

***Name: Abubakkar Abdullah***

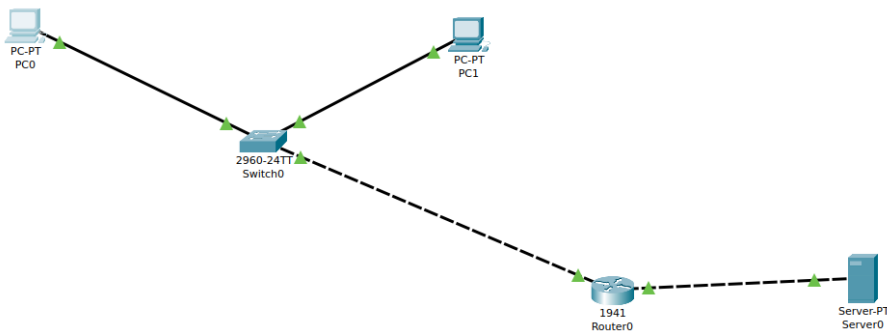
***Rno#20p-0045***

***Class-BCS-4B***

***Lab-Task***

## Task=1.

## Topology:



## Configuration:

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 0002.4AB6.1501

IP Configuration

IPv4 Address 192.168.2.1

Subnet Mask 255.255.255.0

Tx Ring Limit 10

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

0002.4AB6.1502

IP Configuration

IPv4 Address

192.168.1.1

Subnet Mask

255.255.255.0

Tx Ring Limit

10

Equivalent IOS Commands

Physical

Config

Services

Desktop

Programming

Attributes

IP Configuration

X

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

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

Authentication

MD5

Username

Password

***DHCP:***

Physical Config **Services** Desktop Programming Attributes

**SERVICES**

- HTTP
- DHCP**
- DHCPv6
- TFTP
- DNS
- SYSLOG
- AAA
- NTP
- EMAIL
- FTP
- IoT
- VM Management
- Radius EAP

**DHCP**

Interface: **FastEthernet0** Service: ☒ On ☐ Off

Pool Name: **serverPool**

Default Gateway: **0.0.0.0**

DNS Server: **0.0.0.0**

Start IP Address: **192** **168** **1** **0**

Subnet Mask: **255** **255** **255** **0**

Maximum Number of Users: **255**

TFTP Server: **0.0.0.0**

WLC Address: **0.0.0.0**

**Add** **Save** **Remove**

Pool Name	Default Gateway	DNS Server	Start IP Address	Subnet Mask	Max User	TFTP Server	WLC Address
SALES	192.16...	192.16...	192.16...	255.25...	255	0.0.0.0	0.0.0.0
serverPool	0.0.0.0	0.0.0.0	192.16...	255.25...	255	0.0.0.0	0.0.0.0

## Connection:

Physical Config **Desktop** Programming Attributes

**IP Configuration** X

Interface: **FastEthernet0**

**IP Configuration**

☒ DHCP ☐ Static **DHCP request successful.**

IPv4 Address: **192.168.2.3**

Subnet Mask: **255.255.255.0**

Default Gateway: **192.168.2.1**

DNS Server: **192.168.1.2**

**IPv6 Configuration**

☐ Automatic ☒ Static

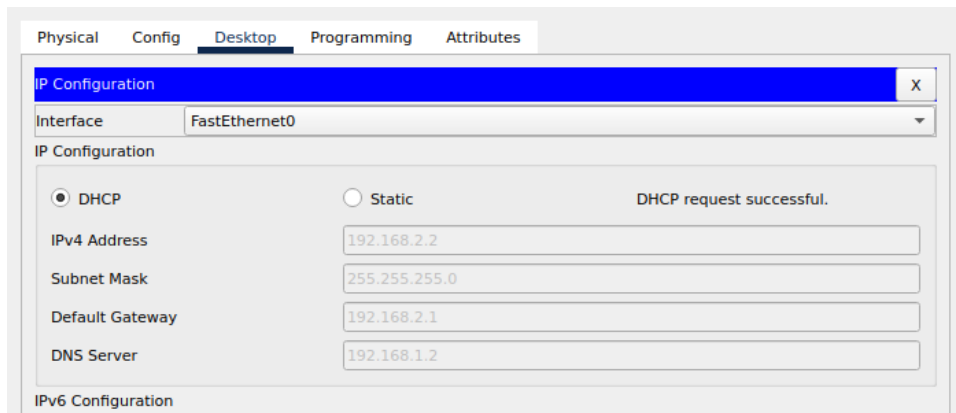
IPv6 Address: **/**

Link Local Address: **FE80::2E0:F9FF:FEC6:303**

Default Gateway:

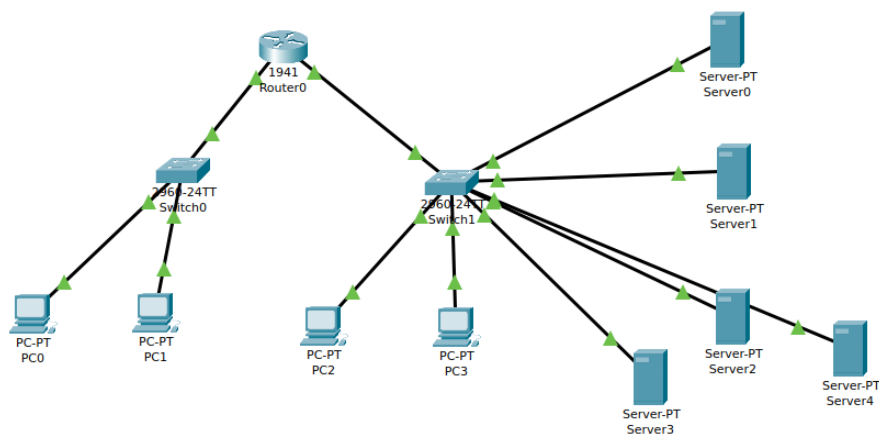
DNS Server:

802.1X

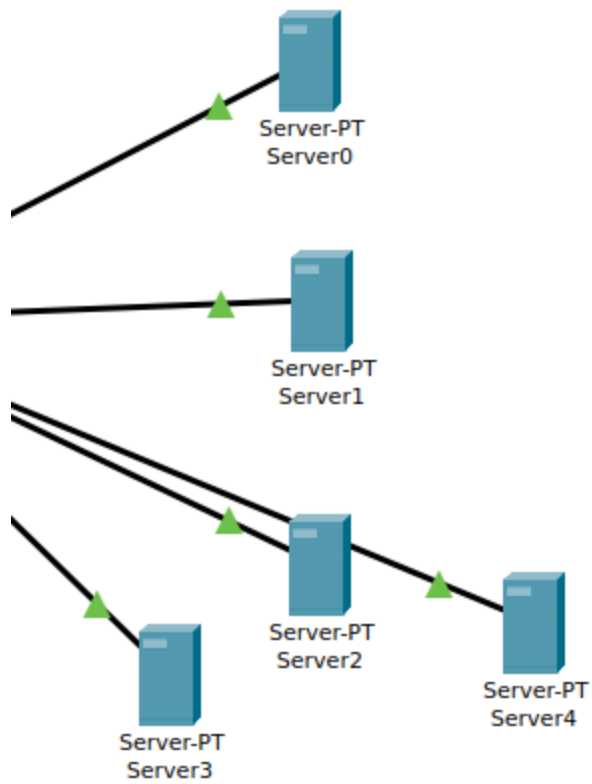


## ***TASK#2:***

## ***TOPOLOGY.***



***SERVERS.***



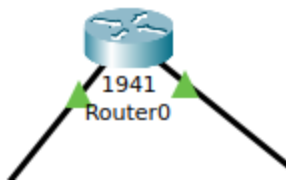
**PCS.**



**SERVERS.**



**ROUTER.**



### SERVER 0.

Physical Config Services **Desktop** Programming Attributes

IP Configuration X

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 192.168.1.2

Subnet Mask 255.255.255.0

Default Gateway 192.168.1.1

DNS Server 192.168.1.3

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address /

Link Local Address FE80::290:CFF:FE46:863B

Default Gateway

DNS Server

### SERVER 1.

Physical Config Services **Desktop** Programming Attributes

IP Configuration X

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 192.168.1.3

Subnet Mask 255.255.255.0

Default Gateway 192.168.1.1

DNS Server 192.168.1.3

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address /

Link Local Address FE80::20C:CFF:FEDA:B847

Default Gateway

DNS Server

### SERVER 2.

Physical Config Services **Desktop** Programming Attributes

IP Configuration X

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 192.168.1.4

Subnet Mask 255.255.255.0

Default Gateway 192.168.1.1

DNS Server 192.168.1.3

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address /

Link Local Address FE80::201:64FF:FE75:6607

Default Gateway

DNS Server

### SERVER 3.

Physical Config Services **Desktop** Programming Attributes

IP Configuration X

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 192.168.1.5

Subnet Mask 255.255.255.0

Default Gateway 192.168.1.1

DNS Server 192.168.1.3

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address /

Link Local Address FE80::202:16FF:FE60:707D

Default Gateway

DNS Server

802.1X

### SERVER 4.





Physical Config **Services** Desktop Programming Attributes

**SERVICES**

- HTTP
- DHCP**
- DHCPv6
- TFTP
- DNS
- SYSLOG
- AAA
- NTP
- EMAIL
- FTP
- IoT
- VM Management
- Radius EAP

**DHCP**

Interface: FastEthernet0 Service: ☒ On ☐ Off

Pool Name: serverPool

Default Gateway: 192.168.1.1

DNS Server: 192.168.1.3

Start IP Address: 192 168 1 13

Subnet Mask: 255 255 255 0

Maximum Number of Users: 243

TFTP Server: 0.0.0.0

WLC Address: 0.0.0.0

Add Save Remove

Pool Name	Default Gateway	DNS Server	Start IP Address	Subnet Mask	Max User	TFTP Server	WLC Address
serverPool	192.16...	192.16...	192.16...	255.25...	243	0.0.0.0	0.0.0.0

## SERVER 1 DNS

Physical Config **Services** Desktop Programming Attributes

**SERVICES**

- HTTP
- DHCP
- DHCPv6
- TFTP
- DNS**
- SYSLOG
- AAA
- NTP
- EMAIL
- FTP
- IoT
- VM Management
- Radius EAP

**DNS**

DNS Service: ☒ On ☐ Off

Resource Records

Name:  Type: A Record

Address:

Add Save Remove

No.	Name	Type	Detail
0	copyrights.html	A Record	192.168.1.4
1	flex.html	A Record	192.168.1.5
2	pwr.html	A Record	192.168.1.6

## SERVER 2 DHCP

Physical Config **Services** Desktop Programming Attributes

**SERVICES**  
 HTTP  
**DHCP**  
 DHCPv6  
 TFTP  
 DNS  
 SYSLOG  
 AAA  
 NTP  
 EMAIL  
 FTP  
 IoT  
 VM Management  
 Radius EAP

### DHCP

Interface: FastEthernet0 Service: ☐ On ☒ Off

Pool Name: serverPool

Default Gateway: 0.0.0.0

DNS Server: 0.0.0.0

Start IP Address: 192 168 1 0

Subnet Mask: 255 255 255 0

Maximum Number of Users: 255

TFTP Server: 0.0.0.0

WLC Address: 0.0.0.0

Pool Name	Default Gateway	DNS Server	Start IP Address	Subnet Mask	Max User	TFTP Server	WLC Address
serverPool	0.0.0.0	0.0.0.0	192.16...	255.25...	255	0.0.0.0	0.0.0.0

### SERVER 3 DHCP

Physical Config **Services** Desktop Programming Attributes

**SERVICES**  
 HTTP  
**DHCP**  
 DHCPv6  
 TFTP  
 DNS  
 SYSLOG  
 AAA  
 NTP  
 EMAIL  
 FTP  
 IoT  
 VM Management  
 Radius EAP

### DHCP

Interface: FastEthernet0 Service: ☐ On ☒ Off

Pool Name: serverPool

Default Gateway: 0.0.0.0

DNS Server: 0.0.0.0

Start IP Address: 192 168 1 0

Subnet Mask: 255 255 255 0

Maximum Number of Users: 255

TFTP Server: 0.0.0.0

WLC Address: 0.0.0.0

Pool Name	Default Gateway	DNS Server	Start IP Address	Subnet Mask	Max User	TFTP Server	WLC Address
serverPool	0.0.0.0	0.0.0.0	192.16...	255.25...	255	0.0.0.0	0.0.0.0

### SERVER 4 DHCP

Physical Config **Services** Desktop Programming Attributes

**SERVICES**

- HTTP
- DHCP**
- DHCPv6
- TFTP
- DNS
- SYSLOG
- AAA
- NTP
- EMAIL
- FTP
- IoT
- VM Management
- Radius EAP

**DHCP**

Interface: **FastEthernet0** Service: ☐ On ☒ Off

Pool Name:

Default Gateway:

DNS Server:

Start IP Address:

Subnet Mask:

Maximum Number of Users:

TFTP Server:

WLC Address:

Pool Name	Default Gateway	DNS Server	Start IP Address	Subnet Mask	Max User	TFTP Server	WLC Address
serverPool	0.0.0.0	0.0.0.0	192.16...	255.25...	255	0.0.0.0	0.0.0.0

### Configuration:

#### IOS Command Line Interface

```

Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface GigabitEthernet0/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface GigabitEthernet0/1
Router(config-if)#
Router(config-if)#exit
Router(config)#interface GigabitEthernet0/1
Router(config-if)#
Router(config-if)#exit
Router(config)#interface GigabitEthernet0/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface GigabitEthernet0/0
Router(config-if)#

Router(config-if)#exit
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#exit

```

Router con0 is now available

Press RETURN to get started.

```
Router>enable
Router#if-config
Translating "if-config"...domain server (255.255.255.255)
```

```
Router(config-if)#
Router(config-if)#exit
Router(config)#interface GigabitEthernet0/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface GigabitEthernet0/1
Router(config-if)#
Router(config-if)#exit
Router(config)#interface GigabitEthernet0/1
Router(config-if)#if-config
```