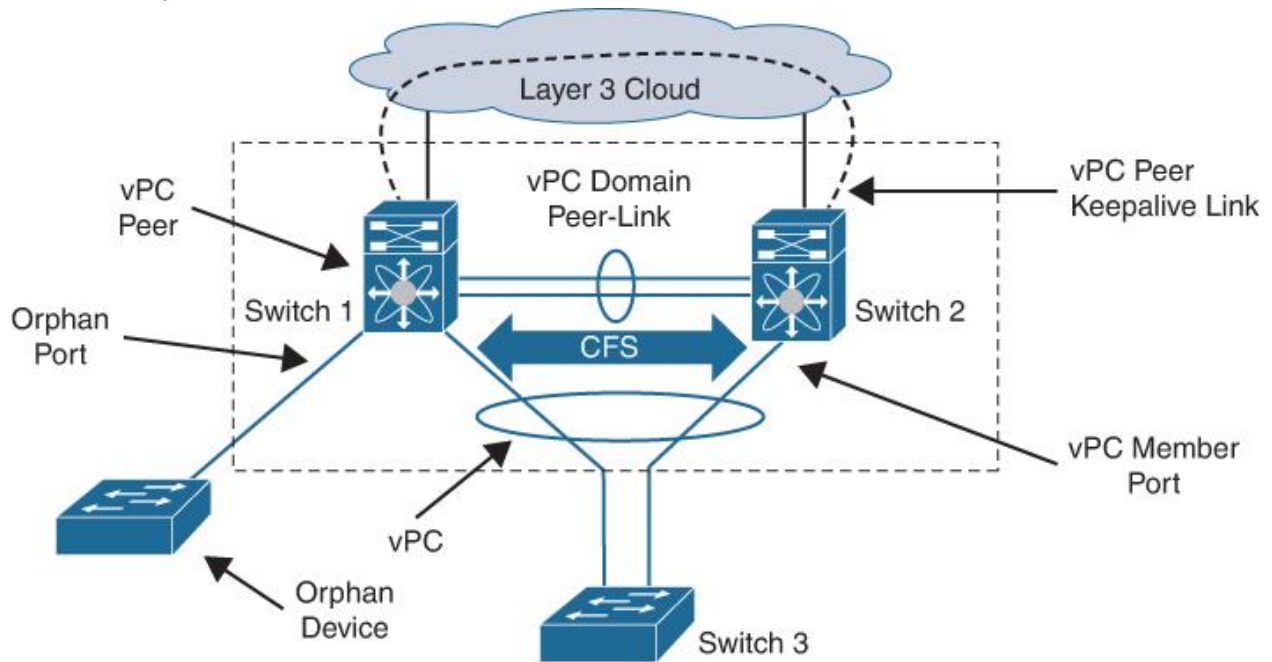
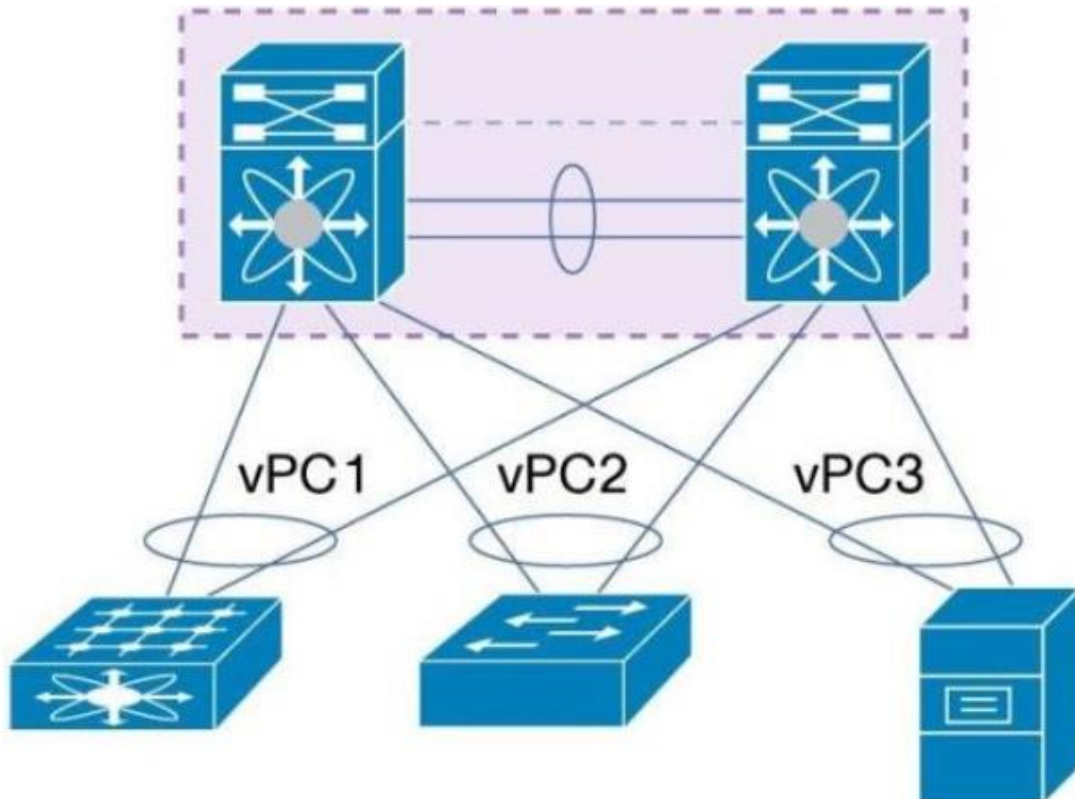


vPC Components:



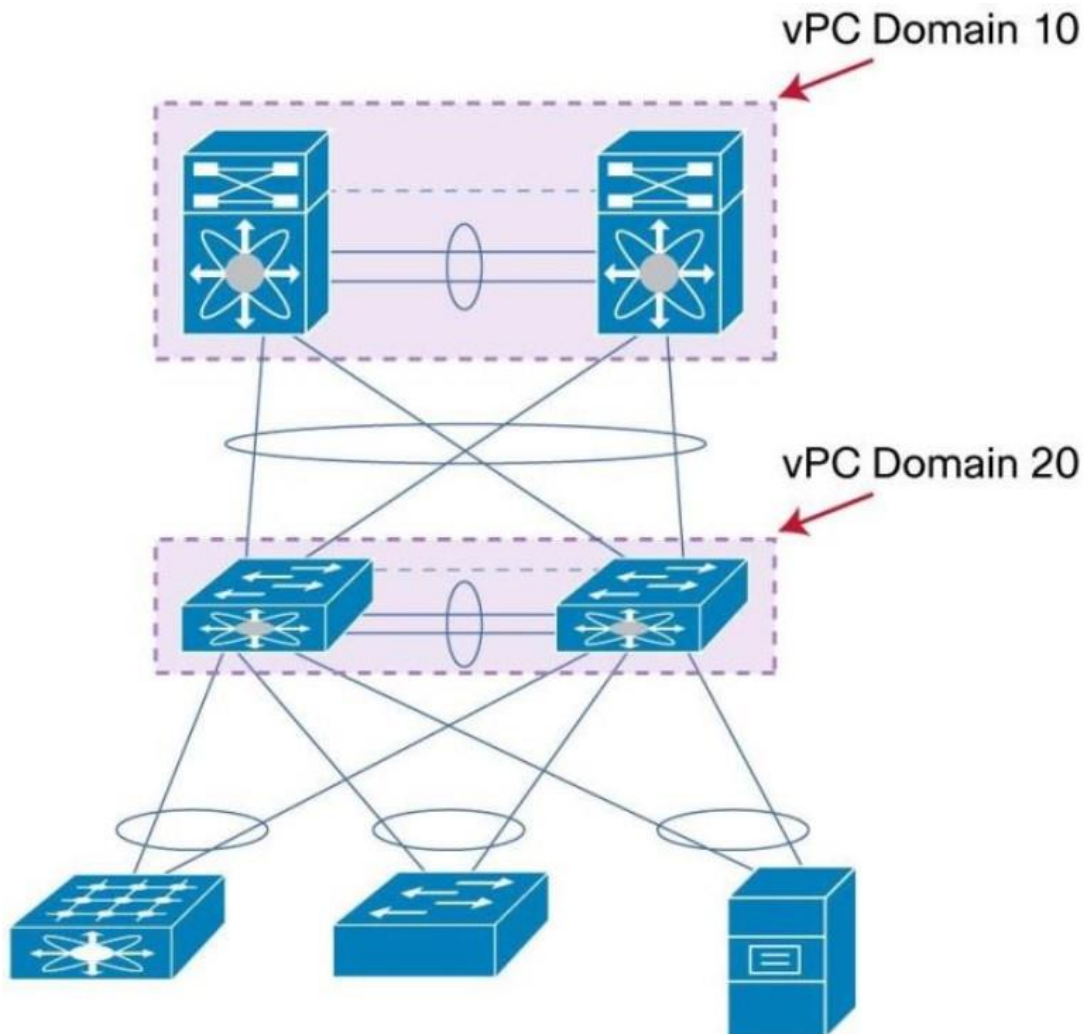
vPC:

It is the port-channel that includes vPC peers and the downstream device altogether. The combined port channel between the vPC peer devices and the downstream device.



vPC Domain:

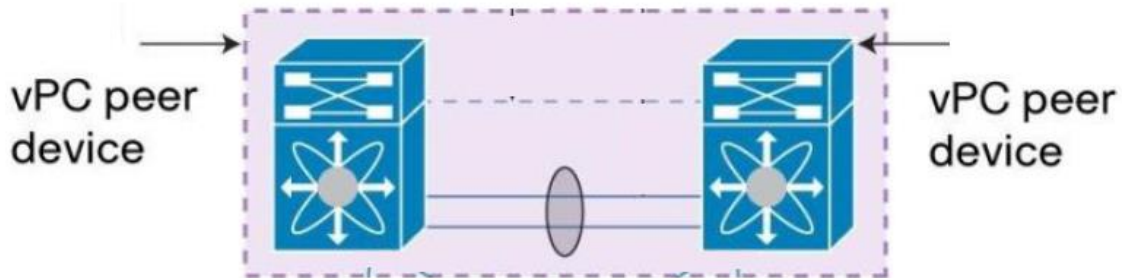
A Domain contains 2 nexus peer switches. vPC domains are limited to have a maximum of two peer devices each. This is the common domain configured across two vPC peer devices and this value identifies the vPC. A vPC domain ID per device is permitted. Basically the vPC domain ID is like a domain of certain vPC members to distinguish from other vPC members. The domain ID must be the same on both peer devices. Each vPC member can be part of only one vPC Domain.



vPC Peer:

This is the adjacent device, which is connected via the vPC Peer-link. A vPC setup consists of two Nexus devices in a pair. One acts as the Primary and the other as a Secondary, which allows other devices to connect to the two chassis using Multi-Channel Ethernet (MEC).

The vPC peer is a mechanism to bundle the two “core switches” into single virtual switch from the perspective of access switch (or hosts).

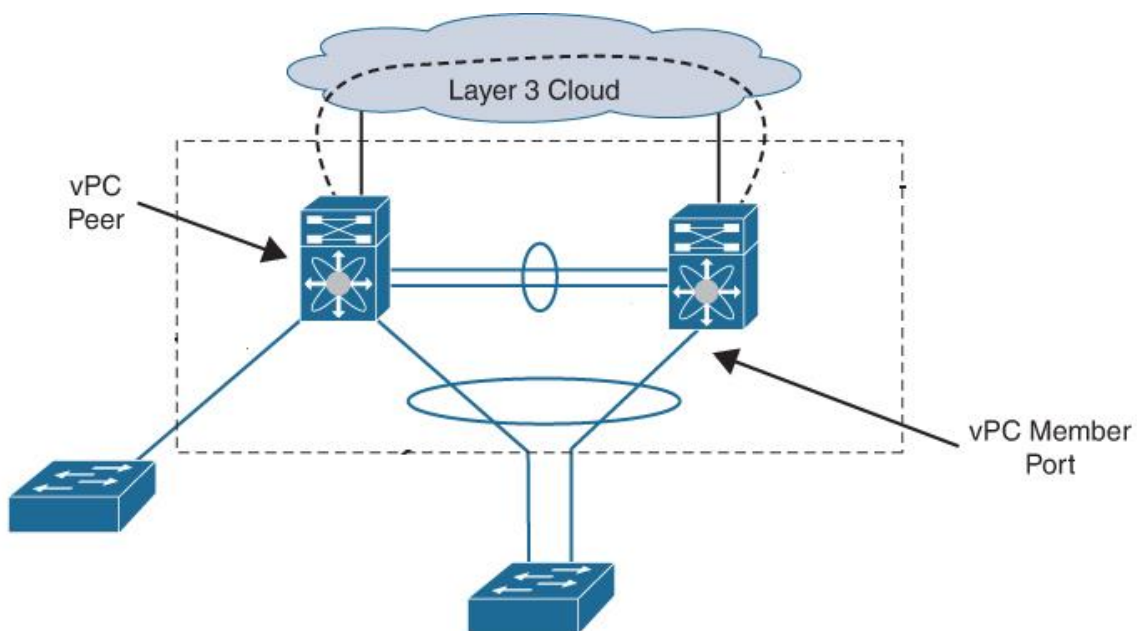


vPC Member:

vPC member use to which switch has participated the single vPC domain. This is also called as vPC peer device. The pair of vPC members combined acts as a single logical switch.

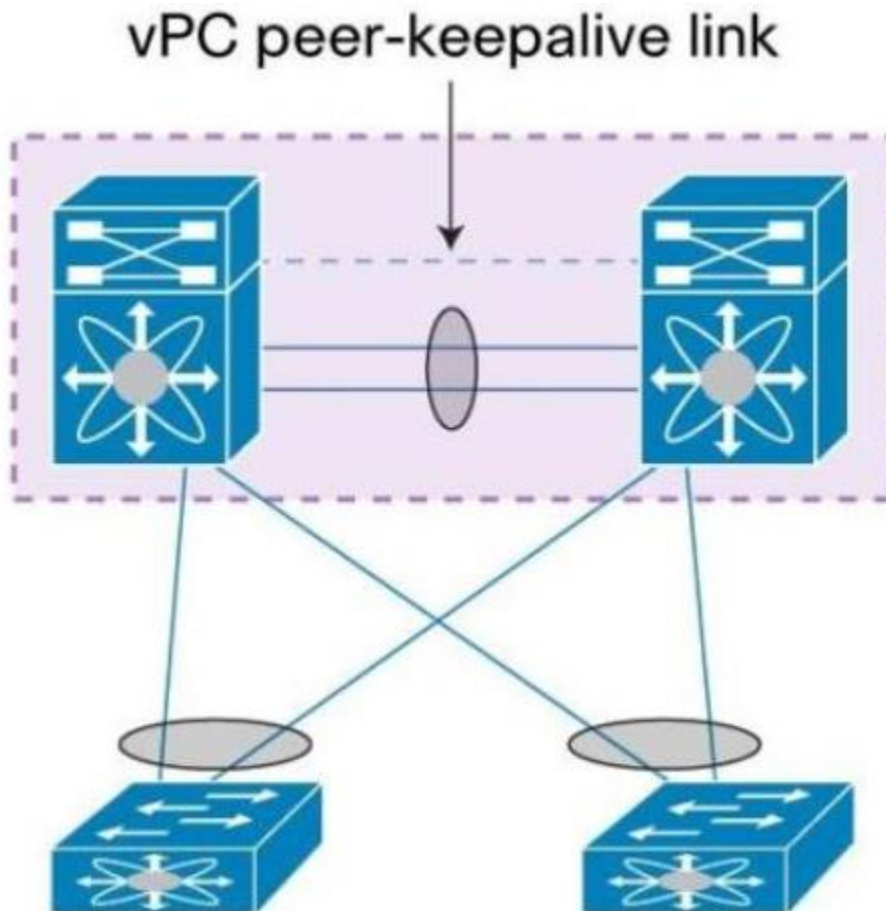
vPC Member Port:

One of a set of ports that is, port-channels that form a vPC or port-channel member of a vPC. Port-channel members of a vPC. This is the interface that is a member of one of the vPCs configured on the vPC peers. This is one of the port which forms vPC.



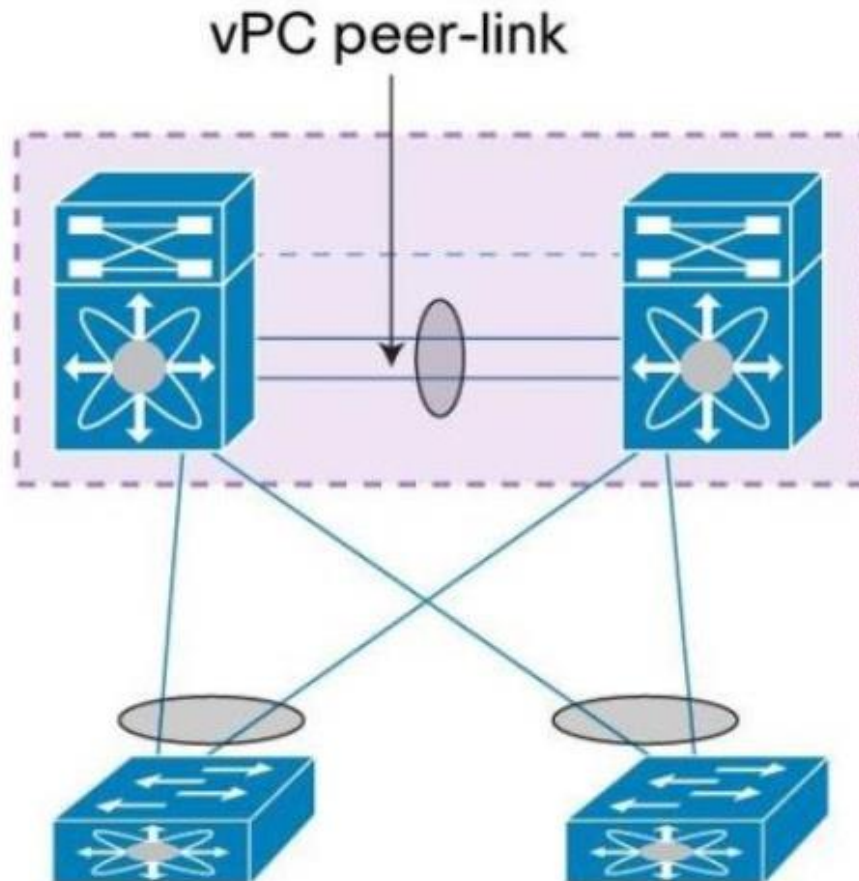
vPC Peer-Keepalive:

vPC Peer-keepalive is a routed (Layer-3) link between both peer switches. The purpose of this link is to check the liveness of peer switch. There are two use cases, first method uses by default the OOB (Out-of-band) IP to establish the vPC peer-Keepalive as this will be in management vrf. In the second method, we can create the dedicated vrf and assign the port with IP in this vrf. The keepalive link between vPC peer devices is used to monitor their liveness. The vPC peer keepalive is a mechanism similar to heartbeat, in order to find out whether the other Nexus switch is alive.



vPC Peer-link:

vPC Peer-link is the layer-2 trunk link and this link is used for synchronizing the vPC peer device. This link must be the 10-Gig link and both peer module and port capability must be the same. Whenever any PC member learns any PC or VMs MAC (Media Access Control) address use this peer-link to inform the peer member. vPC Peer-Link is used to synchronize vPC peer state between two vPC peer switches. Should be point-to-point connection & dedicated links.



vPC VLAN:

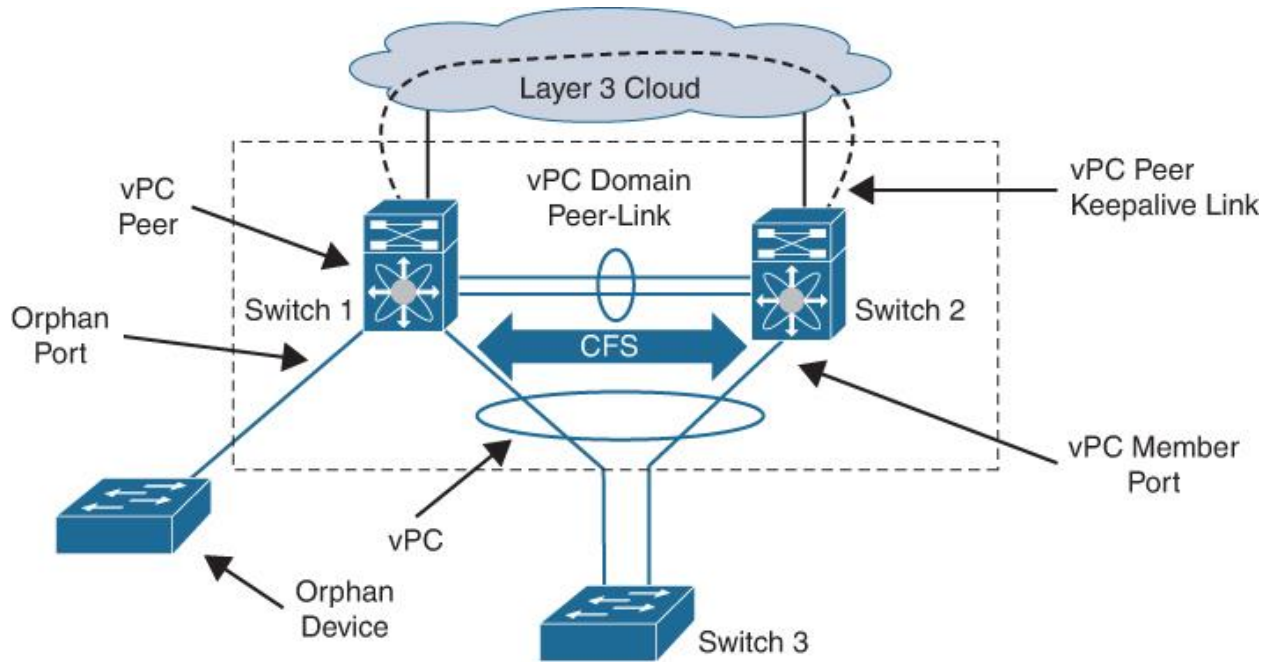
vPC VLAN is carried via the vPC peer-link and is used to communicate with a third device via the vPC. Once a VLAN is defined on a vPC peer-link, it automatically becomes a vPC VLAN. vPC VLAN is simply VLAN which is allowed on the peer-link.

Non-vPC VLAN:

Any of the STP VLANs not carried over the peer-link. Non-vPC VLAN a VLAN that is not part of any vPC and not present on vPC peer-link.

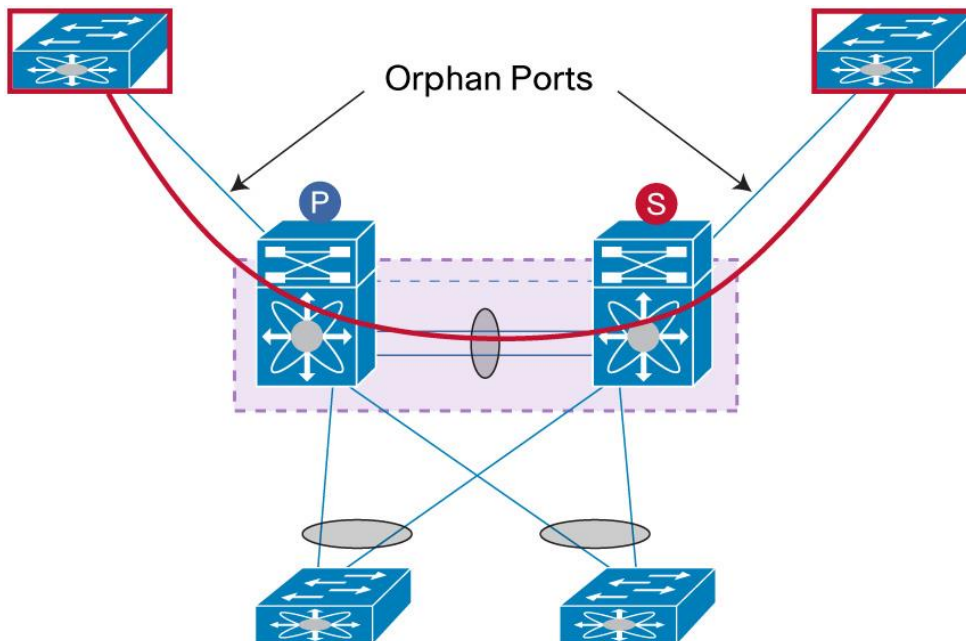
Orphan Device:

This is a device that is on a VPC VLAN but only connected to one VPC peer and not to both. A non-vPC port, also known as an orphaned port, is a port that is not part of a vPC.



Orphan Port:

A port that belongs to a single attached device. Which are single connected to any of the peer. An orphan port is an interface that connects to an orphan device vPC VLAN. A port on vPC peer device primary or secondary that is connected to a single attached device.



Cisco Fabric Services (CFS) Protocol:

Underlying protocol running on top of vPC peer-link providing reliable synchronization and consistency check mechanisms between the 2 peer devices. Configuration validation and comparison synchronization of MAC Address for vPC member ports. CFS is the protocol used between vPC peers to share and synchronize the state between vPC peer devices. Cisco Fabric Services is enabled by default when vPC feature is turned on. There is no specific Cisco Fabric Services configuration to implement.

