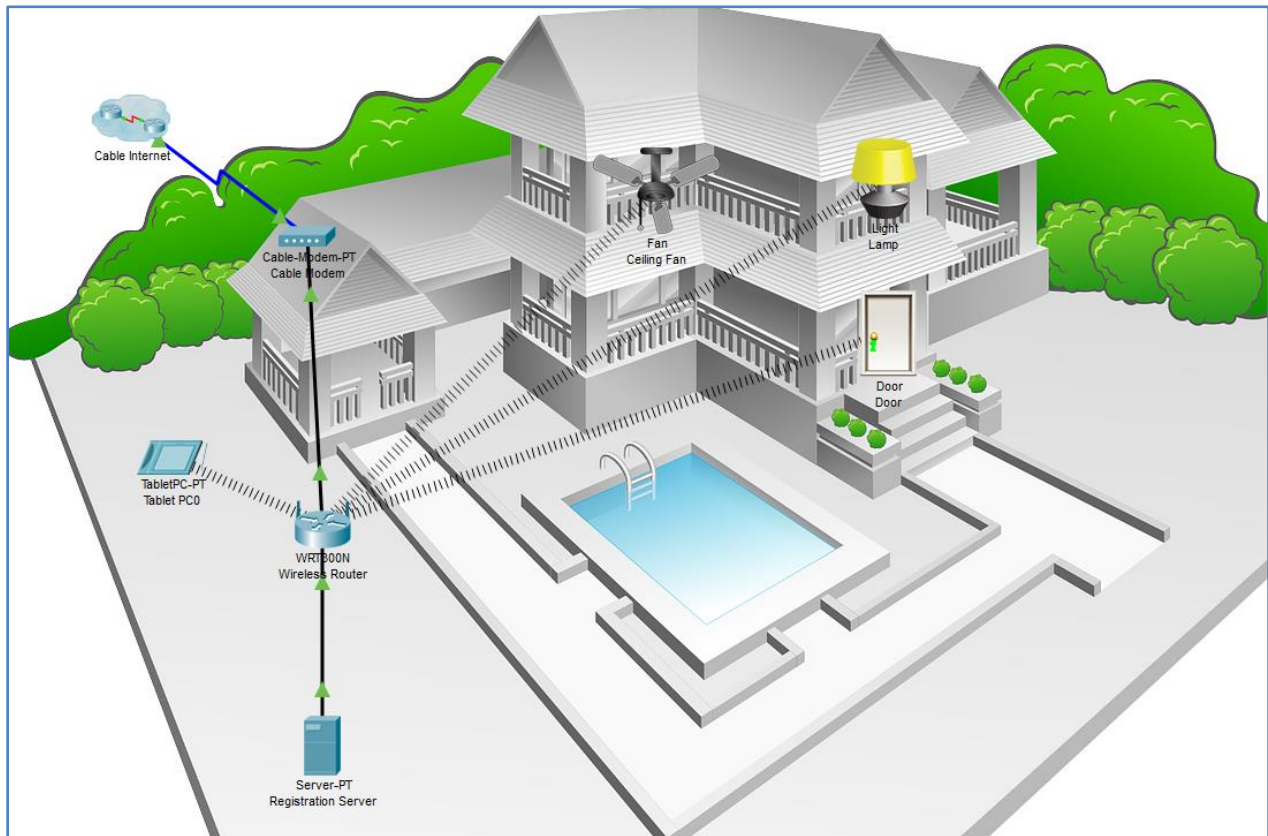# Packet Tracer – Connect IoT Devices to a Registration Server

The Smart Home Network

Objectives

Part 1: Add a Registration Server to the Network

Part 2: Register IoT Devices to the Registration Server

Background / Scenario

In this activity you will add a registration server and several IoT devices to an existing home network and monitor those devices through the registration server.
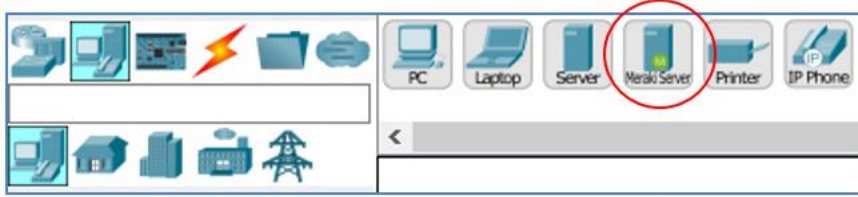
Part 1: Add a Registration Server to the Network

Step 1: Open the Registration_Server.pkt file and save the file to your computer

Step 2: Add a registration server on the network

  a. Place the **Server** end device onto the workspace and connect it to the home gateway.

   Find the **Server** in the **End Devices Selection** box and drag it to the workspace.

b. Connect the server to the wireless router.

Using a copper straight-through cable, connect the server to the wireless router.

c. Enable the registration server service on the server.

Click the server in the workspace to open the configuration window. Click the **Services** tab and then click the **IoT** service in the left pane. Click the "**On**" button to enable the service.
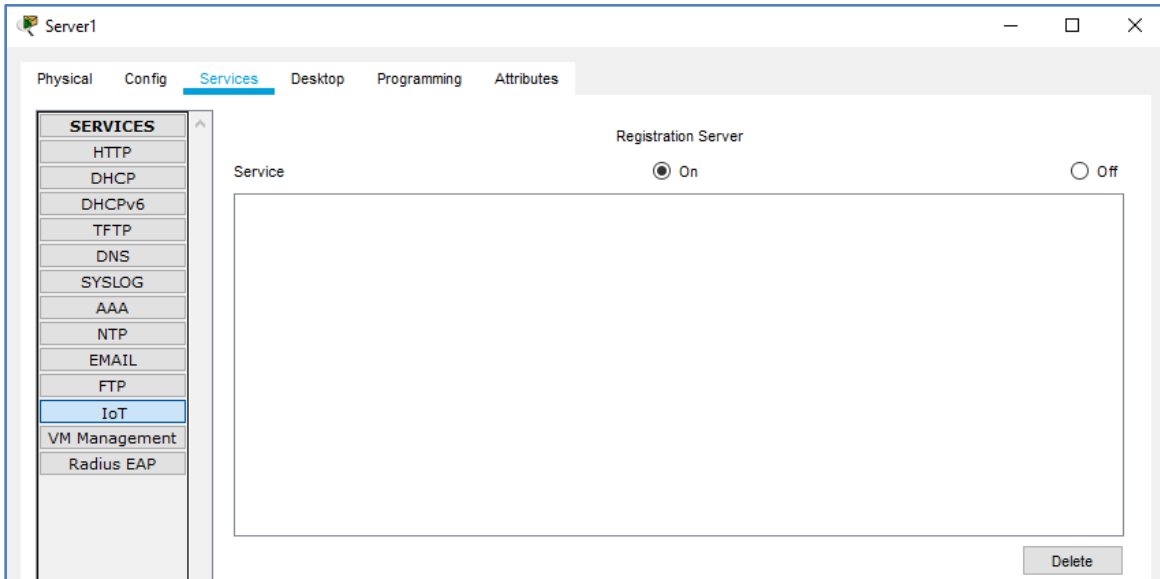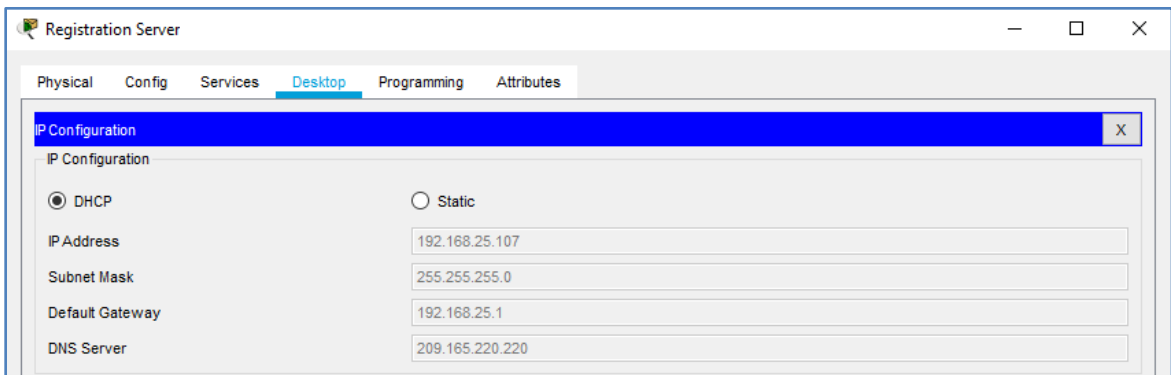

d. Configure the server.

Click the **Config** tab. In the **Global Settings** window change the **Display Name** to **Registration Server** and change the **DHCP/DNS IPv4** setting from the default **Static** to **DHCP**.
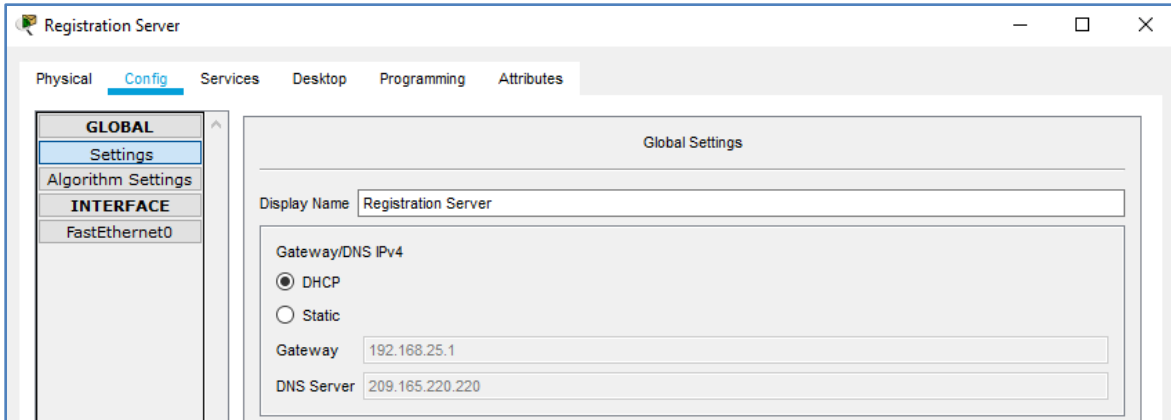
Verify that the server has received an IPv4 address from the home gateway by clicking the **Desktop** tab and then the **IP Configuration** icon.

Note that, in this example, the IPv4 address assigned to the server is 192.168.25.107. Yours may be different.

Close the **Registration Server** window.

Part 2: Register Devices to the Registration Server

Step 1: Create a registration server account

a. Click the **Tablet** icon to open the **Tablet** configuration window. Click the **Web Browser** icon in the **Desktop** tab. Enter the IPv4 address of the **Registration Server** in the **URL** box and then click **Go**.

Because there is no IoT account created yet, one will need to be created. Click the **Sign Up Now** option.
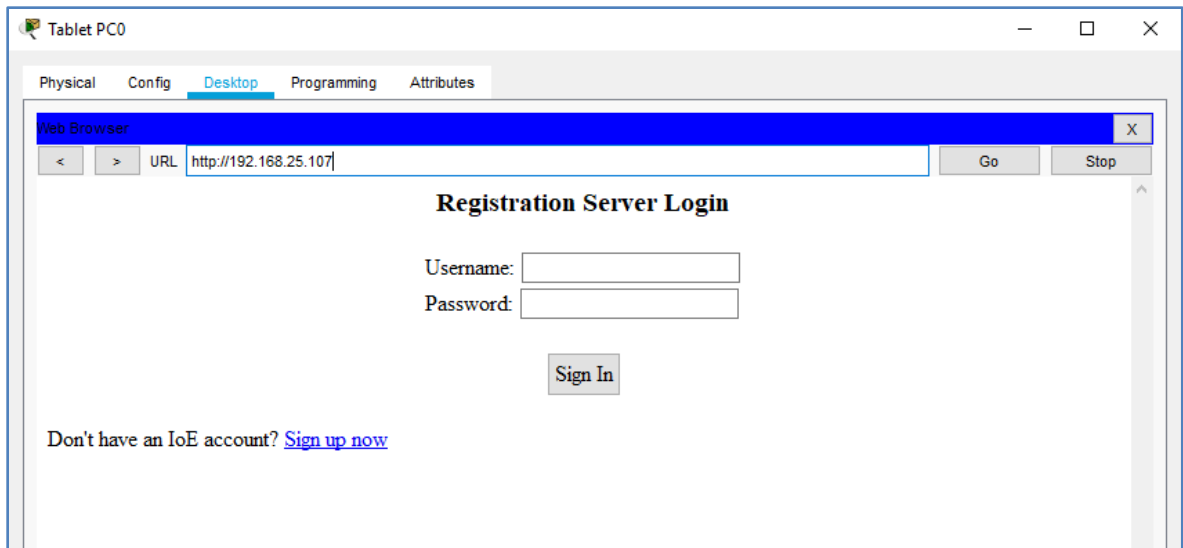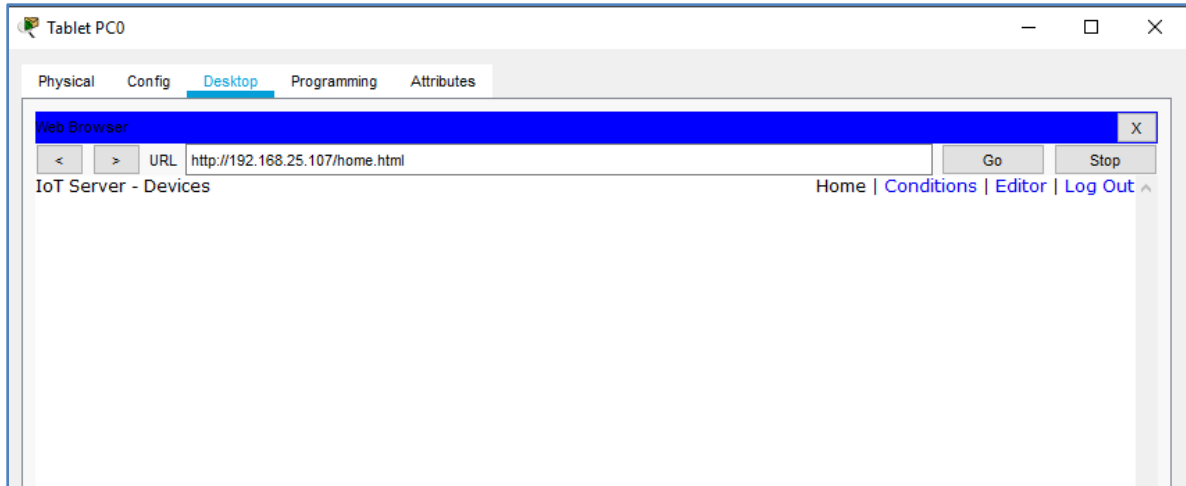
Select a username and password and then click **Create** to create the IoT account.
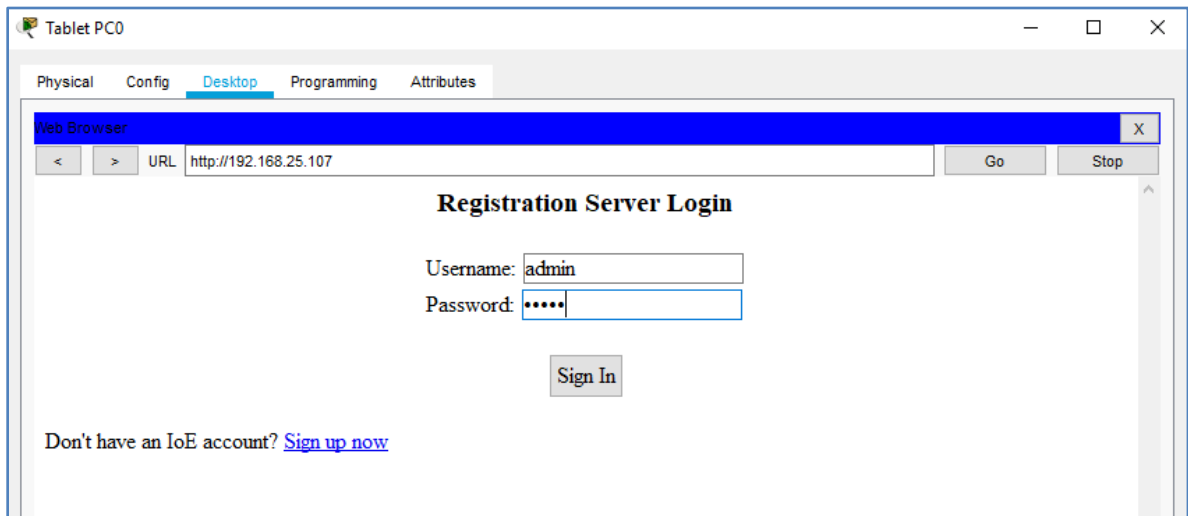
Notice in the **IoT Server – Devices** window there are no IoT devices listed. This is because all the devices are still registered with the home gateway.
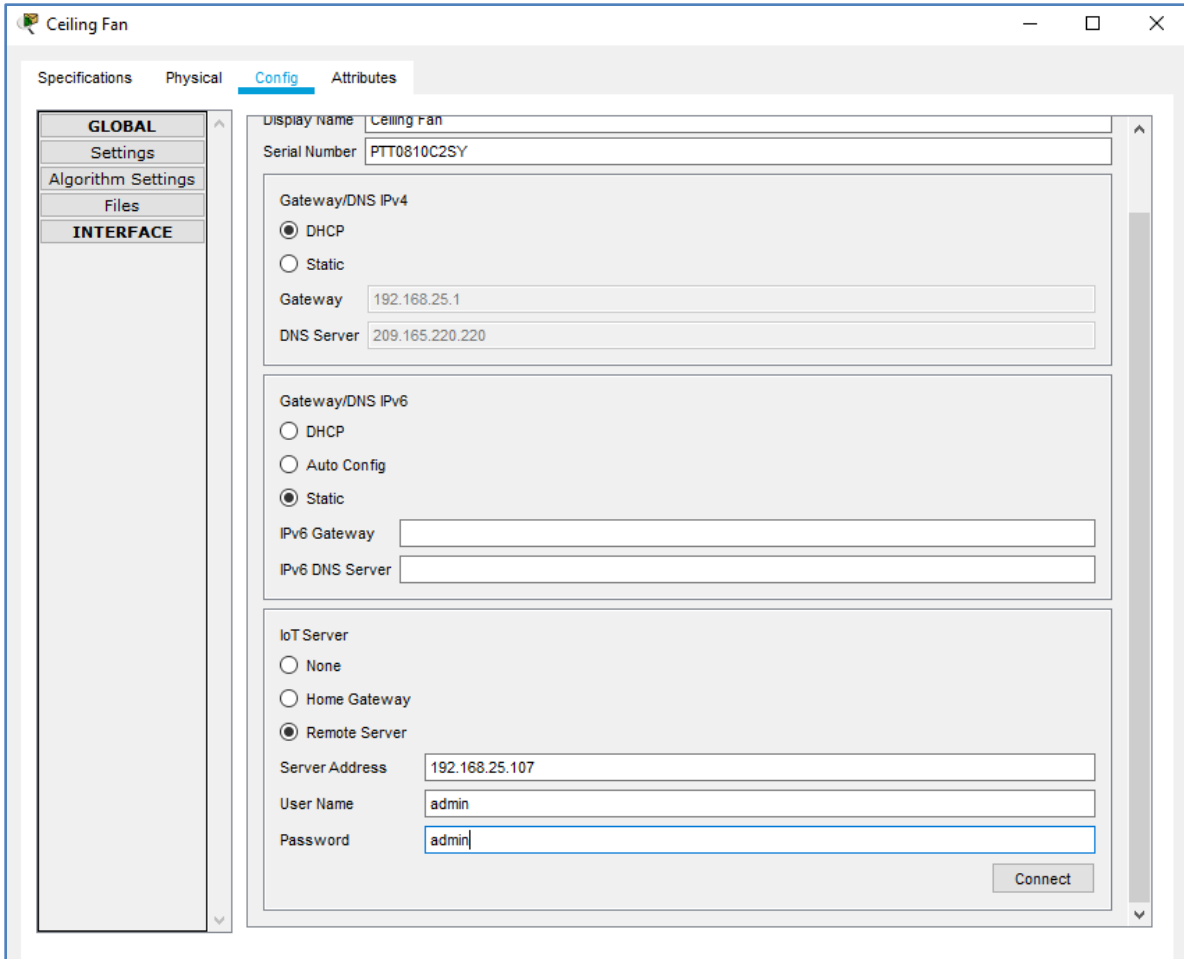
Close the **Tablet PC0** window.

Step 2: Register IoT devices to the registration server

a. Configure the ceiling fan to register with the registration server.

Click the **Ceiling Fan** icon in the workspace to open the device configuration window and then click the **Config** tab. Change the **IoT Server** type from **Home Gateway** to **Remote Server**. Enter the IP address of the registration server from Part 1, and the IoT account **Username** and **Password** created in Step 1 above. Next, click the **Connect** button.

Close the Ceiling Fan window.

b. Configure the lamp and the door IoT devices to register with the registration server in the same manner.

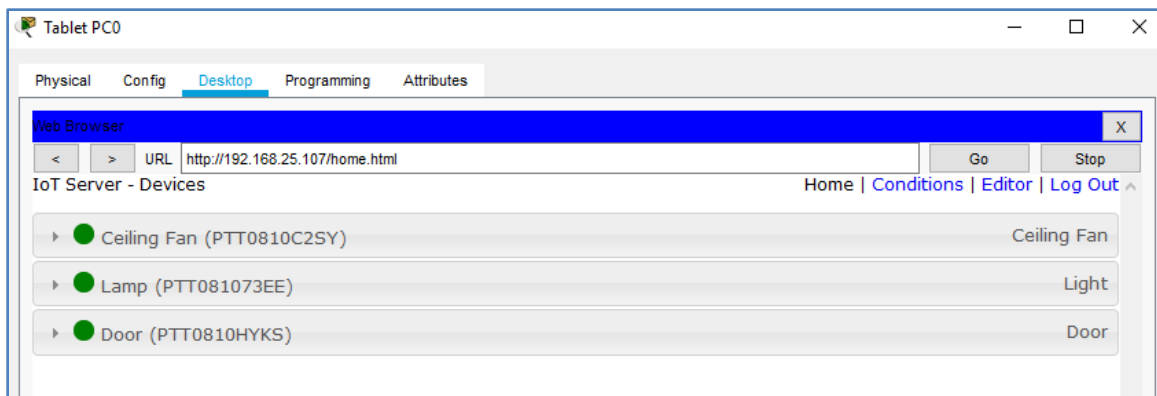## Step 3: Verify that the IoT devices are registered to the registration server

Access the IoT registration server through the wireless **Tablet** web browser using credentials from Step 1 above.

The three IoT devices, the ceiling fan, the lamp, and the door should now be registered with the IoT server.

Close the Tablet PC0 window.

Step 4: Close Packet Tracer