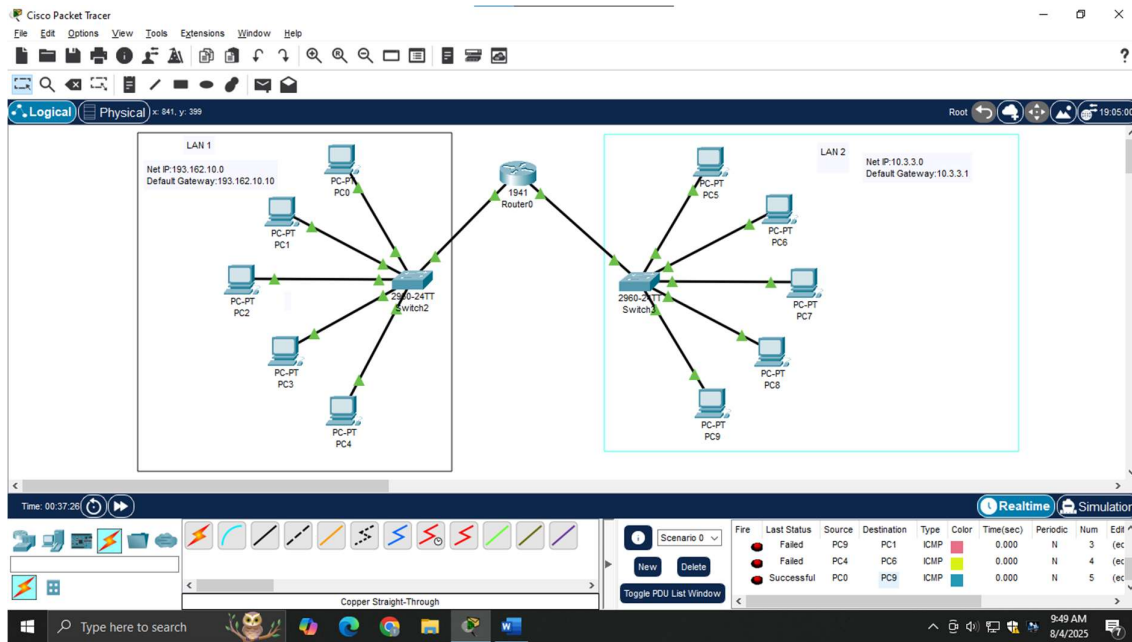


CN Practical 6 & 7

Shakeeb Shaikh

TCS2526068

Aim: Create a network with a router that connects 2 LANs



Router0

Physical

Config

CLI

Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

GigabitEthernet0/0

GigabitEthernet0/1

GigabitEthernet0/0

Port Status

☒ On

Bandwidth

☐ 1000 Mbps ☒ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex

☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address

0060.5C7C.9601

IP Configuration

IPv4 Address

193.162.10.10

Subnet Mask

255.255.255.0

Tx Ring Limit

10

Equivalent IOS Commands

```
Router(config)#interface GigabitEthernet0/1
Router(config-if)#no shutdown
Router(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to up
ip address 10.3.3.1 255.0.0.0
Router(config-if)#ip address 10.3.3.1 255.0.0.0
Router(config-if)#
Router(config-if)#
Router(config-if)#exit
Router(config)#interface GigabitEthernet0/0
Router(config-if)#
```

☐ Top

Router0

Physical

Config

CLI

Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

GigabitEthernet0/0

GigabitEthernet0/1

GigabitEthernet0/1

Port Status

☒ On

Bandwidth

☐ 1000 Mbps ☒ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex

☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address

0060.5C7C.9602

IP Configuration

IPv4 Address

10.3.3.1

Subnet Mask

255.0.0.0

Tx Ring Limit

10

Equivalent IOS Commands

Link 0 Changed: Interface GigabitEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to up

ip address 10.3.3.1 255.0.0.0

Router(config-if)#ip address 10.3.3.1 255.0.0.0

Router(config-if)#

Router(config-if)#

Router(config-if)#exit

Router(config)#interface GigabitEthernet0/0

Router(config-if)#

Router(config-if)#

Router(config-if)#exit

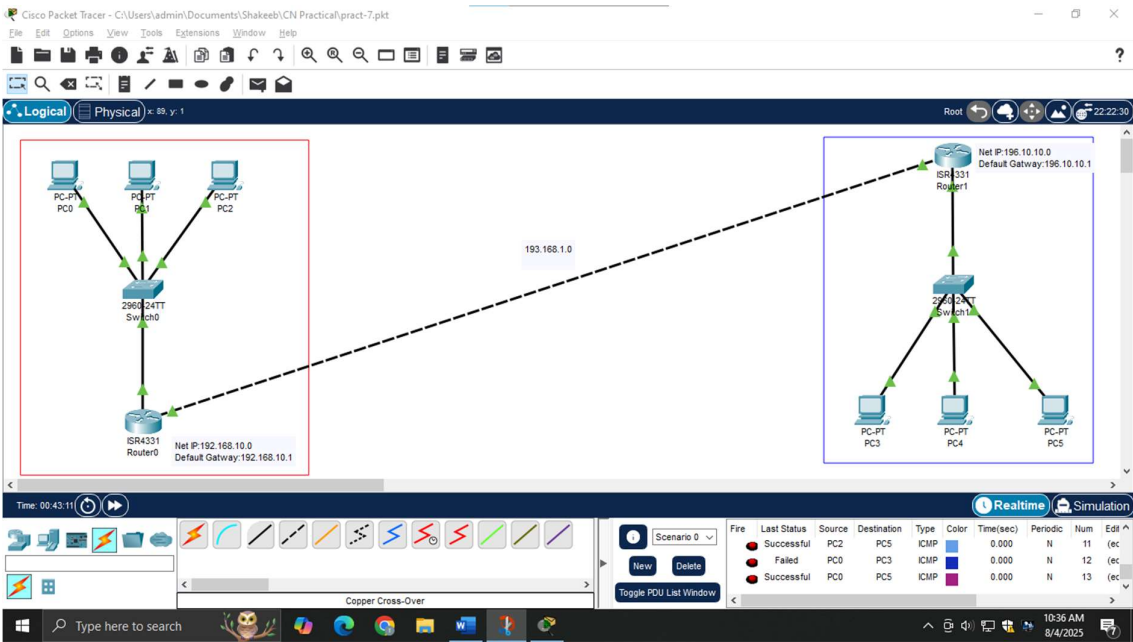
Router(config)#interface GigabitEthernet0/1

Router(config-if)#

☐ Top

Practical 7

Aim: Create a network and configure static routing



Router0

Physical

Config

CLI

Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

GigabitEthernet0/0/0

GigabitEthernet0/0/1

GigabitEthernet0/0/2

GigabitEthernet0/0/0

Port Status

☒ On

Bandwidth

☐ 1000 Mbps

☒ 100 Mbps

☐ 10 Mbps

☒ Auto

Duplex

☐ Half Duplex

☒ Full Duplex

☒ Auto

MAC Address

0006.2AD4.6001

IP Configuration

IPv4 Address

192.168.10.1

Subnet Mask

255.255.255.0

Tx Ring Limit

10

Equivalent IOS Commands

```
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 192.168.10.0 255.255.255.0 192.168.1.1
%Invalid next hop address (it's this router)
Router(config)#
Router(config)#
Router(config)#interface GigabitEthernet0/0/1
Router(config-if)#ip address 192.168.1.1 255.255.255.0
Router(config-if)#
Router(config-if)#
Router(config-if)#exit
Router(config)#interface GigabitEthernet0/0/0
Router(config-if)#
```

☐ Top

Router0

Physical

Config

CLI

Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

GigabitEthernet0/0/0

GigabitEthernet0/0/1

GigabitEthernet0/0/2

GigabitEthernet0/0/1

Port Status

☒ On

Bandwidth

☒ 1000 Mbps

☐ 100 Mbps

☐ 10 Mbps

☒ Auto

Duplex

☐ Half Duplex

☒ Full Duplex

☒ Auto

MAC Address

0006.2AD4.6002

IP Configuration

IPv4 Address

192.168.1.1

Subnet Mask

255.255.255.0

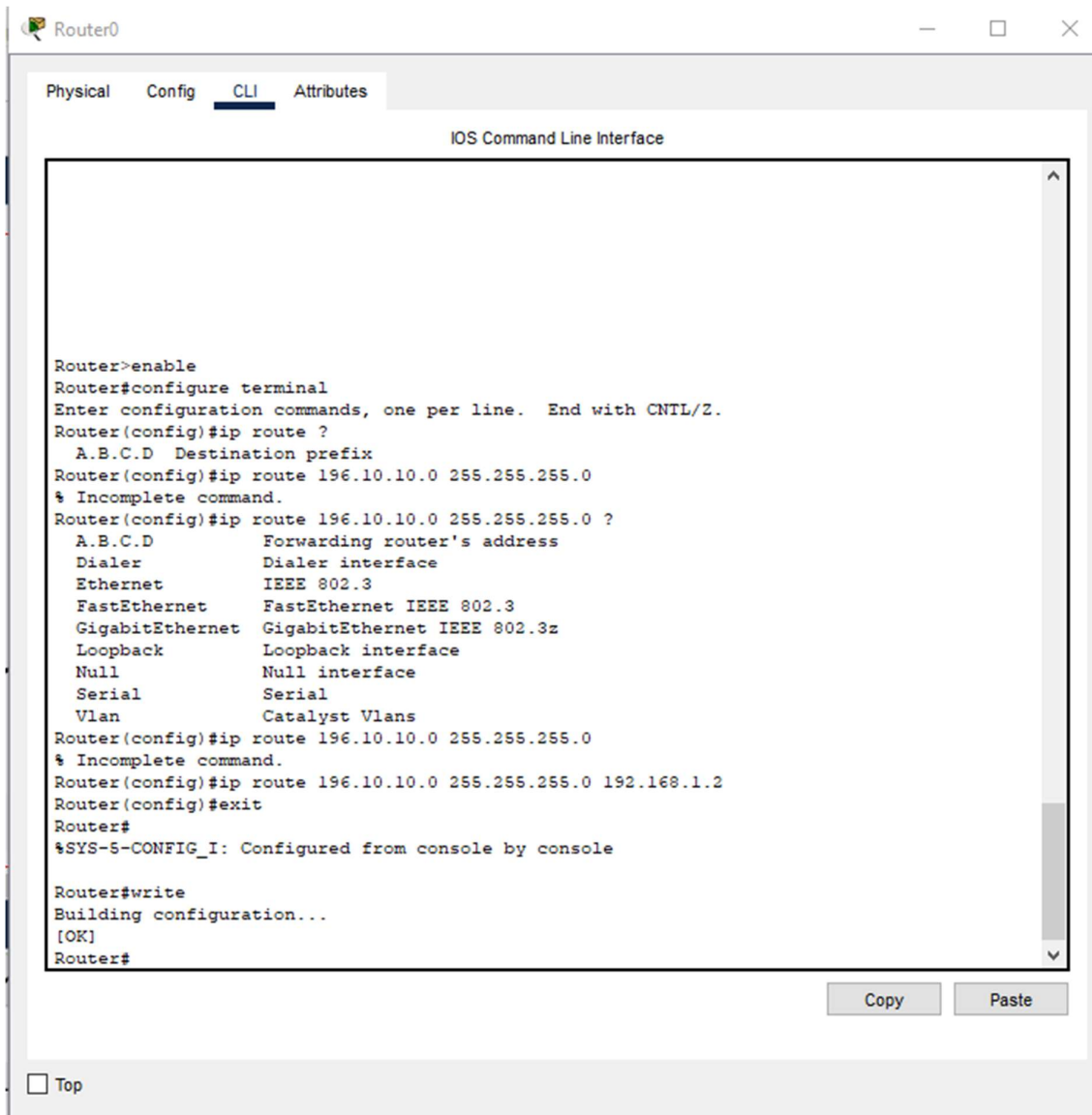
Tx Ring Limit

10

Equivalent IOS Commands

```
Router(config)#ip route 192.168.1.0 255.255.255.0 192.168.1.1
%Invalid next hop address (it's this router)
Router(config)#
Router(config)#
Router(config)#interface GigabitEthernet0/0/1
Router(config-if)#ip address 192.168.1.1 255.255.255.0
Router(config-if)#
Router(config-if)#
Router(config-if)#exit
Router(config)#interface GigabitEthernet0/0/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface GigabitEthernet0/0/1
Router(config-if)#
```

☐ Top



Router1

PhysicalConfigCLIAttributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

GigabitEthernet0/0/0

GigabitEthernet0/0/1

GigabitEthernet0/0/2

GigabitEthernet0/0/0

Port Status

☒ On

Bandwidth

☐ 1000 Mbps☒ 100 Mbps☐ 10 Mbps

☒ Auto

Duplex

☐ Half Duplex☒ Full Duplex

☒ Auto

MAC Address

0006.2AE4.6901

IP Configuration

IPv4 Address

196.10.10.1

Subnet Mask

255.255.255.0

Tx Ring Limit

10

Equivalent IOS Commands

```
Router(config)#ip route 192.168.10.0 255.255.255.0 192.168.1.1
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#write
Building configuration...
[OK]
Router#
Router#
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface GigabitEthernet0/0/0
Router(config-if)#
```

☐ Top

Router1

Physical

Config

CLI

Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

GigabitEthernet0/0/0

GigabitEthernet0/0/1

GigabitEthernet0/0/2

GigabitEthernet0/0/1

GigabitEthernet0/0/1

Port Status

☒ On

Bandwidth

☒ 1000 Mbps ☐ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex

☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address

0006.2AE4.6902

IP Configuration

IPv4 Address

192.168.1.2

Subnet Mask

255.255.255.0

Tx Ring Limit

10

Equivalent IOS Commands

Router#write

Building configuration...

[OK]

Router#

Router#

Router#configure terminal

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#interface GigabitEthernet0/0/0

Router(config-if)#

Router(config-if)#exit

Router(config)#interface GigabitEthernet0/0/1

Router(config-if)#

☐ Top

