

Module 10: Basic Router Configuration

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Configure Initial Router Settings

Configure the device name: Router(config)# hostname [hostname] **Secure privileged EXEC mode:** Router(config)# enable secret password **Secure user EXEC mode:** Router(config)# line console 0 Router(config-line)# password [password] Router(config-line)# login

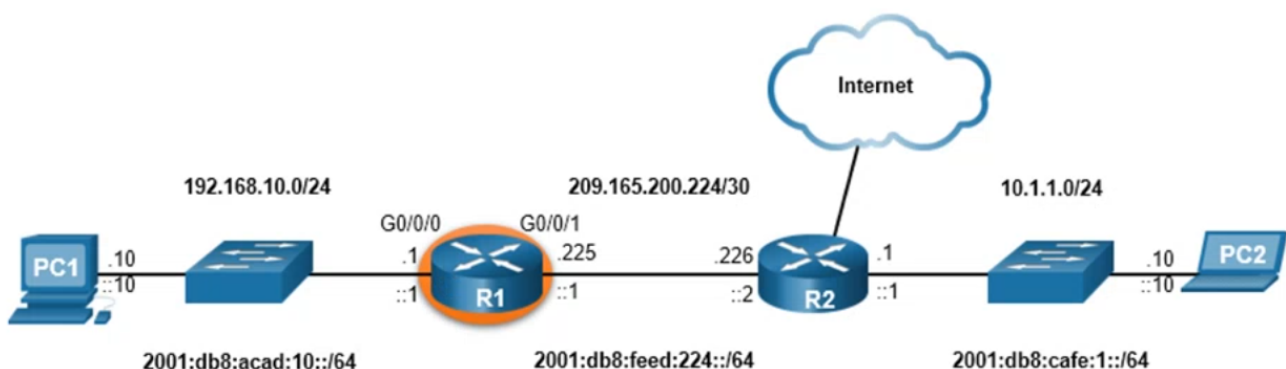
Secure remote Telnet / SSH access Router(config)# line vty 0 4 Router(config-line)# password [password] Router(config-line)# login Router(config-line)# transport input [ssh | telnet]

Encrypt all plaintext passwords: Router(config)# service password encryption **Provide legal notification and save the configuration:** Router(config)# banner motd # message # || Router(config)# banner motd \$ message \$ Router(config)# end Router# copy running-config startup-config

Configure Router Interfaces

Configuring one of the router interfaces (G 0/0/1) from the next picture:

```
Router(config)# interface gigabitEthernet 0/0/1
Router(config-if)# description [description-text]
Router(config-if)# ip address 209.165.200.225 255.255.255.252
Router(config-if)# ipv6 address 2001:db8:feed:224::1/64
Router(config-if)# no shutdown
```



Verify Interface Configuration

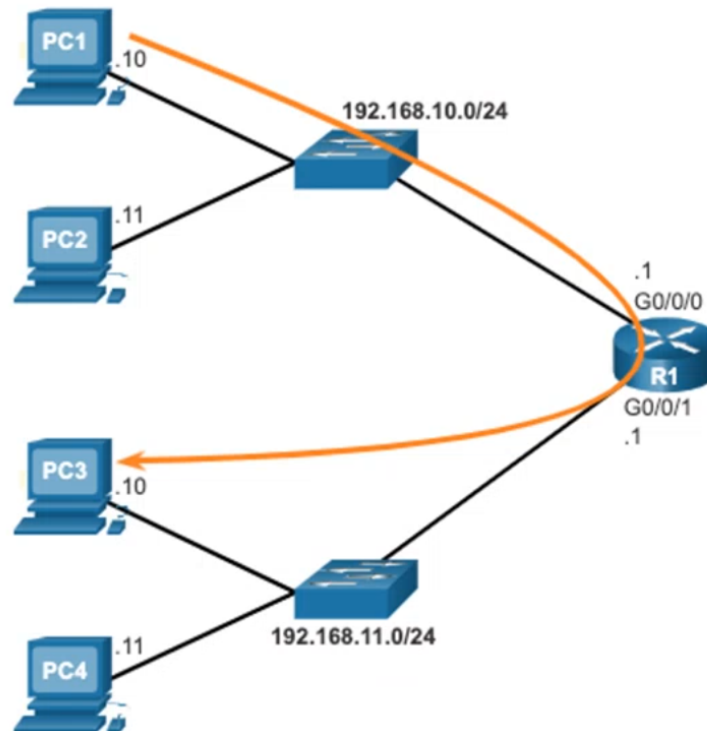
To verify interface configuration use the `show ip interface brief` and `show ipv6 interface brief` commands.

Display the contents of the IP routing tables with the `show ip route` and `show ipv6 route` commands.

Display IPv4 statistics for router interfaces with the `show ip interface [type-and-number (gigabitEthernet 0/0/1)]` command. `show ipv6 interface [type-and-number (gigabitEthernet 0/0/1)]`

Configure the Default Gateway

- Used when a host sends a packet to a device on another network.
- Generally the router interface address attached to the local network of the host.
- To reach PC3, PC1 addresses a packet with the IPv5 address of PC3, but forwards the packet to its default gateway, the G0/0/0 interface of R1.



- A switch must have a default gateway address configured to remotely manage the switch from another network.
- To configure an IPv4 default gateway on a switch, use the `ip default-gateway [ip-address]` global configuration command.