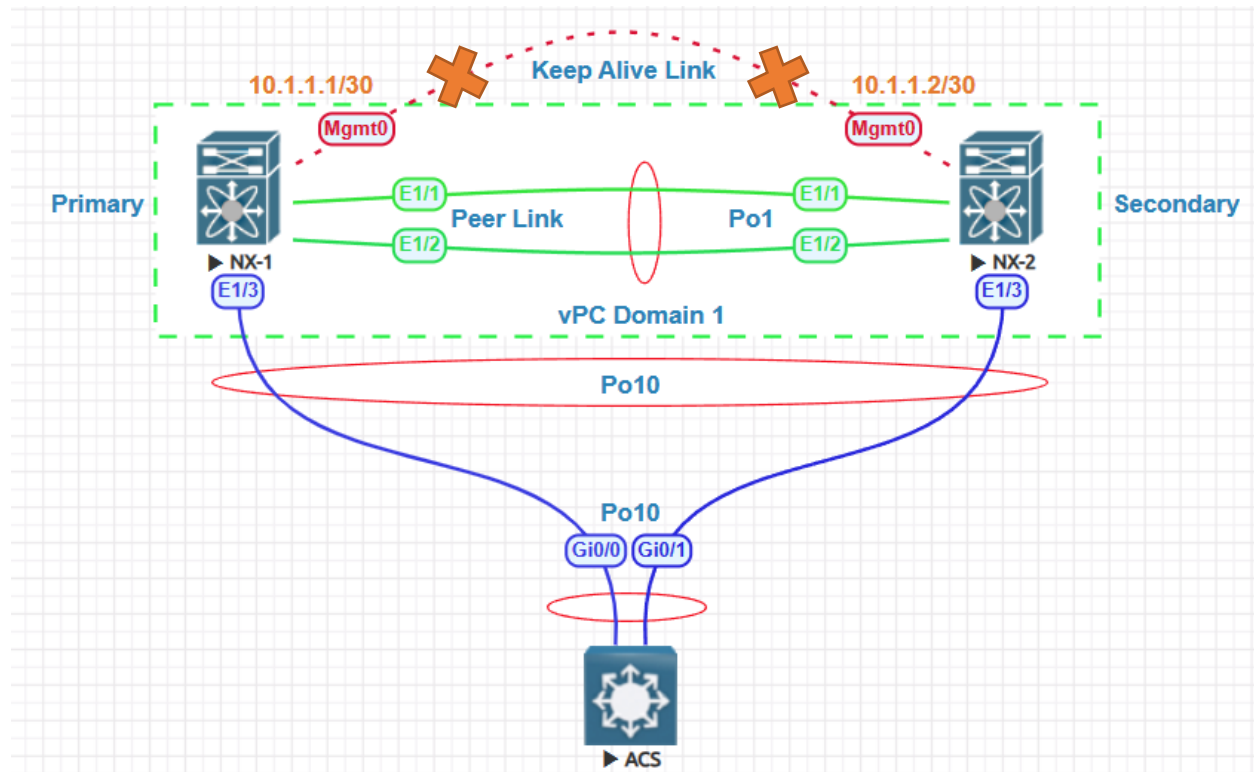


## vPC Keep-Alive Link is Down Lab:



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

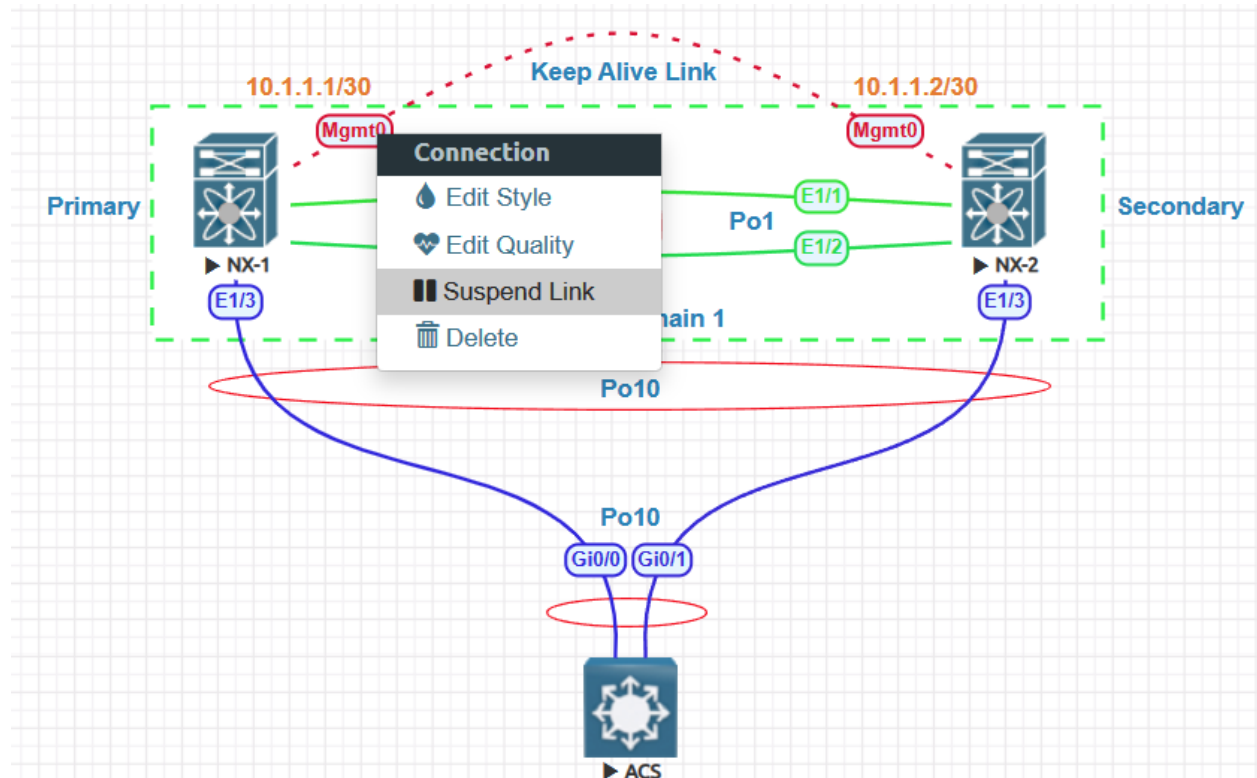
### Change hostname

```
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  
ACS(config)#exit
```

In EVE-NG Professional edition right click on **Mgmt0 Keep Alive** link to Suspend, in EVE-NG Community edition go to **interface mgmt 0** under that type **shutdown**



```
NX-1(config)# interface mgmt 0
```

```
NX-1(config-if)# shutdown
```

```
NX-2(config)# interface mgmt 0
```

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

```
NX-1# 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 not reachable through peer-keepalive
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
```

```
NX-2# 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 not reachable through peer-keepalive
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
```

```
NX-1# 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-1#
```

```

NX-2# 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#

```

```

NX-2# show interface status

```

```

-----
Port      Name          Status      Vlan      Duplex  Speed  Type
-----
mgmt0     --            notconnec  routed    auto    auto   --

```

```

-----
Port      Name          Status      Vlan      Duplex  Speed  Type
-----
Eth1/1    --            connected  trunk     full    1000  10g
Eth1/2    --            connected  trunk     full    1000  10g
Eth1/3    --            connected  trunk     full    1000  10g
Eth1/4    --            connected  1         full    1000  10g
Eth1/5    --            connected  1         full    1000  10g
Eth1/6    --            connected  1         full    1000  10g
Eth1/7    --            connected  1         full    1000  10g

```

```

-----
Port      Name          Status      Vlan      Duplex  Speed  Type
-----
Po1       --            connected  trunk     full    1000  --
Po10     --            connected  trunk     full    1000  --
NX-2#

```

```

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

```

```

IP Interface Status for VRF "management"(2)
Interface      IP Address      Interface Status
mgmt0          10.1.1.2        protocol-down/link-down/admin-up
NX-2(config)#

```