

# CiscoIOS

## Cisco IOS Command Line Cheatsheet

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### --- 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:

```
SW1(config)# service password-encryption
```

```
--- Configuring banners:
```

```
SW1(config)# banner motd $
```

```
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```

```
UNAUTHORIZED ACCESS IS PROHIBITED
```

```
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```

```
$
```

```
--- 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]
```