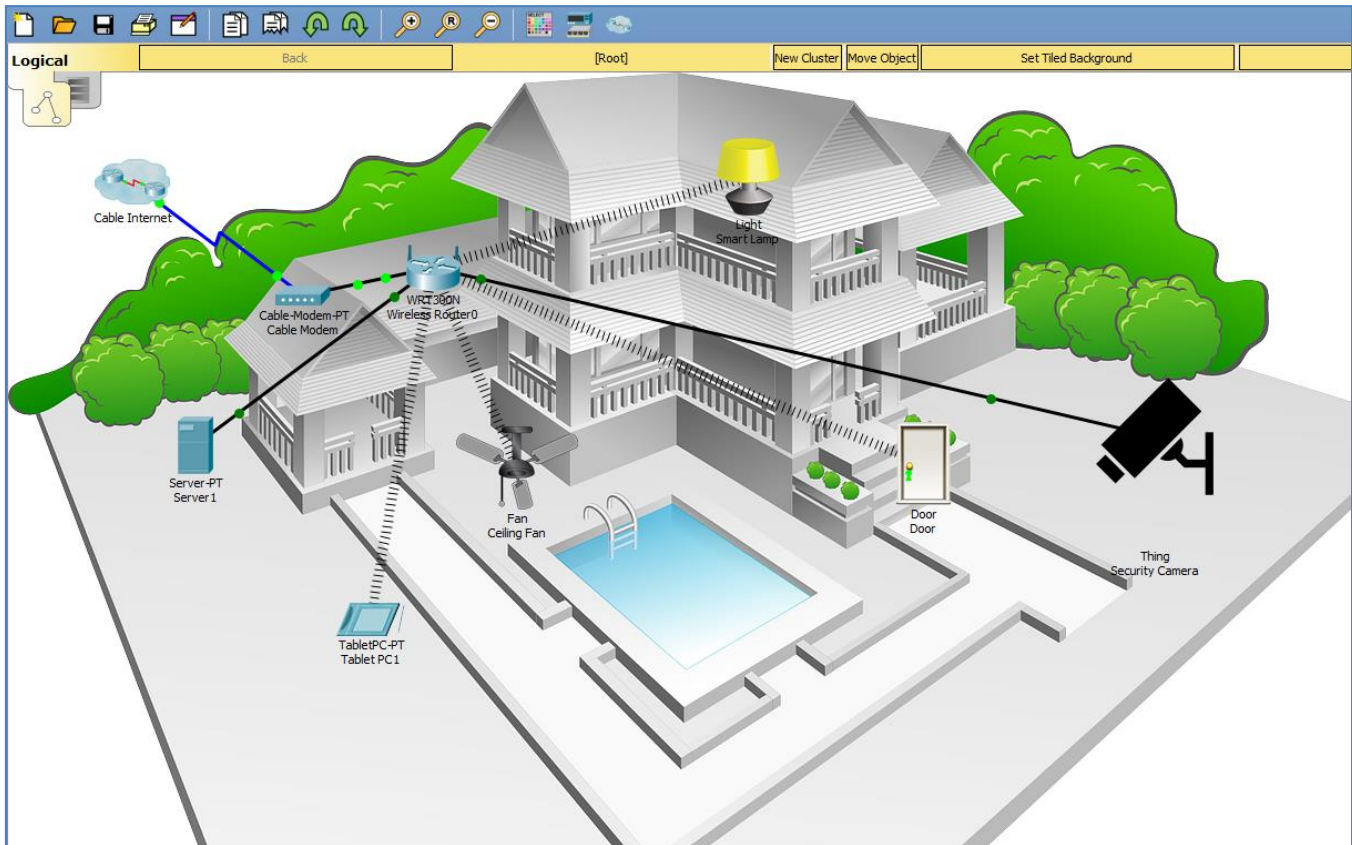


Packet Tracer – Modify Your Thing

The Smart Home Network



Objectives

Part 1: Modify Your Thing

Part 2: Test Modified Thing

Background / Scenario

In this activity you will modify the security camera IoT device created in the previous activity.

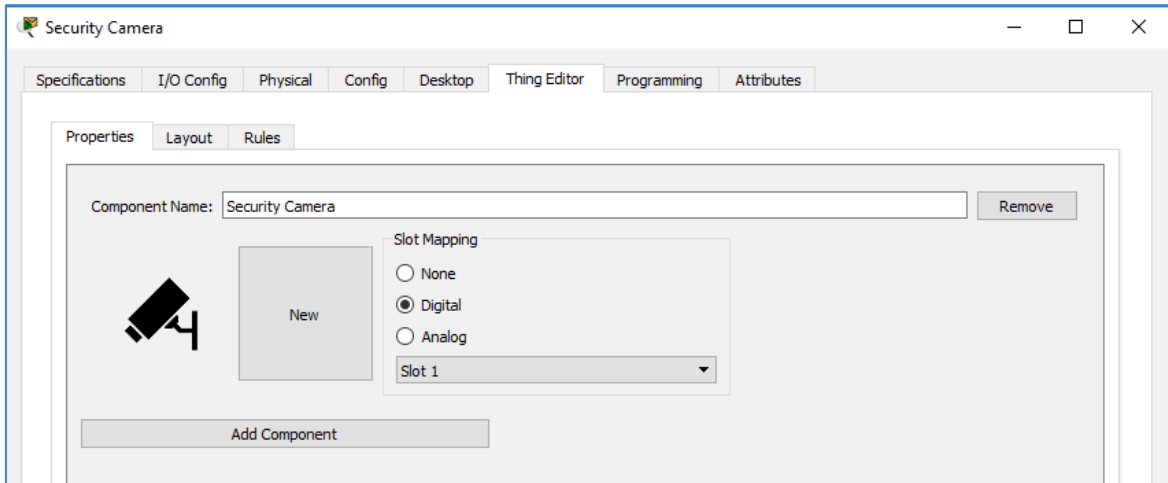
Part 1: Modify Your Thing

Step 1: Open the Modify Your Thing.pkt file and save the file to your computer.

Step 2: Add additional device icon.

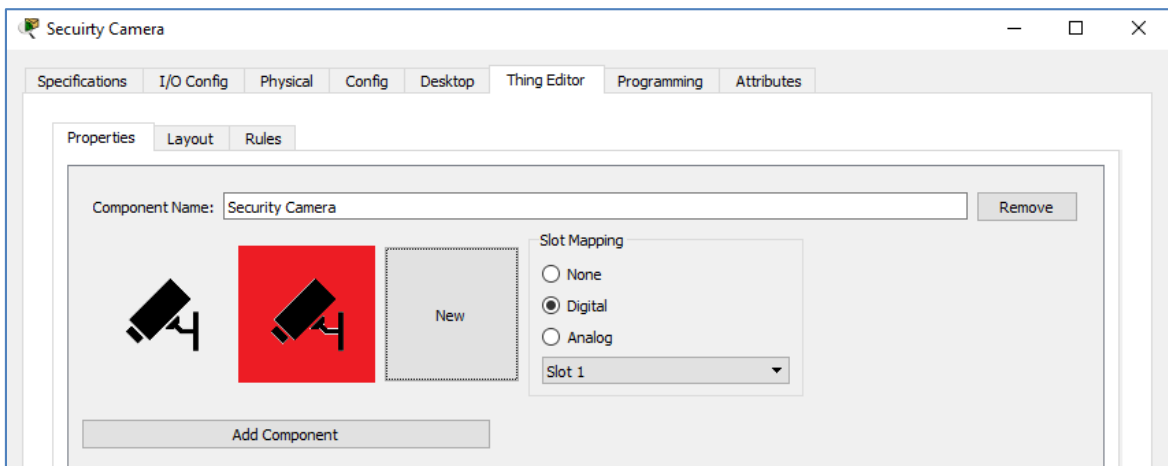
Select the **Security Camera** on the Packet Tracer workspace to open the device configuration window.

Click on **Advanced** button in the bottom right of the device configuration window, then click on **Thing Editor** Tab, and then the **Properties** tab.



Click on the **New** button.

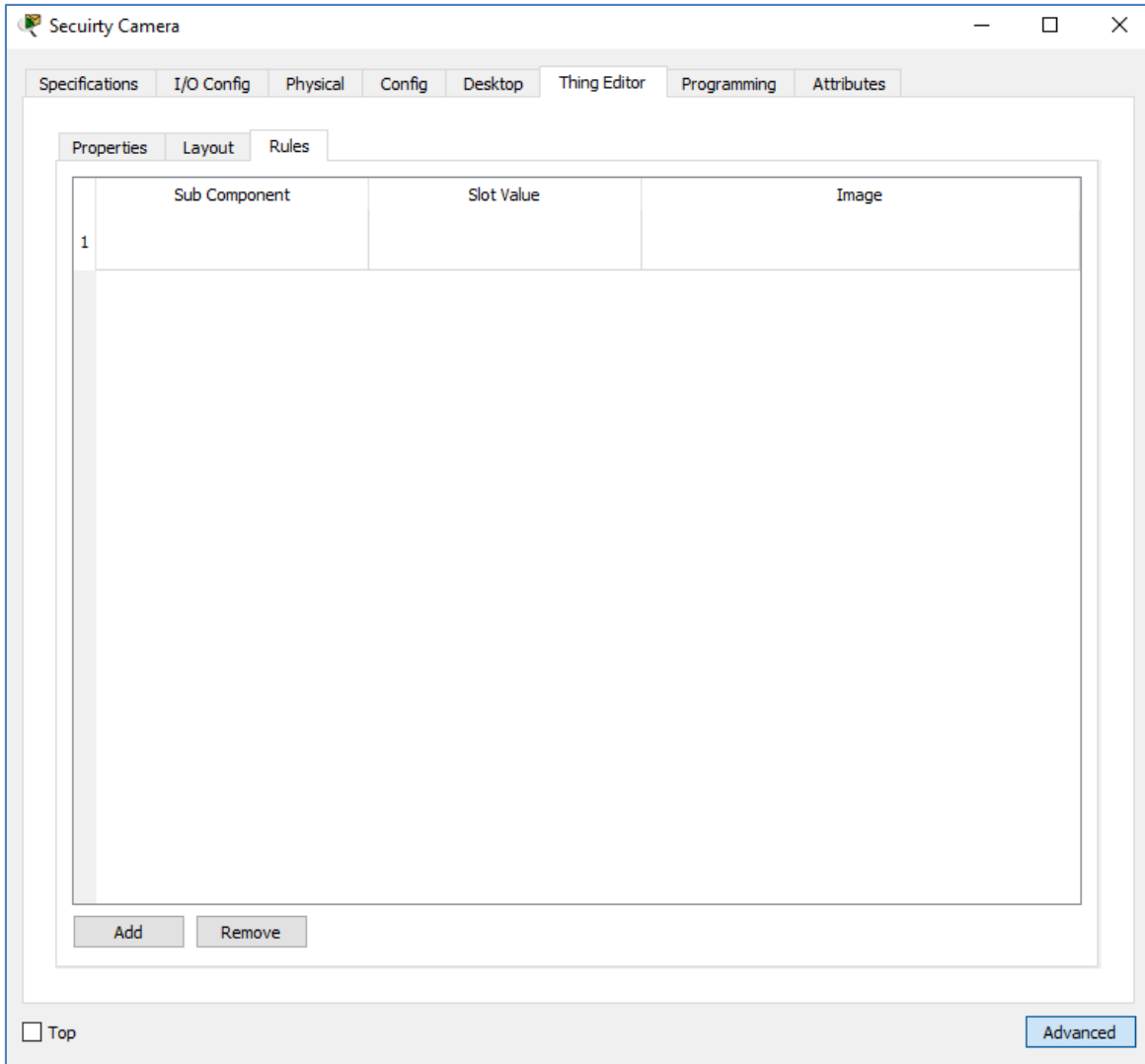
The Choose Image window will open allowing you to browse for a new icon. Select a different image for the security camera for when it is activated.



Next, click on the **Rules** tab.

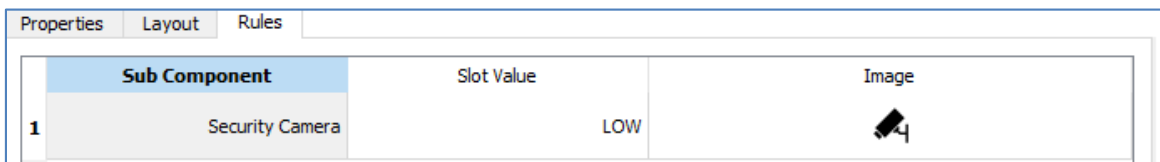
Click the **Add** Button.

Packet Tracer – Modify Your Thing



Click in the **Sub Component** column and select Security Camera in the drop down menu.

The Slot Value should change to LOW and the Image should show the security camera image that will be used as the icon when the camera is deactivated.



Click the **Add** Button again.

Click in the **Sub Component** column and select Security Camera in the drop down menu.

Click in the **Slot Value** column and select **HIGH** and click in the **Image** column and select the second security camera image that will be used as the activated icon.

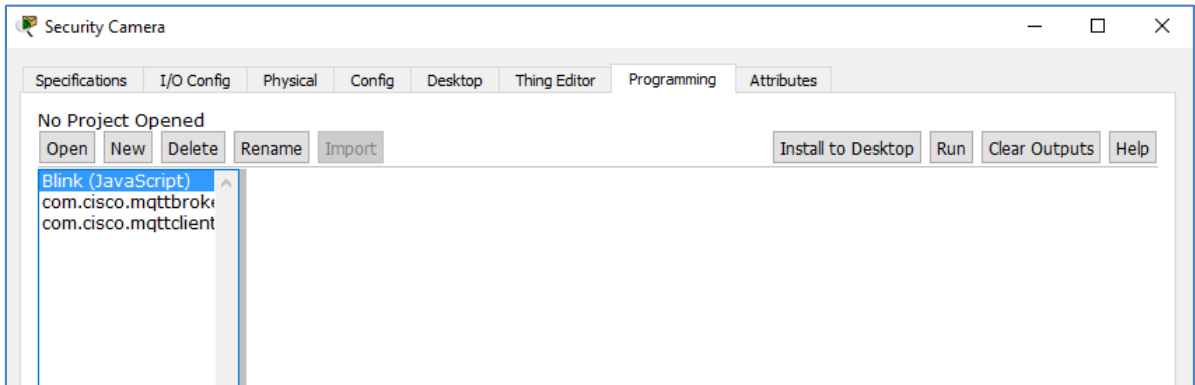
Packet Tracer – Modify Your Thing

	Sub Component	Slot Value	Image
1	Security Camera	LOW	
2	Security Camera	HIGH	

Step 3: Copy programming code to the security camera.

- a. View the existing programming code.

Click on the **Programming** tab.

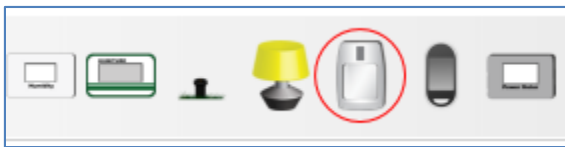


Notice there is no code yet for the device.

Minimize the Security Camera configuration window.

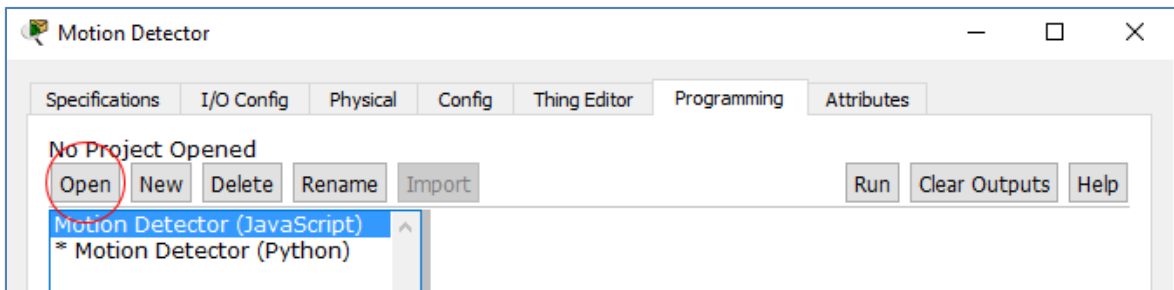
- b. Copy code from existing Packet Tracer IoT device.

Add the Motion Detector IoT Device to the Packet Tracer Workspace.



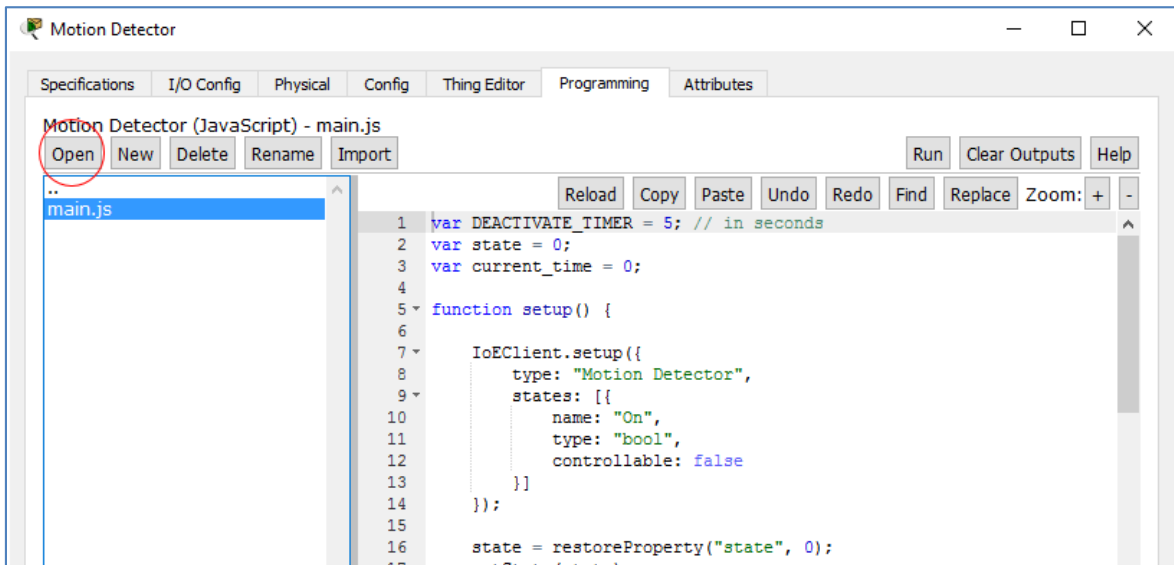
Click on the **Motion Detector** to open the device configuration window, click on **Advanced** button, then click on **Programming** tab.

In the Programming tab, click on **Motion Detector (JavaScript)** in the Left Pane and click **Open**.



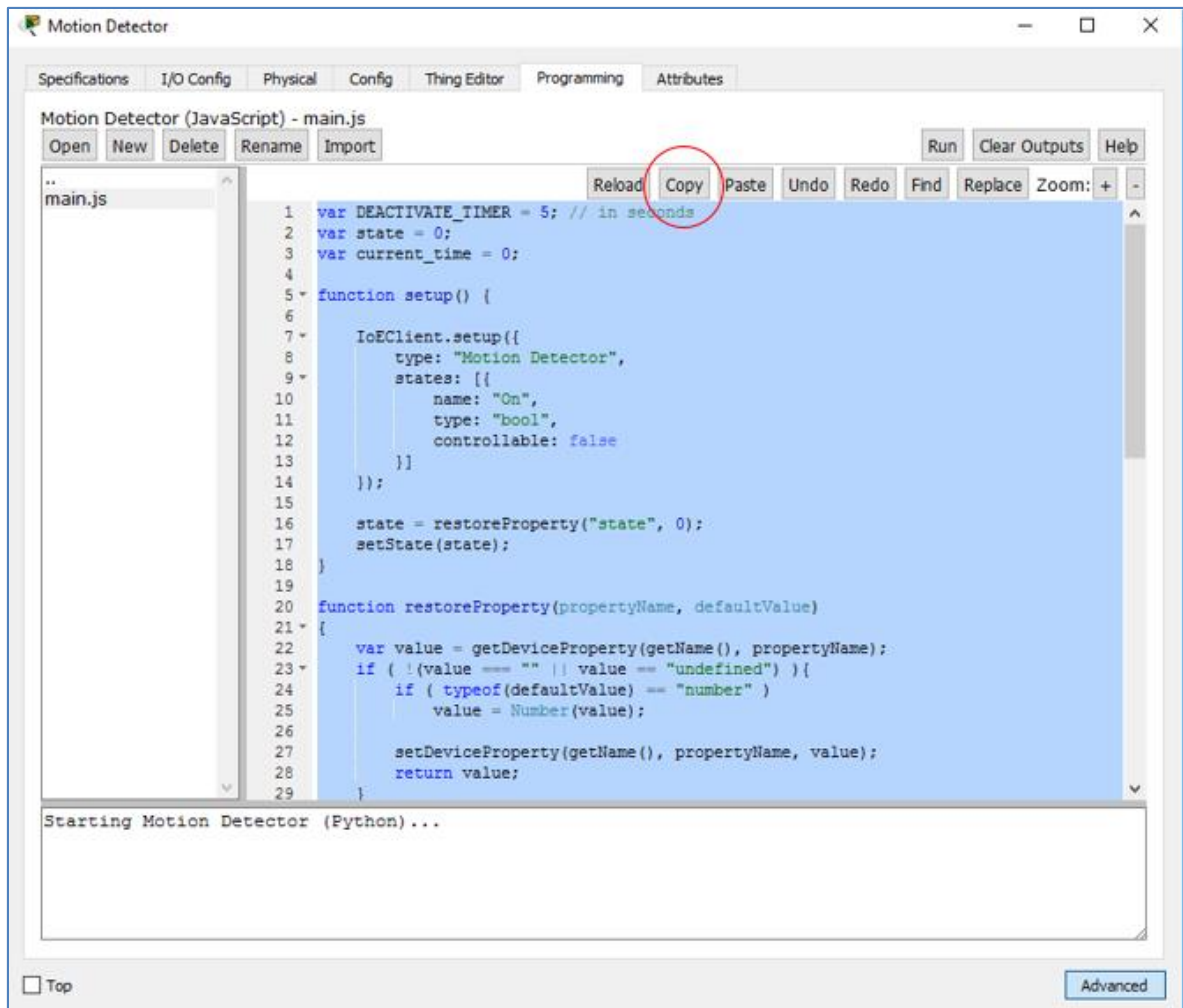
Packet Tracer – Modify Your Thing

Then click on **main.js** in the Left Pane and click **Open**. This opens the code associated with the Motion Detector in the code edit window to the right.



To select all the programming script, click in the code edit window and type **Ctrl+a** on the keyboard. Once all script is selected, click **Copy** in the code edit window menu.

Packet Tracer – Modify Your Thing

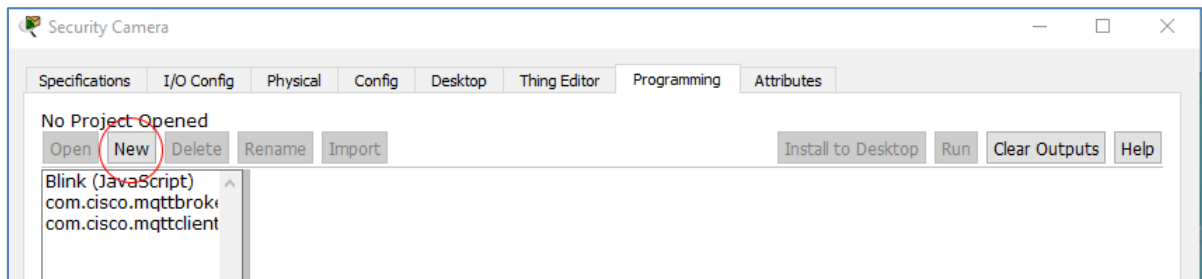


Close the motion detector configuration window.

- c. Paste copied code to the security camera IoT device.

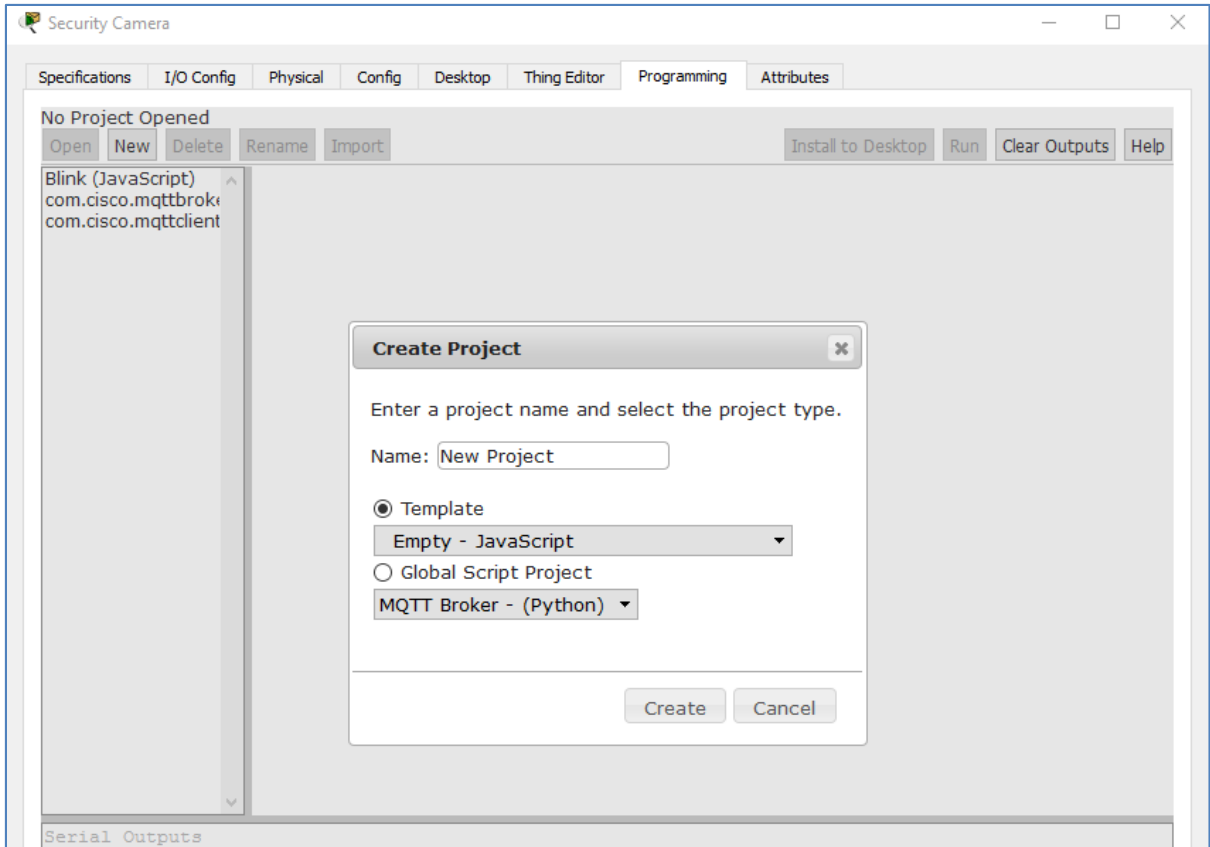
Open the Security Camera window and select the **Programming** tab if not already selected.

Click the **New** project button above the left pane.

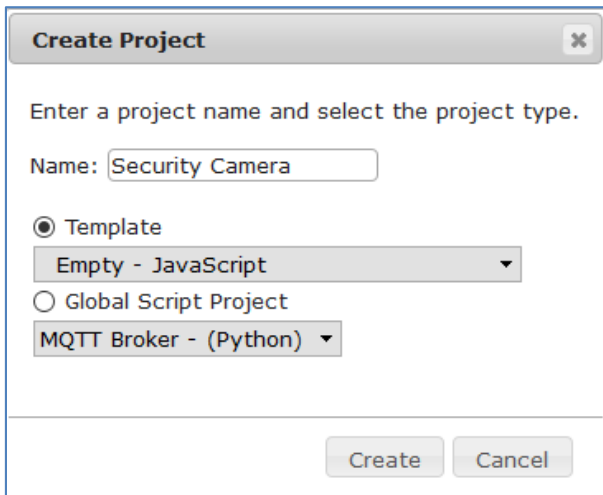


This opens the Create Project window.

Packet Tracer – Modify Your Thing

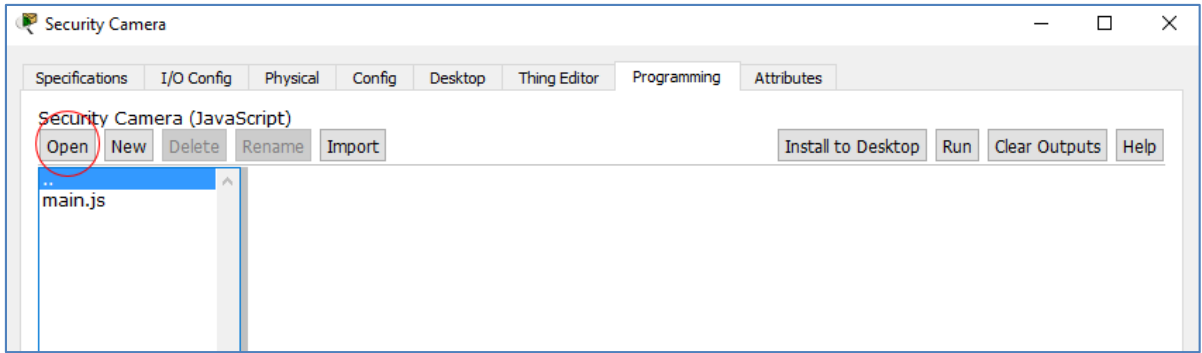


In the Create Project window, create a new programming project named Security Camera by typing Security Camera in the **Name** box and clicking **Create**.

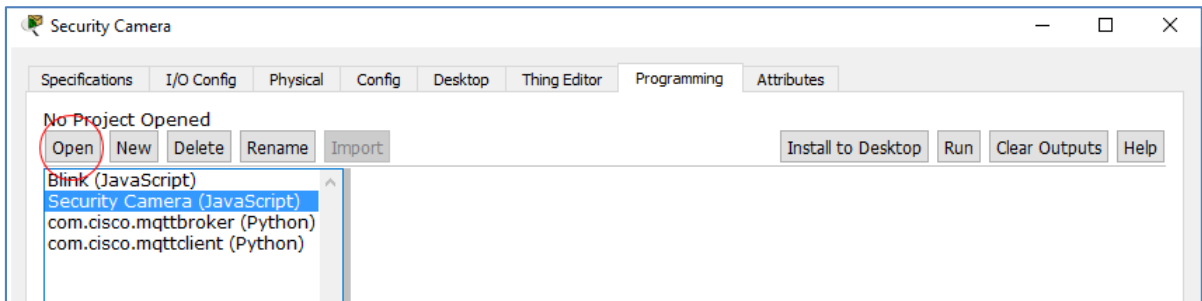


To view the new project just created click on the .. in the left pane and click **Open**.

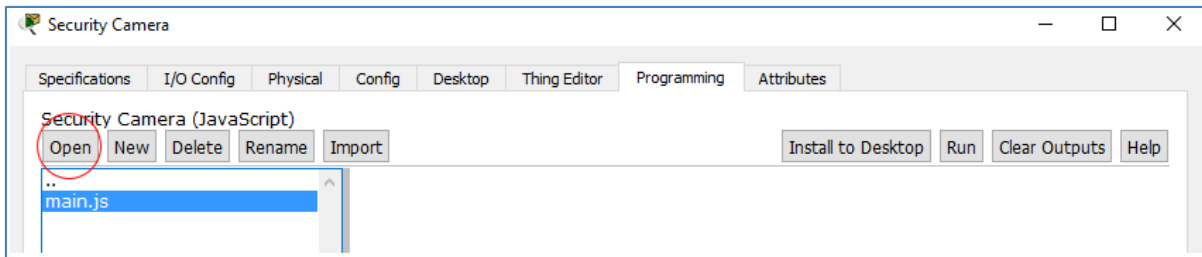
Packet Tracer – Modify Your Thing



Notice there is now a Security Camera (JavaScript) project in the left pane. Click on Security Camera project and click **Open**.

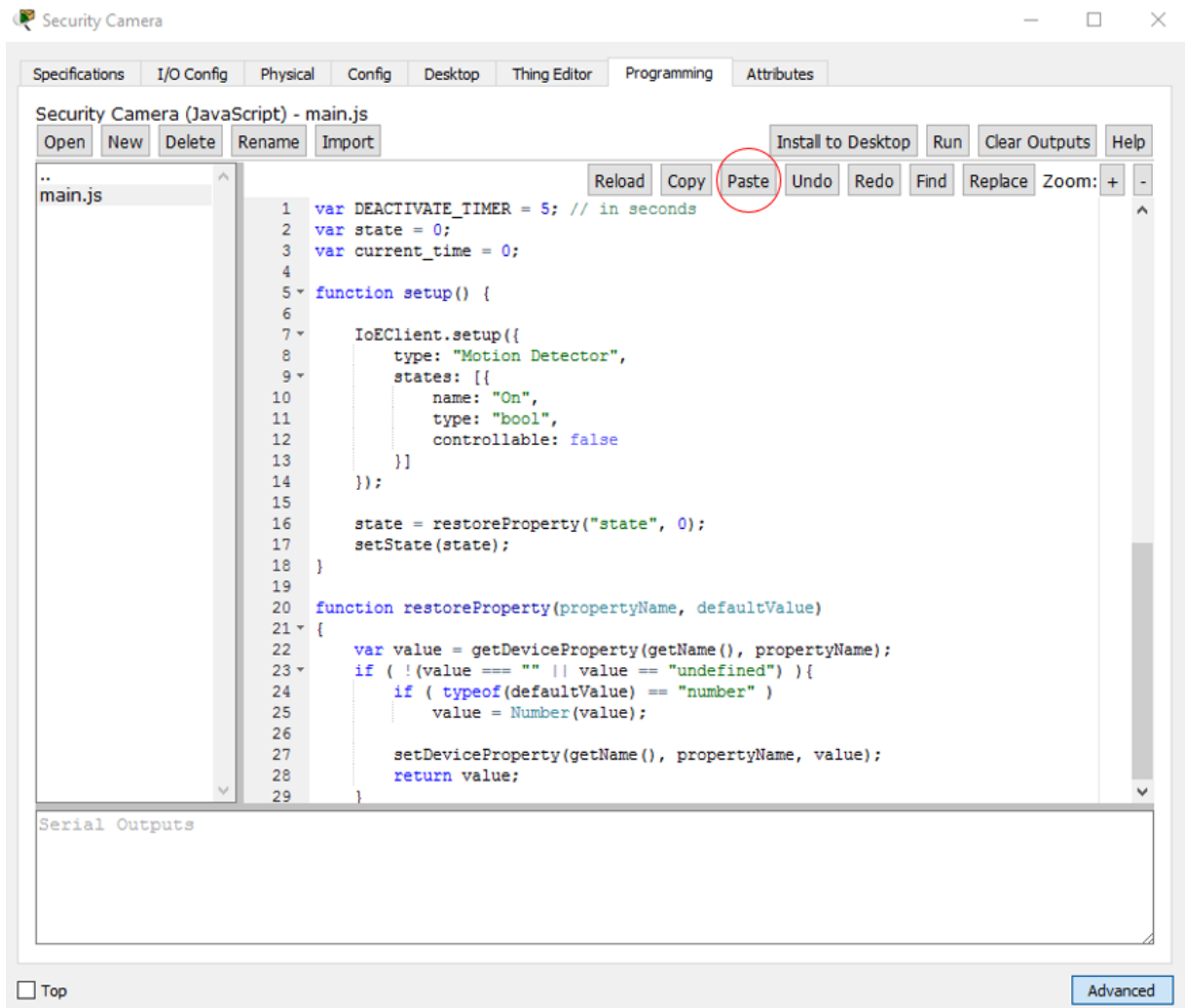


Now click **main.js** and click **Open**.



You can now paste the copied code from the Motion Detector into the code edit window on the right. Click in the code edit window and click on the **Paste** button to paste in the copied code.

Packet Tracer – Modify Your Thing



Step 4: Edit the security camera programming code

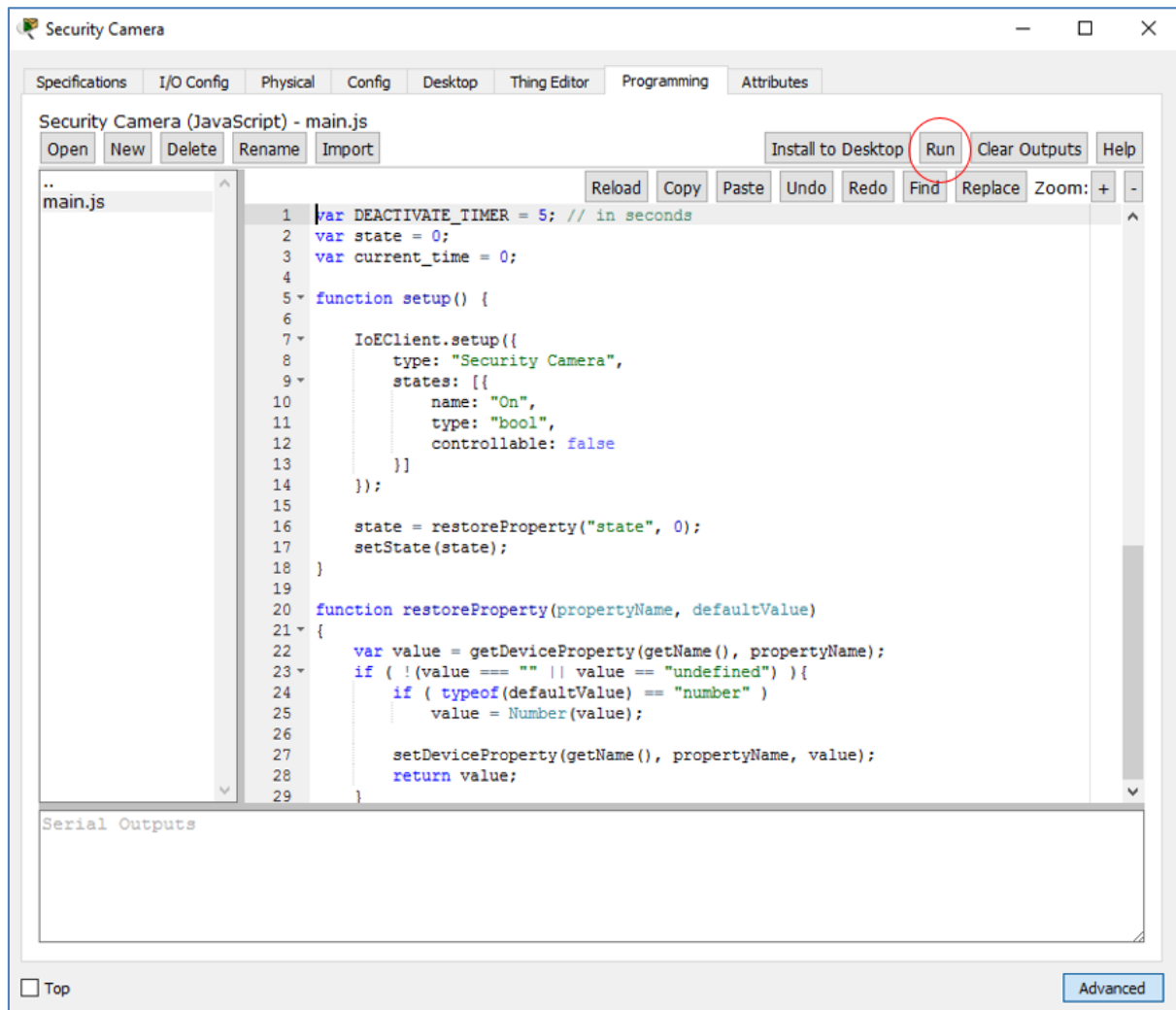
The code copied from the Motion Detector needs to be edited to change the type to Security Camera. Click on the line that identifies the device and change the name.

```
7   IoEClient.setup({
8     type: "Motion Detector",
9     states: [{
10      name: "On",
11      type: "bool",
12      controllable: false
```

Change "Motion Detector" to "Security Camera"

```
7   IoEClient.setup({
8     type: "Security Camera",
9     states: [{
10      name: "On",
11      type: "bool",
12      controllable: false
```

Run the program by clicking on the **Run** button.



Close the Security Camera configuration window.

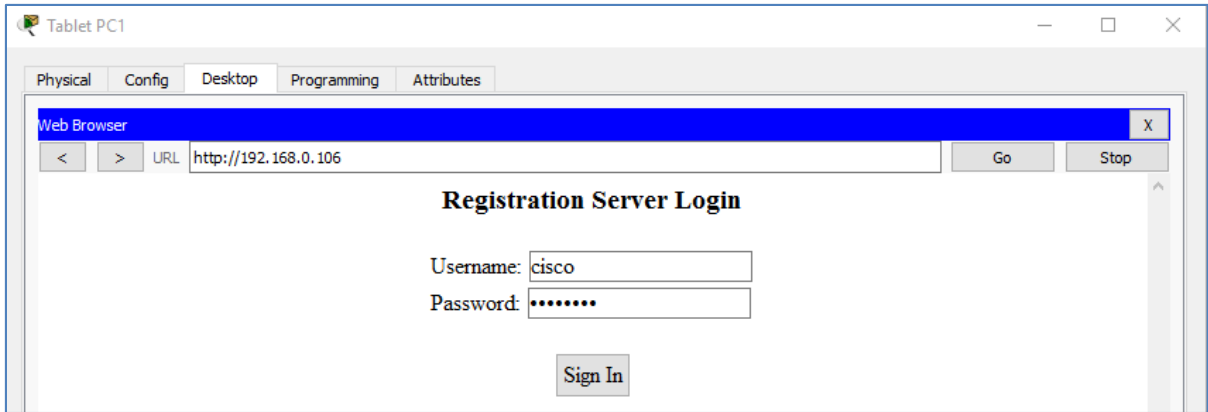
Part 2: Test Modified Thing

Step 1: Access the Registration Server from the Tablet PC.

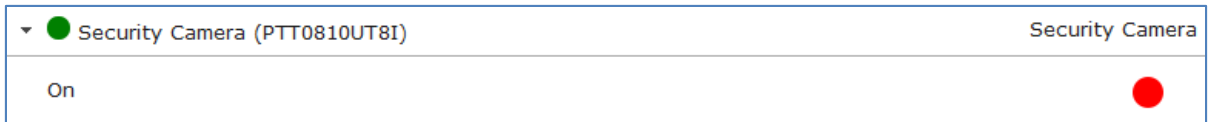
Click on the Tablet-PC to open the configuration window. Click on the **Desktop** tab, and select the **Web Browser** icon.

In the web browser window type in the URL of the registration server 192.168.0.106 and click **Go**. In the Registration Server Login window type in the following credentials and click **Sign In**.

Packet Tracer – Modify Your Thing



In the Server-Devices Window click on the Security Camera to expand the device information. Notice the Security Camera is On but not activated.

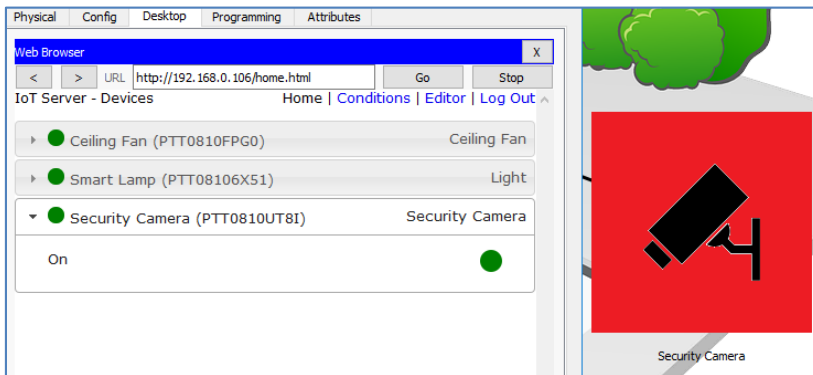


Step 2: Activate the Security Camera.

Move the Tablet configuration window out of the way but still visible so that the Packet Tracer workspace is visible.

Hold down the **Alt** key on the keyboard and move the mouse cursor over the Security Camera icon.

Notice the icon will change to the image used as the activated icon and the Security Camera status changes to activated indicated by the green dot in the Server-Devices list on the Registration Server.



Step 3: Experiment.

Experiment by adding other types of IoT devices and editing the programming of those devices to perform different functions.

Step 4: Close Packet Tracer.