



## VXLAN Commands

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This section describes the commands used to configure VXLAN.

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# 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.

## host-reachability protocol static

<b>Command Default</b>	None	
<b>Command Modes</b>	NVE interface configuration	
<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	Release 7.11.1	This command was introduced.

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

<b>Task ID</b>	<b>Task ID</b>	<b>Operation</b>
	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)# host-reachability protocol static
Router(config-nve-vni)# commit
```

# interface nve

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

```
interface nve nve-id
```

<b>Syntax Description</b>	<i>nve-id</i> The NVE interface ID. It can take values from 1 to 65535.
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<b>Command Default</b>	None
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<b>Command Modes</b>	Global configuration
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<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	Release 7.11.1	This command was introduced.

<b>Usage Guidelines</b>	No specific guidelines impact the use of this command.
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<b>Task ID</b>	<b>Task ID</b>	<b>Operation</b>
	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 VXLAN to a network virtualization endpoint (NVE) interface, use the **member vni** command in the NVE interface configuration mode. To remove the VXLAN from the interface, use the **no** form of this command.

```
member vni vni-number
```

<b>Syntax Description</b>	<i>vni-number</i> The ID of the VXLAN to be mapped to the NVE. The valid values are from 1 to 16777215.
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<b>Command Default</b>	None
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<b>Command Modes</b>	NVE interface configuration
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<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	Release 7.11.1	This command was introduced.

<b>Usage Guidelines</b>	No specific guidelines impact the use of this command.
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<b>Task ID</b>	<b>Task ID</b>	<b>Operation</b>
	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 vxlan

To define VXLAN as the encapsulation type for Network Virtualization Endpoint (NVE) interface, use the **overlay-encapsulation vxlan** command in NVE interface configuration mode. To remove the configured encapsulation on the NVE interface, use the **no** form of this command.

### overlay-encapsulation vxlan

#### Command Default

None

#### Command Modes

NVE interface configuration

#### Command History

Release	Modification
Release 7.11.1	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 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
```

# 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 ]
```

<b>Syntax Description</b>	<b>detail</b> Displays detailed information about NVE interfaces.				
	<b>nve nve-id</b> Displays information only about the specified NVE interface.				
<b>Command Default</b>	None				
<b>Command Modes</b>	XR EXEC				
<b>Command History</b>	<table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>Release 7.11.1</td> <td>This command was introduced.</td> </tr> </tbody> </table>	Release	Modification	Release 7.11.1	This command was introduced.
Release	Modification				
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<b>Usage Guidelines</b>	No specific guidelines impact the use of this command.				
<b>Task ID</b>	<table border="1"> <thead> <tr> <th>Task ID</th> <th>Operation</th> </tr> </thead> <tbody> <tr> <td>interface</td> <td>read</td> </tr> </tbody> </table>	Task ID	Operation	interface	read
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.
<b>detail</b>		Displays more detailed output.
<b>interface nve</b> <i>nve-id</i>		Displays details for the specific NVE interface.

**Command Default** None

**Command Modes** XR EXEC

Command History	Release	Modification
	Release 7.11.1	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
```

<b>Syntax Description</b>	<b>loopback</b>	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

<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	Release 7.11.1	This command was introduced.

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

<b>Task ID</b>	<b>Task ID</b>	<b>Operation</b>
	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
```



# hw-module profile vxlan explicit-null enable

To enable VXLAN on MPLS with the explicit-null setting, use the **hw-module profile vxlan explicit-null enable** command in global configuration mode. To disable VxLAN on MPLS (explicit-null), use the **no** form of this command.

**hw-module profile vxlan explicit-null enable**

Syntax Description	hw-module profile vxlan	explicit-null
	Specifies the VXLAN profile.	
		Specifies MPLS explicit null labels are configured.

**Command Default** None

**Command Modes** Global configuration

Command History	Release	Modification
	Release 24.1.1	This command was introduced.

**Usage Guidelines** Enabling VXLAN on MPLS with explicit-null consumes TCAM resources on your router and could impact the scale and performance of ACL and LI related features. Evaluate you network requirements before using the **hw-module profile vxlan explicit-null enable** command.

Task ID	Task ID	Operation
	interface	read, write

## Example

The following example shows how to enable VXLAN on MPLS with the explicit-null setting.

```
Router(config)# hw-module profile vxlan explicit-null enable
```

hw-module profile vxlan explicit-null enable