Configure static routes with Firewall Management Center (FMC)

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Introduction

This document describes the process of how to deploy static routes in Secure Firewall Threat Defense through Firewall Management Center.

Prerequisites

Requirements

Cisco recommends having knowledge of these topics:

- Firewall Management Center (FMC)
- Secure Firewall Threat Defense (FTD)
- Network routes foundamentals.

Components Used

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

- Firewall Management Center for VMWare v7.3
- Cisco Secure Firewall Threat Defense for VMWare v7.3

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

This procedure is supported on appliances:

- Firewall Management Center On-Prem
- Firewall Management Center for VMWare
- cdFMC
- Cisco Secure Firewall 1000 series appliances
- Cisco Secure Firewall 2100 Series appliances
- Cisco Secure Firewall 3100 series appliances
- Cisco Secure Firewall 4100 series appliances
- Cisco Secure Firewall 4200 series appliances
- Cisco Secure Firewall 9300 appliance
- Cisco Secure Firewall Threat Defense for VMWare

Configure

Configurations

Step 1. In the FMC GUI, Navigate to Devices > Device Managment.

Step 2. Identify the FTD that is going to be configured and click the pencil icon in order to edit the current configuration of the FTD.

Firewall Management Center Overview Analysis	Policies Devices Obje	cts Integra	lion		Deploy 🔍 🚭 🐇	🗘 🔞 admin 🔹 👶	SECURE
View By: Group						Deployment	History
All (1) • Error (0) • Warning (0) • Offline (0) • Normal (1)	 Deployment Pending (0) 	Upgrade (0)	 Snort 3 (1) 		٩	K Search Device	Add 💌
Collapse All							
Name	Model	Version	Chassis	Licenses	Access Control Policy	Auto RollBack	
Ungrouped (1)							
172.16.0.41 Snort 3 172.16.0.41 - Routed	FTDv for VMware	7.3.0	N/A	Essentials, IPS (2 more)	recreates_policy	49	1

Step 2. Click over the Routing tab.

Firewall Management Center Devices / Secure Firewall Interfaces	Overview Analysis	Policies	Devices Objects	Integration		Deploy Q 🧯	🕈 🔯 admin 🕶	enco SECURE
172.16.0.41 Cisco Firepower Threat Defense for VMware Device Routing Interfaces Inline Set	ts DHCP VTEP							Cancel
						Q. Search by name	Sync Device Add	Interfaces *
Interface	Logical Name	Туре	Security Zones	MAC Address (Active/Standby)	IP Address	Path Monitoring	Virtual Router	
Diagnostic0/0	diagnostic	Physical				Disabled	Global	/
GigabitEthernet0/0	inside	Physical	inside		2.2.2.1/24(Static)	Disabled	Global	/
GigabitEthernet0/1	outside	Physical	outside		172.16.0.60/24(Static)	Disabled	Global	/
GigabitEthernet0/2		Physical				Disabled		/
GigabitEthernet0/3		Physical				Disabled		/
GigabitEthernet0/4		Physical				Disabled		/
GigabitEthernet0/5		Physical				Disabled		/
GigabitEthernet0/6		Physical				Disabled		/
					Displaying 1-8 of 8	8 interfaces I< < Page 1	Jo	n > >i ¢

Step 3. At the left menu select Static Route

Firewall Managemen Devices / Secure Firewall Rou	t Center Overview	Analysis Policies	Devices Objects Integration			Deploy	२. 💕 🌣 🎯 admin 🕶	ence SECURE
172.16.0.41 Cisco Firepower Threat Defense for	VMware							ve Cancel
Device Routing Interface	es Inline Sets DHCP	VTEP						
Manage Virtual Routers							+	- Add Route
Global 🔻	Network *	Interface	Leaked from Virtual Router	Gateway	Tunneled	Metric	Tracked	
Virtual Router Properties	▼ IPv4 Routes							
ECMP								
BFD	▼ IPv6 Routes							
OSPF 2								
FIGRP								
RIP								
Policy Based Routing								
∼ BGP								
IPv4								
IPv6								
V Multicast Routing								
IGMP								
PIM								
Multicast Routes								
Multicast Boundary Filter								
General Settings					No data to dis	blay I< < Page 1	of 1	>>> c
BGP								

Step 4. click the (+) Add route option.

Firewall Management Devices / Secure Firewall Rout	t Center Overview	Analysis Policies Devic	es Objects Integration			Deploy C	रे 🗳 🌣 🕲 ad	min • dude SECURE
172.16.0.41 Cisco Firepower Threat Defense for V Device Routing Interface:	/Mware s Inline Sets DHCP \	/TEP						Save Cancel
Manage Virtual Routers								+ Add Route
Global 👻	Network +	Interface	Leaked from Virtual Router	Gateway	Tunneled	Metric	Tracked	
Virtual Router Properties	▼ IPv4 Routes							
ECMP								
BFD	▼ IPv6 Routes							
OSPF								
OSPFV3								
RIP								
Policy Based Routing								
∨ BGP								
IPv4								
IPv6								
Static Route								
V Multicast Routing								
PIM								
Multicast Routes								
Multicast Boundary Filter								
General Settings					No data to disr	lav IC C Page 1		
RGP					NO GALA LO GISE	ual 12 2 1 alla		

Step 5. Under the Static Route Configuration section, enter the required information in the Type, Interface, Available Network, Gateway, and Metric fields (as well as Tunneled and Route tracking if needed).

Type: Click IPv4or IPv6 depending on the type of static route that you are adding.

Interface: Choose the Interface to which this static route applies.

Available Network: In the **Available Network** list, choose the destination network. To define a default route, create an object with the address 0.0.0.0/0 and select it here.

Gateway: In the Gateway or IPv6 Gateway field, enter or choose the gateway router which is the next hop for this route. You can provide an IP address or a Networks/Hosts object.

Metric: In the **Metric**field, enter the number of hops to the destination network. Valid values range from 1 to 255; the default value is 1.

Tunneled: (Optional) For a default route, click the **Tunneled** checkbox to define a separate default route for VPN traffic

Route tracking: (IPv4 static route only) To monitor route availability, enter or choose the name of an SLA (service level agreement) Monitor object that defines the monitoring policy, in the **Route Tracking** field.

Firewall Management Devices / Secure Firewall Routi	t Center Overview	Analysis Policies	Devices Objects Integration	Deploy Q 🚱 🌣 🔕 admin v 👘
172.16.0.41 Cisco Firepower Threat Defense for V Device Routing Interfaces	/Mware s Inline Sets DHCP	VTEP	Add Static Route Configuration	Save Carcel
Device Routing Interfaces Manage Virtual Routers Global Virtual Router Properties ECMP BFD OSPF OSPF OSPF EGRP RIP Policy Based Routing VBP IPv4 IPv6 Static Route VMulticast Routing IGMP PM Multicast Routes Multicast Routes Multicast Routes Multicast Routes	Network 4 Vetwork 4 Vetwork 5 Vetwork 7 Vetwork 7	Interface	Type: ● IPv4 ● IPv6 Interface* outside • (Interface starting with this icon @signifies it is available for route leak) Available Network C* + Available Network C* + Selected Network 10.203.18.100 0.203.18.100 10.203.18.101 10.203.18.104 128.231.210.0-26 128.231.210.0-26 128.231.210.0-26 128.231.210.0-26 128.231.210.0-26 128.231.210.0-26 128.231.210.0-26 1 128.231.210.0-26 128.231.210.0-26 1 128.231.210.0-26 1 1 10.203.18.100 • + Metric: 1 • 1 • • 1 • • 1 • • 1 • • 1 • • 1 • • 1 • • 1 • • 1 • • 1 • • 1 • • 1 • <	+ Add Route
General Settings BGP			Cancel OK	ata to display IC I > > C



Tip: Available Network , Gateway and Route traffic fields requires the use of network objects, if the objects are not created yet , please click over the (+) sign at the right of each filed in order to create a new network object.

Step 6. Click on OK

Step 7. Save the configuration and validate the new static route it is showing as expected.

Firewall Management Devices / Secure Firewall Routin	Center Overview	Analysis Policies Devic	es Objects Integration			Deploy	् 🔮 🌣 🞯 admin •	cisco SECURE
172.16.0.41						٧	ou have unsaved changes Sav	ve Cancel
Cisco Firepower Threat Defense for VM	Mware							
Device Routing Interfaces	Inline Sets DHCP V	/TEP						
Manage Virtual Routers							+	Add Route
Global 🔻	Network +	Interface	Leaked from Virtual Router	Gateway	Tunneled	Metric	Tracked	
Virtual Router Properties	▼ IPv4 Routes							
ECMP	10.203.18.0	outside	Global	10.203.18.100	false	1		11
BFD	► IPv6 Routes							
OSPF C								
EIGRP								
RIP								
Policy Based Routing								
∼ BGP								
IPv4								
IPv6								
Static Route								
 Multicast Houting IOMD 								
PIM								
Multicast Routes								
Multicast Boundary Filter								
General Settings					Displaying 1-1 of 1 p	ner 1/ / Page 1	of 1	
BGP					prophaying 1=1 of 1 h	owa is is rage i	011	/ // 6

Step 7. Navigate to **Deploy** and **checkbox** the selected FTD in **Step 2**, then click over the blue deploy icon to deploy the new configuration.

Firewall Management Devices / Secure Firewall Routin	Center Overview	Analysis Policies Device	es Objects Integration				🔮 🌣 🚳 admin 🔻	dude SECUR	RE
172.16.0.41 Cisco Firepower Threat Defense for VI Device Routing Interfaces	Mware Inline Sets DHCP V	TEP			_	Q 772.16.0.41	Advanced Deploy	Deploy 100	el
Manage Virtual Routers									
Global 👻	Network +	Interface	Leaked from Virtual Router	Gateway	Tunnel				
Virtual Router Properties	▼ IPv4 Routes								
ECMP	10.203.18.0	outside	Global	10.203.18.100	false			1	
OSPE	► IPv6 Routes								
OSPFv3						1 selected 💿 1 pending		0	
EIGRP									
RIP									
Policy Based Routing									
∼ BGP									
IPv4									
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Static Route									
 Multicast Routing 									
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run Multicast Doutes									
Multicast Roundary Filter									
General Settings						Displaying 1-1 of 1 mws. I/ / Page 1	of 1	2.21.0	
BGP						and a second sec	011		I.

Step 8. Validate the deployment is showing as completed.

Firewall Management Devices / Secure Firewall Routi	Center Overview	Analysis Policies Device	es Objects Integration			Deploy Q	🧬 🔅 🔞 admin 🕶 🔤
172.16.0.41 Cisco Firepower Threat Defense for V Device Routing Interfaces	Mware Inline Sets DHCP V	TEP				Q. 172.16.0.41	Advanced Deploy Deploy All cel Completed
Manage Virtual Routers							
Global 💌	Network +	Interface	Leaked from Virtual Router	Gateway	Tunnel		
Virtual Router Properties	▼ IPv4 Routes						
ECMP	10.203.18.0	outside	Global	10.203.18.100	false		
OSPF	▼ IPv6 Routes						
OSPFv3						V I succeeded	B +2
EIGRP							
RIP							
Policy Based Routing							
IPv4							
IPv6							
Static Route							
✓ Multicast Routing							
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PIM Multiment Deuten							
Multicast Boundary Filter							
General Settings							
non						Displaying 1-1 of 1 rows IC C Page 1	of 1 > >> C

Verify

1. Log using SSH, Telnet or console to the previusly deployed FTD.

2. Run command show route and show running-config route

3. Validate the FTD routing table has now the deployed static route with the S flag and that it is also showing in the running configuration.

> show r	route
Codes: L D N E ii i S Gateway	L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2 E1 - OSPF external type 1, E2 - OSPF external type 2, V - VPN i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2 ia - IS-IS inter area, * - candidate default, U - per-user static route b - ODR, P - periodic downloaded static route, + - replicated route SI - Static InterVRF, BI - BGP InterVRF of last resort is not set
C S C L	2.2.2.0 255.255.255.0 is directly connected, inside 2.2.2.1 255.255.255.255 is directly connected, inside 10.203.18.0 255.255.255.0 [1/0] via 10.203.18.100, outside 172.16.0.0 255.255.255.0 is directly connected, outside 172.16.0.60 255.255.255.255 is directly connected, outside

> show running-config route
route outside 10.203.18.0 255.255.255.0 10.203.18.100 1
>