



Basic Cisco IOS Software Commands



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CCIE Routing & Switching



Video Overview

Know how to use and interpret the basic Cisco IOS
Software commands.

Initial Configuration Commands

- ▶ Prevent syslog and event messages from interrupting CLI input
 - Router(config-line)# logging synchronous
- ▶ Prevent DNS resolution attempt for mis-typed commands
 - Router(config)# no ip domain-lookup
- ▶ Configure descriptive device name
 - Router(config)# hostname Lab-1-Rtr

Initial Configuration Commands

▶ Configure informative banner

- Router(config)# banner motd

▶ Add IPv4 address to an interface

- Router(config-if)# ip address <address><mask>
- Router(config-if)# no shutdown

Monitoring Interfaces

- ▶ Display IP addresses and interface status
 - Router# show ip interface brief
- ▶ Display physical-layer status of interfaces
 - Router# show interface <type/number>
- ▶ Display switchport operating mode and trunking information
 - Router# show interface <type/number> switchport
- ▶ Display summary of VLAN Trunks
 - Router# show interface trunk

Monitoring Routing Protocols

▶ Display IP Routing Table

- Router# show ip route

▶ Display summary of any/all active IPv4 routing protocols

- Router# show ip protocol

▶ Display routing protocol neighbor relationships

- Router# show ip <protocol> neighbor

▶ Display connected Cisco devices

- Router# show cdp neighbor

Monitoring Memory and Images

- ▶ Display current IOS version running
 - Router# show version
- ▶ Display all memory locations and file names
 - Router# dir all
- ▶ Display saved, startup configuration file
 - Router# show startup-config
- ▶ Display current running configuration
 - Router# show running-config

Saving and Deleting Configurations

▶ Save current Running Configuration

Router# copy running-config startup-config

Or...

Router# write memory

▶ Setting a router back to factory defaults

- Step-1: Delete startup configuration

Router# erase startup-config

Or...

Router# write erase

- Step-2: Reload the router

Router# reload

Securing Device Access

▶ Configuring enable password

- Switch(config)# enable password <password>
OR
- Switch(config)# enable secret <password>

▶ Configuring console password

- Switch(config)# line console 0
- Switch(config-line)# password <password>

Securing Cisco Devices

▶ Configuring Telnet password

- Switch(config)# line vty 0 4
- Switch(config-line)# password <password>
- Switch(config-line)# login

OR

- Switch(config)# username <username> privilege 15 password <password>
- Switch(config-line)# login local