



Cisco Nexus 7000 Series OTV Command Reference

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Preface

- [Preface, page vii](#)

Preface

This preface describes the audience, organization, and conventions of the Book Title. It also provides information on how to obtain related documentation.

This chapter includes the following topics:

Audience

This publication is for experienced network administrators who configure and maintain Cisco NX-OS on Cisco Nexus 7000 Series Platform switches.

Document Conventions



Note

- As part of our constant endeavor to remodel our documents to meet our customers' requirements, we have modified the manner in which we document configuration tasks. As a result of this, you may find a deviation in the style used to describe these tasks, with the newly included sections of the document following the new format.
- The Guidelines and Limitations section contains general guidelines and limitations that are applicable to all the features, and the feature-specific guidelines and limitations that are applicable only to the corresponding feature.

Command descriptions use the following conventions:

Convention	Description
bold	Bold text indicates the commands and keywords that you enter literally as shown.

Convention	Description
<i>Italic</i>	Italic text indicates arguments for which the user supplies the values.
[x]	Square brackets enclose an optional element (keyword or argument).
[x y]	Square brackets enclosing keywords or arguments separated by a vertical bar indicate an optional choice.
{x y}	Braces enclosing keywords or arguments separated by a vertical bar indicate a required choice.
[x {y z}]	Nested set of square brackets or braces indicate optional or required choices within optional or required elements. Braces and a vertical bar within square brackets indicate a required choice within an optional element.
variable	Indicates a variable for which you supply values, in context where italics cannot be used.
string	A nonquoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks.

Examples use the following conventions:

Convention	Description
screen font	Terminal sessions and information the switch displays are in screen font.
boldface screen font	Information you must enter is in boldface screen font.
<i>italic screen font</i>	Arguments for which you supply values are in italic screen font.
<>	Nonprinting characters, such as passwords, are in angle brackets.
[]	Default responses to system prompts are in square brackets.
!, #	An exclamation point (!) or a pound sign (#) at the beginning of a line of code indicates a comment line.

This document uses the following conventions:



Note

Means *reader take note*. Notes contain helpful suggestions or references to material not covered in the manual.

**Caution**

Means *reader be careful*. In this situation, you might do something that could result in equipment damage or loss of data.

Related Documentation

Documentation for Cisco Nexus 7000 Series Switches is available at:

- Configuration Guides
<http://www.cisco.com/c/en/us/support/switches/nexus-7000-series-switches/products-installation-and-configuration-guides-list.html>
- Command Reference Guides
<http://www.cisco.com/c/en/us/support/switches/nexus-7000-series-switches/products-command-reference-list.html>
- Release Notes
<http://www.cisco.com/c/en/us/support/switches/nexus-7000-series-switches/products-release-notes-list.html>
- Install and Upgrade Guides
<http://www.cisco.com/c/en/us/support/switches/nexus-7000-series-switches/products-installation-guides-list.html>
- Licensing Guide
<http://www.cisco.com/c/en/us/support/switches/nexus-7000-series-switches/products-licensing-information-listing.html>

Documentation for Cisco Nexus 7000 Series Switches and Cisco Nexus 2000 Series Fabric Extenders is available at the following URL:

<http://www.cisco.com/c/en/us/support/switches/nexus-2000-series-fabric-extenders/products-installation-and-configuration-guides-list.html>

Documentation Feedback

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, see [What's New in Cisco Product Documentation](#).

To receive new and revised Cisco technical content directly to your desktop, you can subscribe to the [What's New in Cisco Product Documentation RSS feed](#). RSS feeds are a free service.



A Commands

- [authentication \(OTV\), page 2](#)
- [authentication-check \(OTV\), page 3](#)
- [authentication-type \(OTV\), page 4](#)

authentication (OTV)

To configure an authentication keychain string for edge device authentication, use the **authentication** command. To return to the default setting, use the no form of this command.

authentication key-chain *keychain-name*

no authentication key-chain *keychain-name*

Syntax Description

<i>keychain-name</i>	Authentication keychain. The maximum length is from 1 to 16 characters.
----------------------	---

Command Default

None

Command Modes

OTV ISI VPN configuration mode

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

The authentication command is used to assign a password in the authentication of a hello protocol data unit. Only one authentication key chain is applied to an Intermediate System-to-Intermediate System (IS-IS) interface at one time. If you configure a second authentication command, the first is overridden. You can specify authentication for an entire instance of IS-IS instead of at the interface level by using the authentication command.

This command requires a Transport Services license.

Examples

This example shows how to configure an authentication keychain string for edge device authentication:

```
switch# configure terminal
switch(config)# otv-isis default
switch(config-router)# vpn name
switch(config-router-vrf)# authentication key-chain OTVKeys
switch(config-router-vrf)#
```

Related Commands

Command	Description
show otv isis	Displays the IS-IS status and configuration.

authentication-check (OTV)

To enable an authentication check of hello messages between Overlay Transport Virtualization (OTV) edge devices, use the **authentication-check** command. To return to the default setting, use the **no** form of this command.

authentication-check

no authentication-check

Syntax Description This command has no arguments or keywords.

Command Default Enabled

Command Modes OTV ISIS VPN configuration

Command History	Release	Modification
	5.0(3)	This command was introduced.

Usage Guidelines The authentication-check command controls authentication checking on incoming hello protocol data units (PDUs).

This command requires a Transport Services license.

Examples This example shows how to enable authentication of hello messages between OTV edge devices:

```
switch# configure terminal
switch(config)# otv-isis default
switch(config-router)# vpn name
switch(config-router-vrf)# authentication-check
switch(config-router-vrf)#
```

Related Commands

Command	Description
show otv	Displays information about OTV.

authentication-type (OTV)

To configure the Overlay Transport Virtualization (OTV) authentication type, use the **authentication-type** command. To return to the default setting, use the **no** form of this command.

authentication-type {cleartext| md5}

no authentication-type {cleartext| md5}

Syntax Description

cleartext	Specifies the cleartext authentication method.
md5	Specifies Message Digest (MD5) authentication.

Command Default

Enabled

Command Modes

OTV ISIS VPN configuration

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

Use the authentication-type command to configure the authentication type for hello protocol data units (PDUs) on an interface.

This command requires a Transport Services license.

Examples

This example shows how to specify cleartext authentication:

```
switch# configure terminal
switch(config)# otv-isis default
switch(config-router)# vpn name
switch(config-router-vrf)# authentication-type cleartext
switch(config-router-vrf)#
```

This example shows how to specify Message Digest (MD5) authentication:

```
switch# configure terminal
switch(config)# otv-isis default
switch(config-router)# vpn name
switch(config-router-vrf)# authentication-type md5
switch(config-router-vrf)#
```


Related Commands

Command	Description
show otv	Displays information about OTV.



C Commands

- [clear otv arp-nd, page 8](#)
- [clear otv isis adjacency, page 9](#)
- [clear otv isis statistics, page 11](#)
- [clear otv isis traffic, page 13](#)
- [clear otv route, page 15](#)

clear otv arp-nd

To clear log Address Resolution Protocol (ARP) and Neighbor Discovery (ND) packets caching information, use the **clear otv arp-nd** command.

clear otv arp-nd

Syntax Description This command has no arguments or keywords.

Command Default None

Command Modes Global configuration mode

Command History	Release	Modification
	5.0(3)	This command was introduced.

Usage Guidelines

Note IPv6 is not supported in this release.

This command requires a Transport Services license.

Examples This example shows how to clear log ARP/ND caching information:

```
switch(config)# clear otv arp-nd
switch(config)#
```

Related Commands

Command	Description
show otv isis	Displays the IS-IS status and configuration.

clear otv isis adjacency

To clear the Intermediate System-to-Intermediate System (IS-IS) adjacency state, use the clear otv isis adjacency command.

```
clear otv isis adjacency [* vpn {vpn-name| all}| overlay interface vpn {vpn-name| all}| system-id sid vpn {vpn-name| all}]
```

Syntax Description

*	(Optional) Specifies IS-IS adjacencies on all interfaces.
vpn	(Optional) Specifies VPN information.
vpn-name	VPN name. The maximum length is 32 alphanumeric characters.
all	(Optional) Specifies all configured VPNs.
overlay	(Optional) Specifies an overlay interface.
interface	Overlay interface number. The range is from 0 to 65535.
system-id	(Optional) Specifies the hostname or the system ID.
sid	Hostname or system ID in the form of XXXX.XXXX.XXXX.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

This example shows how to clear counters and reset adjacencies with neighbors:

```
switch# clear otv isis adjacency *  
switch#
```

Related Commands

Command	Description
show otv isis	Displays the IS-IS status and configuration.

clear otv isis statistics

To clear Overlay Transport Virtualization (OTV) Intermediate System-to-Intermediate System (IS-IS) protocol statistics, use the **clear otv isis statistics** command.

```
clear otv isis statistics [* vpn {vpn-name| all}| overlay interface vpn {vpn-name| all}]
```

Syntax Description

*	(Optional) Specifies IS-IS adjacencies on all interfaces.
vpn	(Optional) Specifies VPN information.
<i>vpn-name</i>	VPN name. The maximum length is 32 alphanumeric characters.
all	(Optional) Specifies all configured VPNs.
overlay	(Optional) Specifies an overlay interface.
<i>interface</i>	Overlay interface number. The range is from 0 to 65535.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

This example shows how to clear OTV IS-IS protocol statistics:

```
switch# clear otv isis statistics *
switch#
```

Related Commands

Command	Description
show otv isis	Displays the IS-IS status and configuration.

clear otv isis traffic

To clear Overlay Transport Virtualization (OTV) Intermediate System-to-Intermediate System (IS-IS) traffic information, use the clear otv isis traffic command.

```
clear otv isis traffic [* vpn {vpn-name| all}| overlay interface vpn {vpn-name| all}]
```

Syntax Description

*	(Optional) Specifies IS-IS adjacencies on all interfaces.
vpn	(Optional) Specifies VPN information.
<i>vpn-name</i>	VPN name. The maximum length is 32 alphanumeric characters.
all	(Optional) Specifies all configured VPNs.
overlay	(Optional) Specifies an overlay interface.
<i>interface</i>	Overlay interface number. The range is from 0 to 65535.
vpn	(Optional) Specifies VPN information.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

This example shows how to clear OTV IS-IS traffic information:

```
switch# clear otv isis traffic *
switch#
```

Command History

Command	Description
show otv isis	Displays the IS-IS status and configuration.

clear otv route

To clear an Overlay Transport Virtualization (OTV) route or MAC address table, use the clear otv route command.

clear otv route [*vlan-id*] *mac-address*]

Syntax Description

vlan-id	(Optional) VLAN ID. The range is from 1 to 3967 and from 4048 to 4093.
mac-address	(Optional) MAC address.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
5.0(2)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

This example shows how to clear an OTV route:

```
switch# clear otv route
switch#
```

Related Commands

Command	Description
show otv isis	Displays the IS-IS status and configuration.



F Commands

- [feature otv, page 18](#)

feature otv

To enable Overlay Transport Virtualization (OTV), use the **feature otv** command. To return to the default setting, use the **no** form of this command.

feature otv

no feature otv

Syntax Description This command has no arguments or keywords.

Command Default Disabled

Command Modes Global configuration

Command History	Release	Modification
	5.0(3)	This command was introduced.

Usage Guidelines You must use the **feature otv** command to enable the OTV functionality. The device does not display any OTV commands until you enable the feature.

This command requires a Transport Services license.

Examples This example shows how to enable OTV functionality on the device:

```
switch# configure terminal
switch(config)# feature otv
switch(config)#
```

Related Commands

Command	Description
show feature	Displays information about the features enabled on the device.



H Commands

- [hostname dynamic \(OTV\), page 20](#)

hostname dynamic (OTV)

To configure a dynamic hostname exchange for the Intermediate System-to-Intermediate System (IS-IS), use the **hostname dynamic** command. To return to the default setting, use the **no** form of this command.

hostname dynamic

no hostname dynamic

Syntax Description This command has no arguments or keywords.

Command Default On

Command Modes OTV IS-IS VPN configuration mode

Command History	Release	Modification
	5.0(3)	This command was introduced.

Usage Guidelines This command requires a Transport Services license.

Examples This example shows how to configure a dynamic hostname exchange for IS-IS:

```
switch# configure terminal
switch(config)# otv-isis default
switch(config-router)# vpn name
switch(config-router-vrf)# hostname dynamic
switch(config-router-vrf)#
```

Related Commands

Command	Description
show otv isis	Displays the IS-IS status and configuration.



I Commands

- [interface overlay, page 22](#)

interface overlay

To create an overlay interface and to enter the interface-overlay configuration mode, use the **interface overlay** command. To remove the overlay interface, use the **no** form of this command.

interface overlay *interface-number*

no interface overlay *interface-number*

Syntax Description

<i>interface-number</i>	Number that you assign to the overlay interface. The range is from 0 to 65535.
-------------------------	--

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

Use the **feature otv** command to enable the Overlay Transport Virtualization (OTV) feature before you can create an overlay interface or access the interface-overlay configuration mode.

You do not have to remove the configuration before you remove the overlay interface.

This command requires a Transport Services license.

Examples

This example shows how to create an OTV overlay interface:

```
switch(config)# interface overlay 5
switch(config-if-overlay)#
```

Related Commands

Command	Description
show feature	Displays information about the features enabled on the device.
show otv	Displays information about OTV.



L Commands

- [log-adjacency-changes \(OTV\)](#), page 24
- [lsp-gen-interval \(OTV\)](#), page 25
- [lsp-mtu \(OTV\)](#), page 27

log-adjacency-changes (OTV)

To log changes in the adjacency state, use the **log-adjacency-changes** command. To return to the default setting, use the **no** form of this command.

log-adjacency-changes

no log-adjacency-changes

Syntax Description This command has no arguments or keywords.

Command Default On

Command Modes OTV IS-IS VPN configuration mode

Command History	Release	Modification
	5.0(3)	This command was introduced.

Usage Guidelines This command requires a Transport Services license.

Examples This example shows how to configure the log changes in the adjacency state:

```
switch# configure terminal
switch(config)# otv-isis default
switch(config-router)# vpn name
switch(config-router-vrf)# log-adjacency-changes
switch(config-router-vrf)#
```

Related Commands

Command	Description
feature otv	Enables OTV on this device.

lsp-gen-interval (OTV)

To configure a link-state packet (LSP) generation interval, use the **lsp-gen-interval** command. To return to the default setting, use the **no** form of this command.

lsp-gen-interval {*lsp-max-wait*| *lsp-initial-wait*| *lsp-second-wait*}

no lsp-gen-interval {*lsp-max-wait*| *lsp-initial-wait*| *lsp-second-wait*}

Syntax Description

lsp-max-wait	Maximum interval (in seconds) between two consecutive occurrences of an LSP being generated. The range is from 50 to 120000. The default is 8000.
lsp-initial-wait	Initial LSP generation delay (in milliseconds). The range is from 50 to 120000. The default is 50.
lsp-second-wait	Hold time between the first and second LSP generation (in milliseconds). The range is from 50 to 120000. The default is 50.

Command Default

The defaults are as follows:

- lsp-max-wait: 8000
- lsp-initial-wait: 50
- lsp-second-wait: 50

Command Modes

OTV IS-IS VPN configuration mode

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

You can enter the **lsp-gen-interval** command to control the rate of LSP packets being generated, transmitted, and retransmitted.

This command requires a Transport Services license.

Examples

This example shows how to configure an LSP-generation interval:

```
switch# configure terminal
switch(config)# otv-isis default
switch(config-router)# vpn name
```

```
switch(config-router-vrf) # lsp-gen-interval 9000 60 70
switch(config-router-vrf) #
```

Related Commands

Command	Description
feature otv	Enables OTV on this device.

lsp-mtu (OTV)

To configure a link-state packet (LSP) maximum transmission unit (MTU) that is generated by the Cisco NX-OS software, use the **lsp-mtu** command. To return to the default setting, use the no form of this command.

lsp-mtu *bytes*

no lsp-mtu *bytes*

Syntax Description

bytes	Maximum LSP size in bytes. The range is from 128 to 4352.
-------	---

Command Default

1392 bytes

Command Modes

OTV IS-IS VPN configuration mode

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

This example shows how to set the maximum LSP size to 1500 bytes:

```
switch# configure terminal
switch(config)# otv-isis default
switch(config-router)# vpn name
switch(config-router-vrf)# lsp-mtu 1500
switch(config-router-vrf)#
```

Related Commands

Command	Description
feature otv	Enables OTV on this device.



M Commands

- [max-lsp-lifetime \(OTV\)](#), page 30

max-lsp-lifetime (OTV)

To configure the lifetime of maximum link-state packets (LSPs), use the **max-lsp-lifetime** command. To return to the default setting, use the **no** form of this command.

max-lsp-lifetime value

no max-lsp-lifetime value

Syntax Description

value	Maximum LSP lifetime in seconds. The range is from 1 to 65535.
-------	--

Command Default

1200 seconds

Command Modes

OTV IS-IS VPN configuration mode

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

The maximum LSP lifetime must be greater than the LSP refresh interval.

This command requires a Transport Services license.

Examples

This example shows how to set the maximum time that the LSPs linkstate packets persist to 11,000 seconds:

```
switch# configure terminal
switch(config)# otv-isis default
switch(config-router)# vpn name
switch(config-router-vrf)# max-lsp-lifetime 1100
switch(config-router-vrf)#
```

Related Commands

Command	Description
feature otv	Enables OTV on this device.



N Commands

- [net \(OTV\), page 32](#)

net (OTV)

To configure an Intermediate System-to-Intermediate System (IS-IS) network entity title (NET) for the routing process, use the **net** command. To return to the default setting, use the **no** form of this command.

net *net*

no net *net*

Syntax Description

<i>net</i>	NET network services access point (NSAP) name or address for the IS-IS routing process.
------------	---

Command Default

Backplane MAC address

Command Modes

OTV IS-IS VPN configuration mode

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

If you explicitly configure the NET on two different devices that belong to the same overlay, ensure that the area addresses match. If these addresses do not match, the adjacency does not come up.

This command requires a Transport Services license.

Examples

This example shows how to configure a router with a NET that consists of the system ID 0000.0c11.1111.00 and area address 47.0004.004d.0001:

```
switch# configure terminal
switch(config)# otv-isis default
switch(config-router)# vpn name
switch(config-router-vrf)# net 47.0004.004d.0001.0001.0c11.1111.00
switch(config-router-vrf)#
```

Related Commands

Command	Description
feature OTV	Enables OTV on this device.



R Commands

- [redistribute filter route-map, page 34](#)
- [restart otv-isis, page 35](#)
- [show bfd neighbors, page 36](#)

redistribute filter route-map

To redistribute filter route-map information from another routing protocol, use the **redistribute filter route-map** command. To return to the default setting, use the **no** form of this command.

redistribute filter route-map *route-map-name*

no redistribute filter route-map *route-map-name*

Syntax Description

<i>route-map-name</i>	(Optional) Route map name. The name can be any case-sensitive, alphanumeric string up to 63 characters.
-----------------------	---

Command Default

None

Command Modes

OTV IS-IS VPN configuration mode

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

The match mac-list and match vlan functionalities are used in Overlay Transport Virtualization (OTV). This command requires a Transport Services license.

Examples

This example shows how to redistribute filter route map information from another routing protocol:

```
switch# configure terminal
switch(config)# otv-isis default
switch(config-router)# vpn name
switch(config-router-vrf)# redistribute filter route-map active
switch(config-router-vrf)#
```

Related Commands

Command	Description
show feature	Displays information about the features enabled on the device.

restart otv-isis

To restart the Overlay Transport Virtualization (OTV) Intermediate System-to-Intermediate System (ISIS) protocol, use the restart otv-isis command.

restart otv-isis [default]

Syntax Description

<i>default</i>	(Optional) Name of the IS-IS process.
----------------	---------------------------------------

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

This example shows how to restart the OTV IS-IS process:

```
switch# configure terminal
switch(config)# restart otv-isis default
switch(config)#
```

Related Commands

Command	Description
show feature	Displays information about the features enabled on the device.

show bfd neighbors

To display a line-by-line listing of existing Bidirectional Forwarding Detection (BFD) adjacencies, use the **show bfd neighbors** command.

show bfd neighbors

Syntax Description This command has no arguments or keywords.

Command Default None

Command Modes Global configuration mode

Command History	Release	Modification
	6.2(2)	This command was introduced.

Usage Guidelines This command requires a Transport Services license.

Examples This example shows how to display a line-by-line listing of existing BFD adjacencies:

```
switch# configure terminal
switch(config)# otv site-vlan 10
switch(config-site-vlan)# show bfd neighbors
switch(config-site-vlan)#
```

This example shows how to configure fast failure detection in an OTV site VLAN. The output of the show commands displays that the BFD adjacency is “Up” between switches in the same site and the BFD configuration is applied on OTV switches in the same site:

```
switch# configure terminal
switch(config)# otv site-vlan vlan-id
switch(config)# otv isis bfd
switch(config)# show bfd neighbors
OurAddr NeighAddr LD/RD RH/RS Holdown(mult) State Int Vrf
172.1.1.1 172.1.1.2 1107296329/1107296399 Up 5462(3) Up Vlan2500 default
switch(config)# show otv isis site
OTV-ISIS site-information for: default
Level Metric CSNP Next CSNP Hello Multi Next IIH
1 16777214 10 Inactive 3 20 00:00:02
Level Adjs AdjsUp Pri Circuit ID Since
1 1 1 64 All-E11.01 00:02:30
OTV-IS-IS site adjacency local database:
SystemID: 0024.986c.11c2, IS-Type: L1, Level Metric: 16777214
SNPA State Last Chg Next IIH Hold Interval Multi Fwd-state Site-ID
Version OurBFD NeighBFD
0024.f71e.9742 UP 00:02:30 00:00:02 00:01:02 00:02:30 20 DOWN 0000.0000.0001 3
ON ON
OTV-IS-IS Site Group Information (as in OTV SDB):
```



```
SystemID: 0024.986c.11c2, Interface: site-vlan, VLAN Id: 2500, VLAN: Up
Overlay State Next IIH Int Multi
Overlay2 Down 00:00:02 3 20
Overlay Active SG Last CSNP CSNP Int Next CSNP
Overlay2 224.1.1.2 ffff.ffff.ffff.ff-ff 16:59:59 Inactive
Neighbor SystemID: 0024.f71e.9742
IPv4 site groups: 224.1.1.2
```

Related Commands

Command	Description
show feature	Displays information about the features enabled on the device.



Show Commands

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show forwarding distribution otv multicast route

To display information about the Overlay Transport Virtualization (OTV) multicast route Forwarding Information Base (FIB), use the **show forwarding distribution otv multicast route** command.

show forwarding distribution otv multicast route {vlan| *vlan-id*}

Syntax Description

vlan	(Optional) Specifies VLAN information.
<i>vlan-id</i>	VLAN ID. The range is from 1 to 3967 and from 4048 to 4093.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

This example shows how to display FIB OTV multicast route information:

```
switch# show forwarding distribution otv multicast route
Vlan: 311, Group: 224.0.0.0/4, Source: 0.0.0.0
  OTV Outgoing Interface List Index: 65535
  Reference Count: 1
  Number of Outgoing Interfaces: 0
Vlan: 311, Group: 224.0.0.0/24, Source: 0.0.0.0
  OTV Outgoing Interface List Index: 1
  Reference Count: 1
  Number of Outgoing Interfaces: 1
    External interface: Ethernet1/6
    Delivery group IP: 239.1.1.1
    Delivery source IP: 102.1.1.1
Vlan: 311, Group: 238.1.1.1, Source: 6.2.2.2
  OTV Outgoing Interface List Index: 2
  Reference Count: 1
  Number of Outgoing Interfaces: 1
    External interface: Ethernet1/6
    Delivery group IP: 232.1.1.0
    Delivery source IP: 102.1.1.1
```

Related Commands

Command	Description
show otv mroute	Displays information about the multicast MAC route.

show forwarding otv

To display information about overlay Transport Virtualization (OTV) forwarding on the interface, use the **show forwarding otv** command.

```
show forwarding otv [ethernet slot/port| loopback number| port-channel channel-number| vlan [vlan-id|
vlan-interface-number]]
```

Syntax Description

ethernet	(Optional) Specifies an Ethernet interface.
<i>slot/port</i>	Module and port number.
loopback	(Optional) Specifies a loopback interface.
<i>number</i>	Loopback number. The range is from 0 to 1023.
port-channel	(Optional) Specifies a port-channel interface.
<i>channel-number</i>	Port-channel number. The range is from 1 to 4096.
vlan	Specifies VLAN information.
<i>vlan-id</i>	VLAN ID. The range is from 1 to 3967 and from 4048 to 4093.
<i>vlan-interface-number</i>	VLAN interface number. The range is from 1 to 3967 and from 4048 to 4093.

Command Default None

Command Modes Global configuration

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines This command requires a Transport Services license.

Examples

This example shows how to display information about OTV VLAN forwarding:

```
switch# show forwarding otv vlan 10
```

Related Commands

Command	Description
show otv	Displays information about OTV.

show forwarding otv multicast outgoing-interface-list

To display information about the Overlay Transport Virtualization (OTV) multicast outgoing list, use the **show forwarding otv multicast outgoing-interface-list** command.

show forwarding otv multicast outgoing-interface-list

Syntax Description This command has no arguments or keywords.

Command Default None

Command Modes Global configuration mode

Command History	Release	Modification
	5.0(3)	This command was introduced.

Usage Guidelines This command requires a Transport Services license.

Examples This example shows how to display information about the OTV multicast outgoing interface list:

```
switch# show forwarding otv multicast outgoing-interface-list
slot 1=====
Outgoing Interface List Index: 1Reference Count: 1Overlay1OTV group-address: (102.1.1.1,
239.1.1.1)OTV external interface: Ethernet1/6 vlan: 311
Outgoing Interface List Index: 2Reference Count: 1Overlay1OTV group-address: (102.1.1.1,
232.1.1.0)OTV external interface: Ethernet1/6 vlan: 311
Outgoing Interface List Index: 65535Reference Count: 1
```

Related Commands	Command	Description
	show otv mroute	Displays information about the multicast MAC route.

show forwarding otv multicast route

To display information about the Overlay Transport Virtualization (OTV) multicast route, use the **show forwarding otv multicast route** command.

show forwarding otv multicast route [**module** *slot-number*] **vlan** *vlan-id* **module** *slot-number*]

Syntax Description

module	(Optional) Specifies a module.
<i>slot-number</i>	Slot number. The range is from 1 to 18.
vlan	(Optional) Specifies a VLAN.
<i>vlan-id</i>	VLAN ID. The range is from 1 to 4095.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

This example shows how to display OTV multicast route information:

```
switch# show forwarding otv multicast route
slot 1
=====
-----
Vlan 311 Multicast OTV entry
-----
Total number of routes: 3
Total number of (*,G) routes: 0
Total number of (S,G) routes: 1
Group count: 3
Legend:
  C = Control Route
  D = Drop Route
  G = Local Group (directly connected receivers)
  O = Drop on RPF failure
  P = Punt to Supervisor
  W = Wildcard
  d = OTV Decap route
```

```

c = OTV Copy route
l = OTV /4 route
r = OTV /24 route
IPv4 Broadcast/Link Local Multicast:
  Received Packets: 286 Bytes: 31863
  OTV group-address: (102.1.1.1, 239.1.1.1)
  OTV external interface: Ethernet1/6 vlan: 311
IPv6 Broadcast/Link Local Multicast:
  NULL
(*, 224.0.0.0/4), RPF Interface: NULL, flags: cl
  Received Packets: 0 Bytes: 0
  Number of Outgoing Interfaces: 0
  Null Outgoing Interface List
(*, 224.0.0.0/24), RPF Interface: NULL, flags: r
  Received Packets: 0 Bytes: 0
  Number of Outgoing Interfaces: 1
  Outgoing Interface List Index: 1
  Overlay1 Outgoing Packets:0 Bytes:0
  OTV group-address: (102.1.1.1, 239.1.1.1)
  OTV external interface: Ethernet1/6 vlan: 311
(6.2.2.2/32, 238.1.1.1/32), RPF Interface: NULL, flags:
  Received Packets: 7611485 Bytes: 487135040
  Number of Outgoing Interfaces: 1
  Outgoing Interface List Index: 2
  Overlay1 Outgoing Packets:7611485 Bytes:624141770
  OTV group-address: (102.1.1.1, 232.1.1.0)
  OTV external interface: Ethernet1/6 vlan: 311

```

Related Commands

Command	Description
show otv mroute	Displays information about the multicast MAC route.

show forwarding otv overlay

To display information about the forwarding Overlay Transport Virtualization (OTV) overlay interface, use the show forwarding otv overlay command.

show forwarding otv overlay *overlay-interface* [**peer** *peer-id*]

Syntax Description

<i>overlay-interface</i>	Overlay interface number. The range is from Zero to 65535.
peer	(Optional) Specifies a peer overlay.
<i>peer-id</i>	Peer ID.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

This example shows how to display the forwarding OTV overlay interface:

```
switch# show forwarding otv overlay 1
slot 1
=====
-----
VLAN
-----
311
-----+-----+-----
Peer ID      Peer Ifindex      Tunnel I/f
-----+-----+-----
1            0x22100001        Tunnel16384
2            0x22100002        Tunnel16385
```

Related Commands

Command	Description
show otv isis	Displays the IS-IS status and configuration.

show ip igmp snooping mrouter otv

To display IGMP snooping information for the Overlay Transport Virtualization (OTV), use the **show ip igmp snooping mrouter otv** command.

show ip igmp snooping mrouter otv [*vlan vlan-num*]

Syntax Description

<i>vlan-num</i>	(Optional) VLAN number for which you want to display the OTV IGMP snooping information.
-----------------	---

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

This example shows how to display IGMP snooping information for OTV:

```
switch(config)# show ip igmp snooping mrouter otv
Type: S - Static, D - Dynamic, V - vPC Peer Link, I - Internal
Vlan Router-port Type Uptime Expires
10 Vlan10 I 23:45:12 never (down)
```

Related Commands

Command	Description
feature otv	Enables OTV.

show logging level otv isis

To display the current and default logging level of the Overlay Transport Virtualization (OTV) Intermediate System-to-Intermediate System (IS-IS) process, use the **show logging level otv isis** command.

show logging level otv isis

Syntax Description This command has no arguments or keywords.

Command Default None

Command Modes Global configuration mode

Command History	Release	Modification
	5.0(3)	This command was introduced.

Usage Guidelines This command requires a Transport Services license.

Examples This example shows how to display the logging level of the OTV IS-IS process:

```
switch# show logging level otv isis
Facility          Default Severity      Current Session Severity
-----
isis_otv          5                      5
0 (emergencies)  1 (alerts)            2 (critical)
3 (errors)       4 (warnings)         5 (notifications)
6 (information)  7 (debugging)
switch#
```

Related Commands	Command	Description
	show otv isis	Displays the IS-IS status and configuration.

show otv

To display information about the Overlay Transport Virtualization (OTV) information, use the **show otv** command.

show otv [**overlay** *overlay-interface*]

Syntax Description

overlay	Specifies the overlay interface.
<i>overlay-interface</i>	Overlay interface number. The range is from 0 to 65535.

Command Default

None

Command Modes

Global configuration

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

In a dual AED setup, both the Nexus switches would be running the same version of NX-OS.

Examples

This example shows how to display OTV information:

```
switch(config-if-overlay)# show otv
OTV Overlay Information
Site Identifier 0000.0000.0002
Overlay interface Overlay5
VPN name : Overlay5
VPN state : UP
Extended vlans : 25-150 251-327 (Total:203)
Control group : 224.1.1.0
Data group range(s) : 232.1.0.0/24
Broadcast group : 224.1.1.0
Join interface(s) : Po21 (2.100.21.1)
Site vlan : 1000(up)
AED-Capable : Yes
Capability : Multicast-Reachable
switch(config-if-overlay)#
```


Related Commands

Command	Description
show otv isis	Displays the IS-IS status and configuration.

show otv adjacency

To display the Overlay Transport Virtualization (OTV) adjacency information, use the show **otv adjacency** command.

show otv adjacency [**overlay** *if-number*| **vpn** *vpn-name*] [**detail**]

Syntax Description

overlay	(Optional) Specifies an overlay interface.
<i>if-number</i>	Overlay interface number. The range is from 0 to 65503.
vpn	(Optional) Specifies an overlay virtual private network (VPN) name.
<i>vpn-name</i>	Name of the VPN. A VPN name can be any case-sensitive, alphanumeric string up to 80 characters.
detail	(Optional) Specifies adjacency details.

Command Default

None

Command Modes

Any command mode

Command History

Release	Modification
5.0(3)	This command was introduced.
5.2(1)	Added the overlay, and vpn keywords.

Usage Guidelines

Use the **show otv adjacency detail** command to check for adjacencies with secondary IP addresses when route depolarization is enabled.

This command does not require a license.

Examples

This example shows how to display the OTV adjacency information, with route depolarization enabled:

```
switch# show otv adjacency overlay 1
Overlay Adjacency database
Overlay-Interface Overlay1 :
Hostname                               System-ID      Dest Addr      Up Time      State
```

```

B11-E11                4055.3920.d9c2 2.100.11.1      03:34:56  UP
B12-E12                4055.3921.1e42 2.100.12.1      03:34:07  UP
B22-E22                4055.3921.1fc2 2.100.22.1      03:35:36  UP
B21-E21                4055.3921.23c2 2.100.21.1      03:35:46  UP
B32-E32                d867.d90a.aec2 2.100.32.1      03:42:55  UP

```

This example shows how to display the OTV adjacency details, with route depolarization enabled:

```

switch# show otv adjacency detail overlay 1
Overlay-Interface Overlay1 :
Hostname                System-ID        Dest Addr        Up Time   State
B11-E11                4055.3920.d9c2 2.100.11.1      03:35:12  UP
  Secondary src/dest:  2.100.31.101   2.100.11.1      UP
  Secondary src/dest:  2.100.31.102   2.100.11.1      UP
  Secondary src/dest:  2.100.31.103   2.100.11.1      UP
  Secondary src/dest:  2.100.31.1     2.100.11.101    UP
  Secondary src/dest:  2.100.31.101   2.100.11.101    UP
  Secondary src/dest:  2.100.31.102   2.100.11.101    UP
  Secondary src/dest:  2.100.31.103   2.100.11.101    UP
  Secondary src/dest:  2.100.31.1     2.100.11.102    UP
  Secondary src/dest:  2.100.31.101   2.100.11.102    UP
  Secondary src/dest:  2.100.31.102   2.100.11.102    UP
  Secondary src/dest:  2.100.31.103   2.100.11.102    UP
  Secondary src/dest:  2.100.31.1     2.100.11.103    UP
  Secondary src/dest:  2.100.31.101   2.100.11.103    UP
  Secondary src/dest:  2.100.31.102   2.100.11.103    UP
  Secondary src/dest:  2.100.31.103   2.100.11.103    UP
HW-St: Default
B12-E12                4055.3921.1e42 2.100.12.1      03:34:24  UP
  Secondary src/dest:  2.100.31.101   2.100.12.1      UP
  Secondary src/dest:  2.100.31.102   2.100.12.1      UP
  Secondary src/dest:  2.100.31.103   2.100.12.1      UP
  Secondary src/dest:  2.100.31.1     2.100.12.101    UP
  Secondary src/dest:  2.100.31.101   2.100.12.101    UP
  Secondary src/dest:  2.100.31.102   2.100.12.101    UP
  Secondary src/dest:  2.100.31.103   2.100.12.101    UP
  Secondary src/dest:  2.100.31.1     2.100.12.102    UP
  Secondary src/dest:  2.100.31.101   2.100.12.102    UP
  Secondary src/dest:  2.100.31.102   2.100.12.102    UP
  Secondary src/dest:  2.100.31.103   2.100.12.102    UP
  Secondary src/dest:  2.100.31.1     2.100.12.103    UP
  Secondary src/dest:  2.100.31.101   2.100.12.103    UP
  Secondary src/dest:  2.100.31.102   2.100.12.103    UP
  Secondary src/dest:  2.100.31.103   2.100.12.103    UP
HW-St: Default
B22-E22                4055.3921.1fc2 2.100.22.1      03:35:53  UP
  Secondary src/dest:  2.100.31.101   2.100.22.1      UP
  Secondary src/dest:  2.100.31.102   2.100.22.1      UP
  Secondary src/dest:  2.100.31.103   2.100.22.1      UP
  Secondary src/dest:  2.100.31.1     2.100.22.101    UP
  Secondary src/dest:  2.100.31.101   2.100.22.101    UP
  Secondary src/dest:  2.100.31.102   2.100.22.101    UP
  Secondary src/dest:  2.100.31.103   2.100.22.101    UP
  Secondary src/dest:  2.100.31.1     2.100.22.102    UP
  Secondary src/dest:  2.100.31.101   2.100.22.102    UP
  Secondary src/dest:  2.100.31.102   2.100.22.102    UP
  Secondary src/dest:  2.100.31.103   2.100.22.102    UP
  Secondary src/dest:  2.100.31.1     2.100.22.103    UP
  Secondary src/dest:  2.100.31.101   2.100.22.103    UP
  Secondary src/dest:  2.100.31.102   2.100.22.103    UP
  Secondary src/dest:  2.100.31.103   2.100.22.103    UP
HW-St: Default
B21-E21                4055.3921.23c2 2.100.21.1      03:36:03  UP
  Secondary src/dest:  2.100.31.101   2.100.21.1      UP
  Secondary src/dest:  2.100.31.102   2.100.21.1      UP
  Secondary src/dest:  2.100.31.103   2.100.21.1      UP
  Secondary src/dest:  2.100.31.1     2.100.21.101    UP
  Secondary src/dest:  2.100.31.101   2.100.21.101    UP
  Secondary src/dest:  2.100.31.102   2.100.21.101    UP
  Secondary src/dest:  2.100.31.103   2.100.21.101    UP
  Secondary src/dest:  2.100.31.1     2.100.21.102    UP
  Secondary src/dest:  2.100.31.101   2.100.21.102    UP
  Secondary src/dest:  2.100.31.102   2.100.21.102    UP

```

show otv adjacency

```

Secondary src/dest: 2.100.31.103 2.100.21.102 UP
Secondary src/dest: 2.100.31.1 2.100.21.103 UP
Secondary src/dest: 2.100.31.101 2.100.21.103 UP
Secondary src/dest: 2.100.31.102 2.100.21.103 UP
Secondary src/dest: 2.100.31.103 2.100.21.103 UP
HW-St: Default
B32-E32 d867.d90a.aec2 2.100.32.1 03:43:11 UP
Secondary src/dest: 2.100.31.101 2.100.32.1 UP
Secondary src/dest: 2.100.31.102 2.100.32.1 UP
Secondary src/dest: 2.100.31.103 2.100.32.1 UP
Secondary src/dest: 2.100.31.1 2.100.32.101 UP
Secondary src/dest: 2.100.31.101 2.100.32.101 UP
Secondary src/dest: 2.100.31.102 2.100.32.101 UP
Secondary src/dest: 2.100.31.103 2.100.32.101 UP
Secondary src/dest: 2.100.31.1 2.100.32.102 UP
Secondary src/dest: 2.100.31.101 2.100.32.102 UP
Secondary src/dest: 2.100.31.102 2.100.32.102 UP
Secondary src/dest: 2.100.31.103 2.100.32.102 UP
Secondary src/dest: 2.100.31.1 2.100.32.103 UP
Secondary src/dest: 2.100.31.101 2.100.32.103 UP
Secondary src/dest: 2.100.31.102 2.100.32.103 UP
Secondary src/dest: 2.100.31.103 2.100.32.103 UP
HW-St: Default

```

Related Commands

Command	Description
otv adjacency-server unicast-only	Configures the local edge device as an adjacency server.
otv use-adjacency-server unicast-only	Configures the local edge device to use a remote adjacency server.
show otv isis	Displays the IS-IS status and configuration.
otv depolarization disable	Disables route depolarization for the OTV network.

show otv adjacency-server replication-list

To display the Overlay Transport Virtualization (OTV) adjacency server run-time internal replication list, use the **show otv adjacency-server replication-list** command.

show otv adjacency-server replication-list

Syntax Description This command has no arguments or keywords.

Command Default None

Command Modes Global

Command History	Release	Modification
	5.0(2)	This command was introduced.

Usage Guidelines This command requires a Transport Services license.

Examples This example shows how to display OTV information:

```
switch(config)# show otv adjacency-server replication-list
Overlay Repl List database
switch(config)#
```

Related Commands	Command	Description
	feature otv	Enables OTV on this device.

show otv arp-nd-cache

To display Layer 2 and Layer 3 addresses cached from the Address Resolution protocol (ARP) and Neighbor Discovery (ND) packet inspection, use the **show otv arp-nd-cache** command.

show otv arp-nd-cache

Syntax Description This command has no arguments or keywords.

Command Default None

Command Modes Global configuration mode

Command History	Release	Modification
	5.0(3)	This command was introduced.

Usage Guidelines

Note IPv6 is not supported in this release.

This command requires a Transport Services license.

Examples This example shows how to display the Layer 2 and Layer 3 addresses cached from ARP and ND packet inspection:

```
switch(config)# show otv arp-nd-cache
OTV ARP/ND L3->L2 Address Mapping Cache
switch(config)#
```

Related Commands

Command	Description
feature otv	Enables OTV on this device.

show otv data-group

To display information about Overlay Transport Virtualization (OTV) data group information, use the **show otv data-group** command.

show otv data-group [**delivery-group** *number*| **delivery-source** *number*| **group** *number*| **join-interface** *number*| **local**| **overlay** *number*| **remote**| **source** *number*| **vlan** *vlan-id*]

Syntax Description

delivery-group	Specifies a delivery-group data group.
delivery-source	Specifies a delivery-source data group.
group	Specifies an active-source group data group.
join-interface	Specifies a join-interface data group.
local	Specifies a locally announced data group.
overlay	Specifies an overlay-interface data group.
remote	Specifies a remotely announced data group.
source	Specifies an active-source source data group.
vlan	Specifies a VLAN data group.
<i>vlan-id</i>	VLAN ID. The range is from 1 to 3967 and from 4048 to 4093.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

This example shows how to display information about OTV data group:

```
switch(config)# show otv data-group
Local Active Sources for Overlay0
VLAN Active-Source Active-Group Delivery-Source Delivery-Group Ext-I/F
-----
2 1.1.1.1 225.1.1.1 2.3.0.1 239.1.1.0 Eth2/3
switch(config)#
```

This example shows how to display delivery-source data group:

```
switch(config)# show otv data-group delivery-group 239.1.1.0
Local Active Sources for Overlay0
VLAN Active-Source Active-Group Delivery-Source Delivery-Group Ext-I/F
-----
2 1.1.1.1 225.1.1.1 2.3.0.1 239.1.1.0 Eth2/3
switch(config)#
```

This example shows how to display delivery source-data group:

```
switch(config)# show otv data-group delivery-group 239.1.1.0 delivery-source 2.3.0.1
Local Active Sources for Overlay0
VLAN Active-Source Active-Group Delivery-Source Delivery-Group Ext-I/F
-----
2 1.1.1.1 225.1.1.1 2.3.0.1 239.1.1.0 Eth2/3
switch(config)#
```

This example shows how to display an active-asource group data group:

```
switch(config)# show otv data-group group 225.1.1.1
Local Active Sources for Overlay0
VLAN Active-Source Active-Group Delivery-Source Delivery-Group Ext-I/F
-----
2 1.1.1.1 225.1.1.1 2.3.0.1 239.1.1.0 Eth2/3
switch(config)#
```

This example shows how to display an active-source source data group:

```
switch(config)# show otv data-group group 225.1.1.1 source 1.1.1.1
Local Active Sources for Overlay0
VLAN Active-Source Active-Group Delivery-Source Delivery-Group Ext-I/F
-----
2 1.1.1.1 225.1.1.1 2.3.0.1 239.1.1.0 Eth2/3
switch(config)#
```

This example shows how to display a local-group data group:

```
switch(config)# show otv data-group local
Local Active Sources for Overlay0
VLAN Active-Source Active-Group Delivery-Source Delivery-Group Ext-I/F
-----
2 1.1.1.1 225.1.1.1 2.3.0.1 239.1.1.0 Eth2/3
switch(config)#
```

This example shows how to display a VLAN data group:

```
switch(config)# show otv data-group vlan 2
Local Active Sources for Overlay0
VLAN Active-Source Active-Group Delivery-Source Delivery-Group Ext-I/F
-----
2 1.1.1.1 225.1.1.1 2.3.0.1 239.1.1.0 Eth2/3
switch(config)#
```

This example shows how to display a join-interface data group:

```
switch(config)# show otv data-group join-interface eth2/3
Local Active Sources for Overlay0
VLAN Active-Source Active-Group Delivery-Source Delivery-Group Ext-I/F
-----
```



```

2    1.1.1.1          225.1.1.1          2.3.0.1          239.1.1.0          Eth2/3
switch(config)#

```

This example shows how to display an overlay-interface data group:

```

switch(config)# show otv data-group overlay 0
Local Active Sources for Overlay0
VLAN Active-Source  Active-Group  Delivery-Source  Delivery-Group  Ext-I/F
-----
2    1.1.1.1          225.1.1.1          2.3.0.1          239.1.1.0          Eth2/3
switch(config)#

```

Related Commands

Command	Description
feature otv	Enables OTV on this device.

show otv isis active-source

To display information about an Overlay Transport Virtualization (OTV) Intermediate System-to-Intermediate System (IS-IS) data group information, use the **show otv isis active-source** command.

show otv isis **otv isis** [*otv-isis-tag*] **active-source** [**vlan** *vlan-id* [**group** *gip-addr* [**source** *sip-addr*]]] [**summary**] **vpn** {*vpn-name*| **all**}

Syntax Description

<i>otv-isis-tag</i>	Name of an IS-IS process.
vlan <i>vlan-id</i>	(Optional) Specifies IS-IS VLAN information. IS-IS VLAN information. The range is from 0 to 4294967295.
group <i>gip-addr</i>	(Optional) Specifies group information.
source <i>sip-addr</i>	(Optional) Specifies source information.
summary	Displays a count of the number of multicast entries
vpn	(Optional) Specifies VPN information.
<i>vpn-name</i>	VPN name. The maximum length is 32 alphanumeric characters.
all	(Optional) Specifies all configured VPNs.

Command Default None

Command Modes Global configuration mode

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

This example shows how to display information about an IS-IS data group:

```
switch(config-vlan) # show otv isis active-source
```

```
OTV-IS-IS process: default VPN: Test1
OTV-IS-IS IP DSDG information
OTV-IS-IS IPv4 DSDG information
OTV-IS-IS process: default VPN: foo
OTV-IS-IS IP DSDG information
OTV-IS-IS IPv4 DSDG information
OTV-IS-IS process: default VPN: name
OTV-IS-IS IP DSDG information
OTV-IS-IS IPv4 DSDG information
OTV-IS-IS process: default VPN: test
OTV-IS-IS IP DSDG information
OTV-IS-IS IPv4 DSDG information
OTV-IS-IS process: default VPN: test2
OTV-IS-IS IP DSDG information
OTV-IS-IS IPv4 DSDG information
switch(config-vlan)#
```

Related Commands

Command	Description
show otv isis	Displays the IS-IS status and configuration.

show otv isis adjacency

To display Overlay Transport Virtualization (OTV) Intermediate System-to-Intermediate System (IS-IS) adjacency information, use the **show otv isis adjacency** command.

show otv isis adjacency [**detail** | **overlay interface**] **summary** | *system-id* **vpn** {*vpn-name* | **all**}]

Syntax Description

detail	(Optional) Specifies IS-IS adjacency detail information.
overlay interface	(Optional) Specifies an overlay interface number. The range is from 1 to 65535.
summary	(Optional) Specifies IS-IS adjacency summary information.
<i>system-id</i>	(Optional) Specifies a hostname or system ID.
vpn	(Optional) Specifies VPN information.
<i>vpn-name</i>	VPN name. The maximum length is 32 alphanumeric characters.
all	(Optional) Specifies all configured VPNs.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

This example shows how to display IS-IS adjacency information:

```
switch# configure terminal
switch(config)# vlan 1
switch(config-vlan)# show otv isis adjacency
OTV-IS-IS process: default VPN: Overlay1
```

```
OTV-IS-IS adjacency database:
System ID      SNFA      Level  State  Hold Time  Interface
it8            0015.1762.8f48  1      UP     00:00:08  Overlay1
switch(config-vlan)#
```

Related Commands

Command	Description
show otv isis	Displays the IS-IS status and configuration.

show otv isis database

To display the contents of the Overlay Transport Virtualization (OTV) Intermediate System-to-Intermediate System (IS-IS), link-state packet (LSP) database for each overlay that can be used to determine the unicast MAC addresses and multicast groups received from each neighbor, use the show otv isis database command.

```
show otv isis [otv-isis-tag] database [mgroup] [detail| advertise| summary] [lsp-id] {zero-sequence|
adjacency adj-id| vpn vpn-name| all}
```

Syntax Description

<i>otv-isis-tag</i>	(Optional) Name of an IS-IS process.
mgroup	(Optional) Specifies an IS-IS multicast database for each overlay.
detail	(Optional) Specifies detailed IS-IS information.
advertise	(Optional) Specifies the capability of the device to be multicast capable unless unicast only is specified.
summary	(Optional) Specifies summary IS-IS information.
<i>lsp-id</i>	(Optional) LSP ID in a xxxx.xxxx.xxxx.xx-xx format.
zero-sequence	Specifies an LSP with a zero sequence number.
adjacency	Specifies an adjacency filter.
vpn	Specifies VPN information.
<i>vpn-name</i>	VPN name. The maximum length is 32 characters.
all	Specifies all configured VPNs.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

This example shows how to display IS-IS database information:

```
switch# show otv isis database
OTV-IS-IS Process: default LSP database VPN: Overlay1
OTV-IS-IS Level-1 Link State Database
  LSPID                Seq Number  Checksum  Lifetime  A/P/O/T
  switch.00-00         * 0x000006C1  0xF4E3    980       0/0/0/1
switch#
```

Related Commands

Command	Description
show otv isis	Displays the IS-IS status and configuration.

show otv isis hostname

To display information about the Overlay Transport Virtualization (OTV) Intermediate System-to-Intermediate System (IS-IS) hostname table, use the show otv isis hostname command.

show otv isis hostname [**detail** | **vpn** {**vpn-name**| **all**}]

Syntax Description

detail	(Optional) Specifies detailed IS-IS information.
vpn	(Optional) Specifies VPN information.
vpn-name	VPN name. The maximum length is 32 alphanumeric characters.
all	Specifies all configured VPNs.

Command Default

None

Command Modes

Global configuration mode
network-adminvdc-admin

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

This example shows how to display information about the OTV Intermediate IS-IS dynamic hostname table:

```
switch# show otv isis hostname
OTV-IS-IS Process: default dynamic hostname table VPN: Overlay1
  Level System ID      Dynamic hostname
  1      0022.5579.a4c1* switch
switch#
```

Related Commands

Command	Description
show otv isis	Displays the IS-IS status and configuration.

show otv isis interface

To display information about the Overlay Transport Virtualization (OTV) Intermediate-System-to-Intermediate System (IS-IS) interface, use the show otv isis interface command.

show otv isis interface [**brief**| **overlay interface**| **vpn** {*vpn-name*| **all**}]

Syntax Description

brief	(Optional) Specifies a brief display of IS-IS interfaces.
overlay interface	(Optional) Specifies an overlay interface number. The range is from 1 to 65535.
vpn	(Optional) Specifies VPN information.
<i>vpn-name</i>	VPN name. The maximum length is 32 alphanumeric characters.
all	Specifies all configured VPNs.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

There is one overlay interface per overlay. By default, this command displays the interfaces for all overlays. This command requires a Transport Services license.

Examples

This example shows how to display information about the OTV IS-IS interface:

```
switch# show otv isis interface
OTV-IS-IS process: default VPN: Overlay1
Overlay1, Interface status: protocol-down/link-down/admin-down
  IP address: none
  IPv6 address: none
  IPv6 link-local address: none
  ISIS interface operation state : Down/Ready
  Index: 0x0001, Local Circuit ID: 0x01, Circuit Type: L1
Level1
  Adjacency server (local/remote) : enabled / none
  Adjacency server capability : multicast
```

```

Authentication type is cleartext
Authentication keychain is 1
Authentication check specified
  LSP interval: 33 ms, MTU: 1400
  Level      Metric  CSNP  Next CSNP  Hello  Multi  Next IIH
  1          1      1      Inactive   10     3      Inactive
  Level  Adjs  AdjsUp  Pri  Circuit ID  Since
  1      0      0      1    switch.01   never
switch#

```

Related Commands

Command	Description
show otv isis	Displays the IS-IS status and configuration.

show otv isis ip mroute

To display information about the Overlay Transport Virtualization (OTV) Intermediate System-to-Intermediate System (IS-IS) IPv4 multicast route information, use the `show otv isis ip mroute` command.

```
show otv isis[otv-isis-tag ] ip mroute [vlan vlan-id] [group gip-addr [source sip-addr]] [summary] vpn
{vpn-name| all}
```

Syntax Description

vlan <i>vlan-id</i>	(Optional) Specifies IS-IS VLAN information. The range is from 0 to 4294967295.
group <i>gip-addr</i>	(Optional) Specifies group information.
source <i>sip-addr</i>	(Optional) Specifies source information.
summary	(Optional) Displays a count of the number of multicast entries
vpn	Specifies VPN information.
<i>vpn-name</i>	VPN name. The maximum size is 32 alphanumeric characters.
all	Specifies all configured VPNs.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

This example shows how to display information about the OTV IS-IS IPv4 multicast route:

```
switch(config-vlan)# show otv isis ip mroute
OTV-IS-IS process: default VPN: Test1
OTV-IS-IS IP Multicast Groups
```

```
OTV-IS-IS IPv4 Multicast Group database
OTV-IS-IS process: default VPN: foo
OTV-IS-IS IP Multicast Groups
OTV-IS-IS IPv4 Multicast Group database
OTV-IS-IS process: default VPN: name
OTV-IS-IS IP Multicast Groups
OTV-IS-IS IPv4 Multicast Group database
OTV-IS-IS process: default VPN: test
OTV-IS-IS IP Multicast Groups
OTV-IS-IS IPv4 Multicast Group database
OTV-IS-IS process: default VPN: test2
OTV-IS-IS IP Multicast Groups
OTV-IS-IS IPv4 Multicast Group database
switch(config-vlan)#
```

show otv isis ip redistribute mroute

To display information about the Overlay Transport Virtualization (OTV) Intermediate System-to-Intermediate System (IS-IS) IPv4 redistribute multicast route information, use the **show otv isis ip redistribute mroute** command.

show otv isis ip redistribute mroute [**vlan** *vlan-id* **vpn** {*vpn-name*| **all**}]

Syntax Description

vlan	(Optional) Specifies IS-IS VLAN information.
<i>vlan-id</i>	IS-IS VLAN information. The range is from 0 to 4294967295.
vpn	(Optional) Specifies VPN information.
<i>vpn-name</i>	VPN name. The maximum size is 32 alphanumeric characters.
all	Specifies all configured VPNs.

Command Default

Displays locally learned IPv4 multicast routes

Command Modes

Global configuration mode

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

This example shows how to display information about the OTV IPv4 IS-IS ip redistribute multicast route information:

```
switch(config-vlan)# show otv isis ip redistribute mroute
OTV-IS-IS process: default OTV-IS-IS IPv4 Local Multicast Group database
VLAN 9: (*, *)
VLAN 9: (6.6.6.6, 239.4.4.4)
switch(config-vlan)#
```

Related Commands

Command	Description
show otv isis	Displays the IS-IS status and configuration.

show otv isis mac redistribute mroute

To display Intermediate-System-to-Intermediate System (IS-IS) MAC redistribute multicast route information, use the **show otv isis mac redistribute mroute** command.

show otv isis mac redistribute mroute [*vlan vlan-id vpn vpn-name all*]

Syntax Description

vlan	(Optional) Specifies IS-IS VLAN information.
<i>vlan-id</i>	IS-IS VLAN information. The range is from 0 to 4294967295.
vpn	(Optional) Specifies VPN information.
<i>vpn-name</i>	VPN name. The maximum size is 32 alphanumeric characters.
all	(Optional) Specifies all configured VPNs.

Command Default

None.

Command Modes

Global Configuration Mode

Command History

Release	Modification
5.0(2)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

The following example shows how to display IS-IS MAC redistribute multicast route information:

```
switch(config)# show otv isis mac redistribute mroute
switch(config)#
```

Related Commands

Command	Description
show otv isis	Displays the IS-IS status and configuration.

show otv isis mac redistribute route

To display information about the Overlay Transport Virtualization (OTV) Intermediate System-to-Intermediate System (IS-IS) MAC redistribute route information, use the **show otv isis mac redistribute route** command.

show otv isis [*otv-isis-tag*] [**mac**] **redistribute route** [**summary**] **vpn** {*vpn-name*| **all**}

Syntax Description

<i>otv-isis-tag</i>	(Optional) Name of an IS-IS process.
mac	(Optional) Specifies IS-IS MAC information.
summary	(Optional) Displays route counts.
vpn	Specifies VPN information.
<i>vpn-name</i>	VPN name. The maximum size is 32 alphanumeric characters.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

This example shows how to display information about the OTV IS-IS MAC redistribute route:

```
switch(config-vlan)# show otv isis mac redistribute route
OTV-IS-IS process: default VPN: Test1
OTV-IS-IS MAC redistribute route
OTV-IS-IS process: default VPN: foo
OTV-IS-IS MAC redistribute route
OTV-IS-IS process: default VPN: name
OTV-IS-IS MAC redistribute route
OTV-IS-IS process: default VPN: test
OTV-IS-IS MAC redistribute route
OTV-IS-IS process: default VPN: test2
OTV-IS-IS MAC redistribute route
switch(config-vlan)#
```


Related Commands

Command	Description
show otv isis	Displays the IS-IS status and configuration.

show otv isis protocol

To display information about the Overlay Transport Virtualization (OTV) Intermediate System-to-Intermediate System (IS-IS) information, use the **show otv isis protocol** command.

show otv isis protocol [**vpn** {*vpn-name*| **all**}]

Syntax Description

vpn	(Optional) Specifies VPN information.
<i>vpn-name</i>	VPN name. The maximum length is 32 alphanumeric characters.
all	(Optional) Specifies all configured VPNs.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

This example shows how to display OTV IS-IS information:

```
switch# show otv isis protocol
ISIS process : default
VPN: Overlay1
  System ID : 0022.5579.a4c1  IS-Type : L1
  SAP : 439  Queue Handle : 11
  Maximum LSP MTU: 1392
  Graceful Restart enabled. State: Inactive
  Last graceful restart status : none
  Metric-style : advertise(wide), accept(narrow, wide)
  Area address(es) :
    00
  Process is up and running
  VPN ID: 2
  Stale routes during non-graceful controlled restart
  Interfaces supported by OTV-IS-IS :
    Overlay1
  Level 1
  Authentication type and keychain haven't been configured
  Authentication check is specified
  Address family IPv4 unicast :
```

```
Number of interface : 1  
Adjacency check disabled  
Distance : 115
```

Related Commands

Command	Description
show otv isis	Displays the IS-IS status and configuration.

show otv isis redistribute route

To display Intermediate-System-to-Intermediate System (IS-IS) redistribute route information, use the **show otv isis redistribute route** command.

show otv isis redistribute route [**summary** **vpn** {*vpn-name*| **all**}| **vpn** {*vpn-name*| **all**}]

Syntax Description

summary	(Optional) Specifies route counts.
vpn	(Optional) Specifies VPN information.
<i>vpn-name</i>	VPN name. The maximum size is 32 characters.
all	Specifies all configured VPNs.

Command Default

Locally learned MAC addresses

Command Modes

Global configuration mode

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

This example shows how to display IS-IS redistribute route information:

```
switch(config-vlan)# show otv isis redistribute route
OTV-IS-IS process: default VPN: Overlay1
OTV-IS-IS MAC redistribute route
0009-0033.0033.0033, all
Advertised into L1, metric 1
switch(config-vlan)#
```

Related Commands

Command	Description
show otv isis	Displays the IS-IS status and configuration.

show otv isis route

To display Intermediate-System-to-Intermediate System (IS-IS) information learned from neighbors (remote routes) use the show otv isis route command.

show otv isis route [**detail vpn** {*vpn-name*| **all**}| **summary vpn** {*vpn-name*| **all**}| **vpn** {*vpn-name*| **all**}]

Syntax Description

detail	(Optional) Specifies detailed route information.
summary	(Optional) Specifies route counts.
vpn	(Optional) Specifies VPN information.
<i>vpn-name</i>	VPN name. The maximum size is 32 alphanumeric characters.
all	Specifies all configured VPNs.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

This example shows how to display IS-IS route information:

```
switch(config-vlan)# show otv isis route
OTV-IS-IS process: default VPN: Overlay1
OTV-IS-IS MAC routing table
0009-0015.1762.79cb, L1
*via 10.10.10.9, Overlay1, metric 42, L1 (I,U)
switch(config-vlan)#
```

Related Commands

Command	Description
show otv isis	Displays the IS-IS status and configuration.

show otv isis route-map statistics

To display Intermediate-System-to-Intermediate System (IS-IS) route-map statistics information, use the **show otv isis route-map statistics** command.

show otv isis route-map statistics

Syntax Description This command has no arguments or keywords.

Command Default None

Command Modes Global configuration mode
network-adminvdc-admin

Command History	Release	Modification
	5.0(3)	This command was introduced.

Usage Guidelines This command requires a Transport Services license.

Examples This example shows how to display IS-IS route-map statistics information:

```
switch(config)# show otv isis route-map statistics
OTV-IS-IS process: default
VPN: Test1
Cannot get redistribution information
OTV-IS-IS process: default
VPN: foo
Cannot get redistribution information
OTV-IS-IS process: default
VPN: name
Statistics not available for the policy
OTV-IS-IS process: default
VPN: test
Cannot get redistribution information
OTV-IS-IS process: default
VPN: test2
Cannot get redistribution information
switch(config)#
```

Related Commands

Command	Description
show otv isis	Displays the IS-IS status and configuration.

show otv isis rrm

To display Overlay Transport Virtualization (OTV) Intermediate-System-to-Intermediate System (IS-IS) Retransmit-Routing Message (RRM) information, use the **show otv isis rrm** command.

show otv isis rrm {*mgroup overlay*| *overlay interface vpn* {*vpn-name*| *all*}}

Syntax Description

mgroup	Specifies IS-IS GM RRM information.
overlay interface	Specifies the overlay interface. The range is from 1 to 65535.
vpn	Specifies all VPN information.
<i>vpn-name</i>	VPN name. The maximum length is 32 alphanumeric characters.
all	Specifies all configured VPNs.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

This example shows how to display OTV IS-IS RRM overlay information:

```
switch(config)# show otv isis rrm overlay 1
OTV-IS-IS process: default
OTV-IS-IS RRM information for interface Overlay1:
  No retransmission on non-P2P interface
switch#
```

Related Commands

Command	Description
show otv isis	Displays the IS-IS status and configuration.

show otv isis site

To display Overlay Transport Virtualization (OTV) Intermediate-System-to-Intermediate System (IS-IS) site information, use the **show otv isis site** command.

show otv isis site [**database**| **statistics**]

Syntax Description

database	Displays the IS-IS database information.
statistics	Displays the IS-IS protocol statistics.

This command has no arguments or keywords.

Command Default

None.

Command Modes

Global configuration mode

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

This example shows how to display OTV IS-IS information of the local OTV site:

```
switch(config)# show otv isis site
OTV-ISIS default site-information
VPN: otv-site-vlan
  System ID : 0022.5579.a4c1  IS-Type : L1
LSP interval: 33 ms, MTU: 0
  Level      Metric   CSNP  Next CSNP  Hello  Multi  Next IIH
  1          16777214  10    Inactive   10     3      00:00:08
  Level  Adjs  AdjsUp  Pri  Circuit ID  Since
  1      0     0 64    switch.01   never
switch#
```

Related Commands

Command	Description
show otv isis	Displays the IS-IS status and configuration.

show otv isis spf

To display Overlay Transport Virtualization (OTV) Intermediate-System-to-Intermediate System (IS-IS) Sender Policy Framework (SPF) information, use the **show otv isis spf-log** command.

```
show otv isis spf-log [detail|vpn {vpn-name|all}]
```

Syntax Description

detail	(Optional) Specifies detail IS-IS SPF information.
vpn	(Optional) Specifies all VPN information.
<i>vpn-name</i>	VPN name. The maximum length is 32 alphanumeric characters.
all	Specifies all configured VPNs.

Command Default

None

Command Modes

Global

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

This example shows how to display OTV IS-IS SPF information:

```
switch(config)# show otv isis spf-log
OTV-IS-IS Process: default SPF information VPN: Overlay1
Total number of SPF calculations: 2
Log entry (current/max): 1/20
Ago          Level Reason          Count Total
1w4d        1      Adjust route distribution 4
2           2      Adjust route distribution 3 0.000269
switch#
```

Related Commands

Command	Description
show otv isis	Displays the IS-IS status and configuration.

show otv isis srm

To display Overlay Transport Virtualization (OTV) Intermediate-System-to-Intermediate System (IS-IS) Send-Routing-Message information, use the show otv isis srm command.

show otv isis srm {**mgroup** *overlay interface*| **overlay** *interface*} **vpn** {*vpn-name*| **all**}

Syntax Description

mgroup	Specifies IS-IS GM-Send-Routing-Message information.
overlay	Specifies the overlay interface.
<i>interface</i>	Overlay interface number. The range is from 0 to 65535.
vpn	Specifies all VPN information.
<i>vpn-name</i>	VPN name. The maximum length is 32 characters.
all	Specifies all configured VPNs.

Command Default

None

Command Modes

Global

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

This example shows how to display OTV IS-IS Send-Routing-Message overlay interface information:

```
switch(config-vlan)# show otv isis srm overlay 1
OTV-IS-IS process: default
OTV-IS-IS SRM information for interface Overlay1:
OTV-IS-IS Level-1 Link State Database
Interface is eligible for flooding LSP
Interface is on stopped SRM list
LSP interval: 33 ms, Next LSP: Inactive
LSPID          Seq Number  Checksum  Lifetime  A/P/O/T
switch(config-vlan)#
```

Related Commands

Command	Description
show otv isis	Displays the IS-IS status and configuration.

show otv isis ssn

To display Overlay Transport Virtualization (OTV) Intermediate-System-to-Intermediate System (IS-IS) Send-Sequence-Number (SSN) information, use the show otv isis ssn command.

show otv isis ssn {**mgroup overlay** *interface*| **overlay** *interface*} **vpn** {*vpn-name*| **all**}

Syntax Description

mgroup	Specifies IS-IS GM-Send-Routing-Message information.
overlay	Specifies the overlay interface.
<i>interface</i>	Overlay interface number. The range is from 0 to 65535.
vpn	Specifies all VPN information.
<i>vpn-name</i>	VPN name. The maximum length is 32 characters.
all	Specifies all configured VPNs.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

This example shows how to display OTV IS-IS SSN information:

```
switch(config-vlan)# show otv isis ssn overlay 1
OTV-IS-IS process: default
OTV-IS-IS SSN information for interface Overlay1:
OTV-IS-IS Level-1 Link State Database
Interface is eligible for sending PSNP
Next PSNP: Inactive
LSPID          Seq Number    Checksum    Lifetime    A/P/O/T
switch(config-vlan)#
```

Related Commands

Command	Description
show otv isis	Displays the IS-IS status and configuration.

show otv isis statistics

To display Overlay Transport Virtualization (OTV) Intermediate-System-to-Intermediate System (IS-IS) protocol statistics, use the show otv isis statistics command.

show otv isis statistics [**overlay interface** *vpn* {*vpn-name*| **all**}| **vpn** {*vpn-name*| **all**}]

Syntax Description

overlay	Specifies the overlay interface.
<i>interface</i>	Overlay interface number. The range is from 0 to 65535.
vpn	Specifies all VPN information.
<i>vpn-name</i>	VPN name. The maximum length is 32 alphanumeric characters.
all	Specifies all configured VPNs.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

This example shows how to display OTV IS-IS protocol statistics:

```
switch(config)# show otv isis statistics
OTV-IS-IS Process: default
VPN: Overlay1
SPF calculations: 2
LSPs sourced: 2
LSPs refreshed: 1749
LSPs purged: 0
DIS elections: 1
switch#
```


Related Commands

Command	Description
show otv isis	Displays the IS-IS status and configuration.

show otv isis traffic

To display Overlay Transport Virtualization (OTV) Intermediate-System-to-Intermediate System (IS-IS) traffic information, use the show otv isis traffic command.

show otv isis traffic [**overlay interface vpn** {*vpn-name*| **all**}| **vpn** {*vpn-name*| **all**}]

Syntax Description

overlay	Specifies the overlay interface.
<i>interface</i>	Overlay interface number. The range is from 0 to 65535.
vpn	Specifies all VPN information.
<i>vpn-name</i>	VPN name. The maximum length is 32 alphanumeric characters.
all	Specifies all configured VPNs.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

This example shows how to display OTV IS-IS traffic information:

```
switch(config)# show otv isis traffic
OTV-IS-IS process: default
VPN: Overlay1
OTV-IS-IS Traffic:
PDU          Received          Sent  RcvAuthErr  OtherRcvErr  ReTransmit
LAN-IIH      0                  0      0            0              0          n/a
CSNP         0                  0      0            0              0          n/a
PSNP         0                  0      0            0              0          n/a
LSP          0                  0      0            0              0          0
switch#
```

Related Commands

Command	Description
show otv isis	Displays the IS-IS status and configuration.

show otv isis vpn

To display the Overlay Transport Virtualization (OTV) Virtual Private Network (VPN) configuration, use the **show otv isis vpn** command.

show otv isis vpn {*vpn-name*| **all**}

Syntax Description

<i>vpn-name</i>	VPN name. The maximum length is 32 alphanumeric characters.
all	Specifies all configured VPNs.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

This example shows how to display OTV VPN configuration:

```
switch# show otv isis vpn overlay1
switch#
```

Related Commands

Command	Description
show otv isis	Displays the IS-IS status and configuration.

show otv mroute

To display the Overlay Transport Virtualization (OTV) multicast route information from the OTV Routing and Information Base (ORIB), use the **show otv mroute** command.

```
show otv mroute [overlay overlay-interface-number] vlan vlan-id [group group-ipv4-address| source source-ipv4-address [group group-ipv4-address]]]
```

Syntax Description

overlay	(Optional) Specifies the overlay interface.
<i>overlay-interface-number</i>	Interface number. The range is from 0 to 65535.
vlan	(Optional) Specifies routes for a specific VLAN.
<i>vlan-id</i>	VLAN ID. The range is from 1 to 3967 and from 4048 to 4093.
group	(Optional) Specifies the multicast group.
<i>group-ipv4-address</i>	Group IPv4 address.
source	(Optional) Specifies the multicast source.
<i>source-ipv4-address</i>	Source ipv4 address.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.



Note

IPv6 is not supported in this release.

Examples

This example shows how to display the multicast route information from the ORIB:

```
switch# show otv mroute
OTV Multicast Routing Table For Overlay0
(2, 1.1.1.1, 225.1.1.1), metric: 0, uptime: 00:01:37, igmp
Outgoing interface list: (count: 1)
Eth2/1
(2, 2.2.2.2, 225.2.2.2), metric: 0, uptime: 00:00:04, isis-default
Outgoing interface list: (count: 1)
Overlay0
switch#
```

Related Commands

Command	Description
show otv isis	Displays the IS-IS status and configuration.

show otv mroute vlan

To display the OTV multicast route information for a specific VLAN from the OTV Routing Information Base (ORIB), use the `show otv mroute vlan` command.

show otv mroute vlan *vlan-id* startup

Syntax Description

<i>vlan-id</i>	Displays the VLAN ID. The range is from 1 to 3967.
startup	Displays the startup and all other mroutes.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
6.2(2)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

This example shows how to display the multicast route information from the ORIB:

```
switch(config)# show otv mroute vlan 328 startup
switch(config)#
```

Related Commands

Command	Description
show otv isis	Displays the IS-IS status and configuration.

show otv route

To display Overlay Transport Virtualization (OTV) Intermediate-System-to-Intermediate System (IS-IS) route information from the ORBI, use the **show otv route** command.

show otv route [*overlay overlay-interface-number*] **vlan** *vlan-id*]

Syntax Description

overlay	(Optional) Specifies the overlay interface.
<i>overlay-interface-number</i>	Interface number. The range is from 0 to 65535.
vlan	(Optional) Specifies routes for a specific VLAN.
<i>vlan-id</i>	VLAN ID. The range is from 1 to 3967 and from 4048 to 4093.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.



Note

IPv6 is not supported in this release.

Examples

This example shows how to display OTV IS-IS route information:

```
switch(config)# show otv route
OTV Unicast MAC Routing Table For Overlay0

VLAN MAC-Address      Metric  Uptime    Owner    Next-hop(s)
-----
  2 0004.23e1.bc8d     42      00:06:39 overlay  zg2
  2 001b.2103.b1df     42      00:06:39 overlay  zg2
  2 001b.2103.be17     11      00:00:07 site     Ethernet2/1
switch(config)#
```


Related Commands

Command	Description
feature otv	Enables OTV on this device.

show otv site

To display the Overlay Transport Virtualization (OTV) site information, use the **show otv site** command.

show otv site [all]

Syntax Description

all	(Optional) Specifies all the site adjacencies.
-----	--

Command Default

None

Command Modes

Global

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

This example shows how to display all the OTV site adjacencies:

```
switch# show otv site all
OTV Overlay Information
Site-VLAN           : 4085
Site Adjacency database
Site Adjs not found for ovly (null)
switch#
```

Related Commands

Command	Description
show otv isis	Displays the IS-IS status and configuration.

show otv statistics multicast

To display multicast statistics information, use the **show otv statistics multicast** command.

show otv statistics multicast *vlan-id*

Syntax Description

<i>vlan-id</i>	(Optional) VLAN ID. The range is from 1 to 4095.
----------------	--

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

This example shows how to display multicast statistics information:

```
switch(config)# show otv statistics multicast 1
Multicast Statistics for vlan 1
switch(config)#
```

Related Commands

Command	Description
show otv isis	Displays the IS-IS status and configuration.

show otv vlan

To display the VLAN information for the Overlay Transport Virtualization overlay interface, use the **show otv vlan** command.

show otv vlan [*vlan-range*][**detail**]

Syntax Description

<i>vlan-range</i>	(Optional) VLAN range. The range is from 1 to 3967 and from 4048 to 4094.
detail	Specifies each interface in the VLAN.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
6.2(2)	Changed the command output to show the time remaining for the VLANs to become active after the overlay interface is unshut.
5.0(3)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

This example shows how to display VLAN information for the OTV overlay interface:

```
switch# configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
switch(config)# interface overlay 1
switch(config-if-overlay)# show otv vlan 1 detail
OTV Extended VLANs and Edge Device State Information (* - AED
)
Legend: F - Forwarding B - Blocked
Legend:
(NA) - Non AED, (VD) - Vlan Disabled, (OD) - Overlay Down
(DH) - Delete Holddown, (HW) - HW: State Down
(NFC) - Not Forward Capable
VLAN   Auth. Edge Device                               Vlan State
      Overlay
-----
switch(config-if-overlay)#
```

show otv vlan-mapping

To display VLAN translation mappings from a local site to a remote site, use the **show otv vlan-mapping** command.

show otv vlan-mapping [*overlay interface-number*]

Syntax Description

overlay	Specifies the overlay interface.
<i>interface-number</i>	Overlay interface number. The range is from 0 to 65503.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
6.2(2)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

This example shows how to display VLAN translation mappings from a local site:

```
switch(config-if-overlay)# show otv vlan-mapping
Original VLAN -> Translated VLAN
-----
```

```
switch(config-if-overlay)#
```

This example shows how to map VLANs 10, 14, 15, 16, and 18 on Site A with VLANs 20, 21, 25, 28, and 30 on Site B:

```
switch(config)# interface overlay 5
switch(config-if-overlay)# otv vlan mapping 10,14-16,18 to 20-21,25,28,30
switch(config-if-overlay)# show otv vlan-mapping
Original VLAN -> Translated VLAN
-----
```

```
10 -> 20
14 -> 21
15 -> 25
16 -> 28
18 -> 30
```

This example shows how to overwrite the previous VLAN mapping translation configuration:

```
switch(config)# interface overlay 5
```

```
switch(config-if-overlay)# otv vlan mapping 40,41,42 to 50,51,52
switch(config-if-overlay)# show otv vlan-mapping
Original VLAN -> Translated VLAN
-----
40 -> 50
41 -> 51
42 -> 52
```

This example shows how to add a VLAN map to an existing translation configuration:

```
switch(config)# interface overlay 5
switch(config-if-overlay)# otv vlan mapping add 43 to 53
switch(config-if-overlay)# show otv vlan-mapping
Original VLAN -> Translated VLAN
-----
40 -> 50
41 -> 51
42 -> 52
43 -> 53
```

This example shows how to remove a VLAN map from an existing translation configuration:

```
switch(config)# interface overlay 5
switch(config-if-overlay)# otv vlan mapping remove 40 to 50
switch(config-if-overlay)# show otv vlan-mapping
Original VLAN -> Translated VLAN
-----
41 -> 51
42 -> 52
43 -> 53
```

This example shows how to remove all VLAN translation mappings from the existing translation configuration:

```
switch(config)# interface overlay 5
switch(config-if-overlay)# no otv vlan mapping
Removing all translations
switch(config-if-overlay)# show otv vlan-mapping
Original VLAN -> Translated VLAN
```

Related Commands

Command	Description
show otv isis	Displays the IS-IS status and configuration.

show otv vpn

To display the information about an overlay network, use the **show otv vpn** command.

show otv vpn *vpn-name*

Syntax Description

vpn-name	Overlay Transport Virtualization VPN name.
----------	--

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

This example shows how to display the information about an overlay network:

```
switch# show otv vpn overlay1
OTV Overlay Information
Overlay Interface Overlay1
  VPN Name       : Overlay1
  VPN ID         : 2
  State          : DOWN
                 : Missing Parameter: Control Group Address
  IPv4 multicast group : [None]
  IPv6 multicast group : [None]
  Mcast data group range(s) :
  External interface(s) :
  External IPv4 address  : 0.0.0.0
  External IPv6 address  : 0::
  Encapsulation format  : GRE/IPv4
  Site-vlan            : 4085
  Capability           : Multicast-Reachable
  Is Adjacency Server   : YES
  Adj Server Configured : YES
  Prim/Sec Adj Svr(s)   : 192.0.2.1 / [None]
switch#
```

Related Commands

Command	Description
show otv isis	Displays the IS-IS status and configuration.

show otv-isis track-adjacency-nexthop

To display the Overlay Transport Virtualization (OTV) Intermediate-System-to-Intermediate System (IS-IS) nexthop adjacency, use the **show otv isis track-adjacency-nexthop** command.

show otv isis track-adjacency-nexthop

Syntax Description This command has no arguments or keywords.

Command Default None

Command Modes OTV router configuration mode

Command History	Release	Modification
	6.2(2)	This command was introduced.

Usage Guidelines This command requires a Transport Services license.

Examples This example shows how to display the OTV IS-IS nexthop adjacency:

```
switch(config-router)# show otv isis track-adjacency-nexthop
OTV-IS-IS process: default
  OTV-ISIS adjs for nexthop: 10.0.1.1, VRF: default
    Hostname: 0022.557a.3040, Overlay: Overlay4
    Hostname: 0022.557a.3040, Overlay: Overlay3
    Hostname: 0022.557a.3040, Overlay: Overlay2
    Hostname: 0022.557a.3040, Overlay: Overlay1
switch(config-router)#
```

Related Commands	Command	Description
	show otv isis	Displays the IS-IS status and configuration.

show run otv-isis

To display the current running configuration of the Overlay Transport Virtualization (OTV) Intermediate-System-to-Intermediate System (IS-IS) process, use the **show run otv-isis** command.

show otv run otv-isis [all]

Syntax Description

all	(Optional) Specifies the running configuration.
-----	---

Command Default

None

Command Modes

Global

Command History

Release	Modification
5.0(3)	This command was introduced.

Usage Guidelines

This command requires a Transport Services license.

Examples

This example shows how to display the current running configuration of the OTV IS-IS process:

```
switch# show run otv-isis
!Command: show running-config otv-isis
!Time: Mon Feb  1 03:05:57 2010
version 5.0(1)
interface Overlay1
  otv isis priority 1
  otv isis csnp-interval 1
  otv isis authentication-type cleartext
  otv isis authentication key-chain 1
switch#
```

Related Commands

Command	Description
show otv isis	Displays the IS-IS status and configuration.



T Commands

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track-adjacency-nexthop

To enable overlay route tracking, use the **track-adjacency-nexthop** command. To disable the setting, use the **no** form of this command.

track-adjacency-nexthop

no track-adjacency-nexthop

Syntax Description This command has no arguments or keywords.

Command Default Disabled

Command Modes OTV router configuration mode.

Command History	Release	Modification
	6.2(2)	This command was introduced.

Usage Guidelines This command tracks only the site-adjacent edge device. The site-adjacent device must be reachable only by Interior Gateway Protocol (IGP) and not by any static routes or default routes.

This command requires a Transport Services license.

Examples This example shows how to enable overlay route tracking:

```
switch(config)# otv-isis default
switch(config-router)# track-adjacency-nexthop
```

Related Commands

Command	Description
feature otv	Enables OTV on this device.