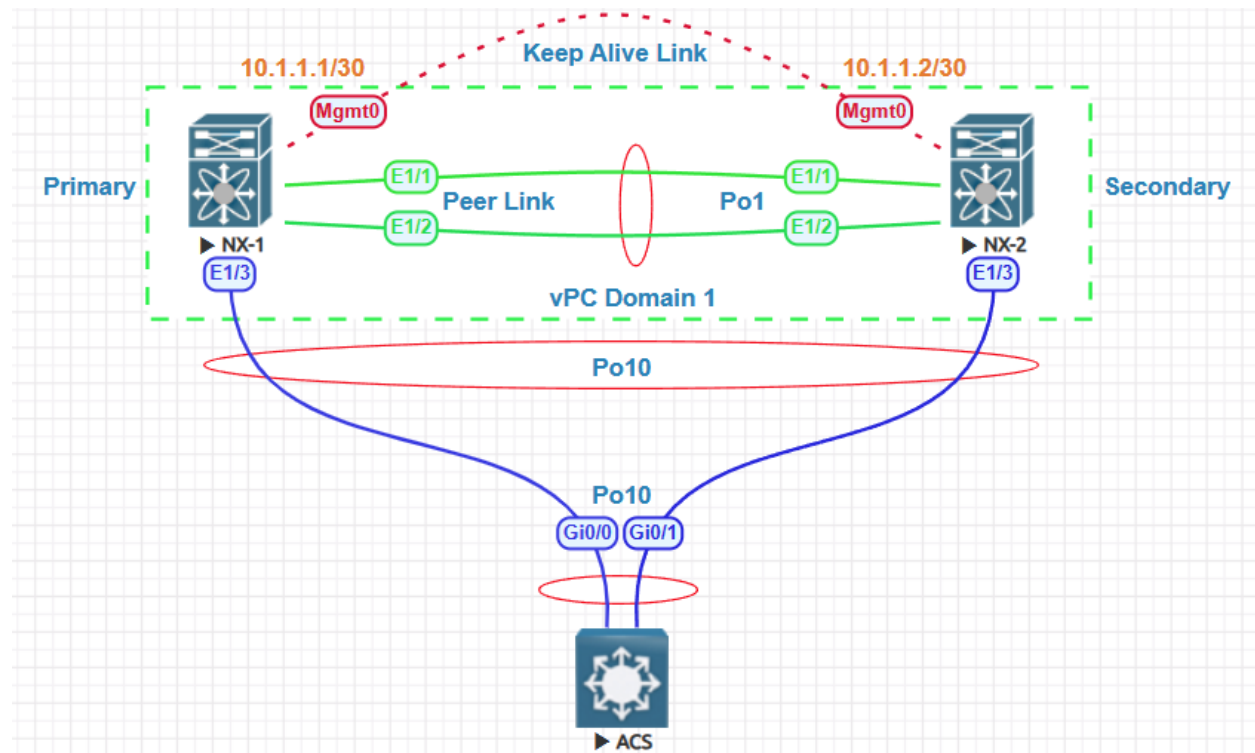


## Single-Sided Virtual PortChannel (vPC):

In a Cisco Nexus Single-Sided Virtual PortChannel (vPC) configuration, you set up a connection from a device (such as a server) to a pair of Cisco Nexus switches using two separate physical links. This provides redundancy and high availability without the switches being directly interconnected. Here's a step guide to configuring a single-sided vPC:



### Physical Connections:

Connect one cable from the device to one Nexus switch (Switch A). Connect another cable from the same device to the second Nexus switch (Switch B).

### vPC Domain Configuration:

On both Nexus switches, create a vPC domain. This is a group that associates the two links as part of the same vPC setup. Assign a unique vPC domain number to this setup on both switches.

### vPC Peer-Link Configuration:

Define a special link called the vPC peer-link between the two switches. Configure the vPC peer-link with the same domain number you assigned earlier. This link is used for internal communication and synchronization between the switches.

### vPC Member Links Configuration:

On both switches, configure the links connecting to the device (server) as vPC member links. Associate these links with the vPC domain you created earlier. Make sure to use the same vPC number for both member links on both switches.

### vPC Peer Keepalive Link:

You can set up a keepalive link between the switches to monitor each other's status. This link ensures that both switches are operational and can detect any failures.

### vPC Configuration Sync:

Ensure that both switches have identical configurations for the vPC domain, peer-link, and member links. Configuration synchronization is crucial to maintain consistency between the switches.

### Device Configuration:

On the device (server), configure the two physical interfaces as part of an aggregated port channel. Use the same port channel configuration on both interfaces.

### Testing and Monitoring:

Test the connectivity and failover by simulating one of the switches going down. Observe how the other switch takes over seamlessly to maintain the connection.

