

# **SAN Pin Groups**

- SAN Pin Groups, on page 1
- Configuring a SAN Pin Group, on page 1
- Configuring a FCoE Pin Group, on page 2
- Configuring SAN Pin Group, on page 3

## **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 abreakout-port1 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 #
```

Configuring SAN Pin Group