



Verifying that the Data Path is Ready

This chapter includes the following sections:

- [Verifying that Dynamic vNICs Are Up and Running, page 1](#)
- [Verifying the Ethernet Data Path, page 2](#)
- [Verifying the Data Path for Fibre Channel Switch Mode, page 2](#)

Verifying that Dynamic vNICs Are Up and Running

When you upgrade a Cisco UCS that includes dynamic vNICs and an integration with VMware vCenter, you must verify that all dynamic vNICs are up and running on the new primary fabric interconnect before you activate the new software on the former primary fabric interconnect to avoid data path disruption.

Perform this step in the Cisco UCS Manager GUI.

Procedure

- Step 1** In the **Navigation** pane, click **VM**.
 - Step 2** On the **VM** tab, expand **All > VMware > Virtual Machines**.
 - Step 3** Expand the virtual machine for which you want to verify the dynamic vNICs and choose a dynamic vNIC.
 - Step 4** In the **Work** pane, click the **VIF** tab.
 - Step 5** On the **VIF** tab, verify that the **Status** column for each VIF is **Online**.
 - Step 6** Repeat Steps 3 through 5 until you have verified that the VIFs for all dynamic vNICs on all virtual machines have a status of **Online**.
-

Verifying the Ethernet Data Path

Procedure

	Command or Action	Purpose
Step 1	UCS-A /fabric-interconnect # connect nxos {a b}	Enters NX-OS mode for the fabric interconnect.
Step 2	UCS-A(nxos)# show int br grep -v down wc -l	Returns the number of active Ethernet interfaces. Verify that this number matches the number of Ethernet interfaces that were up prior to the upgrade.
Step 3	UCS-A(nxos)# show platform fwm info hw-stm grep '1.' wc -l	Returns the total number of MAC addresses. Verify that this number matches the number of MAC addresses prior to the upgrade.

The following example returns the number of active Ethernet interfaces and MAC addresses for subordinate fabric interconnect A so that you can verify that the Ethernet data path for that fabric interconnect is up and running:

```
UCS-A /fabric-interconnect # connect nxos a
UCS-A(nxos) # show int br | grep -v down | wc -l
86
UCS-A(nxos) # show platform fwm info hw-stm | grep '1.' | wc -l
80
```

Verifying the Data Path for Fibre Channel Switch Mode

For best results when upgrading a Cisco UCS domain, we recommend that you perform this task before you begin the upgrade and after you activate the subordinate fabric interconnect, and then compare the two results.

Procedure

	Command or Action	Purpose
Step 1	UCS-A /fabric-interconnect # connect nxos {a b}	Enters NX-OS mode for the fabric interconnect.
Step 2	UCS-A(nxos)# show flogi database	Displays a table of flogi sessions.
Step 3	UCS-A(nxos)# show flogi database grep -I fc wc -l	Returns the number of servers logged into the fabric interconnect. The output should match the output you received when you performed this verification prior to beginning the upgrade.

The following example displays the flogi-table and number of servers logged into subordinate fabric interconnect A so that you can verify that the Fibre Channel data path for that fabric interconnect in Fibre Channel End-Host mode is up and running:

```
UCS-A /fabric-interconnect # connect nxos a
```

```
UCS-A (nxos) # show flogi database
```

```
-----
INTERFACE      VSAN    FCID      PORT NAME      NODE NAME
-----
vfc726          800     0xef0003   20:00:00:25:b5:26:07:02  20:00:00:25:b5:26:07:00
vfc728          800     0xef0007   20:00:00:25:b5:26:07:04  20:00:00:25:b5:26:07:00
vfc744          800     0xef0004   20:00:00:25:b5:26:03:02  20:00:00:25:b5:26:03:00
vfc748          800     0xef0005   20:00:00:25:b5:26:04:02  20:00:00:25:b5:26:04:00
vfc764          800     0xef0006   20:00:00:25:b5:26:05:02  20:00:00:25:b5:26:05:00
vfc768          800     0xef0002   20:00:00:25:b5:26:02:02  20:00:00:25:b5:26:02:00
vfc772          800     0xef0000   20:00:00:25:b5:26:06:02  20:00:00:25:b5:26:06:00
vfc778          800     0xef0001   20:00:00:25:b5:26:01:02  20:00:00:25:b5:26:01:00
```

```
Total number of flogi = 8.
```

```
UCS-A (nxos) # show flogi database | grep fc | wc -l
```

```
8
```

