

## **Configuring Multicast Extranet**

This chapter describes how to configure Multicast Extranet on Cisco NX-OS switches.

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### Information About Multicast Extranet

In the current NX-OS multicast implementation, multicast traffic can only flow within the same VRF. In the multicast extranet feature, multicast receivers may exist in different VRFs from source in an enterprise network.

With the multicast extranet, the RPF lookup for multicast route in receiver VRF can be done in source VRF, thereby allowing to return a valid RPF interface. This forms a source or RP tree from receiver VRF to source VRF, thus enabling the traffic originated from source VRF to be forwarded to OIFs in receiver VRF.

To support RPF selection in a different VRF, use the **ip multicast rpf select vrf** command.

## **Guidelines and Limitations for Multicast Extranet**

Multicast Extranet has the following guidelines and limitations:

- The source and RP should be in the same VRF.
- Multicast NAT and multicast extranet should not coexist for the same group on the same box.
- Auto RP is not supported on multicast extranet.
- The number of multicast routes and VRFs required determine the memory consumption by multicast.
- Multicast VPN (MVPN) extranet is not supported on multicast extranet.
- The RPF lookup will be performed on the VRF specified by the **ip multicast rpf select vrf** command. Fallback mode is not supported.
- For ASM multicast group translation in the fast-pass mode, the static OIF for untranslated groups must be configured on IGMPv2 interface. Source specific static OIF configuration (IGMPv3) is not supported.

# **Configuring Multicast Extranet**

#### Before you begin

Before you begin, ensure that the PIM is enabled.

#### **Procedure**

	Command or Action	Purpose
Step 1	configure terminal	Enters configuration mode.
	Example:	
	<pre>switch# configure terminal switch(config)#</pre>	
Step 2	ip multicast rpf select vrf src-vrf-name group-list group-range	Supports RPF selection in a different VRF. To disable the support, use the <b>no</b> form of this
	Example:	command.
	switch(config)# ip multicast rpf select vrf red group-list 224.1.1.0/24	<b>vrf</b> <i>src-vrf-name</i> is the source VRF name. The name can be a maximum of 32 alphanumeric characters and is case sensitive.
		<b>group-list</b> <i>group-range</i> is the group range for the RPF select. The format is A.B.C.D/LEN with a maximum length of 32.
Step 3	(Optional) show ip mroute	Shows the running-configuration information for IPv4 multicast routes.
	Example:	
	switch(config)# show ip mroute	
Step 4	(Optional) copy running-config startup-config	Saves configuration changes.
	<pre>Example: switch(config)# copy running-config startup-config</pre>	

# **Verifying the Multicast Extranet Configuration**

To display the multicast extranet configuration information, perform one of the following tasks:

#### Table 1:

Command	Purpose
show ip mroute	Displays the running-configuration information for IPv4 multicast routes.

This example shows how to display information about running-configuration for IPv4 multicast routes:

```
switch(config)# show ip mroute
IP Multicast Routing Table for VRF "default"

(*, 225.1.1.207/32), uptime: 00:13:33, ip pim
Incoming interface: Vlan147, RPF nbr: 147.147.147.2, uptime: 00:13:33
Outgoing interface list: (count: 0)

Extranet receiver in vrf blue:
(*, 225.1.1.207/32) OIF count: 1

(40.1.1.2/32, 225.1.1.207/32), uptime: 00:00:06, mrib ip pim
Incoming interface: Vlan147, RPF nbr: 147.147.147.2, uptime: 00:00:06
Outgoing interface list: (count: 0)

Extranet receiver in vrf blue:
(40.1.1.2/32, 225.1.1.207/32) OIF count: 1

switch(config)#
```

For detailed information about the fields in the output from these commands, see the Cisco Nexus 3000 Series Multicast Routing Command Reference

### **Related Documents**

Related Topic	Document Title
CLI commands	Cisco Nexus 3000 Series Multicast Routing Command Reference

### **Standards**

Standards	Tide
No new or modified standards are supported by this feature, and support for existing standards has not been modified by this feature.	_

Standards