Running Configuration:

<output omitted>

feature vpc

vpc domain 1

vpc 10

vpc 20

vpc peer-link

<output omitted>

interface Vlan23

no shutdown

<output omitted>

switchport

no shutdown

<output omitted>

switchport

vpc peer-link

<output omitted>

interface Ethernet1/2

interface port-channel23

switchport mode trunk

interface Ethernet1/1

N7K2-my-vdc# show run vpc

192.168.1.2 vrf keepalive

interface port-channel10

interface port-channel20

interface port-channel23

vrf member keepalive

ip address 192.168.1.2/24

switchport access vlan 23

N7K2-my-vdc# show run int po23

description ***VPC PEER LINK***

switchport trunk allowed vlan 10,20

spanning-tree port type network

N7K2-my-vdc# show run int eth1/2

N7K2-my-vdc# show run int vlan23

N7K2-my-vdc# show run int eth1/1

description ***VPC PEER KEEPALIVE LINK***

peer-keepalive destination 192.168.1.1 source

N7K1-my-vdc# show run vpc <output omitted> feature vpc

Running Configuration:

peer-keepalive destination 192.168.1.2 source 192.168.1.1 vrf keepalive

vpc domain 1

interface port-channel10

vpc 10 interface port-channel20

vpc 20 interface port-channel23

vpc peer-link

N7K1-my-vdc# show run int vlan23 <output omitted>

vrf member keepalive ip address 192.168.1.1/24

<output omitted> interface Ethernet1/1

switchport switchport access vlan 23 no shutdown

N7K1-my-vdc# show run int po23 <output omitted> interface port-channel23

description ***VPC PEER LINK*** switchport switchport mode trunk

switchport trunk allowed vlan 10,20 spanning-tree port type network vpc peer-link

interface Ethernet1/2 switchport

<output omitted> interface Ethernet1/3 switchport

N7K1-my-vdc# show run int po20

description ***Connected to N5K1*** switchport switchport mode trunk

interface port-channel20

<output omitted>

N7K1-my-vdc# show run int eth1/4 <output omitted> interface Ethernet1/4

channel-group 10 mode active

N7K1-my-vdc# show run int po10

no shutdown

<output omitted> interface port-channel10 description ***Connected to N5K2*** switchport switchport mode trunk switchport trunk allowed vlan 10 vpc 10

N5K1# show run int eth1/2 <output omitted> interface Ethernet1/2 description ***Connected to N7K2***

switchport mode trunk

channel-group 20 mode active

switchport trunk allowed vlan 20 channel-group 20 mode active N5K1# show run int po20 <output omitted>

N7K1-my-vdc# ping 192.168.1.2 vrf keepalive PING 192.168.1.2 (192.168.1.2): 56 data bytes

N7K1-my-vdc# show vlan brief

N7K1-my-vdc# show vpc role

VLAN Name

vPC Role status

Basic Verification Commands:

64 bytes from 192.168.1.2: icmp_seq=0 ttl=254 time=0.971 ms 64 bytes from 192.168.1.2: icmp_seq=1 ttl=254 time=0.901 ms

64 bytes from 192.168.1.2: icmp_seq=2 ttl=254 time=0.779 ms

64 bytes from 192.168.1.2: icmp_seq=3 ttl=254 time=0.786 ms 64 bytes from 192.168.1.2: icmp_seq=4 ttl=254 time=0.787 ms

Status Ports

10 VLAN0010 active Po10, 20 VLAN0020 active Po20, 23 keepalive active Eth1/1 active Po10, Po23, Eth1/2, Eth1/4 active Po20, Po23, Eth1/2, Eth1/3

vPC local role-priority : 32667 vPC peer system-mac : 00:3a:9c:f6:bc:c2 vPC peer role-priority : 32667

--Send status : Success --Last send at : 2022.04.27 18:54:13 397 ms --Sent on interface --Receive status

vPC keep-alive status

--Keepalive timeout

--Keepalive hold timeout

--Peer is alive for

--Received on interface : Vlan23 --Last update from peer vPC Keep-alive parameters --Destination : 192.168.1.2 --Keepalive interval : 1000 msec

vPC domain id Peer status vPC keep-alive status

Type-2 consistency status

vPC role

Self-isolation

Port

Status

Reason

: Po20

: up

Consistency: success

Active Vlans : 20

Number of vPCs configured : 2 Peer Gateway : Disabled Dual-active excluded VLANs and BDs : -**Graceful Consistency Check** : Enabled : Enabled, timer is off.(timeout = 240s) Auto-recovery status

Operational Layer3 Peer-router

1 Po23 up 10,20 vPC status Id : 10 Port : Po10 Status : up Consistency : success Reason : success Active Vlans: 10 Id : 20

STP Disabled STP Mode STP Bridge Assurance STP Loopguard STP MST Region Instance to 1 **VLAN Mapping** STP MST Region Revision 1 0 Interface-vlan admin up 2 Interface-vlan routing 2 capability Allowed VLANs

Local error VLANs

Flags: D - Down

b - BFD Session Wait S - Switched R - Routed U - Up (port-channel) M - Not in use. Min-links not met

P - Up in port-channel (members)

20 Po20(SU) Eth LACP Eth1/3(P) 23 Po23(SU) Eth LACP Eth1/2(P) N5K1# show vlan brief **VLAN Name** Status Ports 1 default

Eth1/29, Eth1/30, Eth1/31 Eth1/32, Eth1/33, Eth1/34 Eth1/35, Eth1/36, Eth1/37 Eth1/38, Eth1/39, Eth1/40 Eth1/41, Eth1/42, Eth1/43

Eth1/44, Eth1/45, Eth1/46 Eth1/47, Eth1/48, Eth2/1, Eth2/2 Eth2/3, Eth2/4, Eth2/5, Eth2/6 active Po20, Eth1/1, Eth1/2 20 VLAN0020 N5K1# show port-channel summ P - Up in port-channel (members) Flags: D - Down I - Individual H - Hot-standby (LACP only) s - Suspended r - Module-removed S - Switched R - Routed U - Up (port-channel) M - Not in use. Min-links not met Type Protocol Member Ports Group Port-Channel

20 Po20(SU) Eth LACP Eth1/1(P) Eth1/2(P) [®]Created by Matthew Rich, TCE, Cisco Systems, Inc.

interface Vlan23 no shutdown N7K1-my-vdc# show run int eth1/1 description *** VPC PEER KEEPALIVE LINK***

N7K1-my-vdc# show run int eth1/2 <output omitted> description ***VPC PEER LINK*** switchport mode trunk switchport trunk allowed vlan 10,20 channel-group 23 mode active no shutdown N7K1-my-vdc# show run int eth1/3

switchport trunk allowed vlan 20 vpc 20 description ***Connected to N5K2*** switchport switchport mode trunk switchport trunk allowed vlan 10

N5K1# show run int eth1/1 <output omitted> interface Ethernet1/1 description ***Connected to N7K1*** switchport mode trunk switchport trunk allowed vlan 20

interface port-channel20 description ***Connected to N7K1/N7K2*** switchport mode trunk switchport trunk allowed vlan 20 speed 10000

1 default active

vPC role : primary vPC system-mac : 00:23:04:ee:be:01 vPC system-priority : 32667 vPC local system-mac : 00:3a:9c:ea:e0:42 N7K1-my-vdc# show vpc peer-keepalive

: peer is alive

: (15470) seconds, (513) msec

: Vlan23 : Success : 2022.04.27 18:54:13 398 ms --Last receive at : (0) seconds, (37) msec

: 5 seconds

: 3 seconds

: success

: Disabled

--Keepalive vrf : keepalive --Keepalive udp port : 3200 : 192 --Keepalive tos N7K1-my-vdc# show vpc Legend: (*) - local vPC is down, forwarding via vPC peer-link : 1 : peer adjacency formed ok : peer is alive Configuration consistency status : success Per-vlan consistency status : success

vPC Peer-link status id Port Status Active vlans Active BDs

: primary

Delay-restore orphan ports status : Timer is off.(timeout = 0s)

: Disabled

Legend: Type 1: vPC will be suspended in case of mismatch Type Local Value Peer Value Name STP MST Simulate PVST 1 Enabled Enabled STP Port Type, Edge 1 Normal, Disabled, Normal, Disabled, Disabled BPDUFilter, Edge BPDUGuard Disabled 1111 1111 STP MST Region Name 1 None 1 None Rapid-PVST 1 Rapid-PVST Enabled 1 Enabled

1 Disabled

- 10,20

N7K1-my-vdc# show port-channel summ

I - Individual H - Hot-standby (LACP only)

s - Suspended r - Module-removed

Disabled

0

10,20

N7K1-my-vdc# show vpc consistency-parameters global

Group Port-Type Protocol Member Ports Channel 10 Po10(SU) Eth LACP Eth1/4(P) active Eth1/3, Eth1/4, Eth1/5, Eth1/6 Eth1/7, Eth1/8, Eth1/9, Eth1/10 Eth1/11, Eth1/12, Eth1/13 Eth1/14, Eth1/15, Eth1/16 Eth1/17, Eth1/18, Eth1/19 Eth1/20, Eth1/21, Eth1/22 Eth1/23, Eth1/24, Eth1/25 Eth1/26, Eth1/27, Eth1/28

description ***VPC PEER LINK*** switchport switchport mode trunk switchport trunk allowed vlan 10,20 channel-group 23 mode active no shutdown N7K2-my-vdc# show run int eth1/3 <output omitted> interface Ethernet1/3 description ***Connected to N5K1*** description ***Connected to N5K1*** switchport switchport mode trunk switchport mode trunk switchport trunk allowed vlan 20 switchport trunk allowed vlan 20 channel-group 20 mode active channel-group 20 mode active no shutdown no shutdown

> vpc 20 N7K2-my-vdc# show run int eth1/4 <output omitted> interface Ethernet1/4 description ***Connected to N5K2*** switchport switchport mode trunk switchport trunk allowed vlan 10 channel-group 10 mode active no shutdown N7K2-my-vdc# show run int po10 <output omitted> interface port-channel10

> > description ***Connected to N5K2***

switchport trunk allowed vlan 10

N7K2-my-vdc# show run int po20

description ***Connected to N5K1***

switchport trunk allowed vlan 20

<output omitted>

switchport

switchport

vpc 10

switchport mode trunk

interface port-channel20

switchport mode trunk

N5K2# show run int eth1/1 <output omitted> interface Ethernet1/1 description ***Connected to N7K1*** switchport mode trunk switchport trunk allowed vlan 10 channel-group 10 mode active N5K2# show run int eth1/2 <output omitted> interface Ethernet1/2 description ***Connected to N7K2*** switchport mode trunk

switchport trunk allowed vlan 10

switchport trunk allowed vlan 10

description ***Connected to N7K1/N7K2***

channel-group 10 mode active

N5K2# show run int po10

interface port-channel10

switchport mode trunk

<output omitted>

speed 10000

VLAN Name

1 default

N7K2-my-vdc# show vpc role

vPC peer system-mac

vPC peer role-priority

vPC keep-alive status

--Peer is alive for

--Sent on interface

--Send status

--Last send at

--Destination

--Keepalive interval

Basic Verification Commands: N7K2-my-vdc# ping 192.168.1.1 vrf keepalive PING 192.168.1.1 (192.168.1.1): 56 data bytes 64 bytes from 192.168.1.1: icmp_seq=0 ttl=254 time=1.082 ms 64 bytes from 192.168.1.1: icmp_seq=1 ttl=254 time=0.74 ms 64 bytes from 192.168.1.1: icmp_seq=2 ttl=254 time=0.779 ms 64 bytes from 192.168.1.1: icmp seq=3 ttl=254 time=0.587 ms 64 bytes from 192.168.1.1: icmp_seq=4 ttl=254 time=0.792 ms N7K2-my-vdc# show vlan brief

active

10 VLAN0010 active Po10, Po23, Eth1/2, Eth1/4
20 VLAN0020 active Po20, Po23, Eth1/2, Eth1/3
23 keepalive Eth1/1

vPC Role status vPC role : secondary vPC system-mac : 00:23:04:ee:be:01 vPC system-priority : 32667 vPC local system-mac : 00:3a:9c:f6:bc:c2 vPC local role-priority : 32667

: 32667

: Success

: Vlan23

: 192.168.1.1

: 1000 msec

: 5 seconds

: success

Active BDs

Peer Value

1111

Rapid-PVST

Disabled

0

10,20

Enabled

None

Enabled

Disabled

Normal, Disabled,

: success

: success

: 2

: secondary

: 00:3a:9c:ea:e0:42

: peer is alive

: 2022.04.27 19:12:33 83 ms

: (16558) seconds, (740) msec

Status Ports

--Receive status : Success --Last receive at : 2022.04.27 19:12:33 84 ms --Received on interface : Vlan23 --Last update from peer : (0) seconds, (164) msec

vPC Keep-alive parameters

N7K2-my-vdc# show vpc peer-keepalive

--Keepalive timeout --Keepalive hold timeout : 3 seconds --Keepalive vrf : keepalive --Keepalive udp port : 3200 --Keepalive tos : 192 N7K2-my-vdc# show vpc Legend: (*) - local vPC is down, forwarding via vPC peer-link vPC domain id : 1 Peer status : peer adjacency formed ok : peer is alive vPC keep-alive status

: Disabled Peer Gateway Dual-active excluded VLANs and BDs : -Graceful Consistency Check : Enabled : Enabled, timer is off.(timeout = 240s) Auto-recovery status Delay-restore orphan ports status : Timer is off.(timeout = 0s) Operational Layer3 Peer-router : Disabled Self-isolation : Disabled vPC Peer-link status id Port Status Active vlans

Configuration consistency status

Per-vlan consistency status

Number of vPCs configured

1 Po23 up 10,20

: 10

: Po10

: up Consistency: success

: success

vPC status

Id

Port

Status

Reason

Name

STP MST Simulate PVST

BPDUFilter, Edge BPDUGuard

STP Port Type, Edge

STP Disabled

STP Loopguard

Group Port-

VLAN Name

1 default

10 VLAN0010

Flags: D - Down

N5K2# show port-channel summ

S - Switched R - Routed

U - Up (port-channel)

STP Mode

STP MST Region Name

STP Bridge Assurance

Type-2 consistency status

vPC role

Active Vlans : 10 Id : 20 Port : Po20 Status : up Consistency: success Keason Active Vlans: 20 N7K2-my-vdc# show vpc consistency-parameters global Legend: Type 1: vPC will be suspended in case of mismatch

Type Local Value

1

1 Rapid-PVST

1 Disabled

1 Enabled

1 None

1 Enabled

1 Normal, Disabled,

Disabled

STP MST Region Instance to 1 **VLAN Mapping** STP MST Region Revision 1 0 Interface-vlan admin up 2 Interface-vlan routing 2 capability - 10,20 Allowed VLANs Local error VLANs N7K2-my-vdc# show port-channel summ Flags: D - Down P - Up in port-channel (members) I - Individual H - Hot-standby (LACP only) s - Suspended r - Module-removed b - BFD Session Wait S - Switched R - Routed U - Up (port-channel) M - Not in use. Min-links not met

Channel 10 Po10(SU) Eth LACP Eth1/4(P) 20 Po20(SU) Eth Eth1/3(P) LACP 23 Po23(SU) Eth LACP Eth1/2(P) N5K2# show vlan brief

Type Protocol Member Ports

Status Ports

active Eth1/3, Eth1/4, Eth1/5, Eth1/6

Eth1/7, Eth1/8, Eth1/9, Eth1/10

Eth1/47, Eth1/48, Eth2/1, Eth2/2

Eth2/3, Eth2/4, Eth2/5, Eth2/6

P - Up in port-channel (members)

active Po10, Eth1/1, Eth1/2

Eth1/11, Eth1/12, Eth1/13

Eth1/14, Eth1/15, Eth1/16

Eth1/17, Eth1/18, Eth1/19

Eth1/20, Eth1/21, Eth1/22 Eth1/23, Eth1/24, Eth1/25 Eth1/26, Eth1/27, Eth1/28 Eth1/29, Eth1/30, Eth1/31 Eth1/32, Eth1/33, Eth1/34 Eth1/35, Eth1/36, Eth1/37 Eth1/38, Eth1/39, Eth1/40 Eth1/41, Eth1/42, Eth1/43 Eth1/44, Eth1/45, Eth1/46

Group Port-Type Protocol Member Ports Channel 10 Po10(SU) Eth LACP Eth1/1(P) Eth1/2(P)

I - Individual H - Hot-standby (LACP only)

s - Suspended r - Module-removed

M - Not in use. Min-links not met