

How to Check Upstream FC SAN Switch Connected to a UCS Fabric Interconnect

Contents

[Introduction](#)

[Prerequisites](#)

[Requirements](#)

[Components Used](#)

[Background Information](#)

[Check Ethernet Cisco Discovery Protocol \(CDP\) Neighbors and FC Neighbors](#)

[Related Information](#)

Introduction

This document describes how to check upstream Fiber Channel (FC) Storage Area Network (SAN) Switch connected to a Unified Computing System (UCS) Fabric Interconnect (FI).

Prerequisites

Requirements

There are no specific requirements for this document.

Components Used

The information in this document is based on these software and hardware versions:

- UCS Fabric Interconnects and UCS Manager
- Cisco MDS or Nexus Storage Switch

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

Background Information

It is usually quite easy to determine the IP address of an upstream ethernet switch connected to a UCS Fabric Interconnect with the use of the command **show cdp neighbors** from the nxos prompt. However, most of us experience difficulties to figure out similar information for an upstream FC switch connected to a UCS Fabric Interconnect.

Check Ethernet Cisco Discovery Protocol (CDP) Neighbors and FC Neighbors

An example from the lab:

```
WW-SV-115-A-A(nxos)# show cdp neighbors
```

Capability Codes: R - Router, T - Trans-Bridge, B - Source-Route-Bridge

S - Switch, H - Host, I - IGMP, r - Repeater,

V - VoIP-Phone, D - Remotely-Managed-Device,

s - Supports-STP-Dispute

Device-ID	Local Infrfce	Hldtme	Capability	Platform	Port ID
BGL-SV-CAT6K-01	mgmt0	179	R S I	WS-C6503-E	Gig2/18
BGL-SV-N5548UP-01-14 (SSI15430M56)					
	Eth1/9	161	S I s	N5K-C5548UP	Eth1/16
BGL-SV-N5548UP-02-15 (SSI15430MAW)					
	Eth1/11	153	S I s	N5K-C5548UP	Eth1/17

If the Fabric Interconnect FC is configured for **Switching Mode**, you can use the command **show topology** in order to fetch the required information.

If the Fabric Interconnect FC is configured for **End Host Mode**, you can use the command **show npv internal info external-interface all** in order to fetch the required information.

```
WW-SV-115-A-A(nxos)# show npv internal info external-interface all
```

External Interface Info:

=====

Interface Information:

ifindex: fc1/32, Port VSAN: 200, Internal FLOGI VSAN: 200, fcid: 0xd10241 <
FABRIC INTERCONNECT PORT & ITS FCID

Internal FLOGI Done: True, In Progress: False

FSM current state: NPIVP_EXT_IF_ST_UP

fabric mgmt addr: 10.76.78.15
<UPSTREAM SWITCH IP ADDRESS

fabric pwwn: 20:43:54:7f:ee:e2:ac:80, fabric nwwn: 20:c8:54:7f:ee:e2:ac:81
<UPSTREAM SWITCH WWN

my pwwn: 20:20:8c:60:4f:4f:4f:c0, my nwwn: 20:c8:8c:60:4f:4f:4f:c1
<FABRIC INTERCONNECT WWN

fcf_mac: 8c60:4f4f:4fe7

Pinned Server Intf Count: -3

----- OUTPUT TRUNCATED -----

```
WW-SV-115-A-A(nxos)# show interface fc 1/32
```

```
fc1/32 is up
```

```
Hardware is Fibre Channel, SFP is short wave laser w/o OFC (SN)
```

```
Port WWN is 20:20:8c:60:4f:4f:c0  
<FABRIC INTERCONNECT PWWN (re-verified)
```

```
Admin port mode is NP, trunk mode is off
```

```
----- OUTPUT TRUNCATED -----
```

You get the **IP Address of the upstream FC SAN Switch**. However, this does not reveal the port to which the Fabric Interconnect is connected. In order to find the port information, you need to login to the upstream FC SAN Switch and check the FLOGI database.

```
BGL-SV-N5548UP-02-15# show flogi database | include 20:20:8c:60:4f:4f:c0
```

```
-----
```

INTERFACE	VSAN	FCID	PORT NAME	NODE NAME
fc2/3	200	0xd10241	20:20:8c:60:4f:4f:c0	20:c8:8c:60:4f:4f:c1

```
<UPSTREAM SWITCH PORT AND FABRIC INTERCONNECT FCID & WWN
```

Thus, you can conclude that the Fabric Interconnect port fc1/32 with PWWN 20:20:8c:60:4f:4f:c0 and FCID 0xd10241 has been learned on upstream FC SAN Switch with IP Address 10.76.78.15 on port fc2/3.

UCS Manager GUI can also be used to figure out the information related to the IP Address of the upstream switches.

Firstly, Information Policy needs to be Enabled.

Step 1. In the Navigation pane, click the **Equipment** tab.

Step 2. In the **Equipment** tab, click the **Equipment** node.

Step 3. In the Work pane, click the **Policies** tab.

Step 4. Click the **Global Policies** subtab.

Step 5. In the **Info Policy** area, select **Enabled**.

Step 6. Click **Save Changes**.

Then, you need to navigate to the Neighbors tab for the respective Fabric Interconnect.

Step 1. In the Navigation pane, click the **Equipment** tab.

Step 2. In the **Equipment** tab, expand **Equipment > Fabric Interconnects**.

Step 3. Click the fabric interconnect for which you want to view the SAN neighbors.

Step 4. In the Work pane, click the **Neighbor** tab.

Step 5. Click the **SAN** subtab as shown in the image.

In order to check the same information (after you enable the policy) from CLI.

```
WW-SV-115-A# scope fabric-interconnect a|b
```

```
WW-SV-115-A /fabric-interconnect# show san-neighbors
```

Related Information

- [Cisco Unified Computing System Ethernet Switching Modes](#)
- [Technical Support & Documentation - Cisco Systems](#)