# Packet Tracer Configure RADIUS

Time required: 60 minutes

## Lab Description

In this project, you’ll configure RADIUS on a new Packet Tracer network. Complete the following steps:

## Activities

1. Open Packet Tracer. Save your project as **Radius**.
2. From the **Network Devices** 🡪 **Wireless Devices** menu, insert a **WRT300N** wireless router.
3. On the wireless router’s **Config** tab, Click LAN 🡪 set the IP address to **192.168.5.1/24**.
4. From the **End Devices** menu, insert a **Laptop.**
5. On the laptop’s Physical tab, replace the Ethernet network module with a wireless module:
   1. Click the laptop’s power button to turn off the laptop.
   2. Drag the PT-LAPTOP-NM-1CFE card from the laptop to the MODULES pane. Zoom in if necessary. The card is labeled "FAST ETH0."
   3. Drag the **WPC300N** module from the MODULES pane to the laptop.
   4. Turn the laptop back on.
   5. A wireless connection is automatically created between the wireless router and the laptop. If not, troubleshoot the problem.

# Wireless Router

Let’s set up some security parameters on the wireless router:

1. On the wireless router’s Config tab on the Wireless page, select **WPA2** **Enterprise** authentication.
2. Set the RADIUS server’s IP address to **192.168.5.2**.
3. Set the shared secret to **networkplus**
4. Make sure the encryption type is **AES**.

# RADIUS Server

Let’s need to create a RADIUS server for authentication.

1. From the **End Devices** menu, insert a **generic server**.
2. On the server’s Config tab on the FastEthernet0 page, set its IP address to **192.168.5.2/24**.
3. What is the subnet mask that /24 represents?

Click or tap here to enter text.

1. On the server’s Services tab, on the AAA page, turn on the AAA service.
2. In the Network Configuration section, add a new client with the following information:
   1. Client Name: **WRouter0**
   2. Client IP: **192.168.5.1**
   3. Secret: **networkplus**
   4. ServerType: **Radius**
   5. Click **Add**.
3. In the **User Setup** section, add a new user with the following information:
   1. Username: **User1**
   2. Password: **cengage**
   3. Click **Add**.
4. Insert a screenshot of the server settings.

Click or tap here to enter text.

1. Using a Copper Straight-Through cable, connect the server’s FastEthernet0 port to the wireless router’s Ethernet 1 port.
2. Has the wireless connection been reestablished?

Click or tap here to enter text.

1. Why do you think this is?

Click or tap here to enter text.

# Laptop

1. On the laptop’s **Config** tab, on the **Wireless0** page, change the following settings:
   1. Authentication: **WPA2**
   2. User ID: **User1**
   3. Password: **cengage**
   4. Close the laptop’s configuration window. The wireless connection should reestablish within a minute or two.
   5. Notice that you didn’t configure the laptop’s user information on the wireless router.
2. How did the router know to accept the laptop as a wireless client based on your username and password?

Click or tap here to enter text.

1. Insert a screenshot showing the wireless connection between the laptop and the router.

Click or tap here to enter text.

1. Save your Packet Tracer file.

## Assignment Submission

Attach this completed document and the Packet Tracer file to the assignment in Blackboard.