



## Span Session and Packet Capture Commands

---

- [source, on page 2](#)
- [destination, on page 3](#)
- [show system monitor session, on page 4](#)
- [monitor session , on page 5](#)
- [tcpdump port, on page 6](#)
- [tcpdump vnic, on page 7](#)

**source**

## source

To configure the source interface for a SPAN session, use the **source** command in session configuration mode. To remove the source configuration, use the **no** form of the command.

```
source {all interface interface-name vlan vlan-id vm-vnic vm-name vnic-id}
no source {all interface interface-name vlan vlan-id vm-vnic vm-name vnic-id}
```

<b>Syntax Description</b>	<table border="0"> <tr> <td><b>all</b></td><td>Specifies all supported interfaces for a SPAN session.</td></tr> <tr> <td><b>interface <i>interface-name</i></b></td><td>Specifies a physical interface.</td></tr> <tr> <td><b>vlan <i>vlan-id</i></b></td><td>Specifies a VLAN interface. Range: 1 to 4094.</td></tr> <tr> <td><b>vm-vnic <i>vm-name</i></b></td><td>Specifies a vNIC interface with the VM name.</td></tr> <tr> <td><b>vnic-id</b></td><td>Specifies the VNIC ID. Range: 0 to 8.</td></tr> </table>	<b>all</b>	Specifies all supported interfaces for a SPAN session.	<b>interface <i>interface-name</i></b>	Specifies a physical interface.	<b>vlan <i>vlan-id</i></b>	Specifies a VLAN interface. Range: 1 to 4094.	<b>vm-vnic <i>vm-name</i></b>	Specifies a vNIC interface with the VM name.	<b>vnic-id</b>	Specifies the VNIC ID. Range: 0 to 8.
<b>all</b>	Specifies all supported interfaces for a SPAN session.										
<b>interface <i>interface-name</i></b>	Specifies a physical interface.										
<b>vlan <i>vlan-id</i></b>	Specifies a VLAN interface. Range: 1 to 4094.										
<b>vm-vnic <i>vm-name</i></b>	Specifies a vNIC interface with the VM name.										
<b>vnic-id</b>	Specifies the VNIC ID. Range: 0 to 8.										
<b>Command Default</b>	None										
<b>Command Modes</b>	Session configuration (config-session-2) #										
<b>Command History</b>	<table border="0"> <tr> <td><b>Release</b></td> <td><b>Modification</b></td> </tr> <tr> <td>3.5.1</td> <td>This command was introduced.</td> </tr> </table>	<b>Release</b>	<b>Modification</b>	3.5.1	This command was introduced.						
<b>Release</b>	<b>Modification</b>										
3.5.1	This command was introduced.										
<b>Usage Guidelines</b>	In the case of virtio net or SRIOV VF, you have to specify the VM group name and NIC ID of the VM interface. If the VM vNIC is virtio net type, then the SPAN session is applied on the OVS bridge. If VM vNIC is SRIOV VF, then the mirror is applied to the hardware bridge. The interface name is specified for a physical interface, for example, GE0-0 or eth0.										

### Example

The following configuration shows how to configure a source interface for a SPAN session:

```
nfvis(config)# monitor session 2
nfvis(config-session-2)# bridge lan-br
nfvis(config-session-2)# source interface GE0-0
nfvis(config-session-2)# commit
```

# destination

To configure the destination interface for a SPAN session, use the **destination** command in session configuration mode. To remove the destination configuration, use the **no** form of the command

```
destination {interface interface-name vlan vlan-id vm-vnic vm-name vnic-id}
no destination {interface interface-name vlan vlan-id vm-vnic vm-name vnic-id}
```

## Syntax Description

<b>interface</b> <i>interface-name</i>	Specifies a physical interface.
<b>vlan</b> <i>vlan-id</i>	Specifies a VLAN interface. Range: 1 to 4094.
<b>vm-vnic</b> <i>vm-name</i>	Specifies a vNIC interface with the VM name.
<b>vnic-id</b>	Specifies the VNIC ID. Range: 0 to 8.

## Command Default

None

## Command Modes

Session configuration (config-session-2)#

## Command History

### Release Modification

3.5.1 This command was introduced.

## Usage Guidelines

You must dedicate a destination port for SPAN use. Except for traffic that is required for the SPAN session, destination ports do not receive or forward traffic. When the SPAN is configured on the system, there might be some performance hit.

## Example

The following configuration shows how to configure a destination interface for a SPAN session:

```
nfvis(config)# monitor session 2
nfvis(config-session-2)# bridge lan-br
nfvis(config-session-2)# destination vm-vnic 0
```

**show system monitor session**

# show system monitor session

To display the Switched Port Analyzer (SPAN) session details, use the **show system monitor session** command in privileged EXEC mode.

**show system monitor session**

<b>Syntax Description</b>	This command has no arguments or keywords.				
<b>Command Default</b>	None				
<b>Command Modes</b>	Privileged EXEC (#)				
<b>Command History</b>	<table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>3.5.1</td> <td>This command was introduced.</td> </tr> </tbody> </table>	Release	Modification	3.5.1	This command was introduced.
Release	Modification				
3.5.1	This command was introduced.				

## Example

The following is a sample output of the **show system monitor session** command:

```
nfvis# show system monitor session
system monitor session 2
bridge wan-br
destination_vlan ""
destination_interface vnic0
source_vlans ""
source_rx_interfaces "GE0-0"
source_tx_interfaces "GE0-0"
source_all false
statistics "tx_bytes=142660, tx_packets=1380"
```

# monitor session

To create a SPAN session, use the **monitor session** command in global configuration mode. To remove the SPAN session, use the **no** form of the command.

```
monitor session number
no monitor session
```

<b>Syntax Description</b>	<i>number</i> Specifies the SPAN session number. Valid range: 1-64						
<b>Command Default</b>	None						
<b>Command Modes</b>	Global configuration (config)						
<b>Command History</b>	<table><thead><tr><th></th><th><b>Release</b></th><th><b>Modification</b></th></tr></thead><tbody><tr><td>3.5.1</td><td>This command was introduced.</td><td></td></tr></tbody></table>		<b>Release</b>	<b>Modification</b>	3.5.1	This command was introduced.	
	<b>Release</b>	<b>Modification</b>					
3.5.1	This command was introduced.						

## Example

The following example shows how to create a SPAN session:

```
nfvis(config)# monitor session 2
nfvis(config)# commit
```

# tcpdump port

To configure the packet capture feature on a physical port, use the **tcpdump port** command in global configuration mode. Use the **no** form of the command to remove the packet capture.

```
tcpdump port port-name [filter filter-name protocol {ARP ICMP TCP UDP} time seconds]  
no tcpdump port port-name
```

---

<b>Syntax Description</b>	<p><b>port</b> <i>port-name</i> Specifies the name of the physical port.</p> <p><b>filter</b> <i>filter-name</i> (Optional) Specifies the filter name.</p> <p><b>protocol</b> (Optional) Specifies the protocol to capture specific packets. Supported options are:</p> <ul style="list-style-type: none"> <li>• Internet Control Message Protocol (ICMP)</li> <li>• Address Resolution Protocol (ARP)</li> <li>• TCP</li> <li>• UDP</li> </ul> <p><b>time</b> <i>seconds</i> (Optional) Specifies the time period over which packets are captured. The default value is 60 seconds.</p>				
<b>Command Default</b>	None				
<b>Command Modes</b>	Global configuration (config)				
<b>Command History</b>	<table border="1"> <thead> <tr> <th><b>Release</b></th><th><b>Modification</b></th></tr> </thead> <tbody> <tr> <td>3.5.1</td><td>This command was introduced.</td></tr> </tbody> </table>	<b>Release</b>	<b>Modification</b>	3.5.1	This command was introduced.
<b>Release</b>	<b>Modification</b>				
3.5.1	This command was introduced.				

---

## Example

The following example shows how to configure packet capture on a physical port:

```
nfvis(config)# tcpdump port eth0 filter filter1 time 30 pcap-location  
/data/intdatastore/pktcaptures/tcpdump_eth0.pcap  
nfvis(config)# commit
```

# tcpdump vnic

To configure the packet capture feature on a virtual network interface controller, use the **tcpdump vnic** command in global configuration mode. Use the **no** form of the command to remove the packet capture.

```
tcpdump vnic tenant-name name deployment-name name vm-name name vnic-id id [filter filter-name protocol {ARP ICMP TCP UDP} time seconds]
no tcpdump vnic tenant-name name deployment-name name vm-name name vnic-id id
```

Syntax Description	<b>tenant-name name</b> Specifies the tenant name. <b>deployment-name name</b> Specifies the deployment name. <b>vm-name name</b> Specifies the name of the VM. <b>vnic-id id</b> Specifies the vNIC ID. <b>filter filter-name</b> (Optional) Specifies the filter name. <b>protocol</b> (Optional) Specifies the protocol to capture specific packets. Supported options are: <ul style="list-style-type: none"> <li>• Internet Control Message Protocol (ICMP)</li> <li>• Address Resolution Protocol (ARP)</li> <li>• TCP</li> <li>• UDP</li> </ul>				
<b>time seconds</b>	(Optional) Specifies the time period over which packets are captured. The default value is 60.				
<b>Command Default</b>	None				
<b>Command Modes</b>	Global configuration (config)				
<b>Command History</b>	<table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>3.5.1</td> <td>This command was introduced.</td> </tr> </tbody> </table>	Release	Modification	3.5.1	This command was introduced.
Release	Modification				
3.5.1	This command was introduced.				

## Example

The following example shows how to configure packet capture on a vNIC:

```
nfvis(config)# tcpdump vnic tenant-name admin deployment-name 1489084431 vm-name ROUTER vnic-id 0 time 30 pcap-location /data/intdatastore/pktcaptures/1489084431_ROUTER_vnic0.pcap
nfvis(config)# commit
```

tcpdump vnic