# STATIC ROUTING

**TRICHY**

**CHENNAI**

**BANGALORE**

S0
20.0.0.1

S0
20.0.0.2

S1
40.0.0.1

S0
40.0.0.2

E0
10.0.0.1

E0
30.0.0.1

E0
50.0.0.1

**V.35 Cable**

**V.35 Cable**

**DTE**

**DCE**   **DCE**

**DTE**
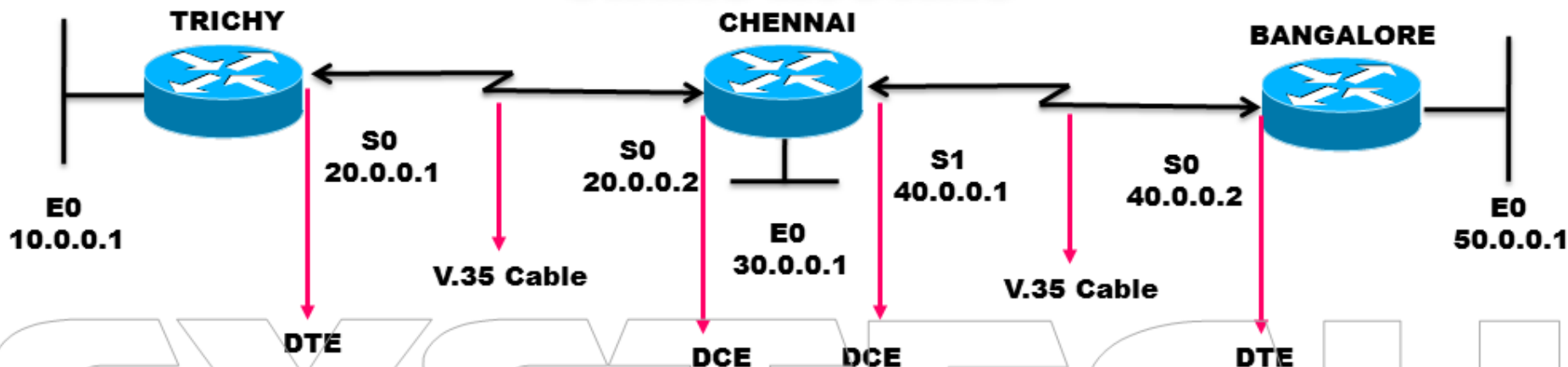
e0    : Ethernet

s0    : serial

DTE   : Data Terminal Equipment (user end)

DCE   : Data Communication Equipment (other end)
       (clock rate must be set, connection speed by ISP)

Directly connected code: C        Static Code :S        Default static Administrative Distance:1

| Router A | Router B | Router C |
|---|---|---|
| C – 10.0.0.0 | C – 20.0.0.0 | C – 40.0.0.0 |
| C – 20.0.0.0 | C – 30.0.0.0 | C – 50.0.0.0 |
| S – 30.0.0.0 | C – 40.0.0.0 | S – 10.0.0.0 |
| S – 40.0.0.0 | S – 50.0.0.0 | S – 20.0.0.0 |
| S – 50.0.0.0 | S – 10.0.0.0 | S – 30.0.0.0 |

# Router A (Trichy)

## ENABLE INTERFACE

| | |
|---|---|
| Router > | Enable |
| Router # | Configure Terminal |
| Router(config)# | Interface ethernet 0 |
| Router(config-if)# | ip address 10.0.0.1 255.0.0.0 |
| Router(config-if)# | no shutdown |
| Router(config-if)# | exit |
| Router(config)# | Interface serial 0 |
| Router(config-if)# | ip address 20.0.0.1 255.0.0.0 |
| Router(config-if)# | no shutdown |

### Ctrl Z

| | |
|---|---|
| Router# | show ip interface brief |
| Router# | show ip route |

## STATIC

| | |
|---|---|
| Router > | Enable |
| Router # | Configure Terminal |
| Router(config)# | ip route 30.0.0.0 255.0.0.0 20.0.0.2 |
| Router(config)# | ip route 40.0.0.0 255.0.0.0 20.0.0.2 |
| Router(config)# | ip route 50.0.0.0 255.0.0.0 20.0.0.2 |

# Router B (Chennai)

## ENABLE INTERFACE

| | |
|---|---|
| Router > | Enable |
| Router # | Configure Terminal |
| Router(config)# | Interface ethernet 0 |
| Router(config-if)# | ip address 30.0.0.1 255.0.0.0 |
| Router(config-if)# | no shutdown |
| Router(config-if)# | exit |
| Router(config)# | interface serial 0 |
| Router(config-if)# | ip address 20.0.0.2 255.0.0.0 |
| Router(config-if)# | no shutdown |
| Router(config-if)# | clock rate 9600 |
| Router(config-if)# | exit |
| Router(config)# | interface serial 1 |
| Router(config-if)# | ip address 40.0.0.1 255.0.0.0 |
| Router(config-if)# | no shutdown |
| Router(config-if)# | clock rate 9600 |

**Ctrl Z**

| | |
|---|---|
| Router# | show ip interface brief |
| Router# | show ip route |

## STATIC

| | |
|---|---|
| Router > | Enable |
| Router # | Configure Terminal |
| Router(config)# | ip route 50.0.0.0 255.0.0.0 40.0.0.2 |
| Router(config)# | ip route 10.0.0.0 255.0.0.0 20.0.0.1 |

# Router C (Bangalore)

## ENABLE INTERFACE

| | |
|---|---|
| Router > | Enable |
| Router # | Configure Terminal |
| Router(config)# | Interface ethernet 0 |
| Router(config-if)# | ip address 50.0.0.1 255.0.0.0 |
| Router(config-if)# | no shutdown |
| Router(config-if)# | exit |
| Router(config)# | interface serial 0 |
| Router(config-if)# | ip address 40.0.0.2 255.0.0.0 |
| Router(config-if)# | no  shutdown |
| Router(config-if)# | exit |

Ctrl Z

| | |
|---|---|
| Router# | show ip interface brief |
| Router# | show ip route |

## STATIC

| | |
|---|---|
| Router > | Enable |
| Router # | Configure Terminal |
| Router(config)# | ip route 10.0.0.0 255.0.0.0 40.0.0.1 |
| Router(config)# | ip route 20.0.0.0 255.0.0.0 40.0.0.1 |
| Router(config)# | ip route 30.0.0.0 255.0.0.0 40.0.0.1 |

**To Set Host name in Router:**

| | |
|---|---|
| Router > | Enable |
| Router # | Configure Terminal |
| Router(config)# | Hostname Trichy |
| Trichy(config)# | |

**Reload the Router:**

| | |
|---|---|
| Router > | Enable |
| Router # | reload |

| | |
|---|---|
| Router # | show  running-configuration |
| Router # | show interface  serial 0 |
| Router # | show controllers serial 0 |
| Router # | debug ip packet |
| Router # | debug ip routing |