

6.Static Routing Using Packet Tracer

The screenshot shows a network topology in Cisco Packet Tracer. Two routers, Router0 and Router1, are connected via their Serial0/0/0 interfaces. Router0 is configured with IP 192.168.1.2 and Router1 with IP 192.168.1.4. Both routers have two Ethernet interfaces connected to PCs. Router0's Ethernet0/0 is connected to PC0 (192.168.2.7) and PC1 (192.168.2.8). Router1's Ethernet0/0 is connected to PC2 (192.168.3.5) and PC3 (192.168.3.7). The configuration window for Router0 is open, showing the following settings:

- GLOBAL**
 - Port Status: On
 - Bandwidth: 100 Mbps
 - Duplex: Full Duplex
 - MAC Address: 90D5.44F.0101
- ROUTING**
 - Static: Enabled
- INTERFACE**
 - GigabitEthernet0/0: IP Address 192.168.1.2, Subnet Mask 255.255.255.0
 - GigabitEthernet0/1: No configuration

The command line interface shows the following commands:

```

Router0>enable
Router0>conf t
Router0(config)#ip address 192.168.1.2 255.255.255.0
Router0(config)#no ip default-gateway
Router0(config)#exit
Router0>show ip interface brief
Router0>
  
```

The screenshot shows the same network topology as the previous image. The Routing Table for Router0 is displayed, showing the following entries:

Type	Network	IP	Next Hop IP	Metric
C	192.168.1.0/24	GigabitEthernet0/0	0.0.0.0	0
L	192.168.1.2/32	GigabitEthernet0/0	0.0.0.0	0
C	192.168.2.0/24	GigabitEthernet0/1	0.0.0.0	0
L	192.168.2.7/32	GigabitEthernet0/1	0.0.0.0	0

The screenshot shows the same network topology. The Simulation Panel is open, displaying a list of events. The events are as follows:

Time	Event	Device	Type
0:00:00	Start	PC0	ICMP
0:00:00	Start	PC1	ICMP
0:00:00	Start	PC2	ICMP
0:00:00	Start	PC3	ICMP
0:00:00	Start	Router0	ICMP
0:00:00	Start	Router1	ICMP
0:00:00	Start	PC0	ICMP
0:00:00	Start	PC1	ICMP
0:00:00	Start	PC2	ICMP
0:00:00	Start	PC3	ICMP
0:00:00	Start	Router0	ICMP
0:00:00	Start	Router1	ICMP
0:00:00	Start	PC0	ICMP
0:00:00	Start	PC1	ICMP
0:00:00	Start	PC2	ICMP
0:00:00	Start	PC3	ICMP