SAN Pin Groups

SAN Pin Groups

Cisco UCS uses SAN pin groups to pin Fibre Channel traffic from a vHBA on a server to an uplink Fibre Channel port on the fabric interconnect. You can use this pinning to manage the distribution of traffic from the servers.

Note In Fibre Channel switch mode, SAN pin groups are irrelevant. Any existing SAN pin groups will be ignored.

To configure pinning for a server, you must include the SAN pin group in a vHBA policy. The vHBA policy is then included in the service profile assigned to that server. All traffic from the vHBA will travel through the I/O module to the specified uplink Fibre Channel port.

You can assign the same pin group to multiple vHBA policies. As a result, you do not need to manually pin the traffic for each vHBA.

Important Changing the target interface for an existing SAN pin group disrupts traffic for all vHBAs which use that pin group. The fabric interconnect performs a log in and log out for the Fibre Channel protocols to re-pin the traffic.

Configuring a SAN Pin Group

In a system with two fabric interconnects, you can associate the pin group with only one fabric interconnect or with both fabric interconnects.

Procedure

	Command or Action	Purpose
Step 1	UCS-A# **scope fc-uplink**	Enters Fibre Channel uplink mode.
Step 2	UCS-A /fc-uplink # **create pin-group** *pin-group-name*	Creates a Fibre Channel (SAN) pin group with the specified name, and enters Fibre Channel uplink pin group mode.
Step 3	(Optional) UCS-A /fc-uplink/pin-group # **set descr** *description*	Provides a description for the pin group. **Note** If your description includes spaces, special characters, or punctuation, you must begin and end your description with quotation marks. The quotation marks will not appear in the description field of any **show** command output.
Step 4	(Optional) UCS-A /fc-uplink/pin-group # **set target** {**a** | **b** | **dual**} **port** *slot-num* / *port-num*	Sets the Fibre Channel pin target to the specified fabric and port.
Step 5	UCS-A /fc-uplink/pin-group # **commit-buffer**	Commits the transaction to the system configuration.

Example

The following example creates a SAN pin group named fcpingroup12, provides a description for the pin group, sets the pin group target to slot 2, port 1, and commits the transaction:

```
UCS-A# scope fc-uplink
UCS-A /fc-uplink # create pin-group fcpingroup12
UCS-A /fc-uplink/pin-group* # set descr "This is my pin group #12"
UCS-A /fc-uplink/pin-group* # set target a port 2/1
UCS-A /fc-uplink/pin-group* # commit-buffer
UCS-A /fc-uplink/pin-group #
```

What to do next

Include the pin group in a vHBA template.

Configuring a FCoE Pin Group

You can create a FCoE pin group, and specify the FCoE uplink port as the pin group target.

Procedure

	Command or Action	Purpose
Step 1	UCS-A# **scope fc-uplink**	Enters FC uplink mode.
Step 2	UCS-A /fc-uplink # **create pin-group fcoepingroup**	Creates a FCoE pin group with the specified name, and enters FCoE uplink pin group mode.
Step 3	UCS-A /fc-uplink/pin-group # **set target a fcoe-port 1/8**	Sets FCoE port 1/8 as the target port for this pin group.
Step 4	UCS-A /fc-uplink/pin-group # **commit-buffer**	Commits the transaction to the system configuration.

Example

```
UCS-A# scope fc-uplink
UCS-A /fc-uplink # create pin-group fcoepingroup
UCS-A /fc-uplink/pin-group* #set target a fcoe-port 1/8
UCS-A /fc-uplink/pin-group* # commit-buffer
UCS-A /fc-uplink/pin-group #
```

Configuring SAN Pin Group

The following steps describe about creating a breakout SAN pin group:

Procedure

	Command or Action	Purpose
Step 1	UCS-A# **scope fc-uplink**	Enters Fibre Channel uplink mode.
Step 2	UCS-A /fc-uplink **create pin-group Test**	
Step 3	UCS-A /fc-uplink/pin-group* # **set target** *a***breakout-port***1 36 4*	Sets the Fibre Channel pin target to the specified fabric and port.
Step 4	UCS-A /fc-uplink/pin-group* # **commit-buffer**	Commits the transaction to the system configuration.
Step 5	UCS-A /fc-uplink/pin-group# **show target**	Displays the output.

Example

The following is the example for creating breakout SAN pin-group:

```
FC Pin Target:
    Fabric Endpoint
    ------ --------
    A      fabric/san/A/slot-1-aggr-port-36/phys-slot-1-port-4
UCS-A /fc-uplink/pin-group #
```