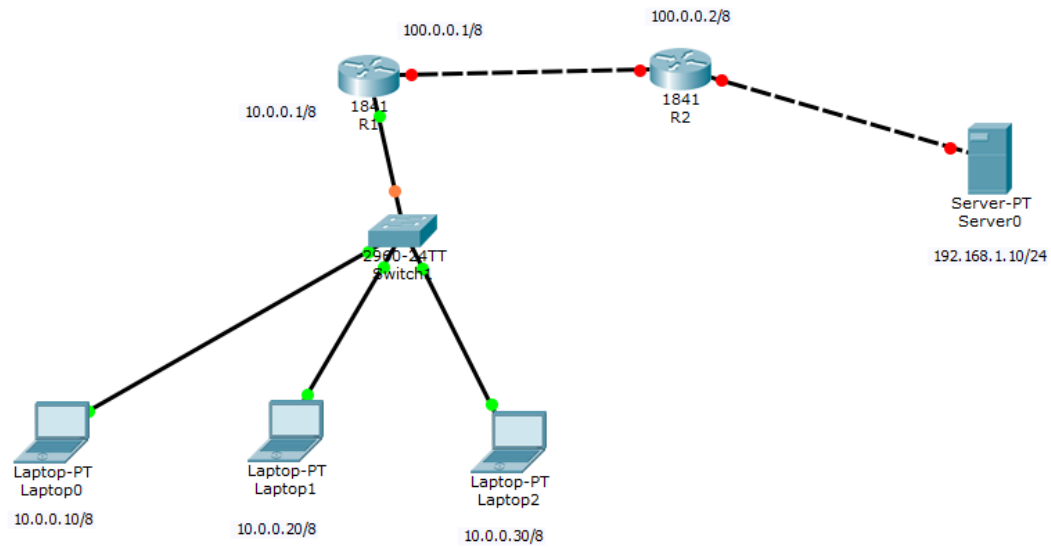
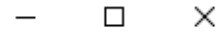


ASJID TAHIR

19p0085

LAB 11 LAB WORK





Physical Config CLI

IOS Command Line Interface

```
management network from the above interface summary:
% No defaulting allowed
Enter interface name used to connect to the
management network from the above interface summary:

Press RETURN to get started!

Router>en
Router#config ter
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname R1
R1(config)#int f0/0
R1(config-if)#ip add 100.0.0.1 255.0.0.0
R1(config-if)#no shut

R1(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
ex
R1(config)#int f0/1
R1(config-if)#ip add 10.0.0.1 255.0.0.0
R1(config-if)#no shut

R1(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to
up
```

Copy

Paste

R2

Physical

Config

CLI

IOS Command Line Interface

```
Router>en
Router#hostname R2
      ^
% Invalid input detected at '^' marker.

Router#config ter
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname R2
R2(config)#int f0/0
R2(config-if)#ip add 100.0.0.2 255.0.0.0
R2(config-if)#no shut

R2(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to
up
ex
R2(config)#int f0/1
R2(config-if)#ip add 192.168.1.1 255.255.255.0
R2(config-if)#no shut

R2(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to
up
|
```

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IP Configuration

IP Configuration

☐ DHCP ☒ Static

IP Address 10.0.0.10

Subnet Mask 255.0.0.0

Default Gateway 10.0.0.1

DNS Server

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address

Link Local Address FE80::2D0:97FF:FE85:7E98

IPv6 Gateway

IPv6 DNS Server



IP Configuration

IP Configuration

☐ DHCP☒ Static

IP Address 10.0.0.20

Subnet Mask 255.0.0.0

Default Gateway 10.0.0.1

DNS Server

IPv6 Configuration

☐ DHCP☐ Auto Config☒ Static

IPv6 Address

Link Local Address FE80::260:2FFF:FE96:B68B

IPv6 Gateway

IPv6 DNS Server

IP Configuration X

IP Configuration

☐ DHCP☒ Static

IP Address

10.0.0.30

Subnet Mask

255.0.0.0

Default Gateway

10.0.0.1

DNS Server

IPv6 Configuration

☐ DHCP☐ Auto Config☒ Static

IPv6 Address

Link Local Address

FE80::209:7CFF:FE67:E5CB

IPv6 Gateway

IPv6 DNS Server

R1

Physical

Config

CLI

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

FastEthernet0/0

FastEthernet0/1

FastEthernet0/0

Port Status

☒ On

Bandwidth

☒ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex

☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address

0001.6320.B401

IP Configuration

IP Address

100.0.0.1

Subnet Mask

255.0.0.0

Tx Ring Limit

10

Equivalent IOS Commands

```
R1(config-if)#exit
R1(config)#interface FastEthernet0/1
R1(config-if)#
R1(config-if)#exit
R1(config)#interface FastEthernet0/0
R1(config-if)#
R1(config-if)#exit
R1(config)#interface FastEthernet0/0
R1(config-if)#
```

R1

Physical

Config

CLI

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

FastEthernet0/0

FastEthernet0/1

FastEthernet0/1

Port Status

☒ On

Bandwidth

☐ 100 Mbps☐ 10 Mbps☒ Auto

Duplex

☐ Half Duplex☒ Full Duplex☒ Auto

MAC Address

0001.6320.B402

IP Configuration

IP Address

10.0.0.1

Subnet Mask

255.0.0.0

Tx Ring Limit

10

Equivalent IOS Commands

```
R1(config-if)#exit
R1(config)#interface FastEthernet0/0
R1(config-if)#
R1(config-if)#exit
R1(config)#interface FastEthernet0/0
R1(config-if)#
R1(config-if)#exit
R1(config)#interface FastEthernet0/1
R1(config-if)#
```


R2

Physical Config CLI

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

FastEthernet0/0

FastEthernet0/1

FastEthernet0/0

Port Status ☒ On

Bandwidth ☒ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 0001.6448.BD01

IP Configuration

IP Address 100.0.0.2

Subnet Mask 255.0.0.0

Tx Ring Limit 10

Equivalent IOS Commands

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up
R2(config-if)#exit
R2(config)#interface FastEthernet0/0
R2(config-if)#
```

R2

Physical Config CLI

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

FastEthernet0/0

FastEthernet0/1

FastEthernet0/1

Port Status ☒ On

Bandwidth ☐ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 0001.6448.BD02

IP Configuration

IP Address 192.168.1.1

Subnet Mask 255.255.255.0

Tx Ring Limit 10

Equivalent IOS Commands

```

R2#show ip interface FastEthernet0/1
FastEthernet0/1 is up. Line protocol on interface FastEthernet0/1, changed state to up

R2(config-if)#exit
R2(config)#interface FastEthernet0/0
R2(config-if)#
R2(config-if)#exit
R2(config)#interface FastEthernet0/1
R2(config-if)#
  
```

- **access-list 1 permit 10.0.0.0 0.255.255.255**
- **ip nat pool ccna 50.0.0.1 50.0.0.2 netmask 255.0.0.0**
- **ip nat inside source list 1 pool ccna**



R1



Physical

Config

CLI

IOS Command Line Interface

```
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to
up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to
up

R1(config-if)#exit
R1(config)#interface FastEthernet0/0
R1(config-if)#
R1(config-if)#exit
R1(config)#interface FastEthernet0/1
R1(config-if)#
R1(config-if)#exit
R1(config)#interface FastEthernet0/0
R1(config-if)#
R1(config-if)#exit
R1(config)#interface FastEthernet0/0
R1(config-if)#
R1(config-if)#exit
R1(config)#interface FastEthernet0/1
R1(config-if)#
R1(config-if)#
R1(config-if)#
R1(config-if)#ex
R1(config)#access-list 1 permit 10.0.0.0 0.255.255.255
R1(config)#ip nat pool ccna 50.0.0.1 50.0.0.2 netmask 255.0.0.0
R1(config)#ip nat inside source list 1 pool ccna
R1(config)#
```

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R1



Physical

Config

CLI

IOS Command Line Interface

```
R1>
R1>
R1>
R1>en
R1#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
R1(config)#access-list 1 permit 10.0.0.0 0.255.255.255
R1(config)#ip nat pool ccna 50.0.0.1 50.0.0.2 netmask 255.0.0.0
R1(config)#ip nat inside source list 1 pool ccna
R1(config)#interface FastEthernet 0/1
R1(config-if)#ip nat inside
R1(config-if)#exit
R1(config)#interface FastEthernet 0/0
R1(config-if)#ip nat outside
      ^
% Invalid input detected at '^' marker.

R1(config-if)#exit
R1(config)#ip nat outside
% Incomplete command.
R1(config)#
R1#
%SYS-5-CONFIG_I: Configured from console by console

R1#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
R1(config)#interface FastEthernet 0/0
R1(config-if)#ip nat outside
R1(config-if)#exit
R1(config)#
```

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R2



Physical

Config

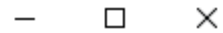
CLI

IOS Command Line Interface

```
R2>
R2>
R2>enable
R2#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
R2(config)#ip nat inside source static 192.168.1.10 200.0.0.10
R2(config)#interface FastEthernet 0/0
R2(config-if)#ip nat outside
R2(config-if)#exit
R2(config)#interface FastEthernet 0/1
R2(config-if)#ip nat inside
R2(config-if)#exit
R2(config)#
```

Copy

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Physical Config CLI

IOS Command Line Interface

```
R1(config)#interface FastEthernet 0/1
R1(config-if)#ip nat inside
R1(config-if)#exit
R1(config)#interface FastEthernet 0/0
R1(config-if)#ip nat outside
      ^
% Invalid input detected at '^' marker.

R1(config-if)#exit
R1(config)#ip nat outside
% Incomplete command.
R1(config)#
R1#
%SYS-5-CONFIG_I: Configured from console by console

R1#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
R1(config)#interface FastEthernet 0/0
R1(config-if)#ip nat outside
R1(config-if)#exit
R1(config)#
R1(config)#
R1(config)#
R1(config)#ip route 200.0.0.0 255.255.255.0 100.0.0.2
      ^
% Invalid input detected at '^' marker.

R1(config)#ip route 200.0.0.0 255.255.255.0 100.0.0.2
R1(config)#ip route 200.0.0.0 255.255.255.252 100.0.0.2
R1(config)#
```

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R2

Physical

Config

CLI

IOS Command Line Interface

Press RETURN to get started.

R2>

R2>

R2>enable

R2#configure terminal

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

R2(config)#ip nat inside source static 192.168.1.10 200.0.0.10

R2(config)#interface FastEthernet 0/0

R2(config-if)#ip nat outside

R2(config-if)#exit

R2(config)#interface FastEthernet 0/1

R2(config-if)#ip nat inside

R2(config-if)#exit

R2(config)#ip route 50.0.0.0 255.0.0.0 100.0.0.1

R2(config)#

Copy

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