Overview

This chapter contains the following sections:

Information About Interfaces

Ethernet Interfaces

All interfaces on the Cisco Nexus 1000V are Layer 2 Ethernet interfaces, which include access ports, trunk ports, private VLAN ports, and promiscuous ports.

Access Ports

An access port carries traffic for one VLAN. This type of port is a Layer 2 interface only.

Private VLAN Ports

Private VLANs (PVLANs) are used to segregate Layer 2 ISP traffic and convey it to a single router interface. PVLANs achieve device isolation by applying Layer 2 forwarding constraints that allow end devices to share the same IP subnet while being isolated by Layer 2. The use of larger subnets reduces address management overhead. Three separate port designations are used. Each has its own unique set of rules that regulate the ability of each connected endpoint to communicate with other connected endpoints within the same PVLAN domain.

For more information about PVLANs, see the *Cisco Nexus 1000V for Microsoft Hyper-V Layer 2 Switching Configuration Guide*.

Promiscuous Ports

A promiscuous port can talk to all other types of ports. A promiscuous port can talk to isolated ports as well as community ports, and those ports can also talk to promiscuous ports.

For more information about promiscuous ports, see the *Cisco Nexus 1000V for Microsoft Hyper-V Layer 2 Switching Configuration Guide*.

Trunk Ports

A trunk port carries traffic for two or more VLANs. This port type is a Layer 2 interface only.

Virtual Ethernet Interfaces

Virtual Ethernet (vEthernet or vEth) interfaces are logical interfaces. Each vEthernet interface corresponds to a switch interface that is connected to a virtual port. The interface types are as follows:

- VM (interfaces connected to VM NICs)

- Service console

- Host NIC

vEthernet interfaces are created on the Cisco Nexus 1000V to represent virtual ports in use on the distributed virtual switch.

Management Interface

You can use the management Ethernet interface to connect the device to a network for remote management using a Telnet client, the Simple Network Management Protocol (SNMP), or other management agents.

Port Channel Interfaces

A port channel is a logical interface that aggregates multiple physical interfaces. You can bundle up to eight individual links to physical ports into a port channel to improve bandwidth and redundancy. You can also use port channeling to load balance traffic across these channeled physical interfaces.

Simplifying the Interface Configuration with Port Profiles

You can use a port profile to simplify the interface configuration. You can configure a port profile and then assign it to multiple interfaces to give them all the same configuration. Changes to the port profile are propagated to the configuration of any interface that is assigned to it.

Note   We do not recommend that you override port profile configurations by making changes to the assigned interface configurations. You should make configuration changes to interfaces only to quickly test a change or to disable a port.