Computer Networking lab

LAB 04

Course Code: CSE 314

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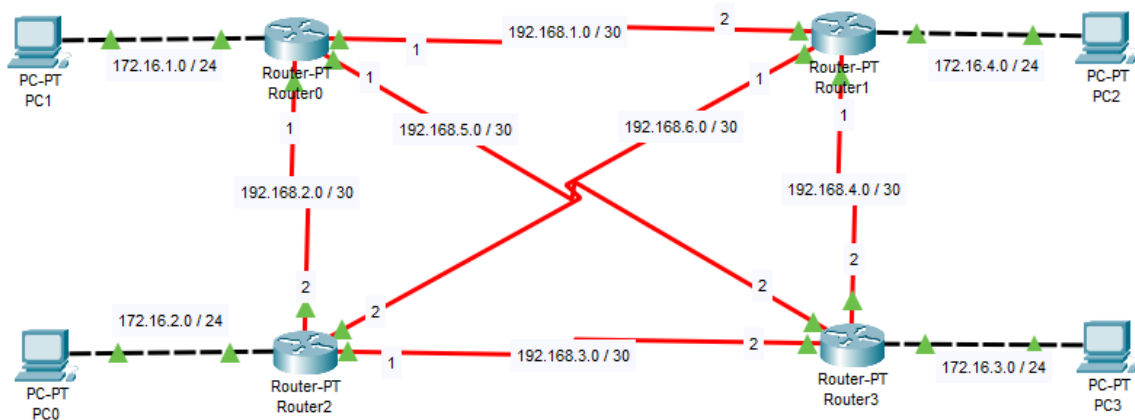Daffodil International University

Diagram

1st Pc Ip Address

2nd Pc Ip Address

PC0 — □ X

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

3rd Pc Ip Address

PC2 — □ X

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

4th Pc Ip Address

PC3 — □ ✕

Physical | Config | Desktop | Programming | Attributes

IP Configuration ✕

Interface: FastEthernet0

IP Configuration

○ DHCP   ⦿ Static

IPv4 Address: 172.16.3.7

Subnet Mask: 255.255.255.0

Default Gateway: 192.168.3.1

DNS Server: 0.0.0.0

IPv6 Configuration

○ Automatic   ⦿ Static

IPv6 Address: _____ / _____

Link Local Address: FE80::210:11FF:FE40:B13C

Default Gateway: _____

DNS Server: _____

802.1X

☐ Use 802.1X Security

Authentication: MD5

Username: _____

Password: _____

☐ Top

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#

--- 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