

## Lab-5

### Create a topology for DNS

1bm21cs220

The image displays a network topology and configuration for a DNS lab in Cisco Packet Tracer. The topology shows a PC-PT (10.0.0.1) connected to a Server-PT (10.0.0.2) via their Fa0/0 interfaces.

The Server-PT configuration (10.0.0.2) shows the DNS service is enabled. The Resource Records table contains one entry:

No.	Name	Type	Detail
0	www.cnlab.com	A Record	10.0.0.2

The PC-PT configuration (10.0.0.1) shows a Web Browser window displaying the Cisco Packet Tracer welcome page. The File Name field is set to index.html, and the content area shows the HTML code for the page.

A Command Prompt window on the PC-PT shows the results of nslookup commands:

```
C:\Users\Admin>nslookup facebook.com
DNS request timed out.
  timeout was 2 seconds.
Name:    facebook.com
Address:  2a03:2880:f142:182:face:b00c:0:25de

C:\Users\Admin>nslookup bmsce.ac.in
DNS request timed out.
  timeout was 2 seconds.
Server:  bmsce.ac.in
Address:  4.2.2.2

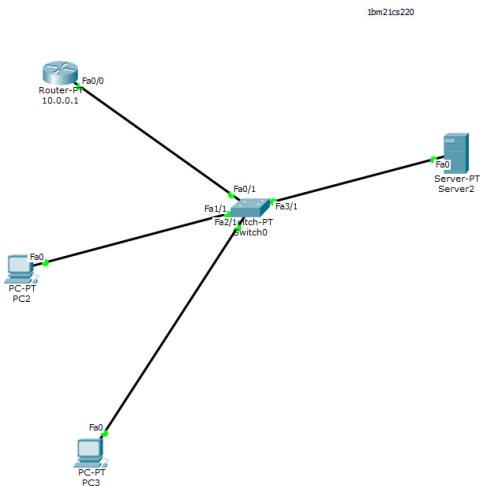
Non-authoritative answer:
Name:    facebook.com
Addresses:  2a03:2880:f142:182:face:b00c:0:25de
           31.13.93.35

C:\Users\Admin>nslookup bmsce.ac.in
DNS request timed out.
  timeout was 2 seconds.
Server:  UnKnown
Address:  4.2.2.2

Non-authoritative answer:
DNS request timed out.
  timeout was 2 seconds.
Name:    bmsce.ac.in
Address:  3.7.81.38

C:\Users\Admin>
```

# CONFIGURE DHCP WITHIN A LAN



```
10.0.0.1
Physical Config CLI

IOS Command Line Interface

Copy Types of Link Configuration (Read/Write)

--- System Configuration Dialog ---
Continue with configuration dialog? [yes/no]: n

Press RETURN to get started!

Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface FastEthernet 10.0.0.1
^
% Invalid input detected at '^' marker.

Router(config)#interface FastEthernet0/0
Router(config-if)#ip address 10.0.0.1 255.0.0.0
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
wexit
Router(config)#
```

10.0.0.2

Physical Config Services Desktop Custom Interface

**SERVICES**

- HTTP
- DHCP
- DHCPv6
- TFTP
- DNS
- SYSLOG
- AAA
- NTP
- EMAIL
- FTP

**DHCP**

Interface: FastEthernet0 Service: ☒ On ☐ Off

Pool Name: serverPool

Default Gateway: 0.0.0.0

DNS Server: 0.0.0.0

Start IP Address: 10.0.0.0

Subnet Mask: 255.0.0.0

Maximum number of Users: 512

TFTP Server: 0.0.0.0

Add Save Remove

Pool Name	Default Gateway	DNS Server	Start IP Address	Subnet Mask	Max User	TFTP
server...	10.0.0.1	10.0.0.2	10.0.0.1	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

PC2

Physical Config Desktop Custom Interface

**IP Configuration**

IP Configuration

☒ DHCP ☐ Static

IP Address: 10.0.0.3

Subnet Mask: 255.0.0.0

Default Gateway: 0.0.0.0

DNS Server:

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address: /

Link Local Address: FE80::2D0:FFFF:FE81:5E83

IPv6 Gateway:

IPv6 DNS Server: