

Cisco IOS

Cisco IOS Command Line Cheatsheet

--- Verify Basic Configuration:

Shows information about the switch and its interfaces, RAM, NVRAM, flash, IOS, etc.
SW1# show version

Shows the current configuration file stored in DRAM.
SW1# show running-config

Shows the configuration file stored in NVRAM which is used at first boot process.
SW1# show startup-config

Lists the commands currently held in the history buffer.
SW1# show history

Shows an overview of all interfaces, their physical status, protocol status and ip address if assigned.
SW1# show ip interface brief

Shows detailed information about the specified interface, its status, protocol, duplex, speed, encapsulation, last 5 mi
SW1# show interface vlan 1

Shows the description of all interfaces
SW1# show interfaces description

Shows the status of all interfaces like connected or not, speed, duplex, trunk or access vlan.
SW1# show interfaces status

Shows the public encryption key used for SSH.
SW1# show crypto key mypubkey rsa

Shows information about the leased IP address (when an interface is configured to get IP address via a dhcp server)
SW1# show dhcp lease

Show the router's routing table. List of all networks that the router can reach.
Router# show ip route

--- Router Modes:

Router>: User mode = Limited to basic monitoring commands
Router#: Privileged mode (exec-level mode) = Provides access to all other router commands
Router(config)#: global configuration mode = Commands that affect the entire system
Router(config-if)#: interface mode = Commands that affect interfaces
Router(config-subif)#: subinterface mode = Commands that affect subinterfaces
Router(config-line)#: line mode = Commands that affect in lines modes (console, vty, aux...)
Router(config-router)#: router configuration mode

--- Changing switch hostname:

Switch(config)# hostname SW1

--- Configuring passwords:

SW1(config)# enable secret cisco ! MD5 hash
SW1(config)# enable password notcisco ! Clear text

--- Securing console port:

SW1(config)# line con 0
SW1(config-line)# password cisco
SW1(config-line)# login

--- Securing terminal lines:

SW1(config)# line vty 0 4
SW1(config-line)# password cisco
SW1(config-line)# login

--- Encrypting passwords:

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SW1(config)# service password-encryption
--- Configuring banners:
SW1(config)# banner motd $
=====
UNAUTHORIZED ACCESS IS PROHIBITED
=====
$

--- Giving the switch an IP address:
SW1(config)# interface vlan 1
SW1(config-if)# ip address 172.16.1.11 255.255.255.0      ! or DHCP
SW1(config-if)# no shutdown

--- Setting the default gateway:
SW1(config)# ip default-gateway 172.16.1.1

--- Saving configuration:
SW1# copy running-config startup-config
Destination filename [startup-config]?      ! Press enter to confirm file name.
Building configuration...
[OK]

! Short for write memory.
SW1# wr
Building configuration...
[OK]
```