



Open packet tracer and draw the following network design, use the same device models(router: 1941,switch: 2960) and connect the same ports(ex: fa0/1,Gig0/1,etc...) as shown in picture.

Using PC5 connected to console of the router:

1. Configure on the router:
 - a. hostname
 - b. Configure a MOTD (message of the day)
 - c. Configure the privileged exec password
 - d. Configure the console password
 - e. Configure the virtual line password
 - f. Encrypt all passwords.
 - g. Configure a description on interface g0/0 on router1.(check show run and see int g0/0)
2. Configure both router's interfaces with the appropriate IP address.
3. Configure all the host pc with the appropriate IP addresses.
4. What command saves the changes you configured on the router?
5. Use the telnet command from pc1 to remotely access the router and change the hostname of the router
6. Now try to use the ping command from :
 - a. pc1 to its default gate way
 - b. pc1 to b pc2
7. Now try to use the ping command from pc1 to any of the pcs in network2 .Is there a reply ? Why? (hint check routing table of the router)
8. Use traceroute command from pc1 to pc4 (tracert).

Hints:

```
router>ena
router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
router(config)#hostname I3304
I3304(config)#ena pass cisco
I3304(config)#line console 0
I3304(config-line)#password cisco
I3304(config-line)#login
I3304(config-line)#line vty 0 4
I3304(config-line)#password cisco
I3304(config-line)#login
```

To configure only encrypted privileged password

Or to encrypt all passwords

```
I3304(config-if)#ena secret cisco1
I3304(config)#service password
I3304(config)#service password-encryption
I3304(config)#^Z
I3304#
%SYS-5-CONFIG_I: Configured from console by console
I3304#show run
```

```
I3304#conf t
Enter configuration commands, one per line. End with CNTL/Z.
I3304(config)#int g0/0
I3304(config-if)#description network 1 interface
I3304#conf t
Enter configuration commands, one per line. End with CNTL/Z.
I3304(config)#banner motd #welcome to router I3304#
I3304(config)#int g0/0
I3304(config-if)#no shut
I3304(config-if)#ip address 192.168.1.1 255.255.255.0
I3304(config-if)#int g0/1
I3304(config-if)#no shutdown
I3304(config-if)#ip address 192.168.2.1 255.255.255.0
I3304(config-if)#^Z
I3304#
%SYS-5-CONFIG_I: Configured from console by console

I3304#copy run start
Destination filename [startup-config]?
Building configuration...
[OK]
```

PC0

Physical Config Desktop Custom Interface

IP Configuration

IP Configuration

☐ DHCP ☒ Static

IP Address 192.168.1.10

Subnet Mask 255.255.255.0

Default Gateway 192.168.1.1

DNS Server

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address /

Link Local Address FE80::201:63FF:FE02:4542

IPv6 Gateway

IPv6 DNS Server

Command Prompt

```
Packet Tracer PC Command Line 1.0
PC>ping 192.168.1.20

Pinging 192.168.1.20 with 32 bytes of data:

Reply from 192.168.1.20: bytes=32 time=31ms TTL=128
Reply from 192.168.1.20: bytes=32 time=0ms TTL=128
Reply from 192.168.1.20: bytes=32 time=3ms TTL=128
Reply from 192.168.1.20: bytes=32 time=0ms TTL=128

Ping statistics for 192.168.1.20:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 31ms, Average = 8ms

PC>tracert 192.168.2.20

Tracing route to 192.168.2.20 over a maximum of 30 hops:

  0  68 ms    0 ms     1 ms    192.168.1.1
  1  *         13 ms    0 ms    192.168.2.20

Trace complete.

PC>telnet 192.168.1.1
Trying 192.168.1.1 ...Openwelcome to router I3304

User Access Verification

Password: |
```