



VXLAN Commands

This section describes the commands used to configure VXLAN.

- [host-reachability protocol static](#), on page 2
- [hw-module profile cef vxlan ipv6-tnl-scale](#) , on page 3
- [interface nve](#), on page 4
- [member vni](#), on page 5
- [overlay-encapsulation](#), on page 6
- [peer-ip lookup disable](#), on page 7
- [show nve interface](#), on page 8
- [show nve vni](#), on page 9
- [source-interface loopback](#), on page 10

host-reachability protocol static

To configure the static control protocol for VXLAN tunnel endpoint reachability, use the **host-reachability protocol static** command in NVE interface configuration mode.

This command has no keywords or arguments.

Command Default	None
------------------------	------

Command Modes	NVE interface configuration
----------------------	-----------------------------

Command History	Release	Modification
	Release 24.2.11	This command was introduced.

Usage Guidelines	No specific guidelines impact the use of this command.
-------------------------	--

Task ID	Task ID	Operation
	interface	read, write
	tunnel	read, write

Example

The following example shows control protocol configuration for VXLAN tunnel endpoint reachability.

```
Router(config)# interface nve1
Router(config-if)# member vni 2
Router(config-nve-vni)# vrf vrf1
Router(config-nve-vni)# host-reachability protocol protocol static
Router(config-nve-vni)# commit
```

hw-module profile cef vxlan ipv6-tnl-scale

To increase the VXLAN static routes, use the **hw-module profile cef vxlan ipv6-tnl-scale** command in the XR Config mode.

This command has no keywords or arguments.

Command Default	None	
Command Modes	XR Config	
Command History	Release	Modification
	Release 24.2.11	This command was introduced.
Usage Guidelines	VXLAN supports up to 160000 static routes by default. However, you can increase the scale value up to one million VXLAN static routes for IPv6 tunnel remote nexthop using the hw-module profile cef vxlan ipv6-tnl-scale command.	
Task ID	Task ID	Operations
	cef	read, write

Example

The following example shows how to increase the scale value of VXLAN static routes up to one million:

```
Router# configuration
Router(config)# hw-module profile cef vxlan ipv6-tnl-scale
Router(config)# commit
```

interface nve

To create a network virtualization endpoint (NVE) interface and enter the NVE interface configuration mode, use the **interface nve** command in XR Config mode. To remove the NVE interface, use the **no** form of this command.

```
interface nve nve-id
```

Syntax Description	<i>nve-id</i> The NVE interface ID. It can take values from 1 to 65535.
---------------------------	---

Command Default	None
------------------------	------

Command Modes	XR Config
----------------------	-----------

Command History	Release	Modification
	Release 24.2.11	This command was introduced.

Usage Guidelines	No specific guidelines impact the use of this command.
-------------------------	--

Task ID	Task ID	Operation
	interface	read, write

Example

The following example shows how to create an NVE interface and enter the NVE interface configuration mode.

```
Router(config)# interface nve 1  
Router(config-if)#
```

member vni

To map a VXLAN to a network virtualization endpoint (NVE) interface, use the **member vni** command in the XR Config mode. To remove the VXLAN from the bridge domain, use the **no** form of this command.

member vni *number*

Syntax Description	vni	The member virtual network identifier (VNI).
	<i>number</i>	The ID of the VXLAN to be mapped to the NVE. The valid values are from 1 to 16777215.

Command Default None

Command Modes Bridge-domain configuration

Command History	Release	Modification
	Release 24.2.11	This command was introduced.

Usage Guidelines No specific guidelines impact the use of this command.

Task ID	Task ID	Operation
	interface	read, write
	tunnel	read, write

Example

The following example shows the VXLAN with VNI "2" associated with the NVE "1".

```
Router(config)# interface nve 1
Router(config-if)# member vni 2
```

overlay-encapsulation

To define the encapsulation type for Network Virtualization Endpoint (NVE) interface, use the **overlay-encapsulation** command in NVE interface configuration mode.

overlay-encapsulation vxlan

Syntax Description	vxlan Sets VXLAN as an overlay encapsulation type for NVE interface.
---------------------------	---

Command Default	VXLAN
------------------------	-------

Command Modes	NVE interface configuration
----------------------	-----------------------------

Command History	Release	Modification
	Release 24.2.11	This command was introduced.

Usage Guidelines	No specific guidelines impact the use of this command.
-------------------------	--

Task ID	Task ID	Operation
		interface
	tunnel	read, write

Example

The following example shows an NVE interface configured for VXLAN encapsulation.

```
Router# configure
Router(config)# interface nve1
Router(config-if)# overlay-encapsulation vxlan
Router(config-nve-encap-vxlan)# commit
```

peer-ip lookup disable

To disable lookup of peer IP address to accept packets from unknown peers, use the **peer-ip lookup disable** command in NVE interface configuration mode.

peer-ip lookup disable

This command has no keywords or arguments.

Command Default

None

Command Modes

NVE interface configuration

Command History

Release	Modification
Release 24.2.11	This command was introduced.

Usage Guidelines

No specific guidelines impact the use of this command.

Task ID

Task ID	Operation
interface	read, write
tunnel	read, write

Example

The following example shows how to disable lookup of peer-ip to accept packets from unknown peers.

```
Router# configure
Router(config)# interface nve1
Router(config-if)# overlay-encapsulation vxlan
Router(config-nve-encap-vxlan)# peer-ip lookup disable
Router(config-nve-encap-vxlan)# commit
```

show nve interface

To display the network virtualization endpoint (NVE) interface information, use the **show nve interface** command in XR EXEC mode.

```
show nve interface [ detail | nve nve-id ]
```

Syntax Description	detail	Displays detailed information about NVE interfaces.	
	nve nve-id	Displays information only about the specified NVE interface.	
Command Default	None		
Command Modes	XR EXEC		
Command History	Release	Modification	
	Release 24.2.11	This command was introduced.	
Usage Guidelines	No specific guidelines impact the use of this command.		
Task ID	Task ID	Operation	
	interface	read	

Example

This is the sample output of the **show interface nve** command anycast gateway parameters.

```
Router# show interface nve100 detail
Interface: nve100 State: Up Encapsulation: VxLAN
  Source Interface: Loopback1 (primary: 10.0.0.1)
  Source Interface State: Up
  NVE Flags: 0x1, Admin State: Up, Interface Handle 0xba0
  UDP Port: 4789
  Anycast Source Interface: Loopback100 (primary: 100.1.1.1)
```


show nve vni

To display list of all VNIs that are associated with various NVE interfaces and the associated multicast IP address that is used for multi-destination frames, use the **show nve vni** command in XR EXEC mode.

```
show nve vni [ vni_number | detail | interface nve nve-id ]
```

Syntax Description	<i>vni_number</i>	Displays output for the specific VNI.
	detail	Displays more detailed output.
	interface nve <i>nve-id</i>	Displays details for the specific NVE interface.
Command Default	None	
Command Modes	XR EXEC	
Command History	Release	Modification
	Release 24.2.11	This command was introduced.
Usage Guidelines	No specific guidelines impact the use of this command.	
Task ID	Task ID	Operation
	tunnel	read

Example

The following shows an example output of this show command:

```
Router# show nve vni
Interface VNI          MCAST      VNI State   Mode
nve3     1002          0.0.0.0    Up          L3 Control (Static)
nve1     17001         0.0.0.0    Up          L3 Control (Static)
nve2     17002         0.0.0.0    Up          L3 Control (Static)
nve3     17003         0.0.0.0    Up          L3 Control (Static)
```

source-interface loopback

To specify a loopback interface whose IP address should be set as the IP address for the NVE interface, use the **source-interface loopback** command.

source-interface loopback *interface-id*

Syntax Description	loopback	Specifies a loopback interface as providing IP address for the NVE interface.
	<i>interface-id</i>	Specifies the loopback interface ID. It can take values from 0 to 65535.

Command Default None

Command Modes NVE interface configuration

Command History	Release	Modification
	Release 24.2.11	This command was introduced.

Usage Guidelines No specific guidelines impact the use of this command.

Task ID	Task ID	Operation
	tunnel	read, write
	interface	read, write

Example

The following example shows how to configure the IP address of an NVE interface as the IP address of a loopback interface.

```
Router(config)# interface nve 1
Router(config-if)# source-interface loopback 1
```