



# M Commands

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This chapter describes the system management commands that begin with M.

# monitor erspan origin ip-address

To configure the Encapsulated Remote Switched Port Analyzer (ERSPAN) origin IP address, use the **monitor erspan origin ip-address** command. To remove the ERSPAN origin IP address configuration, use the **no** form of this command.

**monitor erspan origin ip-address** *ip-address* [**global**]

**no monitor erspan origin ip-address** *ip-address* [**global**]

|                           |                   |                                                                                              |
|---------------------------|-------------------|----------------------------------------------------------------------------------------------|
| <b>Syntax Description</b> | <i>ip-address</i> | IP address.                                                                                  |
|                           | <b>global</b>     | (Optional) Specifies the default virtual device context (VDC) configuration across all VDCs. |

|                        |      |
|------------------------|------|
| <b>Command Default</b> | None |
|------------------------|------|

|                      |                           |
|----------------------|---------------------------|
| <b>Command Modes</b> | Global configuration mode |
|----------------------|---------------------------|

| <b>Command History</b> | <b>Release</b> | <b>Modification</b>          |
|------------------------|----------------|------------------------------|
|                        | 5.2(1)N1(1)    | This command was introduced. |

|                         |                                                                                        |
|-------------------------|----------------------------------------------------------------------------------------|
| <b>Usage Guidelines</b> | When you change the origin IP address in the default VDC, it impacts all the sessions. |
|                         | This command does not require a license.                                               |

|                 |                                                                   |
|-----------------|-------------------------------------------------------------------|
| <b>Examples</b> | This example shows how to configure the ERSPAN origin IP address: |
|-----------------|-------------------------------------------------------------------|

```
switch# configure terminal
switch(config)# monitor erspan origin ip-address 10.1.1.1 global
switch(config)#
```

This example shows how to remove the ERSPAN IP address:

```
switch# configure terminal
switch(config)# no monitor erspan origin ip-address 10.1.1.1 global
switch(config)#
```

| <b>Related Commands</b> | <b>Command</b>         | <b>Description</b>                      |
|-------------------------|------------------------|-----------------------------------------|
|                         | <b>monitor session</b> | Configures a SPAN or an ERSPAN session. |

# monitor session

To create a new Ethernet Switched Port Analyzer (SPAN) or an Encapsulated Remote Switched Port Analyzer (ERSPAN) session configuration for analyzing traffic between ports or add to an existing session configuration, use the **monitor session** command. To clear SPAN or ERSPAN sessions, use the **no** form of this command.

**monitor session** {*session-number* [**shut** | **type** {**local** | **erspan-source**} | **all shut**}

**no monitor session** {*session-number* | **all**} [**shut**]

## Syntax Description

|                       |                                                                                  |
|-----------------------|----------------------------------------------------------------------------------|
| <i>session-number</i> | SPAN session to create or configure. The range is from 1 to 18.                  |
| <b>all</b>            | Specifies to apply configuration information to all SPAN sessions.               |
| <b>shut</b>           | (Optional) Specifies that the selected session will be shut down for monitoring. |
| <b>type</b>           | (Optional) Specifies the type of session to configure.                           |
| <b>local</b>          | Specifies the session type to be local.                                          |
| <b>erspan-source</b>  | Creates an ERSPAN source session.                                                |

## Command Default

None

## Command Modes

Global configuration mode

## Command History

| Release     | Modification                 |
|-------------|------------------------------|
| 5.2(1)N1(1) | This command was introduced. |

## Usage Guidelines

To ensure that you are working with a completely new session, you can clear the desired session number or all SPAN sessions.



### Note

The Cisco Nexus 6000 switch supports two active SPAN sessions. The Cisco Nexus 5548 Switch supports four active SPAN sessions. When you configure more than two SPAN sessions, the first two sessions are active. During startup, the order of active sessions is reversed; the last two sessions are active. For example, if you configured ten sessions 1 to 10 where 1 and 2 are active, after a reboot, sessions 9 and 10 will be active. To enable deterministic behavior, explicitly suspend the sessions 3 to 10 with the **monitor session** *session-number* **shut** command.

After you create an ERSPAN session, you can describe the session and add interfaces and VLANs as sources and destinations.

**Examples**

This example shows how to create a SPAN session:

```
switch# configure terminal
switch(config)# monitor session 2
switch(config)#
```

This example shows how to enter the monitor configuration mode for configuring SPAN session number 9 for analyzing traffic between ports:

```
switch(config)# monitor session 9 type local
switch(config-monitor)# description A Local SPAN session
switch(config-monitor)# source interface ethernet 1/1
switch(config-monitor)# destination interface ethernet 1/2
switch(config-monitor)# no shutdown
```

This example shows how to configure any SPAN destination interfaces as Layer 2 SPAN monitor ports before activating the SPAN session:

```
switch(config)# interface ethernet 1/2
switch(config-if)# switchport
switch(config-if)# switchport monitor
switch(config-if)# no shutdown
```

This example shows how to configure a typical SPAN destination trunk interface:

```
switch(config)# interface Ethernet1/2
switch(config-if)# switchport
switch(config-if)# switchport mode trunk
switch(config-if)# switchport monitor
switch(config-if)# switchport trunk allowed vlan 10-12
switch(config-if)# no shutdown
```

This example shows how to create an ERSPAN session:

```
switch# configure terminal
switch(config)# monitor session 1 type erspan-source
switch(config-erspan-src)#
```

**Related Commands**

| Command                           | Description                                                   |
|-----------------------------------|---------------------------------------------------------------|
| <b>description (SPAN, ERSPAN)</b> | Adds a description to identify the SPAN session.              |
| <b>destination (ERSPAN)</b>       | Configures the destination IP port for an ERSPAN packet.      |
| <b>erspan-id (ERSPAN)</b>         | Sets the flow ID for an ERSPAN session.                       |
| <b>ip dscp (ERSPAN)</b>           | Sets the DSCP value for an ERSPAN packet.                     |
| <b>ip prec (ERSPAN)</b>           | Sets the IP precedence value for an ERSPAN packet.            |
| <b>ip ttl (ERSPAN)</b>            | Sets the time-to-live (TTL) value for an ERSPAN packet.       |
| <b>mtu (ERSPAN)</b>               | Sets the maximum transmission value (MTU) for ERSPAN packets. |
| <b>show monitor session</b>       | Displays SPAN session configuration information.              |
| <b>source (SPAN, ERSPAN)</b>      | Adds a SPAN source port.                                      |

# mtu

To configure the maximum transmission unit (MTU) truncation size for packets in the specified Ethernet Switched Port Analyzer (SPAN) session, use the **mtu** command. To remove the MTU truncation size configuration, use the **no** form of this command.

**mtu** *mtu-size*

**no mtu**

## Syntax Description

|          |                                                    |
|----------|----------------------------------------------------|
| mtu-size | MTU truncation size. The range is from 64 to 1500. |
|----------|----------------------------------------------------|

## Command Default

Disabled

## Command Modes

Monitor configuration (config-monitor)

## Supported User Roles

network-admin  
vdc-admin

## Command History

| Release     | Modification                 |
|-------------|------------------------------|
| 5.2(1)N1(1) | This command was introduced. |

## Usage Guidelines

MTU truncation and the SPAN rate limit cannot be enabled for the same SPAN session. If you configure both for one session, only the rate limit is allowed on F1 Series modules, and MTU truncation is disabled until you disable the rate limit configuration.



### Note

MTU truncation is supported only on F1 Series modules and F2 Series modules.

This command does not require a license.

## Examples

This example shows how to configure the MTU truncation size for packets in the specified SPAN session:

```
switch# configure terminal
switch(config)# monitor session 5
switch(config-monitor)# mtu 128
switch(config-monitor)#
```

This example shows how to remove the MTU truncation size configuration for packets in the specified SPAN session:

```
switch# configure terminal
```

```
switch(config)# monitor session 5  
switch(config-monitor)# no mtu
```

**Related Commands**

| Command                     | Description                                                                  |
|-----------------------------|------------------------------------------------------------------------------|
| <b>monitor session</b>      | Places you in the monitor configuration mode for configuring a SPAN session. |
| <b>show monitor session</b> | Displays the status of the SPAN session.                                     |