R Commands

This chapter describes the Cisco NX-OS Fibre Channel, virtual Fibre Channel, and Fibre Channel over Ethernet (FCoE) commands that begin with R.

rlir preferred-cond fcid

To specify a preferred host to receive Registered Link Incident Report (RLIR) frames, use the **rlir preferred-cond fcid** command. To remove a preferred host, use the **no** form of this command.

rlir preferred-cond fcid *fc-id* **vsan** *vsan-id*

no rlir preferred-cond fcid *fc-id* **vsan** *vsan-id*

Syntax Description

fcid *fc-id*	Specifies the FC ID. The format is **0x***hhhhhh*.
vsan *vsan-id*	Specifies a VSAN ID. The range is from 1 to 4093.

Command Default

By default, the switch sends RLIR frames to one of the hosts in the Virtual SAN (VSAN) with the register function set to “conditionally receive” if no hosts have the register function set to “always receive.”

Command Modes

Global configuration mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Usage Guidelines

The switch sends RLIR frames to the preferred host only if it meets the following conditions:

- No host in the VSAN is registered for RLIR with the registration function set to “always receive.” If one or more hosts in the VSAN are registered as “always receive,” then RLIR sends only to these hosts and not to the configured preferred host.
- The preferred host is registered with the registration function set to “conditionally receive.” If all registered hosts have the registration function set to “conditionally receive,” then the preferred host receives the RLIR frames.

You can specify only one RLIR preferred host per VSAN.

Examples

This example shows how to specify the FCID 0x654321 as the RLIR preferred host for VSAN 2:

```
switch(config)# rlir preferred-cond fcid 0x654321 vsan 2
```

This example shows how to remove the FCID 0x654321 as the RLIR preferred host for VSAN 2:

```
switch(config)# no rlir preferred-cond fcid 0x654321 vsan 2
```

Related Commands

Command	Description
show rlir	Displays information about RLIR, Link Incident Record Registration (LIRR), and Distribute Registered Link Incident Record (DRLIR) frames.
clear rlir	Clears the RLIRs.
debug rlir	Enables RLIR debugging.

rscn

To configure a registered state change notification (RSCN), which is a Fibre Channel service that informs N ports about changes in the fabric, use the **rscn** command.

rscn {**multi-pid** | **suppress domain-swrscn**} **vsan** *vsan-id*

Syntax Description

multi-pid	Sends RSCNs in multiple port ID (multi-PID) format.
suppress domain-swrscn	Suppresses transmission of domain format SW-RCSNs.
vsan *vsan-id*	Configures VSAN information or membership. The ID of the VSAN is from 1 to 4093.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Examples

This example shows how to configure RSCNs in multi-PID format:

```
switch(config)# rscn multi-pid vsan 1
```

Related Commands

Command	Description
show rscn src-table	Displays the state change registration table.
show rscn statistics	Displays RSCN statistics.

rscn abort

To cancel a Registered State Change Notification (RSCN) configuration on a Virtual SAN (VSAN), use the **rscn abort** command. To reverse the cancellation, use the **no** form of this command.

rscn abort vsan *vsan-id*

no rscn abort vsan *vsan-id*

Syntax Description

vsan *vsan-id*	Specifies a VSAN where the RSCN configuration should be canceled. The ID of the VSAN is from 1 to 4093.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Examples

This example shows how to cancel an RSCN configuration on VSAN 1:

```
switch(config)# rscn abort vsan 1
```

Related Commands

Command	Description
rscn commit	Commits a pending RSCN configuration on a specified VSAN.
rscn distribute	Enables the distribution of an RSCN configuration.
rscn event-tov	Configures an RSCN event timeout.
clear rscn session vsan	Clears the RSCN session for a specified VSAN.
show rscn	Displays the RSCN configuration information.

rscn commit

To apply a pending Registered State Change Notification (RSCN) configuration, use the **rscn commit** command. To discard a pending RSCN configuration, use the **no** form of this command.

rscn commit vsan *vsan-id*

no rscn commit vsan *vsan-id*

Syntax Description

vsan *vsan-id*	Specifies a VSAN where the RSCN configuration should be committed. The ID of the VSAN is from 1 to 4093.

Command Default

None

Command Modes

Global configuration mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Usage Guidelines

If you commit the changes made to the active database, the configuration is committed to all the switches in the fabric. On a successful commit, the configuration change is applied throughout the fabric and the lock is released.

Examples

This example shows how to commit an RSCN configuration on VSAN 1:

```
switch(config)# rscn commit vsan 1
```

Related Commands

Command	Description
rscn abort	Cancels a pending RSCN configuration on a specified VSAN.
rscn distribute	Enables the distribution of an RSCN configuration.
rscn event-tov	Configures an RSCN event timeout.
clear rscn session	Clears the RSCN session for a specified VSAN.
show rscn	Displays the RSCN configuration information.

rscn distribute

To enable distribution of a Registered State Change Notification (RSCN) configuration, use the **rscn distribute** command. To disable the distribution, use the **no** form of this command.

rscn distribute

no rscn distribute

Syntax Description

This command has no arguments or keywords.

Command Default

RSCN timer distribution is disabled.

Command Modes

Global configuration mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Usage Guidelines

The RSCN timer configuration must be the same on all switches in the Virtual SAN (VSAN). Cisco Fabric Service (CFS) automatically distributes the RSCN timer configuration to all switches in a fabric. Only the RSCN timer configuration is distributed.

Examples

This example shows how to enable the distribution of an RSCN configuration:

```
switch(config)# rscn distribute
```

Related Commands

Command	Description
rscn abort	Cancels a pending RSCN configuration on a specified VSAN.
rscn commit	Applies a pending RSCN configuration.
rscn event-tov	Configures an RSCN event timeout.
clear rscn session	Clears the RSCN session for a specified VSAN.
show rscn	Displays the RSCN configuration information.

rscn event-tov

To configure an event timeout value for a Registered State Change Notification (RSCN) on a specified Virtual SAN (VSAN), use the **rscn event-tov** command. To cancel the event timeout value and restore the default value, use the **no** form of this command.

rscn event-tov *timeout* **vsan** *vsan-id*

no rscn event-tov *timeout* **vsan** *vsan-id*

Syntax Description

timeout	Event timeout value in milliseconds. The range is from 0 to 2000.
vsan *vsan-id*	Specifies a VSAN where the RSCN event timer should be used. The ID of the VSAN is from 1 to 4093.

Command Default

The default timeout values are 2000 milliseconds for Fibre Channel VSANs.

Command Modes

Global configuration mode

Command History

Release	Modification
6.0(2)N1(1)	This command was introduced.

Usage Guidelines

Before changing the timeout value, you must enable RSCN configuration distribution using the **rscn distribute** command.

The RSCN timer is registered with Cisco Fabric Services (CFS) during initialization and switchover.

Examples

This example shows how to configure an RSCN event timeout value on VSAN 1:

```
switch(config)# rscn event-tov 20 vsan 1
```

Related Commands

Command	Description
rscn abort	Cancels a pending RSCN configuration on a specified VSAN.
rscn commit	Applies a pending RSCN configuration.
rscn distribute	Enables distribution of an RSCN configuration.
clear rscn session	Clears the RSCN session for a specified VSAN.
show rscn	Displays the RSCN configuration information.