

# 6. Static routing using Packet tracer.

Packet Tracer interface showing a network topology and the configuration of Router0.

**Network Topology:**

- Two routers, Router0 and Router1, are connected via their Serial0/0/0 interfaces. Router0's IP is 192.168.1.2 and Router1's IP is 192.168.1.4.
- Router0 has two Ethernet interfaces: Ethernet0/0/0 (IP: 192.168.7.3) and Ethernet0/0/1 (IP: 192.168.7.4). It is connected to two PCs: PC0 (IP: 192.168.2.7) and PC1 (IP: 192.168.7.9).
- Router1 has two Ethernet interfaces: Ethernet0/0/0 (IP: 192.168.7.5) and Ethernet0/0/1 (IP: 192.168.7.6). It is connected to two PCs: PC2 (IP: 192.168.2.5) and PC3 (IP: 192.168.7.7).

**Router0 Configuration:**

**Physical Tab:**

- Serial0/0/0: Enabled, 100 Mbps, 100 Mbps, 10 Mbps, Auto.
- Serial0/0/1: Enabled, 100 Mbps, 100 Mbps, 10 Mbps, Auto.
- MAC Address: 000C.2A.4C.0001

**IP Configuration:**

- Interface: Ethernet0/0/0, IP Address: 192.168.7.3, Subnet Mask: 255.255.255.0.
- Interface: Ethernet0/0/1, IP Address: 192.168.7.4, Subnet Mask: 255.255.255.0.

**Configuration Tab:**

**Static Routes:**

```
Router0(config)# ip route 192.168.2.0 255.255.255.0 192.168.7.5
Router0(config)# ip route 192.168.7.0 255.255.255.0 192.168.7.5
```

Packet Tracer interface showing the same network topology and the configuration of Router1.

**Router1 Configuration:**

**Physical Tab:**

- Serial0/0/0: Enabled, 100 Mbps, 100 Mbps, 10 Mbps, Auto.
- Serial0/0/1: Enabled, 100 Mbps, 100 Mbps, 10 Mbps, Auto.
- MAC Address: 000C.2A.4C.0002

**IP Configuration:**

- Interface: Ethernet0/0/0, IP Address: 192.168.7.5, Subnet Mask: 255.255.255.0.
- Interface: Ethernet0/0/1, IP Address: 192.168.7.6, Subnet Mask: 255.255.255.0.

**Configuration Tab:**

**Static Routes:**

```
Router1(config)# ip route 192.168.2.0 255.255.255.0 192.168.7.2
Router1(config)# ip route 192.168.7.0 255.255.255.0 192.168.7.2
```

