

# **Computer Networks**

## **Lab 05**

**Hamza Shahid**

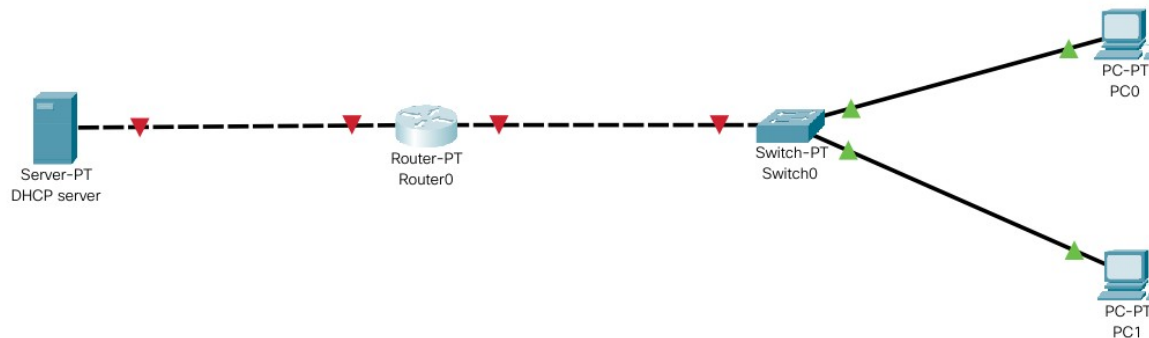
**20P-0117**

**BSSE-5A**

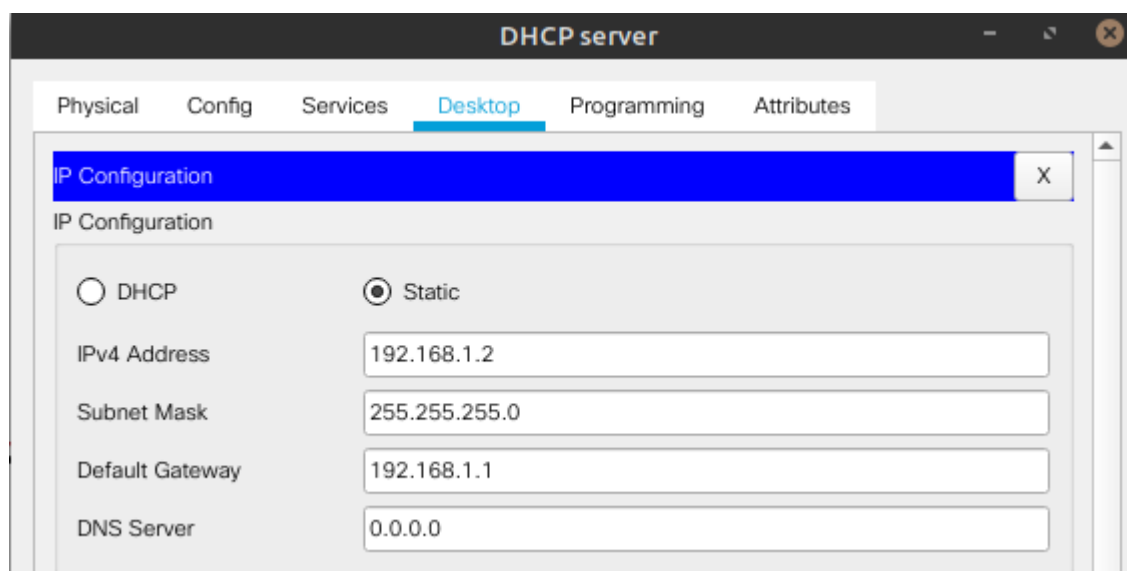
## Task 01:

### Steps:

- First make this protocol by drag and drop.



- Then setup the DHCP server.



```
Router(config-if)#interface Fa1/0
Router(config-if)#ip address 192.168.2.1 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#interface Fa0/0
Router(config-if)#ip address 192.168.1.1 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#interface Fa1/0
Router(config-if)#ip helper-address 192.168.1.2
```

**DHCP server**

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: sales

Default Gateway: 192.168.2.1

DNS Server: 192.168.1.2

Start IP Address: 192 168 2 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	192.168.2.1	192.168.1.2	192.168.2.0	255.255.255.0	255	0.0.0.0	0.0.0.0
serverPool	0.0.0.0	0.0.0.0	192.168.1.0	255.255.255.0	255	0.0.0.0	0.0.0.0

☐ Top

- Then turn all the PCs to the DHCP. And the IP will be assigned automatically.

**PC0**

Physical   Config   **Desktop**   Programming   Attributes

**IP Configuration** X

Interface: FastEthernet0

IP Configuration

☒ DHCP   
 ☐ Static   
 DHCP request successful.

IPv4 Address: 192.168.2.2

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::230:F2FF:FE4D:2564

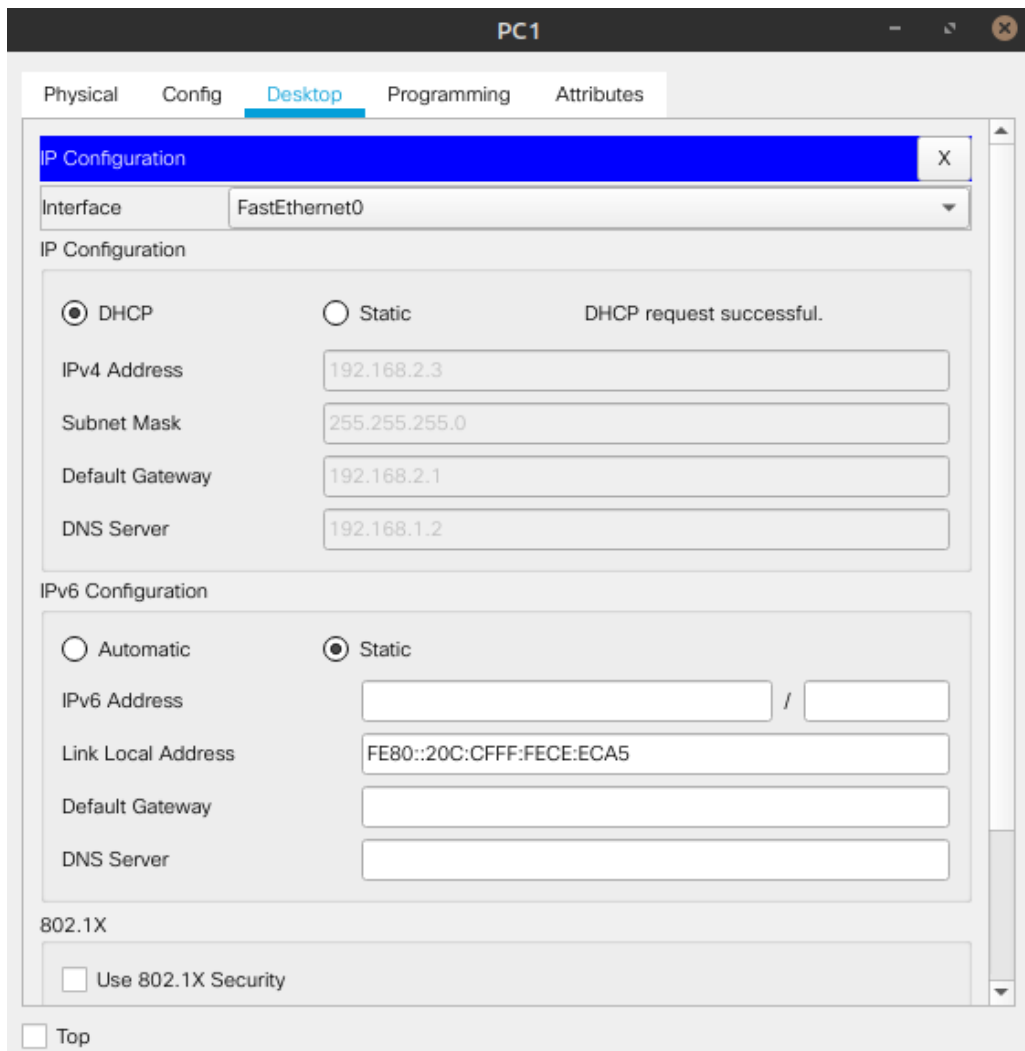
Default Gateway:

DNS Server:

802.1X

☐ Use 802.1X Security

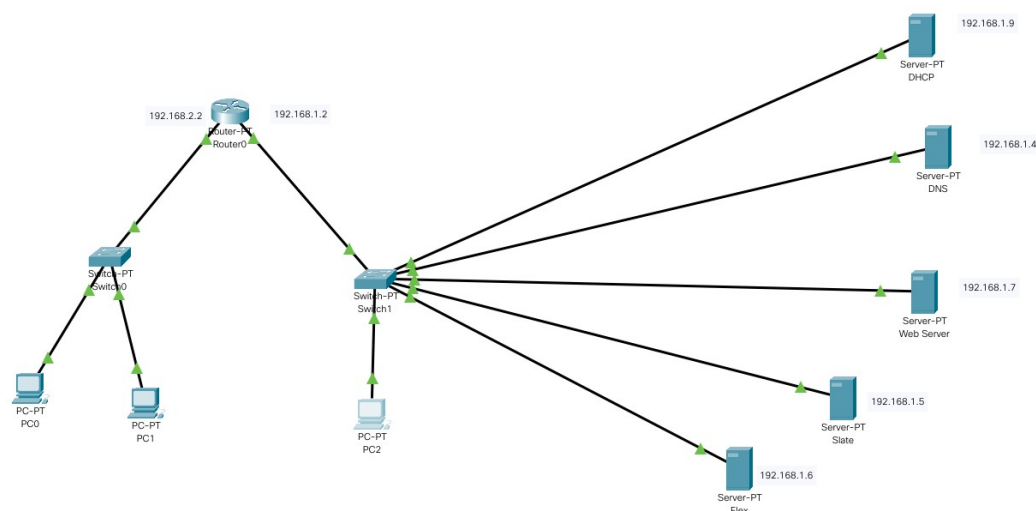
☐ Top



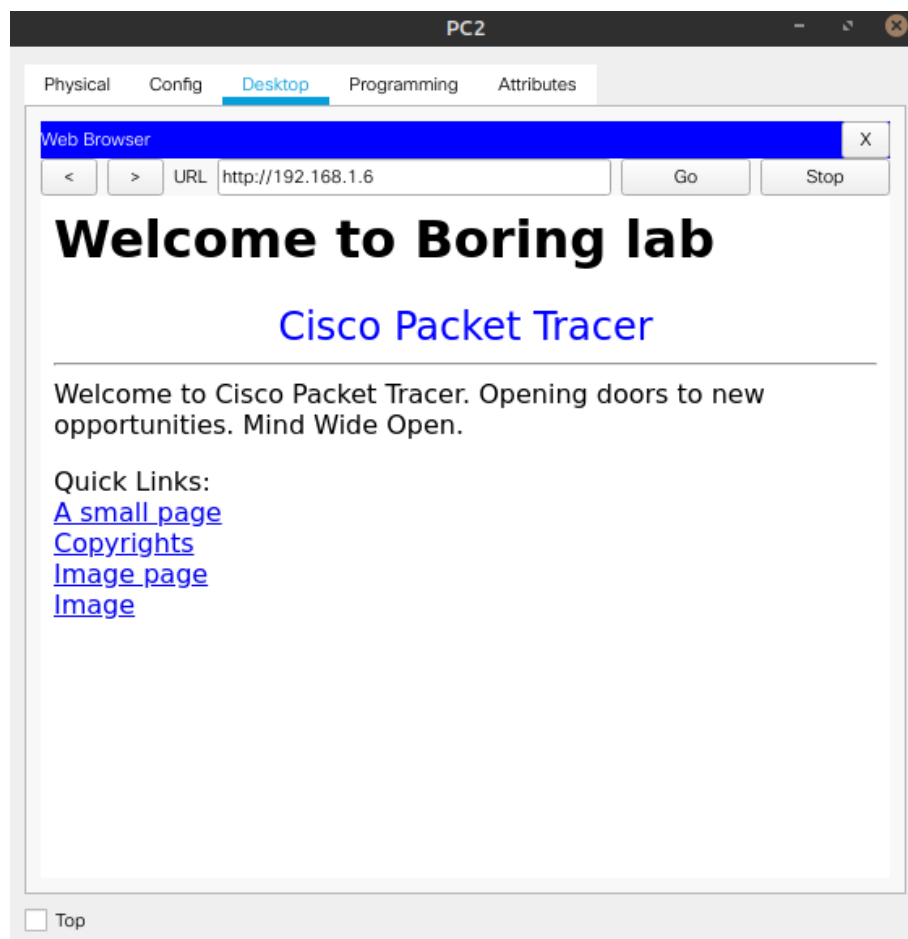
## Task 02:

### Steps:

- First make this protocol by drag and drop as we did in Lab#04.



- Then add Flex and Slate as servers in protocol and assign IP addresses to them.
- Now if you go to PC and access the slate or flex by their IP, you can see the changes you did in their index files.





**(a):**

When we access it with the IP, it directly access the IP without sending request to DNS server.

**(b):**

When we access it with the URL, it sends request to DNS server and then access the desired server.