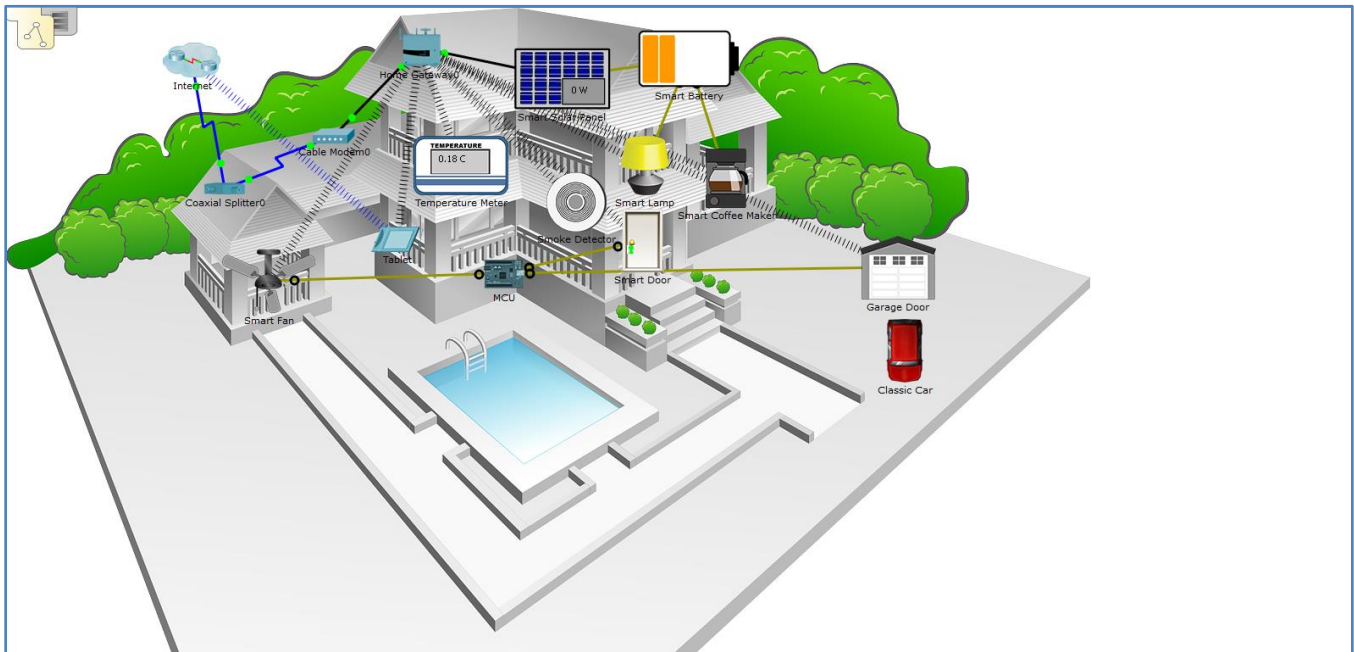# Packet Tracer – Modify and Monitor Environmental Controls in Packet Tracer

The Smart Home Network

Objectives

Part 1: Explore Environmental Controls

Part 2: Edit Environment Elements

Background / Scenario

In this activity you will use the **Physical** view in Packet Tracer to view and edit the evironmental controls.

Part 1: Explore Environmental Controls

Step 1: Open the PT Environmental Controls.pkt file and save the file to your computer

Step 2: View the current environment values

a. Change to the **Physical** view in Packet Tracer.

Click on the **Physical** icon in the top left corner of the Packet Tracer workspace.

b. Open the **Environments** window.

Click on the **Environment** button on the far right of the Packet Tracer **Physical** view menu bar.

c. Explore the many environmental elements in the **Intercity** location.

Environments

Location: Intercity   ▾ **Edit**

Current Time: 18:30:00 Edit Pause

Select an environment to show its chart.

Filter...   Search Reset

⊿ Earth Physical Features		⊿ Gravity	
Elevation	22.00 m	Gravity	9.80 m/s^2
Soil pH	7.00 pH	⊿ Light (Sun)	
⊿ Gases		Electromagnetic Radiation	0.00 %
Argon	0.9340 %	Infrared	0.00 %
CO	0.00 %	Radiant Heat	0.00 %
CO_2	0.0360 %	Sunlight	0.00 %
He	0.0005240 %	Ultraviolet	0.00 %
H	0.00050 %	Visible	0.00 %
Methane	0.000150 %		
Nitrogen	78.0840 %		
O_2	20.9460 %		

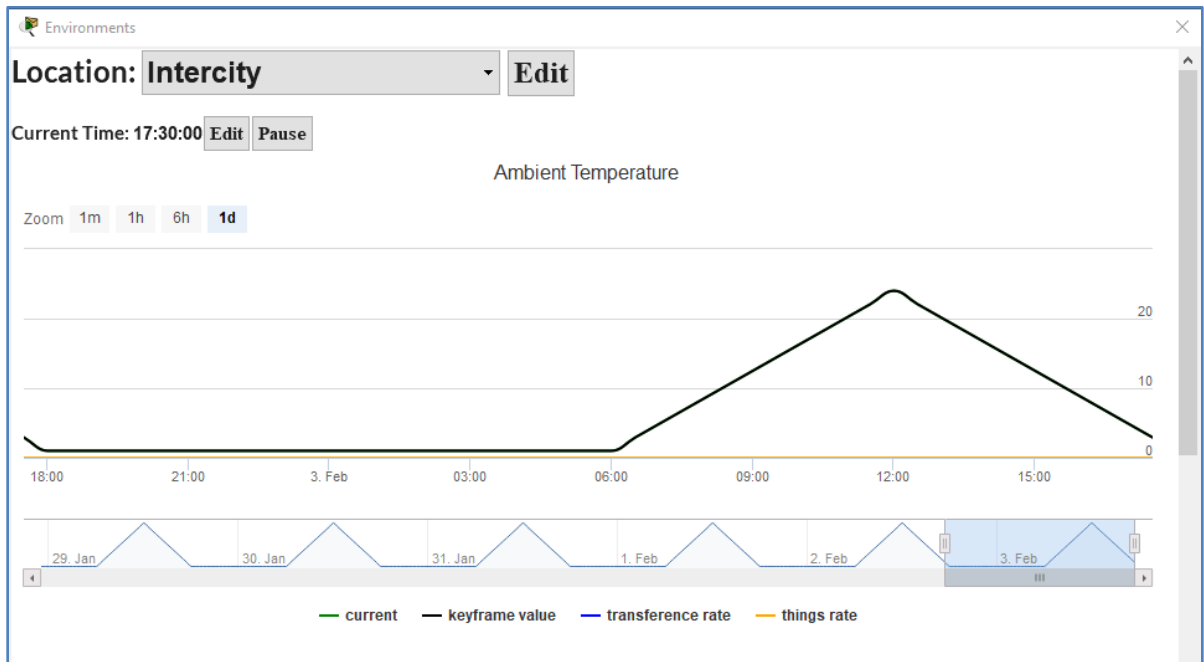| ⊿ Other		⊿ Wind	
Atmospheric Pressure	101.3250 kPa	Direction	41.25 degrees
⊿ Temperature		Variance (gusts)	9.17 %
Ambient Temperature	1.00 C	Speed	2.71 kph
⊿ Water			
Clouds	7.29 %		
Humidity	75.42 %		
Rain	0.46 cm		

d. Observe ambient temperature chart.

Scroll down the **Environments** window to the **Temperature** element and notice that the Ambient Temperature changes in degrees Celsius through the simulated 24 hour day period.

⊿ Temperature
   Ambient Temperature   21.25 C

Click on the **Ambient Temperature** element to open the **Ambient Temperature** chart. Keep the **Environments** window open for a few minutes to simulate several simulated days in the Packet Tracer environment.

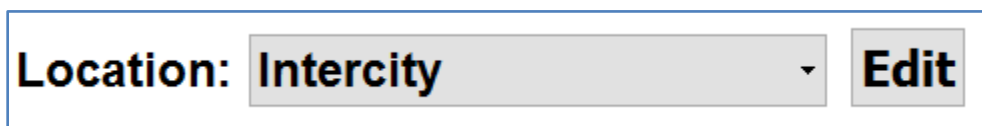Notice that after a few minutes the chart shows the temperature fluctuations over time.

e. Experiment with other environmental elements.

Click on other environmental elements and observe their charts over time.

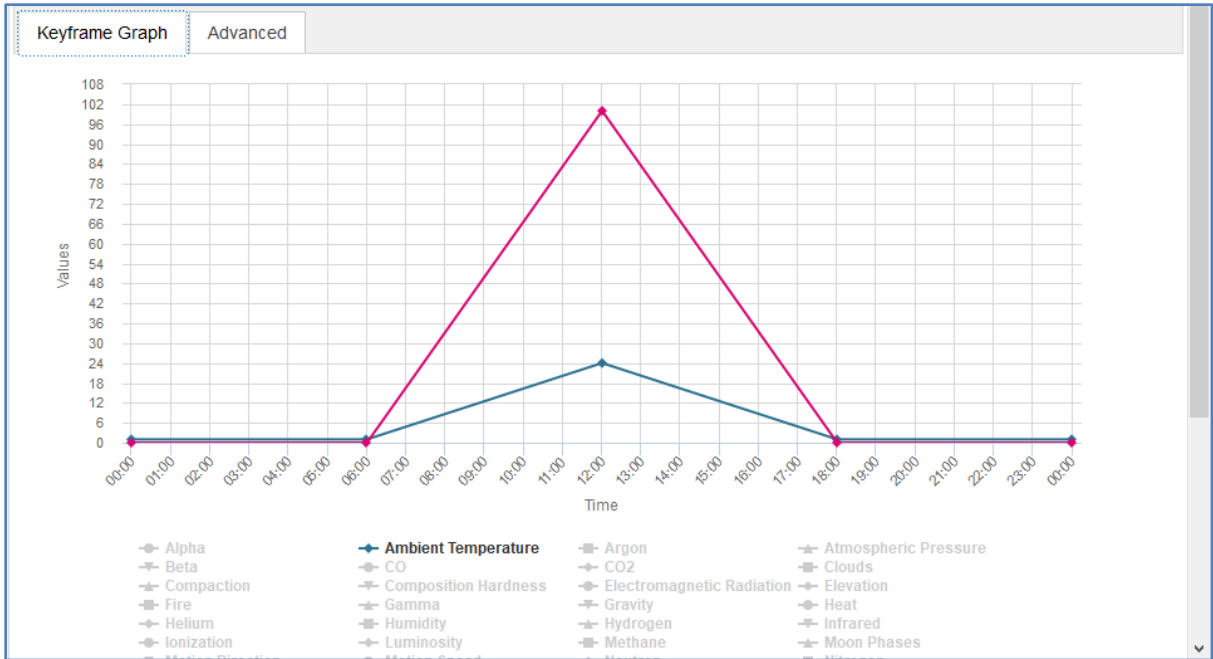Do not close the **Environments** window. We will use it in part 2.

Part 2: Edit Environmental Elements

Step 1: Change to environment edit mode

a. Click on the **Edit** button for the **Intercity** location

Step 2: Edit the Ambient Temperature

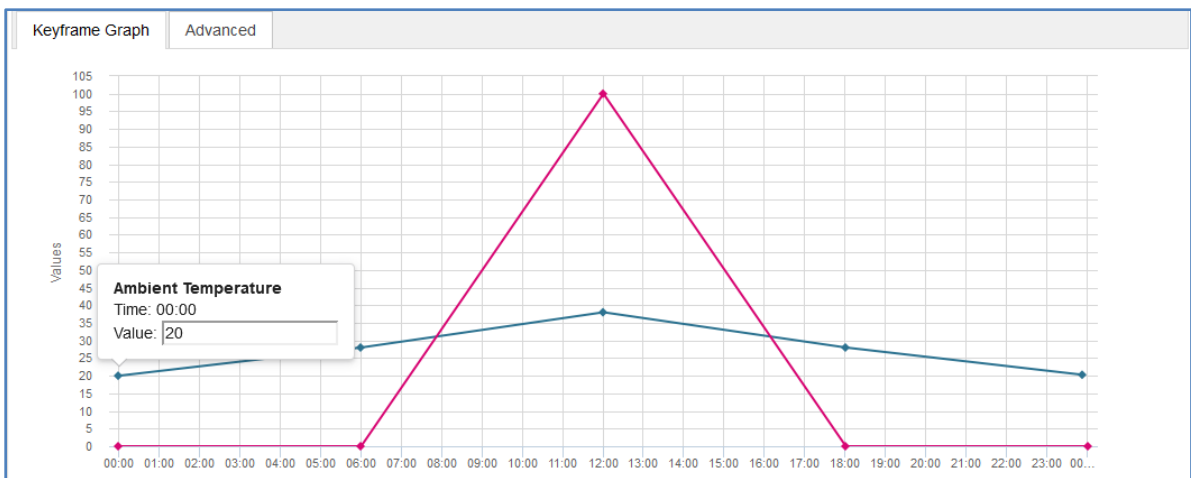b. Note the current **Ambient Temperature** setting

The **Environment Keyframe Graph** for the ambient temperature shows degrees Celsius starting at a low of zero degrees at midnight and a high of 24 degrees at midday.

c. Change the ambient temperature for the Intercity.

Using the **Environment Keyframe Graph,** change the ambient temperature for the 24 hour day by clicking on the blue **Ambient Temperature** line and dragging it up the graph.

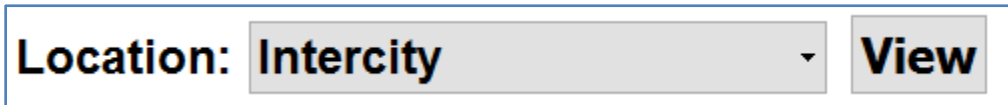To simulate a summer environment make the following changes:

Drag the beginning and end temperatures to 20 degrees, the 06:00 and 18:00 temperatures to 28 degrees and the mid-day temperature to 37 degrees.
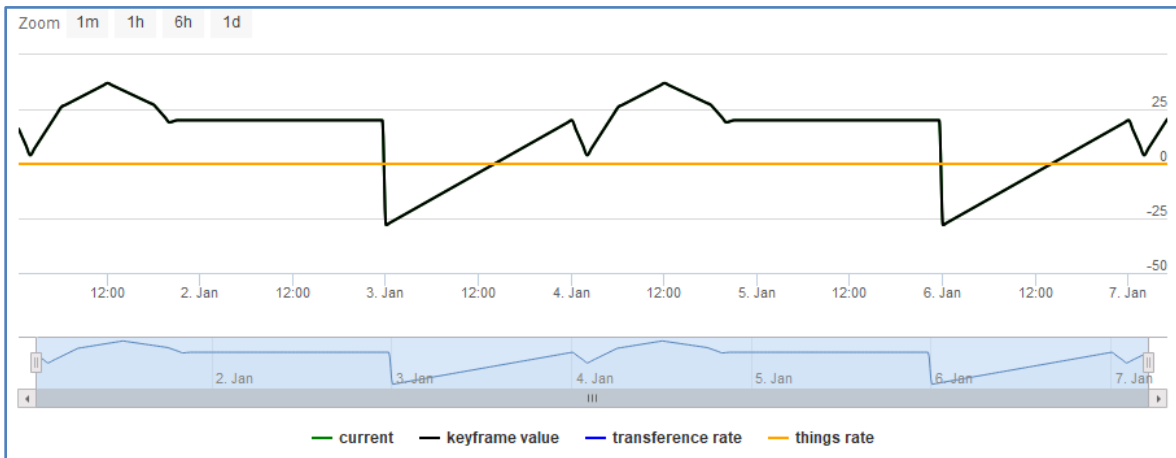
Step 3: Observe changes in the environment

a. Return to **Environment View** mode

Click the **View** button for the **Intercity** location

Note that the Ambient Temperature chart is now showing the temperature increase.

Close the **Environments** window.

Step 4: Close Packet Tracer