

# Deploy a Cloud-Delivered FMC (cdFMC) in Cisco Defense Orchestrator (CDO)

## Contents

[Introduction](#)

[Prerequisites](#)

[Requirements](#)

[Components Used](#)

[Background Information](#)

[Configure](#)

[Deploy a Cloud-Delivered Firepower Management Center on CDO.](#)

[Onboard an FTD on a Cloud-Delivered FMC](#)

[Related Information](#)

## Introduction

This document describes the deployment and onboard process of Cloud-Delivered FMC on the CDO platform.

## Prerequisites

## Requirements

Cisco recommends knowledge of these topics:

- Cloud-Delivered Firepower Management Center (cdFMC)
- Cisco Defense Orchestrator (CDO)
- Firepower Threat Defense Virtual (FTDv)

## Components Used

The information in this document is based on these software and hardware versions:

- cdFMC 7.2.0
- FTDv 7.2.0

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

## Background Information

Cisco Defense Orchestrator (CDO) is the platform for the cloud-delivered Firewall Management Center (cdFMC). The cloud-delivered Firewall Management Center is a software-as-a-service

(SaaS) product that manages Secure Firewall Threat Defense devices. It offers many of the same functions as an on-premises Secure Firewall Secure Firewall Threat Defense. It has the same appearance and behavior as an on-premises Secure Firewall Management Center and uses the same FMC Application Programming Interface (API).

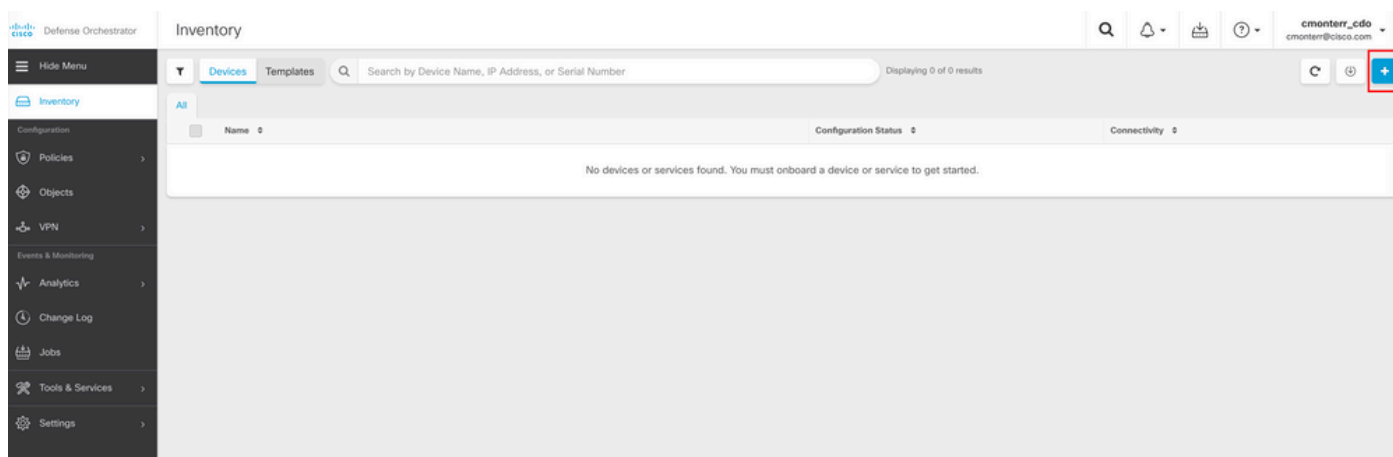
This product is designed for migration from the on-premises Secure Firewall Management Centers to the Secure Firewall Management Center SaaS version.

## Configure

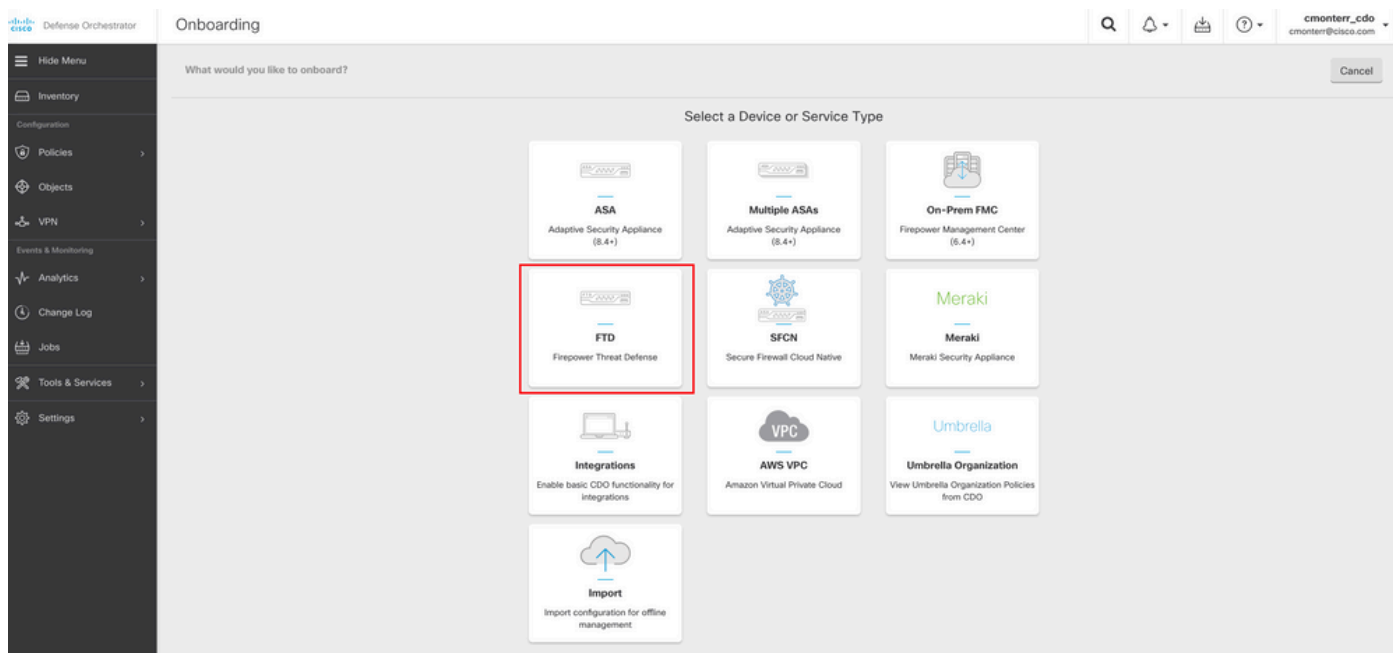
### Deploy a Cloud-Delivered Firepower Management Center on CDO.

These pictures show the initial setup process needed to deploy a cloud-delivered FMC on CDO.

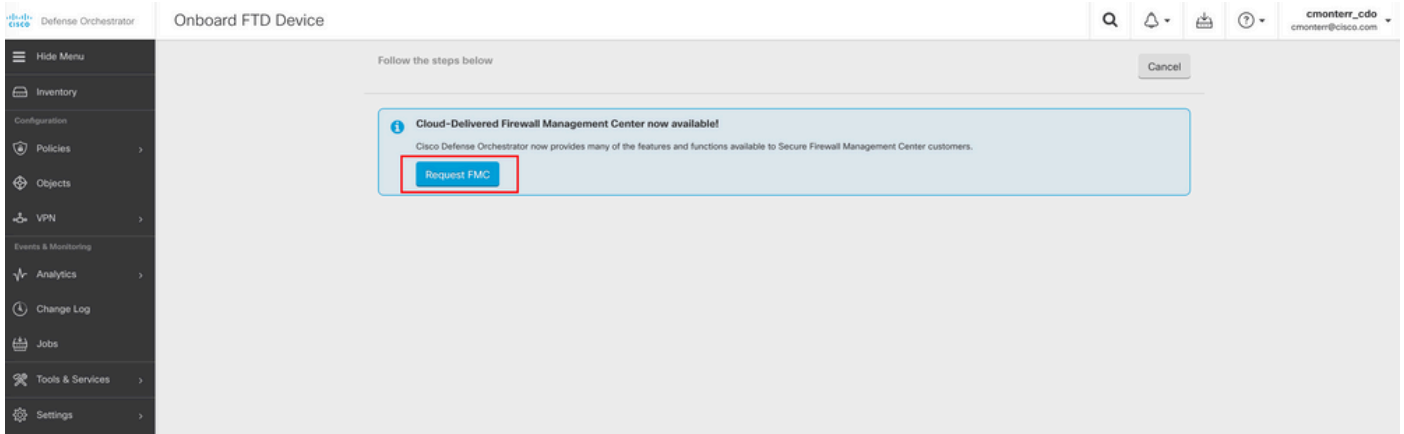
First, navigate to **Menu > Inventory** in order to add a new device.



### Select Firepower Threat Defense (FTD).

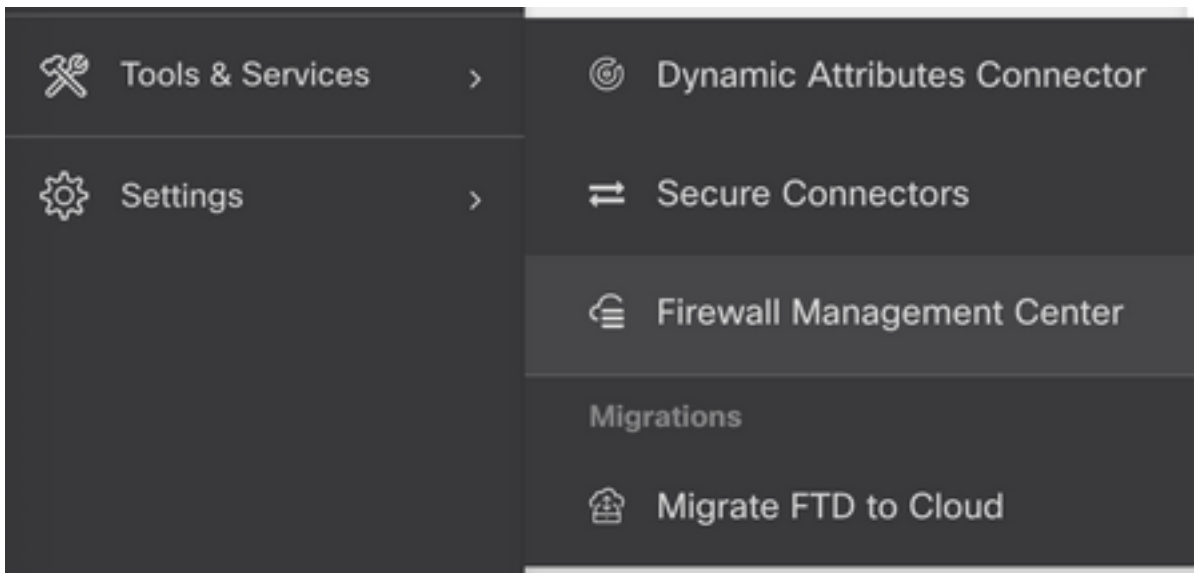


Select **Request FMC** in order to request the Cloud-Delivered Firepower Management Center.

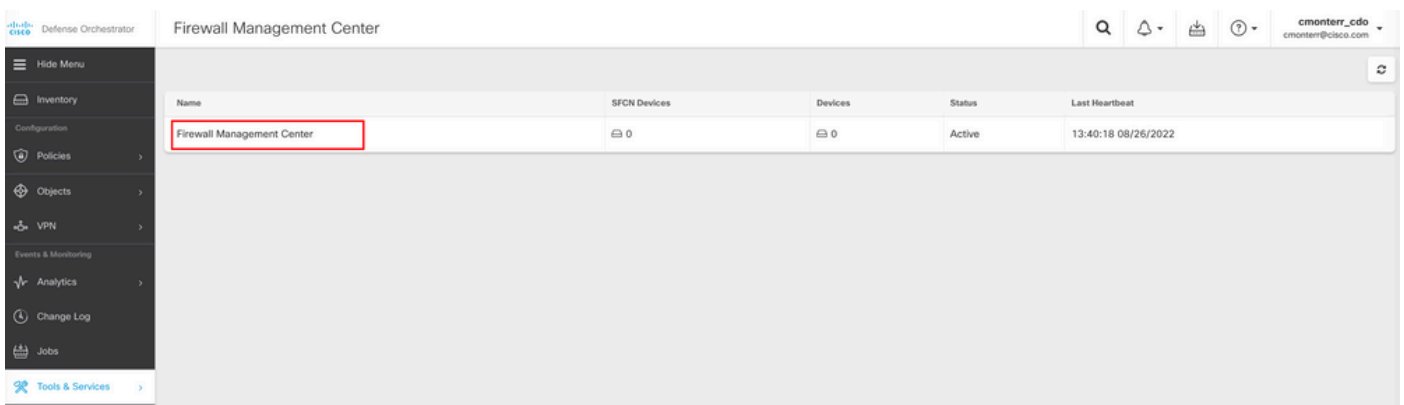


**Note:** The “Request FMC” option is presented only if you do not have any cdFMC in the tenant.

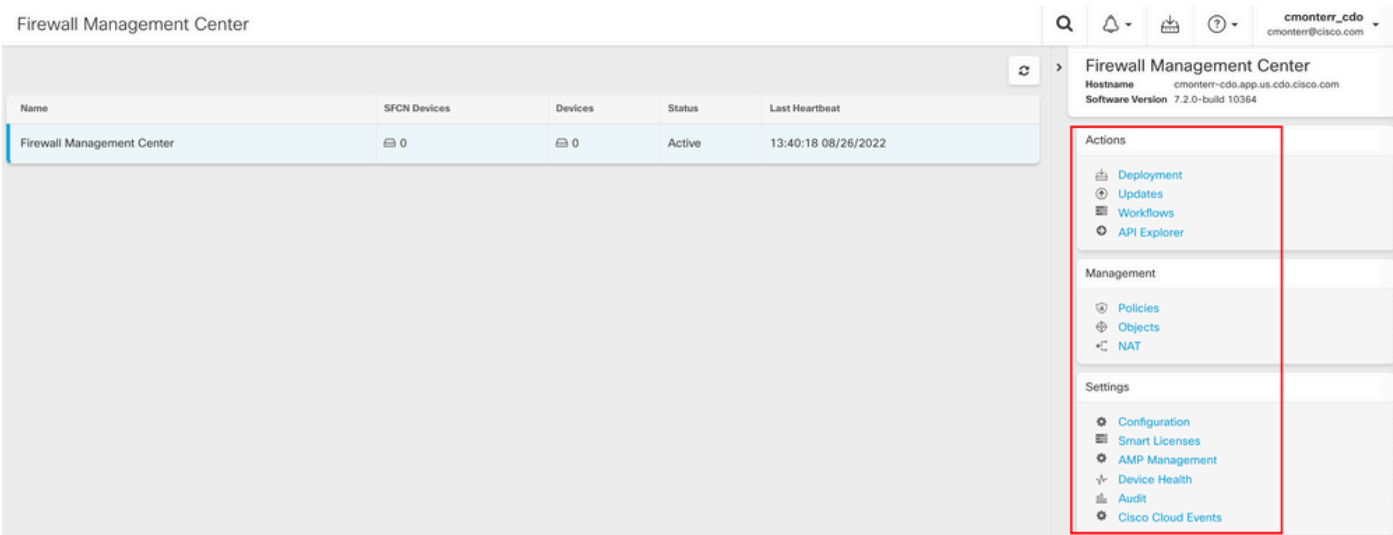
Navigate to **Menu > Tools & Services > Firewall Management Center** when the cdFMC is ready to use.



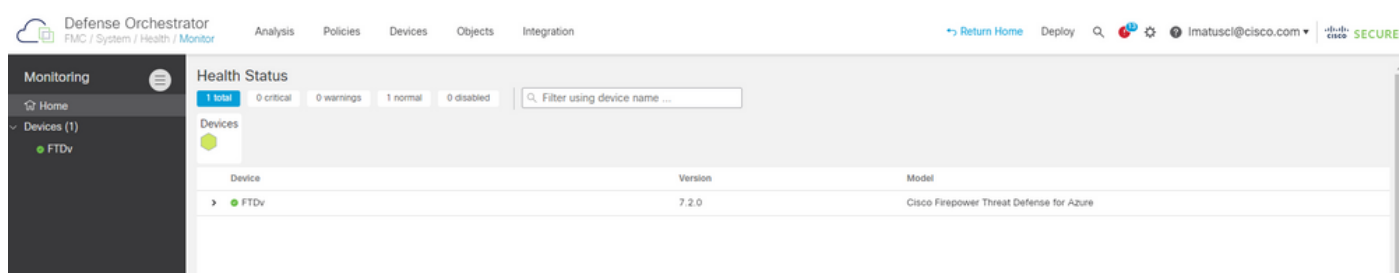
Select the desired cdFMC to display the cdFMC information.



In order to access the Graphical User Interface (GUI) of the cdFMC, select any of the options available on the right side.



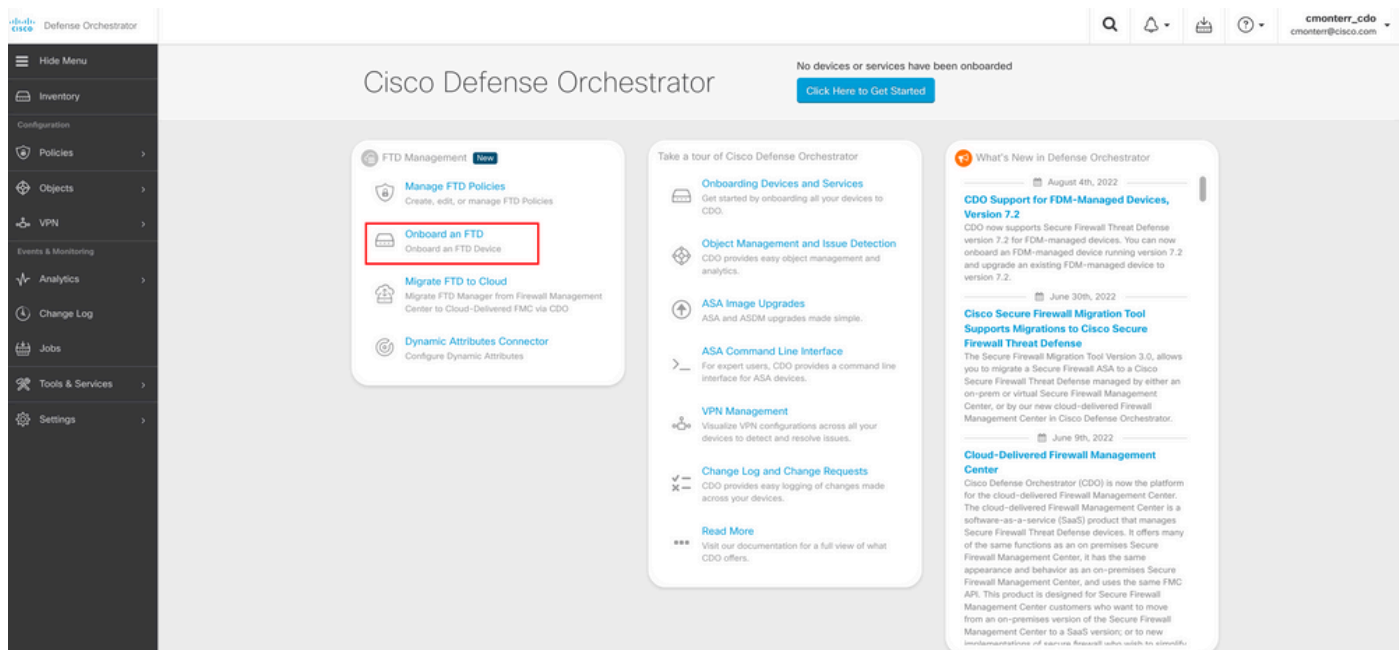
Now you can see the cdFMC GUI.



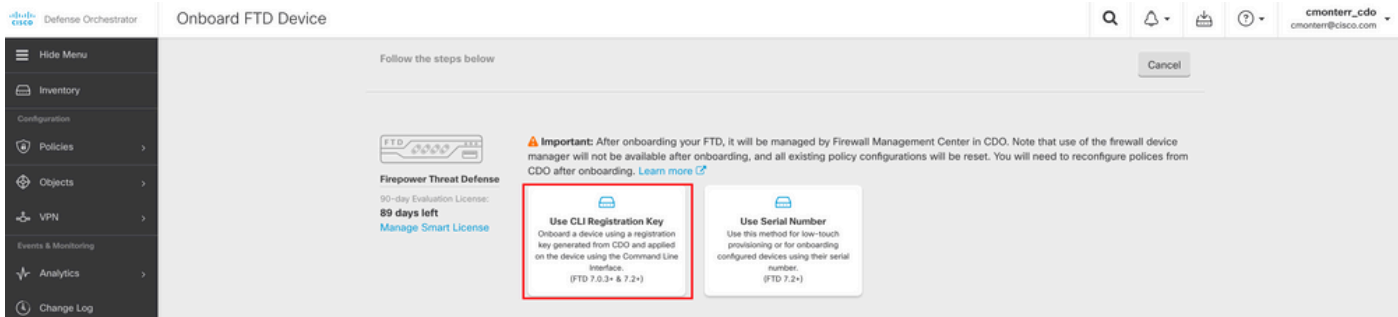
## Onboard an FTD on a Cloud-Delivered FMC

These images show how to onboard an FTD in order to be registered on a cdFMC with Command Line Interface (CLI) registration key.

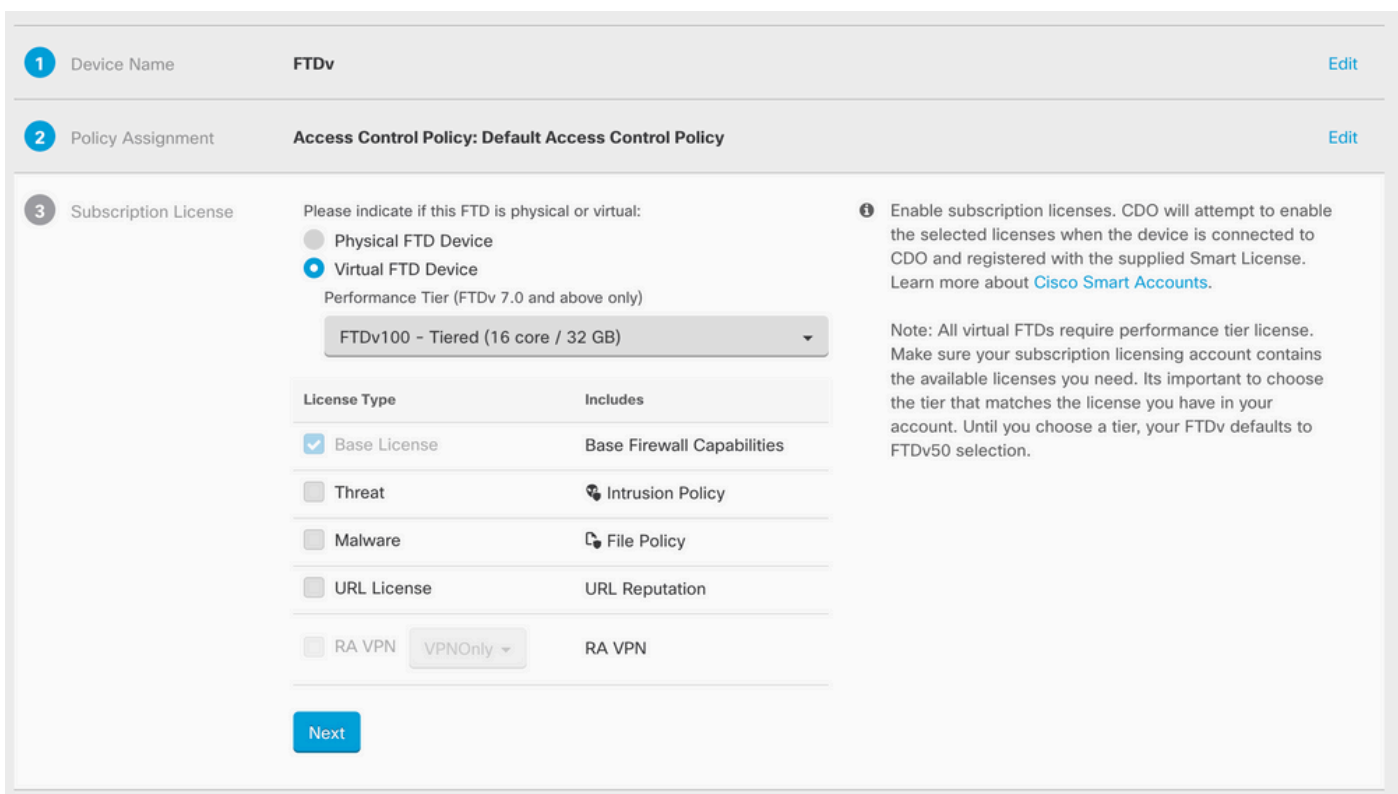
First, select **Onboard an FTD** on the CDO home page.



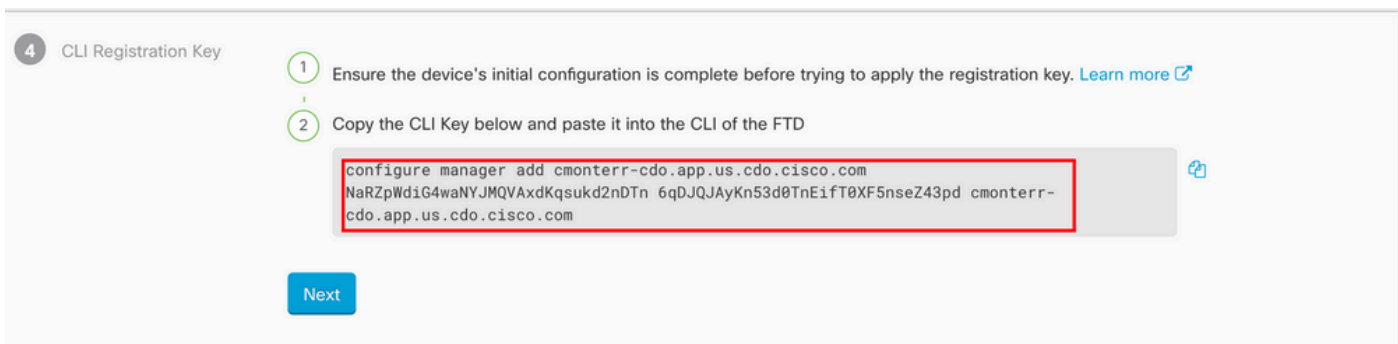
Then, select the **Use CLI Registration Key** option.



Proceed to enter the requested and desired FTDv information.



Finally, the cdFMC creates a specific CLI Key for your device.



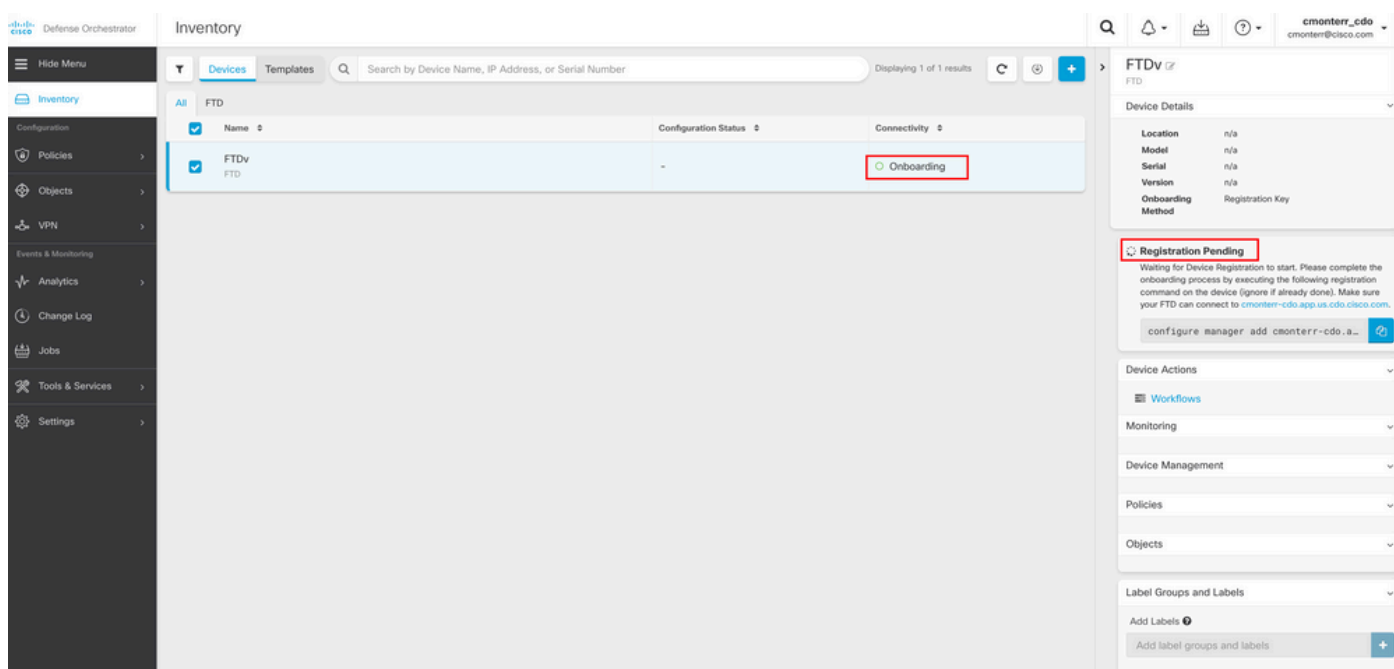
Copy the CLI Key into the CLI of your managed device.

```
> configure manager add cmonterr-cdo.app.us.cdo.cisco.com NaRZpWdiG4waNYJMQVAXdK
qsukd2nDTn 6qDJQJAYKn53d0TnEifT0XF5nseZ43pd cmonterr-cdo.app.us.cdo.cisco.com
File HA_STATE is not found.

Manager cmonterr-cdo.app.us.cdo.cisco.com successfully configured.
Please make note of reg_key as this will be required while adding Device in FMC.

>
> show managers
Type                : Manager
Host                : cmonterr-cdo.app.us.cdo.cisco.com
Display name       : cmonterr-cdo.app.us.cdo.cisco.com
Identifier         : 6qDJQJAYKn53d0TnEifT0XF5nseZ43pd
Registration       : Pending
```

The cdFMC initiates a registration task.



**Note:** Make sure your FTD device has communication over ports 8305 (sftunnel) and 443 to the CDO tenant in order to complete the registration process. Consult the full [Network Requirements](#).

**Note:** If you can not connect to the host, you can rectify the DNS configuration in the FTD-CLI with this command: **configure network dns <address>**.

To monitor the registration process, navigate to **Device Actions > Workflows..**

The screenshot shows the 'Workflows' page in the CDO interface. It displays a table with two workflow tasks:

| Name                       | Priority  | Condition | Current State | Last Active           | Time  |
|----------------------------|-----------|-----------|---------------|-----------------------|---|
| fmcRegisterFtdStateMachine | On Demand | Done      | Done          | 8/30/2022, 3:35:50 PM | 8/30/2022, 3:33:11 PM / 8/30/2022, 3:35:50 PM |
| ftdcOnboardingStateMachine | On Demand | Done      | Done          | 8/30/2022, 3:32:50 PM | 8/30/2022, 3:32:50 PM / 8/30/2022, 3:32:50 PM |

Expand the **Active** state to have additional information, these pictures show how the FTDv was successfully registered.

Workflows

Return to Inventory

FTDv (FTD)

| Name   | Priority                    | Condition                                | Current State                                       | Last Active           | Time  |
|--|-----------------------------|--|---|-----------------------|---|
| <b>ACTION</b>                                | <b>TIME</b>                 | <b>START STATE</b>                       | <b>END STATE</b>                                    | <b>RESULT</b>         |   |
| PollingDelayedCheckAction                    | 15:34:46.812 / 15:34:46.819 | POLLING_WAIT_BEFORE_CHECK_REGISTER_FTD   | ● INITIATE_GET_TASK_STATUS                          | ● SUCCESS             |   |
| FmcRequestGetAction                          | 15:35:17.324 / 15:35:17.724 | INITIATE_GET_TASK_STATUS                 | ● WAIT_FOR_GET_TASK_STATUS                          | ● SUCCESS             |   |
| FmcQueryTaskStatusResponseHandler            | 15:35:18.223 / 15:35:18.244 | AWAIT_RESPONSE_FROM_executeFmcRequests   | ● POLLING_WAIT_BEFORE_CHECK_REGISTER_FTD            | JOB_IN_PROGRESS       |   |
| PollingDelayedCheckAction                    | 15:35:18.288 / 15:35:18.299 | POLLING_WAIT_BEFORE_CHECK_REGISTER_FTD   | ● INITIATE_GET_TASK_STATUS                          | ● SUCCESS             |   |
| FmcRequestGetAction                          | 15:35:48.708 / 15:35:49.173 | INITIATE_GET_TASK_STATUS                 | ● WAIT_FOR_GET_TASK_STATUS                          | ● SUCCESS             |   |
| FmcQueryTaskStatusResponseHandler            | 15:35:49.639 / 15:35:49.652 | AWAIT_RESPONSE_FROM_executeFmcRequests   | ● INITIATE_GET_DEVICE_RECORDS_REGISTER_FTD          | JOB_SUCCEEDED         |   |
| FmcRequestDeviceRecordsAction                | 15:35:49.674 / 15:35:50.084 | INITIATE_GET_DEVICE_RECORDS_REGISTER_FTD | ● WAIT_FOR_DEVICE_RECORDS_REGISTER_FTD              | ● SUCCESS             |   |
| FmcFilterDeviceResponseHandler               | 15:35:50.496 / 15:35:50.510 | AWAIT_RESPONSE_FROM_executeFmcRequests   | ● DONE  | ● SUCCESS             |   |
| <b>HOOK</b>                                  | <b>TYPE</b>                 | <b>TIME</b>                              | <b>RESULT</b>                                       |                       |   |
| SaveInitialConnectivityStateBeforeHook       | Before                      | 15:33:11.229 / 15:33:11.231              | Saved Connectivity State to context                 |                       |   |
| UpdateSMContextWithDeviceVersionHook         | Before                      | 15:33:11.231 / 15:33:11.234              | setDeviceVersionInSMContext                         |                       |   |
| DeviceStateMachineClearErrorBeforeHook       | Before                      | 15:33:11.234 / 15:33:11.236              | noErrorOccurred                                     |                       |   |
| FmcRegisterFtdcStatusPreHook                 | Before                      | 15:33:11.236 / 15:33:11.289              | Executed pre hook successfully for FTD device: FTDv |                       |   |
| FmcRegisterFtdcStatusHook                    | After                       | 15:35:50.517 / 15:35:50.519              | Executed hook successfully                          |                       |   |
| NotifyOnConnectivityStateChangeAfterHook     | After                       | 15:35:50.519 / 15:35:50.521              | Notification skipped for this event                 |                       |   |
| UpdateSMContextWithDeviceAsaNgPolicyFlagHook | After                       | 15:35:50.521 / 15:35:50.523              | notAsaDevice  |                       |   |
| AddDeviceNameToStateMachineDebugAfterHook    | After                       | 15:35:50.523 / 15:35:50.528              | Added device name to debug record                   |                       |   |
| DeviceStateMachineSetEmpirAfterHook          | After                       | 15:35:50.528 / 15:35:50.530              | noErrorOccurred                                     |                       |   |
| ftdcOnboardingStateMachine                   | ● On Demand                 | ● Done                                   | ● Done  | 8/30/2022, 3:32:50 PM | 8/30/2022, 3:32:50 PM / 8/30/2022, 3:32:50 PM |

Inventory

Devices Templates Search by Device Name, IP Address, or Serial Number Displaying 1 of 1 results

FTDv

| Name        | Configuration Status | Connectivity |
|-------------|----------------------|--------------|
| FTDv<br>FTD | ○ Synced             | ● Online     |

**Synced**  
Your device's configuration is up-to-date.

**Device Actions**

- Check for Changes
- Manage Licenses
- Workflows
- Remove

**Monitoring**

- Health

**Device Management**

- Device Overview
- Routing
- Interfaces
- Inline Sets
- DHCP
- VTEP
- High Availability

Finally, Navigate to **Device Management > Device Overview** in order to access the cdFMC and review the FTDv overview status.

## FTDv

Cisco Firepower Threat Defense for Azure

Device Routing Interfaces Inline Sets DHCP VTEP

|   |  |  |
|---|--|--|
| <p><b>General</b></p> <p>Name: FTDv</p> <p>Transfer Packets: No</p> <p>Mode: Routed</p> <p>Compliance Mode: None</p> <p>TLS Crypto Acceleration: Disabled</p> <p>Device Configuration: <a href="#">Import</a> <a href="#">Export</a> <a href="#">Download</a></p> | <p><b>License</b></p> <p>Performance Tier : FTDv100 - Tiered (Core 16 / 32 GB)</p> <p>Base: Yes</p> <p>Export-Controlled Features: No</p> <p>Malware: No</p> <p>Threat: No</p> <p>URL Filtering: No</p> <p>AnyConnect Apex: No</p> <p>AnyConnect Plus: No</p> <p>AnyConnect VPN Only: No</p> | <p><b>System</b></p> <p>Model: Cisco Firepower Threat Defense for Azure</p> <p>Serial: 9AGTAFW2406</p> <p>Time: 2022-08-30 21:04:27</p> <p>Time Zone: UTC (UTC+0:00)</p> <p>Version: 7.2.0</p> <p>Time Zone setting for Time based Rules: UTC (UTC+0:00)</p> |
| <p><b>Inspection Engine</b></p> <p>Inspection Engine: Snort 3</p> <p><a href="#">Revert to Snort 2</a></p>  | <p><b>Health</b></p> <p>Status: <span style="color: green;">●</span></p> <p>Policy: Initial_Health_Policy 2022-06-04 01:25:03</p> <p>Excluded: None</p>  | <p><b>Management</b></p> <p>Host: NO-IP</p> <p>Status: <span style="color: green;">●</span></p> <p>Manager Access Interface: <a href="#">Management Interface</a></p>  |

## Related Information

- [Technical Support & Documentation - Cisco Systems](#)
- [Manage Cisco Secure Firewall Threat Defense Devices with Cloud-Delivered Firewall Management Center](#)