



## Configuring Multicast Extranet

---

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

This chapter includes the following sections:

- [Information About Multicast Extranet, page 7-1](#)
- [Guidelines and Limitations for Multicast Extranet, page 7-1](#)
- [Configuring Multicast Extranet, page 7-2](#)
- [Verifying the Multicast Extranet Configuration, page 7-2](#)

### 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, ensure that the PIM is enabled.

### SUMMARY STEPS

1. **configure terminal**
2. **ip multicast rpf select vrf *src-vrf-name* group-list *group-range***
3. (Optional) **show ip mroute**
4. (Optional) **copy running-config startup-config**

### DETAILED STEPS

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

## Verifying the Multicast Extranet Configuration

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

Command	Purpose
<code>show ip mroute</code>	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 Command Reference*.

## Related Documents

Related Topic	Document Title
CLI commands	<i>Cisco Nexus 3000 Series Command Reference</i> ,

## Standards

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

