



## Span Command Reference

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This chapter describes commands to configure Span.

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# monitor permit-list

To restrict the destination ports that can be used for a SPAN session, use the **monitor permit-list** command in the global configuration mode.

**monitor permit-list destination interface** *type number*

## Syntax Description

<i>type</i>	Type of interface; valid values are <b>gigabitethernet</b> or <b>tengigabitethernet</b> .
<i>number</i>	Number of interface.

## Command Default

Disabled

## Command Modes

Global Configuration (config)

## Command History

Release	Modification
9.5.1	This command was introduced.

## Usage Guidelines

To prevent accidental configuration of ports as destinations, you can create a permit list of the ports that are valid for use as destinations. With a destination port permit list configured, you can only configure the ports in the permit list as destinations.

When you enter multiple instances of **interface** interface-typeslot/port-last-port, you must enter a space before and after the comma. For example, **interface** interface-typeslot/port-last-port, interface-typeslot/port-last-port, interface-typeslot/port-last-port.

## Examples

The following example shows how to configure a destination port permit list that includes Gigabit Ethernet ports 5/1 through 5/4, and activate monitoring.

```
Router(config)# monitor permit-list destination interface gigabitethernet 5/1-4
```

## Related Commands

Command	Description
<b>show monitor permit-list</b>	Displays the permit-list state and interfaces configured.

# monitor session

To start a new SPAN session, add or delete interfaces from an existing SPAN session, or delete a SPAN session, use the **monitor session** command in global configuration mode. To remove one or more source interfaces or destination interfaces from the SPAN session, use the **no** form of this command.

**monitor session** *session\_number* **type** *span-type*

**monitor session** *local\_span\_session\_number* **source interface** *type number* *direction*

**monitor session** *local\_span\_session\_number* **source service instance** *EFP\_number* *type number* *direction*

**monitor session** *local\_span\_session\_number* **destination interface** *type number*

## Syntax Description

<i>session_number</i>	Number of the local SPAN session; valid value is from 1 to 50.
<i>span type</i>	Type of span; only local span type is supported.
<b>source interface</b>	Specifies the port SPAN source.
<b>source service instance</b>	Specifies the EFP SPAN source.
<b>destination interface</b>	Specifies the SPAN destination interface.
<b>interface</b> <i>type number</i>	Specifies the interface type and number; valid values are <b>gigabitethernet</b> (1 to 9) and <b>port-channel</b> .
<i>direction</i>	Traffic direction. The <i>direction</i> argument accepts the following values: <ul style="list-style-type: none"> <li>• both-monitors received and transmitted traffic (both ingress and egress).</li> <li>• rx-monitors received traffic (ingress).</li> <li>• tx-monitors transmitted traffic (egress).</li> </ul>

## Command Default

This command has no default settings.

## Command Modes

Global Configuration (config)

## Command History

Release	Modification
9.5.1	This command was introduced.

**Usage Guidelines**

Only one SPAN destination for a SPAN session is supported. If you attempt to add another destination interface to a session that already has a destination interface configured, you will get an error. You must first remove a SPAN destination interface before changing the SPAN destination to a different interface.

**Examples**

The following example shows how to start a third local monitor session.

```
Router(config)# monitor session 3 type local
```

**Examples**

The following example shows how to configure a port span for the TenGigabitEthernet 4/1 port and monitor the received traffic (ingress).

```
Router(config-mon-local)# source interface TenGigabitEthernet 4/1 rx
```

**Examples**

The following example shows how to configure a monitoring port for a traffic mirroring session.

```
Router(config-mon-local)# destination interface TenGigabitEthernet 5/1
```

**Related Commands**

Command	Description
<b>show monitor</b>	Displays SPAN session number.

# show monitor permit-list

To display the destination ports that can be used for a SPAN session, use the **show monitor permit-list** command in either user or privileged EXEC mode.

**show monitor permit-list**

**Command Default** This command has no default settings.

**Command Modes** User EXEC (>)  
Privileged EXEC (#)

Command History	Release	Modification
	9.5.1	This command was introduced.

**Examples** The following example shows how to display the permit-list state and interfaces configured.

```
Router# show monitor permit-list
```

Related Commands	Command	Description
	<b>monitor permit-list</b>	Configures a destination port permit list or adds to an existing destination port permit list.

# show monitor session

To display information about the SPAN sessions, use the **show monitor session** command in the user EXEC mode.

**show monitor session all**

## Syntax Description

<b>all</b>	(Optional) Displays all sessions.
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## Command Default

This command has no default settings.

## Command Modes

User EXEC (>)

## Command History

Release	Modification
9.5.1	This command was introduced.

## Usage Guidelines

If you enter the **show monitor session** command without specifying a session, the information for all sessions is displayed.

## Examples

The following example shows how to display the configuration of all the SPAN sessions.

```
Router# show monitor session all
```

## Related Commands

Command	Description
<b>monitor session</b>	Starts a new SPAN session.