

# **CCIE Data Center v3.1 Real Labs**

## **Design Module(DEMO)**

### **Design 2-Xandar**

## **Welcome to the Xandar Company!**

**Please read all the available resources before starting the scenario by clicking "Next Item".**

**Question 2:**

Refer to the new resource(s) available.

List the recommended approaches to build a vPC peer-keepalive link in the descending order of preference, where preference 1 is most preferred and preference 3 is least preferred

Mgmt0 interface	Preference 1
Dedicated Layer 3 link or a port channel	Preference 2
VPC peer-keepalive link on top of vPC peer-link	Preference 3
vPC peer-keepalive link routed over the Layer 3 infrastructure	

**Answer:**

	Dedicated Layer 3 link or a port channel
	Mgmt0 interface
VPC peer-keepalive link on top of vPC peer-link	vPC peer-keepalive link routed over the Layer 3 infrastructure

### Question 3:

Which two design changes must be implemented to meet customer requirements?(Choose all applicable)

- A. Configure the vPC peer-gateway on both vPC switches.
- B. Configure the vPC peer-switch feature on both vPC switches.
- C. Implement spanning-tree pseudo-information for VLANs.
- D. Configure the vPC primary switch with lower STP priority.
- E. Configure the vPC primary switch with higher STP priority
- F. Allow spanning tree port type network on non vplink

Answer: B C F

### Question 4:

Refer to the new resource(s) available.

What is your recommendation to change the design to resolve the issue?

- A. Configure the vPC peer-router feature on a pair of Cisco Nexus 7000 Series Switches.
- B. Increase the VLAN 10 STP priority on the vPC standby Cisco Nexus 7000 Series Switch.
- C. Configure the vPC peer-gateway feature on a pair of Cisco Nexus 7000 Series Switches.
- D. Configure the vPC ARP Sync feature on a pair of Cisco Nexus 7000 Series Switches.

Answer: C

**Question 5:**

Refer to the new resource(s) available.

Choose the correct answer based on the customer project requirements.

- A. PIM-SM
- B. PIM is not supported with vPC
- C. BIDIR-PIM
- D. PIM-SSM

**Answer: A**

**Question 6:**

Refer to the new resource(s) available.

For each of these shared protocol capabilities indicate which protocol offers more of an advantage over the other.

**Note: check to have the same meaning**

Protocol Capabilites	BGP	OSPF
Fast convergence	<input type="checkbox"/>	<input type="checkbox"/>
LSDP	<input type="checkbox"/>	<input type="checkbox"/>
Flexibility	<input type="checkbox"/>	<input type="checkbox"/>
PATH MANUPALATION with MED	<input type="checkbox"/>	<input type="checkbox"/>
ATTRIBUTES	<input type="checkbox"/>	<input type="checkbox"/>
Scalability	<input type="checkbox"/>	<input type="checkbox"/>
ROUTE-SUMMARIZATION with hierarchy level	<input type="checkbox"/>	<input type="checkbox"/>
Convergence time	<input type="checkbox"/>	<input type="checkbox"/>
Prevent loop using origin	<input type="checkbox"/>	<input type="checkbox"/>
External network and cloud	<input type="checkbox"/>	<input type="checkbox"/>
Neighbors discovery automatically	<input type="checkbox"/>	<input type="checkbox"/>
Ease of troubleshooting and configuration	<input type="checkbox"/>	<input type="checkbox"/>
med	<input type="checkbox"/>	<input type="checkbox"/>
As number	<input type="checkbox"/>	<input type="checkbox"/>

**Answer:**

Protocol Capabilites	BGP	OSPF
Fast convergence	<input type="checkbox"/>	<input checked="" type="checkbox"/>
LSDP	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Flexibility	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PATH MANUPALATION with MED	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ATTRIBUTES	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Scalability	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ROUTE-SUMMARIZATIONwith hierarchy level	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Convergence time	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Prevent loop using origin	<input checked="" type="checkbox"/>	<input type="checkbox"/>
External network and cloud	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Neighbors discovery automatically	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ease of troubleshooting and configuration	<input type="checkbox"/>	<input checked="" type="checkbox"/>
med	<input checked="" type="checkbox"/>	<input type="checkbox"/>
As number	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Question 7:

Email

Python Script

From: Jane Doe [jdoe@Xandar.com](mailto:jdoe@Xandar.com)

To: Lucky Van Polt [lvpettt@Xandar.com](mailto:lvpettt@Xandar.com)

Subject: CoPP Policies

Hi Lucy,

Xandar has an objective to optimize operational costs in our network, including automation of routine tasks in data centers. Part of this project is to ensure that running configurations of Core layer switches-Cisco Nexus 7000 Series-are backed up daily to a local file on a boot flash. The solution we are looking for should be based on Python implementation via Cisco NX-OS command scheduler. An additional requirement is to have a message generated to the console every time the configuration backup is executed, just for visibility purpose. Thanks, Jane

Doe Data Center Infrastructure Manager

Refer to the new resources available.

Which configuration meets the requirements of the Xandar data center automation project?

A.

configure terminal

feature scheduler

scheduler job name cfg\_backup.plan

python bootflash://./scripts/cfg\_backup.py

time start now repeat 24:0:0

end

cfg\_backup.py file:

```
#!/bin/env python
```

```
from cli import*
from nxos import*
import os
import datetime
fName='config_backup_'+str(datetime.date.today())
res=cli("show run>bootflash:"+fName)
msg='Configuration was backed up to'+fName +'on the bootflash
Py_syslog(1,msg)
```

B.

```
configure terminal
feature scheduler
scheduler job name cfg_backup_plan
python bootflash://scripts/cfg_backup.py
exit
scheduler schedule name cfg_backup_plan
job name cfg_backup_plan
time start now repeat 1:0:0
end
cfg_backup.py file:
#!/bin/env python
from cli import
from nxos import
import datetime
fName='config_backup_'+str(datetime.date.today())
res =cli("show run>bootflash:"+fName)
msg ='Configuration was backed up to'+fName +'on the bootflash
pv syslog(1,msg)
```

C.

Configure terminal

feature scheduler

scheduler schedule name cfg\_backup\_plan

python bootflash:///scripts/cfg\_backup.py

time start now repeat 1:0:0

end

cfg\_backup.py file:

```
#!/bin/env python
```

```
from cli import*
```

```
from nxos
```

```
import*import os
```

```
import date
```

```
timefName ='config_backup_'+str(datetime.date.today())
```

```
res =cli("show run >bootflash:"+fName)
```

```
msg='configuration was backed up to+fName +'on the bootflash
```

```
Py_syslog(1,msg)
```

D.

Configure terminal

feature scheduler

scheduler job name cfg\_backup.py

exit

scheduler schedule name cfg\_backup\_plan

job name cfg\_backup\_plan

time start now repeat 1:0:0

end

cfg\_backup.py file:

```
#!/bin/env python
from cli import*
from nxos import *
import os
import datetime

fName ='config_backup_'+str(datetime.date.today())
res =cli("show run >bootflash:" + fName)
msg='configuration was backed up to'+fName +'on the bootflash
print msg
```

E.

Configure terminal

```
feature scheduler name cfg_backup_plan
scheduler schedule name cfg_backup_plan
python bootflash:///scripts/cfg_backup.py
time start now repeat 1:0:0
end
```

cfg\_backup.py file:

```
#!/bin/env python
from cli import*
from nxos import *
import os

fName ='Configuration was backed up to'+on the bootflash
res =cli("show run >bootflash:" + fName)
msg='Configuration was backed up to'+fName +'on the bootflash
print msg
```

**Answer: B**

**Question 8**

Refer to the new resource(s) available. In the Xandar data Center CoPP can help with certain hardening requirements. Drag and drop the requirements that are supported by CoPP.

CoPP can increase the throughput of control plane traffic during peak periods.	CoPP feature
CoPP mitigates the effects of man-in the middle attacks.	CoPP feature
CoPP policy can be customized. Which allows administrators to set the permitted rate of traffic for different types of control plane traffic.	CoPP feature
Traffic going to mgmt0 gets restricted by CoPP.	
Dense CoPP policy is applied by default.	
COPP RUNS ON IPV4 AND IPV6 PACKET	
CoPP BLOCK from exception Dockets. Such as a packet with IP options set	
CoPP protects from malicious traffic transiting the switch.	
Copp enforces policer or rate limiter to reduce cpu overhead	