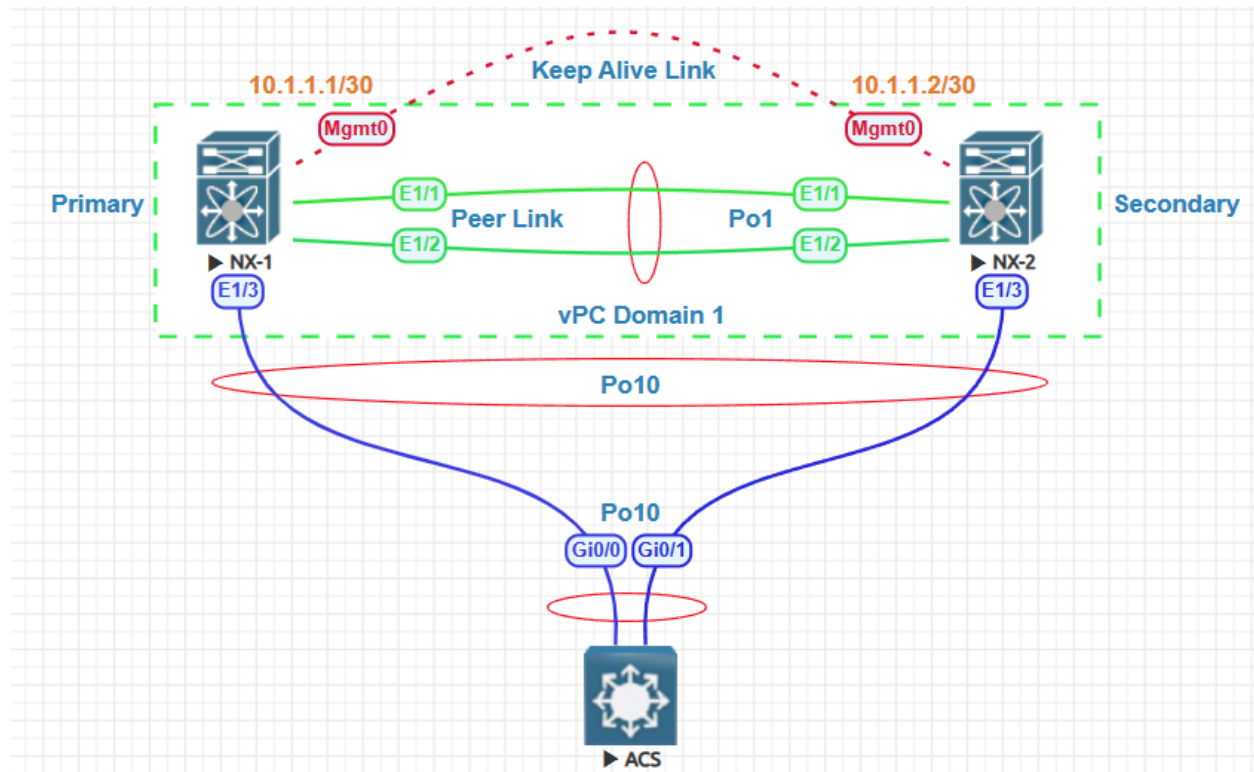


Cisco Nexus vPC Lab:



NX-1 Role	Primary
NX-2 Role	Secondary
NX-1 Priority	20
NX-2 Priority	30
Peer Links	E1/1 and E1/2
Keep Alive Link	Mgmt0
NX-1 Mgmt0 IP Address	10.1.1.1/30
NX-2 Mgmt0 IP Address	10.1.1.2/30
vPC Domain	1
Peer Link Portchannel	1
Member Portchannel	10
Member Ports	E1/3
Member Ports vPC	10
ACS Switch Ports	G0/0 and G0/1
ACS Switch Images	viosl2-adventerprisek9-m.ssa.high_iron_20190423
Nexus Images Version	9300v 9.3.6
Nexus EVE-NG Image	nxosv9k-9.3.6

NX-1 Switch Configuration
Change hostname
switch(config)# hostname NX-1
Enable Features for vPC
NX-1(config)# feature vpc NX-1(config)# feature lacp
Configure Keep Alive Link
NX-1(config)# interface mgmt 0 NX-1(config-if)# ip address 10.1.1.1/30 NX-1(config-if)# no shutdown
Configure vPC Domain & Set Priorities
NX-1(config)# vpc domain 1 NX-1(config-vpc-domain)# role priority 20 NX-1(config-vpc-domain)# peer-keepalive destination 10.1.1.2 source 10.1.1.1 vrf management NX-1(config-vpc-domain)# exit
Configure Peer Link
NX-1(config)# interface ethernet 1/1-2 NX-1(config-if-range)# switchport mode trunk NX-1(config-if-range)# spanning-tree port type network NX-1(config-if-range)# channel-group 1 mode active NX-1(config-if-range)# no shutdown
Configure Peer Link Port-Channel
NX-1(config)# interface port-channel 1 NX-1(config-if)# no shutdown NX-1(config-if)# switchport NX-1(config-if)# switchport mode trunk NX-1(config-if)# spanning-tree port type network NX-1(config-if)# vpc peer-link
Configure Member Ports
NX-1(config)# interface ethernet 1/3 NX-1(config-if)# channel-group 10 mode active NX-1(config-if)# no shutdown NX-1(config-if)# exit
Configure Member Port-Channel
NX-1(config)# interface port-channel 10 NX-1(config-if)# no shutdown NX-1(config-if)# switchport NX-1(config-if)# switchport mode trunk NX-1(config-if)# vpc 10

NX-2 Switch Configuration
Change hostname
switch(config)# hostname NX-2
Enable Features for vPC
NX-2(config)# feature vpc NX-2(config)# feature lacp
Configure Keep Alive Link
NX-2(config)# interface mgmt 0 NX-2(config-if)# ip address 10.1.1.2/30 NX-2(config-if)# no shutdown
Configure vPC Domain & Set Priorities
NX-2(config)# vpc domain 1 NX-2(config-vpc-domain)# role priority 20 NX-2(config-vpc-domain)# peer-keepalive destination 10.1.1.1 source 10.1.1.2 vrf management NX-2(config-vpc-domain)# exit
Configure Peer Link
NX-2(config)# interface ethernet 1/1-2 NX-2(config-if-range)# switchport mode trunk NX-2(config-if-range)# spanning-tree port type network NX-2(config-if-range)# channel-group 1 mode active NX-2(config-if-range)# no shutdown
Configure Peer Link Port-Channel
NX-2(config)# interface port-channel 1 NX-2(config-if)# no shutdown NX-2(config-if)# switchport NX-2(config-if)# switchport mode trunk NX-2(config-if)# spanning-tree port type network NX-2(config-if)# vpc peer-link
Configure Member Ports
NX-2(config)# interface ethernet 1/3 NX-2(config-if)# channel-group 10 mode active NX-2(config-if)# no shutdown NX-2(config-if)# exit
Configure Member Port-Channel
NX-2(config)# interface port-channel 10 NX-2(config-if)# no shutdown NX-2(config-if)# switchport NX-2(config-if)# switchport mode trunk NX-2(config-if)# vpc 10

ACS Switch Configuration
Change hostname
Switch(config)#hostname ACS
Configure Port-channel
ACS(config)#interface range g0/0-1 ACS(config-if-range)#switchport trunk encapsulation dot1q ACS(config-if-range)#switchport mode trunk ACS(config-if-range)#channel-protocol lacp ACS(config-if-range)#channel-group 10 mode active ACS(config-if-range)#no shutdown ACS(config-if-range)#exit ACS(config)#exit

Cisco vPC Command	Purpose
show feature	Displays whether the vPC is enabled or not
show vpc brief	Displays brief information about the vPCs
show vpc consistency-parameters	Displays the current status of parameters
show running-config vpc	Displays running configuration information for vPCs
show port-channel capacity	Displays how many port channels are configured
show vpc statistics	Displays statistics about the vPCs
show vpc peer-keepalive	Displays info about the peer-keepalive messages
show vpc role	Displays the vPC peer's state
show vpc orphan-ports	Displays orphan port details

```
ACS#show etherchannel summary
Flags:  D - down          P - bundled in port-channel
        I - stand-alone  s - suspended
        H - Hot-standby (LACP only)
        R - Layer3       S - Layer2
        U - in use       N - not in use, no aggregation
        f - failed to allocate aggregator

        M - not in use, minimum links not met
        m - not in use, port not aggregated due to minimum links not met
        u - unsuitable for bundling
        w - waiting to be aggregated
        d - default port

        A - formed by Auto LAG
```

```
Number of channel-groups in use: 1
Number of aggregators:          1
```

```
Group  Port-channel  Protocol  Ports
-----+-----+-----+-----+-----
10     Po10(SU)         LACP      Gi0/0(P) Gi0/1(P)
```

```
NX-1(config)# show port-channel summary
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)
       p - Up in delay-lacp mode (member)
       M - Not in use. Min-links not met
```

```
-----
Group Port-          Type      Protocol  Member Ports
  Channel
-----
1      Po1(SU)        Eth       LACP      Eth1/1(P)  Eth1/2(P)
10     Po10(SU)       Eth       LACP      Eth1/3(P)
```

```
NX-2(config)# show port-channel summary
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)
       p - Up in delay-lacp mode (member)
       M - Not in use. Min-links not met
```

```
-----
Group Port-          Type      Protocol  Member Ports
  Channel
-----
1      Po1(SU)        Eth       LACP      Eth1/1(P)  Eth1/2(P)
10     Po10(SU)       Eth       LACP      Eth1/3(P)
```

```
NX-2(config)# show vpc role
```

```
vPC Role status
```

```
-----
vPC role                               : secondary
Dual Active Detection Status           : 0
vPC system-mac                         : 00:23:04:ee:be:01
vPC system-priority                    : 32667
vPC local system-mac                   : 50:02:00:00:1b:08
vPC local role-priority                 : 30
vPC local config role-priority         : 30
vPC peer system-mac                    : 50:01:00:00:1b:08
vPC peer role-priority                 : 20
vPC peer config role-priority          : 20
NX-2(config)#
```

```
NX-1(config)# show vpc
```

```
Legend:
```

```
(*) - local vpc is down, forwarding via vpc peer-link
```

```
VPC domain id           : 1
Peer status             : peer adjacency formed ok
VPC keep-alive status   : peer is alive
Configuration consistency status : success
Per-vlan consistency status : success
Type-2 consistency status : success
VPC role                : primary
Number of vpcs configured : 1
Peer Gateway           : Disabled
Dual-active excluded VLANs : -
Graceful consistency check : Enabled
Auto-recovery status    : Disabled
Delay-restore status    : Timer is off.(timeout = 30s)
Delay-restore SVI status : Timer is off.(timeout = 10s)
Operational Layer3 Peer-router : Disabled
Virtual-peerlink mode   : Disabled
```

```
VPC Peer-link status
```

```
-----
id   Port   Status Active vlans
-----
1    Po1    up     1
-----
```

```
VPC status
```

```
-----
Id   Port   Status Consistency Reason           Active vlans
-----
10   Po10   up     success    success           1
-----
```

```
NX-2(config)# show vpc peer-keepalive
```

```
VPC keep-alive status           : peer is alive
--Peer is alive for             : (1286) seconds, (827) msec
--Send status                   : Success
--Last send at                  : 2023.08.12 11:58:30 796 ms
--Sent on interface             : mgmt0
--Receive status                : Success
--Last receive at               : 2023.08.12 11:58:30 797 ms
--Received on interface         : mgmt0
--Last update from peer        : (0) seconds, (67) msec
```

```
VPC Keep-alive parameters
```

```
--Destination                   : 10.1.1.1
--Keepalive interval             : 1000 msec
--Keepalive timeout              : 5 seconds
--Keepalive hold timeout         : 3 seconds
--Keepalive vrf                  : management
--Keepalive udp port             : 3200
--Keepalive tos                  : 192
```

```
NX-2(config)#
```