

# Configure OSPF Routing on FTD via FDM

## Contents

---

### [Introduction](#)

### [Prerequisites](#)

[Requirements](#)

[Components Used](#)

### [Configure](#)

[Network Diagram](#)

[Configurations](#)

[Step 1: To Configure Access the Smart CLI on FTD.](#)

[Step 2: Configure the Parameters on Smart CLI Object](#)

[Step 3: Deploy the Config Change](#)

[Step 4: Configuration on Router](#)

[Step 5: Verify the Configuration on FTD CLI](#)

### [Verify](#)

---

## Introduction

This document describes how to configure OSPF routing on the Firepower Threat Defense (FTD) managed by the Firepower Device Manager (FDM).

## Prerequisites

### Requirements

Cisco recommends that you have knowledge of these topics:

- FDM
- FTD
- OSPF

### Components Used

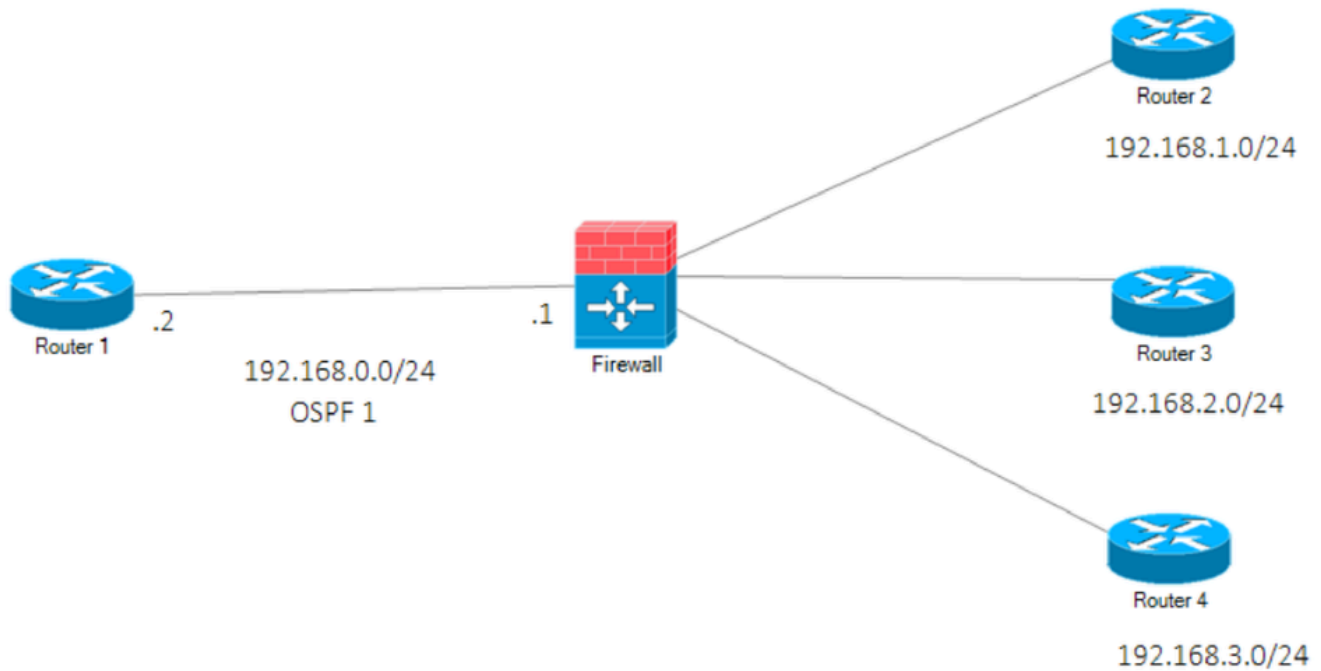
The information in this document is based on these software and hardware versions:

- FTD version 6.4.0 or later and is managed by the FDM
- All physical and virtual platforms

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.

# Configure

## Network Diagram



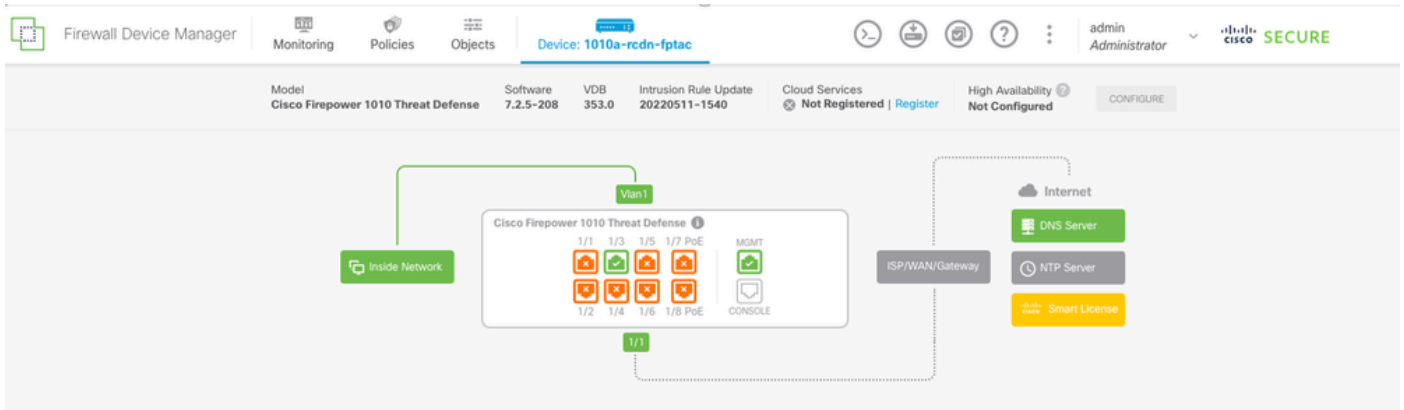
*Network Diagram*

## Configurations

In this scenario you are configuring OSPF on the FTD and R1 router of Network Diagram. You are configuring OSPF on FTD and Router for 3 subnets.

### Step 1. To Configure Access the Smart CLI on FTD.

- Log into the FDM, choose **Device:Firepower > Advanced Configuration > Smart CLI > Routing > Create New > Add name > CLI Template > OSPF.**



<b>Interfaces</b> Connected Enabled 9 of 9 <a href="#">View All Interfaces</a>	<b>Routing</b> There are no static routes yet <a href="#">View Configuration</a>	<b>Updates</b> Geolocation, Rule, VDB, System Upgrade, Security Intelligence Feeds <a href="#">View Configuration</a>	<b>System Settings</b> <a href="#">Management Access</a> <a href="#">Logging Settings</a> <a href="#">DHCP Server / Relay</a> <a href="#">DDNS Service</a> <a href="#">DNS Server</a> <a href="#">Management Interface</a> <a href="#">Hostname</a> <a href="#">Time Services</a> <a href="#">See more</a>
<b>Smart License</b> Evaluation expires in 89 days <a href="#">View Configuration</a>	<b>Backup and Restore</b> <a href="#">View Configuration</a>	<b>Troubleshoot</b> No files created yet <a href="#">REQUEST FILE TO BE CREATED</a>	
<b>Site-to-Site VPN</b> There are no connections yet <a href="#">View Configuration</a>	<b>Remote Access VPN</b> Requires RA VPN license No connections   1 Group Policy <a href="#">Configure</a>	<b>Advanced Configuration</b> Includes: FlexConfig, Smart CLI <a href="#">View Configuration</a>	<b>Device Administration</b> <a href="#">Audit Events, Deployment History, Download Configuration</a> <a href="#">View Configuration</a>

*Advanced Configuration on FDM GUI*

- (Access routing section and then add with the + icon.)

The screenshot shows the Cisco Firepower Device Manager interface. The top navigation bar includes 'Monitoring', 'Policies', 'Objects', and 'Device: firepower'. The left sidebar is divided into 'Advanced Configuration', 'Smart CLI', and 'FlexConfig'. Under 'Smart CLI', 'Routing' is selected, indicated by a red arrow. The main content area displays 'Device Summary Routing' with a table of 3 objects:

#	NAME	TYPE	DESCRIPTION	ACTIONS
1	BGP	BGP		
2	BGPgeneralSetting	BGP General Settings		
3	OSPF	OSPF		

*Routing Selection for OSPF*

- Access each configuration template command as per the requirement of your network topology.
- The configuration in the document is completed with the referenced Network Diagram.

**Step 2: Configure the Parameters on Smart CLI Object**

## Edit OSPF Object



Name

OSPF

Description

Template

Show disabled

Reset

```
1 router ospf 1
2 log-adj-changes disable
3 no log-adj-changes
4 setup ospf advanced
5 router-id 192.168.0.1
6 configure summary-route-cost any
7 no compatible rfc1583
8 distance ospf inter-area 110
9 distance ospf intra-area 110
10 distance ospf external 110
11 timers lsa arrival 1000
12 timers pacing flood 33
13 timers pacing lsa-group 240
14 timers pacing retransmission 66
15 timers throttle lsa 0 5000 5000
16 timers throttle spf 5000 10000 10000
17 default-information originate
18 default-information originate always
19 default-information originate metric 1 metric-type 2
20 area 0
21 configure area 0 properties
22 network 192.168.0.0 area 0 tag-interface
23 network 192.168.1.0 area 0 tag-interface
24 network 192.168.2.0 area 0 tag-interface
25 network 192.168.3.0 area 0 tag-interface
```

CANCEL

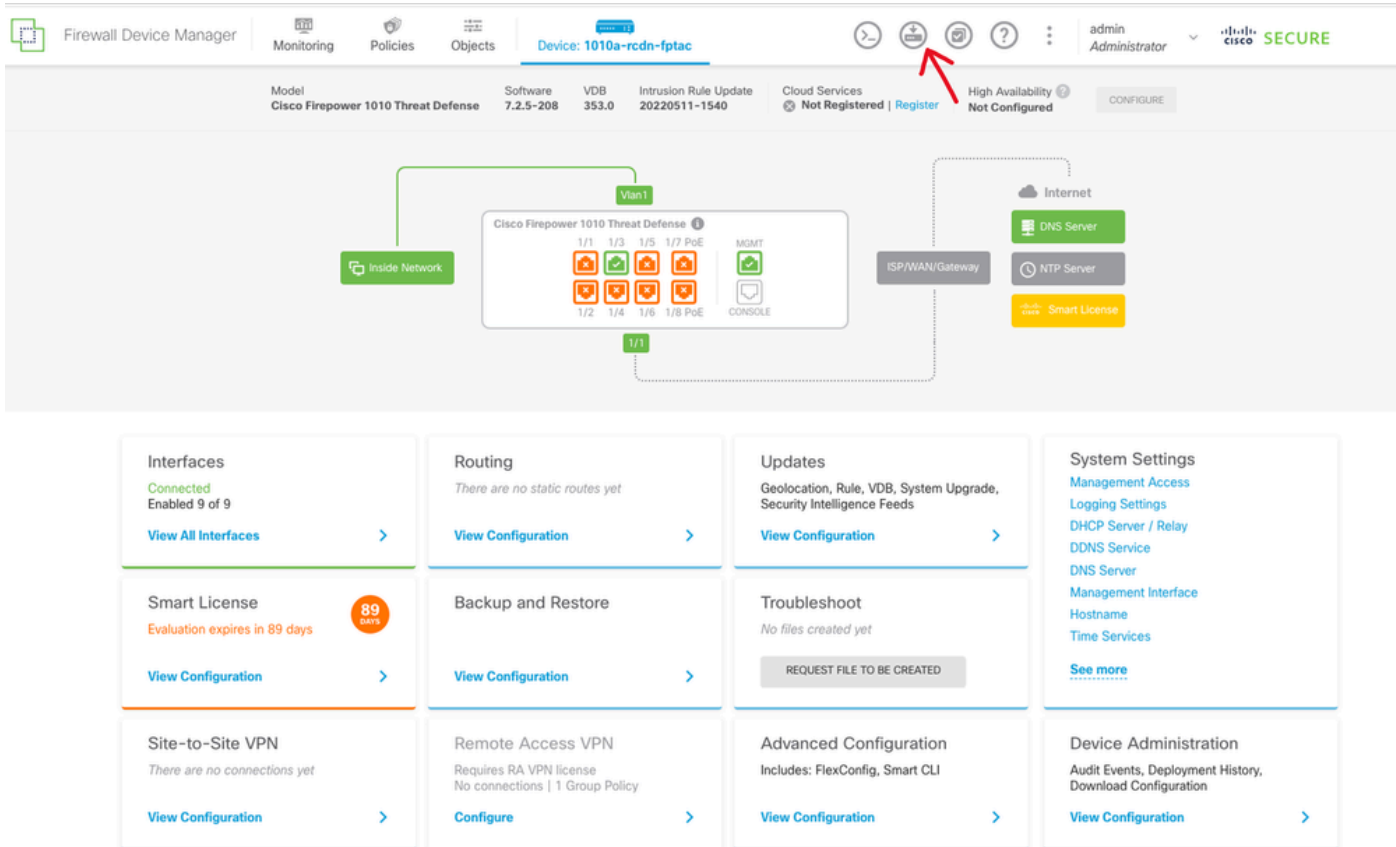
OK

Smart CLI configuration for OSPF

- Highlighted are the configuration changes which are to be done as per the network diagram.
- The parameters: OSPF process ID, router-id, area and the networks are being changed.

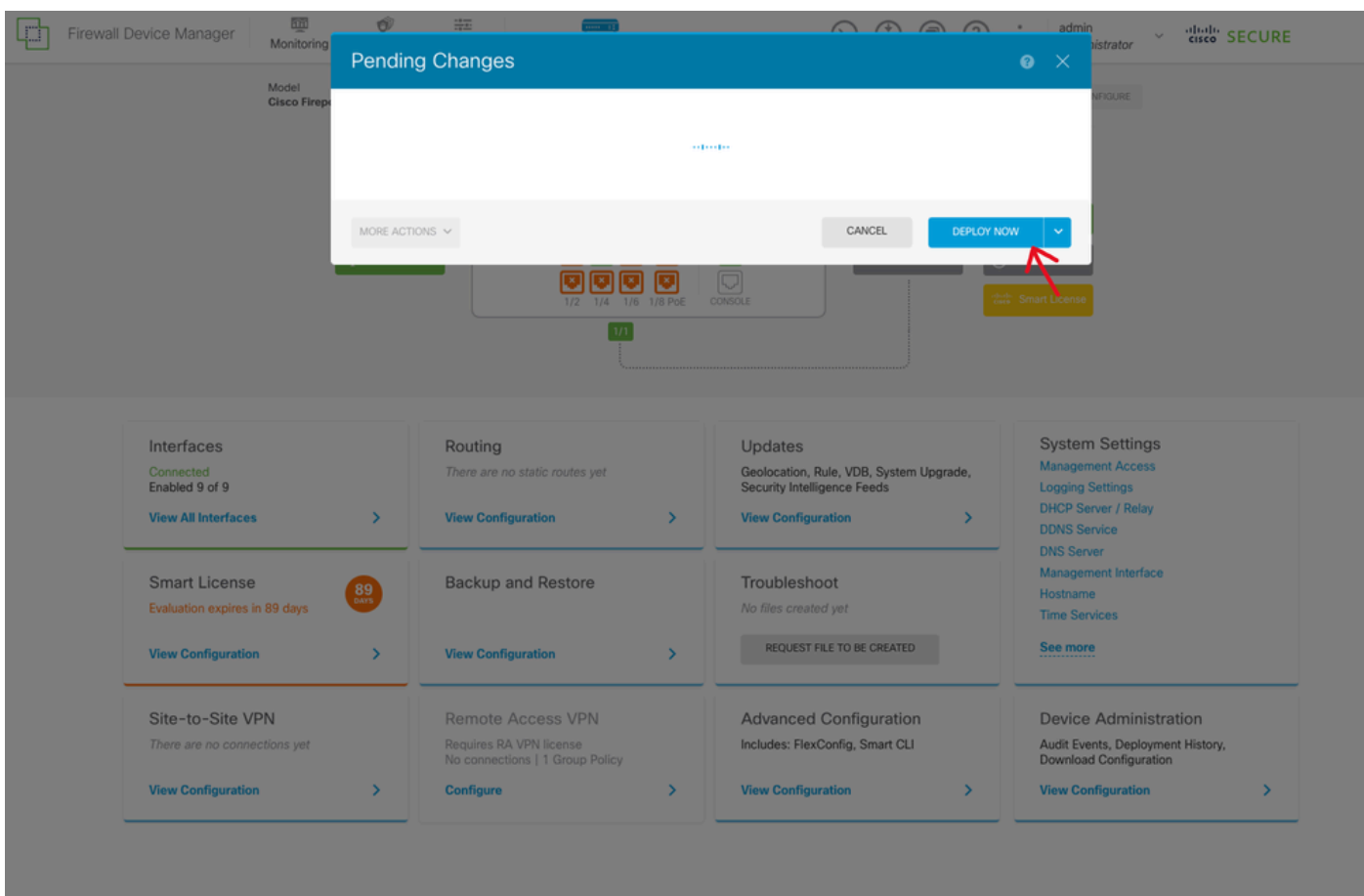
### Step 3: Deploy the Config Change

- Click on the **Deploy** icon which is indicated with an arrow in the next image.



Deploy icon on FDM GUI

- Then Click on the **Deploy Now** tab.



#### Step 4: Configuration on Router

- Add the configuration to the router. In this scenario you are configuring on router R1 from Network Diagram. Refer the next image.

```
R1#show run | section router
router ospf 1
  router-id 192.168.0.2
  network 192.168.0.0 0.0.0.255 area 0
```

*Router configuration for OSPF*

#### Step 5: Verify the Configuration on FTD CLI

- Verify with **show run router ospf** command on CLI.

```
router ospf 1
  router-id 192.168.0.1
  network 192.168.0.0 255.255.255.0 area 0
  network 192.168.1.0 255.255.255.0 area 0
  network 192.168.2.0 255.255.255.0 area 0
  network 192.168.3.0 255.255.255.0 area 0
  area 0
  timers throttle lsa 0 5000 5000
  no compatible rfc1583
  default-information originate always metric 1
```

*Verification of Config on FTD CLI*

## Verify

To verify on the config on FTD CLI:

- **show route** — check for OSPF **O** routes being advertised.
- **show ospf neighbour**

To verify the config on Router:

- **show ip route** — check for OSPF **O** routes being advertised.

- **show ip ospf neighbor**