

# Migrate FTD HA (Failover) to Another FMC

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## Introduction

This document describes the procedure to migrate an FTD HA from an existing FMC to another FMC.

For a standalone firewall migration to a new FMC check

<https://www.cisco.com/c/en/us/support/docs/security/secure-firewall-threat-defense/222480-migrate-an-ftd-from-one-fmc-to-another-f.html>

## Abbreviations

ACP = Access Control Policy

ARP = Address Resolution Protocol

CLI = Command Line Interface

FMC = Secure Firewall Management Center

FTD = Secure Firewall Threat Defense

GARP = Gratuitous ARP

HA = High Availability

MW = Maintenance Window

UI = User Interface

## **Prerequisites**

Before starting the migration process, ensure that you have these prerequisites in place:

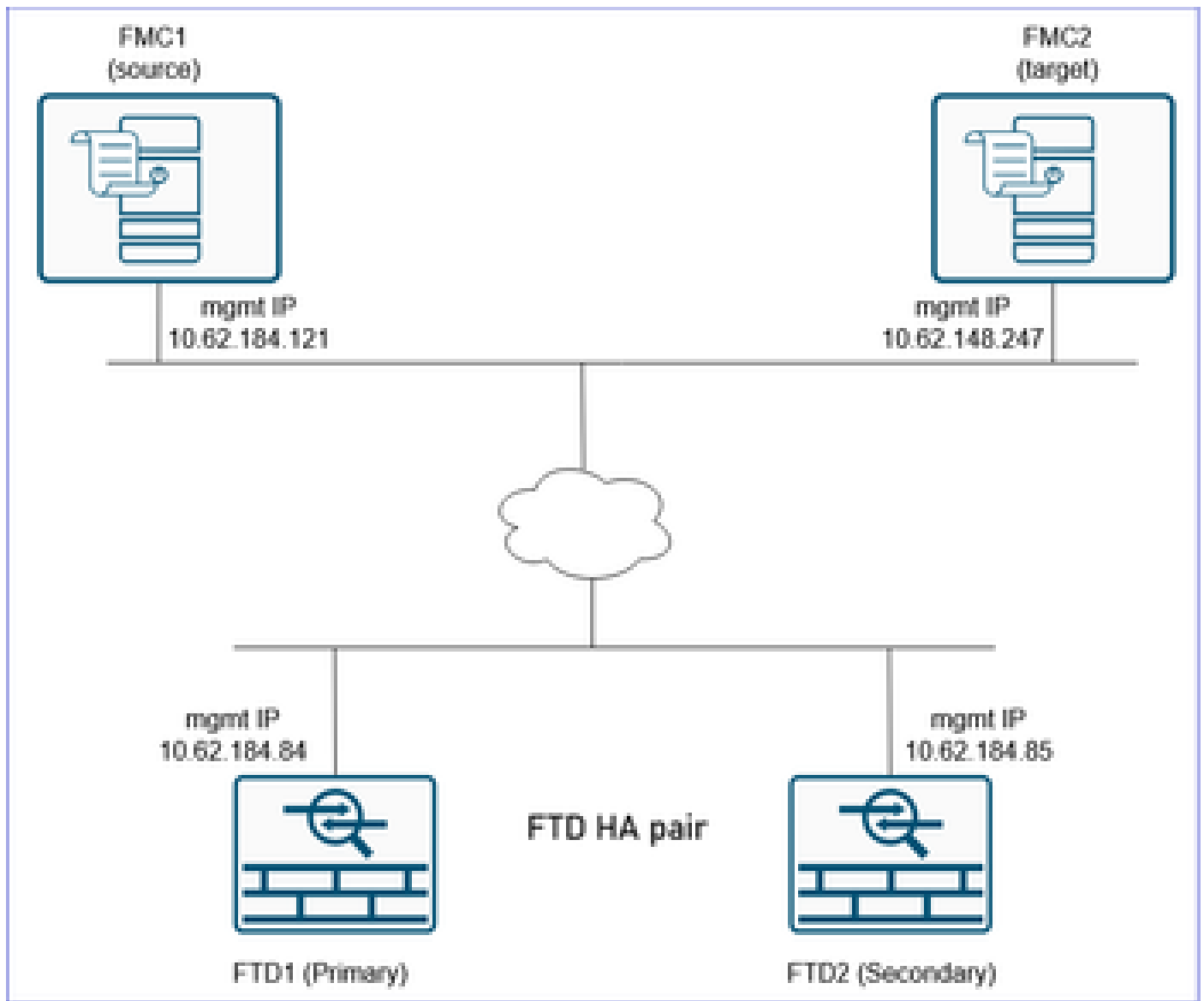
- UI and CLI access to both the source and destination FMCs.
- Administrative credentials for both FMCs and firewalls.
- Console access to both firewalls.
- Access to the L3 upstream and downstream devices (in case you need to clear the ARP cache).
- Ensure that the destination/target FMC has the same version as the source/old FMC.
- Ensure that the destination/target FMC has the same licenses as the source/old FMC.
- Ensure you arrange a MW to perform the migration since it is going to impact the transit traffic.

## **Components Used**

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

- Cisco Secure Firewall 31xx, FTD version 7.4.2.2.
- Secure Firewall Management Center version 7.4.2.2.
- 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.

## **Topology**



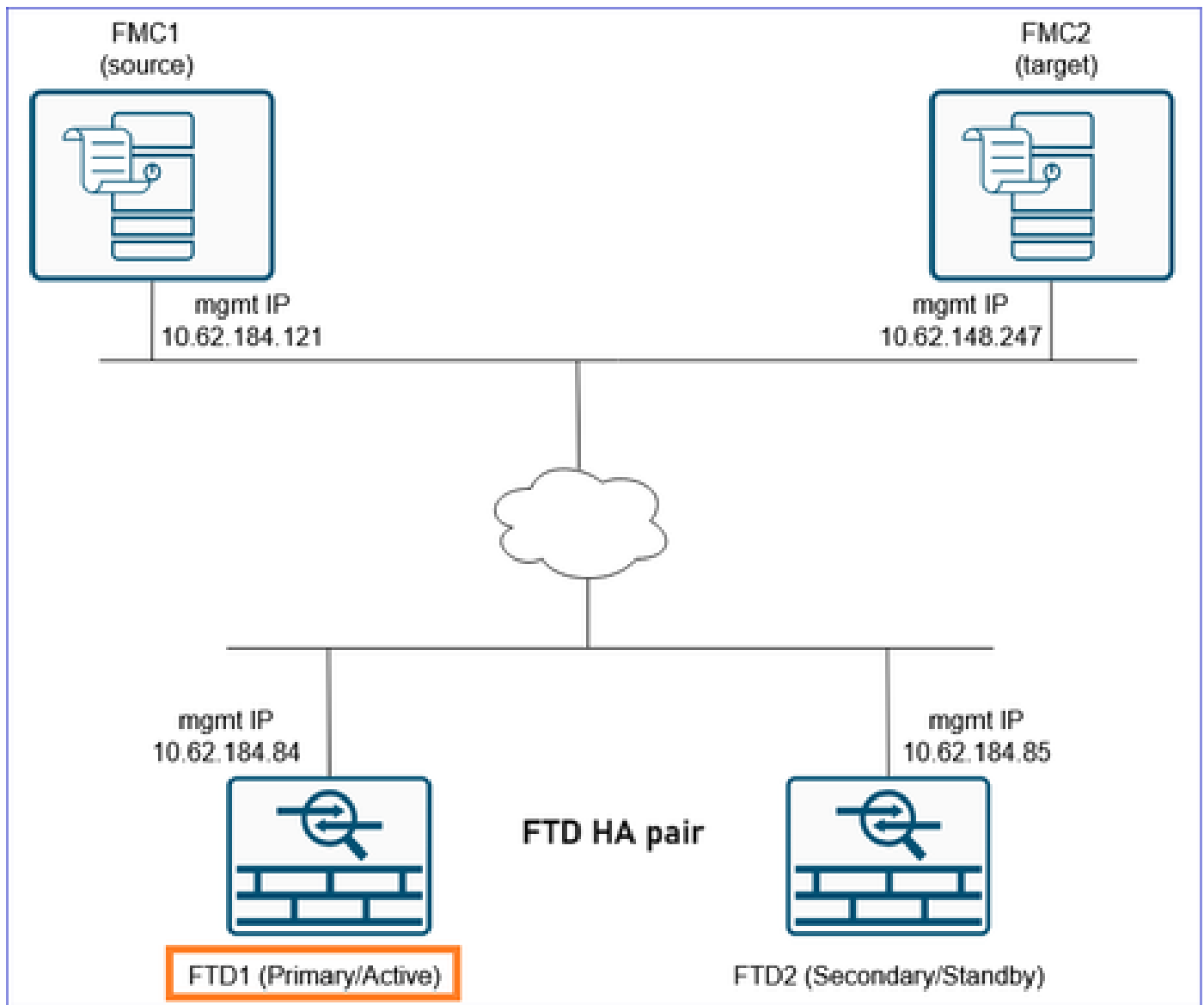
## Configure

### Migration Steps

For this scenario we consider these states:

FTD1: Primary/Active

FTD2: Secondary/Standby



## Step 1. Export the Device Configuration from the Primary Firewall

On the FMC1 (source FMC) navigate to **Devices > Device Management**. Select the FTD HA pair and select **Edit**:

Firewall Management Center									
Devices / Device Management									
Overview Analysis Policies Devices Objects Integration									
View By: Group									
All (4) Error (0) Warning (2) Offline (0) Normal (2) Deployment Pending (2) Upgrade (2) Snort 3 (4)									
Collapse All									
Download Device List Report									
Name Model Version Chassis Licenses Access Control Policy Auto Rollback									
FTD_HA (1)									
FTD3100_HA High Availability									
FTD1(Primary, Active) 10.62.184.84 - Routed	Firewall 3120 Threat Defense	7.4.2.2	Manage	Essentials, IPS (2 more...)	FTD3100_ACP				
FTD2(Secondary, Standby) 10.62.184.85 - Routed	Firewall 3120 Threat Defense	7.4.2.2	N/A	Essentials, IPS (2 more...)	FTD3100_ACP				

Navigate to the **Device** tab. Ensure that the Primary/Active FTD (FTD1 in this case) is selected and select **Export** to export the Device configuration:

Firewall Management Center  
Devices / Secure Firewall Device Summary

Overview Analysis Policies **Devices** Objects Integration Deploy

FTD3100\_HA  
Cisco Secure Firewall 3120 Threat Defense

Summary High Availability **Device** Interfaces Inline Sets Routing DHCP VTEP

1 FTD1

**General**

Name: FTD1

Troubleshoot: Logs CLI Download

Mode: Routed

Compliance Mode: None

TLS Crypto Acceleration: Enabled

Device Configuration: Import **Export** Download

OnBoarding Method: Registration Key

**System**

Model: Cisco Secure Firewall 3120 Threat Defense

Serial: FJZ254600PB

Time: 2025-03-07 07:51:23

Time Zone: UTC (UTC+0:00)

Version: 7.4.2.2

Time Zone setting for Time based Rules: UTC (UTC+0:00)

Inventory: View

**Note:** The Export option is available as of 7.1 software release and later.

You can navigate to **Notifications > Tasks** page to ensure that the export has completed. Then, select the **Download Export Package**:

Deploy

Deployments Upgrades **Health** **Tasks**

20+ total | 0 waiting | 0 running | 0 retrying | 20+ success | 0 fail

✓ Device Configuration Export

Export file created successfully

[Download Export Package](#)

Alternatively, you can click the **Download** button in the **General** area. You get an sfo file, for example DeviceExport-cc3fdc40-f9d7-11ef-bf7f-6c8e2fc106f6.sfo

The file contains device-related configuration such as:

- Routed Interfaces
- Inline Sets
- Routing
- DHCP
- VTEP
- Associated objects

**Note:** The exported configuration file can be imported back only to same FTD. The UUID of the FTD must match with imported sfo file's content. The same FTD can be registered on another FMC and sfo file can be imported.

Reference: 'Export and Import the Device Configuration'

[https://www.cisco.com/c/en/us/td/docs/security/secure-firewall/management-center/device-config/760/management-center-device-config-76/get-started-device-settings.html#Cisco\\_Task.dita\\_7ccc8e87-6522-4ba9-bb00-eccc8b72b7c8](https://www.cisco.com/c/en/us/td/docs/security/secure-firewall/management-center/device-config/760/management-center-device-config-76/get-started-device-settings.html#Cisco_Task.dita_7ccc8e87-6522-4ba9-bb00-eccc8b72b7c8)

## Step 2. Make the Secondary FTD Active

Navigate to **Devices > Device Management**, select the FTD HA pair, and select **Switch Active Pair**:

The screenshot shows the FMC interface with the 'Devices' tab selected. The 'FTD3100\_HA' pair is expanded, showing two FTDs: 'FTD1(Primary, Active)' and 'FTD2(Secondary, Standby)'. The 'Switch Active Peer' button is highlighted in the top right corner of the FTD2 row.

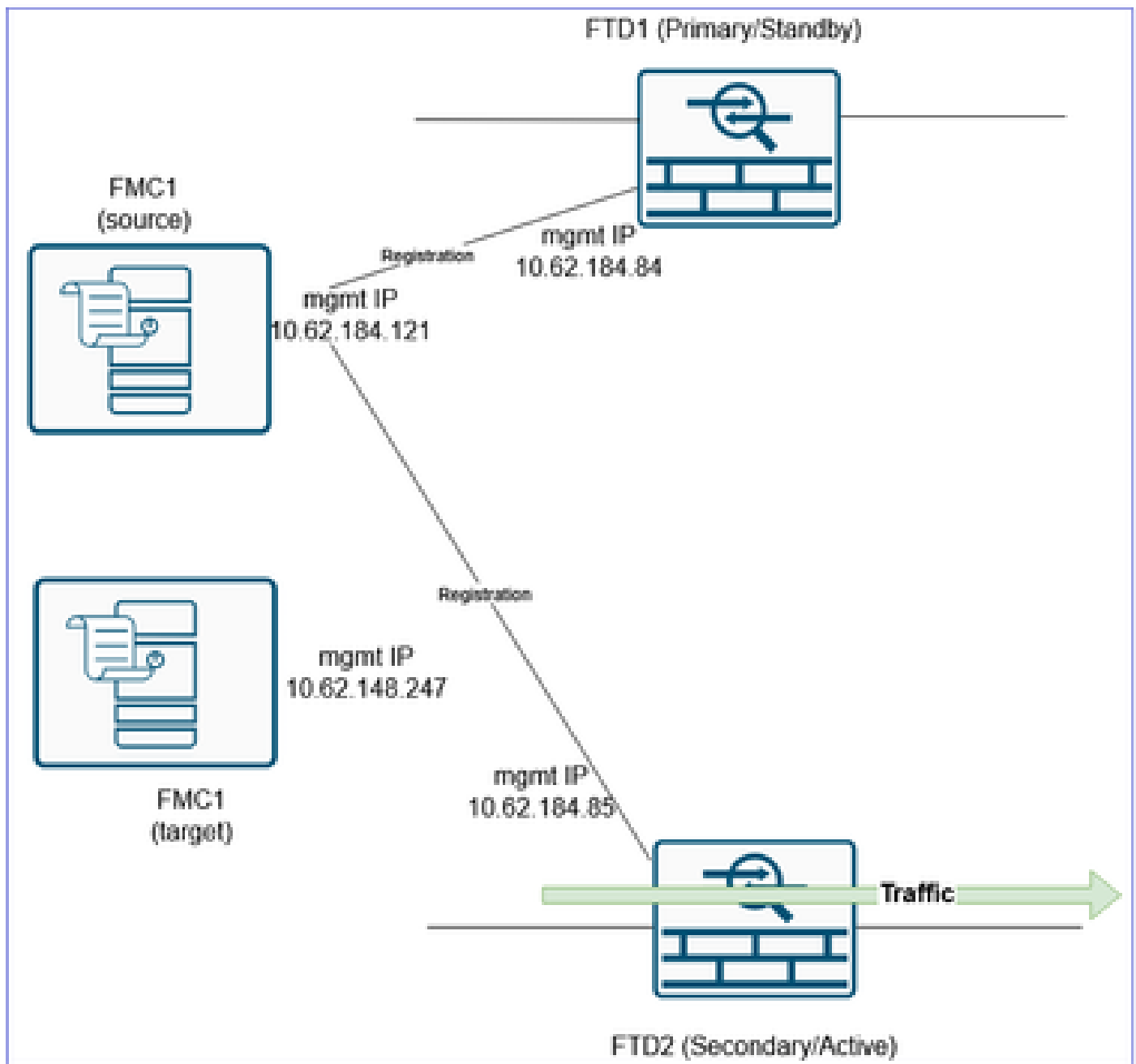
Name	Model	Version	Chassis	Licenses	Access Control Policy	Auto RollBack
FTD1(Primary, Active)	Firewall 3120 Threat Defense	7.4.2.2	Manage	Essentials, IPS (2 more...)	FTD3100_ACP	
FTD2(Secondary, Standby)	Firewall 3120 Threat Defense	7.4.2.2	N/A	Essentials, IPS (2 more...)	FTD3100_ACP	

The result is FTD1 (Primary/Standby) and FTD (Secondary/Active):

The screenshot shows the FMC interface with the 'Devices' tab selected. The 'FTD3100\_HA' pair is expanded, showing two FTDs: 'FTD1(Primary, Standby)' and 'FTD2(Secondary, Active)'. The 'FTD2(Secondary, Active)' row is highlighted with a red box.

Name	Model	Version	Chassis	Licenses	Access Control Policy	Auto RollBack
FTD1(Primary, Standby)	Firewall 3120 Threat Defense	7.4.2.2	N/A	Essentials, IPS (2 more...)	FTD3100_ACP	
FTD2(Secondary, Active)	Firewall 3120 Threat Defense	7.4.2.2	Manage	Essentials, IPS (2 more...)	FTD3100_ACP	

Now the traffic is handled by the Secondary/Active FTD:



### Step 3. Break the FTD HA

Navigate to **Devices > Device Management** and **Break** the FTD HA:

The screenshot shows the Firewall Management Center (FMC) interface. The 'Devices' tab is selected, and the 'FTD3100\_HA High Availability' group is expanded. The table lists two FTDs: FTD1 (Primary, Standby) and FTD2 (Secondary, Active). A context menu is open over FTD2, with the 'Break' option highlighted.

Name	Model	Version	Chassis	Licenses	Access Control Policy	Auto Rollback
FTD1 (Primary, Standby)	Firewall 3120 Threat Defense	7.4.2.2	N/A	Essentials, IPS (2 more...)	FTD3100_ACP	<⌂
FTD2 (Secondary, Active)	Firewall 3120 Threat Defense	7.4.2.2	Manage	Essentials, IPS (2 more...)	FTD3100_ACP	<⌂

This window appears. Select **Yes**

## Confirm Break



Breaking the High Availability pair "FTD3100\_HA" will erase all configuration except the Access Control and Flex Config policy from standby peer. This operation might also restart Snort processes of primary and secondary devices, temporarily causing traffic interruption. Are you sure you want to break the pair?




Breaking High Availability pair when Secondary device is active may cause extended network disruption for NAT traffic. Please ensure to perform clear arp on upstream and downstream devices to restore connectivity.

☐

Force break, if standby peer does not respond

No

Yes

 **Note:** At this point you can experience some traffic interruption for a few seconds since the Snort engine restarts during the HA break. Also, as the message mentions, if you use NAT and experience a prolonged traffic outage consider clearing the ARP cache on upstream and downstream devices.

After breaking the FTD HA, you have two standalone FTDs on FMC.

From configuration point of view, the FTD2 (ex-Active) still has the configuration in place except the failover-related configuration and is handling the traffic:

```
<#root>
```

```
FTD3100-4#
```

```
show failover
```

```
Failover Off
Failover unit Secondary
Failover LAN Interface: not Configured
Reconnect timeout 0:00:00
Unit Poll frequency 1 seconds, holdtime 15 seconds
Interface Poll frequency 5 seconds, holdtime 25 seconds
Interface Policy 1
Monitored Interfaces 1 of 1288 maximum
MAC Address Move Notification Interval not set
```

```
<#root>
```

```
FTD3100-4#
```



```
show interface ip brief
```

Interface	IP-Address	OK?	Method	Status	Protocol
Internal-Data0/1	unassigned	YES	unset	up	up
Port-channel1	unassigned	YES	unset	up	up
Port-channel1.200	10.0.200.70	YES	manual	up	up
Port-channel1.201	10.0.201.70	YES	manual	up	up

The FTD1 (ex-Standby) has all the configuration removed:

```
<#root>
```

```
FTD3100-3#
```

```
show failover
```

```
Failover Off
Failover unit Secondary
Failover LAN Interface: not Configured
Reconnect timeout 0:00:00
Unit Poll frequency 1 seconds, holdtime 15 seconds
Interface Poll frequency 5 seconds, holdtime 25 seconds
Interface Policy 1
Monitored Interfaces 1 of 1288 maximum
MAC Address Move Notification Interval not set
```

```
<#root>
```

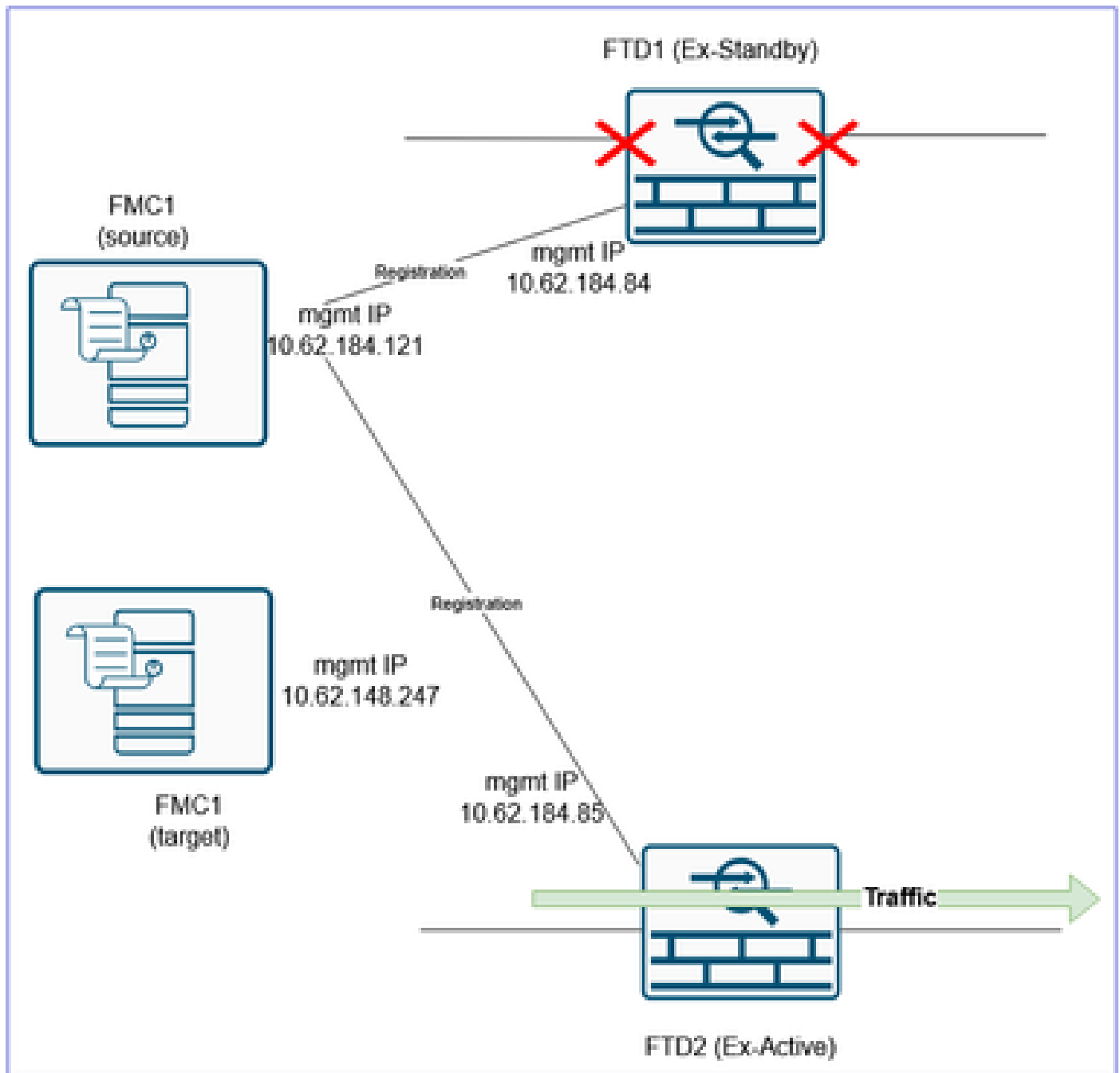
```
FTD3100-3#
```

```
show interface ip brief
```

Interface	IP-Address	OK?	Method	Status	Protocol
Internal-Data0/1	unassigned	YES	unset	up	up
Ethernet1/1	unassigned	YES	unset	admin down	down
Ethernet1/2	unassigned	YES	unset	admin down	down
Ethernet1/3	unassigned	YES	unset	admin down	down
Ethernet1/4	unassigned	YES	unset	admin down	down
Ethernet1/5	unassigned	YES	unset	admin down	down
Ethernet1/6	unassigned	YES	unset	admin down	down
Ethernet1/7	unassigned	YES	unset	admin down	down
Ethernet1/8	unassigned	YES	unset	admin down	down
Ethernet1/9	unassigned	YES	unset	admin down	down
Ethernet1/10	unassigned	YES	unset	admin down	down
Ethernet1/11	unassigned	YES	unset	admin down	down
Ethernet1/12	unassigned	YES	unset	admin down	down
Ethernet1/13	unassigned	YES	unset	admin down	down
Ethernet1/14	unassigned	YES	unset	admin down	down
Ethernet1/15	unassigned	YES	unset	admin down	down
Ethernet1/16	unassigned	YES	unset	admin down	down

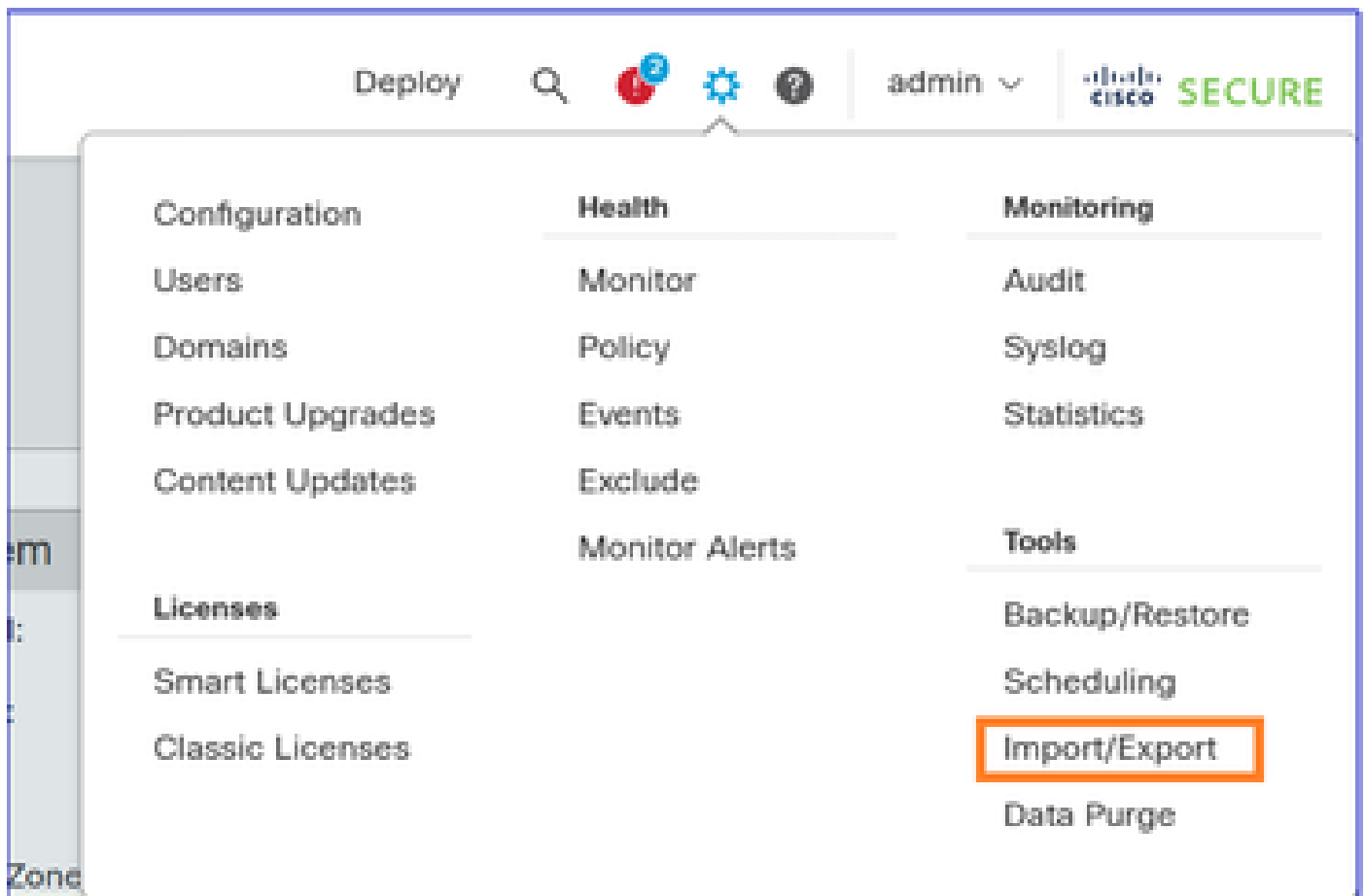
#### Step 4. Isolate the FTD1 (ex-Primary) data interfaces

Disconnect the **data cables** from the FTD1 (ex-Primary). Leave only the FTD management port connected.



#### Step 5. Export the FTD Shared Policies

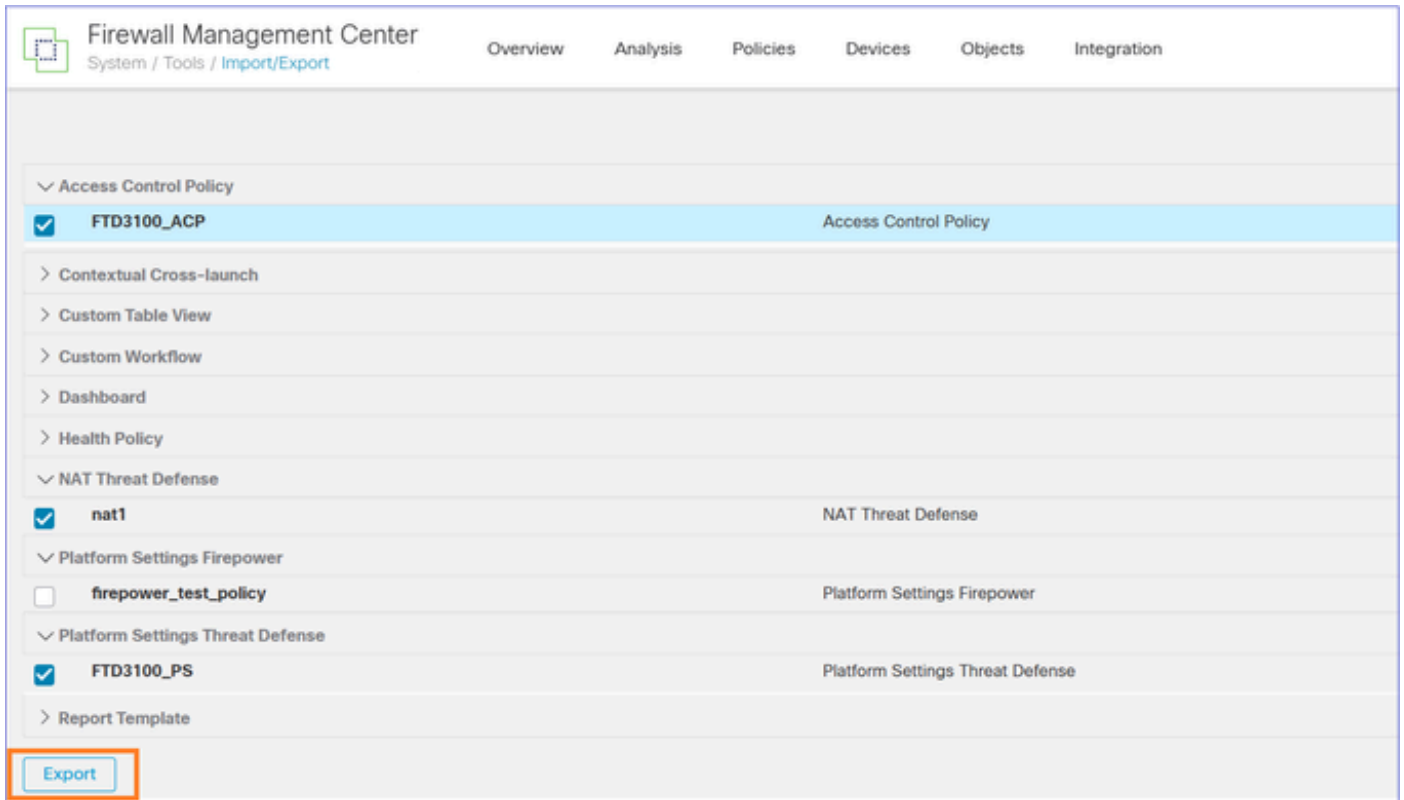
Navigate to **System > Tools** and select **Import/Export**:




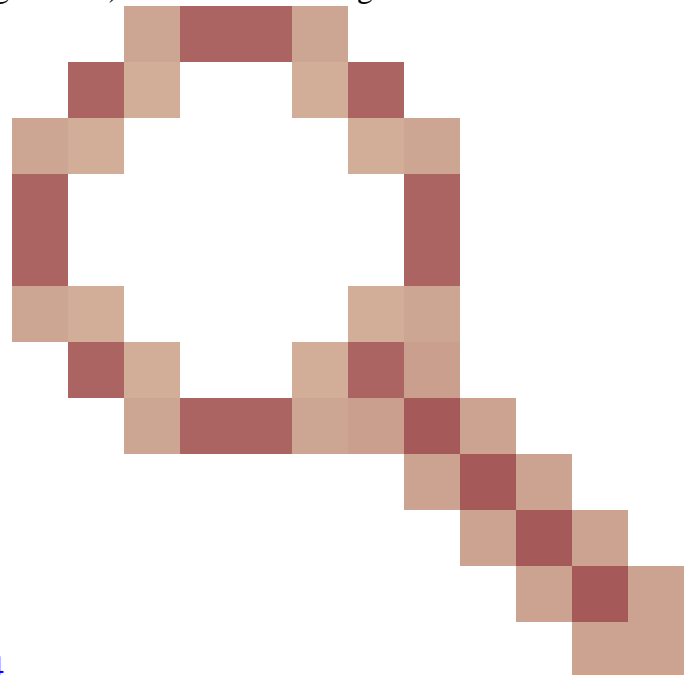
Export the various policies attached to the device. Ensure you export all the policies attached to the FTD such as:

- Access Control Policy (ACP)
- Network Address Translation (NAT) policy
- Health Policy (if custom)
- FTD Platform Settings

and so on.



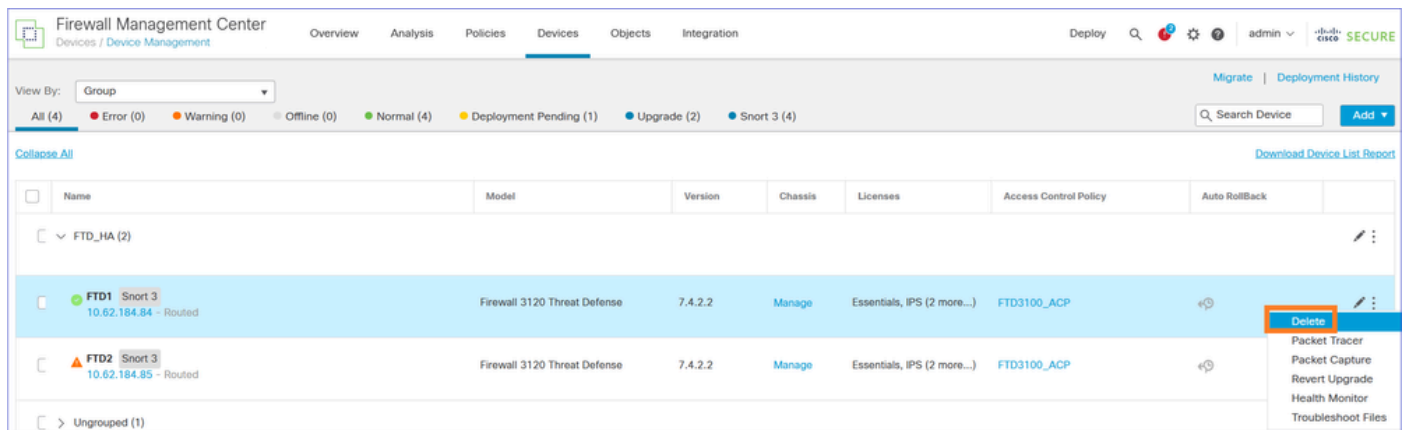
 **Note:** At the time of this writing, exporting VPN-related configuration is not supported. You need to manually reconfigure the VPN on the FMC2 (target FMC) after the device registration.



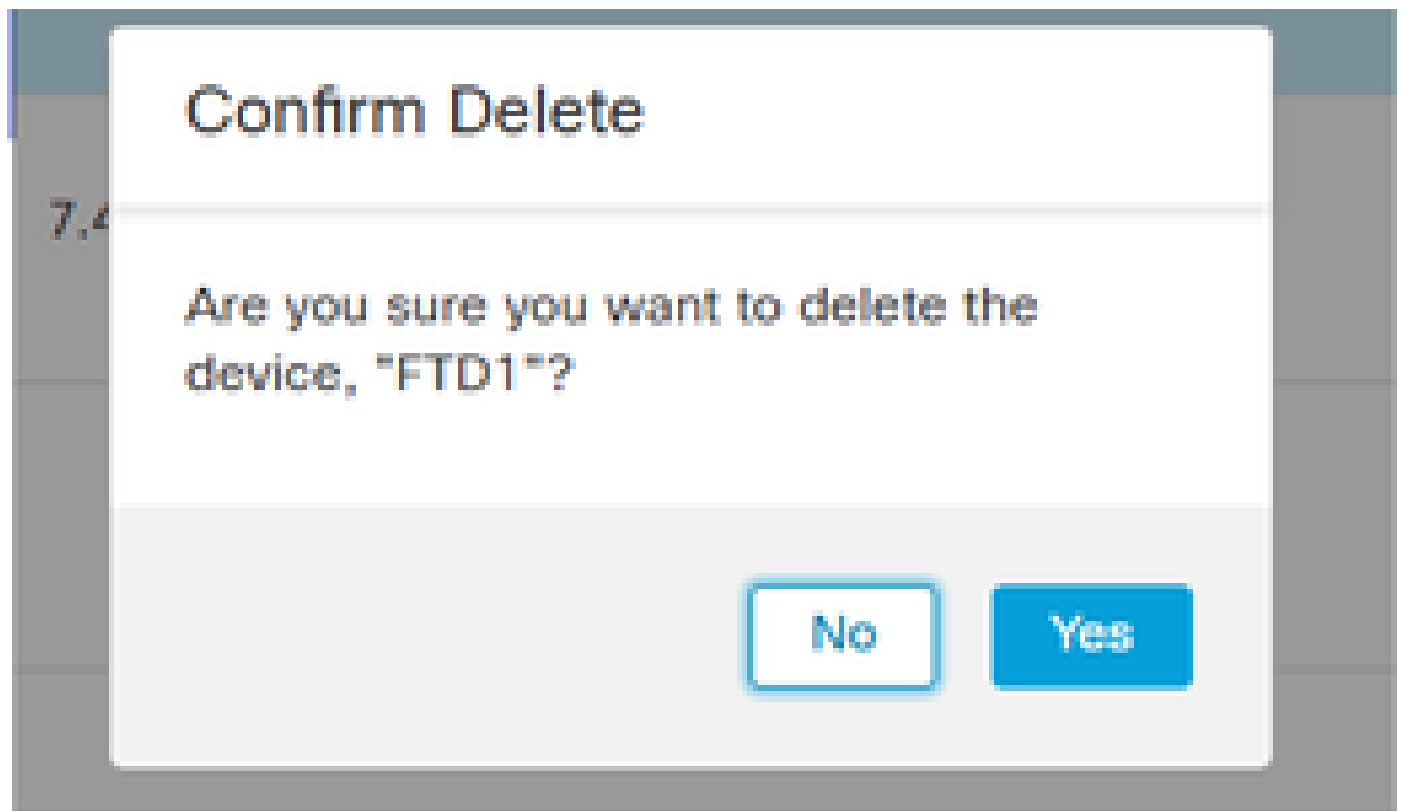
Related enhancement Cisco bug ID [CSCwf05294](https://cisco.com/cisco Bug ID CSCwf05294)

The outcome is an .sfo file, for example ObjectExport\_20250306082738.sfo

## Step 6. Delete/Unregister the FTD1 (ex-Primary) from the old/source FMC



Confirm the device deletion:



FTD1 CLI verification:

```
<#root>
```

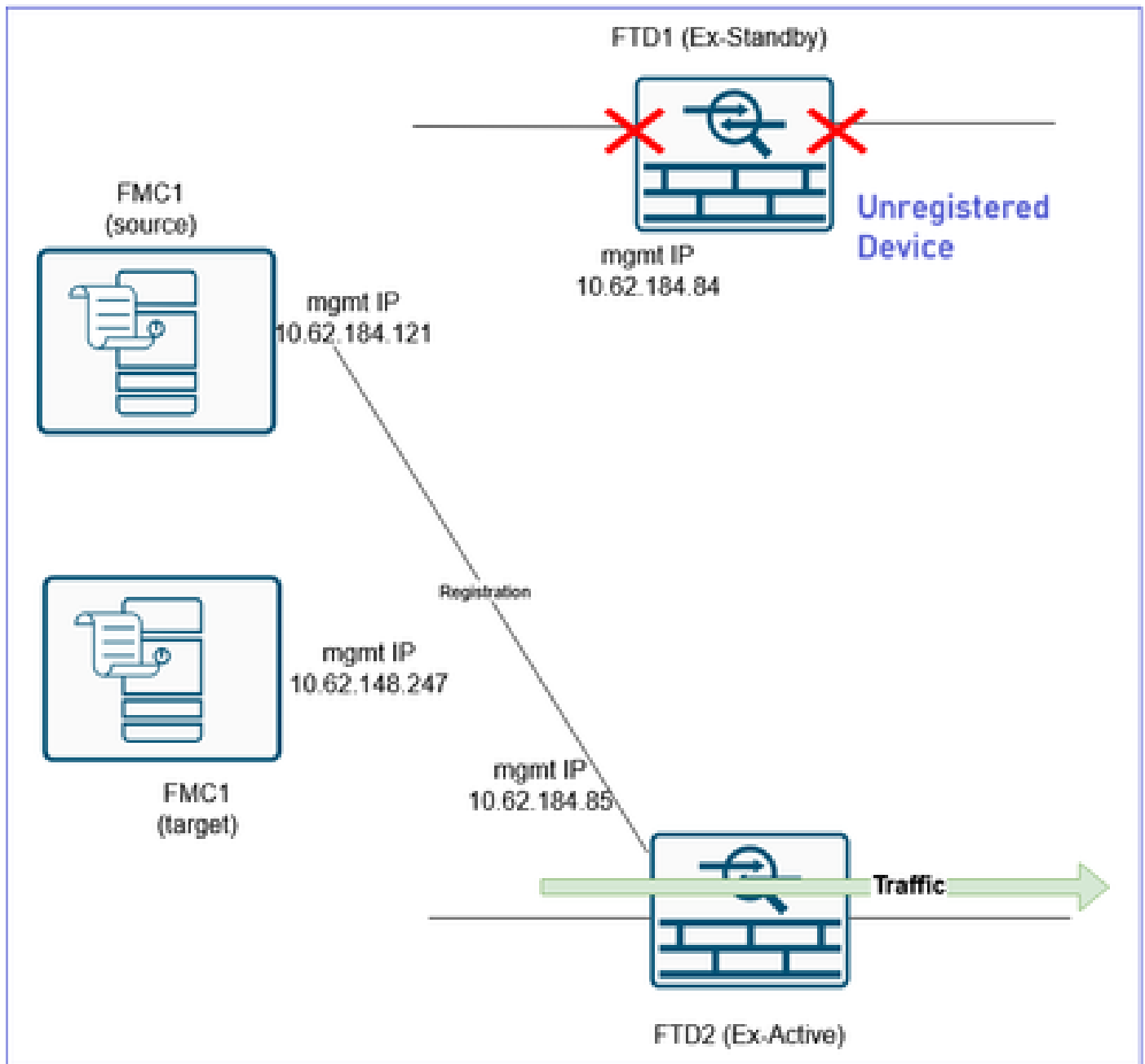
```
>
```

```
show managers
```


```
No managers configured.
```

```
>
```

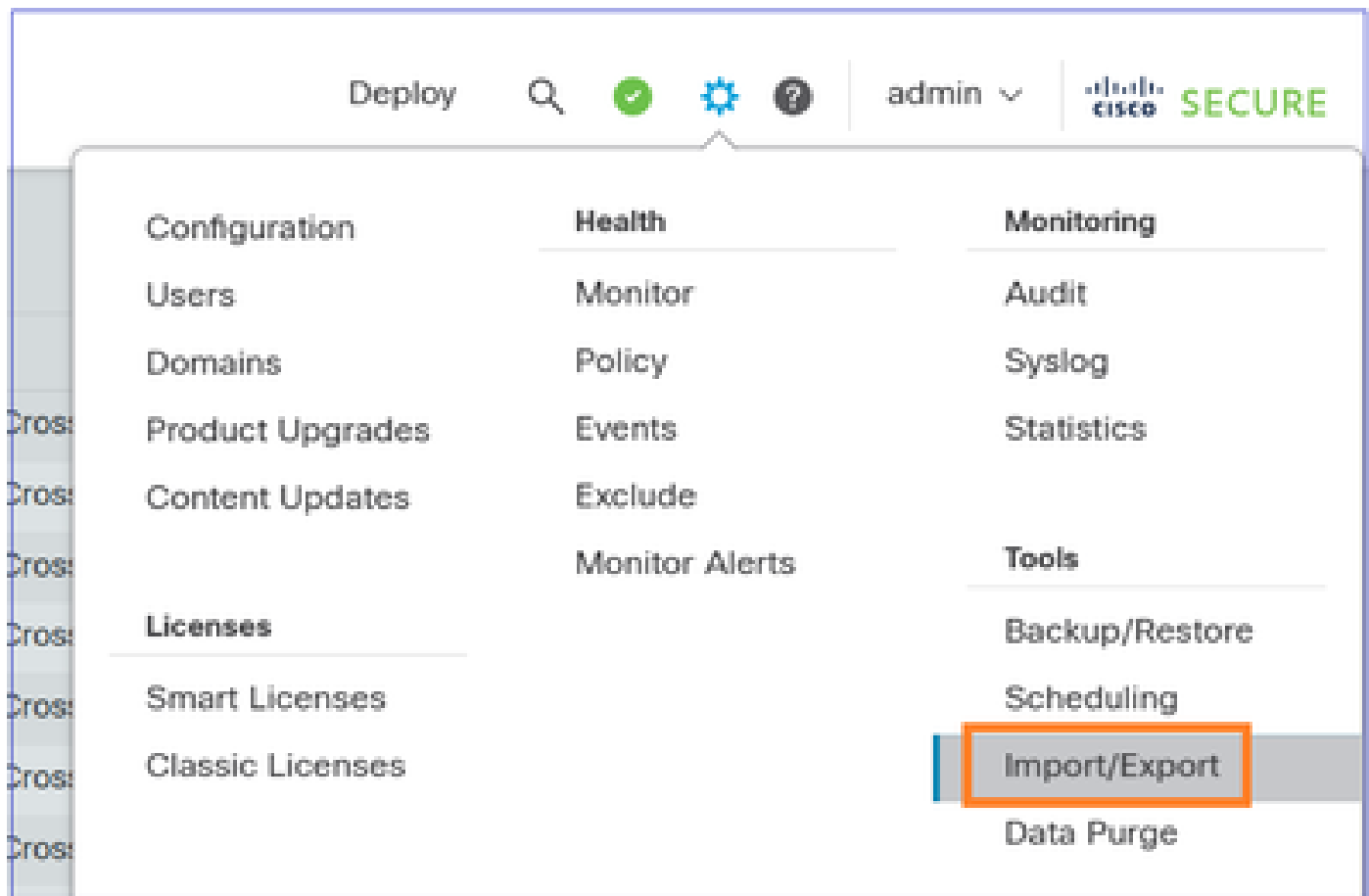
The current status after the FTD1 device deletion:



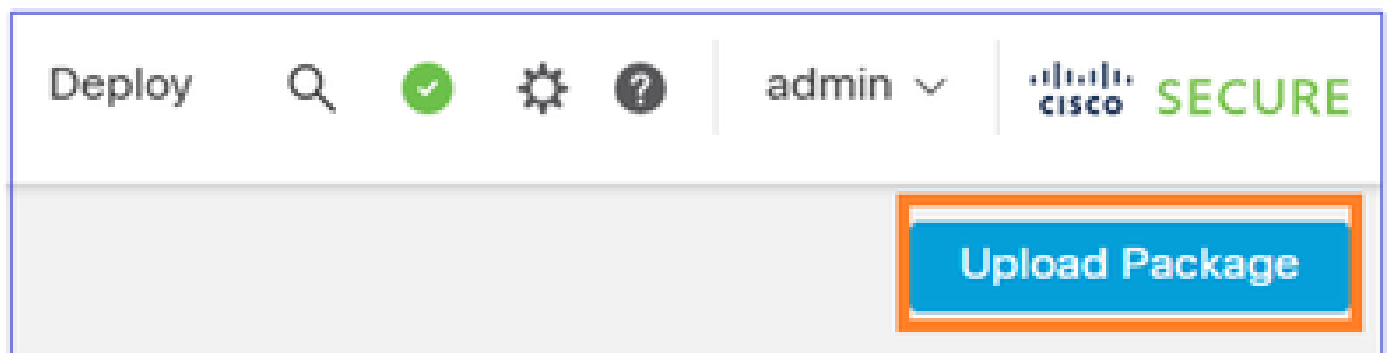
## Step 7. Import the FTD Policy configuration object into the FMC2 (target FMC)

-  **Note:** The document focuses on the migration of a single FTD HA pair to a new FMC. On the other hand, if you plan to migrate multiple firewalls that share the same policies (for example, ACP, NAT) and objects and you want to do this in phases you need to consider these points.
- If you have an existing policy on the target FMC with the same name, you are asked if you:
    - a. Want to replace the policy or
    - b. Create a new one with a different name. This creates duplicate objects with different names (suffix \_1).
  - If you go with option 'b', in Step 9 ensure you reassign the newly-created objects to the migrated policies (ACP Security Zones, NAT Security Zones, Routing, Platform Settings, and so on.).

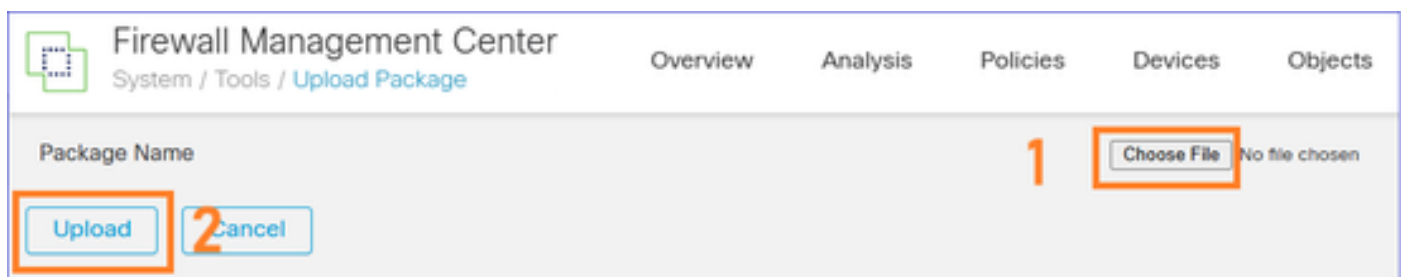
Login to the FMC2 (target FMC) and import the FTD Policies sfo object that you exported in step 5:



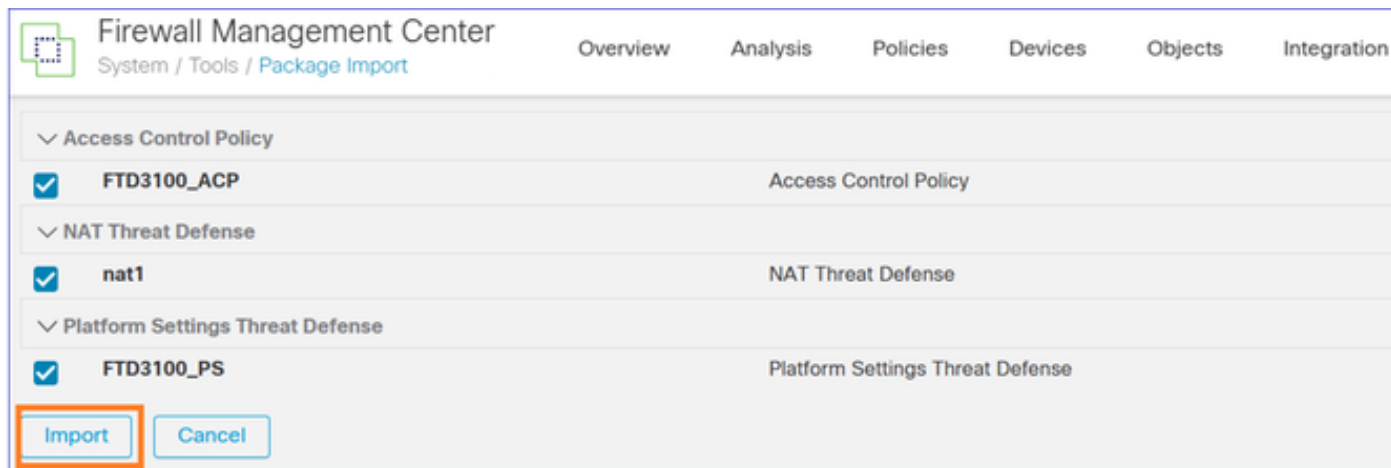
Select **Upload Package**:



**Upload** the file:



**Import** the policies:



Firewall Management Center  
System / Tools / Package Import

Overview Analysis Policies Devices Objects Integration

Access Control Policy

☒ **FTD3100\_ACP** Access Control Policy

NAT Threat Defense

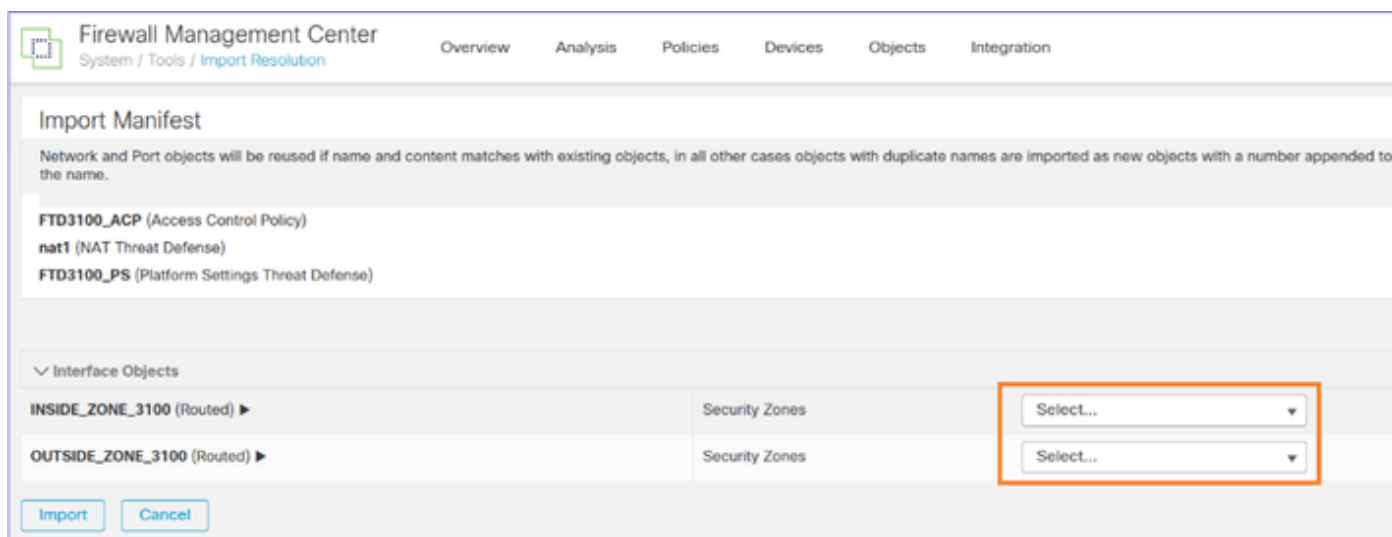
☒ **nat1** NAT Threat Defense

Platform Settings Threat Defense

☒ **FTD3100\_PS** Platform Settings Threat Defense

**Import** Cancel

Create the Interface Objects/Security Zones on the FMC2 (target FMC):



Firewall Management Center  
System / Tools / Import Resolution

Overview Analysis Policies Devices Objects Integration

Import Manifest

Network and Port objects will be reused if name and content matches with existing objects, in all other cases objects with duplicate names are imported as new objects with a number appended to the name.

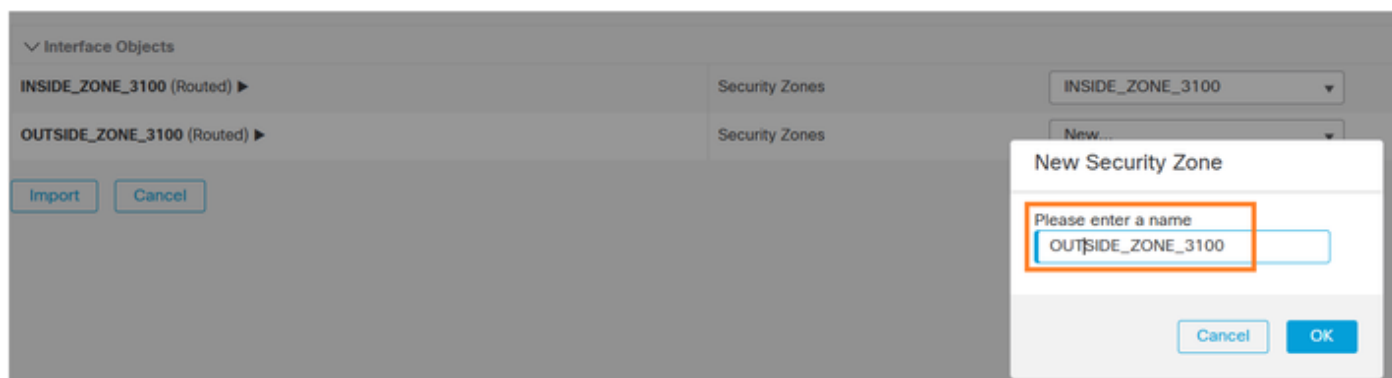
**FTD3100\_ACP** (Access Control Policy)  
**nat1** (NAT Threat Defense)  
**FTD3100\_PS** (Platform Settings Threat Defense)

Interface Objects

Interface Objects	Security Zones
<b>INSIDE_ZONE_3100</b> (Routed) ▶	Select...
<b>OUTSIDE_ZONE_3100</b> (Routed) ▶	Select...

**Import** Cancel

You can give the same names they had on the FMC1 (source FMC):



Interface Objects

Interface Objects	Security Zones
<b>INSIDE_ZONE_3100</b> (Routed) ▶	INSIDE_ZONE_3100
<b>OUTSIDE_ZONE_3100</b> (Routed) ▶	New...

**Import** Cancel

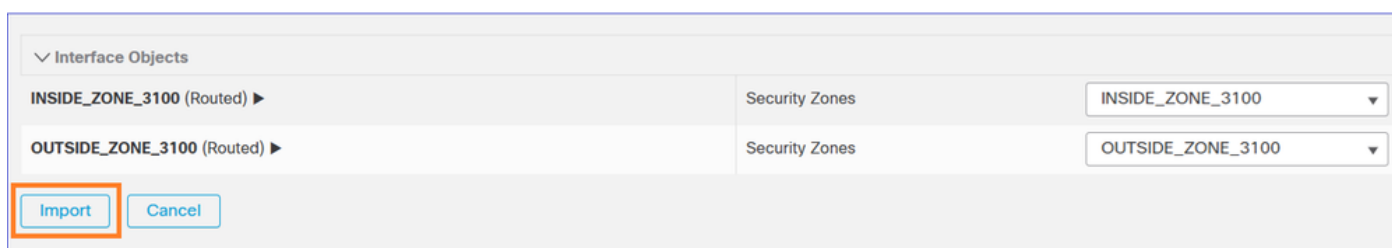
New Security Zone

Please enter a name

OUTSIDE\_ZONE\_3100

Cancel OK

Once you select **Import**, a Task starts to import the related policies into the FMC2 (target FMC):



Interface Objects

Interface Objects	Security Zones
<b>INSIDE_ZONE_3100</b> (Routed) ▶	INSIDE_ZONE_3100
<b>OUTSIDE_ZONE_3100</b> (Routed) ▶	OUTSIDE_ZONE_3100

**Import** Cancel



The Task is done:



## Step 8. Register the FTD1 (ex-Primary) into the FMC2

Go to the FTD1 (ex-Primary) CLI and configure the new manager:

```
<#root>
```

```
>
```

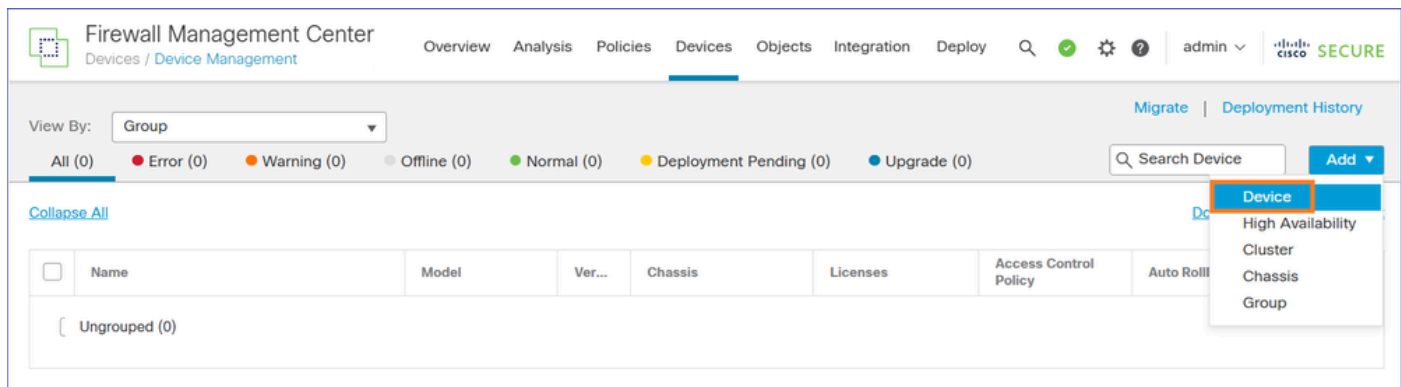
```
configure manager add 10.62.148.247 cisco
```

Manager 10.62.148.247 successfully configured.

Please make note of reg\_key as this will be required while adding Device in FMC.

```
>
```

Navigate to the FMC2 (target FMC) UI **Devices > Device Management** and **Add** the FTD device:



If the device registration fails refer to this document to troubleshoot the problem:

<https://www.cisco.com/c/en/us/support/docs/security/firepower-ngfw/215540-configure-verify-and-troubleshoot-firep.html>

Assign the Access Control Policy you imported in the previous step:

## Add Device

?

Select the Provisioning Method:

☒ Registration Key

☐ Serial Number

☐ CDO Managed Device

Host:†

10.62.184.84

Display Name:

FTD1

Registration Key:\*

\*\*\*\*\*

Group:

None

Access Control Policy:\*

FTD3100\_ACP

Apply the needed licenses and register the device:

## 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

1

### Advanced

Unique NAT ID:†

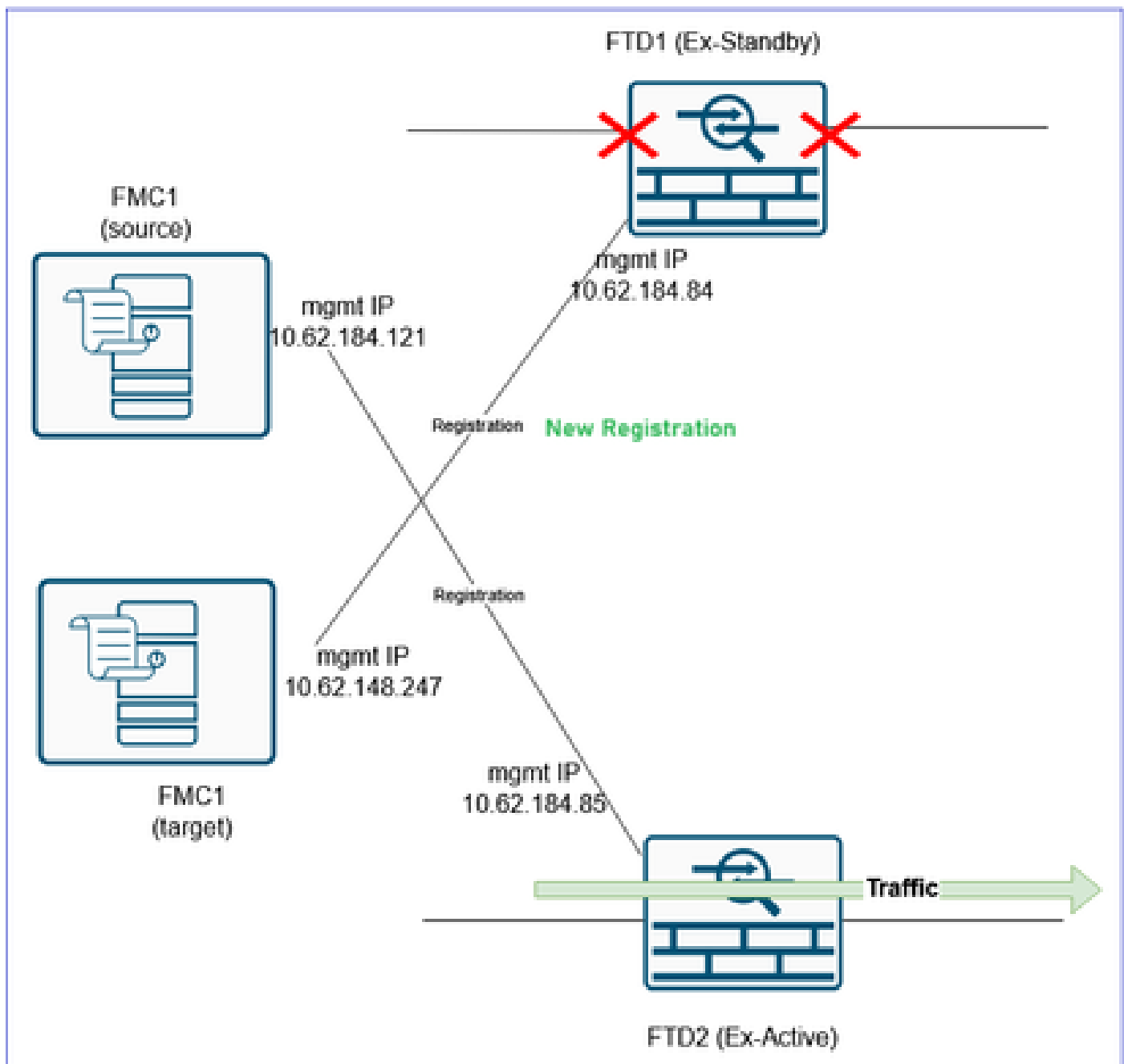
- ☒ Transfer Packets

2

Cancel

Register


The result:



### Step 9. Import the FTD Device configuration object into the FMC2 (target FMC)

Login to the FMC2 (target FMC), navigate to the **Devices > Device Management** and **Edit** the FTD device that you registered in the previous step.

Navigate to the **Device** tab and **Import** the FTD Policies sfo object that you exported in step 2:

 **Firewall Management Center**  
Devices / Secure Firewall Device Summary

OverviewAnalysisPolicies**Devices**

**FTD1**  
Cisco Secure Firewall 3120 Threat Defense

Device**Interfaces**Inline SetsRoutingDHCPVTEP

**General**

Name:FTD1

Transfer Packets:Yes

Troubleshoot:

Logs

CLI

Download

Mode:Routed

Compliance Mode:None

Performance Profile:Default

TLS Crypto Acceleration:Enabled

Device Configuration:

Import

Export

Download

OnBoarding Method:Registration Key

**License**

Essential

Export-Only

Malware

IPS:


Carrier:

URL:

Secure

Secure

Secure

 **Note:** In case in Step 7 you went with option 'b' (Create a new policy), ensure you reassigning the newly-created objects to the migrated policies (ACP Security Zones, NAT Security Zones, Routing, Platform Settings, and so on.).

**Device Configuration Import**

This will replace current device configuration with new configuration from imported file. Do you want to continue?

No

Yes

An FMC task is initiated.

Device Configuration Import

Device configurations imported successfully

View Import Report

7s X

The device configuration is applied on the FTD1, for example, Security Zones, ACP, NAT, and so on:

Firewall Management Center

OverviewAnalysisPolicies**Devices**ObjectsIntegration

DeployadminSECURE

FTD1

Cisco Secure Firewall 3120 Threat Defense


Device**Interfaces**Inline SetsRoutingDHCPVTEP

All InterfacesVirtual Tunnels

Q Search by nameSync DeviceAdd Interfaces

Interface	Logical Name	Type	Security Zones	MAC Address (Active/Standby)	IP Address	Path Monitoring	Virtual Router
Ethernet1/6		Physical				Disabled	
Ethernet1/7		Physical				Disabled	
Ethernet1/8		Physical				Disabled	
Ethernet1/9		Physical				Disabled	
Ethernet1/10		Physical				Disabled	
Ethernet1/11		Physical				Disabled	
Ethernet1/12		Physical				Disabled	
Ethernet1/13		Physical				Disabled	
Ethernet1/14		Physical				Disabled	
Ethernet1/15		Physical				Disabled	
Ethernet1/16		Physical				Disabled	
Port-channel1		EtherChannel				Disabled	
Port-channel1.200	INSIDE	Subinterface	INSIDE_ZONE_3100		10.0.200.70/24(Static)	Disabled	Global
Port-channel1.201	OUTSIDE	Subinterface	OUTSIDE_ZONE_3100		10.0.201.70/24(Static)	Disabled	Global

Displaying 1-20 of 20 interfacesPage 1 of 1



**Caution:** If you have an ACP that expands to many Access Control Elements, the ACP compilation process (tmatch compile) can take time several minutes to complete. You can use this command to verify the ACP compilation status:

```
<#root>

FTD3100-3#

show asp rule-engine

Rule compilation Status:

Completed
```

Step 10. Finish the FTD Configuration

At this point the goal is the configure all the features that can be still missing from FTD1 after the registration to the FMC2 (target FMC) and the import of the Device policy.

Ensure that policies like NAT, Platform Settings, QoS, and so on. are assigned to the FTD. You see that the policies are assigned but pending deployment.

For example, Platform Settings are imported and assigned to the device, but pending the deployment:

The screenshot shows the 'Firewall Management Center' interface with the 'Devices' tab selected. The breadcrumb path is 'Devices / Platform Settings'. A table lists the platform settings for device 'FTD3100\_PS'. The 'Device Type' is 'Threat Defense' and the 'Status' is 'Targeting 1 devices' with a red warning 'Out-of-date on 1 targeted devices'. A 'New Policy' button is visible in the top right.

Platform Settings	Device Type	Status
FTD3100_PS	Threat Defense	Targeting 1 devices Out-of-date on 1 targeted devices

If NAT is configured, the NAT policy is imported and assigned to the device, but pending the deployment:

The screenshot shows the 'Firewall Management Center' interface with the 'Devices' tab selected. The breadcrumb path is 'Devices / NAT'. A table lists the NAT policies for device 'nat1'. The 'Device Type' is 'Threat Defense' and the 'Status' is 'Targeting 1 devices' with a red warning 'Out-of-date on 1 targeted devices'. Buttons for 'NAT Exemptions' and 'New Policy' are visible in the top right.

NAT Policy	Device Type	Status
nat1	Threat Defense	Targeting 1 devices Out-of-date on 1 targeted devices

Security Zones are applied to the interfaces:

The screenshot shows the 'Firewall Management Center' interface with the 'Devices' tab selected. The breadcrumb path is 'Devices / Secure Firewall Interfaces'. The device 'FTD1' is selected, and the 'Interfaces' sub-tab is active. A table lists the interfaces and their assigned security zones. The 'INSIDE\_ZONE\_3100' and 'OUTSIDE\_ZONE\_3100' are highlighted with a red box.

Interface	Logical Name	Type	Security Zones	MAC Address (Active/Standby)	IP Address	Path Monitoring	Virtual Router
Ethernet1/5		Physical				Disabled	
Ethernet1/6		Physical				Disabled	
Ethernet1/7		Physical				Disabled	
Ethernet1/8		Physical				Disabled	
Ethernet1/9		Physical				Disabled	
Ethernet1/10		Physical				Disabled	
Ethernet1/11		Physical				Disabled	
Ethernet1/12		Physical				Disabled	
Ethernet1/13		Physical				Disabled	
Ethernet1/14		Physical				Disabled	
Ethernet1/15		Physical				Disabled	
Ethernet1/16		Physical				Disabled	
Port-channel1		EtherChannel				Disabled	
Port-channel1.200	INSIDE	Subinterface	INSIDE_ZONE_3100		10.0.200.70/24(Static)	Disabled	Global
Port-channel1.201	OUTSIDE	Subinterface	OUTSIDE_ZONE_3100		10.0.201.70/24(Static)	Disabled	Global

Routing configuration is applied to the FTD device:

Firewall Management Center  
Devices / Secure Firewall Routing

Overview Analysis Policies **Devices** Objects Integration

Deploy 🔍 ⚙️ ⓘ admin ▾ **Secure**

### FTD1

Cisco Secure Firewall 3120 Threat Defense

Device Interfaces Inline Sets **Routing** DHCP VTEP

Manage Virtual Routers


Global ▾

Virtual Router Properties

- ECMP
- BFD
- OSPF
- OSPFv3
- EIGRP
- RIP
- Policy Based Routing
- ✓ BGP
  - IPv4
  - IPv6
- Static Route**
- ✓ Multicast Routing
  - IGMP

Network	Interface	Leaked from Virtual Router	Gateway	Tunneled	Metric	Tracked	
▼ IPv4 Routes							
any-ipv4	OUTSIDE	Global	10.0.201.60	false	1		✎ 🗑
▼ IPv6 Routes							

+ Add Route

 **Note:** Now is the time to configure the policies that could not be migrated automatically (for example, VPNs).

Analysis

### Create New VPN Topology

Topology Name:\*  
VPN3100

☒ Policy Based (Crypto Map) ☐ Route Based (VTI)

Network Topology:  
**Point to Point** Hub and Spoke Full Mesh

IKE Version:\* ☐ IKEv1 ☒ IKEv2

Endpoints IKE IPsec Advanced

Node A:


Device Name	VPN Interface	Protected Networks	
FTD FTD1	OUTSIDE (10.0.201.70)	net_10.0.200.0	✎ 🗑

Node B:

Device Name	VPN Interface	Protected Networks	
Extranet Remote_FW	10.0.201.60	net_10.0.202.0	✎ 🗑

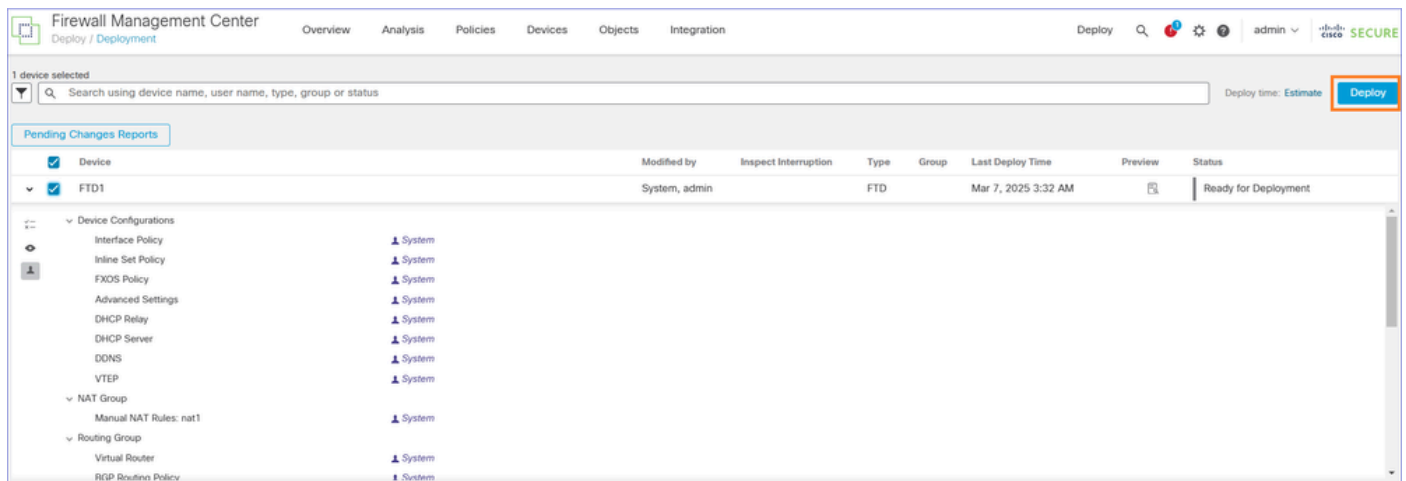
ⓘ Ensure the protected networks are allowed by access control policy of each device.

Cancel Save

 **Note:** If the FTD that is migrated has S2S VPN peers that are also migrated to the target FMC, you have to configure the VPN after moving all FTDs to the target FMC.



## Deploy the pending changes:



## Step 11. Verify the deployed FTD Configuration

At this point the goal is to check from the FTD CLI that all the configuration is in place.

The suggestion is to compare the 'show running-config' output from both FTDs. You can use tools like WinMerge or diff for the comparison.

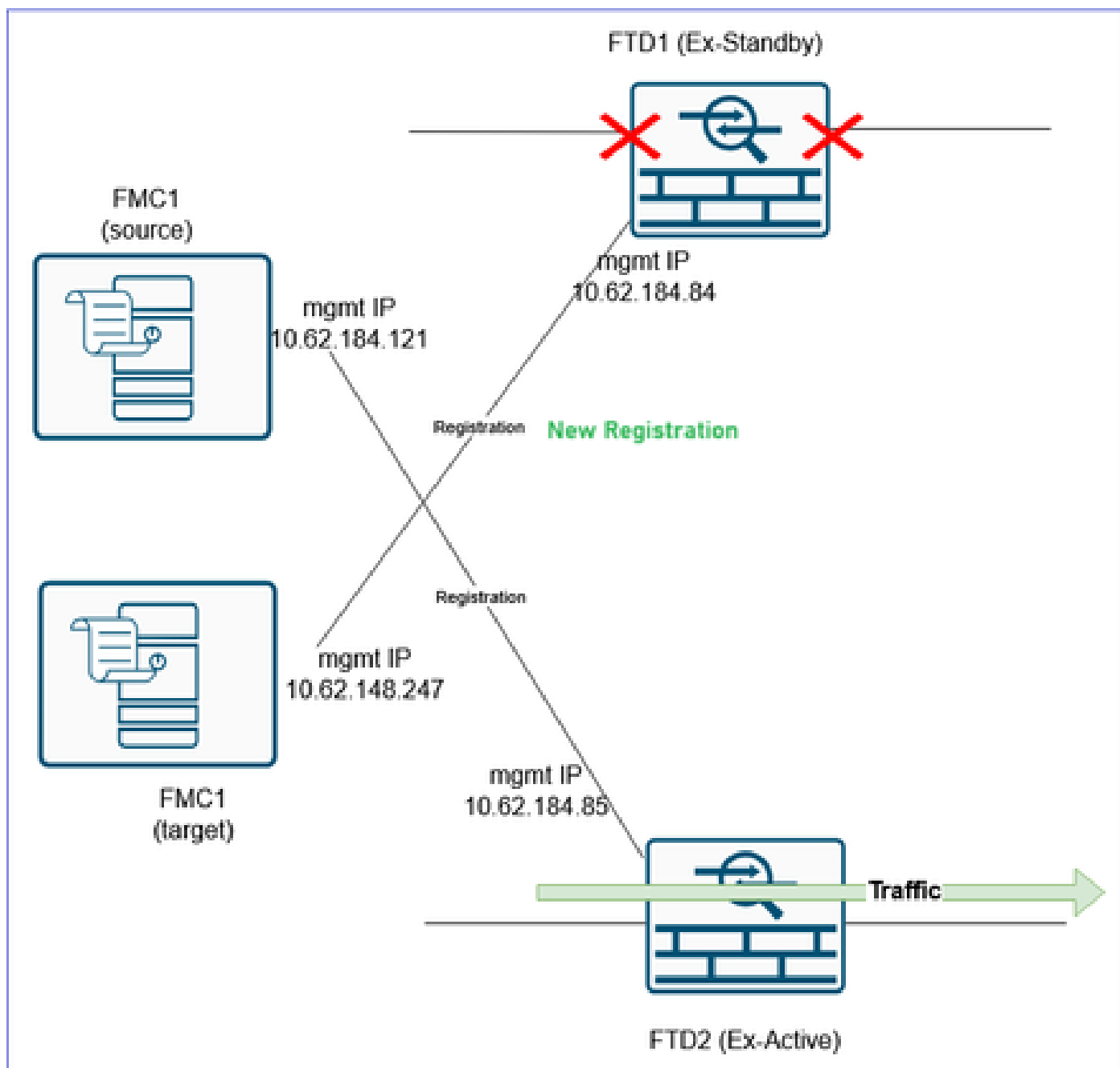
Differences that you see and are normal are:

- Device Serial Number
- Interface descriptions
- ACL rule-ids
- Configuration Cryptochecksum

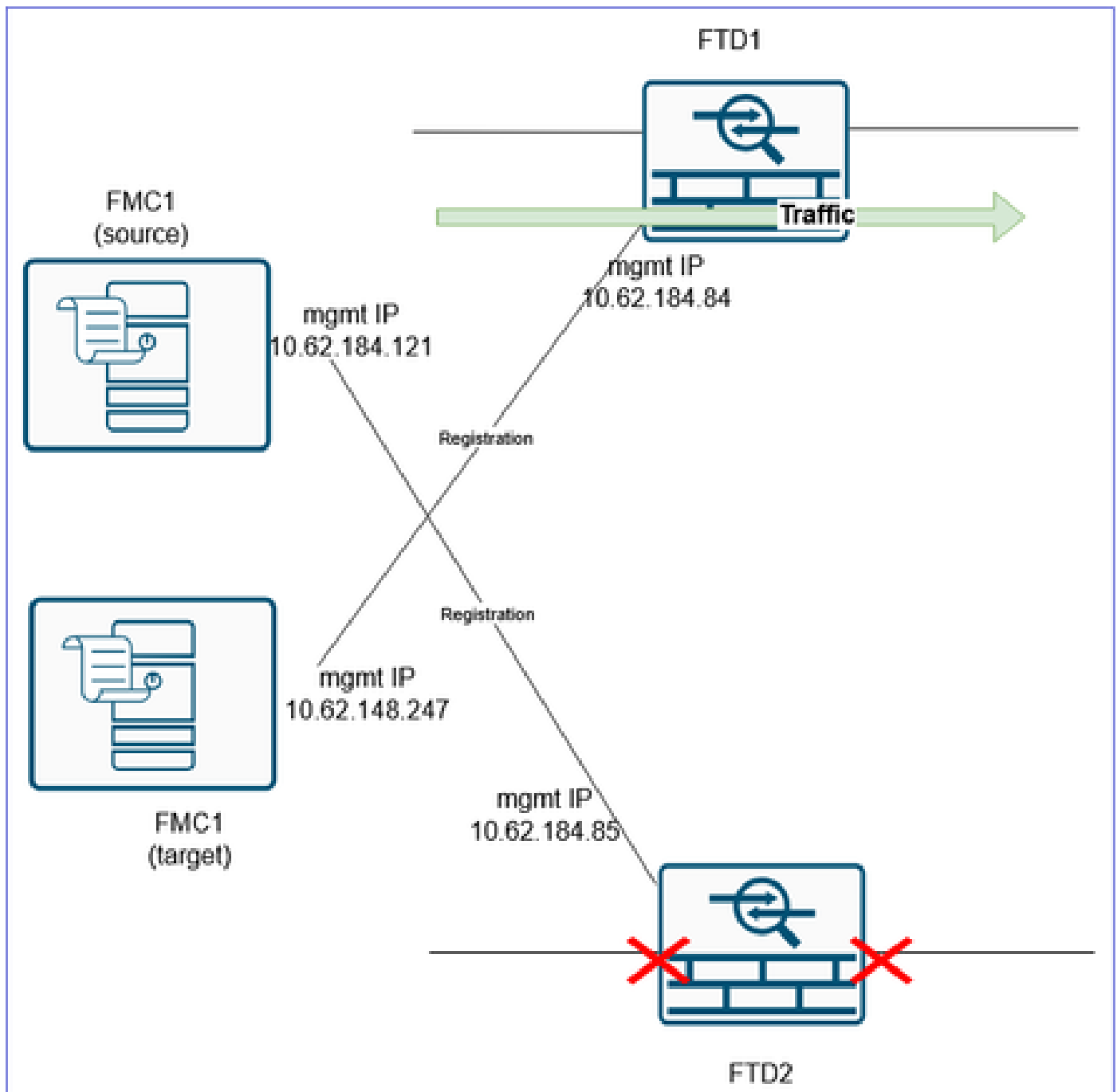
## Step 12. Do the Cutover

At this step the goal is to switch the traffic from the FTD2 that is currently handling the traffic and is still registered to the old/source FMC, to the FTD1 that is registered to the target FMC.

Before:



After:




**⚠ Caution:** Arrange a MW to do the cutover. During the cutover you are going to have some traffic interruption until all the traffic is diverted to the FTD1, VPNs are re-established, and so on.

**⚠ Caution:** Do not initiate the cutover unless the ACP compilation is completed (see step 10 above).

**⚡ Warning:** Make sure you either disconnect the data cables from the FTD2 or shutdown the related switchports. Otherwise, you can end-up with both devices handling the traffic!

**⚠ Caution:** Since both devices use the same IP configuration there is a need for the ARP cache of the adjacent L3 devices to be updated. Consider clearing manually the ARP cache of the adjacent devices to expedite the traffic cutover.

---

 **Tip:** You can also send a GARP packet and update the ARP cache of the adjacent devices using the FTD CLI command:

---

```
<#root>
```

```
FTD3100-3#
```

```
debug menu ipaddrutl 5 10.0.200.70
```

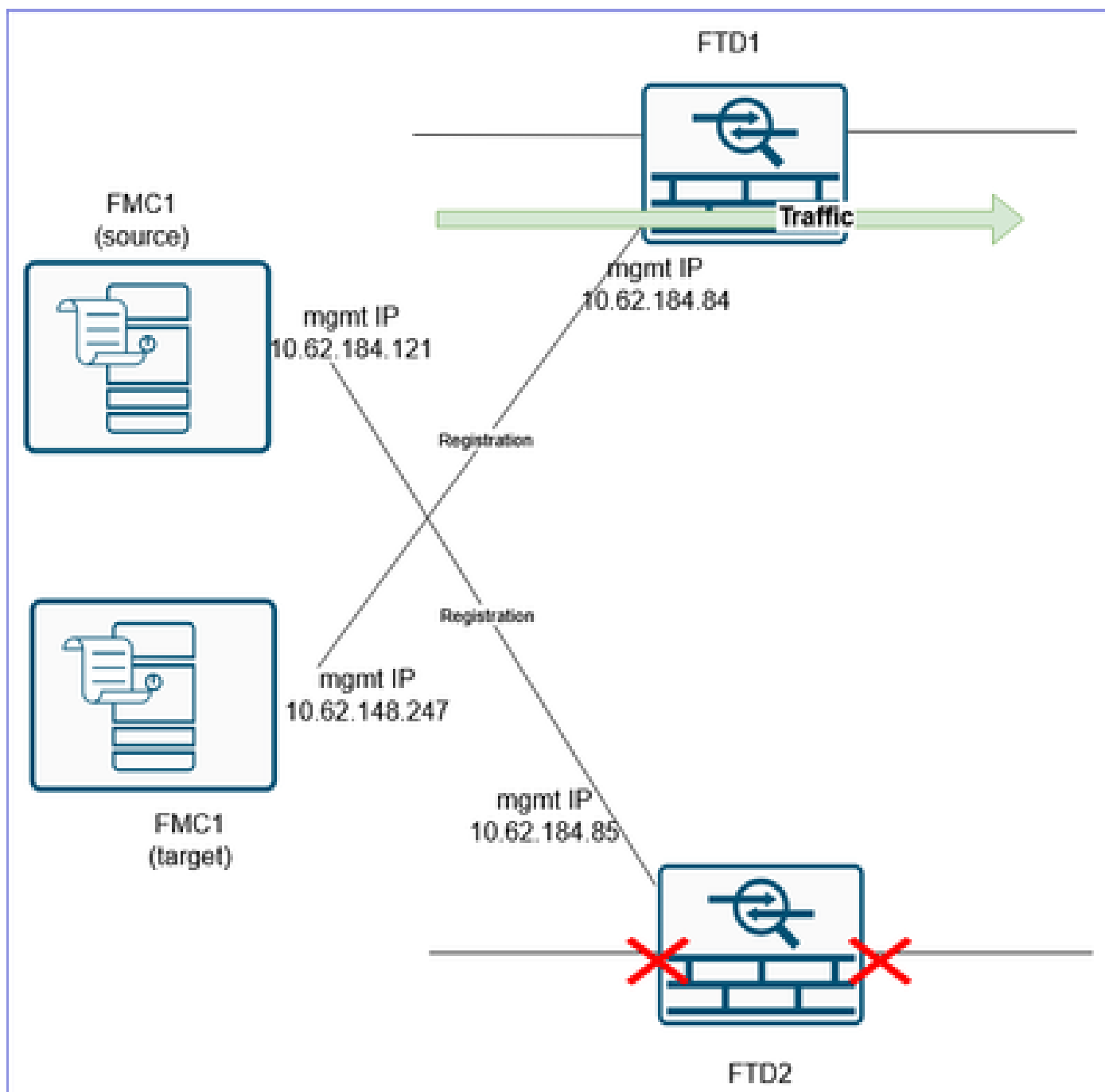
```
Gratuitous ARP sent for 10.0.200.70
```

You have to repeat this command for every IP the FW owns. Thus, it can be faster to just clear the ARP cache of the adjacent devices than sending GARP packets for every IP the firewall owns.

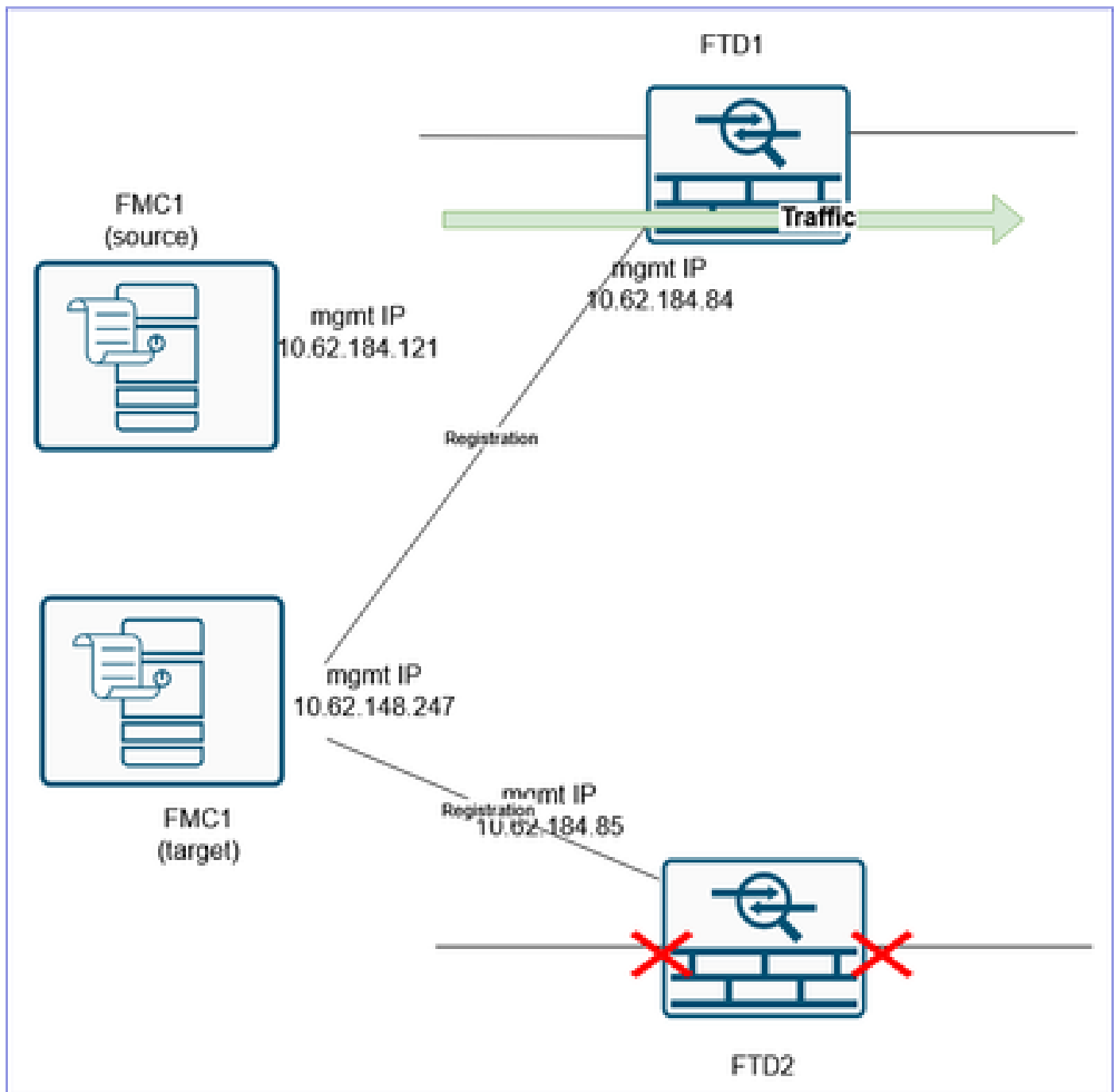
### **Step 13. Migrate the second FTD to the FMC2 (target FMC)**

The last item is to reform the HA pair. To do this, you first need to delete the FTD2 from the FMC1 (source FMC) and register it to the FMC2 (target FMC).

Before:



After:



If you have a VPN configuration attached to the FTD2, you have to remove it first before deleting the FTD. In different case, a message similar to this is shown:

## Error

The Device 'FTD2' cannot be deleted because the following VPN Configuration(s) refer this device.  
**Site to Site : VPN3100**

Please edit/remove the VPN configuration(s) to delete the device.

OK

CLI verification:

```
<#root>
```

```
>
```

```
show managers
```

No managers configured.

It is a good practice to wipe-out all the FTD configuration before registering it to the target FMC. A quick way to do this is to switch between the firewall modes.

For example if you have routed mode, switch to transparent and then back to routed:

```
<#root>
```

```
>
```

```
configure firewall transparent
```

And then:

```
<#root>
```

```
>
```

```
configure firewall routed
```

Then, register it to the FMC2 (target FMC):

```
<#root>
```

```
>
```

```
configure manager add 10.62.148.247 cisco
```

Manager 10.62.148.247 successfully configured.

Please make note of reg\_key as this will be required while adding Device in FMC.

```
>
```



**Firewall Management Center**  
Devices / Device Management

View By: Group

All (1) Error (0) Warning (0) Offline (0) Normal (1) Deployment Pending (0)

**Add Device**

Select the Provisioning Method:  
☒ Registration Key ☐ Serial Number  
☐ CDO Managed Device

Host: 10.62.184.85

Display Name: FTD2

Registration Key: \*

Group: None

Access Control Policy: \* FTD3100\_ACP

**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: \*

☒ Transfer Packets

Cancel Register

The result:

**Firewall Management Center**  
Devices / Device Management

View By: Group

All (2) Error (1) Warning (0) Offline (0) Normal (1) Deployment Pending (0) Upgrade (2) Snort 3 (2)

Search Device Add

Download Device List Report

Name	Model	Version	Chassis	Licenses	Access Control Policy	Auto Rollback
FTD1 Snort 3 10.62.184.84 - Routed	Firewall 3120 Threat Defense	7.4.2.2	Manage	Essentials, IPS (2 more...)	FTD3100_ACP	+S
FTD2 Snort 3 10.62.184.85 - Routed	Firewall 3120 Threat Defense	7.4.2.2	Manage	Essentials, IPS (2 more...)	FTD3100_ACP	+S

## Step 14. Re-form the FTD HA

**Note:** This task (as any HA-related task) must also be performed during a MW. During the HA negotiation there is going to be a traffic outage for ~1 minute since the data interfaces go down.

On the target FMC navigate to **Devices > Device Management** and **Add > High Availability**.



**Caution:** Ensure that you select as Primary Peer the FTD that is handling the traffic (FTD1 in this scenario):

Version	Chassis	Licenses
se	7.4	PS (2 more
se	7.4	PS (2 more

### Add High Availability Pair ?

Name:\*

Device Type:

Primary Peer:

Secondary Peer:

**i** Threat Defense High Availability pair will have primary configuration. Licenses from primary peer will be converted to their high availability versions and applied on both peers.

Reconfigure the HA settings including Monitored Interfaces, Standby IPs, virtual MAC addresses, and so on.

Verification from FTD1 CLI:

```
<#root>
```

```
FTD3100-3#
```

```
show failover | include host
```

```
    This host: Primary - Active
    Other host: Secondary - Standby Ready
```

Verification from FTD2 CLI:

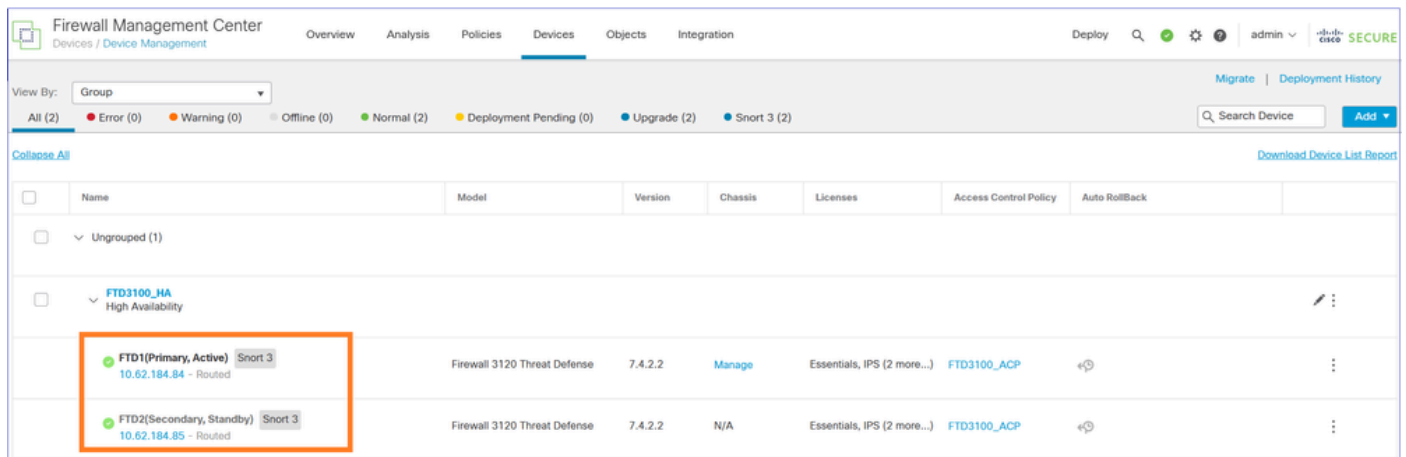
<#root>

FTD3100-3#

show failover | include host

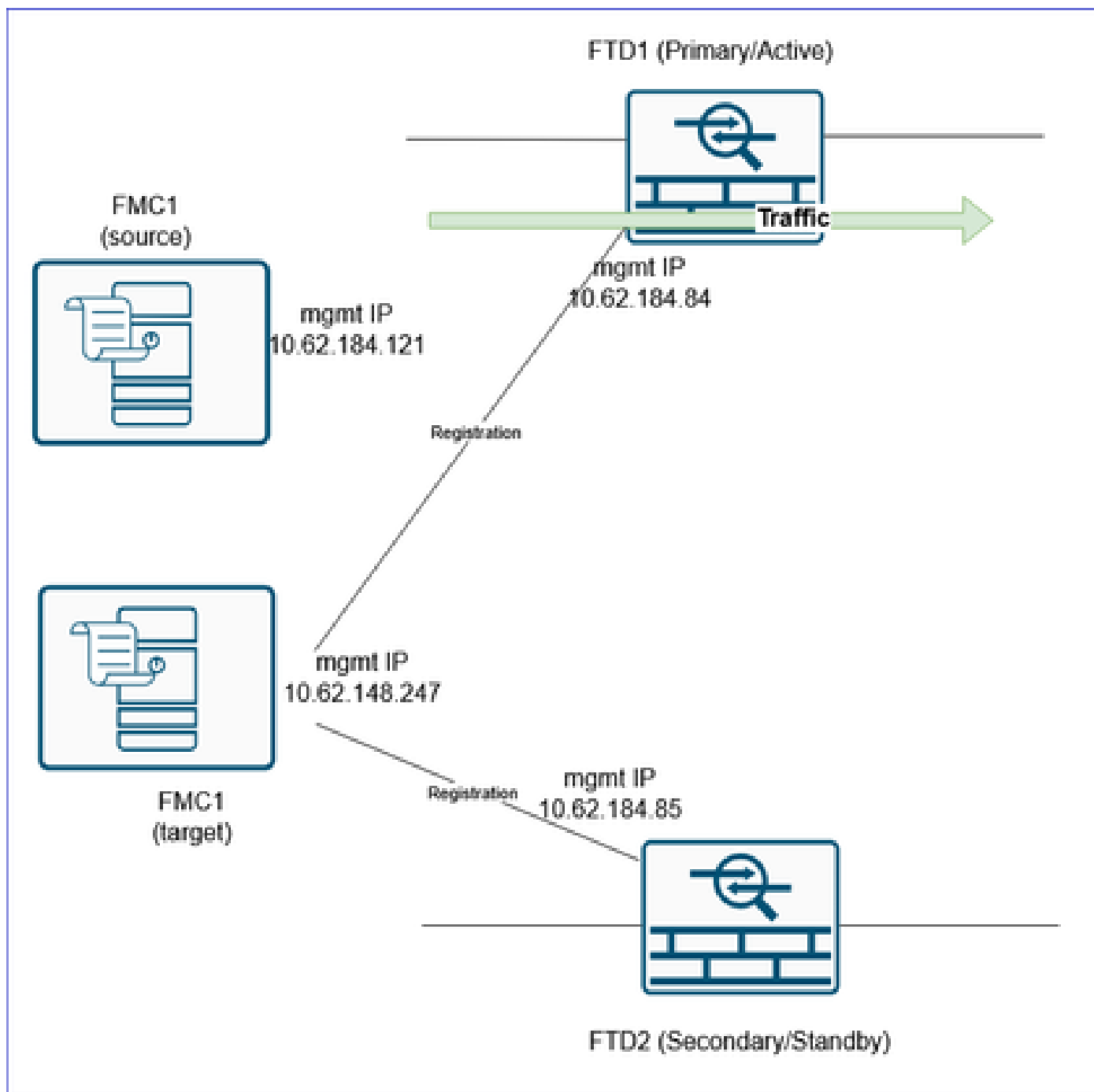
This host: Secondary - Standby Ready  
Other host: Primary - Active

FMC UI verification:



	Name	Model	Version	Chassis	Licenses	Access Control Policy	Auto RollBack	
<input type="checkbox"/>	Ungrouped (1)							
<input type="checkbox"/>	FTD3100_HA High Availability							
<input type="checkbox"/>	FTD1(Primary, Active) 10.62.184.84 - Routed	Firewall 3120 Threat Defense	7.4.2.2	Manage	Essentials, IPS (2 more...)	FTD3100_ACP	⏪⏩	
<input type="checkbox"/>	FTD2(Secondary, Standby) 10.62.184.85 - Routed	Firewall 3120 Threat Defense	7.4.2.2	N/A	Essentials, IPS (2 more...)	FTD3100_ACP	⏪⏩	

Finally, **bring up/reconnect the data interfaces** of the FTD2 device.



## References

- [Export and Import the Device Configuration](#)
- [Add a High Availability Pair](#)
- [Migrate an FTD from One FMC to another FMC](#)