

Packet Tracer - Configure DHCP on a Wireless Router

Objectives

- Connect 3 PCs to a wireless router
- Change the DHCP setting to a specific network range
- Configure the clients to obtain their address via DHCP

Background / Scenario

A home user wants to use a wireless router to connect 3 PCs. All 3 PCs should obtain their address automatically from the wireless router.

Instructions

Part 1: Set up the network topology

- a. Add three generic PCs.
- b. Connect each PC to an Ethernet port to the wireless router using straight-through cables.

Part 2: Observe the default DHCP settings

- a. After the amber lights have turned green, click **PC0**. Click the **Desktop** tab. Select **IP Configuration**. Select **DHCP** to receive an IP address from **DHCP Enabled Router**.

Record the IP address of the default gateway:

- b. Close the **IP Configuration** window.
- c. Open a Web Browser.
- d. Enter the IP address of the default gateway recorded earlier into the URL field. When prompted, enter the username **admin** and password **admin**.
- e. Scroll through the Basic Setup page to view default settings, including the default IP address of the wireless router.
- f. Notice that DHCP is enabled, the starting address of the DHCP range and the range of addresses available to clients.

Part 3: Change the default IP address of the wireless router.

- a. Within the Router IP Settings section, change the IP address to: **192.168.5.1**.
- b. Scroll to the bottom of the page and click **Save Settings**.
- c. If it is done correctly, the web page will display an error message. Close the web browser.
- d. Click **IP Configuration** to renew the assigned IP address. Click **Static**.
Click **DHCP** to receive new IP address information from the wireless router.
- e. Open the web browser, enter the IP address **192.168.5.1** in the URL field. When prompted, enter the username **admin** and password **admin**.

Part 4: Change the default DHCP range of addresses.

- a. Notice the DHCP Server Start IP Address is updated to the same network as the Router IP.
- b. Change the Starting IP Address from 192.168.5.100 to **192.168.5.126**.
- c. Change the Maximum Number of Users to **75**.
- d. Scroll to the bottom of the page and click **Save Settings**. Close the web browser.
- e. Click **IP Configuration** to renew the assigned IP address. Click **Static**.
Click **DHCP** to receive new IP address information from the wireless router.
- f. Select **Command Prompt**. Enter **ipconfig**.

Record the IP address for PC0:

Part 5: Enable DHCP on the other PCs.

- a. Click **PC1**.
- b. Select **Desktop** tab.
- c. Select IP Configuration.

- d. Click **DHCP**.

Record the IP address for PC1:

- e. Close the configuration window.
- f. Enable DHCP on **PC2** following the steps for PC1.

Part 6: Verify connectivity

- a. Click **PC2** and select the **Desktop** tab.
- b. Select Command Prompt.
- c. Enter **ipconfig** at the prompt to view the IP configuration.
- d. At the prompt, enter **ping 192.168.5.1** to ping the wireless router.
- e. At the prompt, enter **ping 192.168.5.127** to ping PC1.
- f. The pings to all devices should be successful.