GLOSSARY

A

A-FEX. VN-Link in Hardware provided by a UCS VIC. For example, the OS can run VEM in switching mode on the top.

C

Cisco UCS P81E Virtual Interface Card. A 2 port x 10 Gbps virtualized host adapter.

Classical Ethernet Edge Device (CE Edge Device). Devices that have ports connected to Classic Ethernet devices (like servers, firewalls, router ports) and ports connected to the FabricPath cloud (or FabricPath ports). Edge devices are able to map a MAC address to the destination Switch ID.

Classical Ethernet Port (CE Port). Interface connected to traditional network device (STP device, end-station, or other device). This interfacesends and receives traffic in standard 802.3 Ethernet frame format, and participates in the STP domain. Forwarding is based on MAC tables. These interfaces are defined as switchport mode trunk or switchport mode access.

Classical Ethernet (CE) VLAN. VLANs are in the CE mode. These VLANs are not brought up on FabricPath core links. They can be forwarded on the FabricPath edge ports.

Core Port (FP Port). Interface connected to another FabricPath device. This interface sends and receives traffic with FabricPath headers, does not run spanning tree (no exchange of BPDU's), does not perform MAC learning, and exchanges topology information through Layer 2 ISIS adjacency. Also, forwarding is based on the Switch ID Table. These interfaces are defined as a switchport mode fabricpath.

D

Distributed Virtual Switch (DVS). VMware terminology to represent a device spanning across a group of ESX hosts.

Datacenter Bridging Capability Exchange (DCBX). A discovery and exchange protocol for ensuring consistent configuration across a data center bridging network.

Distributed Virtual Port (DVPort) A VNIC is connected to DVPort in the VEM or PTS.

F

FabricPath (FP) VLAN.	VLANs that are manually defined. These are the VLANs that need to be transported across the FP Topology. The FabricPath VLANs are forwarded on FabricPath core links using MAC-in-MAC header encapsulation and on FabricPath edge links without the MiM header.

N

NIV Virtual Interface (VIF).	A network endpoint.
Network I/O Virtualization (NIV)	A mechanism that uses VNtagging to deploy several virtual network links (VN-Link) across the same physical Ethernet channel.

P

Pass-Through Switching (PTS)	SoftPTS is a software implementation of pass-through-device with VNTag data plane capability. HardPTS is pass-through switching on the top of NIV-capable host adapters.

S

Spine Device.	Devices that exclusively interconnect to edge devices. Spine devices switch exclusively switch traffic based on the destination Switch ID.
Switch ID.	A 12 bit ID used to identify each switch uniquely in a FabricPath cloud emulated Switch ID: Emulated Switch ID is a switch ID used in VPC+ to identify specific vPC+ bundles associated with vPC+. The Emulated Switch ID must be unique within each vPC+ domain.

T

Trees.	A mechanism built by the IS-IS protocol that is used by multidestination traffic to reach all switches in the FabricPath topology in an efficient, loop free manner.

V

Virtual Distributed Switch (vDS).	See distributed virtual switch (DVS).
Virtual Ethernet Interface (vEthernet or vEth)	A virtual Ethernet interface representing VIF at the device.

Virtual Ethernet Module (VEM). — A Cisco software module running inside an ESX hypervisor and providing VN-Link implementation in a single package.

Virtual NIC (VNIC) — A virtual network interface card, which indicates a host endpoint. It can be associated with an active VIF or a standby VIF.

VM-FEX. — VN-Link in Hardware with the VEM running in PTS mode.

VNIC Interface Control (VIC) — A virtual network interface card interface controler.

Virtual Supervisor Module (VSM). — A component of the DVS.

vPC+ (Emulated Switch). — Traditional Cisco NX-OS technology that allows a device to use a port-channel across two physical Cisco Nexus devices. These devices are part of a vPC domain. Any device (host, switch, or server) that supports port-channeling can dual home to a vPC domain to have an Active/Active connection without the reliance of STP. When moving to a FabricPath environment, the same devices that are participating in a vPC domain are also participating in a FabricPath domain. Devices at the edge that are participating in both vPC and FabricPath are considered to be in a vPC+ domain.

Send comments to nexus5k-docfeedback@cisco.com