GENERAL

cisco ios quick reference cheat sheet

Published: September 3, 2026 | Index ID: #-

Introduction

When you’re working with Cisco IOS, a single command can unlock a world of configuration possibilities. Whether you’re a network engineer, a systems administrator, or a student preparing for the CCNA exam, having a quick reference cheat sheet at hand saves time, reduces errors, and boosts confidence. This comprehensive guide not only presents a detailed cheat sheet for Cisco IOS but also explains how to use it effectively, highlights best practices, and offers real world scenarios where these commands come into play.

Why a Quick Reference Cheat Sheet Matters

Network environments are complex. Devices need to be configured for routing, switching, security, and monitoring, all while maintaining high availability and performance. A cheat sheet serves as:

- Instant recall: Memorize the most commonly used commands without re reading manuals.
- Time saver: Reduce the number of clicks or keystrokes needed during configuration or troubleshooting.
- Exam aid: Keep exam style questions in mind and practice quick command usage.
- On site reference: Use during live deployments, migrations, or maintenance windows.

How to Use This Cheat Sheet

1. Print or pin the cheat sheet. Keep it near your workstation or in a digital notebook.
2. Locate the relevant section. Use the table of contents or search function in a PDF.
3. Read the context. Each command is presented with a brief description and typical use case.
4. Apply and test. Try the command in a lab or a non production environment first.
5. Expand your knowledge. Use the cheat sheet as a springboard to deeper learning.

Getting Started with Cisco IOS

Accessing the Device

Before you can configure anything, you need to reach the command line interface (CLI).

- Console connection – Use a serial cable and terminal emulator (PuTTY, Tera Term). Command prompt: Router>
- SSH/Telnet – Remote access over the network. Prompt: Router#
- Privileged EXEC mode – Enter enable and provide the enable password. Prompt changes to Router#.

Basic CLI Commands

- show running-config – Display current configuration.
- show version – Check IOS version and hardware details.
- show interfaces brief – Quick status of all interfaces.
- show ip interface brief – IP addresses and status of interfaces.
- show ip route – Routing table.
- show logging – System logs.
- show tech-support – Comprehensive troubleshooting snapshot.

- write memory or copy running-config startup-config – Save configuration.

Entering Global Configuration Mode

From privileged EXEC mode, type configure terminal (or conf t) to enter global configuration mode. Prompt changes to Router(config)#.

Interface Configuration

Basic Interface Commands

- interface GigabitEthernet0/1 – Enter interface configuration mode.
- description Uplink to Core Switch – Add a helpful description.
- ip address 192.168.10.1 255.255.255.0 – Assign IP address.
- no shutdown – Enable the interface.
- shutdown – Disable the interface.
- speed 1000 – Set speed to 1 Gbps.
- duplex full – Set duplex mode.

Switching Interfaces

- switchport mode access – Set as access port.
- switchport access vlan 10 – Assign VLAN.
- switchport mode trunk – Set as trunk port.
- switchport trunk allowed vlan 10,20,30 – Allow specific VLANs.
- switchport trunk native vlan 1 – Set native VLAN.

Loopback Interfaces

Useful for testing and as stable routing endpoints.

- interface Loopback0
- ip address 10.0.0.1 255.255.255.255
- no shutdown

Routing Protocols

Static Routing

- ip route 10.0.0.0 255.255.255.0 192.168.10.2 – Static route to next hop.
- ip route 0.0.0.0 0.00.0.0 192.168.10.254 – Default route.

Dynamic Routing – OSPF

- router ospf 1 – Start OSPF process.
- network 192.168.10.0 0.0.0.255 area 0 – Include interfaces.
- passive-interface default – Make all interfaces passive by default.
- no passive-interface GigabitEthernet0/1 – Enable OSPF on specific interface.

Dynamic Routing – EIGRP

- router eigrp 100 – Start EIGRP.
- network 192.168.10.0 0.0.0.255 – Add network.
- no auto-summary – Disable automatic summarization.

Dynamic Routing – BGP

- router bgp 65001 – Start BGP.

- neighbor 10.0.0.2 remote-as 65002 – Define neighbor.
- network 192.168.10.0 mask 255.255.255.0 – Advertise network.

Security Commands

Access Control Lists (ACLs)

- ip access-list extended BLOCK_HTTP – Create named ACL.
- deny tcp any any eq 80 – Block HTTP traffic.
- permit ip any any – Permit all other IP traffic.
- exit – Exit ACL configuration.
- interface GigabitEthernet0/1 – Apply ACL.
- ip access-group BLOCK_HTTP in – Apply inbound.

Secure Shell (SSH)

- ip domain-name example.com – Set domain name.
- crypto key generate rsa modulus 2048 – Generate RSA key.
- username admin privilege 15 password 0 admin123 – Create local user.
- line vty 0 4 – Configure telnet/SSH line.
- transport input ssh – Allow only SSH.
- login local – Use local user database.

Port Security

- switchport port-security – Enable port security.
- switchport port-security maximum 2 – Set maximum MAC addresses.
- switchport port-security violation restrict – Action on violation.
- switchport port-security mac-address sticky – Learn MAC addresses.

Quality of Service (QoS)

Classifying Traffic

- class-map match-any VOICE – Create class map.
- match protocol rtp audio – Match RTP audio traffic.
- exit
- policy-map PRIORITY – Create policy map.
- class VOICE
- priority 1000 – Allocate 1000 kbps.
- exit
- interface GigabitEthernet0/1
- service-policy output PRIORITY

Network Address Translation (NAT)

Static NAT

- ip nat inside source static 192.168.10.10 203.0.113.10 – Map internal to external.

Dynamic PAT

- ip nat inside – Designate inside interface.
- ip nat outside – Designate outside interface.
- ip nat pool NAT_POOL 203.0.113.100 203.0.113.200 netmask 255.255.255.0 – Define pool.

- ip nat inside source list 1 pool NAT_POOL overload – Translate using pool.
- access-list 1 permit 192.168.10.0 0.0.0.255 – Define ACL for NAT.

Monitoring & Troubleshooting

Logging

- logging buffered 64000 informational – Buffer logs locally.
- logging host 203.0.113.200 – Send logs to syslog server.
- logging trap debugging – Set log level.

Show Commands

- show ip interface brief – Interface status.
- show ip protocols – Routing protocols.
- show ip route ospf – OSPF routes.
- show ip arp – ARP table.
- show ip bgp summary – BGP status.
- show run | section interface – Interface config section.
- show tech-support | include error – Quick error search.

Common Troubleshooting Commands

- debug ip routing – Trace routing decisions.
- debug ip ospf events – OSPF events.
- debug ip bgp updates – BGP updates.
- debug ip packet – Packet trace.
- show logging – Review logs.

Useful Tips & Best Practices

- Use no commands to revert changes. Example: no ip address.

Baca Juga (Artikel Terkait)

- **automaker mini software version v8 erptoboss**
  URL: http://art-consciousness.com/automaker-mini-software-version-v8-erptoboss.pdf
- **automata and computability**
  URL: http://art-consciousness.com/automata-and-computability.pdf
- **automata and languages theory and applications**
  URL: http://art-consciousness.com/automata-and-languages-theory-and-applications.pdf
- **automata and mechanical toys**
  URL: http://art-consciousness.com/automata-and-mechanical-toys.pdf

Tags: #cisco #quick #reference #cheat #sheet