

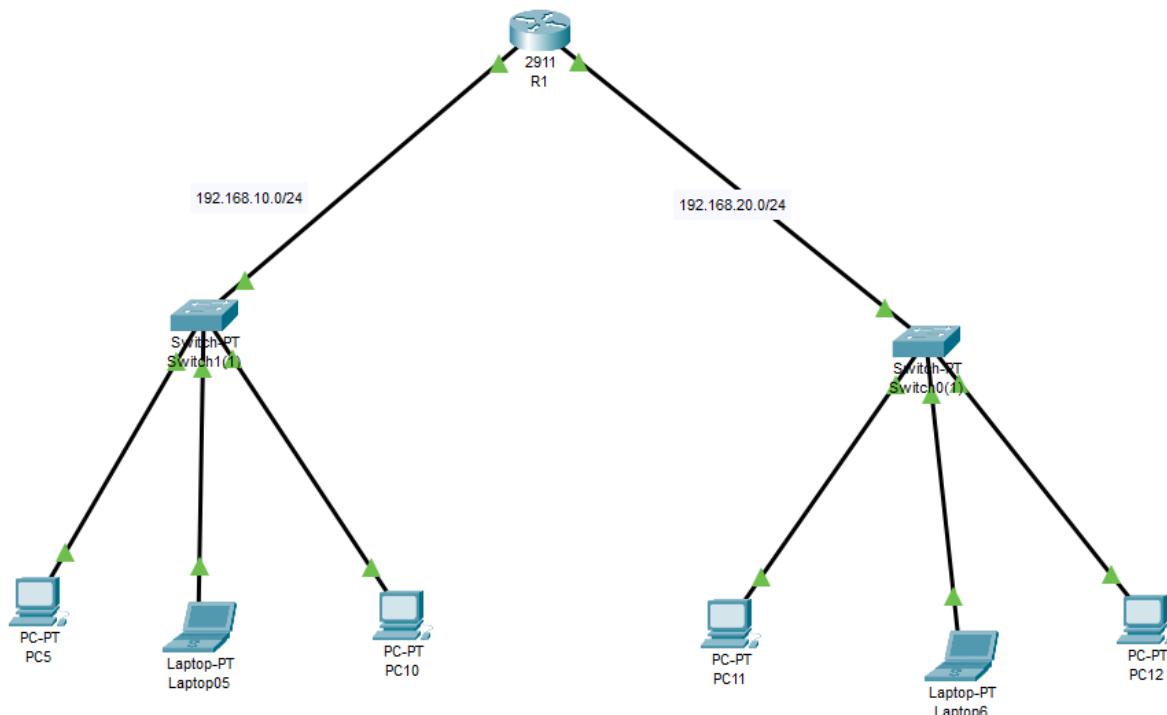
# Lab - Configure DHCP Server

## Lab Objectives:

- Configure and deploy a DHCP server on a network.
- Assign IP addresses dynamically to client devices using DHCP.
- Verify and troubleshoot DHCP server operation and client IP configuration.

A **Dynamic Host Configuration Protocol (DHCP) server** is a network service that automatically assigns IP addresses and other network configuration parameters (such as subnet mask, default gateway, and DNS servers) to devices on a network. This eliminates the need for manual IP address configuration on each device, making network management more efficient and reducing configuration errors.

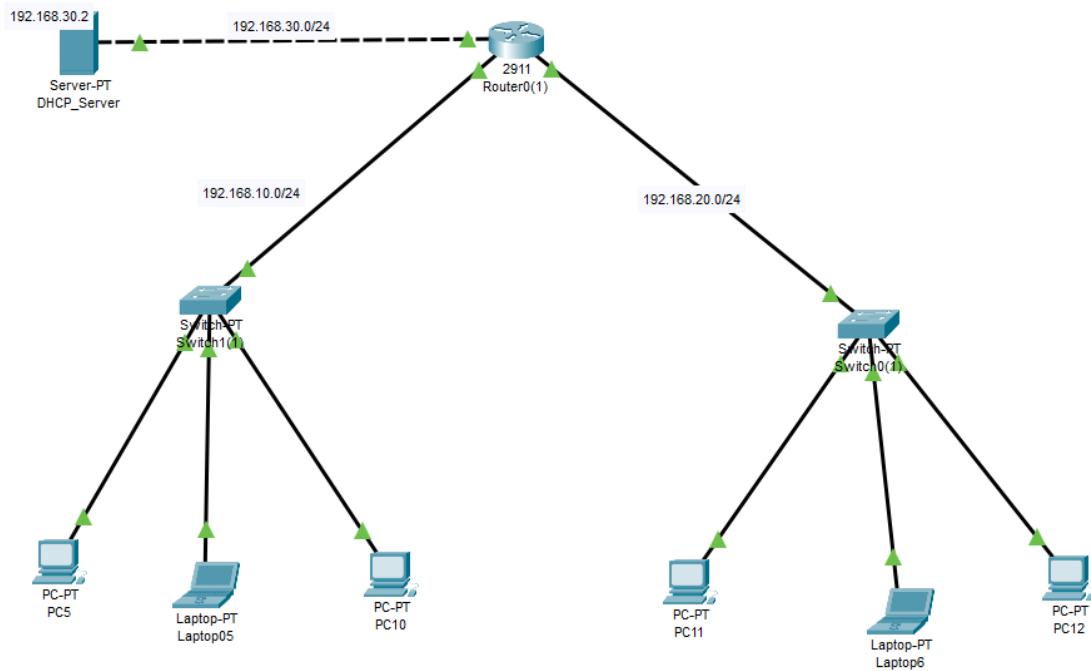
## Task 1: Configure DHCP Server on a Router



Using the provided topology above, perform the following tasks:

- Create the network on the Packet tracer.
- Configure and deploy a DHCP server on R1
- Assign IP addresses dynamically to client devices using DHCP.
- Verify and troubleshoot DHCP server operation and client IP configuration.

## Task 2: Configure DHCP Server



Using the provided topology above, perform the following tasks:

- Create the network on the Packet tracer.
- Configure and deploy a DHCP server on a network
- Assign IP addresses dynamically to client devices using DHCP.
- Verify and troubleshoot DHCP server operation and client IP configuration.