Secure Firewall 4200 Threat Defense Getting Started: Management Center on a Local Management Network

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Before You Begin

Manage the firewall using the Secure Firewall Management Center on a dedicated management network.

Power On the Firewall

System power is controlled by a rocker power switch located on the rear of the firewall. The rocker power switch provides a soft notification that supports graceful shutdown of the system to reduce the risk of system software and data corruption.

Note   The first time you boot up the firewall, threat defense initialization can take approximately 15 to 30 minutes.

Before you begin

It's important that you provide reliable power for your firewall (for example, using an uninterruptable power supply (UPS)). Loss of power without first shutting down can cause serious file system damage. There are many processes running in the background all the time, and losing power does not allow the graceful shutdown of your system.

Procedure

Step 1   Attach the power cord to the firewall, and connect it to an electrical outlet.

Step 2   Turn the power on using the rocker power switch located on the rear of the chassis, adjacent to the power cord.

Figure 1: Power Button
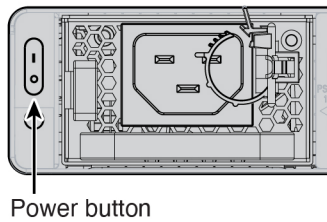
Power button

Step 3   Check the Power LED on the back of the firewall; if it is solid green, the firewall is powered on.

*Figure 2: System and Power LEDs*

System LED
Power LED
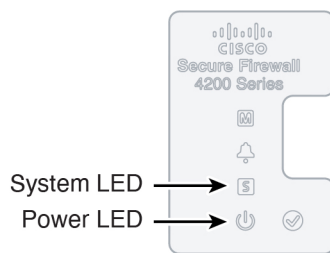
Step 4   Check the System LED on the back of the firewall; after it is solid green, the system has passed power-on diagnostics.

Which Application is Installed: Threat Defense or ASA?

Both applications, threat defense or ASA, are supported on the hardware. Connect to the console port and determine which application was installed at the factory.

Procedure

Step 1   Connect to the console port.

Figure 3: Console Port

RJ-45 console
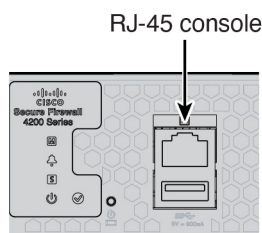
Step 2   See the CLI prompts to determine if your firewall is running threat defense or ASA.

Threat Defense

You see the firepower login (FXOS) prompt. You can disconnect without logging in and setting a new password. If you need to log in all the way, see Access the Threat Defense CLI, on page 3.

```
firepower login:
```

ASA

You see the ASA prompt.

```
ciscoasa>
```

Step 3   If you are running the wrong application, see Cisco Secure Firewall ASA and Secure Firewall Threat Defense Reimage Guide.
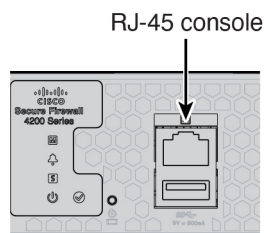
Access the Threat Defense CLI

You might need to access the CLI for configuration or troubleshooting.

Procedure

Step 1   Connect to the console port.

Figure 4: Console Port

Step 2   You connect to FXOS. Log in to the CLI using the **admin** username and the password (the default is **Admin123**). The first time you log in, you are prompted to change the password.

```
firepower login: admin
Password: Admin123
Successful login attempts for user 'admin' : 1

[...]

Hello admin. You must change your password.
Enter new password: ********
Confirm new password: ********
Your password was updated successfully.

[...]
```

```
firepower#
```

Step 3   Change to the threat defense CLI.

Note   If you want to use the device manager for initial setup, do not access the threat defense CLI, which starts the CLI setup.

connect ftd

The first time you connect to the threat defense CLI, you are prompted to complete initial setup.

Example:

```
firepower# connect ftd
>
```

To exit the threat defense CLI, enter the **exit** or **logout** command. This command returns you to the FXOS prompt.

Example:

```
> exit
firepower#
```

Check the Version and Reimage

We recommend that you install your target version before you configure the firewall. Alternatively, you can perform an upgrade after you are up and running, but upgrading, which preserves your configuration, may take longer than using this procedure.
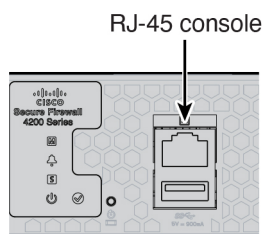
What Version Should I Run?

Cisco recommends running a Gold Star release indicated by a gold star next to the release number on the software download page. You can also refer to the release strategy described in https://www.cisco.com/c/en/us/products/collateral/security/firewalls/bulletin-c25-743178.html.

Procedure

Step 1   Connect to the console port.

Figure 5: Console Port

Step 2   At the FXOS CLI, show the running version.

scope ssa

show app-instance

Example:

```
Firepower# scope ssa
Firepower /ssa # show app-instance

Application Name Slot ID Admin State Operational State Running Version Startup Version Cluster Oper
 State
---------------- ------- ----------- ----------------- --------------- ---------------
-----------------
ftd              1       Enabled     Online            7.6.0.65        7.6.0.65        Not Applicable
```

Step 3   If you want to install a new version, perform these steps.

    a) By default, the Management interface uses DHCP. If you need to set a static IP address for the Management interface, enter the following commands.

        scope fabric-interconnect a

        set out-of-band static ip *ip* **netmask** *netmask* **gw** *gateway*

        commit-buffer

        Note   If you encounter the following error, you must disable DHCP before committing the change. Follow the commands below to disable DHCP.

```
firepower /fabric-interconnect* # commit-buffer
Error: Update failed: [Management ipv4 address (IP <ip> / net mask <netmask> ) is not
in the same network of current DHCP server IP range <ip - ip>.
Either disable DHCP server first or config with a different ipv4 address.]
firepower /fabric-interconnect* # exit
firepower* # scope system
firepower /system* # scope services
firepower /system/services* # disable dhcp-server
firepower /system/services* # commit-buffer
```

    b) Perform the reimage procedure in the FXOS troubleshooting guide.

        You will need to download the new image from a server accessible from the Management interface.

        After the firewall reboots, you connect to the FXOS CLI again.

   c) At the FXOS CLI, you are prompted to set the admin password again.

Obtain Licenses

When you bought your device from Cisco or a reseller, your licenses should have been linked to your Smart Software License account. If you don't have an account on the Smart Software Manager, click the link to set up a new account.

If you have not already done so, register the management center with the Smart Software Manager. Registering requires you to generate a registration token in the Smart Software Manager. See the Cisco Secure Firewall Management Center Administration Guide for detailed instructions.

The threat defense has the following licenses:

- Essentials—Required

- IPS

- Malware Defense

- URL Filtering

- Cisco Secure Client

- Carrier—Diameter, GTP/GPRS, M3UA, SCTP

1. If you need to add licenses yourself, go to Cisco Commerce Workspace and use the **Search All** field.

   Figure 6: License Search
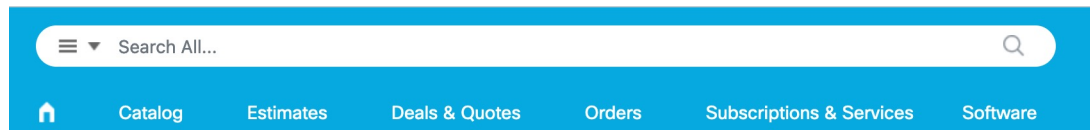
2. Search for the following license PIDs.

   ✎

   | **Note** | If a PID is not found, you can add the PID manually to your order. |

   - Essentials:

     - *Included automatically*

   - IPS, Malware Defense, and URL combination:

     - L-FPR4215T-TMC=

     - L-FPR4225T-TMC=

     - L-FPR4245T-TMC=

     When you add one of the above PIDs to your order, you can then choose a term-based subscription corresponding with one of the following PIDs:
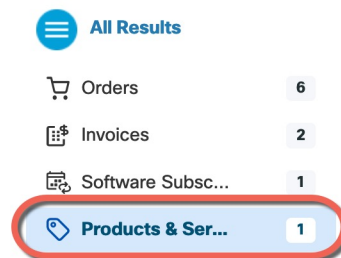
     - L-FPR4215T-TMC-1Y

     - L-FPR4215T-TMC-3Y

     - L-FPR4215T-TMC-5Y

     - L-FPR4225T-TMC-1Y

     - L-FPR4225T-TMC-3Y

     - L-FPR4225T-TMC-5Y

         • L-FPR4245T-TMC-1Y

         • L-FPR4245T-TMC-3Y

         • L-FPR4245T-TMC-5Y

      • Carrier:

         • L-FPR4200-FTD-CAR=

      • Cisco Secure Client—See the Cisco Secure Client Ordering Guide.

3. Choose **Products & Services** from the results.

Figure 7: Results

(If Needed) Power Off the Firewall

It's important that you shut down your system properly. Simply unplugging the power or pressing the power switch can cause serious file system damage. There are many processes running in the background all the time, and unplugging or shutting off the power does not allow the graceful shutdown of your firewall system.
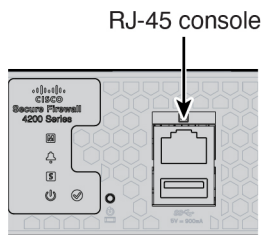
Power Off the Firewall at the CLI

You can use the FXOS CLI to safely shut down the system and power off the firewall.

Procedure

Step 1 Connect to the console port.

Figure 8: Console Port

RJ-45 console

Step 2 In the FXOS CLI, connect to local-mgmt mode.

firepower # **connect local-mgmt**

Step 3 Shut down the system.

firepower(local-mgmt) # **shutdown**

Example:

```
firepower(local-mgmt)# shutdown
This command will shutdown the system.   Continue?
Please enter 'YES' or 'NO': yes
INIT: Stopping Cisco Threat Defense......ok
```

Step 4 Monitor the system prompts as the firewall shuts down. When the shutdown is complete, you will see the following prompt.

```
System is stopped.
It is safe to power off now.
Do you want to reboot instead? [y/N]
```

Step 5 You can now turn off the power switch and unplug the power to physically remove power from the chassis if necessary.

Power Off the Firewall Using the Management Center

Shut down your system properly using the management center.

Procedure

Step 1 Shut down the firewall.

a) Choose **Devices** > **Device Management**.

b) Next to the device that you want to restart, click **Edit** (✎).

c) Click the **Device** tab.

d) Click **Shut Down Device** (⏻) in the **System** section.

e) When prompted, confirm that you want to shut down the device.

Step 2 If you have a console connection to the firewall, monitor the system prompts as the firewall shuts down. When shutdown is complete, you will see the following prompt.

```
System is stopped.
It is safe to power off now.

Do you want to reboot instead? [y/N]
```

If you do not have a console connection, wait approximately 3 minutes to ensure the system has shut down.

Step 3 You can now turn off the power switch and unplug the power to physically remove power from the chassis if necessary.

CHAPTER 2

Cable and Register the Firewall

Cable the firewall and then register the firewall to the management center.

Cable the Firewall

Connect the management center to the dedicated Management 1/1 interface. The management network needs access to the internet for updates. For example, you can connect the management network to the internet through the firewall itself (for example, by connecting to the inside network).

- Obtain a console cable—The firewall does not ship with a console cable by default, so you will need to buy a third-party USB-to-RJ-45 serial cable, for example.

- Install SFPs into the data interface ports—The built-in ports are 1/10/25-Gb SFP28 ports that require SFP/SFP+/SFP28 modules.

- See the hardware installation guide for more information.
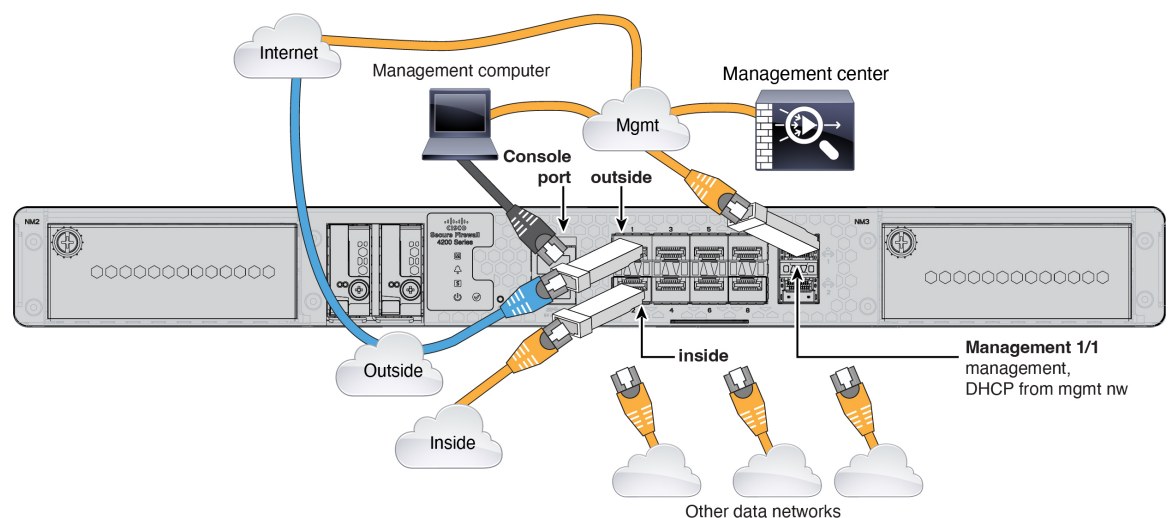
Initial Configuration: CLI

Set the dedicated Management IP address, gateway, and other basic networking settings using the CLI setup script.

Procedure

Step 1 Connect to the console port and access the threat defense CLI. See Access the Threat Defense CLI, on page 3.

Step 2 Complete the CLI setup script for the Management interface settings.

Note You cannot repeat the CLI setup script unless you clear the configuration, for example, by reimaging. However, all of these settings can be changed later at the CLI using **configure network** commands. See Cisco Secure Firewall Threat Defense Command Reference.

```
You must accept the EULA to continue.
Press <ENTER> to display the EULA:
Cisco General Terms
[...]

Please enter 'YES' or press <ENTER> to AGREE to the EULA:

System initialization in progress.  Please stand by.
You must configure the network to continue.
Configure at least one of IPv4 or IPv6 unless managing via data interfaces.
Do you want to configure IPv4? (y/n) [y]:
Do you want to configure IPv6? (y/n) [y]: n
```

Guidance: Enter **y** for at least one of these types of addresses.

```
Configure IPv4 via DHCP or manually? (dhcp/manual) [manual]:

Enter an IPv4 address for the management interface [192.168.45.61]: 10.89.5.17
Enter an IPv4 netmask for the management interface [255.255.255.0]: 255.255.255.192

Enter the IPv4 default gateway for the management interface [data-interfaces]: 10.10.10.1

Enter a fully qualified hostname for this system [firepower]: 1010-3
Enter a comma-separated list of DNS servers or 'none' [208.67.222.222,208.67.220.220,2620:119:35::35]:
Enter a comma-separated list of search domains or 'none' []: cisco.com
If your networking information has changed, you will need to reconnect.
Disabling IPv6 configuration: management0
Setting DNS servers: 208.67.222.222,208.67.220.220,2620:119:35::35
Setting DNS domains:cisco.com

Setting hostname as 1010-3
Setting static IPv4: 10.89.5.17 netmask: 255.255.255.192 gateway: data on management0
Updating routing tables, please wait...
All configurations applied to the system. Took 3 Seconds.
Saving a copy of running network configuration to local disk.
For HTTP Proxy configuration, run 'configure network http-proxy'

Setting hostname as 1010-3
Setting static IPv4: 10.89.5.17 netmask: 255.255.255.192 gateway: data on management0
Updating routing tables, please wait...
All configurations applied to the system. Took 3 Seconds.
Saving a copy of running network configuration to local disk.
For HTTP Proxy configuration, run 'configure network http-proxy'
```

```
    Configuring firewall mode ...


    Device is in OffBox mode - disabling/removing port 443 from iptables.
    Update policy deployment information
        - add device configuration
        - add network discovery
        - add system policy

    You can register the sensor to a Firepower Management Center and use the
    Firepower Management Center to manage it. Note that registering the sensor
    to a Firepower Management Center disables on-sensor Firepower Services
    management capabilities.

    When registering the sensor to a Firepower Management Center, a unique
    alphanumeric registration key is always required.  In most cases, to register
    a sensor to a Firepower Management Center, you must provide the hostname or
    the IP address along with the registration key.
    'configure manager add [hostname | ip address ] [registration key ]'

    However, if the sensor and the Firepower Management Center are separated by a
    NAT device, you must enter a unique NAT ID, along with the unique registration
    key.
    'configure manager add DONTRESOLVE [registration key ] [ NAT ID ]'

    Later, using the web interface on the Firepower Management Center, you must
    use the same registration key and, if necessary, the same NAT ID when you add
    this sensor to the Firepower Management Center.
    >
```

Step 3   Identify the management center.

configure manager add {*hostname* | *IPv4_address* | *IPv6_address* | **DONTRESOLVE**} *reg_key nat_id*

- {*hostname* | *IPv4_address* | *IPv6_address* | **DONTRESOLVE**}—Specifies either the FQDN or IP address of the management center. If the management center is not directly addressable, use **DONTRESOLVE**, in which case the firewall must have a reachable IP address or hostname.

- *reg_key*—Specifies a one-time registration key of your choice that you will also specify on the management center when you register the threat defense. The registration key must not exceed 37 characters. Valid characters include alphanumerical characters (A–Z, a–z, 0–9) and the hyphen (-).

- *nat_id*—Specifies a unique, one-time string of your choice that you will also specify on the management center. The NAT ID must not exceed 37 characters. Valid characters include alphanumerical characters (A–Z, a–z, 0–9) and the hyphen (-). This ID cannot be used for any other devices registering to the management center.

Example:

```
> configure manager add fmc-1.example.com regk3y78 natid56
Manager successfully configured.
```

Register the Firewall with the Management Center

Register the firewall to the management center.

Procedure

Step 1   Log into the management center.

  a)   Enter the following URL.

      https://_fmc_ip_address_

  b)   Enter your username and password.

  c)   Click **Log In**.

Step 2   Choose **Devices** > **Device Management**.

Step 3   From the **Add** drop-down list, choose **Add Device**.

Figure 9: Add Device Using a Registration Key

Add Device   ⊚

☐ CDO Managed Device

Host:†
10.89.5.41

Display Name:
3110-1

Registration Key:*
••••

Group:
None   ⌄

Access Control Policy:*
wfx_automationPolicy123   ⌄

Smart Licensing
Note: All virtual Firewall Threat Defense devices require a performance tier license.
Make sure your Smart Licensing account contains the available licenses you need.
It's important to choose the tier that matches the license you have in your account.
Click here for information about the Firewall Threat Defense performance-tiered licensing.
Until you choose a tier, your Firewall Threat Defense virtual defaults to the FTDv50 selection.

Performance Tier (only for Firewall Threat Defense virtual 7.0 and above):
Select a recommended Tier   ⌄
☑ Carrier
☑ Malware Defense
☑ IPS
☑ URL

Advanced
Unique NAT ID:†
31101

☑ Transfer Packets

Cancel   **Register**

Set the following parameters:

- **Host**—Enter the IP address or hostname of the firewall you want to add, if available. Leave this field blank if it is not available.

- **Display Name**—Enter the name for the firewall as you want it to display in the management center. You cannot change this name later.

- **Registration Key**—Enter the same registration key that you specified in the firewall initial configuration.

- **Domain**—Assign the device to a leaf domain if you have a multidomain environment.

• **Group**—Assign it to a device group if you are using groups.

• **Access Control Policy**—Choose an initial policy. Unless you already have a customized policy you know you need to use, choose **Create new policy**, and choose **Block all traffic**. You can change this later to allow traffic; see Configure an Access Control Rule, on page 31.

Figure 10: New Policy

• **Smart Licensing**—Assign the Smart Licenses you need for the features you want to deploy. **Note:** You can apply the Secure Client remote access VPN license after you add the device, from the **System** > **Licenses** > **Smart Licenses** page.

• **Unique NAT ID**—Specify the NAT ID that you specified in the firewall initial configuration.

• **Transfer Packets**—Check the **Transfer Packets** check box so that for each intrusion event, the device transfers the packet to the management center for inspection.

This option is enabled by default. For each intrusion event, the device sends event information and the packet that triggered the event to the management center for inspection. If you disable it, only event information will be sent to the management center; the packet will not be sent.

Step 4   Click **Register**.

If the threat defense fails to register, check the following items:

• Ping—Access the threat defense CLI (see Access the Threat Defense CLI, on page 3), and ping the management center IP address using the following command:

ping system *fmc_ip_address*

If the ping is not successful, check your network settings using the **show network** command. If you need to change the firewall Management IP address, use the **configure network** {**ipv4** | **ipv6**} **manual** command.

• Registration key, NAT ID, and the management center IP address—Make sure you are using the same registration key and NAT ID on both devices. You can set the registration key and NAT ID on the firewall using the **configure manager add** command.

For more troubleshooting information, see https://cisco.com/go/fmc-reg-error.

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

Configure a Basic Policy

Configure a basic security policy with the following settings:

- Inside and outside interfaces—Assign a static IP address to the inside interface, and use DHCP for the outside interface.

- DHCP server—Use a DHCP server on the inside interface for clients.

- Default route—Add a default route through the outside interface.

- NAT—Use interface PAT on the outside interface.

- Access control—Allow traffic from inside to outside.

You can also ccustomize your security policy to include more advanced inspections.

Configure Interfaces

The following example configures a routed-mode inside interface with a static address and a routed-mode outside interface using DHCP. It also adds a DMZ interface for an internal web server.

Procedure

Step 1 Choose **Devices** > **Device Management**, and click **Edit** (✐) for the firewall.

Step 2 Click **Interfaces**.

Figure 11: Interfaces

Step 3 To create breakout ports from a 40-Gb or larger interface, click the **Break** icon for the interface.

If you already used the full interface in your configuration, you will have to remove the configuration before you can proceed with the breakout.

Step 4 Click **Edit** (✎) for the interface that you want to use for inside.

Figure 12: General Tab

a) From the **Security Zone** drop-down list, choose an existing inside security zone or add a new one by clicking **New**.

For example, add a zone called **inside_zone**. You apply your security policy based on zones or groups. For example, configure your access control policy to enable traffic to go from the inside zone to the outside zone, but not from outside to inside.

b) Enter a **Name** up to 48 characters in length.

For example, name the interface **inside**.

c) Check the **Enabled** check box.

d) Leave the **Mode** set to **None**.

e) Click the **IPv4** and/or **IPv6** tab.

- **IPv4**—Choose **Use Static IP** from the drop-down list, and enter an IP address and subnet mask in slash notation.

For example, enter **192.168.1.1/24**

Figure 13: IPv4 Tab

Edit Physical Interface

| General | IPv4 | IPv6 | Path Monitoring |

IP Type:
Use Static IP ▼

IP Address:
192.168.1.1/24

eg. 192.0.2.1/255.255.255.128 or 192.0.2.1/25

- **IPv6**—Check the **Autoconfiguration** check box for stateless autoconfiguration.

Figure 14: IPv6 Tab

Edit Physical Interface

| General | IPv4 | IPv6 | Path Monitoring | Hardware Configu |

| Basic | Address | Prefixes | Settings | DHCP |

Enable IPV6: ☐
Enforce EUI 64: ☐
Link-Local address: _____
Autoconfiguration: ☑
Obtain Default Route: ☐

f) Click **OK**.

Step 5 Click **Edit** (✎) for the interface that you want to use for outside.

Figure 15: General Tab

a) From the **Security Zone** drop-down list, choose an existing outside security zone or add a new one by clicking **New**.

For example, add a zone called **outside_zone**.

If the outside interface was pre-configured, the rest of these fields are optional.

b) Enter a **Name** up to 48 characters in length.

For example, name the interface **outside**.

c) Check the **Enabled** check box.

d) Leave the **Mode** set to **None**.

e) Click the **IPv4** and/or **IPv6** tab.

- **IPv4**—Choose **Use DHCP**, and configure the following optional parameters:

- **Obtain default route using DHCP**—Obtains the default route from the DHCP server.

- **DHCP route metric**—Assigns an administrative distance to the learned route, between 1 and 255. The default administrative distance for the learned routes is 1.

Figure 16: IPv4 Tab

Edit Physical Interface

| General | IPv4 | IPv6 | Path Mc |

IP Type:

Use DHCP ▼

Obtain default route ☑
using DHCP:

DHCP route metric:

1

(1 – 255)

- **IPv6**—Check the **Autoconfiguration** check box for stateless autoconfiguration.

Figure 17: IPv6 Tab

Edit Physical Interface

| General | IPv4 | IPv6 | Path Monitoring | Hardware Configu |

| Basic | Address | Prefixes | Settings | DHCP |

Enable IPV6: ☐
Enforce EUI 64: ☐
Link-Local address: [   ]
Autoconfiguration: ☑
Obtain Default Route: ☐

    f) Click **OK**.

Step 6   Configure a DMZ interface to host a web server, for example.

    a) Click **Edit** (✎) for the interface you want to use.

    b) From the **Security Zone** drop-down list, choose an existing DMZ security zone or add a new one by clicking **New**.

       For example, add a zone called **dmz_zone**.

    c) Enter a **Name** up to 48 characters in length.

       For example, name the interface **dmz**.

    d) Check the **Enabled** check box.
    e) Leave the **Mode** set to **None**.
    f) Click the **IPv4** and/or **IPv6** tab and configure the IP address as desired.
    g) Click **OK**.

Step 7   Click **Save**.

Configure the DHCP Server

Enable the DHCP server if you want clients to use DHCP to obtain IP addresses from the firewall.

Procedure

Step 1   Choose **Devices** > **Device Management**, and click **Edit** (✎) for the device.

Step 2   Choose **DHCP** > **DHCP Server**.

Figure 18: DHCP Server

Step 3   In the **Server** area, click **Add** and configure the following options.

Figure 19: Add Server

Add Server

Interface*

inside

Address Pool*

192.168.1.2-192.168.1.55

(2.2.2.10-2.2.2.20)

☑ Enable DHCP Server

Cancel   OK

- **Interface**—Choose the interface name from the drop-down list.

- **Address Pool**—Set the range of IP addresses. The IP addresses must be on the same subnet as the selected interface and cannot include the IP address of the interface itself.

- **Enable DHCP Server**—Enable the DHCP server on the selected interface.

Step 4   Click **OK**.

Step 5   Click **Save**.

Add the Default Route

The default route normally points to the upstream router reachable from the outside interface. If you obtained the outside address from DHCP, your device might have already received a default route. If you need to manually add the route, complete this procedure.

Procedure

Step 1   Choose **Devices** > **Device Management**, and click **Edit** (✎) for the device.

Step 2   Choose **Routing** > **Static Route**.

Figure 20: Static Route

If you received a default route from the DHCP server, it will show in this table.

Step 3 Click **Add Route**, and set the following options.

Figure 21: Add Static Route Configuration

- **Type**—Click the **IPv4** or **IPv6** radio button depending on the type of static route that you are adding.

- **Interface**—Choose the egress interface; typically the outside interface.

- **Available Network**—Choose **any-ipv4** for an IPv4 default route, or **any-ipv6** for an IPv6 default route, and click **Add** to move it to the **Selected Network** list.

- **Gateway** or **IPv6 Gateway**—Enter or choose the gateway router that is the next hop for this route. You can provide an IP address or a Networks/Hosts object.

Step 4   Click **OK**.

The route is added to the static route table.

Step 5   Click **Save**.

Configure NAT

This procedure creates a NAT rule for internal clients to convert the internal addresses to a port on the outside interface IP address. This type of NAT rule is called *interface Port Address Translation (PAT)*.

Procedure

Step 1   Choose **Devices** > **NAT**, and click **New Policy**.

Step 2   Name the policy, select the devices that you want to use the policy, and click **Save**.

Figure 22: New Policy

The policy is added the management center. You still have to add rules to the policy.

Figure 23: NAT Policy
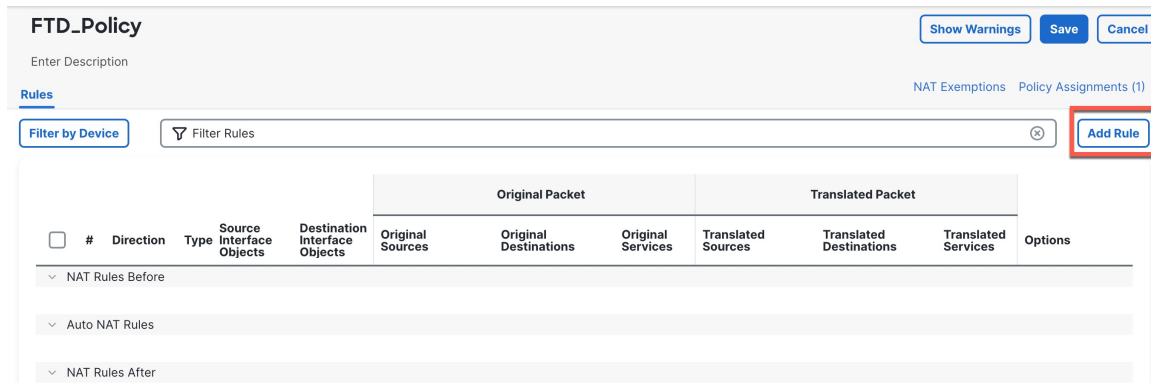
Step 3   Click **Add Rule**.

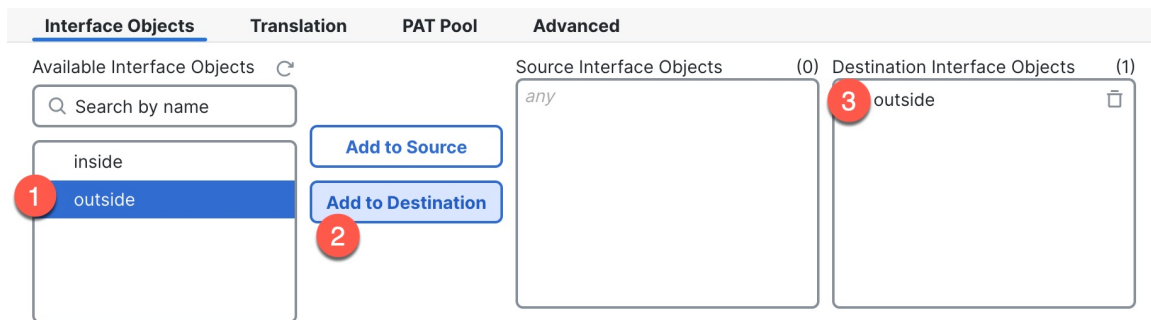**Step 4**   Configure the basic rule options:

Figure 24: Basic Rule Options
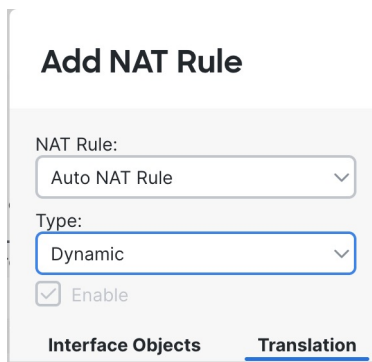
• **NAT Rule**—Choose **Auto NAT Rule**.

• **Type**—Choose **Dynamic**.

Step 5   On the **Interface Objects** page, add the outside zone from the **Available Interface Objects** area to the **Destination Interface Objects** area.

Figure 25: Interface Objects

Step 6   On the **Translation** page, configure the following options:

Figure 26: Translation

• **Original Source**—Click **Add** (+) to add a network object for all IPv4 traffic (**0.0.0.0/0**).

Figure 27: New Network Object

| **Note** | You cannot use the system-defined **any-ipv4** object, because Auto NAT rules add NAT as part of the object definition, and you cannot edit system-defined objects. |

• **Translated Source**—Choose **Destination Interface IP**.

Step 7 Click **Save** to add the rule.

The rule is saved to the **Rules** table.

Step 8 Click **Save** on the **NAT** page to save your changes.

Configure an Access Control Rule

If you created a basic **Block all traffic** access control policy when you registered the device, then you need to add rules to the policy to allow traffic through the device. The access control policy can include multiple rules that are evaluated in order.

This procedure creates an access control rule to allow all traffic from the inside zone to the outside zone.

Procedure

Step 1　　Choose **Policy** > **Access Policy** > **Access Policy**, and click **Edit** ( ) for the access control policy assigned to the device.

Step 2　　Click **Add Rule**, and set the following parameters.

Figure 28: Source Zone

1. Name this rule, for example, **inside-to-outside**.

2. Select the inside zone from **Zones**

3. Click **Add Source Zone**.

Figure 29: Destination Zone

4. Select the outside zone from **Zones**.

5. Click **Add Destination Zone**.

Leave the other settings as is.

Step 3 (Optional) Customize associated policies by clicking on the policy type in the packet flow diagram.

Prefilter, Decryption, Security Intelligence, and Identity policies are applied before an access control rule. Customizing these policies is not required, but after you know your network's needs, they let you improve network performance by either fastpathing trusted traffic (bypassing processing) or blocking traffic so no further processing is required.

Figure 30: Policies Applied Before Access Control

☐ *Packets* → ✅ **Prefilter Rules** → ◯ **Decryption** → ✅ **Security Intelligence** → ◯ **Identity** → ✅ **Access Control**
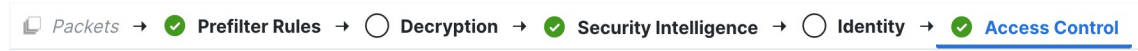
- **Prefilter Rules**—The Default Prefilter Policy passes all traffic for the other rules to act on (analyzes). The only change to the default policy you can make is to **block** tunnel traffic. Otherwise, you can create a new prefilter policy to associate with the access control policy that can analyze (pass on), fastpath (bypass further checks) or block.

  Prefiltering lets you improve performance by dealing with traffic before it gets any further, by either blocking or fastpathing. In a new policy, you can add *tunnel* rules and *prefilter* rules. A tunnel rule lets you fastpath, block, or rezone plaintext (non-encrypted), passthrough tunnels. A prefilter rule lets you fastpath or block non-tunneled traffic identified by IP address, port, and protocol.

  For example, if you know you want to block all FTP traffic on your network, but fastpath SSH traffic from an administrator, you can add a new prefilter policy.

- **Decryption**—Decryption is not applied by default. Decryption is a way to expose network traffic to deep inspection. In most cases, you don't want to decrypt traffic, and can only do so if it is legally allowed. For maximum network protection, a decryption policy might be a good idea for traffic going to critical servers or coming from untrusted network segments.

- **Security Intelligence**—(Requires the IPS license) Security Intelligence is enabled by default. Security Intelligence is another early defense against malicious activity applied before passing connections to the access control policy for further processing. Security Intelligence uses reputation intelligence to quickly block connections to or from IP addresses, URLs, and domain names provided by Talos, the threat intelligence organization at Cisco. You can add or delete additional IP addresses, URLs, or domains if desired.

  Note If you do not have the IPS license, this policy will not be deployed even though it shows in your access control policy as enabled.

- **Identity**—Identity is not applied by default. You can require a user to authenticate before allowing traffic to be processed by the access control policy.

Step 4 (Optional) Add an Intrusion policy that is applied after the access control rule.

The Intrusion policy is a defined set of intrusion detection and prevention configurations that inspects traffic for security violations. The management center includes many system-provided policies you can enable as-is or that you can customize. This step enables a system-provided policy.

a) Click the **Intrusion Policy** drop-down list.

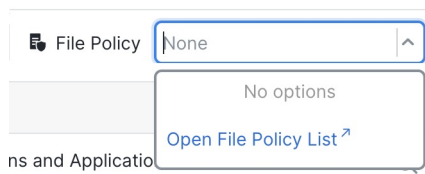**Figure 31: System-Provided Intrusion Policies**
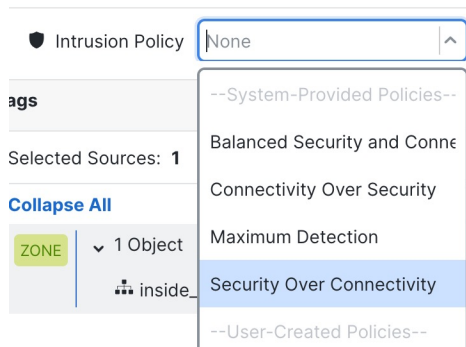
b) Choose one of the system-provided policies from the list.

Step 5 (Optional) Add a File policy that is applied after the access control rule.

a) Click the **File Policy** drop-down list and choose either an existing policy or add one by choosing the **Open File Policy List**.

Figure 32: File Policy

For a new policy, the **Policies** > **Malware & File** page opens in a separate tab.

b) See the Cisco Secure Firewall Device Manager Configuration Guide for details on creating the policy.

c) Return to the **Add Rule** page and select the newly created policy from the drop-down list.

Step 6 Click **Apply**.

The rule is added to the **Rules** table.
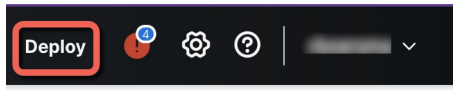
Step 7 Click **Save**.

Deploy the Configuration

Deploy the configuration changes to the device; none of your changes are active on the device until you deploy them.
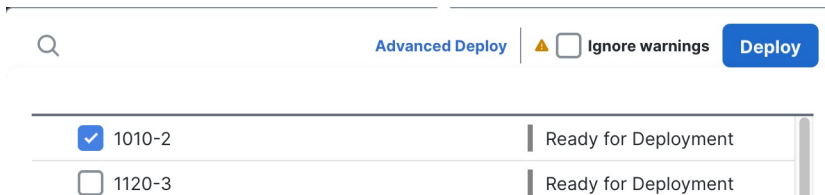
Procedure

Step 1 Click **Deploy** in the upper right.
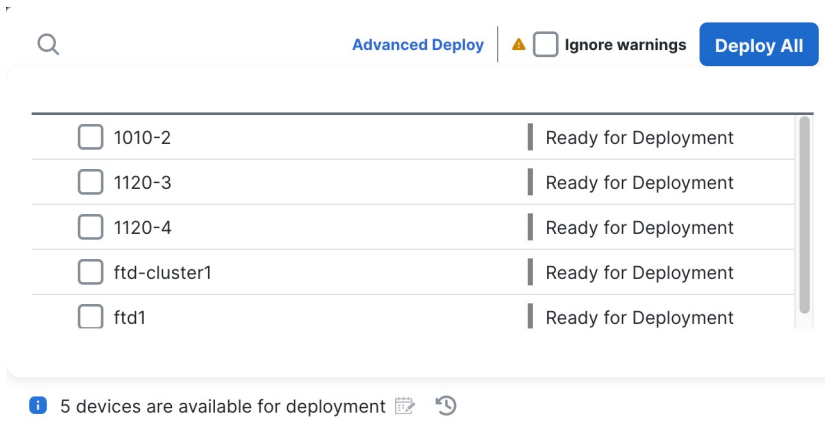
Figure 33: Deploy

Step 2   For a quick deployment, check specific devices and then click **Deploy**.
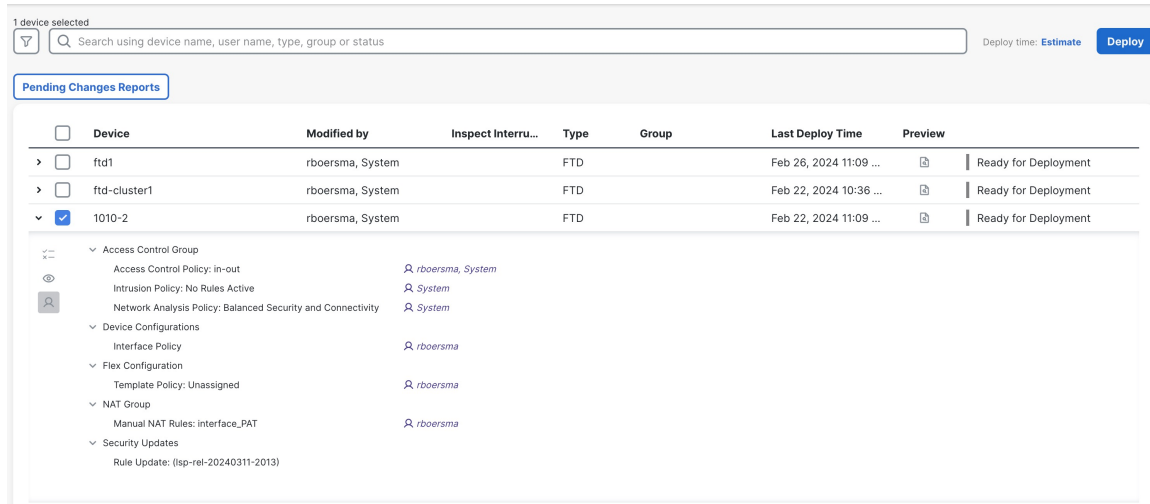
Figure 34: Deploy Selected

Or click **Deploy All** to deploy to all devices.

Figure 35: Deploy All

Otherwise, for additional deployment options, click **Advanced Deploy**.

Figure 36: Advanced Deployment

Step 3   Ensure that the deployment succeeds. Click the icon to the right of the **Deploy** button in the menu bar to see status for deployments.

Figure 37: Deployment Status