Lab2 : Telnet using Cisco Packet Tracer

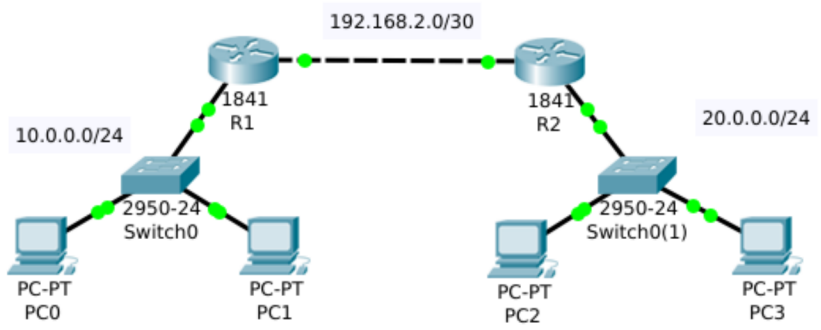
1 Background

Telnet is a network protocol that allows a user to communicate with a remote device. It is a virtual terminal protocol used mostly by network administrators to remotely access and manage devices. Administrator can access the device by "telnetting" to the IP address or hostname of a remote device.

To use telnet, we must have a software (Telnet client) installed. On a remote device, a Telnet server must be installed and running. Telnet uses TCP port 23.

2 Telnet Lab

Let's construct this topology:



Steps:

- Configure the IP addresses of the hosts and the router's interfaces.

- Configure and enable telnet on router R1 with password enable on it:

```
R1> enable
R1(config)# line vty 0 4                    { we create here 5 telnet sessions}
R1(config-line)# password cisco123          {a password is set for the telnet sessions}
R1(config-line)# login                      {login is enabled }
```

- Now if we try to login to R1 from PC0 using telnet :

```
C:\> telnt 10.0.0.1
R1> enable
```

Note that we couldn't access the enable mode from telnet because enable password is mandatory when we use telnet. To solve the issue, return to the router and run the command:

```
R1# config t
R1(config)# enable password djelfa123       {a password is set for the enable mode}
```

On PC0 we can run now

```
R1> enable
```

```
R1#
```

Now see how to enable telnet with no password set:

```
R1# conf t
R1(config)# line vty 0 4
R1(config-line)# no login
R1(config-line)# end
R1# exit
```

So, we will be able to telnet to the router without having to enter a password:

```
C:\> telnt 10.0.0.1
R1>
```

Now we will configure telnet on Router R2 with username and password enabled.

```
R2# config t
R2(config)# username MRT password cisco123   {create an administrative user}
R2(config)# line vty 0 4
R2(config-line)# login local
R2(config-line)# exit
R2(config)# enable password djelfa123
```

Now, Using telnet on PC0 we want to configure static route in R1 to the 20.0.0.0/24 network:

```
C:\> telnt 10.0.0.1
R1> en
R1# config t
R1(config)# ip route 20.0.0.0 255.255.255.0 192.168.2.2
R1(config)# end
R1# exit
```

Using telnet on PC2 we want to configure static route in R2 to the 10.0.0.0/24 network:

```
C:\> telnt 20.0.0.1
R2> en
R2# config t
R2(config)# ip route 10.0.0.0 255.255.255.0 192.168.2.1
R2(config)# end
R2# exit
```

Now, test the connection between the two networks using ping cammand from PC0:

```
C:\> ping 20.0.0.2
```

Or from PC2:

```
C:\> ping 10.0.0.2
```