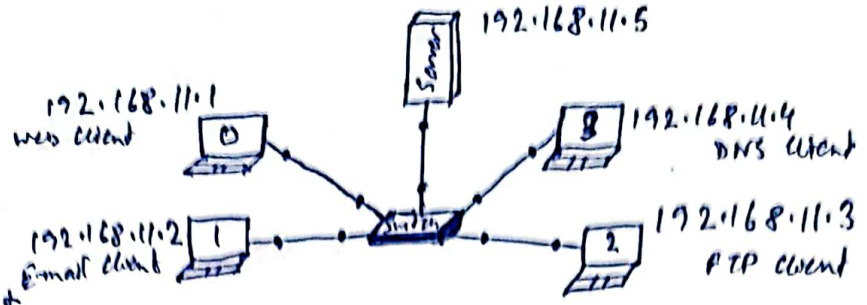
Assignment-11

1. Analyse the performance of TCP & UDP using 4 clients & 1 Server.



DNS client

(1) Set IP Address of each devices. For each PC & server set DNS server IP as 192.168.11.5

(2) Go to Server - Services - DNS tab

Create new record

Resource Record Name - www.google.com

Address - 192.168.11.5

DNS service - ON

HTTP tab - File Manager - index.html

See HTTP & HTTPS is on

click edit - delete existing content

create own content

```
<html>
Welcome to my page
</html>
```

click save - Yes

(3) Click DNS client PC 8

command prompt ↴

PC > nslookup www.google.com

shows ip address of server

show dns client can connect will server.

Web Browser

↳ URL - www.google.com - Go - see html content

Welcome to my page

Web Client

(1) PC0 - Email - configure mail rohit

Name, email - entered. rohit@gmail.com

Incoming, outgoing mail server - 192.168.11.5

Login information - username - rohit
Password - cisco
} Save

Email clients

PC - email - configure mail.
Enter another Name, email. krishna
krishna@gmail.com
incoming outgoing mail server - 192.168.11.5
login information - Username - krishna } save
Password - abcd

Multiserver

- services - Email
- switch ON SMTP service, POP3 service

Domain Name : gmail.com set

Add two different username & password set from web & email clients.

Now we want to send mail from PC0 to PC1

PC0 - Email - compose - compose Mail.
enter to as mailid of email clients.
enter subject as Hi
Type body as clock send
PC1 - email - receive - click index
sel - msg sent
check whether whether command is possible between PC1 to PC0.

- configures working of PC0 & PC1.

FTP Client

Multiserver - services - FTP
set username - admin
password - admin
click - write, Read, Delete, Rename, List,
click Add
FTP client (PC3)
→ command prompt
ftp www.google.com.
username : } enter the set username & password
password : } (admin, admin)

we get ftp command prompt.
go to → text editor of PC3

type hi
hello
how are you
} Close & Save
filename. test.txt

Now again command prompt

ftp > put. test.txt

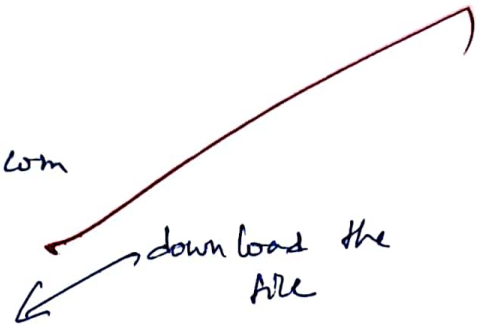
ftp > dir - checks whether file is there or not

19 test.txt

thus completed upload of file into server.

DNS client PC2
command prompt.

PC > ftp www.google.com
username : admin
username : admin



ftp > get test.txt

Transfer complete - 19 bytes

ftp > dir

19. test.txt

Therefore we transferred file from one client node to another client node.

Simulation Mode

We keep simulation panel open.

① Server - Desktop - command prompt

server > ping 192.168.11.1 ↵

see packets in simulation panel

② Web client - Desktop - Email

compose To krishna@gmail.com
subject hi
body hi ← send

Two TCP packets in simulation panel.

(3) Email client – Desktop – Email – Receive

Two TCP packets formed.

(4) FTP – Command prompt

ftp> put test.txt

One FTP packet formed

Click capture in simulation panel - see packet transfer.

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