



## Z Commands

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This chapter covers the following commands:

- [zone](#), page 19-2
- [zone member](#), page 19-4
- [zoneset](#), page 19-6
- [zoneset enable](#), page 19-8
- [zoneset zone](#), page 19-10

# zone

To create a Fibre Channel (FC) switched fabric zone, use the **zone** command.

**zone** *name*

## Syntax Description

<i>name</i>	The name of the zone created by this command. Enter a maximum of 31 characters. The name must begin with an alpha character.
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## Defaults

None.

## Command Modes

Administrator.

## Command History

Release	Modification
2.5.1	This command was introduced for the SN 5428.
3.2.1	This command was introduced for the SN 5428-2.

## Usage Guidelines

FC fabric zoning enables you to divide ports and devices of the FC fabric into zones to provide more efficient and secure communication among grouped nodes. Zones are named groups of ports or devices that can communicate with each other. Zone membership can be defined by World Wide Port Name (WWPN), port number or FC address. The storage router supports zone membership defined by WWPN (or alias) only.

Zone members can only communicate with other members in the same zone; however, a port or device can be a member of multiple zones.



### Caution

If the storage router is connected to the FC switched fabric, all zoning changes (including the creation of a new FC zone) are immediately propagated to other storage routers and switches in the fabric.

Refer to the appropriate *Cisco Storage Router Software Configuration Guide* for your storage router model for more information about FC switched fabric zones.

## Examples

The following example creates a zone named *labzone3*:

```
[SN5428-2A]# zone labzone3
```

Related Commands	Command	Description
	<b>clear fcswitch</b>	Clear the switch log files of all entries or clear stored zoning configuration information.
	<b>delete zone</b>	Delete the specified Fibre Channel zone or the specified member of the zone from the zoning database.
	<b>delete zoneset</b>	Delete the specified zone from the zone set or to delete the entire named zone set from the zoning database.
	<b>fcalias</b>	Create an alias entity for use in Fibre Channel zoning.
	<b>fcalias member</b>	Add the specified member to the named alias.
	<b>fcswitch zoning autosave</b>	Enable the storage router to save zoning changes received from switches in the fabric.
	<b>fcswitch zoning default</b>	Select the level of communication between the storage router and devices in the fabric where there is no active zone set.
	<b>fcswitch zoning merge</b>	Set zoning merge compliance.
	<b>show debug fcswitch</b>	Display internal Fibre Channel interface parameters.
	<b>show fcalias</b>	Display information about aliases and their members.
	<b>show fcswitch</b>	Display global configuration information for storage router FC interfaces.
	<b>show fcswitch fabric</b>	Display information about the Fibre Channel fabric.
	<b>show zone</b>	Display configuration and operational information for Fibre Channel fabric zones from the local zoning database.
	<b>show zoneset</b>	Display configuration and operational information for Fibre Channel fabric zone sets.
	<b>zone member</b>	Add a device or an alias to a zone.
	<b>zoneset</b>	Create a Fibre Channel fabric zone set.
	<b>zoneset enable</b>	Activate a zone set.
	<b>zoneset zone</b>	Add a member zone to a zone set.

# zone member

To add a device or an alias to a zone, use the **zone member** command.

```
zone name member {fcalias alias-name | wwpn xxxxxxxxxxxxxxxx | all}
```

Syntax Description	
<i>name</i>	The name of the zone to which the member is being added.
<b>fcalias</b> <i>alias-name</i>	Make the specified alias a member of the named zone.
<b>wwpn</b> <i>xxxxxxxxxxxxxxxx</i>	Make the specified WWPN a member of the named zone.  <b>Note</b> WWPN address notation is represented by 16 hex digits. The digits may be separated by colons. When entering WWPN addresses, colons can be omitted or placed anywhere in the address notation as long as they do not leave one character without a partner character.
<b>wwpn all</b>	Add all WWPNs known to the storage router to the zone.

**Defaults** None.

**Command Modes** Administrator.

Command History	Release	Modification
	2.5.1	This command was introduced for the SN 5428.
	3.2.1	This command was introduced for the SN 5428-2.
	3.3.1	The <b>all</b> keyword was added.

**Usage Guidelines** Zones are named groups of ports or devices that can communicate with each other. A zone member can be a port or a device associated with a specific WWPN, or an alias. An alias is a named set of ports or devices that are grouped together for convenience. You can add a WWPN or an alias to one or more zones.

Zone members can only communicate with other members in the same zone; however, a port or device can be a member of multiple zones.



**Caution**

If the storage router is connected to the Fibre Channel (FC) switched fabric, all zoning changes (including adding a member to a zone) are immediately propagated to other storage routers and switches in the fabric.

Refer to the appropriate *Cisco Storage Router Software Configuration Guide* for your storage router model for more information about fabric zones.

**Examples**

The following example adds the aliases *testgroup1* and *testgroup2* and the WWPN *220145ab32ca7890* to the zone named *labgroup3*:

```
[SN5428-2A]# zone labzone3 member fcalias testgroup1
[SN5428-2A]# zone labzone3 member fcalias testgroup2
[SN5428-2A]# zone labzone3 member wwpn 2201:45ab:32ca:7890
```

**Related Commands**

Command	Description
<a href="#">clear fcswitch</a>	Clear the switch log files of all entries or clear stored zoning configuration information.
<a href="#">delete zone</a>	Delete the specified Fibre Channel zone or the specified member of the zone from the zoning database.
<a href="#">delete zoneset</a>	Delete the specified zone from the zone set or to delete the entire named zone set from the zoning database.
<a href="#">fcalias</a>	Create an alias entity for use in Fibre Channel zoning.
<a href="#">fcalias member</a>	Add the specified member to the named alias.
<a href="#">fcswitch zoning autosave</a>	Enable the storage router to save zoning changes received from switches in the fabric.
<a href="#">fcswitch zoning default</a>	Select the level of communication between the storage router and devices in the fabric where there is no active zone set.
<a href="#">fcswitch zoning merge</a>	Set zoning merge compliance.
<a href="#">show debug fcswitch</a>	Display internal Fibre Channel interface parameters.
<a href="#">show fcalias</a>	Display information about aliases and their members.
<a href="#">show fcswitch</a>	Display global configuration information for storage router FC interfaces.
<a href="#">show fcswitch fabric</a>	Display information about the Fibre Channel fabric.
<a href="#">show zone</a>	Display configuration and operational information for Fibre Channel fabric zones from the local zoning database.
<a href="#">show zoneset</a>	Display configuration and operational information for Fibre Channel fabric zone sets.
<a href="#">zone</a>	Create a Fibre Channel fabric zone.
<a href="#">zoneset</a>	Create a Fibre Channel fabric zone set.
<a href="#">zoneset enable</a>	Activate a zone set.
<a href="#">zoneset zone</a>	Add a member zone to a zone set.

# zoneset

To create a Fibre Channel (FC) switched fabric zone set, use the **zoneset** command.

**zoneset** *name*

<b>Syntax Description</b>	<i>name</i>	The name of the zone set created by this command. Enter a maximum of 31 characters. The name must begin with an alpha character.
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<b>Defaults</b>	None.
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<b>Command Modes</b>	Administrator.
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<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	2.5.1	This command was introduced for the SN 5428.
	3.2.1	This command was introduced for the SN 5428-2.

**Usage Guidelines** A zone set is a named group of fabric zones. A zone can belong to multiple zone sets. The storage router and each switch in the fabric maintains its own zoning database containing one or more zone sets. When you activate a zone set, zone sets of the same name from all storage routers and switches in the fabric are compiled and then the merged active zone set is redistributed to every storage router and switch in the fabric. This means that all switches and storage routers in the fabric have identical active zone sets.



**Caution**

If the storage router is connected to the FC switched fabric, all zoning changes (including the creation of a new FC switched fabric zone set) are immediately propagated to other storage routers and switches in the fabric.

Refer to the appropriate *Cisco Storage Router Software Configuration Guide* for your storage router model for more information about FC fabric zoning.

**Examples** The following example creates a zone set named *foo*:

```
[SN5428-2A]# zoneset foo
```

Related Commands	Command	Description
	<b>clear fcswitch</b>	Clear the switch log files of all entries or clear stored zoning configuration information.
	<b>delete zone</b>	Delete the specified Fibre Channel zone or the specified member of the zone from the zoning database.
	<b>delete zoneset</b>	Delete the specified zone from the zone set or to delete the entire named zone set from the zoning database.
	<b>fcalias</b>	Create an alias entity for use in Fibre Channel zoning.
	<b>fcalias member</b>	Add the specified member to the named alias.
	<b>fcswitch zoning autosave</b>	Enable the storage router to save zoning changes received from switches in the fabric.
	<b>fcswitch zoning default</b>	Select the level of communication between the storage router and devices in the fabric where there is no active zone set.
	<b>fcswitch zoning merge</b>	Set zoning merge compliance.
	<b>show debug fcswitch</b>	Display internal Fibre Channel interface parameters.
	<b>show fcalias</b>	Display information about aliases and their members.
	<b>show fcswitch</b>	Display global configuration information for storage router FC interfaces.
	<b>show fcswitch fabric</b>	Display information about the Fibre Channel fabric.
	<b>show zone</b>	Display configuration and operational information for Fibre Channel fabric zones from the local zoning database.
	<b>show zoneset</b>	Display configuration and operational information for Fibre Channel fabric zone sets.
	<b>zone</b>	Create a Fibre Channel fabric zone.
	<b>zone member</b>	Add a device or an alias to a zone.
	<b>zoneset enable</b>	Activate a zone set.
	<b>zoneset zone</b>	Add a member zone to a zone set.

# zoneset enable

To activate a zone set, use the **zoneset enable** command. To deactivate a zone set, use the **no** form of this command.

**zoneset name enable**

**no zoneset name enable**

## Syntax Description

<i>name</i>	The name of the zone set being activated.
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## Defaults

None.

## Command Modes

Administrator.

## Command History

Release	Modification
2.5.1	This command was introduced for the SN 5428.
3.2.1	This command was introduced for the SN 5428-2.

## Usage Guidelines

The storage router and each switch in the fabric maintains its own zoning database containing one or more zone sets. You must activate a zone set to apply its zoning definitions to the Fibre Channel (FC) fabric. When you activate a zone set, zone sets of the same name from all storage routers and switches in the fabric are compiled and then the merged active zone set is redistributed to every storage router and switch in the fabric. This means that all switches and storage routers in the fabric have identical active zone sets.

Only one zone set can be active at a time. You must explicitly deactivate an active zone set to allow another zone set to be activated.



### Caution

If the storage router is connected to the FC switched fabric, all zoning changes (including activating a zone set) are immediately propagated to other storage routers and switches in the fabric.

Refer to the appropriate *Cisco Storage Router Software Configuration Guide* for your storage router model for more information about FC fabric zoning.

## Examples

The following example activates the zone set named foo:

```
[SN5428-2A]# zoneset foo enable
```

Related Commands	Command	Description
	<b>clear fcswitch</b>	Clear the switch log files of all entries or clear stored zoning configuration information.
	<b>delete zone</b>	Delete the specified Fibre Channel zone or the specified member of the zone from the zoning database.
	<b>delete zoneset</b>	Delete the specified zone from the zone set or to delete the entire named zone set from the zoning database.
	<b>fcalias</b>	Create an alias entity for use in Fibre Channel zoning.
	<b>fcalias member</b>	Add the specified member to the named alias.
	<b>fcswitch zoning autosave</b>	Enable the storage router to save zoning changes received from switches in the fabric.
	<b>fcswitch zoning default</b>	Select the level of communication between the storage router and devices in the fabric where there is no active zone set.
	<b>fcswitch zoning merge</b>	Set zoning merge compliance.
	<b>show debug fcswitch</b>	Display internal Fibre Channel interface parameters.
	<b>show fcalias</b>	Display information about aliases and their members.
	<b>show fcswitch</b>	Display global configuration information for storage router FC interfaces.
	<b>show fcswitch fabric</b>	Display information about the Fibre Channel fabric.
	<b>show zone</b>	Display configuration and operational information for Fibre Channel fabric zones from the local zoning database.
	<b>show zoneset</b>	Display configuration and operational information for Fibre Channel fabric zone sets.
	<b>zone</b>	Create a Fibre Channel fabric zone.
	<b>zone member</b>	Add a device or an alias to a zone.
	<b>zoneset</b>	Create a Fibre Channel fabric zone set.
	<b>zoneset zone</b>	Add a member zone to a zone set.

## zoneset zone

To add a member zone to a zone set, use the **zoneset zone** command.

```
zoneset name zone name
```

Syntax Description		
	<i>name</i>	The name of the zone set to which the member is being added.
	<b>zone</b> <i>name</i>	The name of the zone.

Defaults	
	None.

Command Modes	
	Administrator.

Command History	Release	Modification
	2.5.1	This command was introduced for the SN 5428.
	3.2.1	This command was introduced for the SN 5428-2.

Usage Guidelines	
	A zone set is a named group of fabric zones. Zones are named groups of ports or devices that can communicate with each other. Zone members are identified in the storage router by WWPN. A zone can belong to multiple zone sets.

Refer to the appropriate *Cisco Storage Router Software Configuration Guide* for your storage router model for more information about Fibre Channel fabric zoning.

Examples	
	The following example adds the zone named <i>labzone3</i> to the zone set named <i>foo</i> :
	<pre>[SN5428-2A]# <b>zoneset foo zone labzone3</b></pre>

Related Commands	Command	Description
	<b>clear fcswitch</b>	Clear the switch log files of all entries or clear stored zoning configuration information.
	<b>delete zone</b>	Delete the specified Fibre Channel zone or the specified member of the zone from the zoning database.
	<b>delete zoneset</b>	Delete the specified zone from the zone set or to delete the entire named zone set from the zoning database.
	<b>fcalias</b>	Create an alias entity for use in Fibre Channel zoning.
	<b>fcalias member</b>	Add the specified member to the named alias.
	<b>fcswitch zoning autosave</b>	Enable the storage router to save zoning changes received from switches in the fabric.
	<b>fcswitch zoning default</b>	Select the level of communication between the storage router and devices in the fabric where there is no active zone set.
	<b>fcswitch zoning merge</b>	Set zoning merge compliance.
	<b>show debug fcswitch</b>	Display internal Fibre Channel interface parameters.
	<b>show fcalias</b>	Display information about aliases and their members.
	<b>show fcswitch</b>	Display global configuration information for storage router FC interfaces.
	<b>show fcswitch fabric</b>	Display information about the Fibre Channel fabric.
	<b>show zone</b>	Display configuration and operational information for Fibre Channel fabric zones from the local zoning database.
	<b>show zoneset</b>	Display configuration and operational information for Fibre Channel fabric zone sets.
	<b>zone</b>	Create a Fibre Channel fabric zone.
	<b>zone member</b>	Add a device or an alias to a zone.
	<b>zoneset</b>	Create a Fibre Channel fabric zone set.
	<b>zoneset enable</b>	Activate a zone set.

