

CN LAB-5

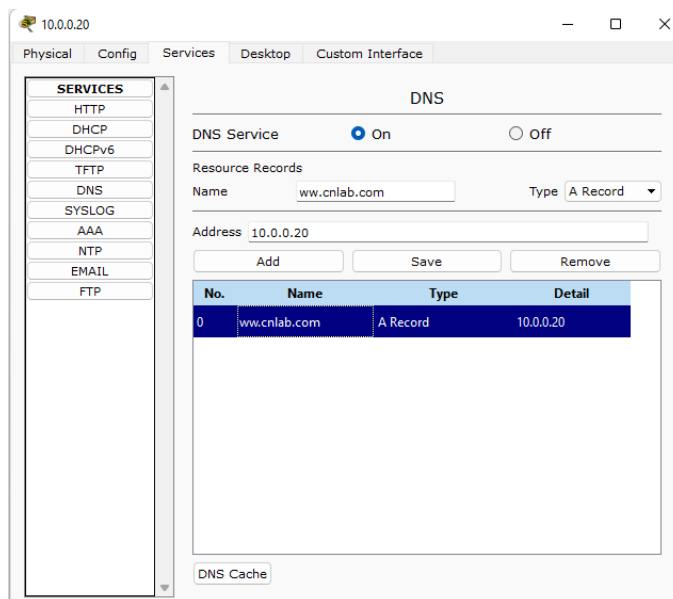
1. Configure http and DNS Server

Create a topology consisting of :1 end device and oner server.

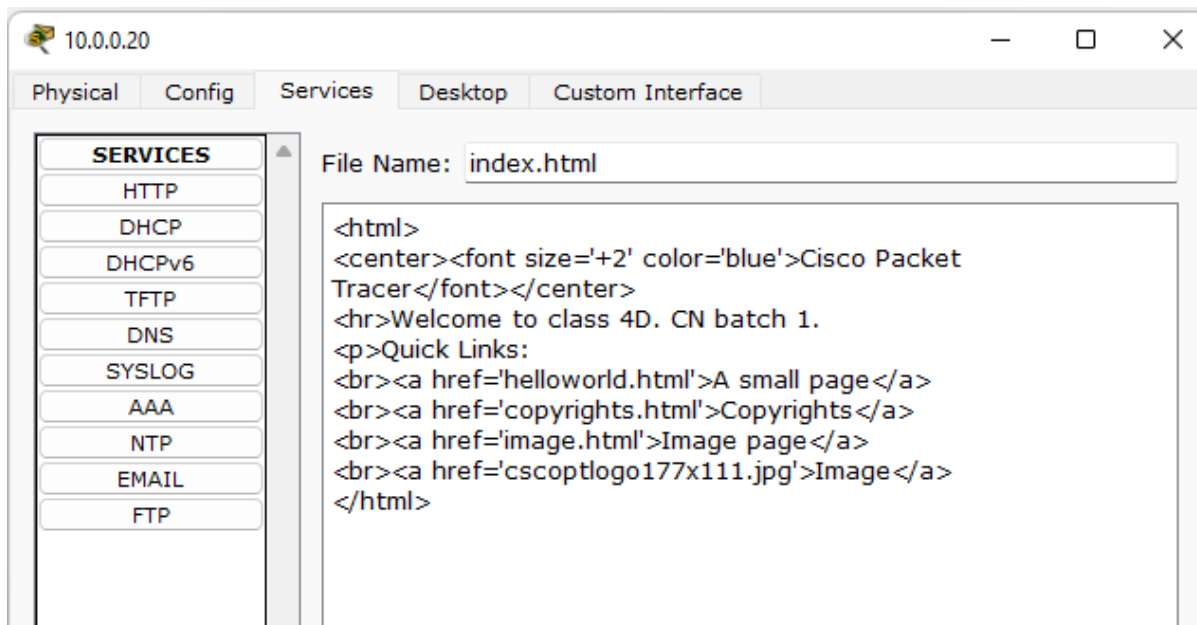
TOPOLOGY:



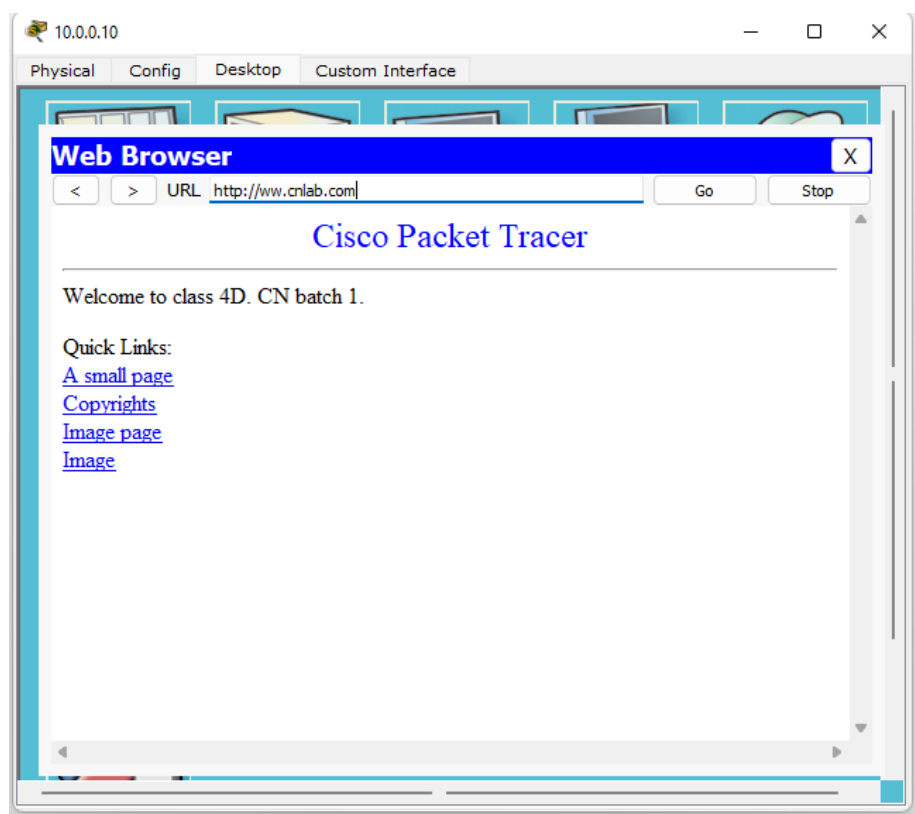
In the server:



Edit the html. Index page(server->services->index.html->edit)

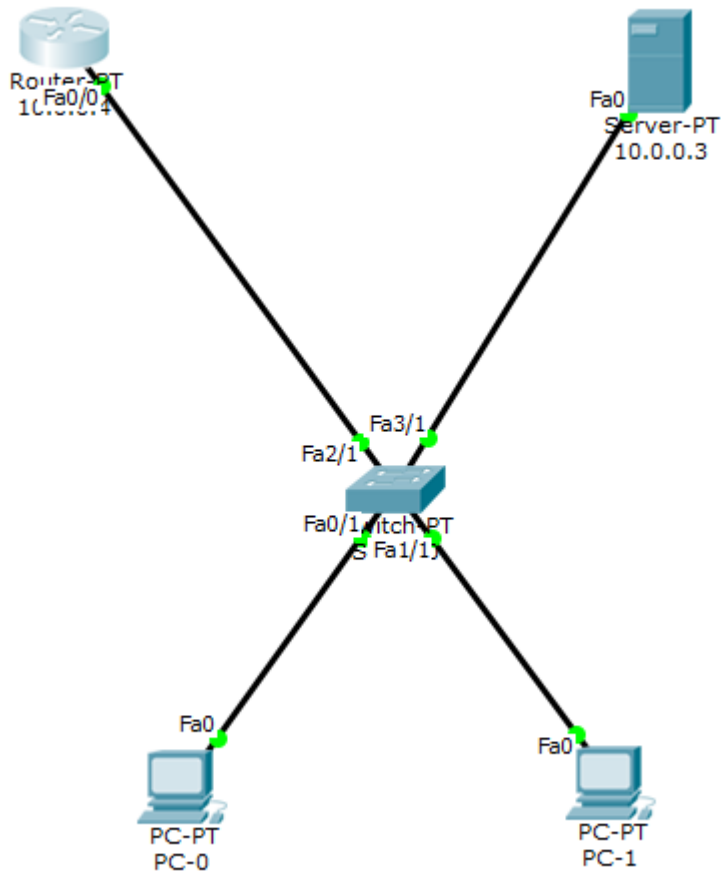


At end device, search from ww.cnlab.com in web browser:



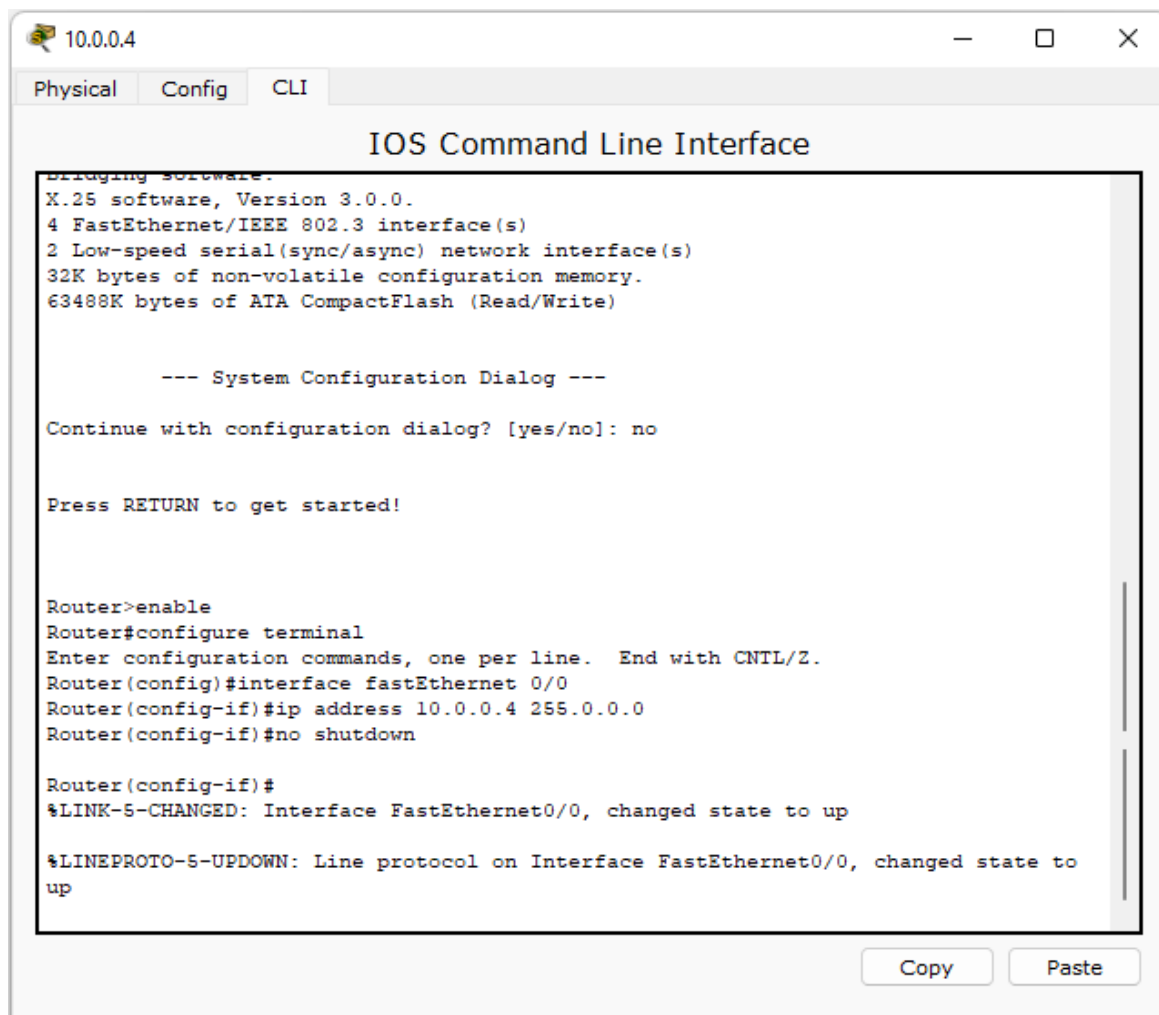
2.Configure DHCP within a LAN.

Topology:

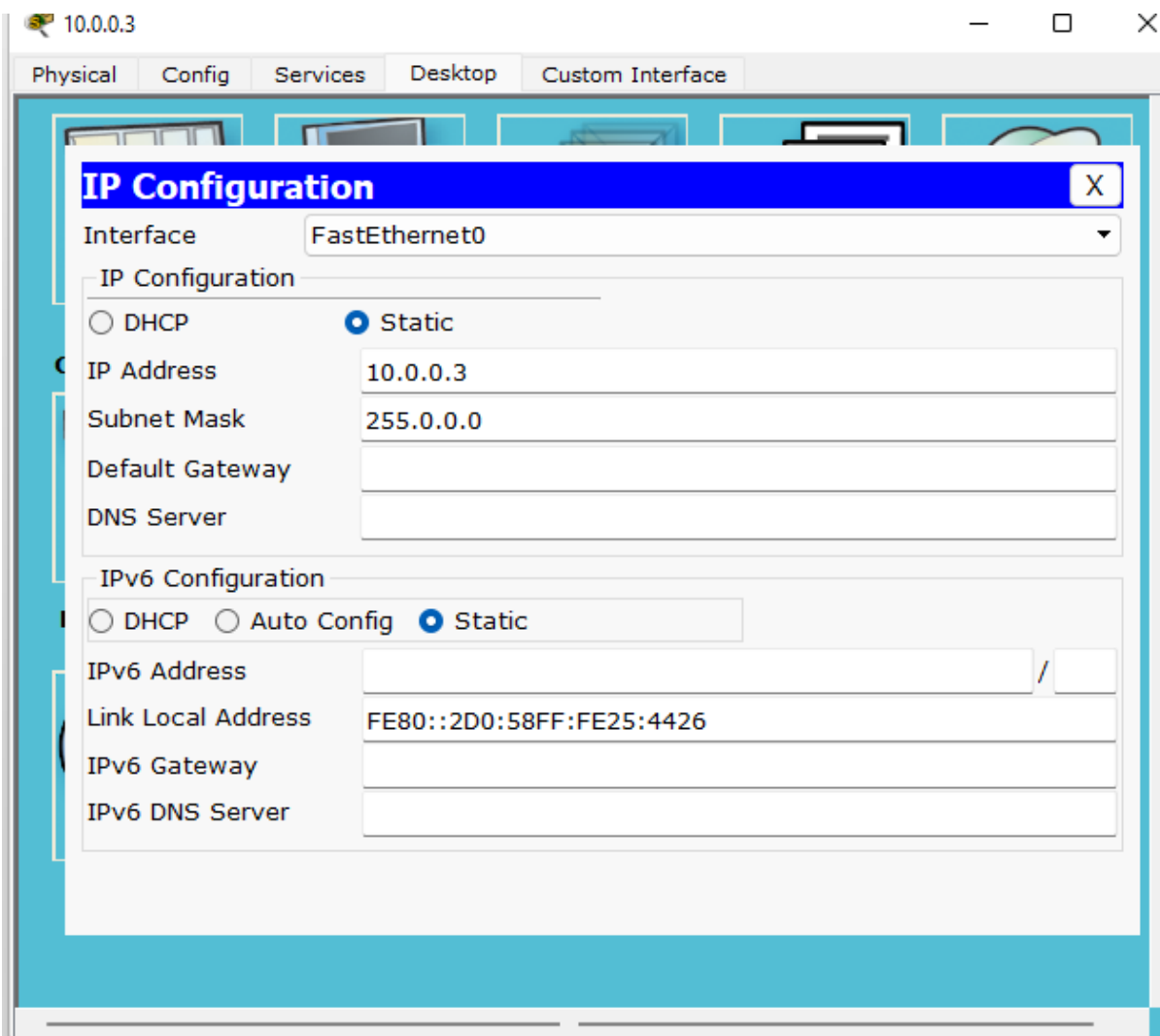


Configure Router and Server ip addresses only:

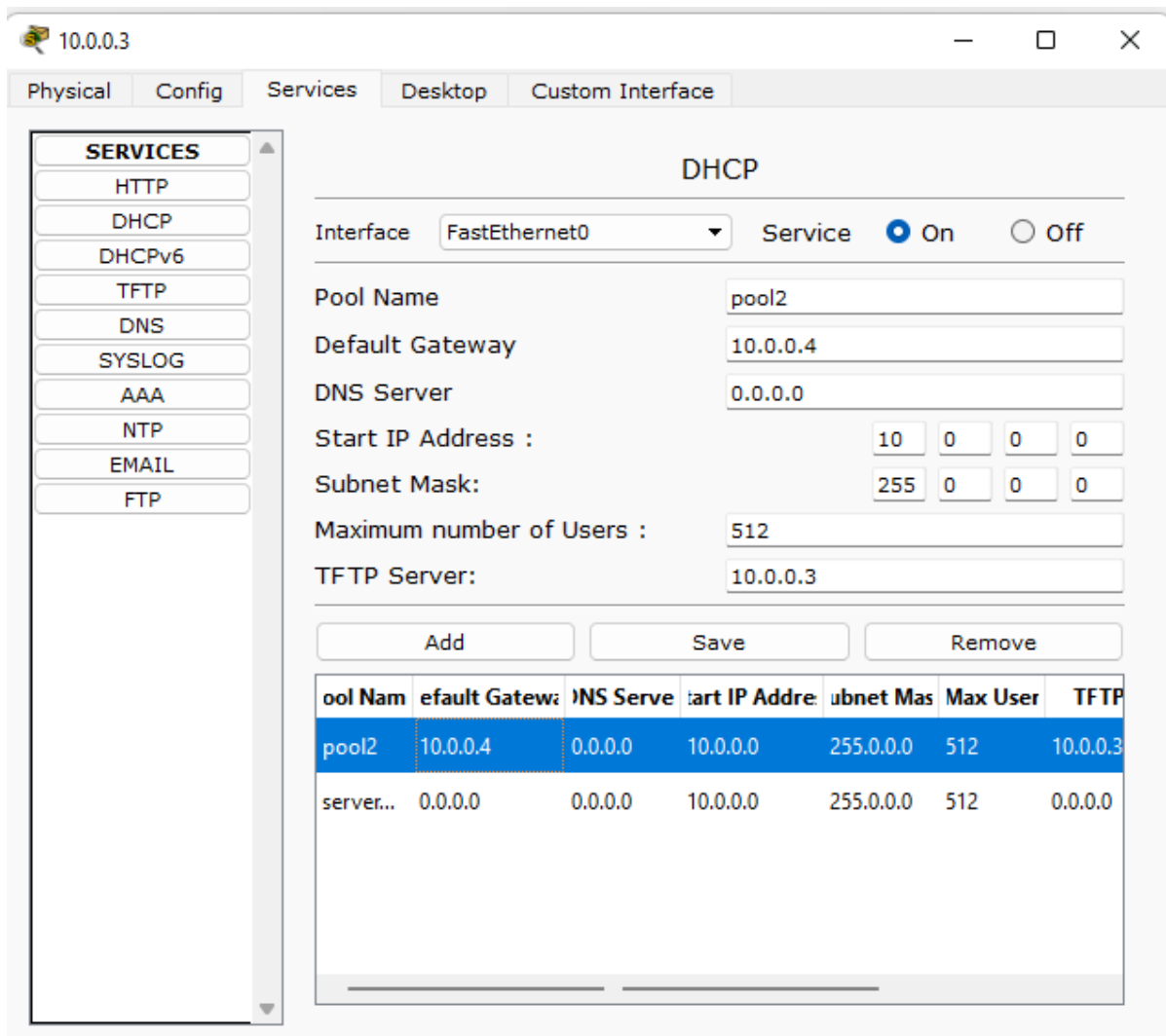
In router CLI(10.0.0.4):



In Server-desktop ip config(10.0.0.3):

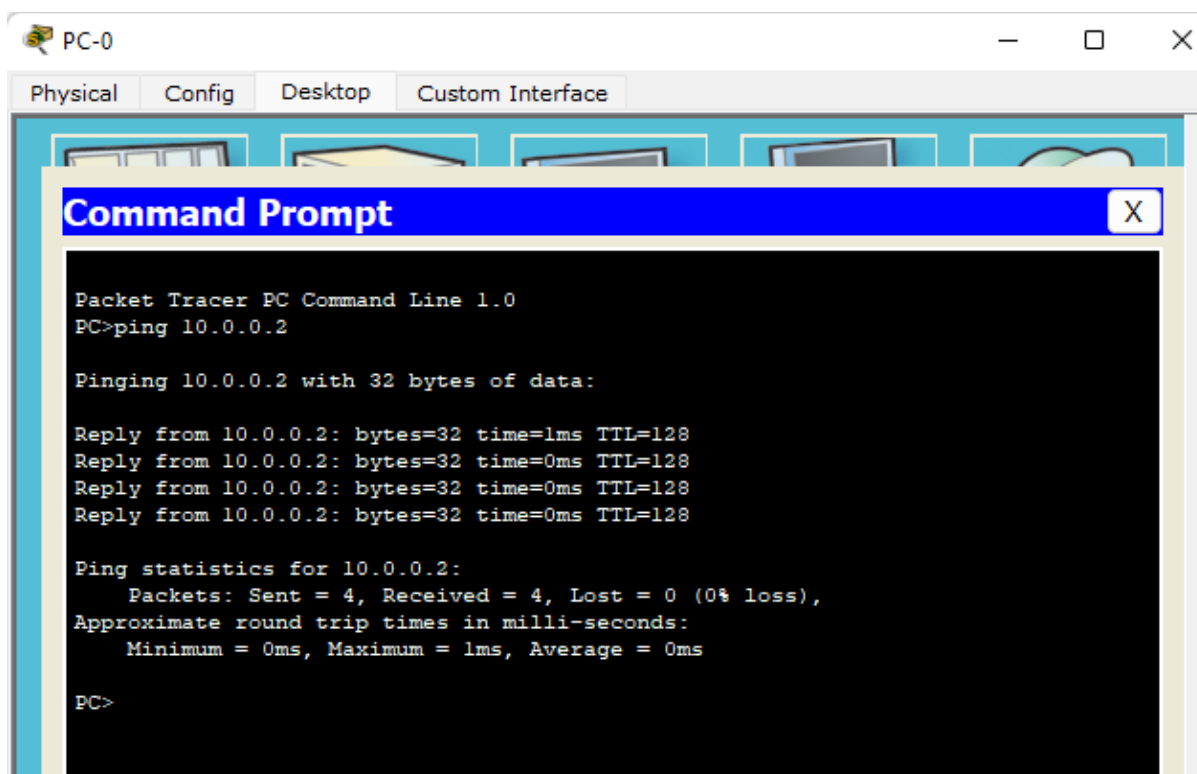


In Server, services, set pool name , default gateway = ip of router . TFTP server = IP of server.



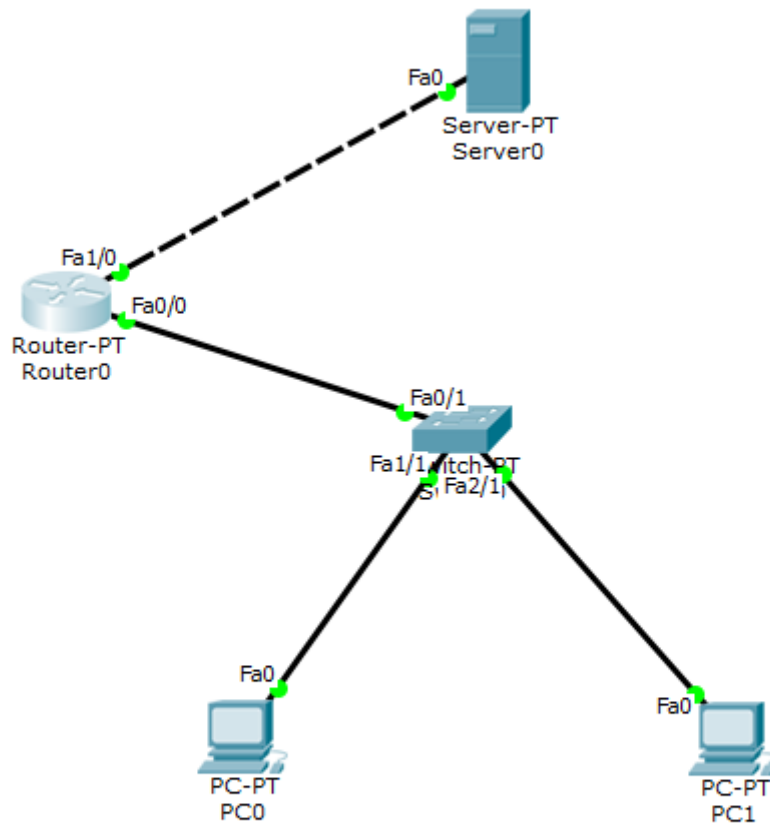
IP for the two end devices get dynamically set:

Pinging from 10.0.0.1(first end device) to 10.0.0.2 (second end device):



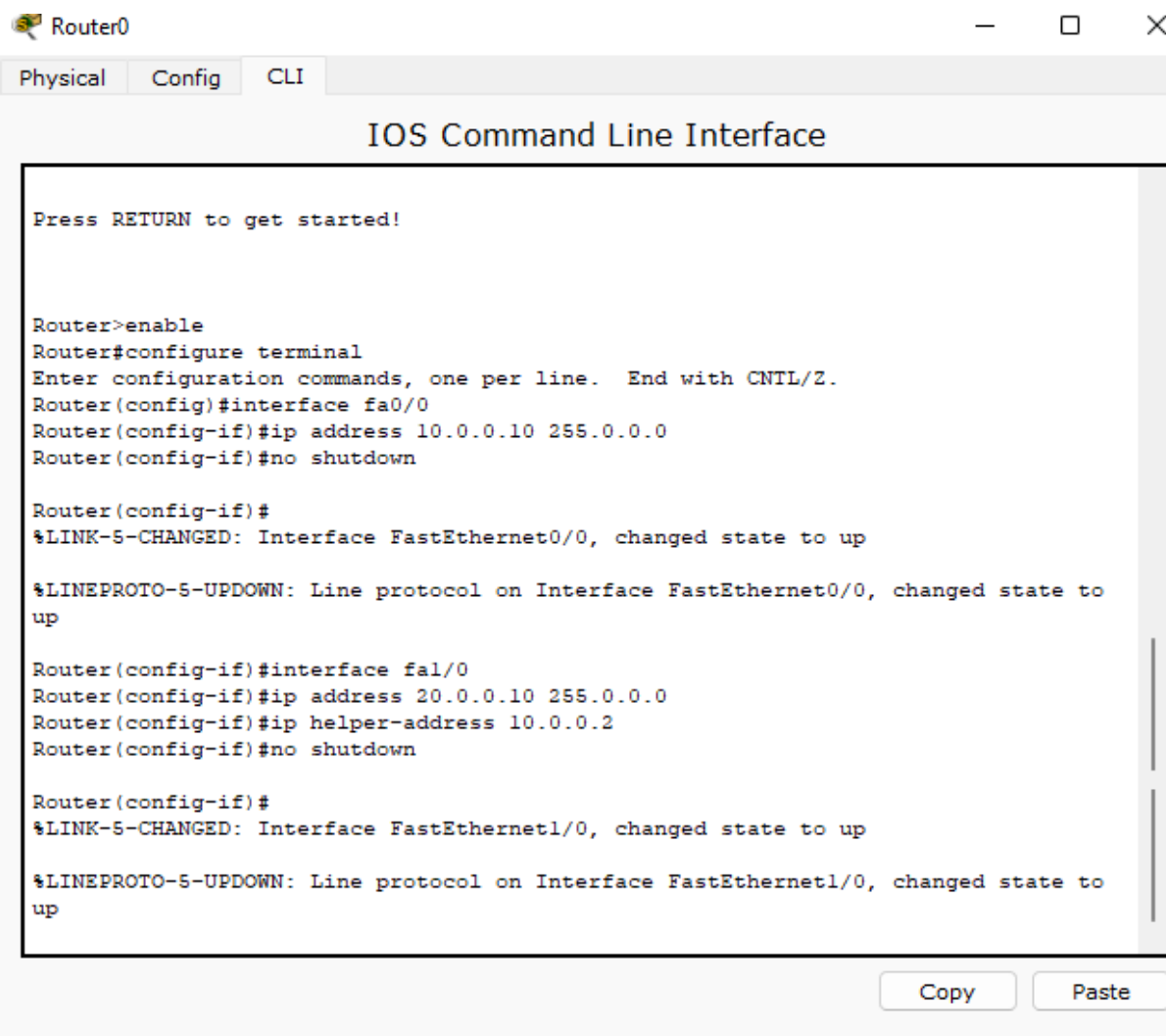
2.Configure DHCP outside a LAN.

Topology:



Configure server ip(10.0.0.2) ,default gateway=ip address of router.

Configure router ip in CLI:



The screenshot shows a window titled "Router0" with three tabs: "Physical", "Config", and "CLI". The "CLI" tab is active, displaying the "IOS Command Line Interface". The interface prompts the user to "Press RETURN to get started!". The user enters the command "enable", followed by "configure terminal". The prompt changes to "Router(config)#". The user enters "interface fa0/0", then "ip address 10.0.0.10 255.0.0.0", and finally "no shutdown". The router responds with two status messages: "%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up" and "%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up". The user then enters "interface fa1/0", followed by "ip address 20.0.0.10 255.0.0.0", "ip helper-address 10.0.0.2", and "no shutdown". The router responds with similar status messages for interface fa1/0. At the bottom of the CLI window, there are "Copy" and "Paste" buttons.

```
Router>enable
Router#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#interface fa0/0
Router(config-if)#ip address 10.0.0.10 255.0.0.0
Router(config-if)#no shutdown

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)#interface fa1/0
Router(config-if)#ip address 20.0.0.10 255.0.0.0
Router(config-if)#ip helper-address 10.0.0.2
Router(config-if)#no shutdown

Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet1/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to
up
```

Configure server default gateway(services->DHCP->pool1,pool 2 set default gateway for both server pools ,both the ip addresses of the router)

Physical Config Services Desktop Custom Interface

SERVICES

HTTP

DHCP

DHCPv6

TFTP

DNS

SYSLOG

AAA

NTP

EMAIL

FTP

DHCP

Interface FastEthernet0 Service ☐ On ☒ OffPool Name pool1Default Gateway 20.0.0.10DNS Server 0.0.0.0Start IP Address : 20 0 0 0Subnet Mask: 255 0 0 0Maximum number of Users : 512TFTP Server: 10.0.0.2

Add

Save

Remove

Pool Name	Default Gateway	DNS Server	Start IP Address	Subnet Mask	Max User	TFTP
pool 2	10.0.0.10	0.0.0.0	10.0.0.0	255.0.0.0	512	10.0.0.2
pool1	20.0.0.10	0.0.0.0	20.0.0.0	255.0.0.0	512	10.0.0.2
server...	0.0.0.0	0.0.0.0	10.0.0.0	255.0.0.0	512	0.0.0.0

Physical Config Services Desktop Custom Interface

SERVICES ▲

HTTP

DHCP

DHCPv6

TFTP

DNS

SYSLOG

AAA

NTP

EMAIL

FTP

DHCP

Interface FastEthernet0 ▾ Service ☐ On ☒ OffPool Name pool 2Default Gateway 10.0.0.10DNS Server 0.0.0.0Start IP Address : 10 0 0 0Subnet Mask: 255 0 0 0Maximum number of Users : 512TFTP Server: 10.0.0.2

Add

Save

Remove

Pool Name	Default Gateway	DNS Server	Start IP Address	Subnet Mask	Max User	TFTP
pool 2	10.0.0.10	0.0.0.0	10.0.0.0	255.0.0.0	512	10.0.0.2
pool1	20.0.0.10	0.0.0.0	20.0.0.0	255.0.0.0	512	10.0.0.2
server...	0.0.0.0	0.0.0.0	10.0.0.0	255.0.0.0	512	0.0.0.0

first PC:

Physical Config Desktop Custom Interface

IP Configuration

IP Configuration

☒ DHCP ☐ Static

IP Address 20.0.0.11

Subnet Mask 255.0.0.0

Default Gateway 20.0.0.10

DNS Server 10.0.0.2

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address /

Link Local Address FE80::205:5EFF:FEC0:8918

IPv6 Gateway

IPv6 DNS Server

second PC:

Physical Config Desktop Custom Interface

IP Configuration

IP Configuration

☒ DHCP ☐ Static

IP Address 20.0.0.12

Subnet Mask 255.0.0.0

Default Gateway 20.0.0.10

DNS Server 10.0.0.2

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address /

Link Local Address FE80::290:CFF:FE80:7D65

IPv6 Gateway

IPv6 DNS Server