VXLAN Commands

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

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 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*

Syntax Description

nve-id	The NVE interface ID. It can take values from 1 to 65535.

Command Default

None

Command Modes

Global 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

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*

Syntax Description

vni-number	The ID of the VXLAN to be mapped to the NVE. The valid values are from 1 to 16777215.

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 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*]

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 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

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

vni_number	Displays output for the specific VNI.
detail	Displays more detailed output.
interface nve *nve-id*	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*

Syntax Description

loopback	Specifies a loopback interface as providing IP address for the NVE interface.
interface-id	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 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, 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	Specifies the VXLAN profile.
explicit-null	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
```