is operating as a Standby member of a device group
amber blinking	System might be in a state in which a software or hardware problem is interfering with control of the LCD or communication is lost between the system and the LCD.

Alarm LED

The alarm LED indicates system alarm conditions and the severity of the alarm condition.

There are five levels of messages.

Note: The alarm LED remains lit until you have used the LCD panel to clear alerts above an informational level.

State	Description
off/none	Informational or no alarm conditions are present. System is operating properly.
amber solid	Warning (0). System may not be operating properly, but the condition is not severe or potentially damaging.
amber blinking	Error (1). System is not operating properly, but the condition is not severe or potentially damaging.
red solid	Alert (2) or Critical (3). System is not operating properly, and the condition is potentially damaging.
red blinking	Emergency (4). System is not operating, and the condition is potentially damaging.

Power 1 and Power 2 LEDs

The Power 1 and Power 2 LEDs on the front of the chassis indicate the general operating state of the power supplies.

Power 1 state	Power 2 state	Description
green solid	green solid	Power supply is present and operating properly. Also indicates when the system is in power standby mode.
amber solid	amber solid	Power supply is present, but not operating properly.
off/none	off/none	No power supply is present.

Define custom alerts

Two files on the system define alerts that could cause the LED behavior to change:

- The `/etc/alertd/alert.conf` file defines standard system alerts. Do not edit this file.
- The `/config/user_alert.conf` file defines custom settings. You should edit only this file.

1. Open a command prompt on the system.
2. Change to the `/config` directory.

```
cd /config
```
3. Using a text editor, such as `vi` or `Pico`, open the `/config/user_alert.conf` file.
4. Edit the file, as needed.
For example, add these lines to the end of the file to create a custom alert in which the front panel LEDs indicate when a node is down:

```

alert BIGIP_MCPD_MCPDERR_POOL_MEMBER_MON_DOWN "Pool member (.?):(.?) monitor status
down."
{
  snmptrap OID=".1.3.6.1.4.1.3375.2.4.0.10";
  lcdwarn description="Node down" priority="1"
}
alert BIGIP_MCPD_MCPDERR_NODE_ADDRESS_MON_DOWN "Node (.?) monitor status down." {
  snmptrap OID=".1.3.6.1.4.1.3375.2.4.0.12";
  lcdwarn description="Node address down" priority="1"
}
alert BIGIP_MCPD_MCPDERR_POOL_MEMBER_MON_UP "Pool member (.?):(.?) monitor status up."
{
  snmptrap OID=".1.3.6.1.4.1.3375.2.4.0.11"
}
alert BIGIP_MCPD_MCPDERR_NODE_ADDRESS_MON_UP "Node (.?) monitor status up."
{
  snmptrap OID=".1.3.6.1.4.1.3375.2.4.0.13"
}

```

5. Save the file and exit the text editor.

About platform interfaces

Every platform includes multiple interfaces. The exact number of interfaces that are on the system depends on the platform type.

Each interface on the platform has a set of properties that you can configure, such as enabling or disabling the interface, setting the requested media type and duplex mode, and configuring flow control.

For information about optical transceivers and cable pinouts for this platform, see *F5® Platforms: Accessories*.

About managing interfaces

You can use the TMOS Shell (`tmsh`) or the Configuration utility to manage platform interfaces.

View the status of a specific interface using `tmsh`

You can use `tmsh` to view the status of a specific interface on a platform.

1. Open the TMOS Shell (`tmsh`).

```
tmsh
```
2. Change to the network module.

```
net
```

The system prompt updates with the module name: `user@bigip01 (Active) (/Common)`

```
(tmos.net)# user@bigip01 (Active) (/Common) (tmos.net) #
```
3. Display the current status of a specific interface.

```
show interface <interface_key>
```

This is an example of the output that you might see when you run this command on a specific interface:

View the status of all interfaces using tmsh

You can use `tmsh` to view the status of all interfaces on the platform.

1. Open the TMOS Shell (`tmsh`).

```
tmsh
```

2. Change to the network module.

```
net
```

```
The system prompt updates with the module name: user@bigip01 (Active) (/Common)
(tmos.net) # user@bigip01 (Active) (/Common) (tmos.net) #
```

3. Display the current status of all interfaces.

```
show interface
```

This is an example of the output that you might see when you run this command:

View the status of all interfaces using the Configuration utility

You can use the Configuration utility to view the status of all interfaces on the platform.

1. On the Main tab, click **Network > Interfaces > Interface List**.

This displays the list of available interfaces.

2. On the menu bar, click **Statistics**.

The Statistics screen for all interfaces opens.

About interface media type and duplex mode

All interfaces on the system default to auto-negotiate speed and full duplex settings. We recommend that you also configure any network equipment that you plan to use with the system to auto-negotiate speed and duplex settings. If you connect the system to network devices with forced speed and duplex settings, you must force the speed and duplex settings of the system to match the settings of the other network device.

Important: *If the system is attempting to auto-negotiate interface settings with an interface that has the speed and duplex settings forced (that is, auto-negotiation is disabled), you will experience severe performance degradation.*

By default, the media type on interfaces is set to automatically detect speed and duplex settings, but you can specify a media type as well. Use the following syntax to set the media type:

```
tmsh modify net interface <interface_key> media <media_type> | auto
```

If the media type does not accept the duplex mode setting, a message appears. If media type is set to `auto`, or if the interface does not accept the duplex mode setting, the duplex setting is not saved to the `config/bigip_base.conf` file.

Important: *Auto-MDI/MDIX functionality is retained when you manually configure an interface to use specific speed and duplex settings. You can use either a straight-through cable or a crossover cable when media settings are forced, and you will be able to successfully link to either DTE or DCE devices.*

View valid media types for an interface

You can use `tmsh` to view the valid media types for an interface.

Note: This platform might not support all of the media type options that are available in `tmsh`.

1. Open the TMOS Shell (`tmsh`).

```
tmsh
```

2. Change to the network module.

```
net
```

```
The system prompt updates with the module name: user@bigip01 (Active) (/Common)
(tmos.net) # user@bigip01 (Active) (/Common) (tmos.net) #
```

3. Display the valid media types for a specific interface.

```
list interface <interface_key> media-capabilities
```

Important: In all Gigabit Ethernet modes, the only valid duplex mode is full duplex.

This is an example of the output that you might see when you run this command on interface 2.0:

Valid media types

This table lists the valid media types for the `tmsh interface` command.

Note: This platform might not support all of the media type options that are available in the TMOS Shell (`tmsh`).

10baseT half	1000baseLX full
10baseT full	1000baseCX full
10GbaseER full	1000baseT half
10GbaseLR full	1000baseT full
10GbaseSR full	1000baseSX full
10GbaseT full	100GbaseSR4 full
10SFP+Cu full	100GbaseLR4 full
40GbaseSR4 full	auto
40GbaseLR4 full	none
100baseTX half	no-phy
100baseTX full	

About network interface LED behavior

The appearance and behavior of the network interface LEDs on the platform indicate network traffic activity, interface speed, and interface duplexity.

SFP/SFP+ port LED behavior

The appearance and behavior of the SFP/SFP+ port LEDs indicate network traffic activity, interface speed, and interface duplexity.

State	Description
off (not lit)	No link.

About Always-On Management

The Always-On Management (AOM) subsystem enables you to manage the system remotely using the serial console or SSH, even if the host is powered down. The AOM Command Menu operates independently of the Traffic Management Operating System® (TMOS®).

You can use the command menu to reset the unit if TMOS has locked up or get access to TMOS directly, so that you can configure it from the command-line interface.

AOM Command Menu options

The AOM Command Menu provides the AOM options for the platform. You can access the AOM Command Menu using either a serial console or SSH.

Note: The availability of menu options varies depending on the platform type.

Letter	Option	Description
B	Set console baud rate	Configures the baud speed for connecting to AOM using the serial console. Select from these options: <ul style="list-style-type: none"> • 9600 • 19200 (default) • 38400 • 57600 • 115200
I	Display platform information	Displays information about the AOM firmware, bootloader, and management network configuration; chassis serial and part numbers; MAC address; power supply status; LCD status; and power status for the active console.
P	Power on/off host subsystem	Powers the host subsystem on or off.
R	Reset host subsystem	Resets the host subsystem with a hardware reset. <hr/> <p>Important: F5® does not recommend using this option under normal circumstances. It does not allow for graceful shutdown of the system.</p> <hr/>
N	Configure AOM network	Runs the AOM network configuration utility. This utility enables you to reconfigure the IP address, netmask, and default gateway used by AOM. If you use this option while connected using SSH, your session will be disconnected as a part of the network configuration operation. <hr/> <p>Note: This option is not available when you are connected using SSH.</p> <hr/>
S	Configure SSH Server	Sets a session idle timeout (in seconds) for the AOM SSH server. Available values are 0 (no timeout; default value), or between 30 and 86400 (one day).
A	Reset AOM	Resets the AOM subsystem. In this case, the system is reset with a hardware reset.

Letter	Option	Description
		<i>Important: F5[®] does not recommend using this option under normal circumstances. It does not allow for graceful shutdown of the system.</i>
Q	Quit menu and return to console	Exits the AOM Command Menu and returns to terminal emulation mode.

Access the AOM Command Menu from the serial console

You can access the AOM Command Menu after connecting to the front panel serial console.

1. Connect to the system using the serial console.
2. Open the AOM Command Menu.
Esc (

Create an AOM admin user account

If you would like to access AOM over the network rather than using the serial console, you need to create an AOM admin user account.

***Note:** This account is created on the AOM subsystem only and is not saved to your BIG-IP[®] configuration.*

1. Connect to the system using the serial console.
2. Create an admin user account:
 - On a newly configured BIG-IP system, type `aom_setup_user`.
 - On a previously configured BIG-IP system, type `aom_setup_user -o` to override the existing AOM admin user account.
3. Type the desired username.
4. Type the desired password.
5. Type the new password again to confirm it.
When the account creation is successful, a message similar to this one displays: AOM username aom-admin successfully set and enabled. Note that the AOM network must be configured via the AOM menu.
6. (Optional) Verify the AOM admin user account is enabled and set up correctly.
`aom_setup_user -l`
A message similar to this one displays: Current AOM username: aom-admin (enabled)

Configure the AOM management network

You can assign a management IP address, netmask, and gateway to access AOM either manually or with DHCP.

1. Connect to the system using the serial console.
2. Open the AOM Command Menu.
Esc (
3. Type `n` to open the AOM management network configurator.
4. Assign a management IP address, netmask, and gateway:
 - To use DHCP to assign the addresses, type `y` when prompted about using DHCP.

- To manually assign the addresses, type `n` when prompted about using DHCP. At the prompts, type values for IP address (required), netmask (required), and gateway (optional).

A confirmation message displays the configured management IP address, netmask, and gateway.

5. (Optional) Type `i` to verify the assigned addresses.

Access the AOM Command Menu using SSH

Before you access the AOM Command Menu using SSH, you must assign a management IP address, netmask, and gateway for AOM. You can assign the addresses manually or with DHCP.

You can access the AOM Command Menu remotely using SSH from a management workstation that is connected to the same subnet as the platform's management (MGMT) interface.

Note: On this platform, AOM allows only one SSH connection at a time.

1. Open an SSH session, where `<ip addr>` is the IP address that you configured for AOM.
`ssh root@<ip addr>`
2. Type the root password.
3. Open the AOM Command Menu.
`Esc (`

Set an SSH idle session timeout

You can specify a timeout value (in seconds) for idle AOM SSH sessions. You can access the AOM Command Menu using either a serial console or SSH.

1. Connect to the system using the serial console.
2. Open the AOM Command Menu.
`Esc (`
3. Type `s` to configure a timeout value for idle SSH sessions.
4. Type a timeout value.

The default value is 0 (no timeout). Available values are 0, or between 30 and 86400 (one day).

Disable network configuration

You can connect to the system's serial console to disable SSH access to AOM over the network. This does not affect console access to AOM.

1. Connect to the system using the serial console.
2. Open the AOM Command Menu.
`Esc (`
3. Type `n` to open the AOM management network configurator.
4. Type `n` when prompted about using DHCP.
5. Type `0.0.0.0` at the IP address prompt.
A confirmation message displays the configured management IP address, netmask, and gateway.
6. (Optional) Type `i` to verify that network configuration is disabled.

Platform Installation

About installing the i800 Series platform

After you have reviewed the hardware requirements and become familiar with the i800 Series platform, you can install the unit into a 19-inch rack.

Important: Before you install this platform, review the environmental guidelines to make sure that you are installing the platform into a compatible rack and in the appropriate environment.

About the quick-install rails

The quick-install rails are optimized for installation into square hole cabinets, but can be installed in other cabinet styles, such as round hole cabinets, using the screws provided. The rails are easily converted to mount to either cabinet style.



Figure 3: Quick-install rails

For information about installing the platform using the quick-install rails, see the instruction guide provided by the manufacturer, which is included with the rail hardware.

Caution: Be sure that the rotating mount brackets located on the ends of the rails are locked into place on both sides of the platform when installing the quick-install rails.

After installing the platform, secure the chassis to the rack with the rail lock brackets that are provided.

Quick-install rail kit hardware

When you are installing with the quick-install rail kit, use these components.

Quantity	Hardware
2	Quick-install rails
2	#8-32 pan head screws, steel zinc
8	#8-32 thumb screws (from rail kit, use only when installing into a round hole rack)
2	Rail lock brackets

Quantity	Hardware
4	M3 x 6mm flathead screws, black with patch (for rail lock brackets)

Install the rail lock brackets

Be sure that the rails are installed onto the chassis before you install the rail lock brackets.

The rail lock brackets secure the platform to the rack when you are using the quick-install rail kit.

1. Use a #1 Philips screwdriver to attach the rail lock brackets to each side of the unit using two of the black M3 x 6mm flathead screws that are provided with the kit.

Use 5 inch-pounds (0.6 Newton-meters) of torque on these screws.



2. Slide the unit into the rack.
3. Use a #2 Philips screwdriver to secure the rail lock brackets to the rack on each side of the unit using one of the #8-32 pan head screws that are provided with the kit.
Use 14 to 16 inch-pounds (1.6 to 1.8 Newton-meters) of torque on these screws.

About grounding the platform

You must ground the platform after you install it in a rack. The chassis ground lug is located on the back of the platform.

Do not secure multiple bonding or grounding connectors with the same bolt. The grounding connectors do not need to be removed to perform service or installation procedures. You can connect other bonding or grounding conductors to a grounding connector provided a reliable bond between the connector and the equipment is not disturbed during installation, service, or maintenance of the platform.

Important: All grounding cable terminal lugs must meet appropriate safety standards.

Note: The platform must be grounded to a common bonding network (CBN).

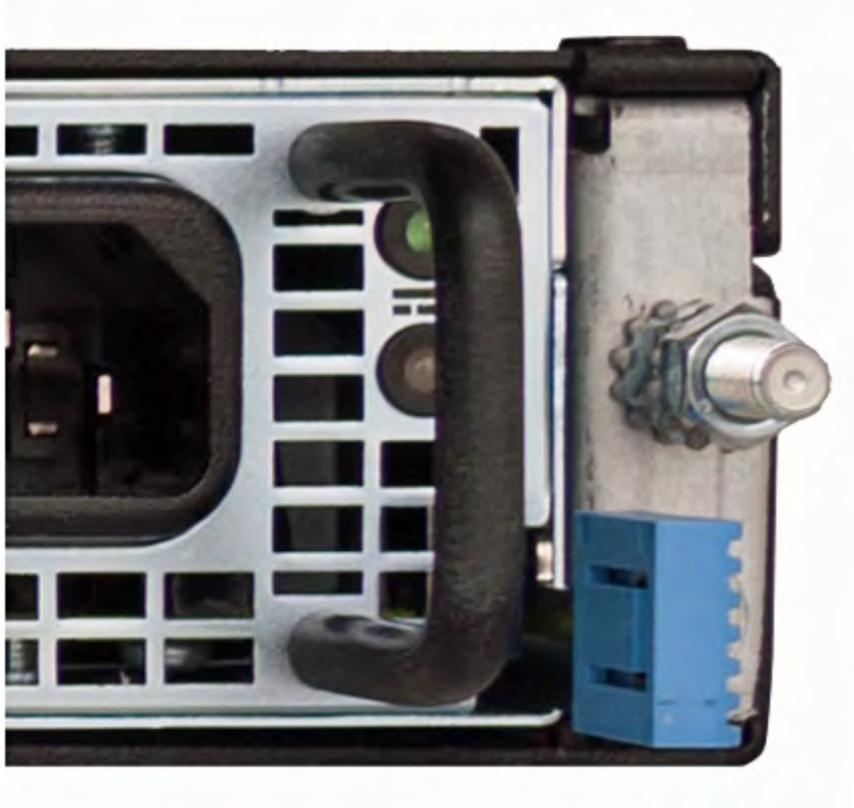


Figure 4: Chassis ground lug

Connect the ground lug to the ground terminal

You must provide these components to properly ground the chassis:

- Crimping tool
- Single ring ground terminal lug
- One 12 AWG copper wire long enough to reach from the chassis to the common bonding network (CBN)

After the unit is installed in the rack and before you provide power to the system, you need to connect the grounding hardware.

1. Remove the M5 Keps nuts from the ground lug on the back of the chassis.
2. Attach a ground ring terminal to the 12 AWG copper ground wire.
3. Install the ground ring terminal onto the chassis ground terminal.
4. Secure the ground ring terminal with the M5 Keps nuts.

Use 18 to 24 inch-pounds (2.0 to 2.7 Newton-meters) of torque on these Keps nuts.

5. Connect the ground wire to a common bonding network (CBN).

Connect the cables and other hardware

After you have installed the unit into the rack, connect the cables and other hardware.

Important: *In the event that network access is impaired or not yet configured, the serial console might be the only way to access the unit. You should perform all installations and upgrades using the serial console, as these procedures require reboots, in which network connectivity is lost temporarily.*

1. If you are using the default network configured on the management interface, connect an Ethernet cable to the management port.

Note: For EMI compliance, shielded cables are required for the management port, and the shield must be grounded at both ends.

2. Connect the console port to a serial console server. Depending on which F5® system you have, you can use either the supplied RJ45 to DB9 console port cable or the RJ45F to RJ45M rolled serial adapter to connect the system to a serial console.

- Connect the RJ45 to DB9 console port cable to the console port on the system.

Note: The default baud rate and serial port configuration is 19200/8-N-1.

- Connect the RJ45F to RJ45M rolled serial adapter to the console port if you are connecting the system to a serial console server with a standard CAT5 cable, and then connect the CAT5 cable to the adapter. The adapter provides the appropriate pinout connection to your equipment. For information about cable and connector pinout specifications, see *F5 Platforms: Accessories* at support.f5.com.



Figure 5: The RJ45F to RJ45M rolled serial (pass-through) adapter (CBL-0143-00)

3. Connect power to installed power supplies:

Note: Be sure to route the power cords away from the fan tray so that the cords do not impede access to it.

- For AC-powered systems, connect an auto locking power cable to the power input panel on all installed power supplies, and then connect the cable to the power source.

Note: Not all country-specific power cables include a locking feature.

Note: To remove the locking power cord, pull one or both of the power cord locking tabs away from the power supply.

4. If you plan to set up device service clustering (DSC®) with hard-wired failover capacity, connect the serial failover cable to the FAILOVER port on each unit.

For more information about configuring failover, see *BIG-IP® Device Service Clustering: Administration*.

You can now assign a management IP address to the system, and then license and provision the software.

Optionally, you should run the latest version of the qkview utility. This utility collects configuration and diagnostic information about your system into a single file that you can provide to F5 Technical Support to aid in troubleshooting. For more information, see:

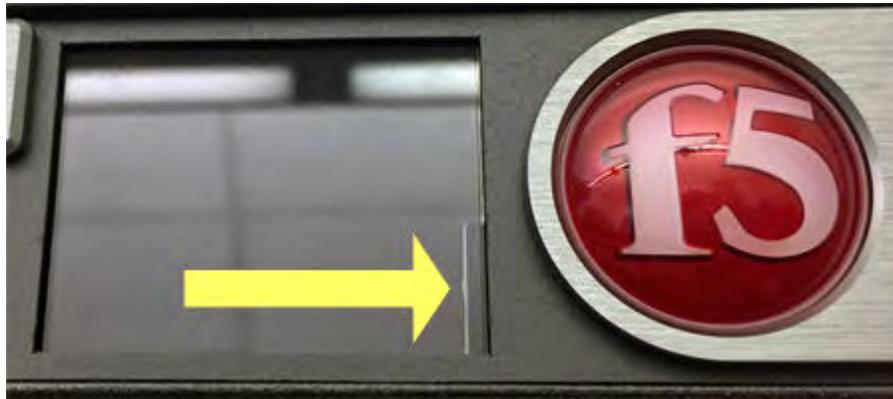
support.f5.com/kb/en-us/solutions/public/12000/800/sol12878.html

Configure a management IP address using the LCD

You can use the touchscreen LCD to configure the management IP address. With the management IP address, you can access the Configuration utility to configure other aspects of the product, such as the product license, VLANs, and trunks.

Note: When using the LCD to configure the unit, be sure to use the **Commit** option to save all settings.

1. (Optional) Remove the protective film from the LCD panel using the small cutout on the lower right corner of the film.

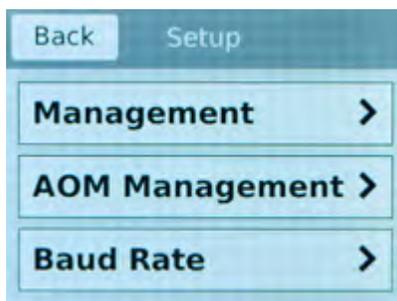


2. Touch the screen to activate the LCD menus.



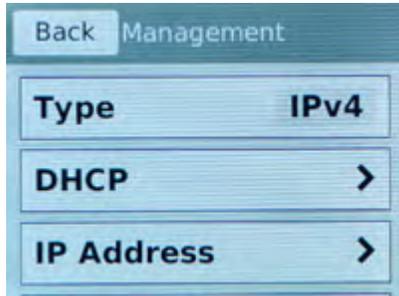
3. Tap **Setup**.

The Setup screen displays.



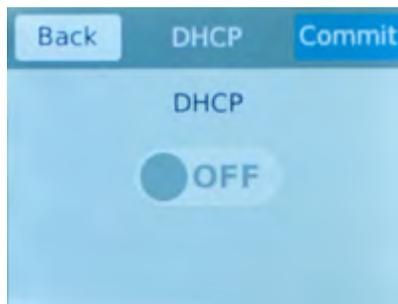
4. Tap **Management**.

The Management screen displays.



5. For the **Type** setting, tap to select either **IPv4** or **IPv6**.
6. If you are using IPv4, you can configure the management IP address using DHCP:
 - a) Tap **DHCP**.

The DHCP option displays.

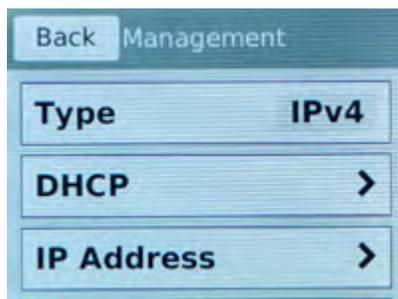


- b) Tap to set the DHCP option to **ON**.
 - c) Tap **Commit** to save your changes.
7. If you are using IPv6 or IPv4, you can configure the management IP address manually:
 - a) Tap **DHCP**.

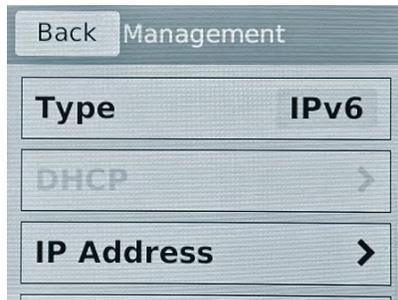
The DHCP screen displays.
 - b) Make sure that the DHCP option is set to **OFF**.

If the DHCP option was set to **ON**, tap **OFF**, and then tap **Commit** to save the change.
 - c) Tap **Back** to return to the Management screen.

If you selected IPv4, this screen displays:



If you selected IPv6, this screen displays:

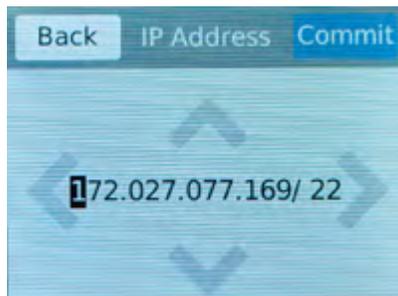


- d) Tap **IP Address**.

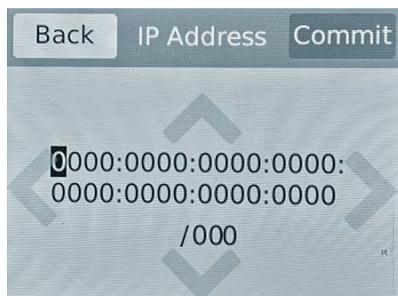
The IP Address screen displays.

- e) Use the left, right, up, and down arrows to configure the management IP address and the length of the routing prefix for the IPv4 or IPv6 management IP address.

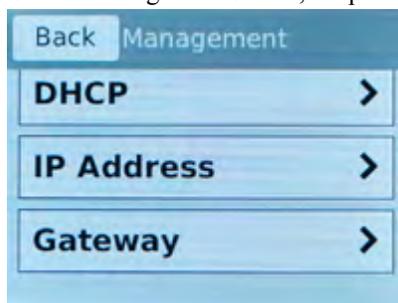
For an IPv4 address, this screen displays:



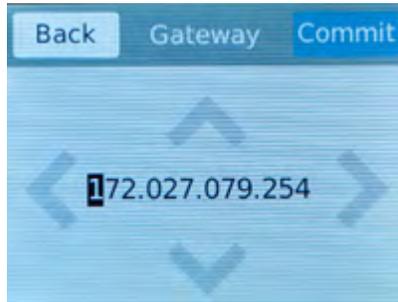
For an IPv6 address, this screen displays:



- f) Tap **Commit** to save your changes.
- g) On the Management screen, swipe to scroll down and tap **Gateway**.



- h) Use the left, right, up, and down arrows to configure the default route for the management interface.



- i) Tap **Commit** to save your changes.

You can now access the browser-based Configuration utility using the IP address that you configured.

License the platform

Once the management IP address is configured for the platform, you can use the Configuration utility to license the appropriate F5[®] software.

1. Using a Web browser, navigate to the management IP address that you assigned to the platform.

Use this format where *<mgmt_ip_address>* is the management IP address that you assigned:

`https://<mgmt_ip_address>`

For example, type an IPv4 management IP address like this: `https://192.168.0.22`. For an IPv6 management address of 2001:0DB8::f5f5/64, type the address like this: `https://`

`[2001:0DB8::f5f5]`.

2. Type `admin` as the user name and `admin` as the password.

If this is the first time you have accessed the Configuration utility, the first screen you see is the Introduction screen.

3. Click **Next** to view the License screen.
4. Follow the instructions in the Configuration utility to license the platform.

Platform Maintenance

About maintaining the platform

The i800 Series platform contains components that you can replace individually without exchanging the entire system. This platform contains these replaceable components:

- AC power supply

About power supplies

This platform supports up to two AC hot swappable power supplies. Most platforms come with only one power supply by default.

Caution: Running without power supplies installed in all available bays in the platform can affect cooling and electromagnetic interference (EMI). If you need to run the unit with one power supply unit (PSU), you must install a blank supply bracket into the empty power supply bay. The blank supply bracket is required to maintain proper airflow in the system. If you do not have a blank supply bracket, leave all supplies installed and disconnect power from any unused PSUs.

Caution: Do not mix power supply unit (PSU) models. If two PSUs are installed in the same system, use only PSUs of the same model.

Important: This product is sensitive to electrostatic discharge (ESD). F5[®] recommends that you use proper ESD grounding procedures and equipment when you install or maintain the unit.

Note: The AC power supply units (PSU) do not have an on/off switch. You can control the power from the rack switch .

Note: After removing input power from any power supply unit, wait 30 seconds before reapplying input power to the power supply unit.

About AC power supplies

This platform can support up to two AC power supplies. You can hot swap a power supply without powering down the system if there are two installed, and one remains installed and operational during the replacement process.

The platform supports power supply redundancy, which ensures that the system is unaffected if a single power supply fails in a system containing more than one power supply.

Caution: As a safety precaution, the socket outlet must be installed near the equipment and be easily accessible.

Replace an AC power supply in a single-supply system

In the event of a power supply failure, you can replace an AC power supply in a single supply system.

Caution: Be sure that you are using the correct wattage power supply when performing a power supply replacement.

Note: All photos shown are examples. The appearance of your components or accessories might vary slightly.

1. Use the touchscreen LCD to halt and power off the system.
Performing a proper shutdown procedure helps maintain system integrity.
 2. Before removing the PSU from your system, disconnect the AC power cord from the power supply by pulling one or both of the power cord locking tabs away from the power supply.
-

Important: Locking AC power cords might not be available in all countries.



3. Remove the failed AC PSU by squeezing the ejector latch and pulling straight toward you.
-

Note: After you remove a power supply unit (PSU) from the system, ensure that the replacement PSU has been unpowered for 30 seconds to ensure that the PSU circuitry is fully discharged before inserting the replacement PSU into the system.

4. If a connector protective cap is installed on your new PSU, remove it prior to installing the PSU into your system.



5. Inspect the new PSU, especially the connector area, for any damage that might have occurred during shipment.
6. Slide the new PSU into the empty slot, and push it in until the ejector latch engages and clicks.

Note: While installing the supply, use care to ensure that the supply's connector does not come into contact with the rear of the chassis.

7. Ensure that the PSU is fully seated in the chassis by making sure it does not come out when gently pulled.
8. Connect an auto locking AC power cord to the power input panel on the new PSU.

Note: Be sure to route the power cords away from the fan tray so that the cords do not impede access to it.

9. Connect the power cord to the power source.

If the system does not boot after you apply power to the PSU, use the touchscreen LCD to power on the system.

10. (Optional) Use the LCD touchscreen to clear any alert messages that might have resulted from performing the PSU replacement.

Replace an AC power supply in a dual-supply system

In the event of a power supply unit (PSU) failure, you can replace an AC PSU in a dual-supply system without powering down the system, provided that there is at least one PSU operating during the replacement process.

Caution: Be sure that you are using the correct wattage power supply when performing a power supply replacement.

Note: All photos shown are examples. The appearance of your components or accessories might vary slightly.

1. Make sure that you have a live power supply unit (PSU) already installed in your system if you want to hot swap a PSU while the system is running.
2. Before removing the PSU from your system, disconnect the AC power cord from the power supply by pulling one or both of the power cord locking tabs away from the power supply.

Important: Locking AC power cords might not be available in all countries.



3. Remove the failed AC PSU by squeezing the ejector latch and pulling straight toward you.

Note: After you remove a power supply unit (PSU) from the system, ensure that the replacement PSU has been unpowered for 30 seconds to ensure that the PSU circuitry is fully discharged before inserting the replacement PSU into the system.

4. If a connector protective cap is installed on your new PSU, remove it prior to installing the PSU into your system.



5. Inspect the new PSU, especially the connector area, for any damage that might have occurred during shipment.
6. Slide the new PSU into the empty slot, and push it in until the ejector latch engages and clicks.

Note: While installing the supply, use care to ensure that the supply's connector does not come into contact with the rear of the chassis.

7. Ensure that the PSU is fully seated in the chassis by making sure it does not come out when gently pulled.
8. Connect an auto locking AC power cord to the power input panel on the new PSU.

Note: Be sure to route the power cords away from the fan tray so that the cords do not impede access to it.

9. Connect the power cord to the power source.
If the system does not boot after you apply power to the PSU, use the touchscreen LCD to power on the system.
10. (Optional) Use the LCD touchscreen to clear any alert messages that might have resulted from performing the PSU replacement.

Environmental Guidelines

General environmental and installation guidelines

The i800 Series platform is an industrial network appliance that is designed to be mounted in a standard 19-inch EIA rack.

Follow these guidelines to adhere to safety precautions:

- Install the rack according to the manufacturer's instructions and check the rack for stability before placing equipment in it.
- Build and position the rack so that after you install the platform, the power supply and the vents on both the front and back of the unit remain unobstructed. The platform must have adequate ventilation around the unit at all times.
- Although not required, a 1U space between units makes it easier for you to remove the unit from the rack in the event that the unit requires service. A 1U space between units also provides additional cable routing options.
- Leaving at least 100 mm of space from the front panel of the unit to the rack front or rack door provides enough room for you to route the cables without excessive bending or insulation damage.
- A shelf or similar supportive structure is required to support the unit if only one person is installing the unit.
- Do not plug the unit into a branch circuit shared by more electronic equipment than the circuit is designed to manage safely at one time.
- Route and secure power cords so that they do not obstruct removal of the fan tray.

Important: *This product is sensitive to electrostatic discharge (ESD). FS[®] recommends that you use proper ESD grounding procedures and equipment when you install or maintain the unit.*

Caution: *Customers should not attempt to replace batteries. There is a risk of explosion if a battery is replaced with an incorrect type. Field technicians should dispose of used batteries according to the instructions.*

Attention : *Il y a risque d'explosion si la batterie est remplacée par une batterie de type incorrect. Mettre au rebut les batteries usagées conformément aux instructions.*

Chassis rack-mount spatial requirements

The i800 Series platforms ship with a rack mount kit to help install the system more easily. This kit requires that the rack or cabinet has certain clearances and spacing, as shown here.

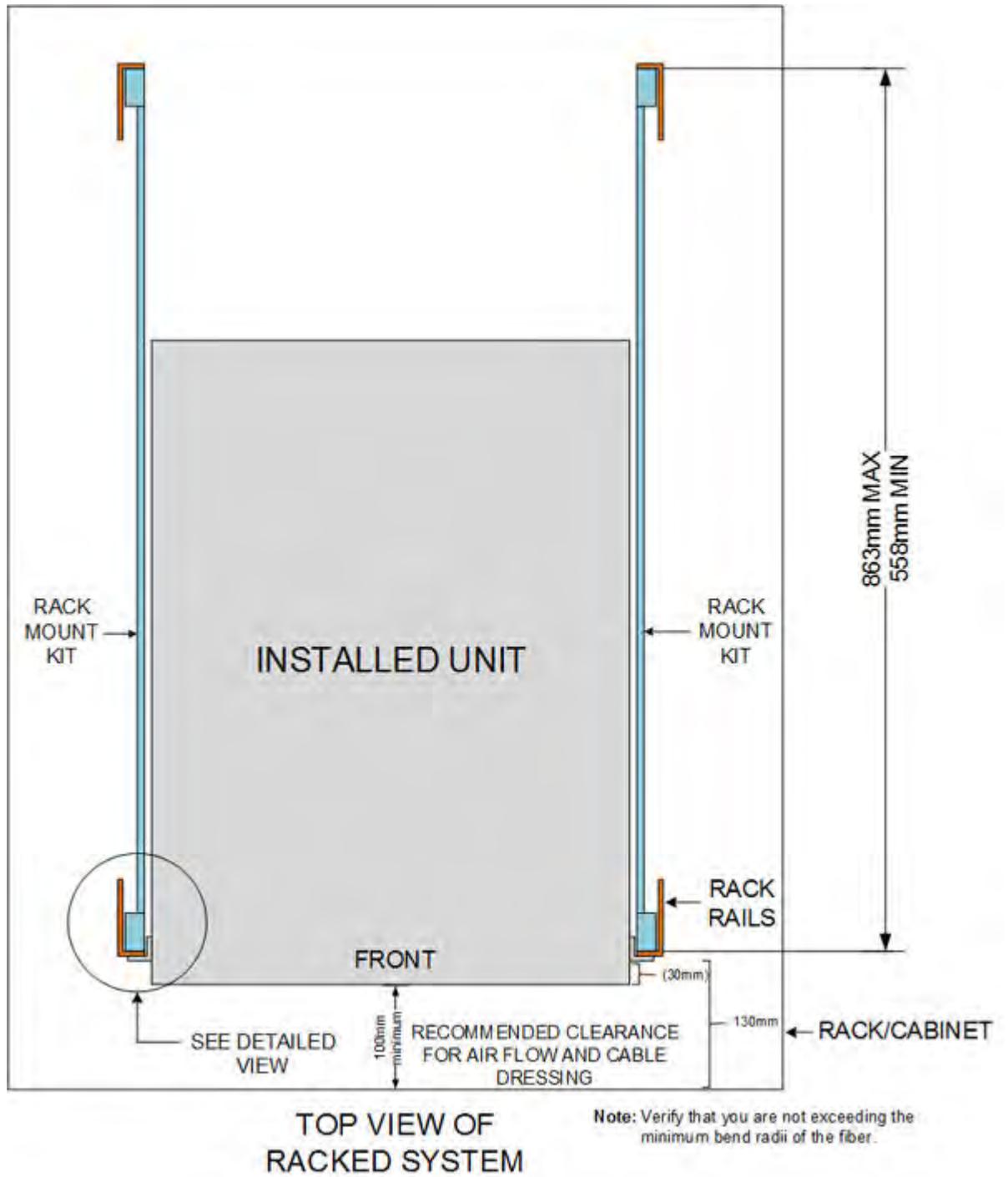


Figure 6: Rack mounting spatial requirements for the i800 Series platform

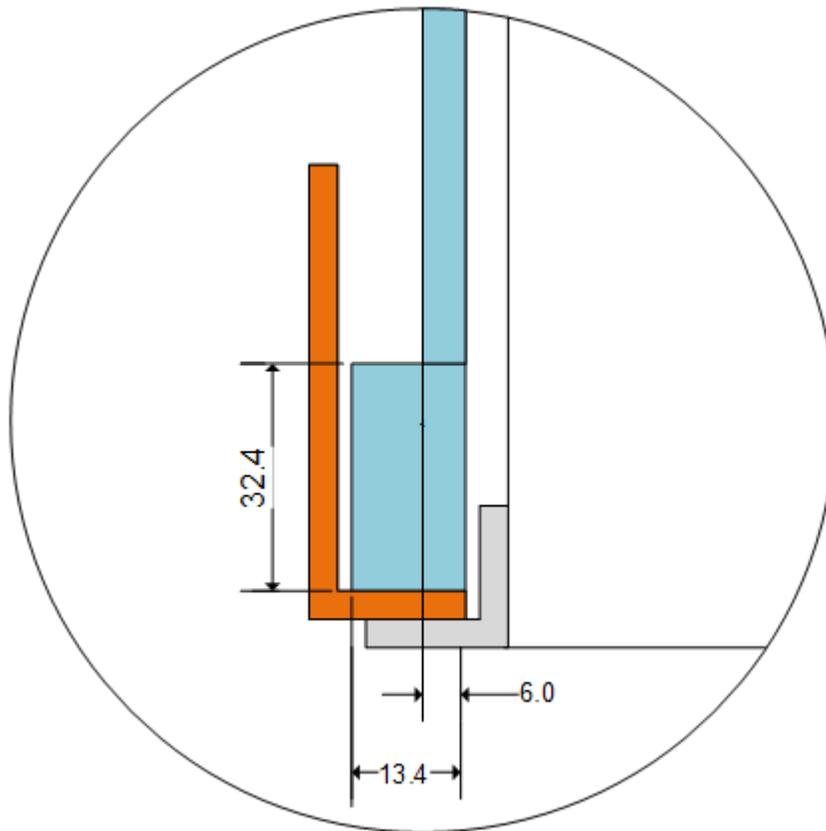


Figure 7: Detailed view of rack mounting spatial requirements

Guidelines for AC-powered equipment

An AC-powered installation must meet these requirements:

- Use a 15 amp external branch circuit protection device to install the unit.
- Use one power feed for each individual power supply.

Important: The platform must be installed in a *RESTRICTED ACCESS LOCATION*, such as a central office or customer premises environment.

Note: The power cables included with this unit are for exclusive use with this unit and should not be used with other electrical appliances.

Note: These guidelines apply to *STATIONARY PLUGGABLE EQUIPMENT TYPE A* with simultaneous multiple connections to the *AC MAINS SUPPLY*:

- The building installation shall provide a means for connection to protective earth; and
 - The equipment is to be connected to that means; and
 - A SERVICE PERSON shall check whether or not the socket-outlet from which the equipment is to be powered provides a connection to the building protective earth. If not, the SERVICE PERSON shall arrange for the installation of a PROTECTIVE EARTHING CONDUCTOR from the separate protective earthing terminal to the protective earth wire in the building.
-

Note: High leakage current. Earth connection essential before connecting supply.

Platform airflow diagram

When you install the platform into a rack, it is important to understand the unit's airflow direction so that you can ensure proper cooling.

The platform employs a negative pressure fan system, which draws cold air in from the front of the chassis.

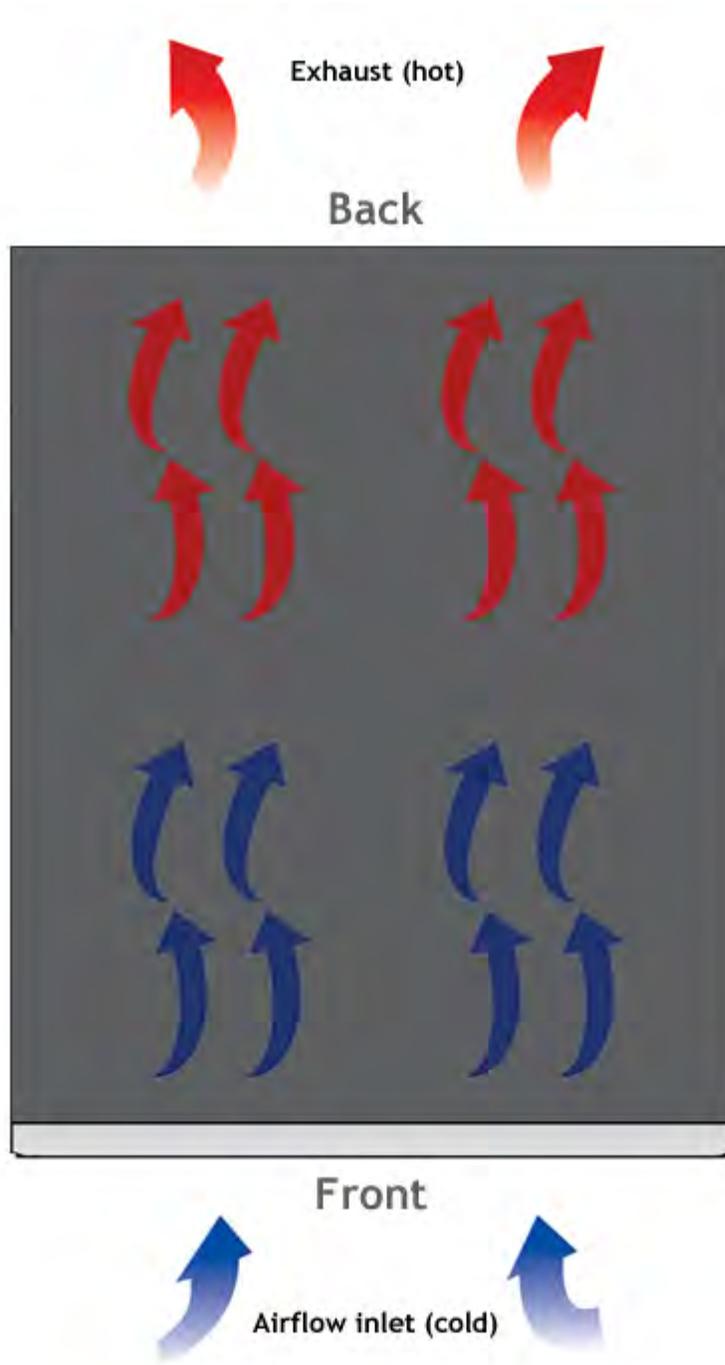


Figure 8: Airflow in iSeries platforms

Platform Specifications

General specifications for system features

This table lists general specifications for system features for BIG-IP® iSeries platforms.

Item	Specification
Transceiver modules hot swap	Support for hot swap of optical transceiver modules
Power supply hot swap	Support for hot swap of the power supplies
Jumbo frames	Support for maximum Ethernet frame size of 9216 bytes and MTU of 9128 bytes
F5® TurboFlex™ Profiles	TurboFlex Profiles are groupings of hardware-accelerated (FPGA) features that are associated with a specific use case. TurboFlex Profiles are groupings of hardware-accelerated features that are dependent on module licensing. If BIG-IP® LTM® is licensed and provisioned, then the ADC profile is available. If BIG-IP AFM™ is licensed and provisioned, then the Security profile is available. TurboFlex Profiles are supported only in platforms running a high performance license (x800). Also, TurboFlex Profile availability varies depending on the platform series tier.

Hardware specifications - i800 Series

This table lists hardware specifications for i800 Series platforms.

Item	Specification
Dimensions	H: 1.72 inches (4.37 cm) x W: 17.4 inches (44.20 cm) x D: 22.5 inches (57.15 cm) (per unit) 1U industry standard rack-mount chassis
Weight	20.0 pounds (9.07 kg) with one power supply (per unit) <ul style="list-style-type: none">• Quick install rail kit adds 4.5 pounds (2.04 kg).• Optional front-mount rack brackets add 2.5 pounds (1.13 kg).• Additional power supply adds 2.0 pounds (0.91 kg).
Processor	1 x Dual-Core Intel® Xeon® processor (total 4 hyperthreaded logical processing cores)
Communication interfaces	2 x 10GbE SFP+ 4 x 1GbE SFP ports 1 x 10/100/1000Base-T management port 1 x RJ45 console port 1 x RJ45 failover port 1 x USB 2.0 interface
Storage drive capacity	1 x 500 GB Enterprise Class hard disk drive (HDD)
RAM	16 GB
AC power supply	1 x 250 W 100-240 VAC(+/- 10%) AUTO Switching Platinum 1 x NEMA 5-15P power cords

Important: Specifications are subject to change without notification.

Environmental operating specifications

This table lists platform environmental operating specifications.

Item	Specification
Operational temperature	32 to 104°F (0 to 40°C)
Operational relative humidity	5% to 85% (40°C) non-condensing Up to 93% (40°C) non-condensing for a maximum of 96 hours
Non-operational temperature	-40 to 158°F (-40 to 70°C)
Non-operational relative humidity	5% to 93% (40°C) non-condensing

Power specifications - i800 Series

This table lists power specifications for i800 Series platforms.

Item	Single power supply	Dual power supply
Idle power draw (AC power)	110VAC input: 70W 220VAC input: 70W	110VAC input: 80W 220VAC input: 75W
Typical power draw (AC power; 50% load; temp 25°C)	110VAC input: 95W 220VAC input: 95W	110VAC input: 100W 220VAC input: 100W
Maximum power draw (AC power)	110VAC input: 120W 220VAC input: 120W	110VAC input: 120W 220VAC input: 120W
Typical heat generated (AC power)	110VAC input: 325 BTU/hour 220VAC input: 345 BTU/hour	110VAC input: 325 BTU/hour 220VAC input: 345 BTU/hour
Maximum heat generated (AC power)	410 BTU/hour	410 BTU/hour

Important: Specifications are subject to change without notification.

Safety requirements

This equipment complies with these requirements of the Low Voltage Directive 2014/35/EU:

EC Type Examination Certificates: Master Contract 252302

CB Scheme

EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013

IEC 60950-1:2005, A1:2009+A2:2013

CSA 60950-1-07, Including A1:2011+A2:2014

ANSI/UL 60950-1-2014

EMC requirements

USA--FCC Class A, Canada--Industry Canada Class A

This equipment complies with Part 15 of FCC Rules. Operation is subject to these two conditions:

1. This equipment may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

European Union

This equipment complies with these requirements of the EMC Directive 2014/30/EU:

As Telecommunication Network Equipment (TNE) in Both Telecom Centers and Other than Telecom Centers per (as applicable):

ETSI EN 300 386 V1.6.1 (2012)

EN 55032:2012/AC:2013

EN 61000-3-2:2014

EN 61000-3-3:2013

As Information Technology Equipment (ITE) Class A per (as applicable):

EN 55024:2010

EN 55032:2012/AC:2013

EN 61000-3-2:2014

EN 61000-3-3:2013

Acoustic and altitude specifications

This table lists acoustic levels and operational altitude specifications for iSeries platforms.

Specification type	Detail	Value	Notes
Acoustic	Sound power	72.72 dBA	A-weighted Sound Power at 27°C full system load.
Altitude	Operational	13,000 Feet	Per BELCORE GR-63-CORE, section 4.1.3: This unit is functional when installed at elevations between 60m (197 feet) below sea level and 1800m (6000 feet) above sea level at the aisle ambient temperatures of 40°C.
	Non-operational	40,000 Feet	

Restriction of Hazardous Substances Directive (RoHS) for China

Products listed on this declaration comply with the Restriction of Hazardous Substances (RoHS) directive 2011/65/EU, and produce required technical documentation in compliance with EN50581:2012.

In accordance with China's Management Methods for the Restriction of the Use of Hazardous Substances in Electrical and Electronic Products #32, the following information is provided regarding the names and concentration levels of toxic substances or hazardous substances that may be contained in the following product relative to the standards set by the Standardization Administration of the People's Republic of China.

说明: DESCRIPTION : HAZARDOUS SUBSTANCE TABLE, CHINA ROHS

部件编号: PART NUMBER: i800/ i2000 / i4000 SERIES

配件: ACCESSORIES:

Component Name 组件名称	Hazardous/Toxic Substance Name 危险/有毒物质名称					
	铅 Pb	汞 Hg	镉 Cd	六价铬 Cr ⁶⁺	多溴联苯 PBB	多溴二苯醚 PBDE
金属部件 Metal Parts	X	□	□	□	□	□
PCA 处理器板 PCA Processor Board	X	□	□	□	□	□
PCA 中隔板 PCA Mezzanine Board	X	□	□	□	□	□
内部电缆 Internal Cables	□	□	□	□	□	□
硬盘 / 固态硬盘 Hard Drives or SSDs	X	□	□	□	□	□

This table is prepared in accordance with the provisions of SJ/T 11364

此表是按照规定制备 SJ/T 11364

□: Indicates that this toxic or hazardous substance contained in all the homogeneous materials for this part is below the limit requirement of GB/T 26572.

X: Indicates that this toxic or hazardous substance contained in all the homogeneous materials for this part is above the limit requirement of GB/T 26572.

□: 表示此部件的均质材料中所含的有毒或危险物质低于 GB/T 26572 限值要求。

X: 表示此部件的均质材料中所含的有毒或危险物质高于 GB/T 26572 限值要求。



(注: 表中标记“X”的部件, 表明全球技术委员会于现阶段无法实现有害物质的替代。)

Platform Specifications

General specifications for system features

This table lists general specifications for system features for BIG-IP® iSeries platforms.

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Storage drive capacity	1 x 500 GB Enterprise Class hard disk drive (HDD)
RAM	16 GB
AC power supply	1 x 250 W 100-240 VAC(+/- 10%) AUTO Switching Platinum 1 x NEMA 5-15P power cords

Important: Specifications are subject to change without notification.

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Item	Specification
Operational temperature	32 to 104°F (0 to 40°C)
Operational relative humidity	5% to 85% (40°C) non-condensing Up to 93% (40°C) non-condensing for a maximum of 96 hours
Non-operational temperature	-40 to 158°F (-40 to 70°C)
Non-operational relative humidity	5% to 93% (40°C) non-condensing

Power specifications - i800 Series

This table lists power specifications for i800 Series platforms.

Item	Single power supply	Dual power supply
Idle power draw (AC power)	110VAC input: 70W 220VAC input: 70W	110VAC input: 80W 220VAC input: 75W
Typical power draw (AC power; 50% load; temp 25°C)	110VAC input: 95W 220VAC input: 95W	110VAC input: 100W 220VAC input: 100W
Maximum power draw (AC power)	110VAC input: 120W 220VAC input: 120W	110VAC input: 120W 220VAC input: 120W
Typical heat generated (AC power)	110VAC input: 325 BTU/hour 220VAC input: 345 BTU/hour	110VAC input: 325 BTU/hour 220VAC input: 345 BTU/hour
Maximum heat generated (AC power)	410 BTU/hour	410 BTU/hour

Important: Specifications are subject to change without notification.

Safety requirements

This equipment complies with these requirements of the Low Voltage Directive 2014/35/EU:

EC Type Examination Certificates: Master Contract 252302

CB Scheme

EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013

IEC 60950-1:2005, A1:2009+A2:2013

CSA 60950-1-07, Including A1:2011+A2:2014

ANSI/UL 60950-1-2014

EMC requirements

USA--FCC Class A, Canada--Industry Canada Class A

This equipment complies with Part 15 of FCC Rules. Operation is subject to these two conditions:

1. This equipment may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

European Union

This equipment complies with these requirements of the EMC Directive 2014/30/EU:

As Telecommunication Network Equipment (TNE) in Both Telecom Centers and Other than Telecom Centers per (as applicable):

ETSI EN 300 386 V1.6.1 (2012)

EN 55032:2012/AC:2013

EN 61000-3-2:2014

EN 61000-3-3:2013

As Information Technology Equipment (ITE) Class A per (as applicable):

EN 55024:2010

EN 55032:2012/AC:2013

EN 61000-3-2:2014

EN 61000-3-3:2013

Acoustic and altitude specifications

This table lists acoustic levels and operational altitude specifications for iSeries platforms.

Specification type	Detail	Value	Notes
Acoustic	Sound power	72.72 dBA	A-weighted Sound Power at 27°C full system load.
Altitude	Operational	13,000 Feet	Per BELCORE GR-63-CORE, section 4.1.3: This unit is functional when installed at elevations between 60m (197 feet) below sea level and 1800m (6000 feet) above sea level at the aisle ambient temperatures of 40°C.
	Non-operational	40,000 Feet	

Restriction of Hazardous Substances Directive (RoHS) for China

Products listed on this declaration comply with the Restriction of Hazardous Substances (RoHS) directive 2011/65/EU, and produce required technical documentation in compliance with EN50581:2012.

In accordance with China's Management Methods for the Restriction of the Use of Hazardous Substances in Electrical and Electronic Products #32, the following information is provided regarding the names and concentration levels of toxic substances or hazardous substances that may be contained in the following

product relative to the standards set by the Standardization Administration of the People's Republic of China.

说明: DESCRIPTION : HAZARDOUS SUBSTANCE TABLE, CHINA ROHS

部件编号: PART NUMBER: i800/ i2000 / i4000 SERIES

配件: ACCESSORIES:

Component Name 组件名称	Hazardous/Toxic Substance Name 危险/有毒物质名称					
	铅 Pb	汞 Hg	镉 Cd	六价铬 Cr ⁶⁺	多溴联苯 PBB	多溴二苯醚 PBDE
金属部件 Metal Parts	X	□	□	□	□	□
PCA 处理器板 PCA Processor Board	X	□	□	□	□	□
PCA 中隔板 PCA Mezzanine Board	X	□	□	□	□	□
内部电缆 Internal Cables	□	□	□	□	□	□
硬盘 / 固态硬盘 Hard Drives or SSDs	X	□	□	□	□	□

This table is prepared in accordance with the provisions of SJ/T 11364
此表是按照规定制备 SJ/T 11364

O: Indicates that this toxic or hazardous substance contained in all the homogeneous materials for this part is below the limit requirement of GB/T 26572.
X: Indicates that this toxic or hazardous substance contained in all the homogeneous materials for this part is above the limit requirement of GB/T 26572.

O: 表示此部件的均质材料中所含的有毒或危险物质低于 GB/T 26572 限值要求。
X: 表示此部件的均质材料中所含的有毒或危险物质高于 GB/T 26572 限值要求。



(注: 表中标记“X”的部件, 表明该部件未能按现行国家标准要求实现有害物质限量化。)

Repackaging Guidelines

About repackaging the platform

If it becomes necessary to transport the platform to another location or return it to F5[®] Networks, these guidelines will help ensure that you repackage the platform properly.

You can perform a disk erase operation to erase all sensitive data from storage drives (for example, solid-state drives and hard disk drives) before you return a platform to F5. For more information, see *F5[®] Platforms: Essentials*.

Important: Before returning any equipment, contact F5 to obtain a Service Order (SO) or Return Material Authorization (RMA) case number.

Important: You must use shipping materials and packaging provided by F5 when repackaging the platform.

Note: Be sure to keep a record of the tracking number and ship date. These will be needed to track lost shipments.

Note: Do not include any cables, removable XFP/SFP modules, GBICs, or other peripheral items if you are returning the platform to F5.

Repackage the platform

The iSeries platforms must be shipped in F5[®]-provided packaging.

1. Halt the platform using the LCD panel.
2. Disconnect the AC power cord from the power supplies.
3. Disconnect the network cables and other cables from the chassis, and then remove any optical modules.
4. Remove the chassis from the rack.
5. Remove all installation hardware from the chassis.
6. Place the chassis onto the bottom foam in the shipping box.
7. Place the top foam pieces into the slot on the bottom foam.
8. Close and seal the shipping box.

Returned Material Data Security Statement

About returned material data security

Follow these data security guidelines when returning equipment to F5® for reprocessing or repair. The guidelines include reprocessing procedures and optional customer-end procedures.

About memory technologies used in F5 equipment

F5® equipment contains volatile, battery-backed volatile, and non-volatile memory. Volatile memory loses all traces of data on power down. Battery-backed volatile memory retains data as long as battery charge is maintained. Non-volatile memory retains data indefinitely.

Volatile memory

Volatile memory loses all traces of data on power down; therefore, customer data that is stored in volatile memory is secure when power is removed from the platform. No further action is required by customers for equipment that includes volatile memory.

Battery-backed volatile memory

This F5® platform contains a coin battery for maintaining BIOS settings and the system clock. All data maintained by the coin battery is used only for system specific tasks. No customer data is maintained by the battery-backed volatile memory. No further action is required by customers for equipment that includes volatile memory.

Non-volatile memory

F5® platforms include various non-volatile memory components. These non-volatile memory components can be categorized as either user inaccessible or user accessible.

Inaccessible non-volatile memory components are programmed during manufacture or software installation. The data stored in user inaccessible non-volatile memory is used for setting voltage levels, determining the sequence of operational events, and the managing appliance operational condition. Data held within user inaccessible, non-volatile memory represents no data security risk to customers. User inaccessible, non-volatile memory cannot be modified by appliance users, and therefore, contains no customer data.

Inaccessible non-volatile memory

This table lists the inaccessible non-volatile memory in this system.

Description	Data	Customer data
Programmable firmware stores	Firmware	No
Switch Card SEEPROM	Platform ID, serial number, part number, and so on.	No
PHY EEPROMs	PHY MAC address	No

Accessible non-volatile memory

This table lists the accessible non-volatile memory in this system. Not all platform variants include all of these non-volatile memory items.

Description	Data	Customer data	Data security method
Hard disk drive (HDD)	F5® product software, customer configuration, and log files	Yes	Standard reprocessing or customer removal
Always-On Management (AOM) Flash chip (soldered-down flash chip)	AOM boot code and customer custom configuration	Yes	Standard reprocessing or customer action

About removing data from F5 components

For components that contain sensitive customer data and cannot be removed from your F5® system, you can take optional steps to remove the data from these components before you return the system to F5 for processing.

Remove sensitive data from storage drives

The hard disk drive (HDD) and solid-state drive (SSD) components included in F5® platforms might include sensitive customer data. If you purchase the HDD removal SKU, you can remove the HDD/SSD and coin battery, and these components will be replaced during F5 reprocessing. Otherwise, HDD and SSD components are processed by F5 through standard processing. You can perform a disk erase operation on your system to remove sensitive customer data.

Perform a disk erase operation using the F5 `Disk Erase` utility to remove all data on hard disk drives (HDDs) or solid-state drives (SSDs) using a single-pass, zero write disk erase operation. For more information about storage drive maintenance, see *F5® Platforms: Essentials*.

Remove IP address data from Always-On Management

If you have configured an IP address for the Always-On Management (AOM) subsystem, you can remove the customized IP address from the system before returning it to F5® Networks.

1. Connect to the system using the serial console.
2. Open the AOM Command Menu.
Esc (
3. Manually assign a new management IP address, netmask, and gateway by typing `n` when prompted about using DHCP. At the prompts, type `0.0.0.0` for IP address (required), and values for netmask (required), and gateway (optional).
A confirmation message displays the configured management IP address, netmask, and gateway.
4. (Optional) Type `i` to verify the assigned addresses.

Legal Notices

Legal Notices

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This product may include cryptographic software. Under the Export Administration Act, the United States government may consider it a criminal offense to export this product from the United States.

RF Interference Warning

This is a Class A product. In a domestic environment this product may cause radio interference, in which case the user may be required to take adequate measures.

FCC Compliance

This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This unit generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user, at his own expense, will be required to take whatever measures may be required to correct the interference.

Any modifications to this device, unless expressly approved by the manufacturer, can void the user's authority to operate this equipment under part 15 of the FCC rules.

Canadian Regulatory Compliance

This Class A digital apparatus complies with Canadian ICES-003.

Standards Compliance

This product conforms to the IEC, European Union, ANSI/UL and Canadian CSA standards applicable to Information Technology products at the time of manufacture.

VCCI Class A Compliance

This is a Class A product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take corrective actions. VCCI-A

この製置は、クラス A 情報技術製置です。この製置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。VCCI-A

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