

Replace Cisco Nexus 3132Q-V cluster switches

ONTAP Systems Switches

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Replace Cisco Nexus 3132Q-V cluster switches

You must be aware of certain configuration information, port connections and cabling requirements when you replace Cisco Nexus 3132Q-V cluster switches.

- The Cisco Nexus 3132Q-V cluster switch is supported.
- The number of 10 GbE and 40/100 GbE ports are defined in the reference configuration files (RCFs) available on the Cisco® Cluster Network Switch Reference Configuration File Download page.
- The cluster switches use the Inter-Switch Link (ISL) ports e1/31-32.
- The Hardware Universe contains information about supported cabling to Nexus 3132Q-V switches:
 - The nodes with 10 GbE cluster connections require QSFP optical modules with breakout fiber cables or QSFP to SFP+ copper break-out cables.
 - The nodes with 40/100 GbE cluster connections require supported QSFP/QSFP28 optical modules with fiber cables or QSFP/QSFP28 copper direct-attach cables.
 - The cluster switches use the appropriate ISL cabling: 2x QSFP28 fiber or copper direct-attach cables.
- On Nexus 3132Q-V, you can operate QSFP ports as either 40/100 Gb Ethernet or 4 x10 Gb Ethernet modes.

By default, there are 32 ports in the 40/100 Gb Ethernet mode. These 40 Gb Ethernet ports are numbered in a 2-tuple naming convention. For example, the second 40 Gb Ethernet port is numbered as 1/2. The process of changing the configuration from 40 Gb Ethernet to 10 Gb Ethernet is called *breakout* and the process of changing the configuration from 10 Gb Ethernet to 40 Gb Ethernet is called *breakin*. When you break out a 40/100 Gb Ethernet port into 10 Gb Ethernet ports, the resulting ports are numbered using a 3-tuple naming convention. For example, the breakout ports of the second 40/100 Gb Ethernet port are numbered as 1/2/1, 1/2/2, 1/2/3, 1/2/4.

On the left side of Nexus 3132Q-V is a set of four SFP+ ports multiplexed to the first QSFP port.

By default, the RCF is structured to use the first QSFP port.

You can make four SFP+ ports active instead of a QSFP port for Nexus 3132Q-V by using the hardware profile front portmode sfp-plus command. Similarly, you can reset Nexus 3132Q-V to use a QSFP port instead of four SFP+ ports by using the hardware profile front portmode qsfp command.

• You must have configured some of the ports on Nexus 3132Q-V to run at 10 GbE or 40/100 GbE.

You can break-out the first six ports into 4x10 GbE mode by using the interface breakout module 1 port 1-6 map 10g-4x command. Similarly, you can regroup the first six QSFP+ ports from breakout configuration by using the no interface breakout module 1 port 1-6 map 10g-4x command.

 You must have done the planning, migration, and read the required documentation on 10 GbE and 40/100 GbE connectivity from nodes to Nexus 3132Q-V cluster switches.

The Cisco Ethernet Switches page has information about the ONTAP and NX-OS versions supported in this procedure.

How to replace Cisco Nexus 3132Q-V cluster switches

Replacing a defective Cisco Nexus 3132Q-V switch in a cluster network is a nondisruptive procedure (NDO), and you must perform a specific sequence of tasks.

Before you begin

- The existing cluster and network configuration must have:
 - The Nexus 3132Q-V cluster infrastructure must be redundant and fully functional on both switches.

The Cisco Ethernet Switch page has the latest RCF and NX-OS versions on your switches.

- All cluster ports must be in the up state.
- Management connectivity must exist on both switches.
- ° All cluster logical interfaces (LIFs) must be in the up state and must not have been migrated.
- The Nexus 3132Q-V replacement switch:
 - Management network connectivity on the replacement switch must be functional.
 - · Console access to the replacement switch must be in place.
 - The desired RCF and NX-OS operating system image switch must be loaded onto the switch.
 - Initial customization of the switch must be complete.

About this task

This procedure replaces the second Nexus 3132Q-V cluster switch CL2 with new 3132Q-V switch C2. The examples in this procedure use the following switch and node nomenclature:

- n1 clus1 is the first cluster logical interface (LIF) connected to cluster switch C1 for node n1.
- n1 clus2 is the first cluster LIF connected to cluster switch CL2 or C2, for node n1.
- n1 clus3 is the second LIF connected to cluster switch C2, for node n1.
- n1 clus4 is the second LIF connected to cluster switch CL1, for node n1.
- The number of 10 GbE and 40/100 GbE ports are defined in the reference configuration files (RCFs) available on the Cisco® Cluster Network Switch Reference Configuration File Download page.
- The nodes are n1, n2, n3, and n4. The examples in this procedure use four nodes: Two nodes use four 10 GB cluster interconnect ports: e0a, e0b, e0c, and e0d. The other two nodes use two 40 GB cluster interconnect ports: e4a and e4e. See the Hardware Universe for the actual cluster ports on your platforms.

This procedure covers the following scenario:

- The cluster starts with four nodes connected to two Nexus 3132Q-V cluster switches, CL1 and CL2.
- Cluster switch CL2 is to be replaced by C2 (Steps 1 -21)
 - \circ On each node, cluster LIFs connected to CL2 are migrated onto cluster ports connected to CL1.
 - Disconnect cabling from all ports on CL2 and reconnect cabling to the same ports on the replacement switch C2.
 - On each node, its migrated cluster LIFs are reverted.

Steps

If AutoSupport is enabled on this cluster, suppress automatic case creation by invoking an AutoSupport

message:

system node autosupport invoke -node * -type all - message MAINT=xh

x is the duration of the maintenance window in hours.



The AutoSupport message notifies technical support of this maintenance task so that automatic case creation is suppressed during the maintenance window.

2. Display information about the devices in your configuration:

network device-discovery show

Clustel/		device-discovery sh Discovered	10 W	
Node	Port	Device	Interface	Platform
n1	/cdp			
	e0a	CL1	Ethernet1/1/1	N3K-C3132Q-V
	e0b	CL2	Ethernet1/1/1	N3K-C3132Q-V
	e0c	CL2	Ethernet1/1/2	N3K-C3132Q-V
	e0d	CL1	Ethernet1/1/2	N3K-C3132Q-V
n2	/cdp			
	e0a	CL1	Ethernet1/1/3	N3K-C3132Q-V
	e0b	CL2	Ethernet1/1/3	N3K-C3132Q-V
	e0c	CL2	Ethernet1/1/4	N3K-C3132Q-V
	e0d	CL1	Ethernet1/1/4	N3K-C3132Q-V
n3	/cdp			
	e4a	CL1	Ethernet1/7	N3K-C3132Q-V
	e4e	CL2	Ethernet1/7	N3K-C3132Q-V
n4	/cdp			
	e4a	CL1	Ethernet1/8	N3K-C3132Q-V
	e4e	CL2	Ethernet1/8	N3K-C3132Q-V

- 3. Determine the administrative or operational status for each cluster interface:
 - a. Display the network port attributes:

```
network port show
```

Ιġ	gnore							
Не	ealth						Speed(Mbps)	Health
	ort tatus	IPspace	Broadcast	Domain	Link	MTU	Admin/Oper	Status
e(0a	Cluster	Cluster		up	9000	auto/10000	-
e(Ob	Cluster	Cluster		up	9000	auto/10000	-
e(0c	Cluster	Cluster		up	9000	auto/10000	-
e(0d	Cluster	Cluster		up	9000	auto/10000	-
No	ode: n2							
	gnore							
	_						Speed(Mbps)	Health
Po	ealth ort	IPspace	Broadcast	Domain	Link	MTU	Admin/Oper	Status
	tatus 							
e(· Da	 Cluster	Cluster		up	9000	auto/10000	-
e(0b	Cluster	Cluster		up	9000	auto/10000	-
e(0c	Cluster	Cluster		up	9000	auto/10000	-
e(Od	Cluster	Cluster		up	9000	auto/10000	-
_								
No	ode: n3							
Ιġ	gnore						Speed(Mbps)	Health
	ealth ort	IPspace	Broadcast	Domain	Link	MTU	Admin/Oper	Status
	tatus							
			Clusts			0000		
e 4 -	4a	Cluster	Cluster		up	9000	auto/40000	_

e4e -	Cluster	Cluster	up	9000	auto/40000	_
Node: n4						
Ignore					Speed(Mbps)	Health
Health Port	IPspace	Broadcast Domain	Link	MTU	Admin/Oper	
Status						
e4a	 Cluster	Cluster	up	9000	auto/40000	-
e4e -	Cluster	Cluster	up	9000	auto/40000	-

¹² entries were displayed.

b. Display information about the logical interfaces:

network interface show

		Logical	Status	Network	Current
Current					
			Admin/Oper	Address/Mask	Node
Port 	HOM:	e 			
		_			
Cluster					
		n1_clus1	up/up	10.10.0.1/24	n1
e0a	tru				
0.1		_	up/up	10.10.0.2/24	n1
e0b	tru		11n / 11n	10.10.0.3/24	n1
e0c	tru	-	up/ up	10.10.0.3/24	111
	020		up/up	10.10.0.4/24	n1
e0d	tru	_			
		n2_clus1	up/up	10.10.0.5/24	n2
e0a	tru				
- 01-		_	up/up	10.10.0.6/24	n2
e0b	tru		11n/11n	10.10.0.7/24	n2
e0c	tru	_	ар, ар	10.10.0.7/24	112
			up/up	10.10.0.8/24	n2
e0d	tru	e			
		n3_clus1	up/up	10.10.0.9/24	n3
e0a	tru		,		
200		_	up/up	10.10.0.10/24	n3
e0e	tru		up/up	10.10.0.11/24	n4
e0a	tru	_	αρ/ αρ	10.10.0.11/24	11 1
		n4_clus2	up/up	10.10.0.12/24	n4
e0e	tru	_			

c. Display the information on the discovered cluster switches:

system cluster-switch show

```
cluster::> system cluster-switch show
Switch
                                               Address
                                                                Model
                            Type
_____
                            cluster-network 10.10.1.101
CT<sub>1</sub>1
NX3132V
     Serial Number: FOX000001
     Is Monitored: true
            Reason:
  Software Version: Cisco Nexus Operating System (NX-OS) Software,
Version
                    7.0(3) I4(1)
    Version Source: CDP
CL2
                             cluster-network 10.10.1.102
NX3132V
     Serial Number: FOX000002
      Is Monitored: true
            Reason:
  Software Version: Cisco Nexus Operating System (NX-OS) Software,
Version
                    7.0(3) I4(1)
    Version Source: CDP
2 entries were displayed.
```

4. Verify that the appropriate RCF and image are installed on the new Nexus 3132Q-V switch as necessary for your requirements, and make any essential site customizations.

You must prepare the replacement switch at this time. If you need to upgrade the RCF and image, you must follow these steps:

- a. On the NetApp Support Site, go to the Cisco Ethernet Switch page.
- b. Note your switch and the required software versions in the table on that page.
- c. Download the appropriate version of the RCF.
- d. Click **CONTINUE** on the **Description** page, accept the license agreement, and then follow the instructions on the **Download** page to download the RCF.
- e. Download the appropriate version of the image software.
- 5. Migrate the LIFs associated to the cluster ports connected to switch C2:

```
network interface migrate
```

This example shows that the LIF migration is done on all the nodes:

```
cluster::*> network interface migrate -vserver Cluster -lif n1_clus2 -source-node n1 -destination-node n1 -destination-port e0a cluster::*> network interface migrate -vserver Cluster -lif n1_clus3 -source-node n1 -destination-node n1 -destination-port e0d cluster::*> network interface migrate -vserver Cluster -lif n2_clus2 -source-node n2 -destination-node n2 -destination-port e0a cluster::*> network interface migrate -vserver Cluster -lif n2_clus3 -source-node n2 -destination-node n2 -destination-port e0d cluster::*> network interface migrate -vserver Cluster -lif n3_clus2 -source-node n3 -destination-node n3 -destination-port e4a cluster::*> network interface migrate -vserver Cluster -lif n4_clus2 -source-node n4 -destination-node n4 -destination-port e4a
```

6. Verify cluster's health:

network interface show

	network in work interf		w -role cluster		
Comment To	Logical	Status	Network	Current	
Current Is Vserver Home	Interface	Admin/Oper	Address/Mask	Node	Port
					-
Cluster	n1_clus1	up/up	10.10.0.1/24	n1	e0a
true	n1_clus2	up/up	10.10.0.2/24	n1	e0a
false	n1_clus3	up/up	10.10.0.3/24	n1	e0d
false	n1_clus4	up/up	10.10.0.4/24	n1	e0d
true	n2_clus1	up/up	10.10.0.5/24	n2	e0a
true	n2_clus2	up/up	10.10.0.6/24	n2	e0a
false	n2_clus3	up/up	10.10.0.7/24	n2	e0d
false	n2_clus4	up/up	10.10.0.8/24	n2	e0d
true	n3_clus1	up/up	10.10.0.9/24	n3	e4a
true	n3_clus2	up/up	10.10.0.10/24	n3	e4a
false	n4_clus1	up/up	10.10.0.11/24	n4	e4a
true false	n4_clus2	up/up	10.10.0.12/24	n4	e4a
12 entries	were displa	yed.			

7. Shut down the cluster interconnect ports that are physically connected to switch CL2:

network port modify

This example shows the specified ports being shut down on all nodes:

```
cluster::*> network port modify -node n1 -port e0b -up-admin false cluster::*> network port modify -node n1 -port e0c -up-admin false cluster::*> network port modify -node n2 -port e0b -up-admin false cluster::*> network port modify -node n2 -port e0c -up-admin false cluster::*> network port modify -node n3 -port e4e -up-admin false cluster::*> network port modify -node n4 -port e4e -up-admin false
```

8. Ping the remote cluster interfaces and perform an RPC server check:

cluster ping-cluster

```
cluster::*> cluster ping-cluster -node n1
Host is n1
Getting addresses from network interface table...
Cluster n1 clus1 n1
                     e0a 10.10.0.1
Cluster n1 clus2 n1
                     e0b 10.10.0.2
Cluster n1 clus3 n1
                     e0c 10.10.0.3
                    e0d 10.10.0.4
Cluster n1 clus4 n1
Cluster n2 clus1 n2
                     e0a 10.10.0.5
Cluster n2 clus2 n2
                     e0b 10.10.0.6
Cluster n2 clus3 n2
                     e0c 10.10.0.7
Cluster n2 clus4 n2
                     e0d 10.10.0.8
Cluster n3 clus1 n4
                     e0a 10.10.0.9
Cluster n3 clus2 n3
                     e0e 10.10.0.10
                     e0a 10.10.0.11
Cluster n4 clus1 n4
Cluster n4 clus2 n4
                     e0e 10.10.0.12
Local = 10.10.0.1 10.10.0.2 10.10.0.3 10.10.0.4
Remote = 10.10.0.5 10.10.0.6 10.10.0.7 10.10.0.8 10.10.0.9 10.10.0.10
10.10.0.11 10.10.0.12
Cluster Vserver Id = 4294967293
Ping status:
. . . .
Basic connectivity succeeds on 32 path(s)
Basic connectivity fails on 0 path(s)
Detected 1500 byte MTU on 32 path(s):
   Local 10.10.0.1 to Remote 10.10.0.5
   Local 10.10.0.1 to Remote 10.10.0.6
   Local 10.10.0.1 to Remote 10.10.0.7
   Local 10.10.0.1 to Remote 10.10.0.8
   Local 10.10.0.1 to Remote 10.10.0.9
   Local 10.10.0.1 to Remote 10.10.0.10
    Local 10.10.0.1 to Remote 10.10.0.11
    Local 10.10.0.1 to Remote 10.10.0.12
```

```
Local 10.10.0.2 to Remote 10.10.0.5
    Local 10.10.0.2 to Remote 10.10.0.6
    Local 10.10.0.2 to Remote 10.10.0.7
    Local 10.10.0.2 to Remote 10.10.0.8
    Local 10.10.0.2 to Remote 10.10.0.9
    Local 10.10.0.2 to Remote 10.10.0.10
    Local 10.10.0.2 to Remote 10.10.0.11
    Local 10.10.0.2 to Remote 10.10.0.12
    Local 10.10.0.3 to Remote 10.10.0.5
    Local 10.10.0.3 to Remote 10.10.0.6
    Local 10.10.0.3 to Remote 10.10.0.7
    Local 10.10.0.3 to Remote 10.10.0.8
    Local 10.10.0.3 to Remote 10.10.0.9
    Local 10.10.0.3 to Remote 10.10.0.10
    Local 10.10.0.3 to Remote 10.10.0.11
    Local 10.10.0.3 to Remote 10.10.0.12
    Local 10.10.0.4 to Remote 10.10.0.5
    Local 10.10.0.4 to Remote 10.10.0.6
    Local 10.10.0.4 to Remote 10.10.0.7
    Local 10.10.0.4 to Remote 10.10.0.8
    Local 10.10.0.4 to Remote 10.10.0.9
    Local 10.10.0.4 to Remote 10.10.0.10
    Local 10.10.0.4 to Remote 10.10.0.11
    Local 10.10.0.4 to Remote 10.10.0.12
Larger than PMTU communication succeeds on 32 path(s)
RPC status:
8 paths up, 0 paths down (tcp check)
8 paths up, 0 paths down (udp check)
```

9. Shut down the ports 1/31 and 1/32 on CL1, and the active Nexus 3132Q-V switch:

shutdown

This example shows the ISL ports 1/31 and 1/32 being shut down on switch CL1:

```
(CL1) # configure
(CL1) (Config) # interface e1/31-32
(CL1(config-if-range) # shutdown
(CL1(config-if-range) # exit
(CL1) (Config) # exit
(CL1) #
```

10. Remove all the cables attached to the Nexus 3132Q-V switch CL2 and reconnect them to the replacement switch C2 on all nodes.

- 11. Remove the ISL cables from ports e1/31 and e1/32 on CL2 and reconnect them to the same ports on the replacement switch C2.
- 12. Bring up ISLs ports 1/31 and 1/32 on the Nexus 3132Q-V switch CL1.

```
(CL1) # configure
(CL1) (Config) # interface e1/31-32
(CL1 (config-if-range) # no shutdown
(CL1 (config-if-range) # exit
(CL1) (Config) # exit
(CL1) #
```

13. Verify that the ISLs are up on CL1:

```
show port-channel
```

Ports Eth1/31 and Eth1/32 should indicate (P), which means that the ISL ports are up in the port-channel.

14. Verify that the ISLs are up on C2:

```
show port-channel summary
```

Ports Eth1/31 and Eth1/32 should indicate (P), which means that both ISL ports are up in the portchannel.

15. On all nodes, bring up all the cluster interconnect ports connected to the Nexus 3132Q-V switch C2: network port modify

```
cluster::*> network port modify -node n1 -port e0b -up-admin true cluster::*> network port modify -node n1 -port e0c -up-admin true cluster::*> network port modify -node n2 -port e0b -up-admin true cluster::*> network port modify -node n2 -port e0c -up-admin true cluster::*> network port modify -node n2 -port e4e -up-admin true cluster::*> network port modify -node n3 -port e4e -up-admin true cluster::*> network port modify -node n4 -port e4e -up-admin true
```

16. For all nodes, revert all of the migrated cluster interconnect LIFs:

network interface revert

```
cluster::*> network interface revert -vserver Cluster -lif n1_clus2
cluster::*> network interface revert -vserver Cluster -lif n1_clus3
cluster::*> network interface revert -vserver Cluster -lif n2_clus2
cluster::*> network interface revert -vserver Cluster -lif n2_clus3
Cluster::*> network interface revert -vserver Cluster -lif n3_clus2
Cluster::*> network interface revert -vserver Cluster -lif n4_clus2
```

17. Verify that the cluster interconnect ports are now reverted to their home:

```
network interface show
```

This example shows that all the LIFs are successfully reverted because the ports listed under the Current Port column have a status of true in the Is Home column. If the Is Home column value is false, the LIF has not been reverted.

	Logical	Status	Network	Current	
Current Is Vserver Home	Interface	Admin/Oper	Address/Mask	Node	Port
Cluster		/	10 10 0 1/24	n1	e0a
true	n1_clus1	up/up	10.10.0.1/24	111	eua
	n1_clus2	up/up	10.10.0.2/24	n1	e0b
true	n1_clus3	up/up	10.10.0.3/24	n1	e0c
true	n1 alua/	/n	10.10.0.4/24	n1	e0d
true	n1_clus4	up/up	10.10.0.4/24	111	eua
	n2_clus1	up/up	10.10.0.5/24	n2	e0a
true	n2_clus2	up/up	10.10.0.6/24	n2	e0b
true	n2 clus3	up/up	10.10.0.7/24	n2	e0c
true	II2_Cluss	ир/ ир	10.10.0.7/24	112	e00
true	n2_clus4	up/up	10.10.0.8/24	n2	e0d
crue	n3_clus1	up/up	10.10.0.9/24	n3	e4a
true	n3 clus2	up/up	10.10.0.10/24	n3	e4e
true	113_01402	αρ, αρ	10.10.0.10,21	110	010
true	n4_clus1	up/up	10.10.0.11/24	n4	e4a
0140	n4 clus2	up/up	10.10.0.12/24	n4	e4e

18. Verify that the cluster ports are connected:

network port show

Health Port	IPspace	Broadcast	Domain	Link	MTU	Admin/Oper	Status	
Status								
e0a	Cluster	Cluster		up	9000	auto/10000	-	-
e0b	Cluster	Cluster		up	9000	auto/10000	-	-
e0c	Cluster	Cluster		up		auto/10000	-	-
e0d	Cluster	Cluster		up	9000	auto/10000	-	-
Node: n2								
Ignore						Speed(Mbps)	Health	
Health						speed (hops)	iicai cii	
Port	IPspace	Broadcast	Domain	Link	MTU	Admin/Oper	Status	
Status								
e0a	Cluster	Cluster		up	9000	auto/10000	_	_
e0b	Cluster	Cluster		up	9000	auto/10000		_
e0c	Cluster	Cluster		up	9000	auto/10000	_	_
e0d	Cluster	Cluster		up	9000	auto/10000	-	-
Node: n3								
Ignore								
II 1 + h						Speed (Mbps)	Health	
Health Port	IPspace	Broadcast	Domain	T.ink	МТІІ	Admin/Oper	Status	
Status	1150000	Dioadcasc	Domain	TT111C	1110	mamili, oper	beacus	
		Cluster		_		auto/40000		-
e4e	Cluster	Cluster		up	9000	auto/40000	_	-
Node: n4								
Ignore						Speed(Mbps)	Health	
Health							11001011	
Port	IPspace	Broadcast	Domain	Link	MTU	Admin/Oper	Status	
Status								
e4a	Cluster	Cluster		up	9000	auto/40000	-	-

```
e4e Cluster Cluster up 9000 auto/40000 - - 12 entries were displayed.
```

19. Ping the remote cluster interfaces and perform an RPC server check:

cluster ping-cluster

```
cluster::*> cluster ping-cluster -node n1
Host is n1
Getting addresses from network interface table...
Cluster n1 clus1 n1
                      e0a 10.10.0.1
Cluster n1 clus2 n1
                      e0b 10.10.0.2
                      e0c 10.10.0.3
e0d 10.10.0.4
Cluster n1 clus3 n1
Cluster n1 clus4 n1
Cluster n2 clus1 n2
                      e0a 10.10.0.5
Cluster n2 clus2 n2 e0b 10.10.0.6
Cluster n2 clus3 n2
                      e0c 10.10.0.7
Cluster n2 clus4 n2 e0d 10.10.0.8
Cluster n3 clus1 n3
                      e0a 10.10.0.9
Cluster n3 clus2 n3
                      e0e 10.10.0.10
Cluster n4 clus1 n4
                      e0a 10.10.0.11
Cluster n4 clus2 n4
                        e0e 10.10.0.12
Local = 10.10.0.1 10.10.0.2 10.10.0.3 10.10.0.4
Remote = 10.10.0.5 10.10.0.6 10.10.0.7 10.10.0.8 10.10.0.9 10.10.0.10
10.10.0.11 10.10.0.12
Cluster Vserver Id = 4294967293
Ping status:
Basic connectivity succeeds on 32 path(s)
Basic connectivity fails on 0 path(s)
. . . . . . . . . . . . . . . .
Detected 1500 byte MTU on 32 path(s):
    Local 10.10.0.1 to Remote 10.10.0.5
   Local 10.10.0.1 to Remote 10.10.0.6
    Local 10.10.0.1 to Remote 10.10.0.7
    Local 10.10.0.1 to Remote 10.10.0.8
    Local 10.10.0.1 to Remote 10.10.0.9
    Local 10.10.0.1 to Remote 10.10.0.10
    Local 10.10.0.1 to Remote 10.10.0.11
    Local 10.10.0.1 to Remote 10.10.0.12
    Local 10.10.0.2 to Remote 10.10.0.5
    Local 10.10.0.2 to Remote 10.10.0.6
    Local 10.10.0.2 to Remote 10.10.0.7
    Local 10.10.0.2 to Remote 10.10.0.8
    Local 10.10.0.2 to Remote 10.10.0.9
```

```
Local 10.10.0.2 to Remote 10.10.0.10
    Local 10.10.0.2 to Remote 10.10.0.11
    Local 10.10.0.2 to Remote 10.10.0.12
    Local 10.10.0.3 to Remote 10.10.0.5
    Local 10.10.0.3 to Remote 10.10.0.6
    Local 10.10.0.3 to Remote 10.10.0.7
    Local 10.10.0.3 to Remote 10.10.0.8
    Local 10.10.0.3 to Remote 10.10.0.9
    Local 10.10.0.3 to Remote 10.10.0.10
    Local 10.10.0.3 to Remote 10.10.0.11
    Local 10.10.0.3 to Remote 10.10.0.12
    Local 10.10.0.4 to Remote 10.10.0.5
    Local 10.10.0.4 to Remote 10.10.0.6
    Local 10.10.0.4 to Remote 10.10.0.7
    Local 10.10.0.4 to Remote 10.10.0.8
    Local 10.10.0.4 to Remote 10.10.0.9
    Local 10.10.0.4 to Remote 10.10.0.10
    Local 10.10.0.4 to Remote 10.10.0.11
    Local 10.10.0.4 to Remote 10.10.0.12
Larger than PMTU communication succeeds on 32 path(s)
RPC status:
8 paths up, 0 paths down (tcp check)
8 paths up, 0 paths down (udp check)
```

20. Display the information about the devices in your configuration:

```
° network device-discovery show
```

[°] network port show -role cluster

[°] network interface show -role cluster

 $^{^{\}circ}$ system cluster-switch show

cluster::>		<pre>device-discovery Discovered</pre>	show	
Node	Port	Device	Interface	Platform
n1	/cdp			
	e0a	C1	Ethernet1/1/1	N3K-C3132Q-V
	e0b	C2	Ethernet1/1/1	N3K-C3132Q-V
	e0c	C2	Ethernet1/1/2	N3K-C3132Q-V
	e0d	C1	Ethernet1/1/2	N3K-C3132Q-V
n2	/cdp			
	e0a	C1	Ethernet1/1/3	N3K-C3132Q-V
	e0b	C2	Ethernet1/1/3	N3K-C3132Q-V
	e0c	C2	Ethernet1/1/4	N3K-C3132Q-V
	e0d	C1	Ethernet1/1/4	N3K-C3132Q-V
n3	/cdp			
	e4a	C1	Ethernet1/7	N3K-C3132Q-V
	e4e	C2	Ethernet1/7	N3K-C3132Q-V
n4	/cdp			
	e4a	C1	Ethernet1/8	N3K-C3132Q-V
	e4e	C2	Ethernet1/8	N3K-C3132Q-V
12 entries	were di	splayed.		

	*> network po k port show)	rt show -rc	ole clus	ster			
Ignore						Speed(Mbps)	∐ool+h
Health						speed (MDps)	nearth
Port	IPspace	Broadcast	Domain	Link	MTU	Admin/Oper	Status
Status							
e0a	 Cluster	Cluster		up	9000	auto/10000	_
_				-			
e0b	Cluster	Cluster		up	9000	auto/10000	-
-	01	Q1			0000		
e0c _	Cluster	Cluster		up	9000	auto/10000	_
e0d	Cluster	Cluster		up	9000	auto/10000	_
_							
Node: n2							

Ignore						Speed (Mbpg)	Hoolth
Health						Speed (Mbps)	пеатип
Port	IPspace	Broadcast	Domain	Link	MTU	Admin/Oper	Status
Status							
e0a	Cluster	Cluster		up	9000	auto/10000	-
- e0h	Cluster	Cluster		up	9000	auto/10000	_
-	Clustel	Clustel		uр	9000	auco/10000	
e0c	Cluster	Cluster		up	9000	auto/10000	-
- end	Cluster	Cluster		un	9000	auto/10000	_
-	0140661	CIUSCCI		αp	5000	aaco/10000	
Node: n3							
Ignore							
7.1						Speed (Mbps)	Health
Health Port	IPspace	Broadcast	Domain	Link	MTU	Admin/Oper	Status
Status	1						
e4a	 Cluster	Cluster		up	9000	auto/40000	_
-				_			
e4e	Cluster	Cluster		up	9000	auto/40000	-
_							
Node: n4							
Ignore							
1911010						Speed (Mbps)	Health
Health							
Port Status	IPspace	Broadcast	Domain	Link	MTU	Admin/Oper	Status
e4a -	Cluster	Cluster		up	9000	auto/40000	_
e4e	Cluster	Cluster		up	9000	auto/40000	_

12 entries were displayed.

	Logical	Status	Network	Current
Current	Is			
Vserver		Admin/Oper	Address/Mask	Node
Port	Home			
Cluster				
		up/up	10.10.0.1/24	n1
e0a	true			
	n1_clus2	up/up	10.10.0.2/24	n1
e0b	true			
	_	up/up	10.10.0.3/24	n1
e0c	true	/	10 10 0 4/04	1
e0d	true	up/up	10.10.0.4/24	n1
euu		up/up	10.10.0.5/24	n2
e0a	true	ap, ap	10,10,0,0,21	
	n2_clus2	up/up	10.10.0.6/24	n2
e0b	true			
	n2_clus3	up/up	10.10.0.7/24	n2
e0c	true			
0.1	n2_clus4	up/up	10.10.0.8/24	n2
e0d	true	/	10.10.0.9/24	n3
e4a	n3_clus1 true	up/up	10.10.0.9/24	113
Ciu	n3 clus2	up/up	10.10.0.10/24	n3
e4e	true			
	n4_clus1	up/up	10.10.0.11/24	n4
e4a	true			
	n4_clus2	up/up	10.10.0.12/24	n4
e4e	true			

cluster::*> system cluster-switch show

Switch Type Address Model

CL1 cluster-network 10.10.1.101 NX3132V

Serial Number: FOX000001

Is Monitored: true

Reason:

Software Version: Cisco Nexus Operating System (NX-OS) Software,

Version

7.0(3) I4(1)

Version Source: CDP

CL2 cluster-network 10.10.1.102 NX3132V

Serial Number: FOX000002

Is Monitored: true

Reason:

Software Version: Cisco Nexus Operating System (NX-OS) Software,

Version

7.0(3) I4(1)

Version Source: CDP

C2 cluster-network 10.10.1.103 NX3132V

Serial Number: FOX000003

Is Monitored: true

Reason:

Software Version: Cisco Nexus Operating System (NX-OS) Software,

Version

7.0(3) I4(1)

Version Source: CDP

3 entries were displayed.

21. Remove the replaced Nexus 3132Q-V switch, if it is not already removed automatically:

system cluster-switch delete

cluster::*> system cluster-switch delete -device CL2

22. Verify that the proper cluster switches are monitored:

system cluster-switch show

Is Monitored: true

Reason:

Software Version: Cisco Nexus Operating System (NX-OS) Software,

Version

7.0(3) I4(1)

Version Source: CDP

2 entries were displayed.

23. Enable the cluster switch health monitor log collection feature for collecting switch-related log files:

system cluster-switch log setup-password

system cluster-switch log enable-collection

```
cluster::*> system cluster-switch log setup-password
Enter the switch name: <return>
The switch name entered is not recognized.
Choose from the following list:
C1
C2
cluster::*> system cluster-switch log setup-password
Enter the switch name: C1
RSA key fingerprint is e5:8b:c6:dc:e2:18:18:09:36:63:d9:63:dd:03:d9:cc
Do you want to continue? {y|n}::[n] y
Enter the password: <enter switch password>
Enter the password again: <enter switch password>
cluster::*> system cluster-switch log setup-password
Enter the switch name: C2
RSA key fingerprint is 57:49:86:a1:b9:80:6a:61:9a:86:8e:3c:e3:b7:1f:b1
Do you want to continue? {y|n}:: [n] y
Enter the password: <enter switch password>
Enter the password again: <enter switch password>
cluster::*> system cluster-switch log enable-collection
Do you want to enable cluster log collection for all nodes in the
cluster?
\{y|n\}: [n] y
Enabling cluster switch log collection.
cluster::*>
```



If any of these commands return an error, contact NetApp support.

24. If you suppressed automatic case creation, re-enable it by invoking an AutoSupport message:

system node autosupport invoke -node * -type all -message MAINT=END

Related information

Cisco Ethernet Switch description page

Hardware Universe

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