



## Computer Networking lab

# LAB 04

Course Code: CSE 314

Submitted to:

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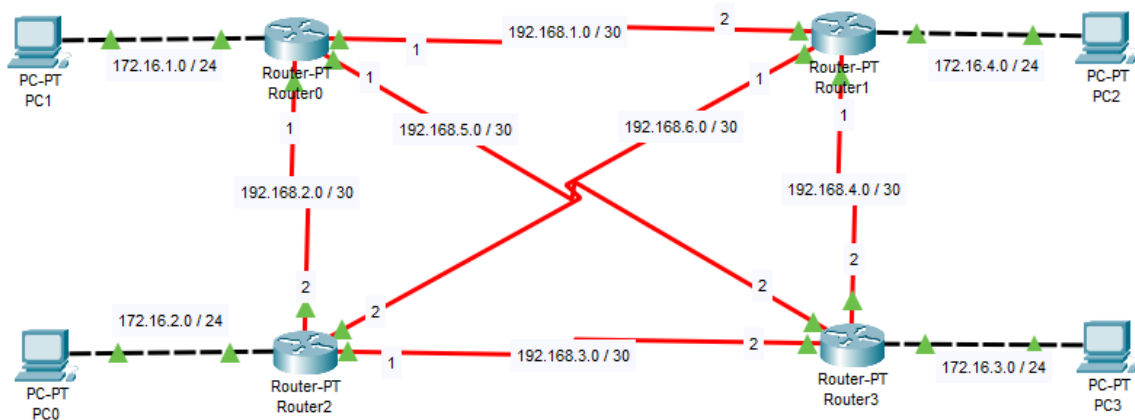
Section: PC-A

Department of CSE

Daffodil International University



## Diagram



## 1<sup>st</sup> Pc Ip Address

PC1

Physical Config **Desktop** Programming Attributes

IP Configuration

Interface: FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address: 172.16.1.7

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::260:47FF:FEEA:398A

Default Gateway:

DNS Server:

802.1X

☐ Use 802.1X Security

Authentication: MD5

Username:

Password:

☐ Top

## 2<sup>nd</sup> Pc Ip Address

PC0

Physical Config **Desktop** Programming Attributes

IP Configuration X

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 172.16.2.7

Subnet Mask 255.255.255.0

Default Gateway 192.168.2.1

DNS Server 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address /

Link Local Address FE80::202:16FF:FEA4:4E61

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

Username

Password

☐ Top

## 3<sup>rd</sup> Pc Ip Address

PC2

Physical Config **Desktop** Programming Attributes

IP Configuration X

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 172.16.4.7

Subnet Mask 255.255.255.0

Default Gateway 192.168.4.1

DNS Server 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address /

Link Local Address FE80::260:70FF:FE0E:EC7D

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

Username

Password

☐ Top

## 4<sup>th</sup> Pc Ip Address

The screenshot shows a window titled 'PC3' with tabs for Physical, Config, Desktop, Programming, and Attributes. The 'Config' tab is active, displaying the 'IP Configuration' dialog for the 'FastEthernet0' interface. The 'IP Configuration' section has two radio buttons: 'DHCP' (unselected) and 'Static' (selected). Below these are input fields for 'IPv4 Address' (172.16.3.7), 'Subnet Mask' (255.255.255.0), 'Default Gateway' (192.168.3.1), and 'DNS Server' (0.0.0.0). The 'IPv6 Configuration' section also has two radio buttons: 'Automatic' (unselected) and 'Static' (selected). Below these are input fields for 'IPv6 Address' (empty), 'Link Local Address' (FE80::210:11FF:FE40:B13C), 'Default Gateway' (empty), and 'DNS Server' (empty). The '802.1X' section has a checkbox for 'Use 802.1X Security' (unchecked), a dropdown for 'Authentication' (MD5), and input fields for 'Username' and 'Password' (both empty). A 'Top' button is located at the bottom left of the window.

## Coding part

### Router-01

--- System Configuration Dialog ---

Would you like to enter the initial configuration dialog? [yes/no]: no

```
Router>ena
```

```
Router#config t
```

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

```
Router(config)#int f0/0
```

```
Router(config-if)#ip add 172.16.1.1 255.255.255.0
```

```
Router(config-if)#no shut
```

```
Router(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

```
Router(config-if)#ex
Router(config)#int s2/0
Router(config-if)#ip add 192.168.2.1 255.255.255.252
Router(config-if)#no shut
```

```
%LINK-5-CHANGED: Interface Serial2/0, changed state to down
Router(config-if)#ex
Router(config)#int s6/0
Router(config-if)#ip add 192.168.5.1 255.255.255.252
Router(config-if)#no shut
```

```
%LINK-5-CHANGED: Interface Serial6/0, changed state to down
Router(config-if)#ex
Router(config)#int s3/0
Router(config-if)#ip add 192.168.1.1 255.255.255.252
Router(config-if)#no shut
```

```
%LINK-5-CHANGED: Interface Serial3/0, changed state to down
Router(config-if)#ex
Router(config)#router ospf 7
Router(config-router)#network 172.16.1.0 0.0.0.255 area 0
Router(config-router)#network 192.168.1.0 0.0.0.255 area 0
Router(config-router)#network 192.168.5.0 0.0.0.255 area 0
Router(config-router)#network 192.168.2.0 0.0.0.255 area 0
Router(config-router)#ex
Router(config)#ex
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

```
Router#copy run start
Destination filename [startup-config]?
Building configuration...
[OK]
Router#
```

## **Router-02**

--- System Configuration Dialog ---

Would you like to enter the initial configuration dialog? [yes/no]: no

```
Router>ena
Router#config t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#int f0/0
Router(config-if)#ip add 172.16.2.1 255.255.255.0
```

Router(config-if)#no shut

Router(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

Router(config-if)#ex

Router(config)#int s2/0

Router(config-if)#ip add 192.168.2.2 255.255.255.252

Router(config-if)#no shut

Router(config-if)#ex

Router(config)#int s6/0

Router(config-if)#ip add 192.168.6.2 255.255.255.252

Router(config-if)#no shut

%LINK-5-CHANGED: Interface Serial6/0, changed state to down

Router(config-if)#ex

Router(config)#int s3/0

Router(config-if)#ip add 192.168.3.1 255.255.255.252

Router(config-if)#no shut

%LINK-5-CHANGED: Interface Serial3/0, changed state to down

Router(config-if)#ex

Router(config)#router ospf 7

Router(config-router)#network 172.16.2.0 0.0.0.255 area 0

Router(config-router)#network 192.168.2.0 0.0.0.255 area 0

Router(config-router)#network 192.168.3.0 0.0.0.255 area 0

Router(config-router)#network 192.168.6.0 0.0.0.255 area 0

Router(config-router)#ex

Router(config)#ex

Router#

%SYS-5-CONFIG\_I: Configured from console by console

Router#copy run start

Destination filename [startup-config]?

Building configuration...

[OK]

Router#

### **Router-03**

--- System Configuration Dialog ---

Would you like to enter the initial configuration dialog? [yes/no]: no

Router>ena

Router#config t

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

Router(config)#int f0/0

Router(config-if)#ip add 172.16.3.1 255.255.255.0

Router(config-if)#no shut

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

Router(config-if)#ex

Router(config)#int s3/0

Router(config-if)#ip add 192.168.3.2 255.255.255.252

Router(config-if)#no shut

Router(config-if)#ex

Router(config)#int s6/0

Router(config-if)#ip add 192.168.5.2 255.255.255.252

Router(config-if)#no shut

Router(config-if)#ex

Router(config)#int s6/0

Router(config-if)#ip add 192.168.4.2 255.255.255.252

Router(config-if)#no shut

%LINK-5-CHANGED: Interface Serial2/0, changed state to down

Router(config-if)#ex

Router(config)#router ospf 7

Router(config-router)#network 172.16.3.0 0.0.0.255 area 0

Router(config-router)#network 192.168.3.0 0.0.0.255 area 0

Router(config-router)#network 192.168.5.0 0.0.0.255 area 0

Router(config-router)#network 192.168.4.0 0.0.0.255 area 0

Router(config-router)#ex

Router(config)#ex

Router#

%SYS-5-CONFIG\_I: Configured from console by console

copy run start

Destination filename [startup-config]?

Building configuration...

[OK]

Router#

## Router-04

--- System Configuration Dialog ---

Would you like to enter the initial configuration dialog? [yes/no]: no

Router>ena

Router#config t

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

Router(config)#int f0/0

Router(config-if)#ip add 172.16.4.1 255.255.255.0

Router(config-if)#no shut

Router(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

Router(config-if)#ex

Router(config)#int s2/0

Router(config-if)#ip add 192.168.1.2 255.255.255.252

Router(config-if)#no shut

Router(config-if)#ex

Router(config)#

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

Router(config)#int s6/0

Router(config-if)#ip add 192.168.6.1 255.255.255.252

Router(config-if)#no shut

Router(config-if)#ex

Router(config)#int s3/0

Router(config-if)#ip add 192.168.4.1 255.255.255.252

Router(config-if)#no shut

Router(config-if)#ex

Router(config)#router ospf

% Incomplete command.

Router(config)#router ospf 7

Router(config-router)#network 172.16.4.0 0.0.0.255 area 0

Router(config-router)#network 192.168.4.0 0.0.0.255 area 0

Router(config-router)#network 192.168.6.0 0.0.0.255 area 0

Router(config-router)#network 192.168.1.0 0.0.0.255 area 0

Router(config-router)#ex



```
Router(config)#ex
Router#
%SYS-5-CONFIG_I: Configured from console by console
copy run start
Destination filename [startup-config]?
Building configuration...
[OK]
Router#
```

## Packet transfer

