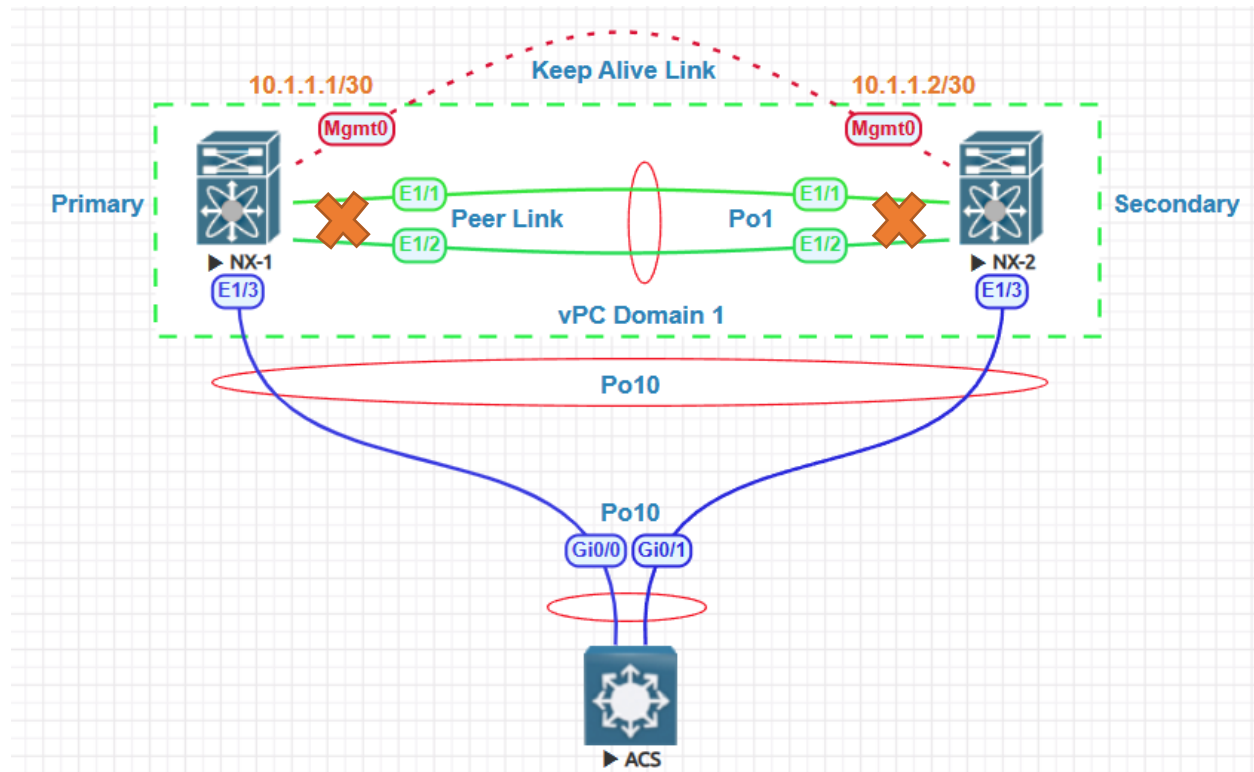


## vPC Peer Link is Down Lab:



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

<b>NX-1 Switch Configuration</b>
<b>Change hostname</b>
switch(config)# hostname NX-1
<b>Enable Features for vPC</b>
NX-1(config)# feature vpc NX-1(config)# feature lacp
<b>Configure Keep Alive Link</b>
NX-1(config)# interface mgmt 0 NX-1(config-if)# ip address 10.1.1.1/30 NX-1(config-if)# no shutdown
<b>Configure vPC Domain &amp; Set Priorities</b>
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
<b>Configure Peer Link</b>
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
<b>Configure Peer Link Port-Channel</b>
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
<b>Configure Member Ports</b>
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
<b>Configure Member Port-Channel</b>
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

<b>NX-2 Switch Configuration</b>
<b>Change hostname</b>
switch(config)# hostname NX-2
<b>Enable Features for vPC</b>
NX-2(config)# feature vpc NX-2(config)# feature lacp
<b>Configure Keep Alive Link</b>
NX-2(config)# interface mgmt 0 NX-2(config-if)# ip address 10.1.1.2/30 NX-2(config-if)# no shutdown
<b>Configure vPC Domain &amp; Set Priorities</b>
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
<b>Configure Peer Link</b>
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
<b>Configure Peer Link Port-Channel</b>
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
<b>Configure Member Ports</b>
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
<b>Configure Member Port-Channel</b>
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

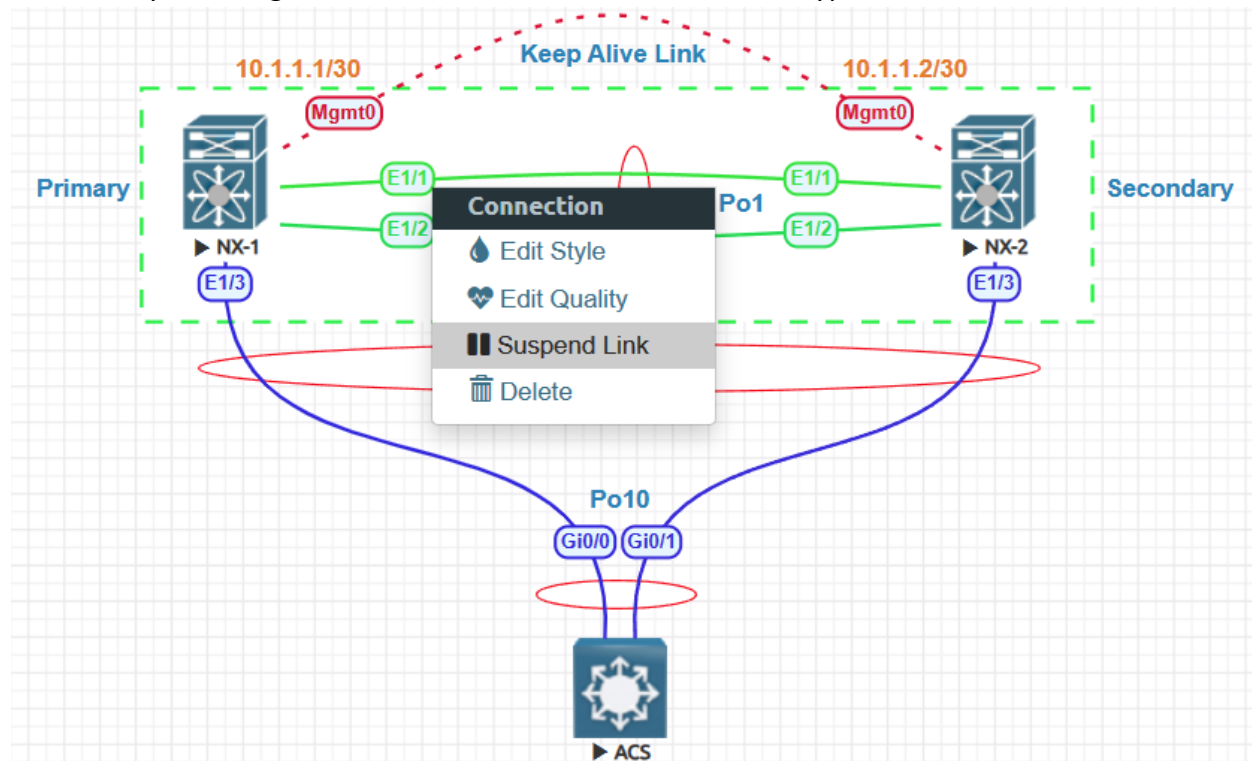
### Change hostname

```
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
```

In EVE-NG Professional edition right click on **E1/1 and E1/2** link to Suspend, in EVE-NG Community edition go to **interface E1/1 and E1/2** under that type **shutdown**



```
NX-1(config)# interface e1/1  
NX-1(config-if)# shutdown  
NX-1(config)# interface e1/2  
NX-1(config-if)# shutdown
```

```
NX-2(config)# interface e1/1  
NX-2(config-if)# shutdown  
NX-2(config)# interface e1/2  
NX-2(config-if)# shutdown
```

```

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(SD)         Eth       LACP      Eth1/1(s)   Eth1/2(s)
10     Po10(SD)        Eth       LACP      Eth1/3(D)
NX-2(config)#

```

```

NX-2(config)#
NX-2(config)# show ip interface brief

IP Interface Status for VRF "default"(1)
Interface          IP Address      Interface Status
Vlan10             1.1.1.2        protocol-down/link-down/admin-up
Eth1/4             2.2.2.2        protocol-up/link-up/admin-up
NX-2(config)#

```

```

NX-2(config)# show vpc
Legend:
          (*) - local vPC is down, forwarding via vPC peer-link

```

```

vPC domain id          : 1
Peer status            : peer link is down
vPC keep-alive status  : peer is alive
Configuration consistency status : success
Per-vlan consistency status : success
Type-2 consistency status : success
vPC role               : secondary
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	down	-

vPC status

Id	Port	Status	Consistency	Reason	Active vlans
10	Po10	down	failed	Peer-link is down	-

NX-1# show vpc brief

Legend:

(\*) - local vPC is down, forwarding via vPC peer-link

vPC domain id : 1  
Peer status : peer link is down  
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	down	-

vPC status

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

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(s)

NX-1# show vpc role

vPC Role status

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