Lab 2-3: Configuring Cisco FabricPath

Complete this lab activity to practice what you learned in the related module.

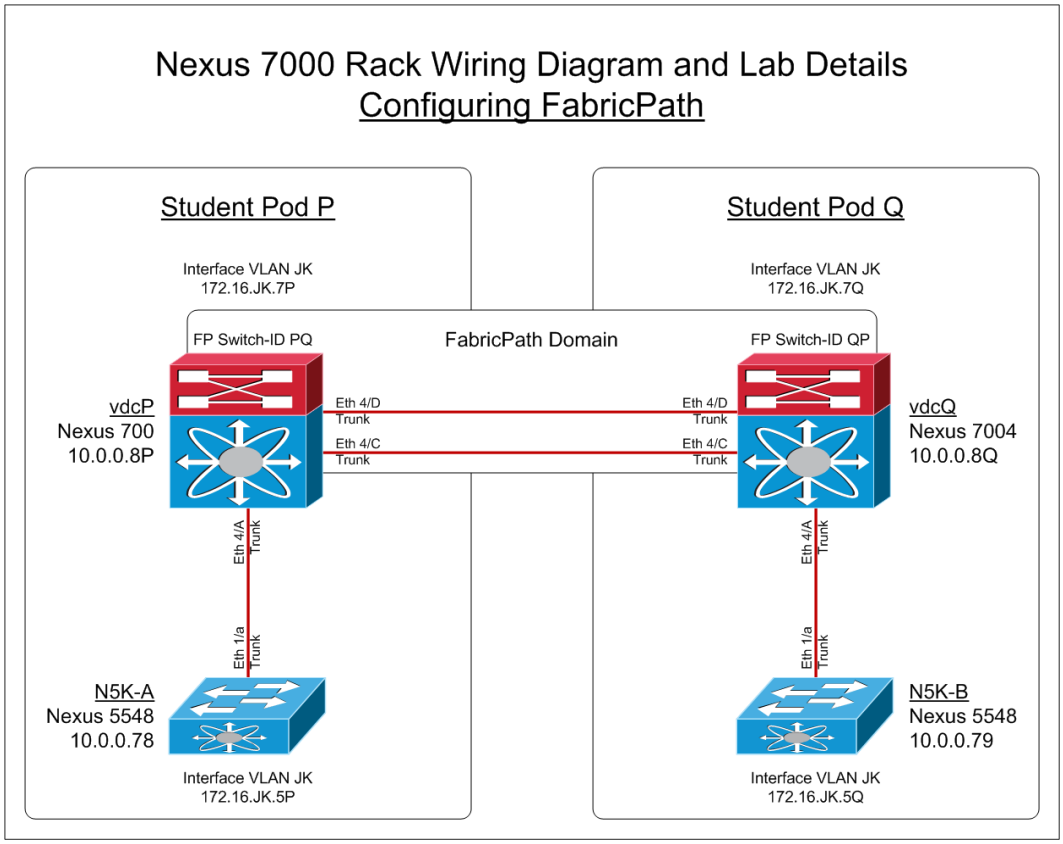
Activity Objective

In this activity, you will configure and verify Cisco FabricPath on the Cisco Nexus 5500 and 7000 Series switches. After completing this activity, you will be able to meet these objectives:

- Analyze spanning-tree load balancing
- Implement Cisco FabricPath
- Verify Cisco FabricPath
- Analyze Cisco FabricPath load balancing

Visual Objective

The figure illustrates what you will accomplish in this activity.



Command List

The following table describes the Cisco NX-OS commands that are used in this activity.

Command	Description
install feature-set fabricpath	Installs the FabricPath feature set on a Cisco Nexus 7000 Series switch

Command	Description
feature-set fabricpath	Enables the FabricPath feature set
fabricpath switch-id	Sets the FabricPath switch identifier (Note: The same command configured the virtual switch ID for vPC+ in the vPC domain configuration mode.)
switchport mode fabricpath	Configures the FabricPath mode on an interface (This command is available in interface configuration mode.)
mode fabricpath	Changes a VLAN to a Cisco FabricPath VLAN
show mac address-table vlan <vlan>	Displays the MAC address table for a VLAN
show spanning-tree vlan <vlan>	Displays the spanning-tree topology for a VLAN
fabricpath load-balance unicast	Configures the load-balancing method for unicast traffic
show fabricpath switch-id	Displays the FabricPath switch ID table
show fabricpath isis route	Displays the FabricPath Intermediate System-to-Intermediate System (IS-IS paths
show fabricpath route	Displays the FabricPath routing table

Task 0: Lab Preparation

In this task, you will perform the steps necessary to get ready for performing the Tasks in this lab.

Activity Procedure

Complete these steps:

Step 1 Before you can perform this lab you will need a Student Server and a Pod Number assigned to you. Your instructor should provide to you the following information:

- Student Server Name or IP Address
- Student Server Username
- Student Server Password
- Pod Number
- Peer Pod Number

Step 2 From your personal/work computer use the Remote Desktop Connection (RDC) application to log in to your assigned Student Server. Refer to *Accessing the NterOne Lab Equipment* for detailed instructions regarding how to use RDC to connect to your Student Server.

Step 3 From your Student Server desktop use the PuTTY application to open SSH sessions to each of the devices in the following table.

Device Name	Device Description	IP Address	Username	Password
vdcP*	Your Pod Nexus 7004 VDC	10.0.0.8P*	admin	Nterone179
vdcQ*	Your Peer Pod Nexus 7004 VDC	10.0.0.8Q*	admin	Nterone179
N5K-X	Nexus 5548UP Switch	10.0.0.78	admin	Nterone179
N5K-B	Nexus 5548UP Switch	10.0.0.79	admin	Nterone179

*Note	Replace “P” with your Pod Number for this lab and replace “Q” with your Peer Pod Number.

Step 4 Perform a configuration rollback on your Pod VDC to the checkpoint named “baseline”. Use the “best-effort” option.

```
vdcP# rollback running-config checkpoint baseline best-effort
Collecting Running-Config
#Generating Rollback Patch
Executing Rollback Patch

Rollback completed successfully.
```

Step 5 If any VLANs other than VLAN 1 are still on your Pod VDC, delete them.

Activity Verification

You have completed this activity when you have achieved these goals:

- You have made a successful connection to your Student Server.
- You have successfully used PuTTY to connect to the devices in the table above.
- You rolled back the running configuration to the state at checkpoint "baseline" on your Pod VDC.

Task 1: Examine Spanning Tree Load Balancing

In this task, you will configure and examine the spanning-tree forwarding within the network.

Activity Procedure

Complete these steps:

Step 6 On your Pod VDC disable interface Ethernet 4/B, it will not be used in this lab.

```
vdcP# config
Enter configuration commands, one per line.  End with CNTL/Z.
vdcP(config)# interface ethernet 4/B
vdcP(config-if)# shutdown
```

Step 7 Create a VLAN using the table below and give it the name "FP-TEST". The characters "JK" will be used in this lab to represent this value.

Your Pod Number	VLAN Number (JK)
Pod 1	12
Pod 2	12
Pod 3	34
Pod 4	34
Pod 5	56
Pod 6	56
Pod 7	78
Pod 8	78

```
vdcP(config)# vlan JK
vdcP(config-vlan)# name FP-TEST
```

Step 8 Create an SVI for VLAN JK with the address 172.16.JK.7P, where P is your Pod Number.

```
vdcP(config-vlan)# feature interface-vlan
vdcP(config)# interface vlan JK
vdcP(config-if)# ip address 172.16.JK.7P/24
vdcP(config-if)# no shutdown
```

Step 9 Enable the interfaces toward your Nexus 5548 switch as well as your Peer Pod VDC, and configure them as trunks.

```
vdcP(config-if)# interface ethernet 4/A, ethernet 4/C-D
vdcP(config-if-range)# switchport
vdcP(config-if-range)# switchport mode trunk
vdcP(config-if-range)# spanning-tree port type network
vdcP(config-if-range)# end
```

Step 10 On your Nexus 5548 switch create and name VLAN JK in the same configuration as on your VDC.

```
N5K-X# config
Enter configuration commands, one per line.  End with CNTL/Z.
N5K-X(config)# vlan JK
N5K-X(config-vlan)# name FP-TEST
```

Step 11 Create an SVI for VLAN JK with the address 172.16.JK.5P, where P is your Pod Number.

```
N5K-X(config-vlan)# feature interface-vlan
N5K-X(config)# interface vlan JK
N5K-X(config-if)# ip address 172.16.JK.5P/24
N5K-X(config-if)# no shutdown
```

Step 12 On your Nexus 5548 switch configure interface Ethernet 1/a as a trunk port.

```
N5K-X(config)# interface ethernet 1/a
N5K-X(config-if)# switchport
N5K-X(config-if)# switchport mode trunk
N5K-X(config-if)# spanning-tree port type network
N5K-X(config-if)# end
```

Step 13 Ping the SVI interfaces on each of the switches in your Pod Pair to verify that you have correctly configured VLAN JK and the trunking between the two switches:

- vdcP – 172.16.JK.7P
- vdcQ – 172.16.JK.7Q
- N5K-X – 172.16.JK.5P
- N5K-Y – 172.16.JK.5Q

```
vdcP# ping 172.16.JK.5P
PING 172.16.JK.5P (172.16.JK.5P): 56 data bytes
64 bytes from 172.16.JK.5P: icmp_seq=0 ttl=254 time=1.245 ms
64 bytes from 172.16.JK.5P: icmp_seq=1 ttl=254 time=0.694 ms
64 bytes from 172.16.JK.5P: icmp_seq=2 ttl=254 time=0.776 ms
64 bytes from 172.16.JK.5P: icmp_seq=3 ttl=254 time=7.507 ms
64 bytes from 172.16.JK.5P: icmp_seq=4 ttl=254 time=9.524 ms

--- 172.16.JK.5P ping statistics ---
5 packets transmitted, 5 packets received, 0.00% packet loss
round-trip min/avg/max = 0.694/C.949/9.524 ms

vdcP# ping 172.16.JK.5Q
PING 172.16.JK.5Q (172.16.JK.5Q): 56 data bytes
64 bytes from 172.16.JK.5Q: icmp_seq=0 ttl=254 time=2.701 ms
64 bytes from 172.16.JK.5Q: icmp_seq=1 ttl=254 time=0.975 ms
64 bytes from 172.16.JK.5Q: icmp_seq=2 ttl=254 time=1.748 ms
64 bytes from 172.16.JK.5Q: icmp_seq=3 ttl=254 time=7.341 ms
64 bytes from 172.16.JK.5Q: icmp_seq=4 ttl=254 time=6.968 ms
```

```
--- 172.16.JK.5Q ping statistics ---
5 packets transmitted, 5 packets received, 0.00% packet loss
round-trip min/avg/max = 0.975/3.946/7.341 ms

vdcP# ping 172.16.JK.7P
PING 172.16.JK.7P (172.16.JK.7P): 56 data bytes
64 bytes from 172.16.JK.7P: icmp_seq=0 ttl=255 time=0.72 ms
64 bytes from 172.16.JK.7P: icmp_seq=1 ttl=255 time=0.444 ms
64 bytes from 172.16.JK.7P: icmp_seq=2 ttl=255 time=0.57 ms
64 bytes from 172.16.JK.7P: icmp_seq=3 ttl=255 time=0.726 ms
64 bytes from 172.16.JK.7P: icmp_seq=4 ttl=255 time=0.399 ms

--- 172.16.JK.7P ping statistics ---
5 packets transmitted, 5 packets received, 0.00% packet loss
round-trip min/avg/max = 0.399/0.571/0.726 ms

vdcP# ping 172.16.JK.7Q
PING 172.16.JK.7Q (172.16.JK.7Q): 56 data bytes
64 bytes from 172.16.JK.7Q: icmp_seq=0 ttl=254 time=1.025 ms
64 bytes from 172.16.JK.7Q: icmp_seq=1 ttl=254 time=0.679 ms
64 bytes from 172.16.JK.7Q: icmp_seq=2 ttl=254 time=0.735 ms
64 bytes from 172.16.JK.7Q: icmp_seq=3 ttl=254 time=0.668 ms
64 bytes from 172.16.JK.7Q: icmp_seq=4 ttl=254 time=0.7 ms

--- 172.16.JK.7Q ping statistics ---
5 packets transmitted, 5 packets received, 0.00% packet loss
round-trip min/avg/max = 0.668/0.761/1.025 ms
```

Step 14 Examine the spanning-tree topology of VLAN JK on the VDCs in your Pod Pair and identity the links that are in a blocking state. Note that at this point we are not concerned about which switch is the root bridge.

```
vdcP# show spanning-tree vlan JK

VLAN00JK
  Spanning tree enabled protocol rstp
  Root ID    Priority    32780
             Address     002a.6a0f.7181
             Cost        6
             Port        515 (Ethernet4/C)
             Hello Time  2  sec  Max Age 20 sec  Forward Delay 15 sec

  Bridge ID  Priority    32780  (priority 32768 sys-id-ext JK)
             Address     8478.ac57.9642
             Hello Time  2  sec  Max Age 20 sec  Forward Delay 15 sec

Interface        Role Sts Cost      Prio.Nbr Type
---------------- ---- --- --------- -------- --------------------------------
Eth4/A           Desg FWD 2         128.513  Network P2p
Eth4/C           Root FWD 4         128.515  Network P2p
Eth4/D           Altn BLK 4         128.516  Network P2p

vdcP# show spanning-tree blockedports

Name                 Blocked Interfaces List
-------------------- ------------------------------------
VLAN0001             Eth4/D
VLAN00JK             Eth4/D


Number of blocked ports (segments) in the system : 2
```

```
vdcQ# show spanning-tree vlan JK

VLAN00JK
  Spanning tree enabled protocol rstp
  Root ID    Priority    32780
             Address     002a.6a0f.7181
             Cost        2
             Port        517 (Ethernet4/5)
             Hello Time  2  sec  Max Age 20 sec  Forward Delay 15 sec

  Bridge ID  Priority    32780  (priority 32768 sys-id-ext JK)
             Address     8478.ac57.9643
             Hello Time  2  sec  Max Age 20 sec  Forward Delay 15 sec

Interface        Role Sts Cost      Prio.Nbr Type
---------------- ---- --- --------- -------- --------------------------------
Eth4/5           Root FWD 2         128.517  Network P2p
Eth4/7           Desg FWD 4         128.519  Network P2p
Eth4/8           Desg FWD 4         128.520  Network P2p

vdcQ# show spanning-tree blockedports
```

Activity Verification

You have completed this task when you attain these results:

- You have verified that the spanning-tree topology does not allow several active links between two switches or Layer 2 loops in the topology.

Task 2: Implement Cisco FabricPath

In this task, you will implement Cisco FabricPath technology on your Nexus 7000 VDC.

Activity Procedure

Complete these steps:

Step 15 Connect to your assigned Nexus 7000 VDC.

Step 16 In your Pod Nexus 7000 VDC, examine the license usage.

```
vdcP# show license usage
Feature                      Ins  Lic   Status Expiry Date Comments
                                 Count
--------------------------------------------------------------------------------
MPLS_PKG                      Yes   -   Unused 18 Sep 2013 -
STORAGE-ENT                   No    -   Unused             -
VDC_LICENSES                  Yes   4   Unused 18 Sep 2013 -
ENTERPRISE_PKG                No    -   Unused             -
FCOE-N7K-F132XP               No    0   Unused             -
FCOE-N7K-F248XP               No    0   Unused             -
ENHANCED_LAYER2_PKG           Yes   -   Unused 18 Sep 2013 -
SCALABLE_SERVICES_PKG         No    -   Unused             -
TRANSPORT_SERVICES_PKG        Yes   -   Unused 18 Sep 2013 -
LAN_ADVANCED_SERVICES_PKG     Yes   -   Unused 18 Sep 2013 -
LAN_ENTERPRISE_SERVICES_PKG   Yes   -   Unused 18 Sep 2013 -
--------------------------------------------------------------------------------
```

Step 17 Enable the Cisco FabricPath feature set.

```
vdcP# config
```

```
Enter configuration commands, one per line.  End with CNTL/Z.
vdcP(config)# feature-set fabricpath
```

Step 18 Examine the Cisco FabricPath switch ID of your Nexus 7000 VDC.

```
vdcP(config)# show fabricpath switch-id
                        FABRICPATH SWITCH-ID TABLE
Legend: '*' - this system
================================================================================
SWITCH-ID      SYSTEM-ID       FLAGS         STATE    STATIC  EMULATED
---------+---------------+-----------+----------+--------------------
*2172        8478.ac57.9642    Primary     Confirmed    No      No
Total Switch-ids: 1
```

Note	The switch ID will be different than in the example.

Step 19 Configure the switch ID of your VDC to be PQ, where P is your pod number and Q is your peer pod number.

```
vdcP(config)# fabricpath switch-id PQ
```

Note	The switch ID of each switch participating in FabricPath must be unique.

Step 20 Verify the configured Cisco FabricPath switch ID.

```
vdcP(config)# show fabricpath switch-id
                        FABRICPATH SWITCH-ID TABLE
Legend: '*' - this system
================================================================================
SWITCH-ID      SYSTEM-ID       FLAGS         STATE    STATIC  EMULATED
---------+---------------+-----------+----------+--------------------
*PQ          8478.ac57.9642    Primary     Confirmed    Yes     No
Total Switch-ids: 1
```

Step 21 Configure the interfaces to your Peer Pod VDC, Ethernet 4/C-D, as FabricPath interfaces.

```
vdcP(config)# interface ethernet 4/C-D
vdcP(config-if-range)# switchport mode fabricpath
```

Step 22 Reexamine the Cisco FabricPath switch IDs.

```
vdcP(config-if-range)# show fabricpath switch-id
                        FABRICPATH SWITCH-ID TABLE
Legend: '*' - this system
================================================================================
SWITCH-ID      SYSTEM-ID       FLAGS         STATE    STATIC  EMULATED
---------+---------------+-----------+----------+--------------------
*PQ          8478.ac57.9642    Primary     Confirmed    Yes     No
 QP          8478.ac57.9643    Primary     Confirmed    Yes     No
Total Switch-ids: 2
```

Note	Do not continue to the next step until you see your peer pod switch ID also listed in the output of the show fabricpath switch-id command.

Step 23 Use the **show fabricpath isis adjacency** command to verify that Cisco FabricPath IS-IS adjacencies have been formed between the VDCs.

```
vdcP(config-if-range)# show fabricpath isis adjacency
Fabricpath IS-IS domain: default Fabricpath IS-IS adjacency database:
System ID       SNPA            Level  State  Hold Time  Interface
vdcQ            N/A             1      UP     00:00:31   Ethernet4/C
vdcQ            N/A             1      UP     00:00:30   Ethernet4/D
```

Step 24 From your Nexus 5548 switch, ping 172.16.JK.5Q, the IP address of your peer pod Nexus 5548 switch, where Q is your peer pod number, in order to confirm IP connectivity between the two pods. Determine if the ping was successful and why.

```
N5K-X# ping 172.16.JK.5Q
PING 172.16.JK.5Q (172.16.JK.5Q): 56 data bytes
Request 0 timed out
Request 1 timed out
Request 2 timed out
Request 3 timed out
Request 4 timed out
--- 172.16.JK.5Q ping statistics ---
5 packets transmitted, 0 packets received, 100.00% packet loss
```

Step 25 Examine the Cisco FabricPath routing table on your Pod VDC.

```
vdcP(config-if-range)# show fabricpath route
FabricPath Unicast Route Table
'a/b/c' denotes ftag/switch-id/subswitch-id
'[x/y]' denotes [admin distance/metric]
ftag 0 is local ftag
subswitch-id 0 is default subswitch-id


FabricPath Unicast Route Table for Topology-Default

0/JK/0, number of next-hops: 0
        via ---- , [60/0], 0 day/s 00:07:47, local
```

Note	The Cisco FabricPath routing table does not list any remote switches until at least one Cisco FabricPath VLAN has been configured.

Step 26 Convert VLAN JK to a Cisco FabricPath VLAN on your Pod VDC.

```
vdcP(config-if-range)# vlan JK
vdcP(config-vlan)# mode fabricpath
vdcP(config-vlan)# exit
```

Note	In NX-OS changes to a VLAN's configuration are not implemented until you leave VLAN configuration mode; this can be done by using the "exit" command.

Step 27 Configure your Pod VDC to be the root bridge for VLAN JK. This step is necessary so that traffic flows through the FabricPath properly.

```
vdcP(config)# spanning-tree vlan JK root primary
```

Step 28 Examine the state of spanning tree of VLAN JK by using the show spanning-tree vlan JK command. You should see that your Pod VDC is now only connected to your Pod Nexus 5548 switch and that there is no longer any spanning tree configured between your VDCs.

```
vdcP(config)# show spanning-tree vlan JK
```

```
VLAN00JK
  Spanning tree enabled protocol rstp
  Root ID    Priority    24588
             Address     c84c.75fa.6000
             This bridge is the root
             Hello Time  2  sec  Max Age 20 sec  Forward Delay 15 sec

  Bridge ID  Priority    24588  (priority 24576 sys-id-ext JK)
             Address     c84c.75fa.6000
             Hello Time  2  sec  Max Age 20 sec  Forward Delay 15 sec

Interface        Role Sts Cost      Prio.Nbr Type
---------------- ---- --- --------- -------- --------------------------------
Eth4/A           Desg FWD 2         128.513  Network P2p
```

Step 29 Reexamine the Cisco FabricPath routing table.

```
vdcP(config)# show fabricpath route
FabricPath Unicast Route Table
'a/b/c' denotes ftag/switch-id/subswitch-id
'[x/y]' denotes [admin distance/metric]
ftag 0 is local ftag
subswitch-id 0 is default subswitch-id


FabricPath Unicast Route Table for Topology-Default

0/PQ/0, number of next-hops: 0
        via ---- , [60/0], 0 day/s 00:15:27, local
1/QP/0, number of next-hops: 2
        via Eth4/C, [115/400], 0 day/s 00:00:39, isis_fabricpath-default
        via Eth4/D, [115/400], 0 day/s 00:00:39, isis_fabricpath-default
```

Step 30 From your Nexus 5548 switch, ping 172.16.JK.5Q, the IP address of your peer pod Nexus 5548 switch, where Q is your peer pod number, in order to confirm IP connectivity between the two pods. Determine if the ping was successful and why.

```
N5K-X# ping 172.16.JK.5Q
PING 172.16.JK.5Q (172.16.JK.5Q): 56 data bytes
64 bytes from 172.16.JK.5Q: icmp_seq=0 ttl=254 time=2.111 ms
64 bytes from 172.16.JK.5Q: icmp_seq=1 ttl=254 time=0.789 ms
64 bytes from 172.16.JK.5Q: icmp_seq=2 ttl=254 time=0.746 ms
64 bytes from 172.16.JK.5Q: icmp_seq=3 ttl=254 time=0.737 ms
64 bytes from 172.16.JK.5Q: icmp_seq=4 ttl=254 time=0.735 ms
--- 172.16.JK.5Q ping statistics ---
5 packets transmitted, 5 packets received, 0.00% packet loss
round-trip min/avg/max = 0.735/1.024/B.111 ms
```

Step 31 Examine the MAC address table for VLAN JK on your Pod VDC. You should see an entry for the SVI interface of your Peer Pod Nexus 5548 switch.

```
vdcP(config)# show mac address-table vlan JK
Legend:
        * - primary entry, G - Gateway MAC, (R) - Routed MAC, O - Overlay MAC
        age - seconds since last seen,+ - primary entry using vPC Peer-Link,
        (T) - True, (F) - False
   VLAN     MAC Address      Type      age     Secure NTFY Ports/SWID.SSID.LID
---------+-----------------+--------+---------+------+----+------------------
G JK       8478.ac57.9642    static       -       F    F  sup-eth1(R)
  JK       002a.6a0f.7181    dynamic   330        F    F  QP.0.52
* JK       547f.eef7.6bfc    dynamic   330        F    F  Eth4/A
```

Note	Do not proceed to the next task until you succeed in pinging the peer pod Nexus 5548 switch VLAN JK IP address. Troubleshoot together with your peer as necessary.

Activity Verification

You have completed this task when you attain these results:

- You have implemented Cisco FabricPath on your Nexus 7000 VDC.
- You have established a Cisco FabricPath cloud with your peer pod.
- You have verified IP connectivity between your Nexus 5548 switch and your peer pod Nexus 5548 switch in VLAN across the Cisco FabricPath cloud.

Task 3: Analyze Cisco FabricPath Load Balancing

In this task, you will examine the traffic load balancing in a Cisco FabricPath environment.

Activity Procedure

Complete these steps:

Step 32 On your Nexus 7000 VDC, configure the VLAN JK interface with the secondary IP address of 172.16.JK.9P, where P is your pod number.

```
vdcP(config)# interface vlan JK
vdcP(config-if)# ip address 172.16.JK.9P/24 secondary
Disabling IP Redirects on VlanJK :secondary address configured.
```

Step 33 Configure Cisco FabricPath load balancing to use only Layer 3 for hash calculation.

```
vdcP(config-if)# fabricpath load-balance unicast layer3
```

Step 34 Determine which links Cisco FabricPath will use to forward traffic toward your Peer Pod Nexus 7000 VDC. Examine the flows between the following IP addresses:

- 172.16.JK.7P to 172.16.JK.7Q
- 172.16.JK.7P to 172.16.JK.9Q
- 172.16.JK.9P to 172.16.JK.9Q
- 172.16.JK.9P to 172.16.JK.7Q

```
vdcP(config)# show fabricpath load-balance unicast forwarding-path ftag 1 switchid
21 flow-type L3 src-ip 172.16.JK.7P dst-ip 172.16.JK.7Q vlan JK module 4
This flow selects interface Eth4/C
vdcP(config)# show fabricpath load-balance unicast forwarding-path ftag 1 switchid
21 flow-type L3 src-ip 172.16.JK.7P dst-ip 172.16.JK.9Q vlan JK module 4
This flow selects interface Eth4/D
vdcP(config)# show fabricpath load-balance unicast forwarding-path ftag 1 switchid
21 flow-type L3 src-ip 172.16.JK.9P dst-ip 172.16.JK.9Q vlan JK module 4
This flow selects interface Eth4/C
vdcP(config)# show fabricpath load-balance unicast forwarding-path ftag 1 switchid
21 flow-type L3 src-ip 172.16.JK.9P dst-ip 172.16.JK.7Q vlan JK module 4
This flow selects interface Eth4/D
```

Step 35 To check high availability of the Cisco FabricPath cloud, disable interface Ethernet 4/C.

```
vdcP(config)# interface ethernet 4/C
vdcP(config-if)# shutdown
```

Step 36 Examine the Cisco FabricPath routing table.

```
vdcP(config-if)# show fabricpath route
FabricPath Unicast Route Table
'a/b/c' denotes ftag/switch-id/subswitch-id
'[x/y]' denotes [admin distance/metric]
ftag 0 is local ftag
subswitch-id 0 is default subswitch-id


FabricPath Unicast Route Table for Topology-Default

0/PQ/0, number of next-hops: 0
        via ---- , [60/0], 0 day/s 00:40:20, local
1/QP/0, number of next-hops: 1
        via Eth4/D, [115/400], 0 day/s 00:25:32, isis_fabricpath-default
```

Step 37 From your Nexus 5548 switch, ping 172.16.JK.5Q, the IP address of your peer pod Nexus 5548 switch, where Q is your peer pod number, in order to confirm high availability between the two pods.

```
N5K-X# ping 172.16.JK.5Q
PING 172.16.JK.5Q (172.16.JK.5Q): 56 data bytes
64 bytes from 172.16.JK.5Q: icmp_seq=0 ttl=254 time=2.111 ms
64 bytes from 172.16.JK.5Q: icmp_seq=1 ttl=254 time=0.789 ms
64 bytes from 172.16.JK.5Q: icmp_seq=2 ttl=254 time=0.746 ms
64 bytes from 172.16.JK.5Q: icmp_seq=3 ttl=254 time=0.737 ms
64 bytes from 172.16.JK.5Q: icmp_seq=4 ttl=254 time=0.735 ms
--- 172.16.JK.5Q ping statistics ---
5 packets transmitted, 5 packets received, 0.00% packet loss
round-trip min/avg/max = 0.735/1.024/B.111 ms
```

Activity Verification

You have completed this task when you attain these results:

- You have examined the Cisco FabricPath load balancing.
- You have examined the high availability of the Cisco FabricPath links.