

# Traffic Mirroring Commands

This module describes the commands used to configure and monitor traffic mirroring.

To use commands of this module, you must be in a user group associated with a task group that includes appropriate task IDs. If the user group assignment is preventing you from using any command, contact your AAA administrator for assistance.


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# acl

To configure ACL-based traffic mirroring, use the **acl** command in monitor session configuration mode. To stop ACL-based traffic mirroring, use the **no** form of this command.

**acl**

## Syntax Description

This command has no keywords or arguments.

## Command Default

No default behavior or values

## Command Modes

Monitor session configuration

## Command History

| Release | Modification |
|---|---|
| Release 7.0.12 | This command was introduced. |

## Usage Guidelines

If you use the **acl** command, traffic is mirrored according to the definition of the global interface access list (ACL) defined in one of the following commands: **ipv4 access-list**, **ipv6 access-list**, **ethernet-services access-list**.

Even when the **acl** command is configured on the source mirroring port, if the ACL configuration command does not use the **capture** keyword, no traffic gets mirrored.

If the ACL configuration uses the **capture** keyword, but the **acl** command is not configured on the source port, although traffic is mirrored, no access list configuration is applied.

## Examples

This example shows how to configure ACL-based traffic mirroring on the interface:

```
RP/0/RP0/CPU0:router(config)# monitor-session tm_example
RP/0/RP0/CPU0:router(config)# ethernet-services access-list tm_filter
RP/0/RP0/CPU0:router(config-es-acl)# 10 deny 0000.1234.5678 0000.abcd.abcd any capture
RP/0/RP0/CPU0:router(config-es-acl)# exit
RP/0/RP0/CPU0:router(config)# interface HundredGigabitEthernet0/2/0/0
RP/0/RP0/CPU0:router(config-if)# monitor-session tm_example direction rx-only
RP/0/RP0/CPU0:router(config-if)# acl
RP/0/RP0/CPU0:router(config-if-l2)# exit
RP/0/RP0/CPU0:router(config-if)# ethernet-services access-group tm_filter ingress
RP/0/RP0/CPU0:router(config-if)# end
```

## Related Commands

| Command | Description |
|---|---|
| ethernet-services access-list | Defines an Ethernet services (Layer 2) access list by name. |
| ipv4 access-list | Defines an IPv4 access list by name. |

# acl mpls

To mirror the MPLS traffic based on the global interface access list (ACL) defined in the **mpls access-list** configuration, use the **acl mpls** command in monitor session configuration mode.

**acl mpls** *acl_name*

## Syntax Description

| | |
|---|---|
| *acl_name* | Specifies the ACL name specified in the **mpls access-list** definition. |

## Command Default

None

## Command Modes

Monitor session configuration mode

## Command History

| Release | Modification |
|---|---|
| Release 24.4.1 | This command was introduced. |

## Usage Guidelines

No specific guidelines impact the use of this command.

## Task ID

| Task ID | Operation |
|---|---|
| ethernet-services | read, write |

### Example

This example provides the monitor session to be used on the configured interface. Use the direction keyword to specify that only ingress MPLS traffic is mirrored.

```
Router(config)# interface tenGigE 0/0/0/14
Router(config-if)#monitor-session S1 ethernet direction rx-only port-level
Router(config-if-mon)#acl mpls mp
```

# clear monitor-session counters

To clear the traffic mirroring session statistics, use the **clear monitor-session counters** command in XR EXEC mode .

**clear monitor-session counters** [**interface** *type interface-path-id*]

## Syntax Description

| | |
|---|---|
| **interface** | Identifies the interface for which the counters are to be cleared. |
| *type* | Interface type. For more information, use the question mark (**?**) online help function. |
| *interface-path-id* | Physical interface or virtual interface.<br>**Note** Use the **show interfaces** command to see a list of all interfaces currently configured on the router.<br>For more information about the syntax for the router, use the question mark (**?**) online help function. |
| *session-name* | Name of the monitor session to clear. |

## Command Default

All stored statistics for all interfaces are cleared.

## Command Modes

XR EXEC mode

## Command History

| Release | Modification |
|---|---|
| Release 7.0.12 | This command was introduced. |

## Usage Guidelines

No specific guidelines impact the use of this command.

## Task ID

| Task ID | Operations |
|---|---|
| interface | read |

## Examples

This example shows how to clear the traffic mirroring statistic counters:

```
RP/0/RP0/CPU0:router#clear monitor-session mon1 ipv6 counters
```

# destination file

To associate a destination file with a traffic mirroring session, use the **destination file** command in monitor-session configuration mode.

**destination file** [ **size** *kbytes* ] [ **buffer-type linear** ] [ **format pcapng** ] [**always-on**] [ **periodic-write** *interval* ] [ **capacity** *capacity* { **KB** | **MB** | **GB** } ]

## Syntax Description

| | |
|---|---|
| **file** | Configures a file destination for the current monitor-session. |
| **size** | Configures a non-default value for the size of buffer. If not configured, a platform-specific default value is used. |
| *kbytes* | Specifies the size of buffer in kilobytes. |
| **buffer-type** | Configures a non-default value for the type of buffer. If not configured, *circular* is used as the default buffer type. |
| **linear** | Configures the type of buffer as *linear*. |
| **format** | Configures a non-default value for the format of the file written. If not configured, *pcap* is used as the default output file format. |
| **pcapng** | Configures the format of the file written as *pcapng.* |
| **always-on** | If the file destination is configured to be always-on, the packet collection begins immediately and does not stop when the contents of the packet buffer are written. When the always-on config is removed, packet collection starts and stops based on packet-collection action commands. |
| **periodic-write** | Configures periodic write of the packet buffer to a file. |
| *interval* | Configures the interval in seconds at which the packet buffer is written to a file.<br>The value can range from 1 to 2147483647. |
| **capacity** | If this optional keyword is configured, the user-defined *capacity* is used as the maximum amount of disk memory to maintain periodic capture files for this session. |
| *capacity* | Specifes the storage capacity allocated to maintain periodic capture files for this session.<br>The value can range from 1 to 4294967295.<br>The capacity is converted into bytes when the units are specified and must be lower than the local-capture-capacity (the maximum capacity available for writing periodic capture files of all monitor sessions) in bytes. The default value is zero, which means the periodic files are written up to the local-capture-capacity limit. |
| **KB \| MB \| GB** | Specifies the unit in which the value configured for *capacity* is considered. |

## Command Default

See the syntax description table for the default values of each keyword.

## Command Modes

monitor-session configuration submode

## Command History

| Release | Modification |
|---|---|
| Release 7.1.2 | This command was introduced. |
| Release 24.4.1 | The keywords **always-on, periodic-write,** and **capacity** were introduced. |

## Usage Guidelines

- This class of destination is not supported on sessions with separate Rx and Tx destinations.
- Storage Capacity Management: The capacity management is performed on the default directory and files with default file names. If manual changes are done on the location or file names where the files are written, they do not contribute towards the session limit.

## Task ID

| Task ID | Operations |
|---|---|
| ethernet-services | read, write |

## Examples

This example demonstrates how to link a destination file to a traffic mirroring session with always-on SPAN-to-File packet capture. The buffer is written every 300 seconds, and the maximum storage capacity for the captured files is set to 500 MB.

```
Router(config)#monitor-session test
Router(config-mon)#destination file always-on periodic-write 300 capacity 500 MB
Router(config-mon)#commit
```

# destination interface

To associate a destination interface with a traffic mirroring session, use the **destination interface** command in monitor session configuration mode. To remove the designated destination, use the **no** form of this command.

**destination interface** *type interface-path-id*

## Syntax Description

| | |
|---|---|
| *type* | Interface type. For more information, use the question mark (**?**) online help function. |
| *interface-path-id* | Physical interface or virtual interface.<br>**Note** Use the **show interfaces** command to see a list of all interfaces currently configured on the router.<br>For more information about the syntax for the router, use the question mark (**?**) online help function. |

## Command Default

No default behavior or values

## Command Modes

Monitor sessions configuration

## Command History

| Release | Modification |
|---|---|
| Release 7.0.12 | This command was introduced. |

## Usage Guidelines

Use the **destination interface** command to assign a traffic monitoring session to a specific destination interface. This is the port to which a network analyzer is connected. This is generally called the monitoring port.

A destination port has these characteristics:

- A destination port must reside on the same switch as the source port.
- A destination port can be any Ethernet physical port, nV Satellite ICL port or EFP, but not a bundle interface. Also, the ICL must not be a bundle interface.
- At any one time a destination port can participate in only one traffic mirroring session. A destination port in one traffic mirroring session cannot be a destination port for a second traffic mirroring session. In other words, no two monitor sessions can have the same destination port.
- A destination port cannot also be a source port.

## Examples

This example shows how to configure a monitoring port for a traffic mirroring session:

```
RP/0/RP0/CPU0:router(config)# monitor-session mon1
RP/0/RSP0/CPU0:router(config-mon)# destination interface gigabitethernet0/0/0/15
```

# destination pseudowire

To direct mirrored traffic to a pseudowire, use the **destination pseudowire** command in monitor session configuration mode. To remove the pseudowire designation, use the **no** form of this command.

**destination pseudowire**

## Syntax Description

This command has no keywords or arguments.

## Command Default

No default behavior or values

## Command Modes

Monitor session configuration

## Command History

| Release | Modification |
|---|---|
| Release 7.0.12 | This command was introduced. |

## Usage Guidelines

Use the **destination pseudowire** command to direct the mirrored traffic to a pseudowire. A network analyzer in a central location can then be used to monitor the traffic. Use the monitor session command to define the exact pseudowire to which the monitored traffic should be replicated.

## Examples

This example shows how to configure a monitoring port for a traffic mirroring session:

```
RP/0/RP0/CPU0:router(config)# monitor-session mon1
RP/0/RSP0/CPU0:router(config-mon)# destination pseudowire
```

# destination sflow

To direct mirrored traffic to a sFlow collector, use the **destination sflow** command in monitor session configuration mode.

**destination sflow** *exporter-map-name*

## Syntax Description

| | |
|---|---|
| *exporter-map-name* | Specifies the sFlow exporter map name. |

## Command Default

No default behavior or values

## Command Modes

Monitor session configuration

## Command History

| Release | Modification |
|---|---|
| Release 25.1.1 | This command was introduced. |

## Usage Guidelines

Use the **destination sflow** command to direct the mirrored traffic to the sFlow collector. A network analyzer in a central location can then be used to monitor the traffic.

## Examples

This example shows how to configure a mirroring session for dropped packets via sFlow:

```
Router(config)#monitor-session monitor1
Router(config)#destination sflow EXP-MAP-DROP
Router(config)#forward-drops rx
!
```

# drops

To mirror Traffic Management (TM) buffer drop packets or forward-drop packets at the ingress of a router to a configured destination, use the **drops** command in XR Config mode.

```
drops [rx|tx] { traffic-management |packet-processing |unique-punt |
unique-port |filter expression }
```

## Syntax Description

| | |
|---|---|
| **rx** | Mirror packet drops in the Rx direction only. |
| **tx** | Mirror packet drops in the Tx direction only. |
| **traffic-management** | Mirror TM buffer drop packets in the specified direction (Rx or Tx). |
| **packet-processing** | Mirror forward-drop packets in the specified direction (Rx or Tx). |
| **unique-punt** | (Optional) Monitor packets that are punted to the CPU for processing. |
| **unique-port** | (Optional) Specify packet drops associated with specific port conditions. |
| **filter** *expression* | Apply pcap filter expression to the traffic being captured. |

## Command Default

Mirroring TM buffer drop packets and forward-drop packets is disabled.

## Command Modes

XR Config mode

## Command History

| Release | Modification |
|---|---|
| Release 25.4.1 | The keyword **filter** *expression*was introduced. |
| Release 24.2.11 | This command was introduced. |
| Release 25.2.1 | The optional keywords **unique-punt** and **unique-port** are introduced. |

## Usage Guidelines

The command is not available on management interface.

## Task ID

| Task ID | Operation |
|---|---|
| ethernet-services | read, write |

## Examples

This example shows how to configure a global traffic mirroring session for TM buffer drop packets.

```
Router(config)# interface tunnel-ip2
Router(config-if)# tunnel mode gre ipv4
Router(config-if)# tunnel source 10.10.10.10
Router(config-if)# tunnel destination 192.0.2.1
Router(config-if)# exit
Router(config)# monitor-session mon2 ethernet
Router(config-mon)# destination interface tunnel-ip2
```

```
Router(config-mon)# drops traffic-management rx
Router(config)# commit
```

**Examples**

This example shows how to configure a global traffic mirroring session for SPAN to file destination.

```
Router(config)# monitor-session mon1 ethernet
Router(config-mon)# destination file
Router(config-mon)# drops traffic-management rx
Router(config-mon)# commit
```

**Examples**

This example shows how to configure a global traffic mirroring session for forward-drop packets.

```
Router(config)# interface tunnel-ip2
Router(config-if)# tunnel mode gre ipv4
Router(config-if)# tunnel source 10.10.10.10
Router(config-if)# tunnel destination 192.0.2.1
Router(config-if)# exit
Router(config)# monitor-session mon2 ethernet
Router(config-mon)# destination interface tunnel-ip2
Router(config-mon)# drops packet-processing rx
Router(config-mon)# commit
```

**Examples**

This example shows how to configure a monitor session to capture unique packets by using the **unique-punt** option for a file destination.

```
Router(config)# monitor-session s1
Router(config-mon)# destination file always-on
Router(config-mon)# drops packet-processing unique-punt
Router(config-mon)# commit
```

**Examples**

This example shows how to capture drop packets from a particular source ip address using the filter expression.

```
Router(config)# monitor-session span1 ethernet
 Router(config-mon)# destination file size 10000 format pcapng
 Router(config-mon)# drops packet-processing rx filter ip src host 192.0.2.1
 Router(config-mon)# commit
```

# forward-drop rx

To mirror forward-drop packets at the ingress of a router to a configured destination, use the **forward-drop rx** command in XR Config mode.

**forward-drop rx**

## Syntax Description

This command has no keywords or arguments.

## Command Default

Mirroring forward-drop packets is disabled.

## Command Modes

XR Config mode

## Command History

| Release | Modification |
|---|---|
| Release 7.5.4 | This command was introduced. |
| Release 24.2.11 | This command was deprecated. Use the **drops** command to achieve the same functionality. |

## Usage Guidelines

The **forward-drop rx** command is not available on management interface.

## Task ID

| Task ID | Operation |
|---|---|
| ethernet-services | read, write |

### Example

This example shows how to configure a global traffic mirroring session for forward-drop packets.

```
Router(config)# interface tunnel-ip 2
Router(config-if)# tunnel mode gre ipv4
Router(config-if)# tunnel source 20.20.20.20
Router(config-if)# tunnel destination 192.1.1.3
Router(config-if)# exit
Router(config)# monitor-session mon2 ethernet
Router(config-mon)#destination interface tunnel-ip2
Router(config-mon)#forward-drop rx
Router(config-mon)#commit
```

# mirror enable

To copy files or directories automatically from `/harddisk:/mirror` location in active RP to `/harddisk:/mirror` location in standby RP or RSP without user intervention or EEM scripts, use `mirror enable` command. The `mirror enable checksum` command enables MD5 checksum across active to standby RP to check integrity of the files. This command is optional. A slight delay is observed in `show mirror` command output when mirror checksum configuration is enabled.

**mirror enable**

## Command Default

The `/harddisk:/mirror` directory is created by default, but file mirroring functionality is only enabled by executing the `mirror enable` command from configuration terminal.

## Command Modes

Monitor configuration

## Command History

| Release | Modification |
|---|---|
| Release 7.2.1<br>Release 7.0.14 | This command was introduced. |

File mirroring has to be enabled explicitly on the router. It is not enabled by default.

```
RP/0/RSP0/CPU0:router#show run mirror
Thu Jun 25 10:12:17.303 UTC
mirror enable
mirror checksum
```

# mirror first

To configure partial traffic mirroring, use the **mirror first** command in monitor session configuration mode. To stop mirroring a portion of the packet, use the **no** form of this command.

**mirror first** *bytes*

**Syntax Description**

| | |
|---|---|
| *bytes* | Number of bytes mirrored. The mirrored packet length value can range from 65 to 128. |

**Command Default**

The entire packet is mirrored.

**Command Modes**

Monitor session configuration

**Command History**

| Release | Modification |
|---|---|
| Release 7.0.12 | This command was introduced. |

**Usage Guidelines**

Use the **mirror first** command to mirror the first 64 to 128 bytes of the packet. The actual mirrored packet is the configured partial packet monitoring size plus the 4-byte trailing CRC.

**Examples**

This example shows how to mirror the first 100 bytes of the packet:

```
RP/0/RP0/CPU0:router(config)# interface hundredgigabitethernet0/0/0/11
RP/0/RP0/CPU0:router(config-if)# monitor-session mon1
RP/0/RP0/CPU0:router(config-if-mon)# mirror first 100
```

# monitor-session

To define a traffic mirroring session and enter monitor session configuration mode, use the **monitor-session** command in global configuration mode. To remove the traffic mirroring session, use the **no** form of this command.

**monitor-session** *session-name* [ **ethernet** | **ipv4** | **ipv6** | **mpls-ipv4** | **mpls-ipv6** ] [ **destination** [ **rx** | **tx** ] { **interface** | **pseudowire** | **file** | **sflow** } ] [ **rate-limit** *value [units]* ] [ **drops** [ **rx** | **tx** ] { **traffic-management** | **packet-processing** | **unique-punt** | **unique-port** | **filter** *expression* } ] [ **protocol-capture** [ **rx** | **tx** ] { **filter** *expression* } ]

## Syntax Description

| | |
|---|---|
| *session-name* | Name of the monitor session to configure. |
| **monitor-session** *session-name* [ **ethernet** \| **ipv4** \| **ipv6** \| **mpls-ipv4** \| **mpls-ipv6** ] | Specifies the monitor session type. Ethernet is the default type if none of these session types are specified:<br>• **ipv4**<br>• **ipv6**<br>• **mpls-ipv4**<br>• **mpls-ipv6** |
| **rx** | Allows you to configure the monitor session for the incoming traffic (Rx) only. |
| **tx** | Allows you to configure the monitor session for the outgoing traffic (Tx) only. |
| **destination** | Allows you to configure the destination for the current monitor-session for incoming traffic (Rx) or outgoing traffic (Tx). |
| **destination interface** | Sends mirrored traffic to the specified interface. |
| **destination pseudowire** | Sends mirrored traffic over a pseudowire. |
| **destination file** | Stores mirrored traffic directly into a file. |
| **destination sflow** | Configures the monitoring session to send the network traffic data using the sFlow protocol. |
| **rate-limit** | Enables rate-limit to control the amount of mirrored traffic. |
| *value [units]* | Specifies the value of rate-limit. The unit of measurement is kbps.<br>The minimum supported value is 40000 kbps (40 Mbps). The maximum supported value is 40000000 kbps (40 Gbps). |
| **protocol-capture** | Configures the session to capture packets related to specific control-plane protocols. |
| **filter** *expression* | Apply pcap filter expression to the traffic being captured. |

**Command Default**

No default behavior or values

**Command Modes**

Global configuration

**Command History**

| Release | Modification |
|---|---|
| Release 25.4.1 | The **protocol-capture** and **filter** *expression* keywords were introduced. |
| Release 25.3.1 | The **rate-limit** *value* keyword was introduced. |
| Release 7.0.12 | This command was introduced. |

**Usage Guidelines**

Before you can assign a monitor session to a specific interface, you must configure it using the **monitor-session** command. The *session-name* should not be the same as any interface name.

In monitor session configuration mode, you should define the destination interface to be used in the traffic mirroring session using the **destination** command.

For more information about monitoring a session, see *Configuring Traffic Monitoring* chapter in *Cisco 8000 Series Router Interface and Hardware Component Configuration Guide*.

**Examples**

This example shows how to enter monitor session configuration mode:

```
Router(config)# monitor-session mon1
Router(config-mon)#
```

**Examples**

This example shows how to apply rate-limit per destination using the **monitor-session** command:

```
Router(config)# monitor-session ERSPAN ethernet
Router(config-mon)# destination interface tunnel-ip100 rate-limit 200kpbs
```

To capture protocol packets in the receive (Rx) direction from a specific protocol, use the following command:

```
Router(config)# monitor-session span2 ethernet
 Router(config-mon)# destination file size 10000 format pcapng
 Router(config-mon)# protocol-capture rx filter arp
 Router(config-mon)# commit
```

**Related Commands**

| Command | Description |
|---|---|
| destination interface, on page 7 | Associates a destination interface with a traffic mirroring session. |

# monitor-session (interface)

To associate a traffic mirroring session with a specific interface, use the **monitor-session** command in interface configuration mode or dynamic-template configuration mode. To remove the association between a traffic mirroring session and an interface, use the **no** form of this command.

**monitor-session** *session-name* [ **direction** { **rx-only** | **tx-only** } ] **[port-level]**

## Syntax Description

| | |
|---|---|
| *session-name* | Name of the monitor session to configure. |
| **direction** | Specifies that traffic replication is in only one direction. |
| **rx-only** | Specifies that only ingress traffic is replicated. |
| **tx-only** | Specifies that only egress traffic is replicated. |
| **ethernet** | Specifies ethernet interface as destination. |
| **ipv4** | Indicates that Ipv4 traffic needs to be monitored. |
| **ipv6** | Indicates that Ipv6 traffic needs to be monitored. |
| **port-level** | Specifies the configuration at port level.<br>**Note**<br>• port-level mirroring is only supported in the ingress direction.<br>• port-level mirroring is only supported in sampling mode with a minimal sampling rate of 1:512. |

## Command Default

Replicates both ingress and egress traffic.

## Command Modes

Interface configuration

Dynamic template configuration (for BNG)

## Command History

| Release | Modification |
|---|---|
| Release 7.0.12 | This command was introduced. |
| Release 26.3.1 | The **tx-only** keyword was introduced. |

## Usage Guidelines

Before you can associate a traffic mirroring session to a specific interface, you must define it using the **monitor-session** global configuration command. After the traffic mirroring session is defined, use the **monitor-session** interface configuration command or dynamic template configuration command to associate this session with a specific source interface. For BNG sessions, the subscriber is attached to the monitor session, only when the dynamic template is applied to the subscriber. When the session is associated, all specified traffic on the interface is then replicated to the destination location defined in the monitor session configuration.

The **monitor-session** interface configuration command also enters monitor session configuration mode for you to configure additional features of the mirroring session.

If a physical interface is configured for Layer 3, then the traffic mirroring session can be associated on physical interfaces. Example:

```
interface TenGigE0/1/0/0
ipv4 address 10.0.0.1 255.255.255.0
```

If a physical interface has sub-interfaces configured for Layer 3, then the traffic mirroring session must be associated on each sub-interface. Example:

```
interface TenGigE0/1/0/1.601
ipv4 address 10.0.1.1 255.255.255.0
encapsulation dot1q 601
```

For more information about monitoring a session, see *Configuring Traffic Monitoring* chapter in *Cisco ASR 8000 Series Router Interface and Hardware Component Configuration Guide*.

## Task ID

| Task ID | Operations |
|---|---|
| interface | read, write |
| config-services | read, write |

## Examples

This example shows how to enter monitor session configuration mode:

```
RP/0/RP0/CPU0:router# configure
RP/0/RP0/CPU0:router(config)# interface hundredgigabitethernet0/0/0/11
RP/0/RP0/CPU0:router(config-if)# monitor-session mon1
RP/0/RP0/CPU0:router(config-if-mon)#
```

This example shows how to configure **monitor-session** command in the dynamic-template configuration mode for BNG:

```
RP/0/RP0/CPU0:router# configure
```

```
RP/0/RP0/CPU0:router(config)# dynamic-template type ppp ppp_template
RP/0/RP0/CPU0:router(config-dynamic-template-type)# monitor-session mon1 direction rx-only

RP/0/RP0/CPU0:router(config-dynamic-template-type)# acl
RP/0/RP0/CPU0:router(config-dynamic-template-type)# mirror first 100
```

This example shows how to capture egress traffic by using **tx-only** keyword:

```
Router(config-mon)#interface HundredGigE0/1/0/2
Router(config-if)# monitor-session mon1 ethernet direction tx-only
Router(config-if-mon)# no shut
Router(config-if)#!
Router(config-if)#
Router(config-if)#interface Bundle-Ether1
Router(config-if)# monitor-session mon1 ethernet direction tx-only
Router(config-if-mon)# no shutdown
Router(config-if)#!
```

# monitor-session default-capture-disable

To disable the default SPAN-to-File session, use the **monitor-session default-capture-disable** command in global configuration mode. A SPAN-to-File session for packet forwarding and buffer drops is enabled automatically by default.

**monitor-session default-capture-disable**

## Syntax Description

| | |
|---|---|
| **default-capture-disable** | Disables the default SPAN-to-File session. |

## Command Default

Default SPAN-to-File session for packet forwarding and buffer drops is enabled.

## Command Modes

Global configuration

## Command History

| Release | Modification |
|---|---|
| Release 24.4.1 | This command was introduced. |

## Usage Guidelines

If the default session has already been configured, configuring this command deletes the default session.

## Task ID

| Task ID | Operations |
|---|---|
| ethernet-services | read, write |

## Examples

This example shows how to disable the default SPAN-to-File session.

```
Router#configure
Router(config)#monitor-session default-capture-disable
Router(config)#commit
```

# monitor-session local-capture-capacity

To set the storage capacity limit for all monitor-sessions, use **monitor-session local-capture-capacity** command in global configuration mode.

**monitor-session local-capture-capacity** *capacity* { **kB** | **MB** | **GB** }

## Syntax Description

| | |
|---|---|
| **local-capture-capacity** | Configures the maximum amount of memory on disk used to maintain periodic capture files for all sessions. |
| *capacity* | Specifies the maximum capacity available for writing periodic capture files of all monitor sessions.<br>The value can range from 1 to 4294967295. |
| **KB \| MB \| GB** | Specifies the unit in which the value configured for *capacity* is considered. |

## Command Default

If the global storage capacity for all monitor sessions is not configured, a platform-specific default value is used for capacity management.

## Command Modes

Global configuration

## Command History

| Release | Modification |
|---|---|
| Release 24.4.1 | This command was introduced. |

## Usage Guidelines

Configure the global storage capacity larger than the capacity value in bytes for each session.

## Task ID

| Task ID | Operations |
|---|---|
| ethernet-services | read, write |

## Examples

This example shows how to configure 300 GB as the global storage capacity limit for all SPAN-to-File monitor-sessions.

```
Router#configure
Router(config)#monitor-session local-capture-capacity 300 MB
Router(config)#commit
```

# show monitor-session status

To display status information about configured traffic mirroring sessions, use the **show monitor-session status** command in XR EXEC mode .

**show monitor-session** [*session-name*] **status** [**detail**] [**errors**]

## Syntax Description

| | |
|---|---|
| *session-name* | Name of the monitor session to configure. |
| **detail** | Displays the full error string for any errors. |
| **errors** | Displays all sessions, but only source interfaces with errors are displayed (if no source interfaces have errors, then 'No errors' is displayed). |

## Command Default

No default behavior or values

## Command Modes

XR EXEC

## Command History

| Release | Modification |
|---|---|
| Release 7.0.12 | This command was introduced. |

## Usage Guidelines

The **show monitor-sessions status** command displays the following information:

- Destination information for the session (including the name of the interface).
- Destination status (interface state).
- List of source interfaces.
- Any other status information that may be pertinent, such as a software or hardware error that would stop sessions operating correctly. If an error is returned from interactions with another component, then the full error string is only displayed in detail output; standard tabular output reports that there has been an error but refers the user to the detailed output.

## Examples

This example shows sample output from the **show monitor-session status** command:

```
RP/0/RP0/CPU0:router# show monitor-session status

Monitor-session foo
Destination interface HundredGigabitEthernet 0/0/0/0
================================================================================
Source Interface      Dir   Status
--------------------- ----  --------------------------------------------------
Gi0/1/0/0.10          Both  Operational
Gi0/1/0/0.11          Rx    Operational
Gi0/1/0/0.12          Tx    Operational
```

# show monitor-session status internal

To display information about monitoring session statistics, use the `show monitor-session status internal` command in XR EXEC mode.

**show monitor-session status internal**

**Command Default** No default behavior or values

**Command Modes** XR EXEC

**Command History**

| Release | Modification |
|---|---|
| 7.2.12 | This command was introduced. |

### Example

This example shows sample output from the `show monitor-session status internal` command:

```
RP/0/RP0/CPU0:router#show monitor-session status internal
Thu Aug 13 20:05:23.478 UTC
Information from SPAN Manager and MA on all nodes:
Monitor-session mon1 (ID 0x00000001) (Ethernet)
SPAN Mgr: Destination interface HundredGigE0/1/0/0 (0x00800190)
Last error: Success
0/1/CPU0: Destination interface HundredGigE0/1/0/0 (0x00800190)
0/RP0/CPU0: Destination interface HundredGigE0/1/0/0 (0x00800190)
Information from SPAN EA on all nodes:
Monitor-session 0x00000001 (Ethernet)
0/1/CPU0: Name 'mon1', destination interface HundredGigE0/1/0/0 (0x00800190)
Platform, 0/1/CPU0:
Monitor Session ID: 1
Monitor Session Packets: 32
Monitor Session Bytes: 4024
0/2/CPU0: Name 'mon1', destination interface HundredGigE0/1/0/0 (0x00800190)
Platform, 0/2/CPU0:
Monitor Session ID: 1
Monitor Session Packets: 0
Monitor Session Bytes: 0
```

# show monitor-session counters

To display statistics regarding traffic mirroring sessions, use the **show monitor-session counters** command in XR EXEC mode .

**show monitor-session** [*session-name*] **counters** [*per-session*]

## Syntax Description

| | |
|---|---|
| *session-name* | Name of the monitor session to configure. |
| *per-session* | Specifies the counters at the session level. |

## Command Default

No default behavior or values

## Command Modes

XR EXEC

## Command History

| Release | Modification |
|---|---|
| Release 7.0.12 | This command was introduced. |
| Release 25.3.1 | The **per-session** option was added to view counters at the session level. |

## Usage Guidelines

The **show monitor-sessions counters** command displays a list of all source interfaces, and the replicated packet statistics for each interface. The full set of statistics displayed for each interface is:

- Ingress replicated packets and octets
- Egress replicated packets and octets
- Non-replicated packets and octets

## Examples

This example shows sample output from the **show monitor-session counters** command:

```
RP/0/RP0/CPU0:router show monitor-session 2 counters

Monitor session 2
  HundredGigabitEthernet 0/3/0/0.100:
    Rx Replicated: 100 Packets 8000 Bytes
    Tx Replicated: 2 Packets 3000 Bytes
    Non Replicated: 0 Packets 0 Bytes
```

## Examples

With rate-limit applied, the counters are available at the session level, rather than per source interface.

This example shows sample output from the **show monitor-session counters** command with rate-limit applied to the destination:

```
Router# show monitor-session foo counters per-session
```

```
Monitor session foo
  GigabitEthernet 0/3/0/0.100:
    Rx Replicated: 100 Packets 8000 Bytes
    Tx Replicated: 2 Packets 3000 Bytes
    Non Replicated: 0 Packets 0 Bytes
Per-session counters:
  Monitor-session foo
    Total replicated: 45 packets, 3600 octets
    Non-replicated: 0 packets, 0 octets
```