



Configuring DFA Features

This chapter contains the following topics:

- [Prerequisites, page 1](#)
- [Guidelines and Limitations, page 1](#)
- [Enabling Cisco Dynamic Fabric Automation , page 2](#)
- [Adding an Anycast Gateway MAC Address, page 2](#)
- [Adding the Forwarding Mode, page 3](#)
- [Verifying the DFA Configuration, page 3](#)
- [Feature History for DFA, page 4](#)

Prerequisites

Configuring Cisco DFA for the Cisco Nexus 1000V has the following prerequisites:

- You have installed and configured the Cisco Nexus 1000V for VMware vSphere software using the *Cisco Nexus 1000V Installation and Upgrade Guide*.
- Ensure that the Virtual Supervisor Module (VSM) has an active SVS connection.
- Ensure that the VSM and Virtual Ethernet Module (VEM) connectivity is functioning.
- You have added hosts to the Cisco Nexus 1000V.
- You have enabled the segmentation feature on the Cisco Nexus 1000V.

For more information on how to install and configure the Cisco Nexus 1000V, see the related documentation available at http://www.cisco.com/en/US/partner/products/ps9902/tsd_products_support_series_home.html

Guidelines and Limitations

For detailed guidelines and limitations for Cisco DFA, see the *Cisco Dynamic Fabric Automation Solutions Guide*.

Enabling Cisco Dynamic Fabric Automation

You can enable Cisco DFA on the Cisco Nexus 1000V by configuring the fabric forwarding feature. This global configuration enables the DFA specific enhancements.

Before You Begin

- Log in to the CLI in EXEC mode.

Procedure

	Command or Action	Purpose
Step 1	switch # configure terminal	Enters global configuration mode.
Step 2	switch (config) # feature fabric forwarding	Enables the DFA features on the Cisco Nexus 1000V.
Step 3	switch # show running-config fabric forwarding	(Optional) Displays the running configuration for enabling the fabric forwarding feature.
Step 4	switch (config-feature fabric) # copy running-config startup-config	(Optional) Saves the change persistently through reboots and restarts by copying the running configuration to the startup configuration.

Adding an Anycast Gateway MAC Address

You can add the Anycast Gateway MAC address to the global configuration on the Cisco Nexus 1000V.

Before You Begin

- You must enable the fabric forwarding feature.
- Log in to the CLI in EXEC mode.

Procedure

	Command or Action	Purpose
Step 1	switch # configure terminal	Enters global configuration mode.
Step 2	switch (config) # fabric forwarding anycast-gateway-mac <mac-address>	Adds the Anycast Gateway MAC address to the Cisco DFA global configuration on the Cisco Nexus 1000V. Note For information about the REST API for this command, see the <i>Cisco Nexus 1000V REST API Plug-In Configuration Guide</i> .
Step 3	switch # show fabric forwarding	(Optional) Displays the fabric forwarding details for the Anycast Gateway MAC address.

	Command or Action	Purpose
Step 4	switch(config)# copy running-config startup-config	(Optional) Saves the change persistently through reboots and restarts by copying the running configuration to the startup configuration.

Adding the Forwarding Mode

You can add the forwarding mode to the segmentation configuration.

Before You Begin

- You must configure the fabric forwarding feature.
- You must log in to the CLI in EXEC mode.

Procedure

	Command or Action	Purpose
Step 1	switch # configure terminal	Enters global configuration mode.
Step 2	switch (config)# bridge-domain name-string	Creates a bridge domain and associates an identifying name to it.
Step 3	switch (config-bd)# fabric forwarding mode <anycast-gateway> <proxy-gateway>	Adds the forwarding mode to the Cisco Nexus 1000V segmentation configuration. Note For information about the REST API for this command, see the <i>Cisco Nexus 1000V REST API Plug-In Configuration Guide</i> .
Step 4	switch # show fabric forwarding	(Optional) Displays the fabric forwarding configuration on the Cisco Nexus 1000V.
Step 5	switch(config)# copy running-config startup-config	(Optional) Saves the change persistently through reboots and restarts by copying the running configuration to the startup configuration.

Verifying the DFA Configuration

To display the DFA configuration information, use the following commands:

Command	Purpose
show running-config fabric forwarding	Shows the running configuration for the fabric forwarding feature on the Cisco Nexus 1000V. See Example Example 1. show running-config fabric forwarding , on page 4.
show fabric forwarding	Displays the fabric forwarding information for an Anycast Gateway or a Proxy gateway MAC. See Example Example 2. show fabric forwarding , on page 4.

Example 1. show running-config fabric forwarding

This example shows how to display the fabric forwarding feature configuration.

```
switch# show running-config fabric forwarding
version 4.2(1)SV2(2.2)
feature fabric forwarding
fabric forwarding anycast-gateway-mac 0000.1111.2222
```

Example 2. show fabric forwarding

This example shows how to display the fabric forwarding details.

```
switch # show fabric forwarding
version 4.2(1)SV2(2.2)
Gateway mac-address: 0000.1111.2222
```

Feature History for DFA

Feature	Release	Feature information
Dynamic Fabric Automation	4.2(1)SV2(2.2)	This feature was introduced.