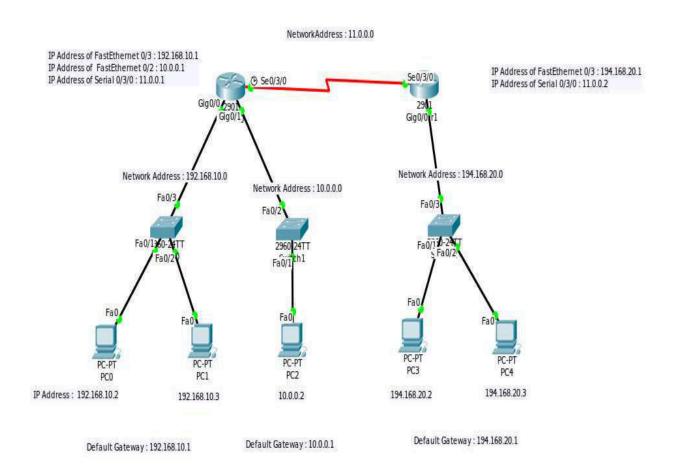
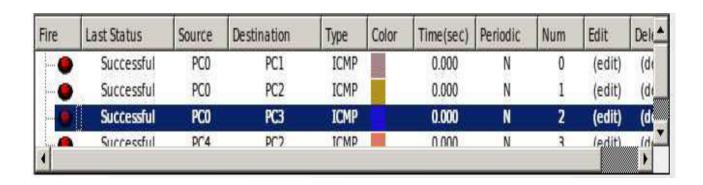
# **Configuration of Static Routing**

# Output:





#### **Procedure:**

For this, we first select 2 routers (2901) with 3 switches (2960-24TT) and 5 Pcs.

The Pcs under the first switch form one network.

The Pcs are given the IP Addresses 192.168.10.2 and 192.168.10.3, default gateway is 192.168.10.1 and the network has the address 192.168.10.0

The Pcs under the second switch forms second network.

The PC is given the IP Address 10.0.0.2 and default gateway 10.0.0.1, the network having the address 10.0.0.0

The Pcs under the third switch forms third network.

The Pcs are given the IP Addresses 194.168.20.2 and 194.168.20.3, default gateway of 194.168.20.1 and the network having the address 194.168.20.0

The Routers are turned OFF and HWIC-2T module is added in each of the routers.

Then, they are turned ON again.

The Pcs and the switches, the switches and the routers are connected using Copper Straight-through wire and the routers are interconnected using Serial DCE.

The IP Address of FA 0/3 of Router0 is the default gateway of Pcs under Switch0.

The IP Address of FA 0/2 of Router0 is the default gateway of Pcs under Switch1.

The IP Address of Serial 0/3/0 of Router0 is given as 11.0.0.1

The IP Address of FA 0/3 of Router1 is the default gateway of Pcs under Switch2.

The IP Address of Serial 0/3/0 of Router1 is given as 11.0.0.2

Thus, the network address of the interconnection of routers is 11.0.0.0

The Port Status of the above connections are switched ON in both the routers.

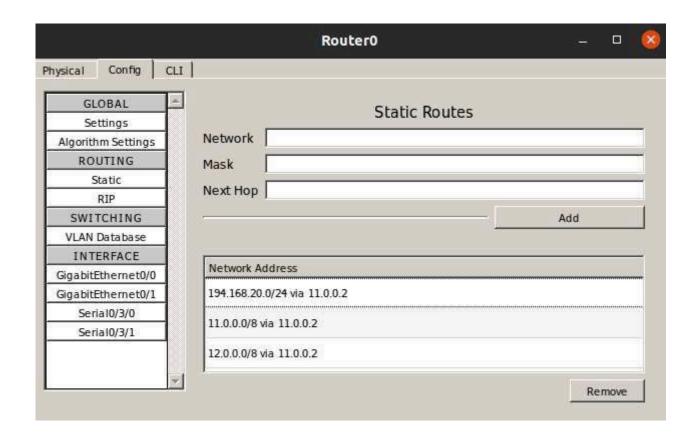
Now comes the important part.

## For Router0:

The following static routes are added: 11.0.0.0 255.0.0.0 11.0.0.2 implying next hop from 11.0.0.0 is to 11.0.0.2

12.0.0.0 255.0.0.0 11.0.0.2

**194.168.20.0 255.255.255.0 11.0.0.2** implying the third network static routes comes to router0 via next hop of router1.



### For Router1:

The following static routes are added: 11.0.0.0 255.0.0.0 11.0.0.1

12.0.0.0 255.0.0.0 11.0.0.1

**192.168.10.0 255.255.255.0 11.0.0.1** (Network under first switch)

**10.0.0.0 255.255.255.0 11.0.0.1** (Network under second switch)

