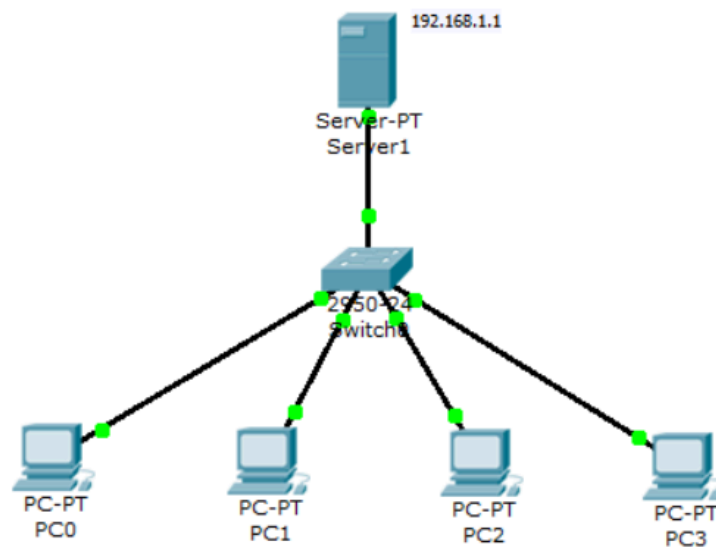


MODERN COMPUTER NETWORK LAB EXPERIMENTS

1. Topology :



2. DHCP Setting :

The screenshot shows the 'Config' tab for 'Server1'. The 'DHCP' service is configured under the 'SERVICES' section. The 'Service' is set to 'On'. The configuration details are as follows:

- Pool Name: serverPool
- Default Gateway: 192.168.1.1
- DNS Server: 0.0.0.0
- Start IP Address: 192.168.1.2
- Subnet Mask: 255.255.255.0
- Maximum number of Users: 254
- TFTP Server: 0.0.0.0

Buttons for 'Add', 'Save', and 'Remove' are visible. Below the configuration fields, a table shows the pool details:

Pool Name	Default Gateway	DNS Server	Start IP Address	Subnet Mask	Maximum Number of Users	TFTP Server
serv...	192.168.1.1	0.0.0.0	192.168....	255.255...	254	0.0.0.0

DHCP Request Successful :

The screenshot shows the 'IP Configuration' window. The 'DHCP' radio button is selected, and the message 'DHCP request successful.' is displayed. The assigned IP configuration is as follows:

- IP Address: 192.168.1.6
- Subnet Mask: 255.255.255.0
- Default Gateway: 192.168.1.1
- DNS Server: 0.0.0.0

MODERN COMPUTER NETWORK LAB EXPERIMENTS

Ping Command :

```
PC>ping 192.168.1.3

Pinging 192.168.1.3 with 32 bytes of data:

Reply from 192.168.1.3: bytes=32 time=73ms TTL=128
Reply from 192.168.1.3: bytes=32 time=32ms TTL=128
Reply from 192.168.1.3: bytes=32 time=48ms TTL=128
Reply from 192.168.1.3: bytes=32 time=33ms TTL=128

Ping statistics for 192.168.1.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 32ms, Maximum = 73ms, Average = 46ms
```

DHCP Packet Flow :

