

ABHISHEK SHARMA

CS 2ND YEAR

SECTION : "I"

ROLL NO.: 01

ENROLLMENT NO.: 12019009001127

COMPUTER NETWORKS LAB 8

WEEK : 8

ASSIGNMENT : 8

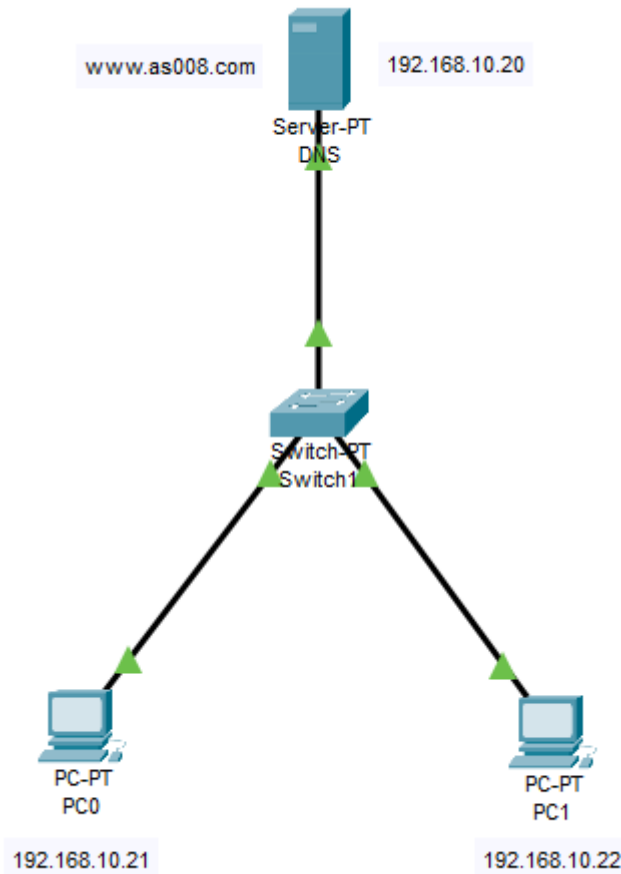
Experiment 7 & 8

PLATFORM USED : CISCO PACKET TRACER 7.2

DATE : 01.04.2021

**UNIVERSITY OF ENGINEERING & MANAGEMENT, KOLKATA
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**

Q1. Configure the DNS Server using Packet Tracer Software.



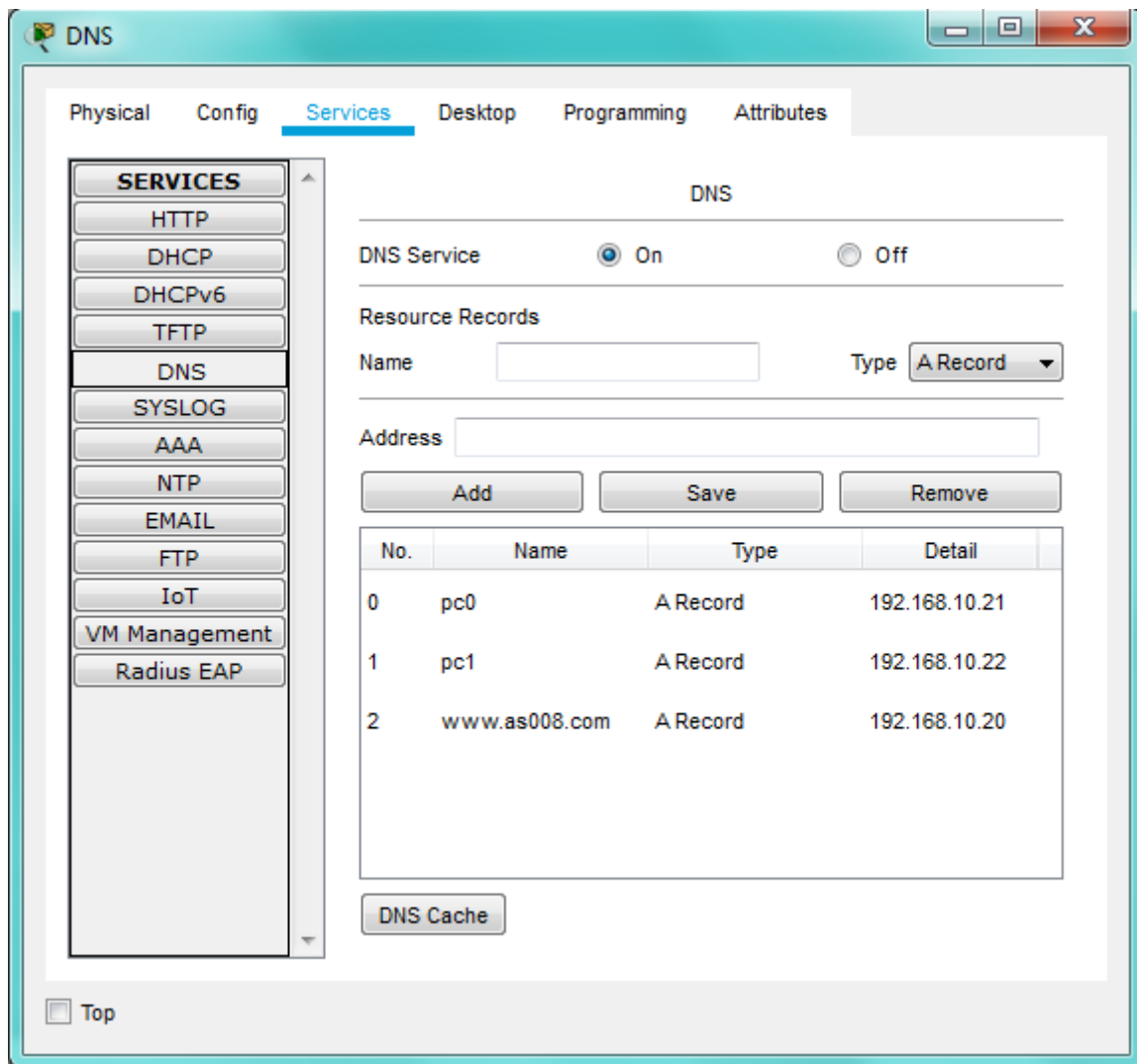
IP address for PC0 : 192.168.10.21
IP address for PC1 : 192.168.10.22
IP address for DNS server : 192.168.10.20
Subnet mask : 255.255.255.0

By providing the domain name we can easily contact the server by using the domain name instead of the IP address.

Same goes to PC0 and PC1, we have renamed the end devices with their IP addresses and contact with both of them using the domain name.

Naming the server using a server name and domain name and also configuring the server with its IP address :

IP Configuration	
IP Configuration	
<input type="radio"/> DHCP	<input checked="" type="radio"/> Static
IPv4 Address	192.168.10.20
Subnet Mask	255.255.255.0
Default Gateway	0.0.0.0
DNS Server	0.0.0.0



Checking the ping command from PC0 :

```
C:\>ping www.as008.com

Pinging 192.168.10.20 with 32 bytes of data:

Reply from 192.168.10.20: bytes=32 time=11ms TTL=128
Reply from 192.168.10.20: bytes=32 time<1ms TTL=128
Reply from 192.168.10.20: bytes=32 time<1ms TTL=128
Reply from 192.168.10.20: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.10.20:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 11ms, Average = 2ms





C:\>ping pc1

Pinging 192.168.10.22 with 32 bytes of data:

Reply from 192.168.10.22: bytes=32 time=10ms TTL=128
Reply from 192.168.10.22: bytes=32 time<1ms TTL=128
Reply from 192.168.10.22: bytes=32 time<1ms TTL=128
Reply from 192.168.10.22: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.10.22:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 10ms, Average = 2ms
```

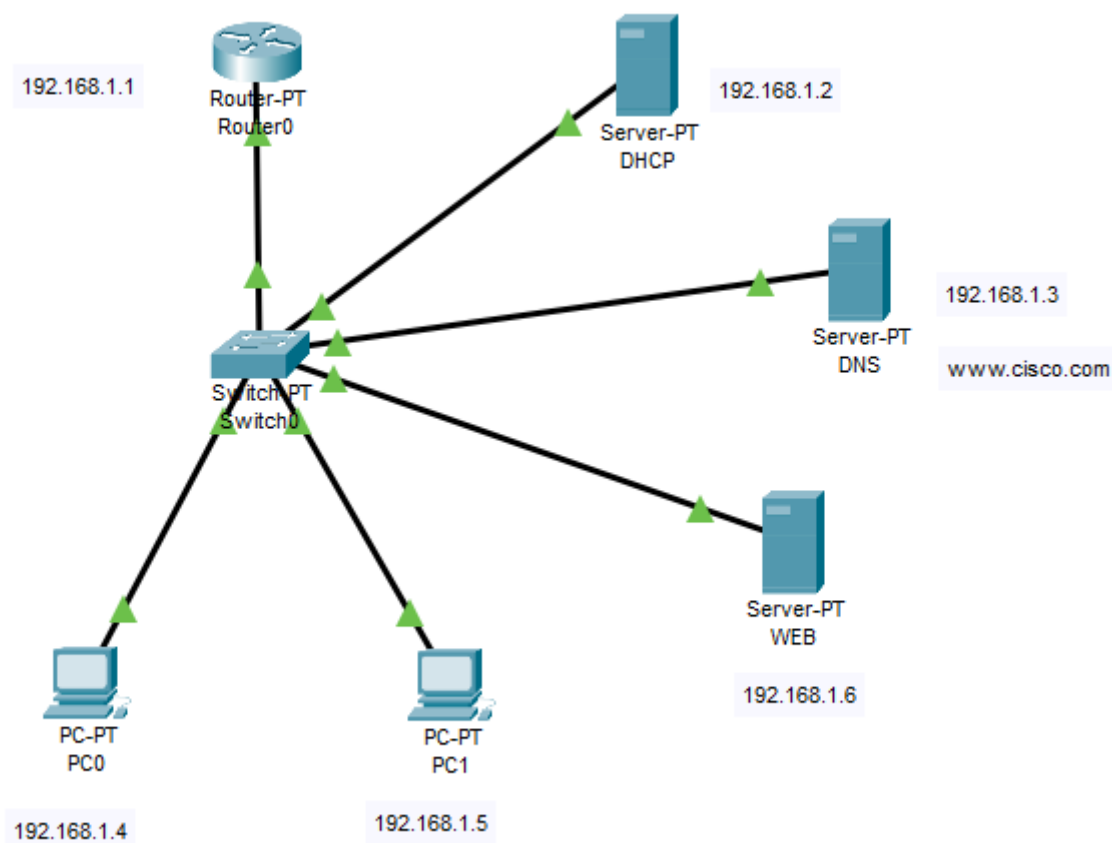
Sending the PDU for checking the successful simulation :

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC0	PC1	ICMP		0.000	N	0	(edit)	(delete)
	Successful	PC1	PC0	ICMP		0.000	N	1	(edit)	(delete)

Conclusion :

The DNS server is deployed successfully and also the simulation is done correctly by checking the PDU status and it shows "Successful".

Q2. Configure Web-server using the Cisco Packet Tracer.



Configuring the router :

GLOBAL	FastEthernet0/0
Settings	Port Status <input checked="" type="checkbox"/> On
Algorithm Settings	Bandwidth <input checked="" type="radio"/> 100 Mbps <input type="radio"/> 10 Mbps <input checked="" type="checkbox"/> Auto
ROUTING	Duplex <input type="radio"/> Half Duplex <input checked="" type="radio"/> Full Duplex <input checked="" type="checkbox"/> Auto
Static	MAC Address 0002.172A.E6BD
RIP	
INTERFACE	
FastEthernet0/0	IP Configuration
FastEthernet1/0	IPv4 Address 192.168.1.1
Serial2/0	Subnet Mask 255.255.255.0
Serial3/0	
	Tx Ring Limit 10

Configuring the DHCP server :

<input type="radio"/> DHCP	<input checked="" type="radio"/> 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

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: 192.168.1.1

DNS Server: 192.168.1.3

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

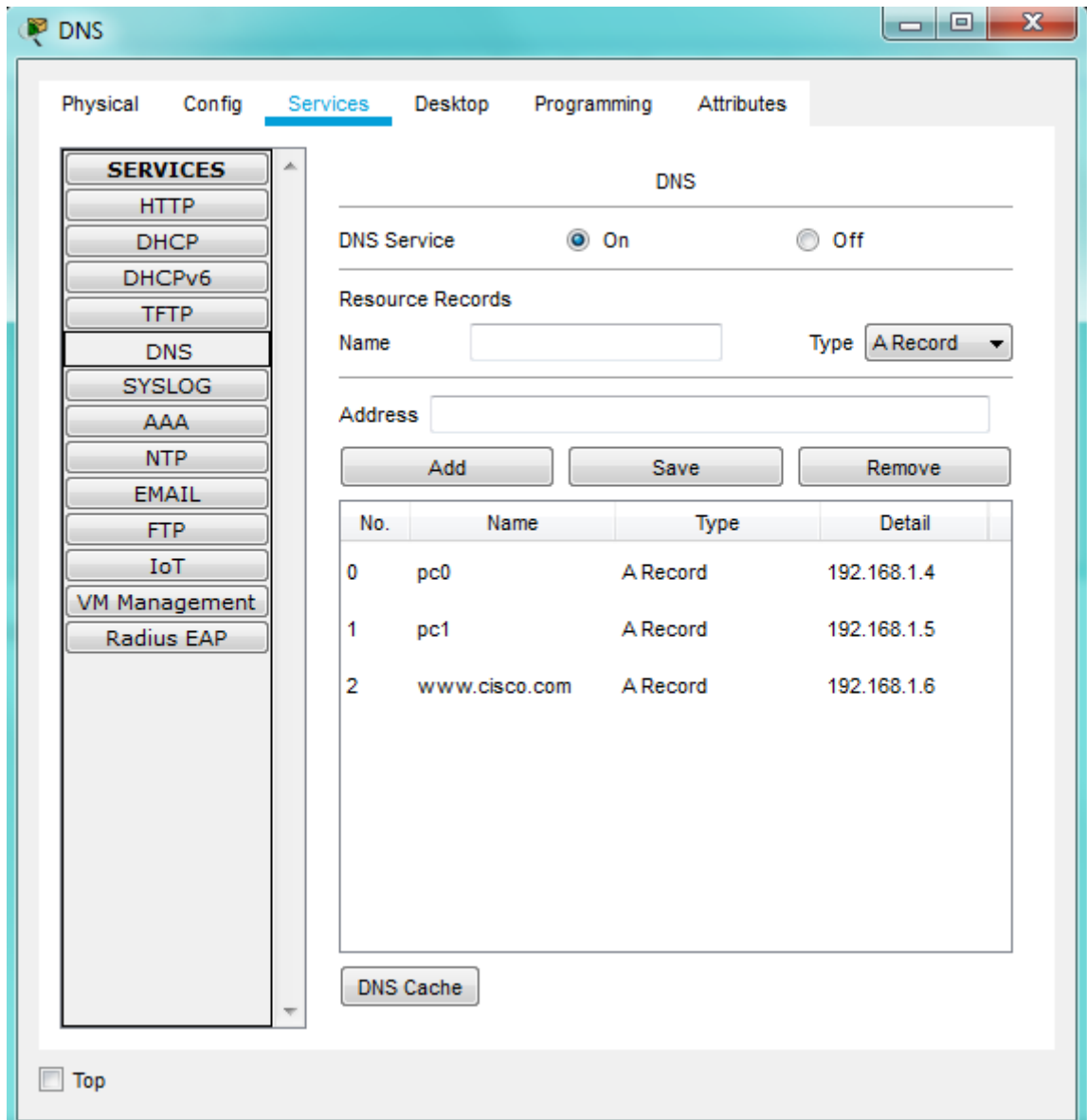
Add Save Remove

Pool Name	Default Gateway	DNS Server	Start IP Address	Subnet Mask	Max User	TFTP Server	WLC Address
serverPool	192....	192....	192....	255....	255	0.0.0.0	0.0.0.0

☐ Top

Configuring the DNS server :

<input type="radio"/> DHCP	<input checked="" type="radio"/> 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



Getting the IPs for PC0 and PC1 using the DHCP :

PC0 :

<input checked="" type="radio"/> DHCP	<input type="radio"/> 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

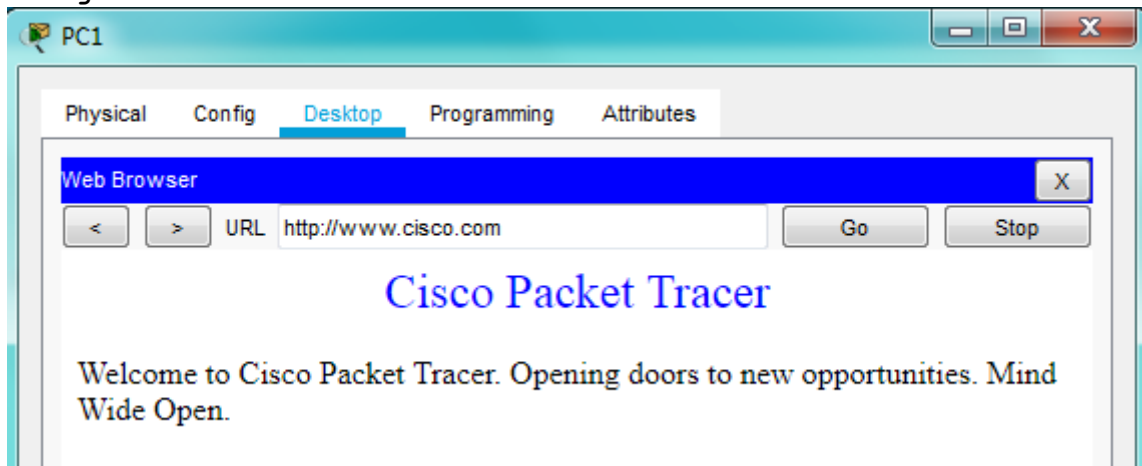
PC1 :

<input checked="" type="radio"/> DHCP	<input type="radio"/> 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

Getting the IP of the web server using the DHCP :

<input checked="" type="radio"/> DHCP	<input type="radio"/> Static
IPv4 Address	192.168.1.6
Subnet Mask	255.255.255.0
Default Gateway	192.168.1.1
DNS Server	192.168.1.3

Now checking the website is working properly using the web browser of the PC1 through web server :



Conclusion :

The web server is deployed successfully, and it is working properly.