Interfaces Configuration Guide

This preface includes the following sections:

Licensing Requirements

For a complete explanation of Cisco NX-OS licensing recommendations and how to obtain and apply licenses, see the *Cisco NX-OS Licensing Guide*.

About Interfaces

Cisco NX-OS supports multiple configuration parameters for each of the interface types supported. Most of these parameters are covered in this guide but some are described in other documents.

The following table shows where to get further information on the parameters you can configure for an interface.

Table 1: Interface Parameters

Feature	Parameters	Further Information
Basic parameters	Description, duplex, error disable, flow control, beacon	*Configuring Basic Interface Parameters*
Layer 3	Medium, IPv4 addresses	*Configuring Layer 3 Interfaces*
Layer 3	Bandwidth, delay, IP routing, VRFs	*Cisco Nexus® 3550-T Unicast Routing Configuration* section *Cisco Nexus® 3550-T Multicast Routing Configuration* section
Port Channels	Channel group, LACP	*Configuring Port Channels*

Feature	Parameters	Further Information
Security	EOU	*Cisco Nexus® 3550-T Security Configuration* section

Ethernet Interfaces

Ethernet interfaces include routed ports.

Cisco Nexus® 3550-T switch has the following guidelines and limitations:

- Cisco Nexus® 3550-T supports only 10G speed.

Access Ports

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

For more information on access ports, see the “Information About Access and Trunk Interfaces” section.

Trunk Ports

A trunk port transmits untagged packets for one VLAN plus encapsulated, tagged, packetsfor multiple VLANs. (See the IEEE 802.1Q Encapsulation section for information about encapsulation.)

You can configure Layer 2 switching ports as access or trunk ports. Trunks carry the traffic of multiple VLANs over a single link and allow you to extend VLANs across an entire network. All Layer 2 switching ports maintain MAC address tables.

Routed Ports

A routed port is a physical port that can route IP traffic to another device. A routed port is a Layer 3 interface only.

For more information on routed ports, see the *Routed Interfaces* section.

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. The management port (mgmt0) is autosensing and operates in full-duplex mode at a speed of 10/100/1000 Mb/s.

For more information on the management interface, see the Cisco Nexus 9000 Series NX-OS Fundamentals Configuration Guide. You will also find information on configuring the IP address and default IP routing for the management interface in this document.

Port-Channel Interfaces

A port channel is a logical interface that is an aggregation of multiple physical interfaces. You can bundle up to 4 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. For more information about port-channel interfaces, see the *Configuring Port Channels* section.

Loopback Interfaces

A virtual loopback interface is a virtual interface with a single endpoint that is always up. Any packet that is transmitted over a virtual loopback interface is immediately received by that interface. Loopback interfaces emulate a physical interface.

High Availability for Interfaces

Interfaces support stateful and stateless restarts.