

Basic Cisco Router Configuration Cheat Sheet

Quick Reference Guide for Key Tasks

1. How to Change Default Hostname

Task: Rename the router for identification.

Commands:

```
Router> enable
Router# configure terminal
Router(config)# hostname [NEW_HOSTNAME]
```

Example:

```
Router(config)# hostname R1_SanJose
```

Note: Hostname appears in prompts and logs.

2. Configure Passwords on a Cisco Router

a. Set Enable Secret Password (Secured with MD5 hashing):

```
Router(config)# enable secret [STRONG_PASSWORD]
```

b. Set Console Password:

```
Router(config)# line console 0
Router(config-line)# password [CONSOLE_PASSWORD]
Router(config-line)# login
```

c. Set Telnet Password (VTY lines):

```
Router(config)# line vty 0 4
Router(config-line)# password [TELNET_PASSWORD]
Router(config-line)# login
```

3. Secure Console Port

Task: Prevent unauthorized console access.

Commands:

```
Router(config)# line console 0
Router(config-line)# password [PASSWORD]
Router(config-line)# login
Router(config-line)# exec-timeout 5 0 # Auto-logout after 5 minutes
Router(config-line)# logging synchronous # Prevent interruptions
```

```
Router(config-line)# no logging monitor
```

4. Configure Telnet & Telnet Password

Task: Enable Telnet access (not recommended—use SSH instead).

Commands:

```
Router(config)# line vty 0 4
Router(config-line)# transport input telnet
Router(config-line)# password [TELNET_PASSWORD]
Router(config-line)# login
```

Warning: Telnet sends passwords in plaintext. Prefer SSH.

5. Secure Privileged EXEC Mode & Encrypt All Passwords

a. Enable Secret Password (already encrypted):

```
Router(config)# enable secret [PASSWORD]
```

b. Encrypt Plaintext Passwords (weak encryption):

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

Note: Encrypts console/VTY passwords but less secure than enable secret.

6. Configure Login Banner

Task: Display a legal warning or message before login.

Command:

```
Router(config)# banner motd # [MESSAGE] #
```

Example:

```
Router(config)# banner motd # Unauthorized Access Prohibited #
```

7. Enable DNS Lookup

Task: Allow the router to resolve domain names.

Command:

```
Router(config)# ip domain-lookup
```

Note: Enabled by default. Disable with `no ip domain-lookup` to avoid typos causing delays.

8. Turn Off Automatic Name Resolution

Task: Stop the router from resolving mistyped commands as hostnames.

Command:

```
Router(config)# no ip domain-lookup
```

9. Assign a Local Name to an IP Address

Task: Create a DNS entry for easy access.

Command:

```
Router(config)# ip host [NAME] [IP_ADDRESS]
```

Example:

```
Router(config)# ip host SERVER_A 192.168.1.100
```

10. Save the Router Configuration

Task: Save running config to startup config.

Command:

```
Router# copy running-config startup-config
```

Shortcut:

```
Router# wr # Short for "write memory"
```

Pro Tips for Security & Efficiency

Use SSH instead of Telnet:

```
Router(config)# crypto key generate rsa
```

```
Router(config-line)# transport input ssh
```

Strong Passwords: Mix uppercase, numbers, and symbols.

Disable Unused Services:

```
Router(config)# no ip http server
```

Regular Backups: Save configs to a TFTP server.