Cisco CLI Cheat Sheet

🌐 Routing Protocols

Command	Description
show ip bgp neighbors	Displays detailed information about all BGP neighbors, including state, uptime, and received prefixes. **Example: show ip bgp neighbors**
show ip ospf neighbors	Lists all OSPF neighbors and their states; useful for verifying OSPF adjacencies. **Example: show ip ospf neighbors**
show ip route	Displays the IP routing table, showing all known routes and their sources (static, connected, dynamic). **Example: show ip route**
show ip protocols	Summarizes active dynamic routing protocols and their parameters like networks and timers. **Example: show ip protocols**
show ip bgp neighbors advertised-routes	Displays the routes advertised to a specific BGP neighbor. **Example: show ip bgp neighbors 192.168.1.1 advertised-routes**

⚒ Troubleshooting

Command	Description
ping <destination>	Sends ICMP Echo requests to test connectivity to a destination IP address. **Example: ping 8.8.8.8**
traceroute <destination>	Traces the route packets take to a network host, useful for diagnosing routing issues. **Example: traceroute google.com**
show logging	Displays the system log messages; useful for debugging and historical event tracking. **Example: show logging**
show version	Shows detailed information about the device's software, hardware, uptime, and more. **Example: show version**

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🕐 Time and NTP

Command	Description
show ntp status	Shows the synchronization status with NTP servers and the system clock state. **Example: show ntp status**
show ntp associations	Displays the association details with configured NTP servers, including delay and reachability. **Example: show ntp associations**

🖧 Interface Configuration

Command	Description
show ip interface brief	Displays a concise summary of all interfaces, including IP addresses and status. **Example: show ip interface brief**
interface <interface-id>	Enters configuration mode for a specific interface. **Example: interface GigabitEthernet0/1**
ip address <ip-address> <subnet-mask>	Assigns an IP address and subnet mask to the selected interface. **Example: ip address 192.168.1.1 255.255.255.0**
no shutdown	Enables an administratively down interface. **Example: no shutdown**
shutdown	Disables an interface administratively. **Example: shutdown**
description <text>	Adds a description to the selected interface. **Example: description Link to ISP Router**
show running-config interface <interface-id>	Displays the active configuration of a specific interface. **Example: show running-config interface GigabitEthernet0/1**

⚙ Configuration Management

Command	Description
show track brief	Summarizes all track objects and their current state, helpful for SLA and failover setups. **Example: show track brief**
copy usb0:<filename> flash:<filename>	Copies a file from USB storage to flash memory. **Example: copy usb0:ios-image.bin flash:ios-image.bin**
copy flash:<filename> startup-config	Copies a file from flash to startup-config to update boot settings. **Example: copy flash:backup-config.cfg startup-config**
write erase	Erases the startup configuration, restoring the device to factory defaults after reload. **Example: write erase**
reload	Restarts the device; can be scheduled or immediate. **Example: reload**

🛡 Certificates & Security

| Command	Description
crypto key generate rsa general-keys modulus 2048	Generates RSA key pairs (general purpose) for securing SSH and VPNs. **Example: crypto key generate rsa general-keys modulus 2048**
crypto key generate rsa modulus 2048 label <hostname>-CA	Creates labeled RSA key pairs for certificate authority purposes. **Example: crypto key generate rsa modulus 2048 label Router1-CA**
no crypto pki certificate chain <cert server hostname>-CA	Deletes the certificate chain for a specific trustpoint. **Example: no crypto pki certificate chain CA-Server**
crypto pki authenticate <cert server hostname>-CA	Authenticates the device to a Certificate Authority for certificate issuance. **Example: crypto pki authenticate CA-Server**
show crypto pki certificates <cert server hostname>-CA	Displays installed certificates for a given trustpoint. **Example: show crypto pki certificates CA-Server**

⊤ VLAN Configuration

Command	Description
show vlan brief	Displays a list of VLANs and their associated ports. **Example: show vlan brief**
vlan <vlan-id>	Creates or modifies a VLAN with the specified VLAN ID. **Example: vlan 10**
name <vlan-name>	Assigns a name to the VLAN for easier management and documentation. **Example: name Accounting**
interface <interface-id>	Selects an interface for VLAN assignment. **Example: interface FastEthernet0/1**
switchport mode access	Configures an interface as an access port for a single VLAN. **Example: switchport mode access**
switchport access vlan <vlan-id>	Assigns the access port to a VLAN. **Example: switchport access vlan 10**

Cisco CLI — Best Practices

Always double-check your command before pressing Enter

A mistyped command (like write erase) can cause outages. Use ? to preview available options and syntax in CLI.
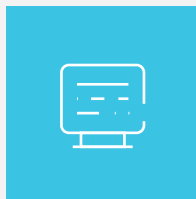
Use show commands liberally

before making changes to understand the current state.

Configuration Tip

Save your configuration (copy running-config startup-config) after important changes — otherwise changes will be lost on reboot.