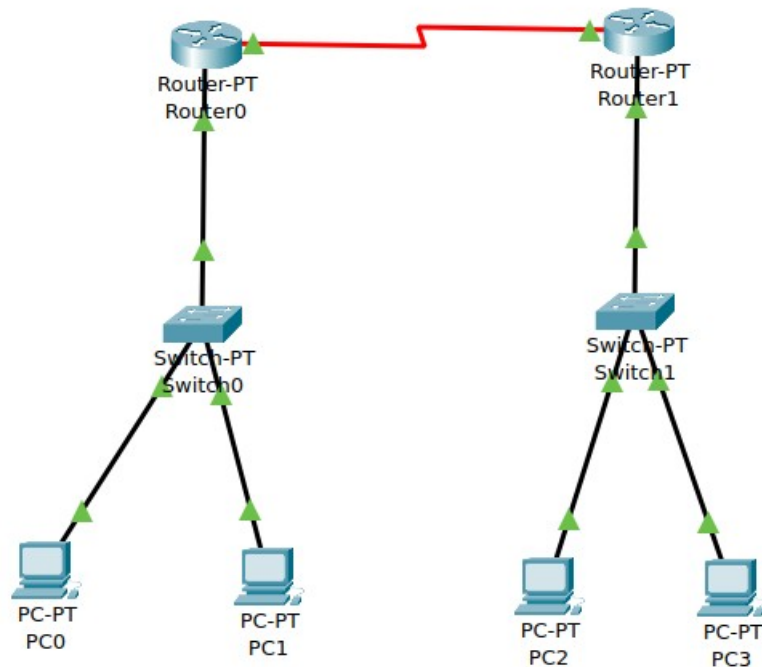


Experiment 6 : Simulate Static Routing in a topology.

Step 1:



Step 2:

PC0

Physical Config Desktop Programming Attributes

IP Configuration

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 192.168.1.2

Subnet Mask 255.255.255.0

Default Gateway 192.168.1.1

DNS Server 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address /

Link Local Address FE80::2E0:F7FF:FE73:9774

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

☐ Top

Step 3:

Router0

Physical Config CLI Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

INTERFACE

FastEthernet0/0

FastEthernet1/0

Serial2/0

Serial3/0

FastEthernet4/0

FastEthernet5/0

FastEthernet0/0

Port Status ☒ On

Bandwidth ☒ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 00D0.97B2.E988

IP Configuration

IPv4 Address 192.168.1.1

Subnet Mask 255.255.255.0

Tx Ring Limit 10

Equivalent IOS Commands

Router(config-if)#
%LINK-5-CHANGED: Interface Serial2/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up

Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet0/0
Router(config-if)#

☐ Top

Step 4:

Router0

Physical Config CLI Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

INTERFACE

FastEthernet0/0

FastEthernet1/0

Serial2/0

Serial3/0

FastEthernet4/0

FastEthernet5/0

Serial2/0

Port Status ☒ On

Duplex ☒ Full Duplex

Clock Rate 2000000

IP Configuration

IPv4 Address 11.0.0.1

Subnet Mask 255.0.0.0

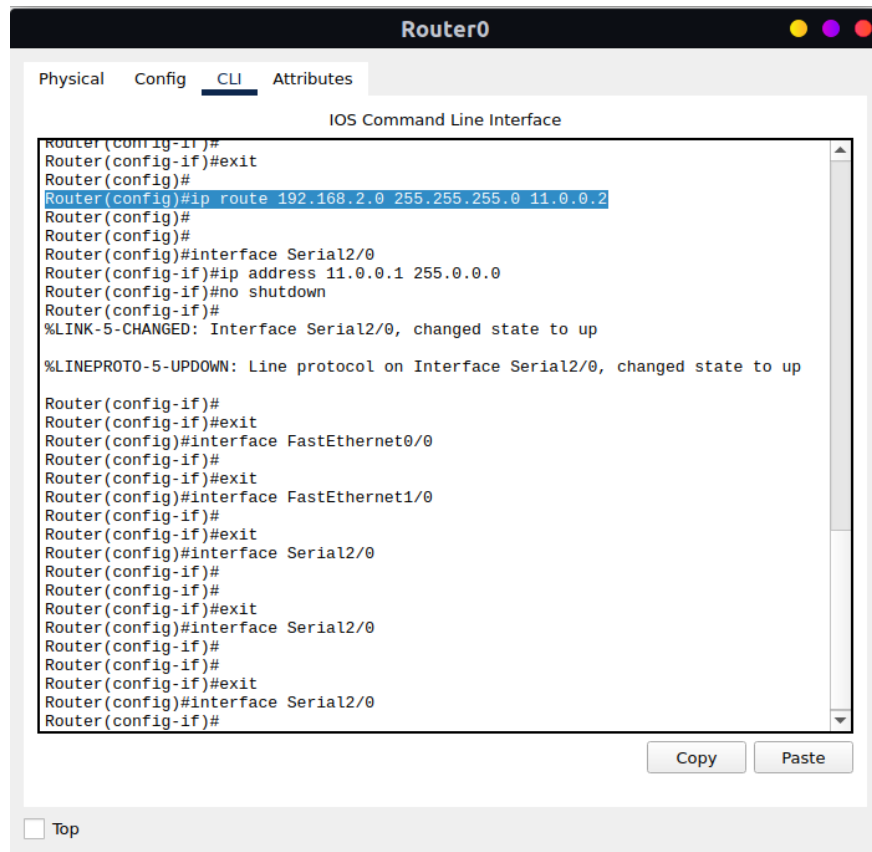
Tx Ring Limit 10

Equivalent IOS Commands

Router(config-if)#exit
Router(config)#interface FastEthernet0/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet1/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface Serial2/0
Router(config-if)#

☐ Top

Step 5:



Step 6:

```
C:\>ping 192.168.2.2

Pinging 192.168.2.2 with 32 bytes of data:

Reply from 192.168.2.2: bytes=32 time=10ms TTL=126
Reply from 192.168.2.2: bytes=32 time=10ms TTL=126
Reply from 192.168.2.2: bytes=32 time=11ms TTL=126
Reply from 192.168.2.2: bytes=32 time=10ms TTL=126

Ping statistics for 192.168.2.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 10ms, Maximum = 11ms, Average = 10ms
```

Step 7:

Activities PacketTracer Dec 18 10:24 PM 24% 3 KB/s 54°C 7h 43m 76%

Cisco Packet Tracer - /home/mikku/study/networking_lab/activity6/static_routing.pkt

File Edit Options View Tools Extensions Window Help

Logical Physical x: 1107, y: 707

Router-PT Router0 Router-PT Router1

Switch-PT Switch0 Switch-PT Switch1

PC-PT PC0 PC-PT PC1 PC-PT PC2 PC-PT PC3

Simulation Panel

Event List

| Vis. | Time(sec) | Last Device |
|------|-----------|-------------|
| | 0.000 | -- |
| | 0.001 | PC0 |
| | 0.002 | Switch0 |
| | 0.003 | Router0 |
| | 0.004 | Router1 |
| | 0.005 | Switch1 |
| | 0.006 | PC2 |
| | 0.007 | Switch1 |
| | 0.008 | Router1 |
| | 0.009 | Router0 |
| | 0.010 | Switch0 |
| | 0.275 | -- |

Reset Simulation Constant Delay Capturing...

Play Controls

Event List Filters - Visible Events

ACL Filter, ARP, BGP, Bluetooth, CAPWAP, CDP, DHCP, DHCPv6, DNS, DTP, EAPOL, EIGRP, EIGRPv6, FTP, H.323, HSRP, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IPsec, ISAKMP, IoT, IoT TCP, LACP, LLDP, Meraki, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3, PPP, PPPoE, PTP, RADIUS, RDP, RIP, RIPng, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, USB, VTP

Edit Filters Show All/None

Event List Realtime Simulation

Scenario 1

| Fire | Last Status | Source | Destination | Type | Color | Time(sec) | Periodic | Num | Edit | Delete |
|------|-------------|--------|-------------|------|-------|-----------|----------|-----|--------|----------|
| | Successful | PC0 | PC2 | ICMP | | 0.000 | N | 0 | (e...) | (delete) |

New Delete

Toggle PDU List Window

Automatically Choose Connection Type