

DHCP Configuration:

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IBM19CS404

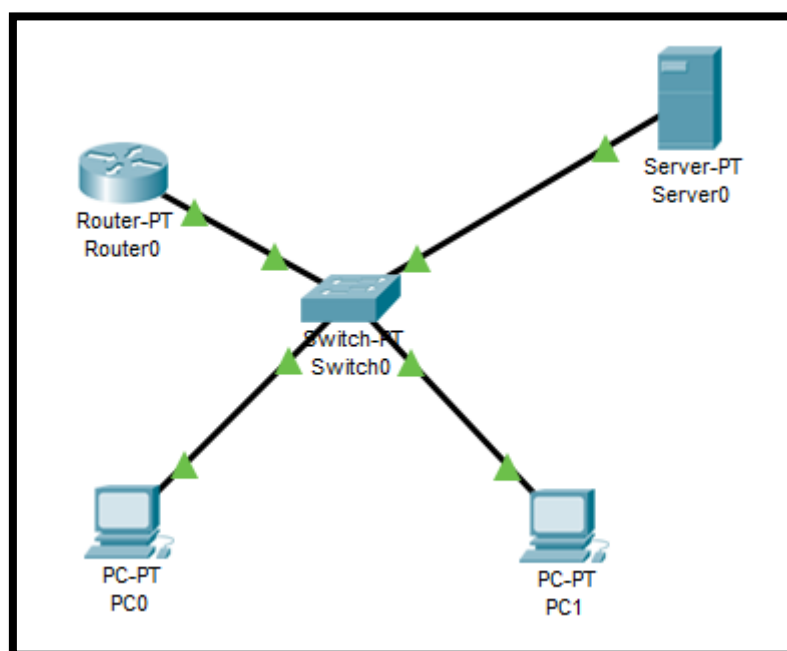
Aim: Configuring DHCP within a LAN in a Packet Tracer.

Procedure:

1. Create a topology as shown in the figure below.
2. Configure the Router fa0/0 interface.
3. Configure the DHCP server, make service '**ON**', PoolName: Give a name to the Pool, Default Gateway: 10.0.0.1, DNS Server: 10.0.0.2 & Start IP Address: 10.0.0.0 & Subnet Mask: 255.0.0.0 & Maximum Number of Users: 512 & TFTP Server: 10.0.0.2 now click on Add Button.
4. Now go to config in Global Settings set Gateway: 10.0.0.1 & DNS: 10.0.0.2 & config → IP Address: 10.0.0.2 & Subnet Mask: 255.0.0.0

Observation: PC0 & PC1 IP Addresses are Dynamically Allocated by the DHCP Server.

Topology:



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DHCP Server config:

The screenshot shows the 'Services' tab for 'Server0'. The 'DHCP' service is selected in the left sidebar. The main configuration area is titled 'DHCP' and includes the following fields:

- Interface: FastEthernet0
- Service: ☒ On, ☐ Off
- Pool Name: serverPool
- Default Gateway: 0.0.0.0
- DNS Server: 0.0.0.0
- Start IP Address: 10.0.0.1
- Subnet Mask: 255.0.0.0
- Maximum Number of Users: 512
- TFTP Server: 0.0.0.0
- WLC Address: 0.0.0.0

Below the configuration fields are 'Add', 'Save', and 'Remove' buttons. A table at the bottom lists the configured DHCP pools:

Pool Name	Default Gateway	DNS Server	Start IP Address	Subnet Mask	Max User	TFTP Server	WLC Address
serverPool1	10.0.0.1	10.0.0.2	10.0.0.0	255.0.0.0	512	10.0.0.2	0.0.0.0

PC0 IP Address Dynamically Allocated:

The screenshot shows the 'Desktop' tab for 'PC0'. The 'DHCP' radio button is selected under the 'IP Address' section. The configuration fields are as follows:

- IP Address: 10.0.0.3
- Subnet Mask: 255.0.0.0
- Default Gateway: 0.0.0.0
- DNS Server: 10.0.0.2

Below the IPv4 configuration is the 'IPv6 Configuration' section, where 'Static' is selected. The fields are:

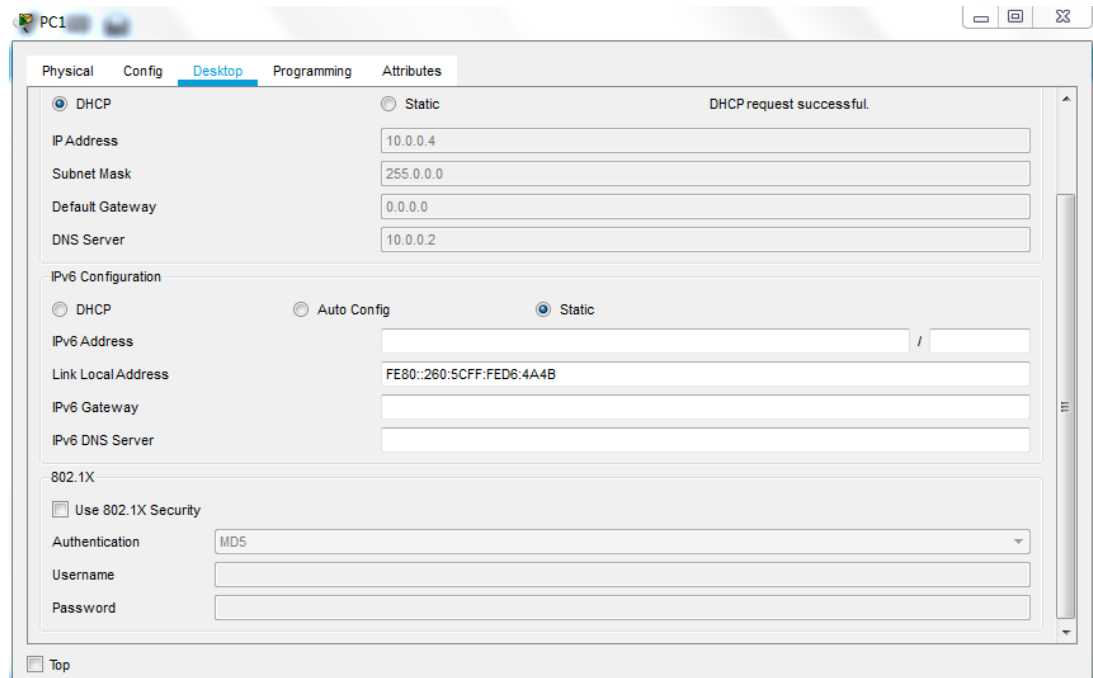
- IPv6 Address: (empty)
- Link Local Address: FE80::206:2AFF:FE00:BE6E
- IPv6 Gateway: (empty)
- IPv6 DNS Server: (empty)

At the bottom is the '802.1X' section, where 'Use 802.1X Security' is unchecked. The 'Authentication' dropdown is set to 'MD5'. The 'Username' and 'Password' fields are empty.

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PC1 IP Address Dynamically Allocated:



Pinging PC1 from PC0:

