



Cable and Register the Firewall

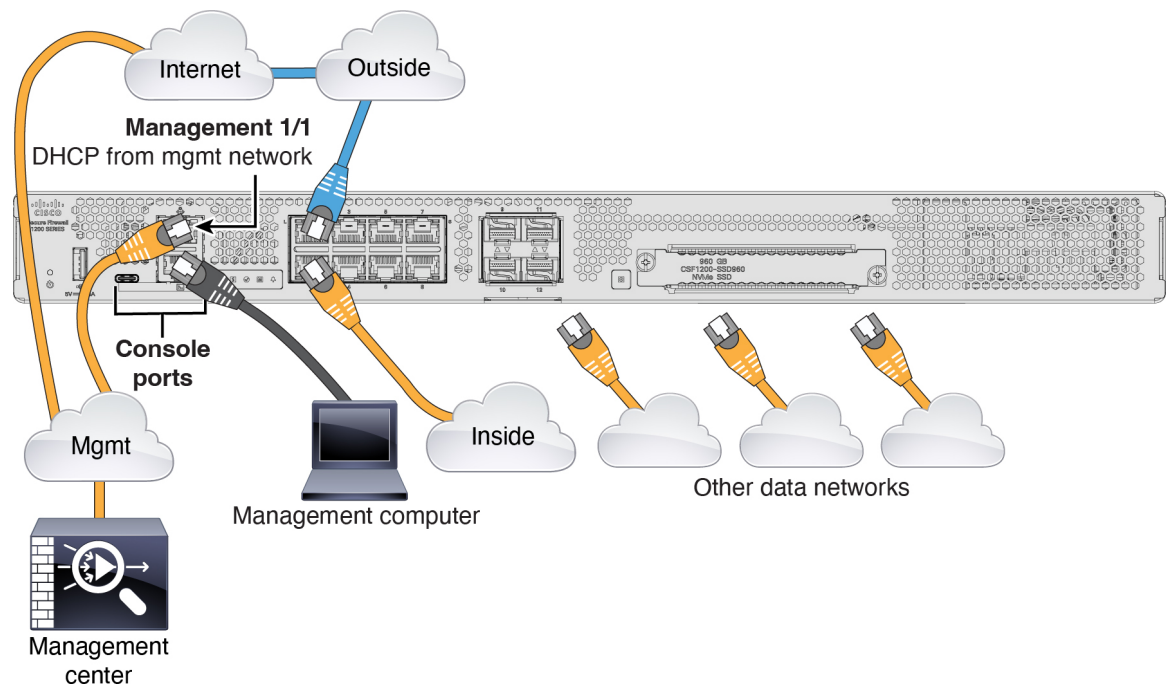
Cable the firewall and then register the firewall to the management center.

- [Cable the Firewall, on page 1](#)
- [Perform Initial Configuration, on page 2](#)
- [Register the Firewall with the Management Center, on page 9](#)

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).

- Install SFP/SFP+ modules into ports Ethernet 1/9 and higher.
- See the [hardware installation guide](#) for more information.



Perform Initial Configuration

Perform initial configuration of the firewall using the Secure Firewall device manager or using the CLI.

Initial Configuration: Device Manager

Using this method, after you register the firewall, the following interfaces will be preconfigured in addition to the Management interface:

- Ethernet 1/1—**outside**, IP address from DHCP, IPv6 autoconfiguration
- Ethernet 1/2—**inside**, 192.168.95.1/24
- Default route—Obtained through DHCP on the outside interface
- Additional interfaces—Any interface configuration from the device manager is preserved.

Other settings, such as the DHCP server on inside, access control policy, or security zones, are not preserved.

Procedure

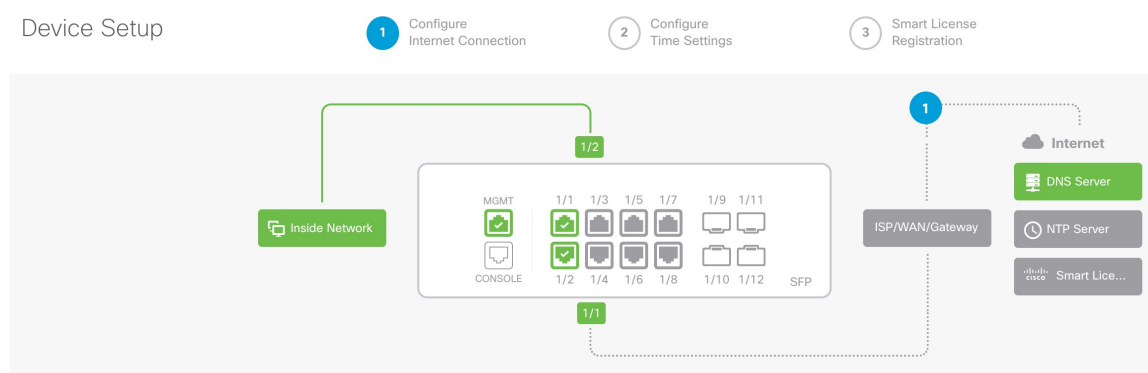
Step 1 Connect your computer to the inside interface (Ethernet 1/2).

Step 2 Log into the device manager.

- Go to <https://192.168.95.1>.
- Log in with the username **admin** and the default password **Admin123**.
- You are prompted to read and accept the General Terms and change the admin password.

Step 3 Use the setup wizard.

Figure 1: Device Setup



Note

The exact port configuration depends on your model.

- Configure the outside and management interfaces.

Figure 2: Connect firewall to internet

Connect firewall to Internet

The initial access control policy will enforce the following actions.
You can edit the policy after setup.

Rule 1 Trust Outbound Traffic This rule allows traffic to go from inside to outside, which is needed for the Smart License configuration.	Default Action Block all other traffic The default action blocks all other traffic.
---	---

Outside Interface Address

Connect Ethernet1/1 (Outside) to your ISP/WAN device, for example, your cable modem or router. Then, configure the addresses for the outside interface.

Configure IPv4

Using DHCP ▼

Configure IPv6

Using DHCP ▼

NEXT

 Don't have internet connection?
[Skip device setup](#) i

1. **Outside Interface Address**—Use a static IP address if you plan for high availability. You cannot configure PPPoE using the setup wizard; you can configure PPPoE after you complete the wizard.
2. **Management Interface**—Setting the Management interface IP address is not part of the setup wizard, but you can set the following options. If you need to use a static IP address, see [Step 4, on page 5](#).

DNS Servers—The DNS server for the system's management address. The default is the OpenDNS public DNS servers.

Firewall Hostname

- b) Configure the **Time Setting (NTP)** and click **Next**.

Figure 3: Time Setting (NTP)

Time Setting (NTP)

System Time: 11:56:20AM October 03 2024 -06:00

Time Zone for Scheduling Tasks

(UTC+00:00) UTC

NTP Time Server

Default NTP Servers

Server Name

0.sourcefire.pool.ntp.org

1.sourcefire.pool.ntp.org

2.sourcefire.pool.ntp.org

NEXT

- c) Select **Start 90 day evaluation period without registration**.

Register with Cisco Smart Software Manager

Register with Cisco Smart Software Manager to use the full functionality of this device and to apply subscription licenses.

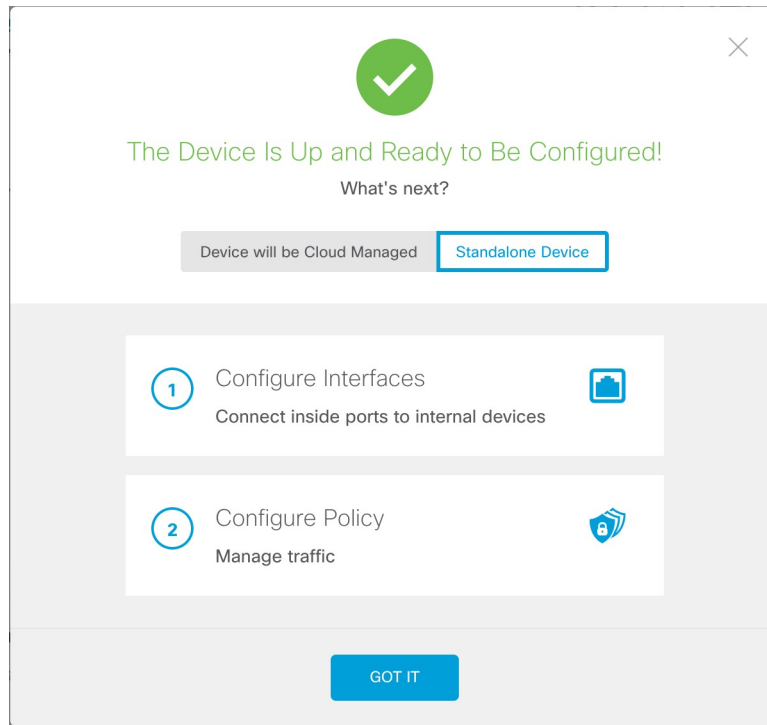
[What is smart license? ↗](#)

☐ **Continue with evaluation period: Start 90-day evaluation period without registration**
Recommended if device will be cloud managed. [Learn More ↗](#)
Please make sure you register with Cisco before the evaluation period ends.
Otherwise you will not be able to make any changes to the device configuration.

Do not register the threat defense with the Smart Software Manager; all licensing is performed on the management centerCDO.

- d) Click **Finish**.

Figure 4: What's Next



e) Choose **Standalone Device**, and then **Got It**.

Step 4 (Optional) Configure the Management interface with a static IP address. See the Management interface on **Device > Interfaces**.

Step 5 If you want to configure additional interfaces, choose **Device**, and then click the link in the **Interfaces** summary.

Step 6 Register with the management centerCDO by choosing **Device > System Settings > Central Management** and clicking **Proceed**

Configure the **Management Center/SCC/Details**.

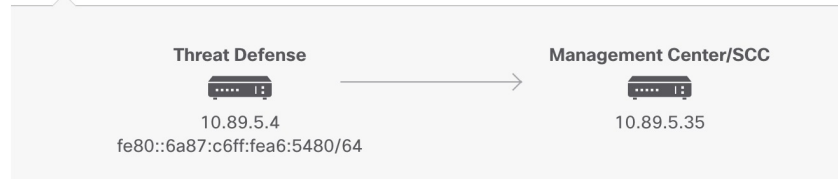
Note

Older versions may show "CDO" instead of "SCC."

Figure 5: Management Center/SCC Details

Management Center/SCC Details

Do you know the Management Center/SCC hostname or IP address?

☒ Yes ☐ No

Management Center/SCC Hostname or IP Address

10.89.5.35

Management Center/SCC Registration Key

....

NAT ID

Required when the management center/SCC hostname or IP address is not provided. We recommend always setting the NAT ID even when you specify the management center/SCC hostname or IP address.

11204

Connectivity Configuration

Threat Defense Hostname

1120-4

DNS Server Group

CustomDNSServerGroup

Management Center/SCC Access Interface

management (Management1/1)

Type: Static | IP Address: 10.89.5.4 / 255.255.255.192

[Edit](#)

CANCEL

CONNECT

- For **Do you know the Management Center/SCC Hostname or IP address**, click **Yes** if you can reach the management center using an IP address or hostname or **No** if the management center is behind NAT or does not have a public IP address or hostname.
- If you chose **Yes**, enter the **Management Center/SCC Hostname/IP Address**.
- Specify the **Management Center/SCC Registration Key**.

This key is a one-time registration key of your choice that you will also specify on the management center when you register the firewall. The registration key must be between 2 and 36 characters. Valid characters include alphanumeric

characters (A–Z, a–z, 0–9) and the hyphen (-). This ID can be used for multiple firewalls registering to the management center.

d) Specify a **NAT ID**.

This ID is a unique, one-time string of your choice that you will also specify on the management center. We recommend that you specify the NAT ID even if you know the IP addresses of both devices. The NAT ID must be between 2 and 36 characters. Valid characters include alphanumerical characters (A–Z, a–z, 0–9) and the hyphen (-). This ID *cannot* be used for any other firewalls registering to the management center. The NAT ID is used in combination with the IP address to verify that the connection is coming from the correct device; only after authentication of the IP address/NAT ID will the registration key be checked.

Step 7 Configure the **Connectivity Configuration**.

- a) Specify the **Threat Defense Hostname**.
- b) Specify the **DNS Server Group**.

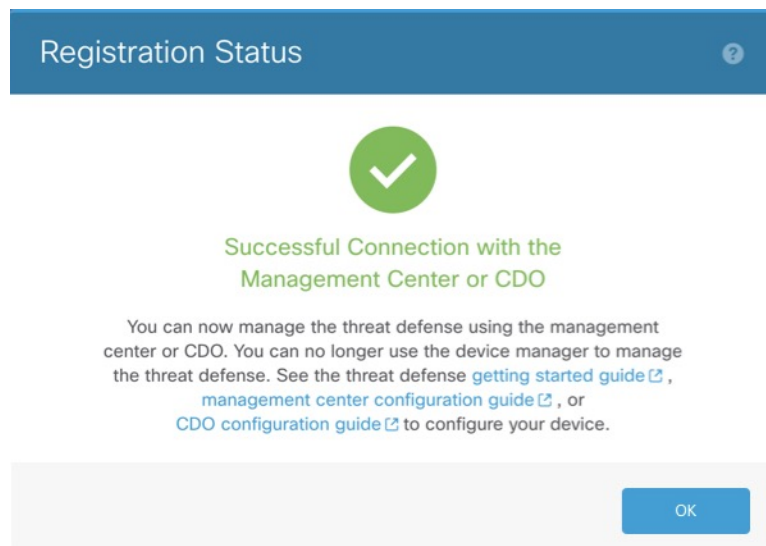
Although you already set this: Choose an existing group, or create a new one. The default DNS group is called **CiscoUmbrellaDNSServerGroup**, which includes the OpenDNS servers.

- c) For the **Management Center/SCC Access Interface**, click **Management Interface**.

Step 8 Click **Connect**.

The **Registration Status** dialog box shows the current status of the management centerCDO registration.

Figure 6: Successful Connection



- Step 9** After the **Saving Management Center/SCC Registration Settings** step on the status screen, go to the management centerCDO and add the firewall. See [Register the Firewall with the Management Center, on page 9](#).

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](#).

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'
```

```
Manage the device locally? (yes/no) [yes]: no
```

Guidance: Enter **no** to use the management center.

```
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 be between 2 and 36 characters. Valid characters include alphanumeric 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 be between 2 and 36 characters. Valid characters include alphanumeric 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 menu, choose **Device (Wizard)**.
- Step 4** Click **Registration Key**, and then click **Next**.

Figure 7: Device Registration Method

The screenshot displays the 'Add Device (Wizard)' interface. On the left, a vertical progress bar shows four steps: 1. Device registration method (active), 2. Management Center Role, 3. Initial device configuration, and 4. Device details. The main content area is divided into two options: 'Registration Key' (highlighted with a blue border) and 'Serial Number'. The 'Registration Key' option includes the text 'Register device using registration key'. The 'Serial Number' option includes a note: 'Cisco Security Cloud integration is not enabled. To enable Cisco Security Cloud integration, go to Integration > Cisco Security Cloud.' A blue 'Next' button is located to the right of the 'Serial Number' option. At the bottom right, there are 'Cancel' and 'Add Device' buttons.

- Step 5** In a multi-domain environment, choose the **Domain** from the drop-down list and click **Next**.

Figure 8: Domain

Add Device(s)

1 Device registration method

Device registration method **Registration Key**

2 Domain

Domain *

Global/Pubs

3 Initial device configuration

4 Device details

Previous Next

Cancel Add Device

Step 6 Click **Primary manager**.

Figure 9: Management Center Role

Add Device (Wizard)

1 Device registration method

Device registration method **Registration Key**

2 Management Center Role

☒ Primary manager ☐ Analytics-only manager (with Security Cloud Control)

You are using this management center for all policy configuration, logging, analytics, and upgrading.

3 Initial device configuration

4 Device details

Previous Next

Cancel Add Device

Step 7 For the **Initial Device Configuration**, click **Basic**.

Figure 10: Initial Device Configuration

Add Device (Wizard) ?

- 1 Device registration method
Device registration method **Registration Key**
- 2 Management Center Role
Management **Primary manager**
- 3 Initial device configuration

Choose initial device configuration method

☒ Basic ☐ Device template

Apply basic configuration, including the access control policy.

Access Control Policy *

wfx_automatio... ⊗ +

Smart licensing

Performance tier (threat defense virtual only)

FTDv50 - 10 Gbps ⌵

☒ Carrier

☒ Malware Defense

☒ IPS

☒ URL Filtering

Ensure that your smart licensing account has the required licenses.

☒ Transfer packet data as well as event data to the management center for inspection.
- 4 Device details

Previous Next

Cancel Add Device

- Choose an initial **Access Control Policy** to deploy to the device at registration, or create a new 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](#).
- Choose **Smart Licensing** licenses to apply to the device.
You can also apply licenses after you add the device, from the **System > Licenses > Smart Licenses** page, including the Secure Client remote access VPN license.
- Click **Next**.

Step 8 Specify the **Device details**.

Figure 11: Device Details

Add Device (Wizard)

1 Device registration method
Device registration method **Registration Key**

2 Management Center Role
Management **Primary manager**

3 Initial device configuration
Access control policy **wfx_automationPolicy123**

4 Device details

Host
10.89.5.41

Display name *
3110-1

Registration key *

Device group
Select...

Unique NAT ID
31101

Note: Either Host or NAT ID is required.

Previous

Cancel Add Device

- For the **Host**, enter the IP address or the hostname of the device you want to add. Leave this field blank if you don't know the device IP address (for example, it's behind NAT).
- For the **Display name**, enter a name for the device as you want it to display in the management center. You cannot change this name later.
- For the **Registration Key**, enter the same registration key from your initial configuration.
- (Optional) Add the device to a **Device group**
- For the **Unique NAT ID**, enter the same ID from your initial configuration.
- Check **Transfer Packets** so that for each intrusion event, the device transfers the packet to the management center for inspection.

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 9 Click **Add Device**.

It may take up to two minutes for the management center to verify the device's heartbeat and establish communication. If the registration succeeds, the device is added to the list. If it fails, you will see an error message. If the device fails to register, check the following items:

- Ping—Access the device CLI, and ping the management center IP address using the following command:
ping system ip_address

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

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

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