WUNDERGROUND LOCAL FOR CRESTRON HOME

Revision: 1.0
Date: 08 May 2026

SUPPORTED INSTALLATION

This is a Crestron Home driver for Crestron Home processors.

DESCRIPTION

The Wunderground Local driver is designed to display weather data from a compatible weather station by configuring the weather station's web interface to use the Wunderground Protocol at a specified port to read in data over the local network.

The driver retrieves telemetry data from the Wunderground-friendly device and presents it within the Crestron Home Client, allowing users to view a range of live environmental readings and station data reported by their weather station. This includes values such as temperature, pressure, rainfall, UV index, and wind conditions.

The properties are exposed, allowing you to apply logic on them however you want. An example of this is sending Notice Messages with property changes.

In addition to displaying weather data, the driver supports configurable notifications for selected telemetry values. This functionality requires the Ultamation Notice Tile, which is a separate product that can be purchased from the shop page. When integrated, the installer can set user-defined thresholds, and when a condition is met, notifications can be delivered to the Crestron Home client app or sent as mobile push notifications. Notifications include a custom title, message, and priority level via the Ultamation Notice Tile.

If the Ultamation Notice Tile is not installed, notification functionality will not be available.

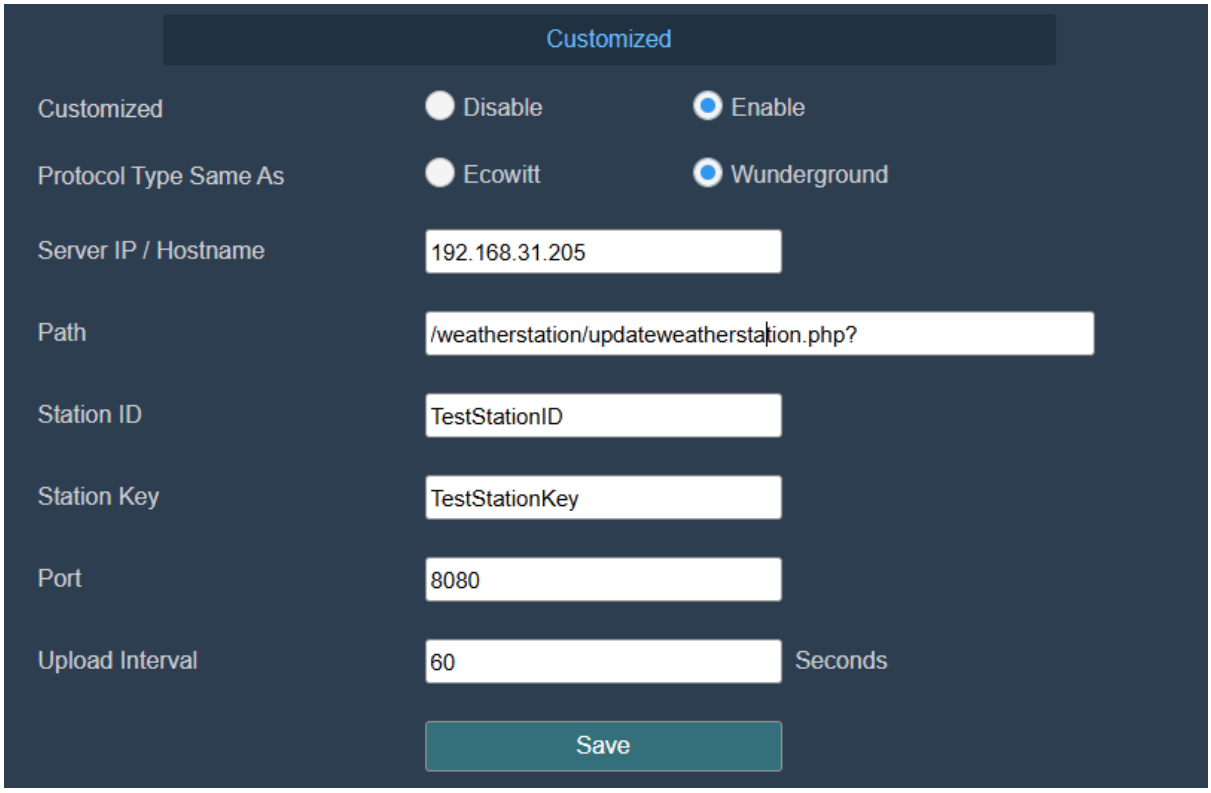
Features include:

- Displaying weather data from a Wunderground-compatible device.
- Providing up-to-date readings such as temperature, pressure, raining telemetry, UV, humidity, solar radiation, updated at an interval of your choosing.
- Displaying wind information including wind speed, wind gust, and wind direction.
- Exposed telemetry properties that allow for logic to be performed on them.
- Installer-defined thresholds for telemetry-based alerts when used with the Ultamation Notice Tile.

WEATHER STATION PREPARATION

Web interface Setup

First, you must set up the Wunderground Protocol and configure the endpoint.



Navigate to the weather station's web interface shown above:

- Set "Customized" to "Enable" option.
- Set "Protocol" to "Wunderground".
- Set "Server IP / Hostname" to the IP address of the processor that you are loading the driver on to.
- Set "Station ID" and "Station Key" to be whatever you want, this functionality isn't used by the driver.
- The "path" option is irrelevant: The driver is configured to take in any data coming in on your chosen port.
- Enter any valid port number for "Port".

Press save and continue with the installation below.

INSTALLATION

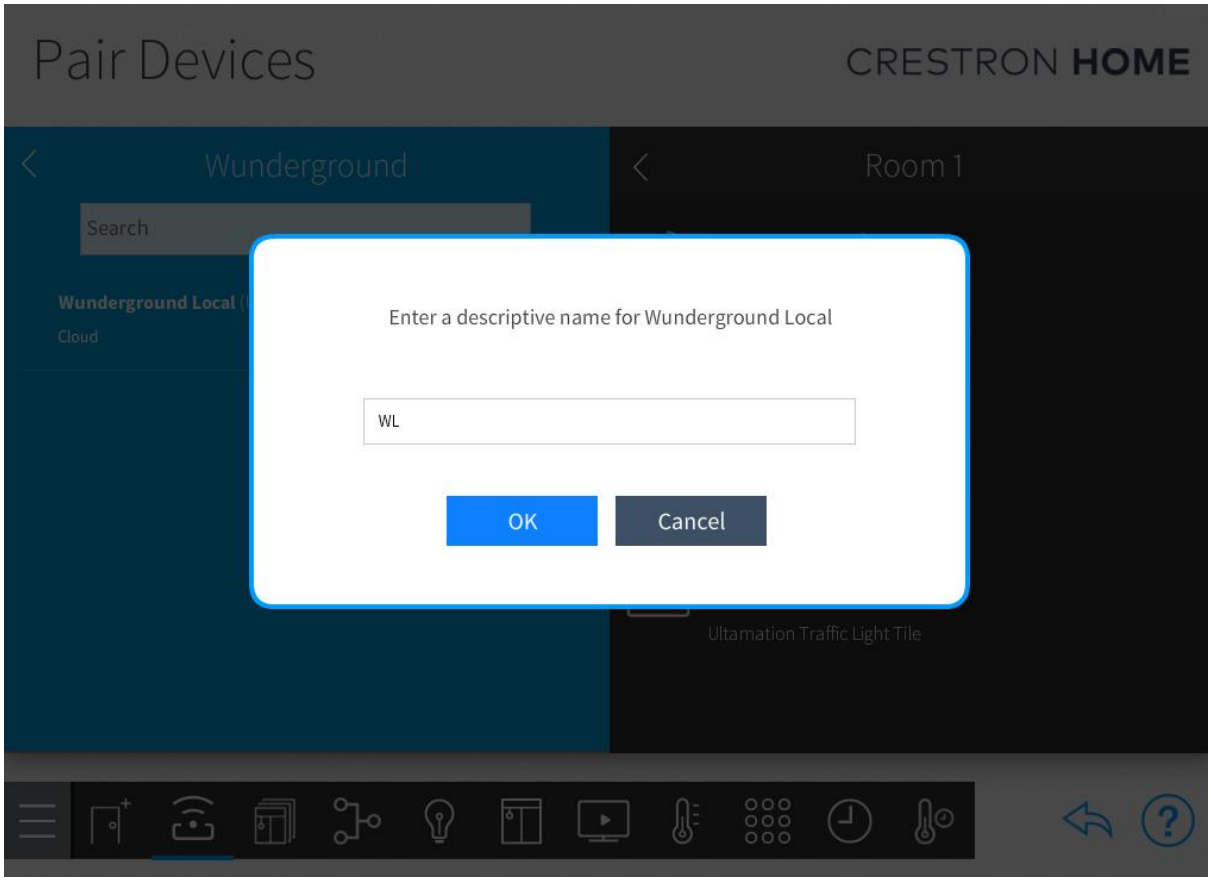
The driver can be found under:

Drivers > Weather Station > Wunderground > **Wunderground Local**

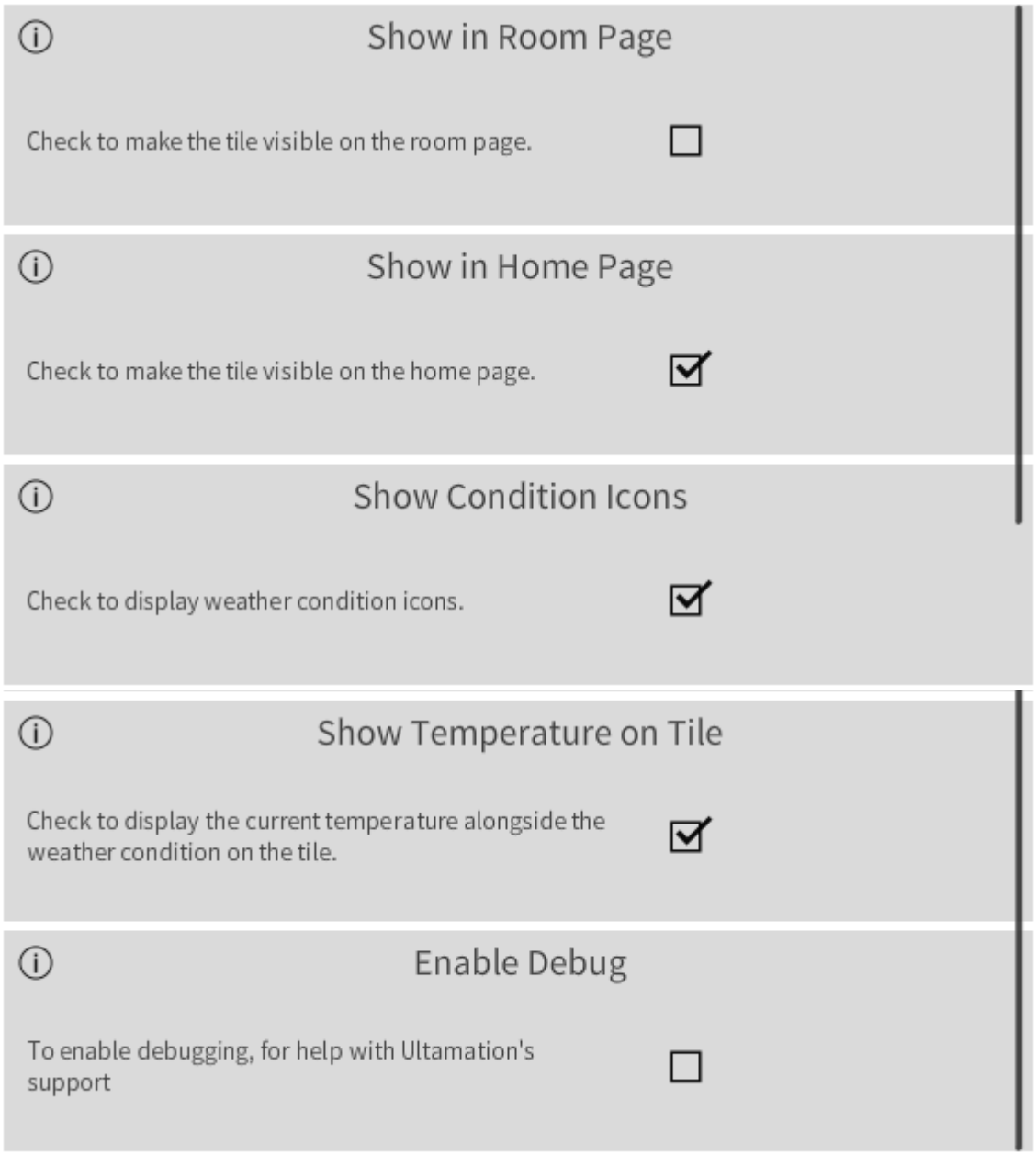
Adding the Driver

Ensure a room is selected, and then click on the '+' against the appropriate device.

You will be asked to provide a descriptive name – this can be anything you wish.

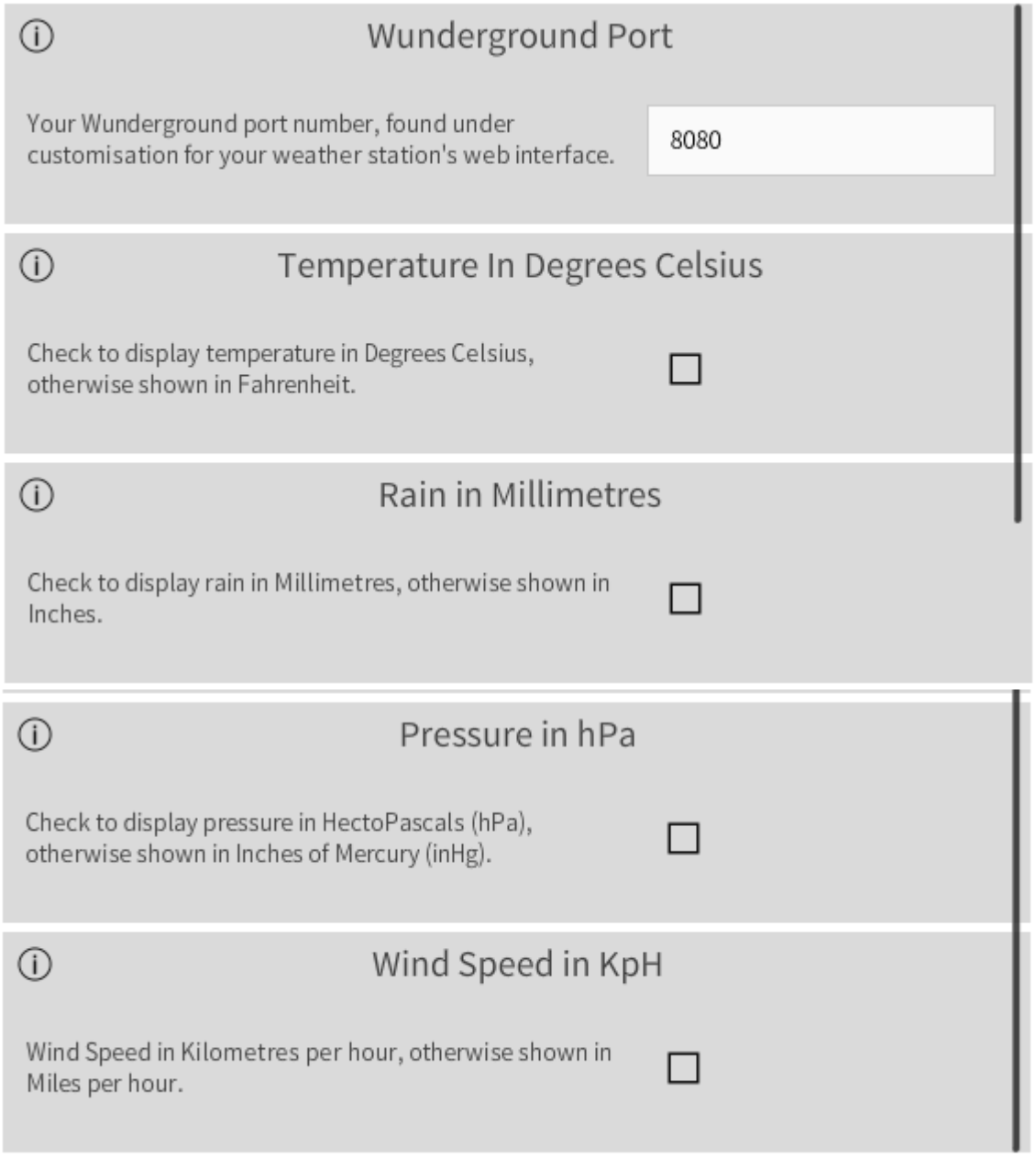


The driver is licenced via the cloud, please first refer to the "Licensing" section below. If you do not have a cloud licence the system will function for **one hour** and then control will be suspended.



This page gives you the preferences for how and where you want the tile to appear.

The last option enables debug logging, which can be viewed in Toolbox's Text Console.



It is very important that you match the same port number that you entered into the station's web interface. If it is wrong, you won't see your data come through.

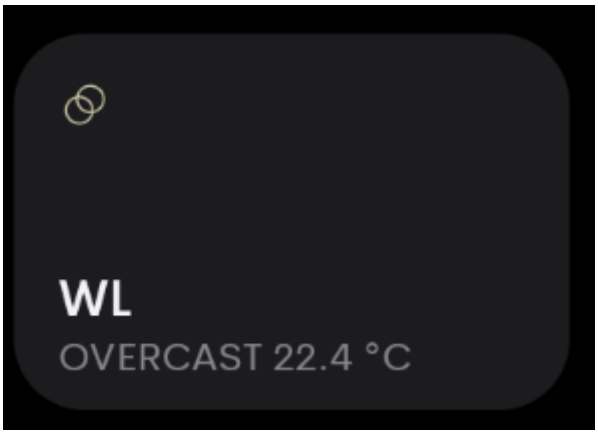
The remaining options allows you to switch the units for your weather station, which in turn will change how the tile displays the units.

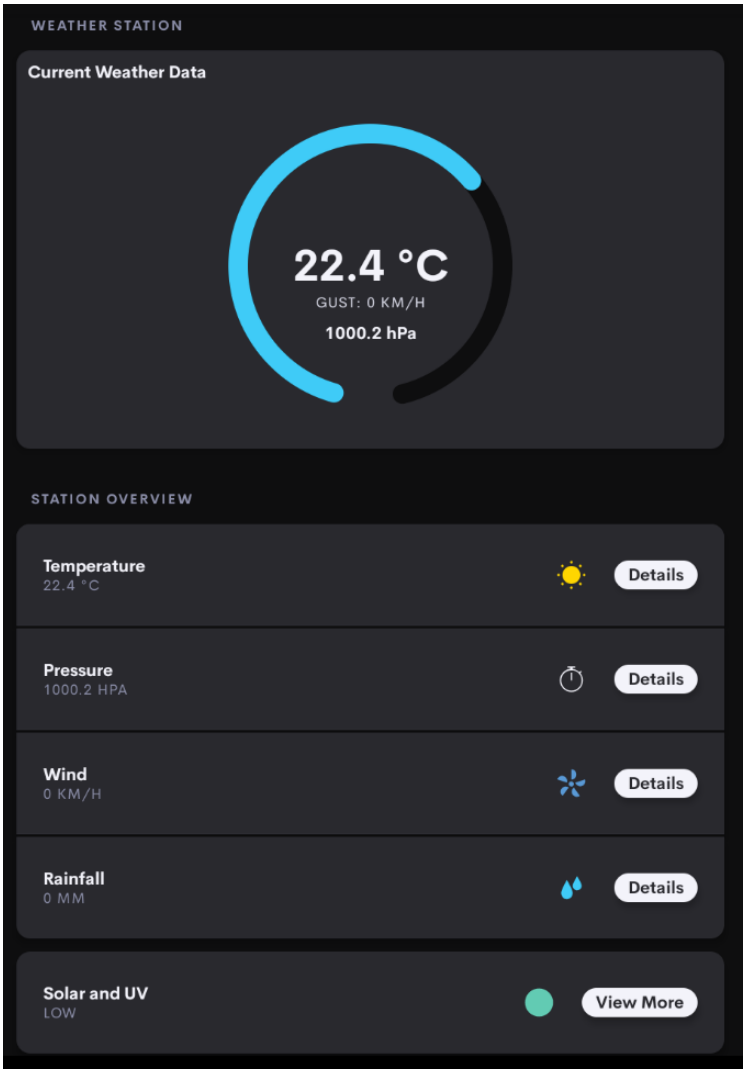
If you choose to change the units after creating logic on the exposed properties, you will need to adjust the logic accordingly for the new units.

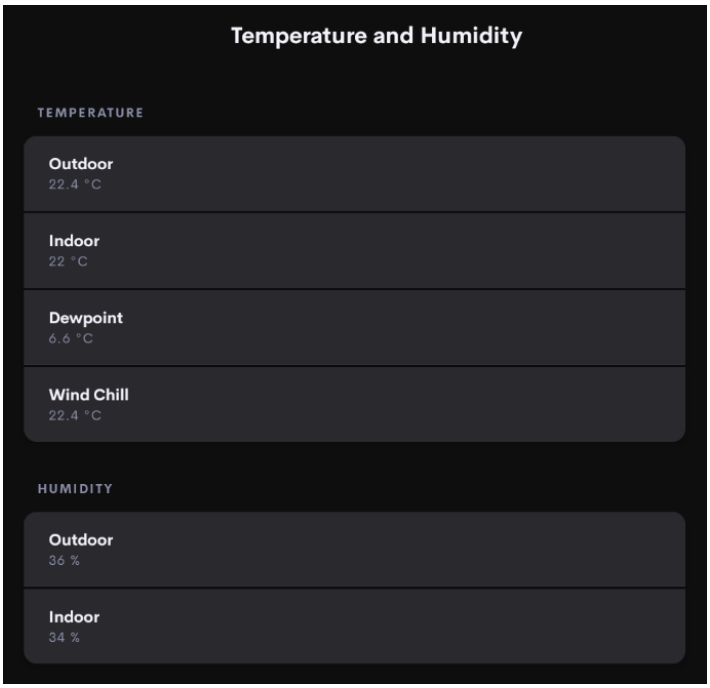
Congratulations, you have now loaded the driver.

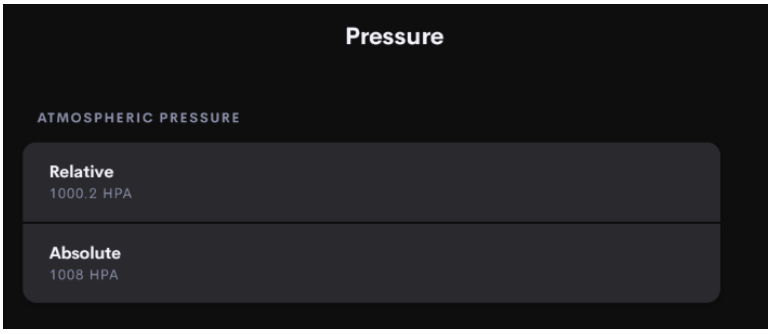
After configuration

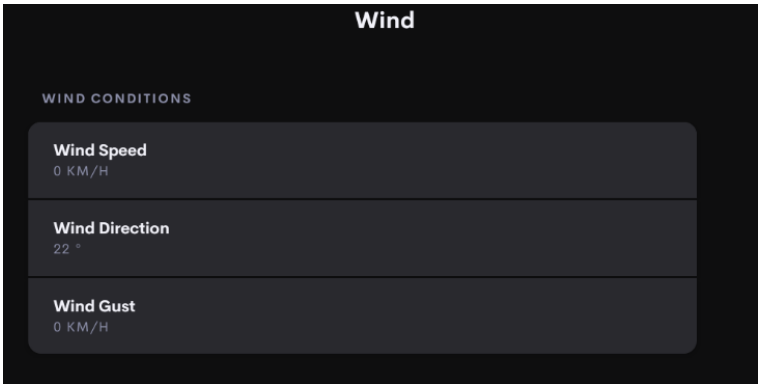
Once the Wunderground Local has been set up, current weather conditions and the forecast is displayed. Below is an example of a loaded tile:

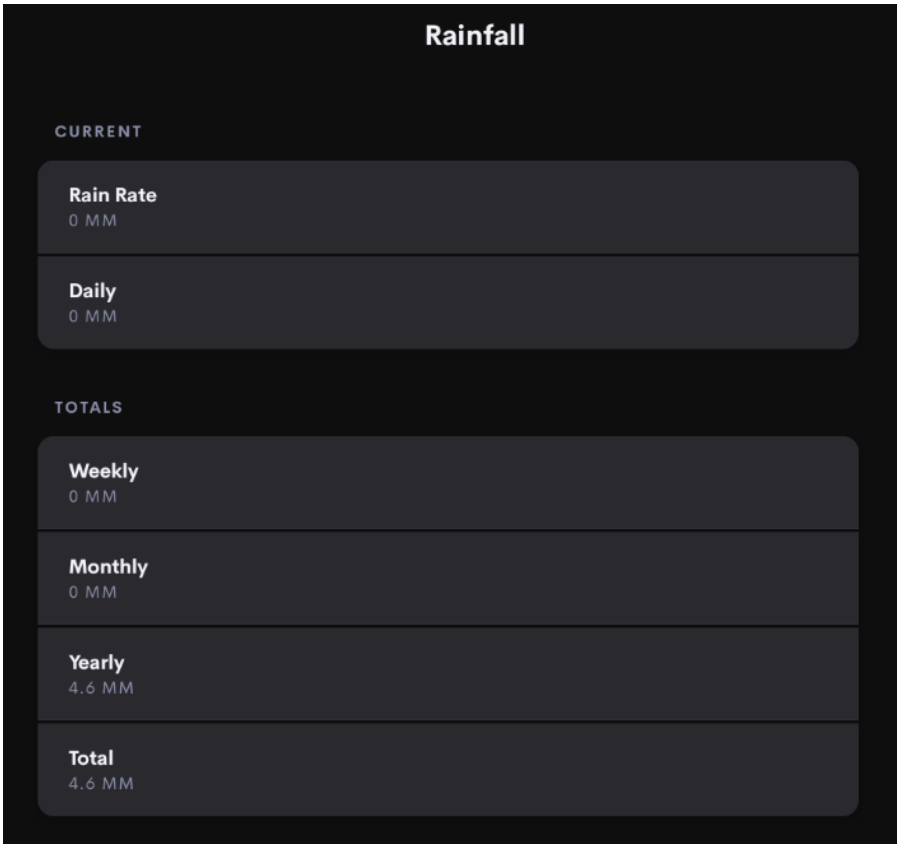


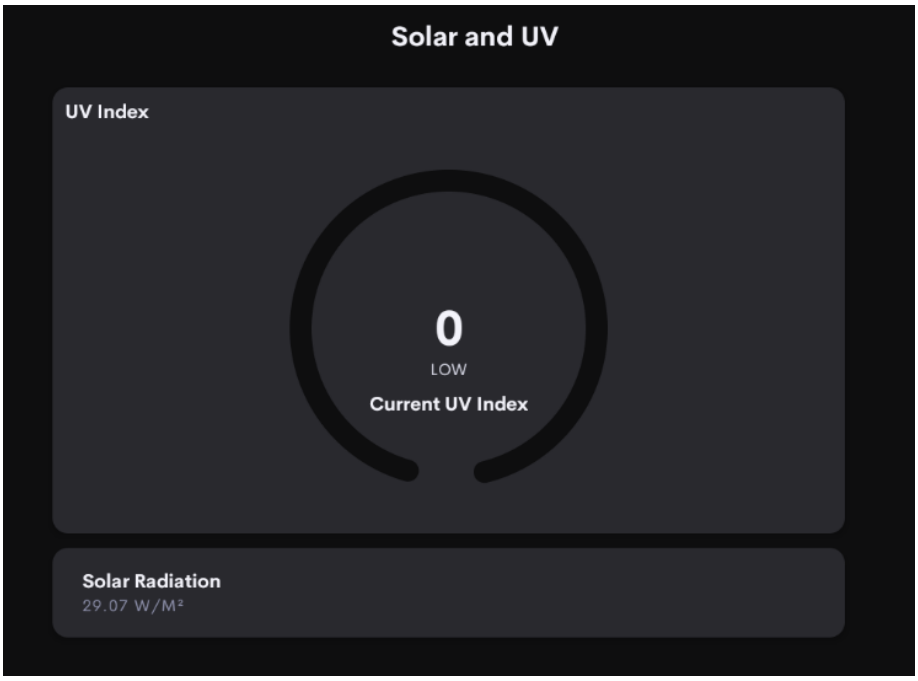








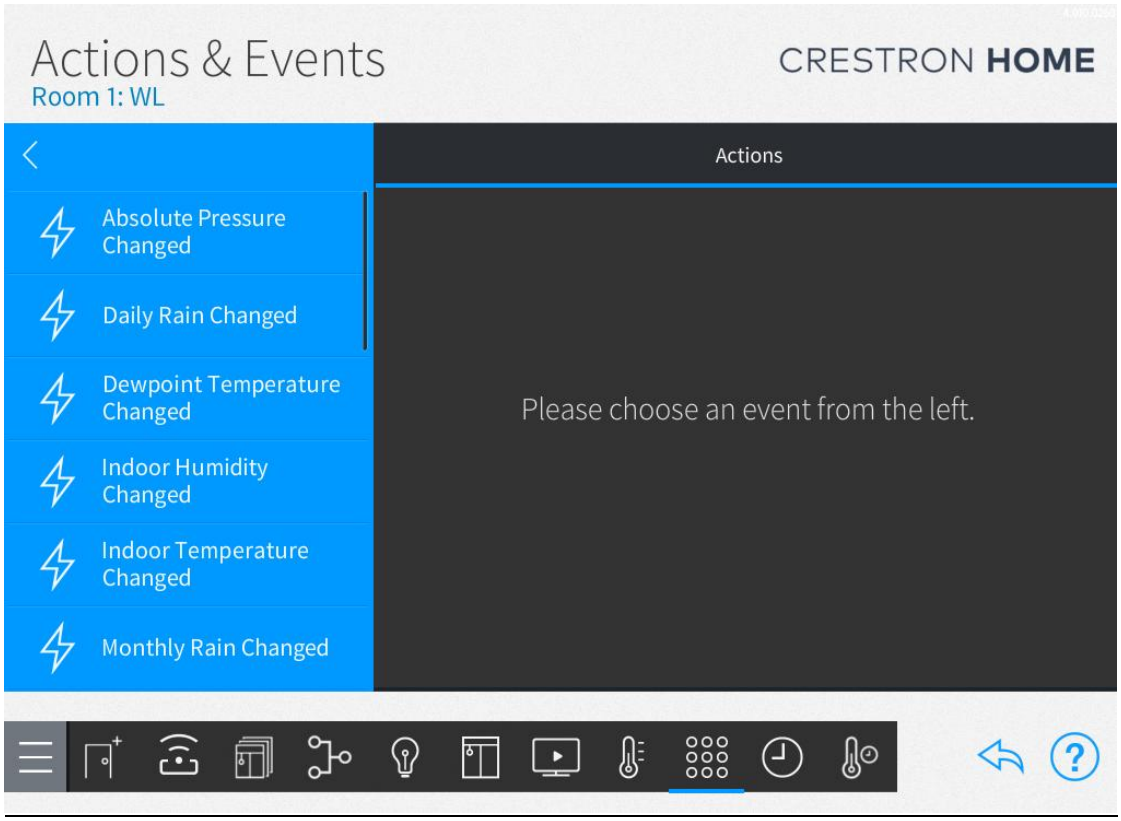




EXPOSED PROPERTIES

When the driver has been loaded, these properties become exposed and allow for logic to be applied on them.

You can find them by clicking into Actions & Events, clicking into the room with the driver and choosing the Wunderground Local folder.



The properties that are exposed are:

- Absolute Pressure
- Daily Rain
- Dewpoint Temperature
- Indoor Humidity
- Indoor Temperature
- Monthly Rain
- Outdoor Humidity
- Outdoor Temperature
- Rain Rate
- Relative Pressure
- Solar Radiation
- Total Rain
- UV Index
- Weekly Rain
- Wind Chill Temperature
- Wind Direction
- Wind Gust
- Wind Speed
- Yearly Rain

Please note that these properties having data come in is dependent on your weather station.

The device used when developing this driver is the CPC PSG04173.

An example of using these exposed properties can be seen below.

THRESHOLD NOTIFICATIONS WITH THE NOTICE TILE

In this example, the driver is generating notifications based on changes in the weather station telemetry, with messages sent via the **Ultamation Notice Tile** (which can be found on the Ultamation Shop Front). If configured, notifications can also be delivered as mobile push notifications through **Pushover**. If you do not own or wish to use the Notice Tile integration, you can skip this section.

For example, a temperature threshold of 30°C may be configured. If the weather station reports a value exceeding this threshold, the driver will generate a user-defined Notice message via the Notice Tile that will repeat based on the upload interval defined **in the weather station's web interface.**

The general message schema for notice messages is as follows:

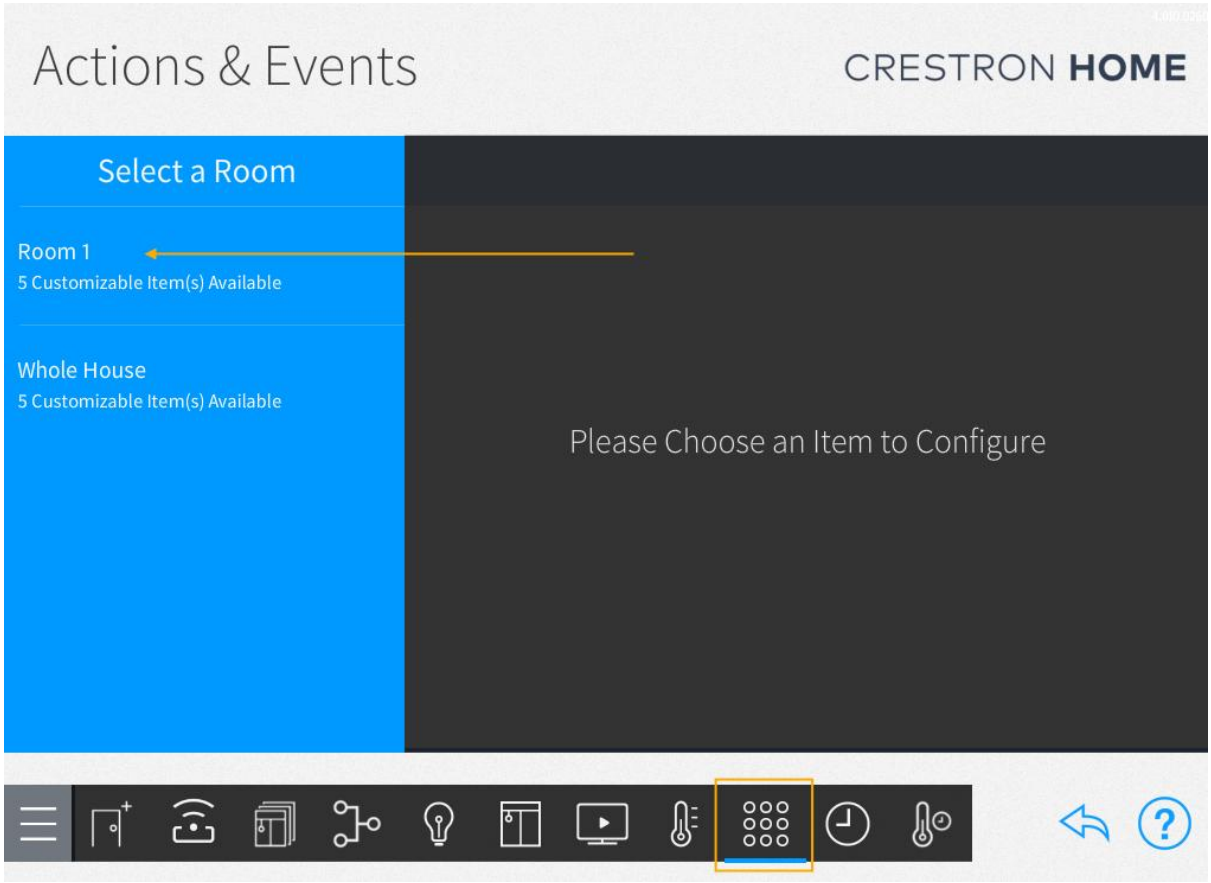
Field	Description	Requirement
Title	Title of the notice	1-30 characters
Message	Main body of the notice	1-60 characters
Priority	To determine importance	Low/Medium/High

Refer to the Notice Tile help file for more information on how the Notice Tile is setup and its capabilities.

Installation

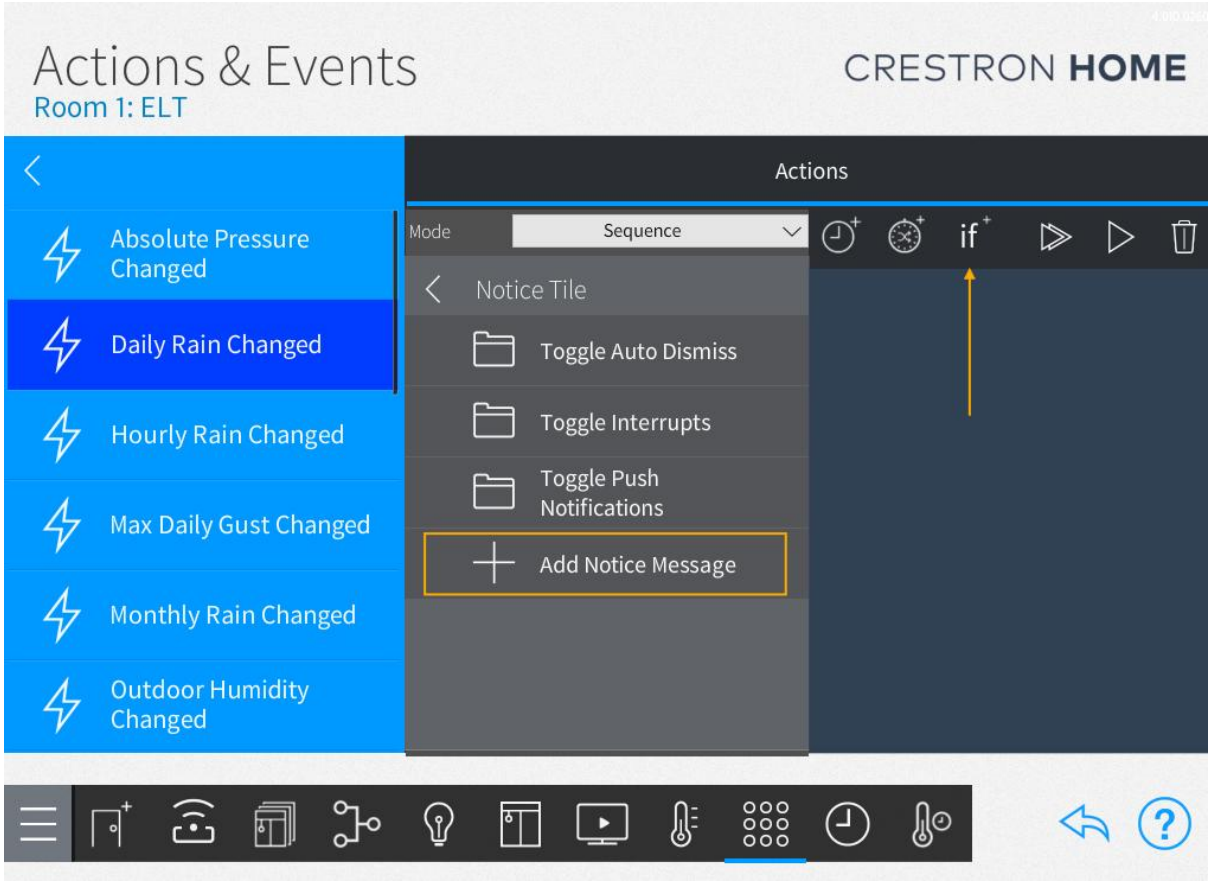
Before proceeding, the Notice Tile must be installed on the same processor.

Once the driver and the Notice Tile are loaded, navigate to **Actions & Events** and select the room containing the driver.



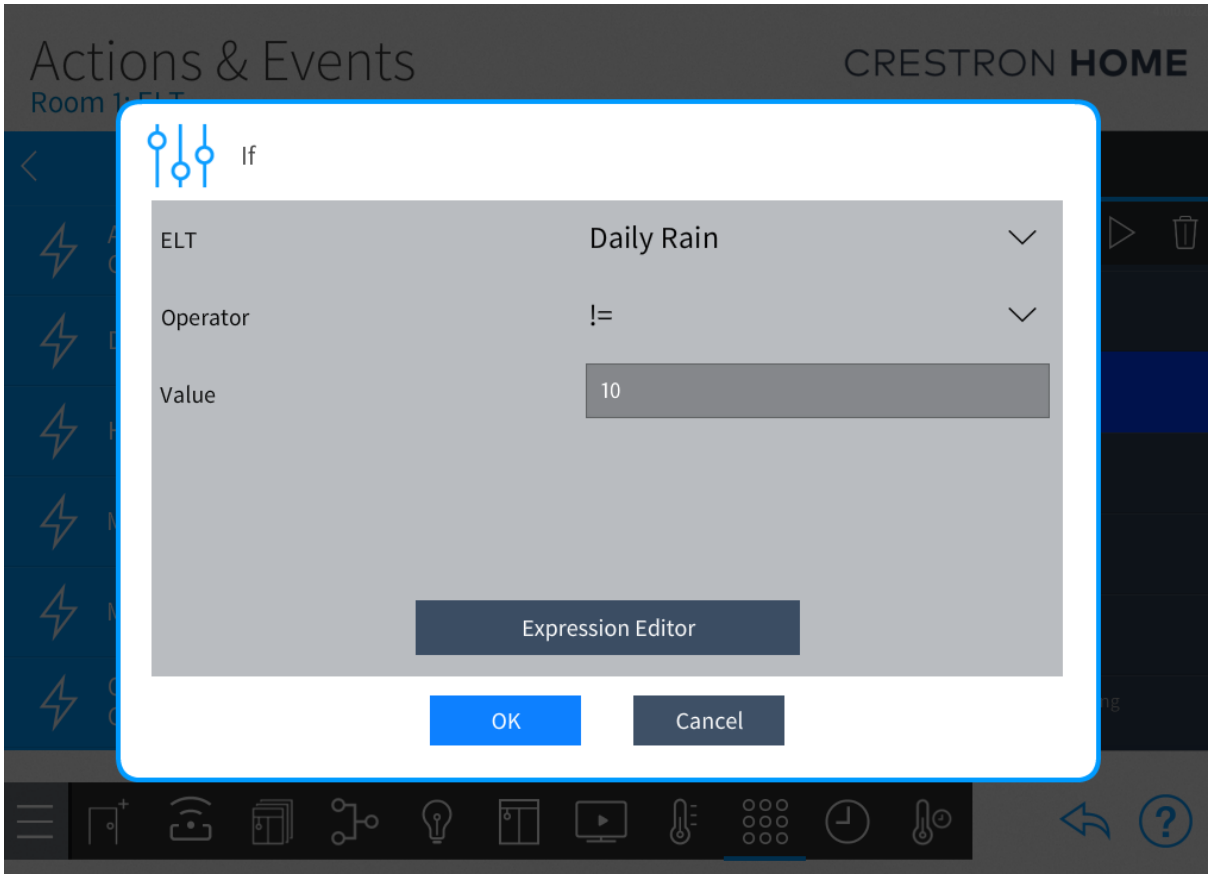
Within the driver folder, the available telemetry values for threshold configuration will be displayed.

Selecting one of the property changes reveals the actions menu. From here click Mode > Sequence, then select the room and driver folder with the Notice Tile to access the Notice Message.

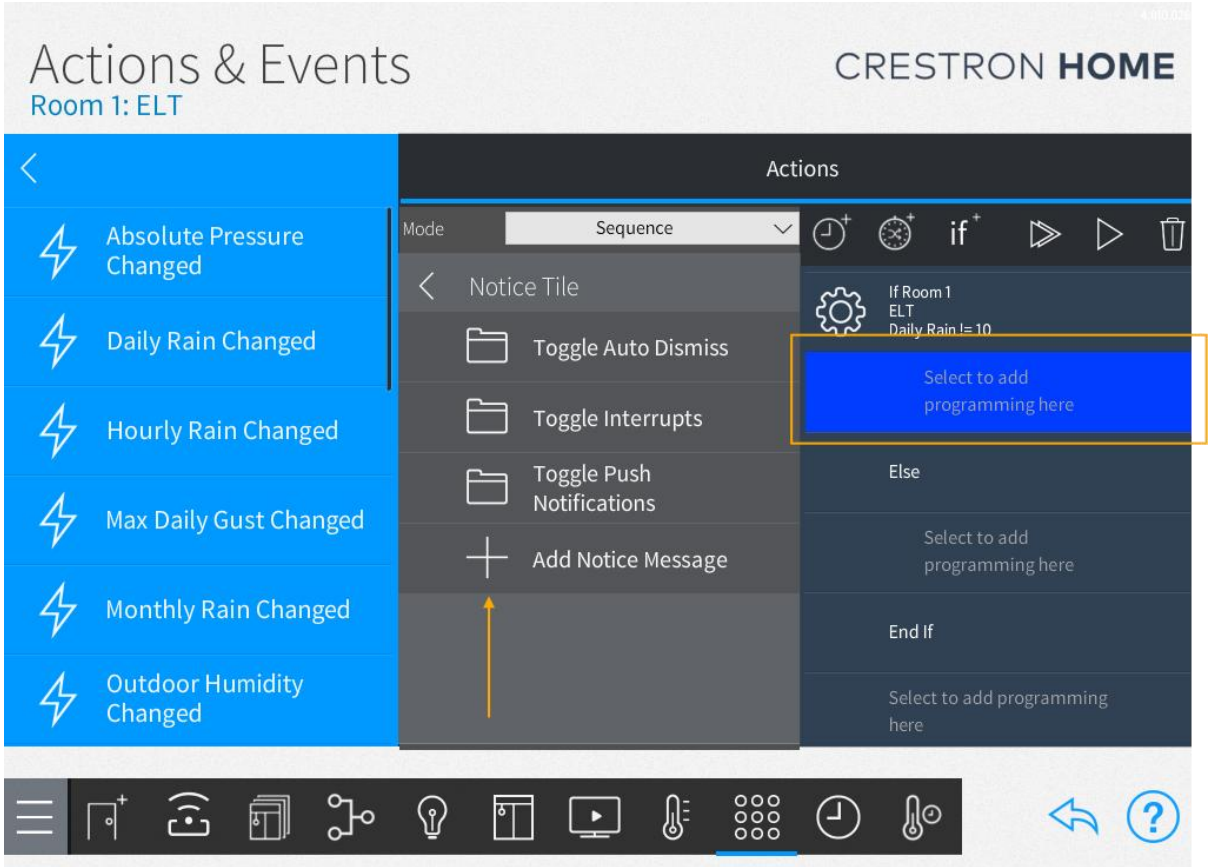


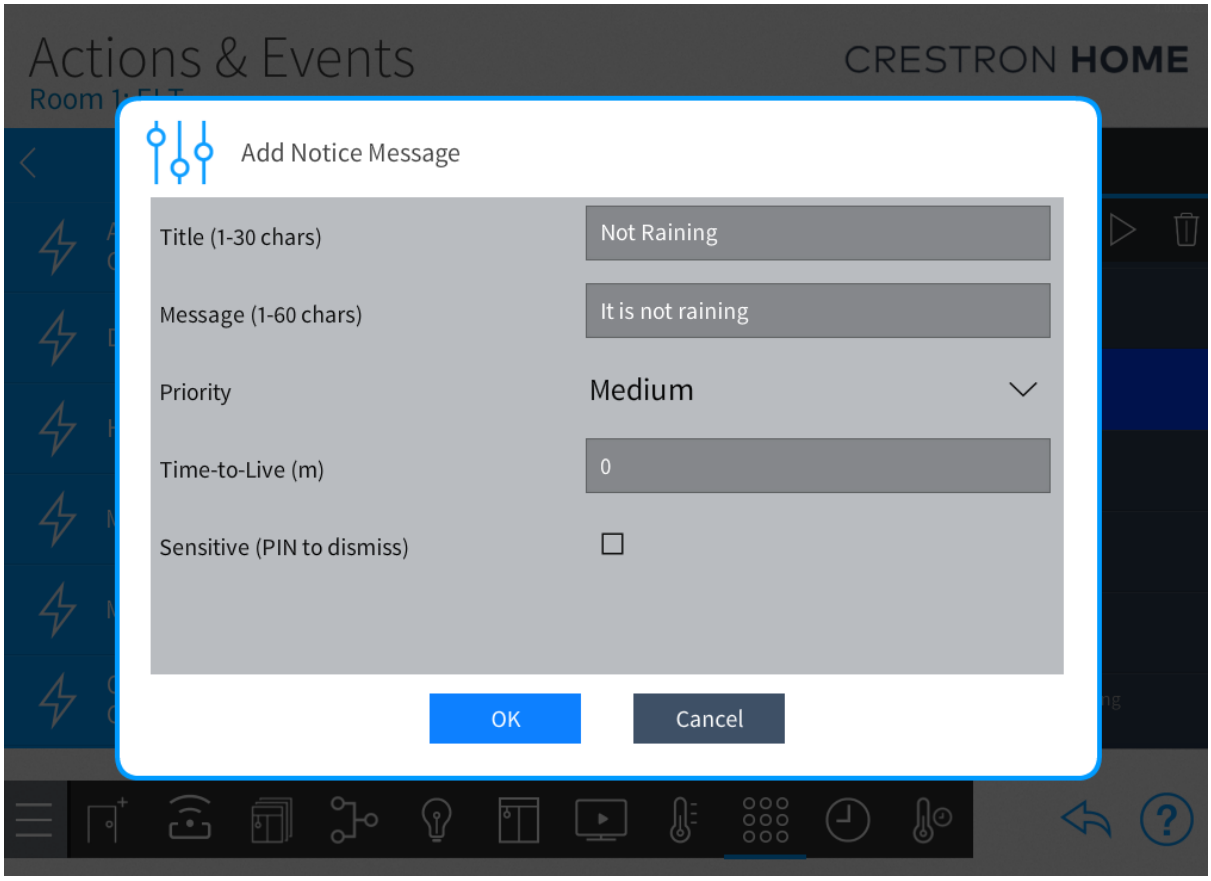
This is where notification logic can be configured.

Selecting the if condition provides access to the available telemetry properties for logic configuration. For example, selecting Daily Rain Changed allows conditions to be defined based on that value.

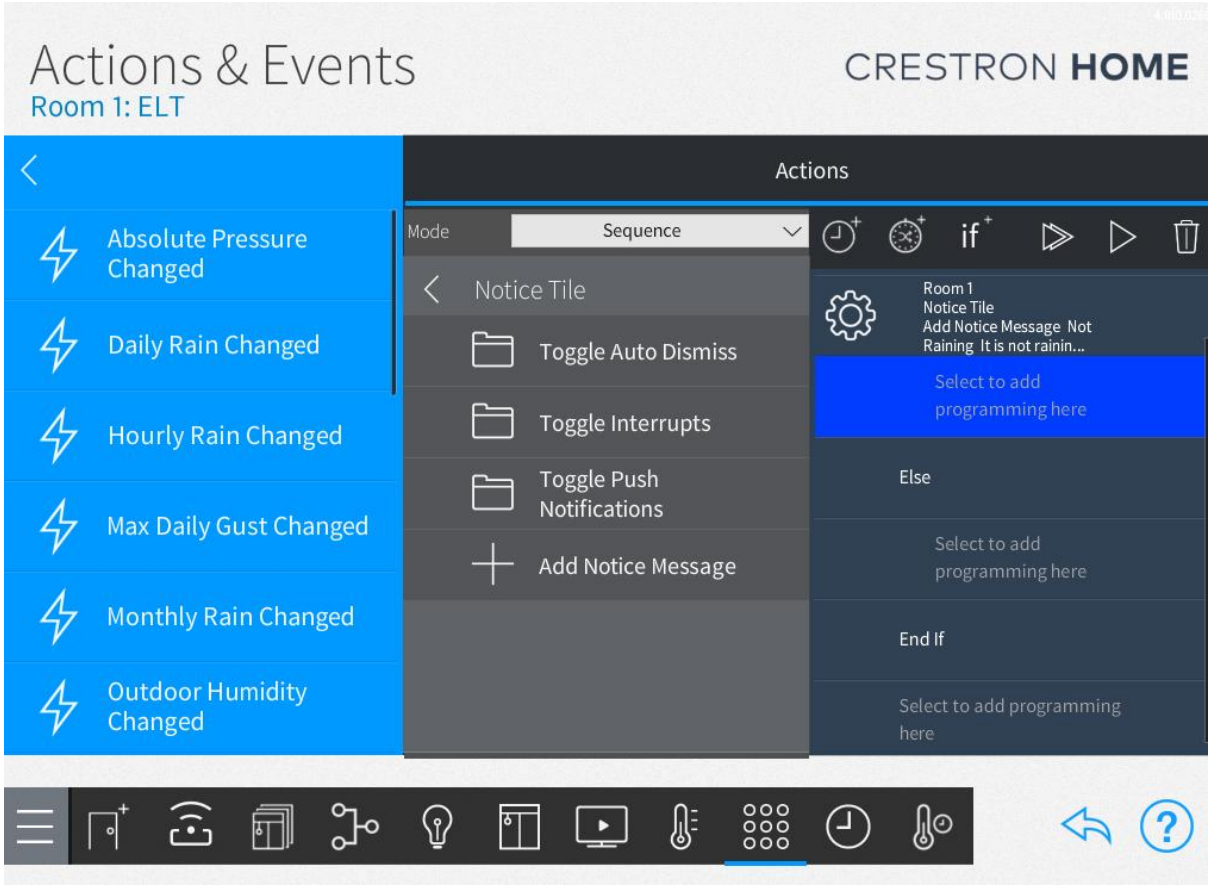


After confirming the condition, add the “Notice Message” action to the if statement.





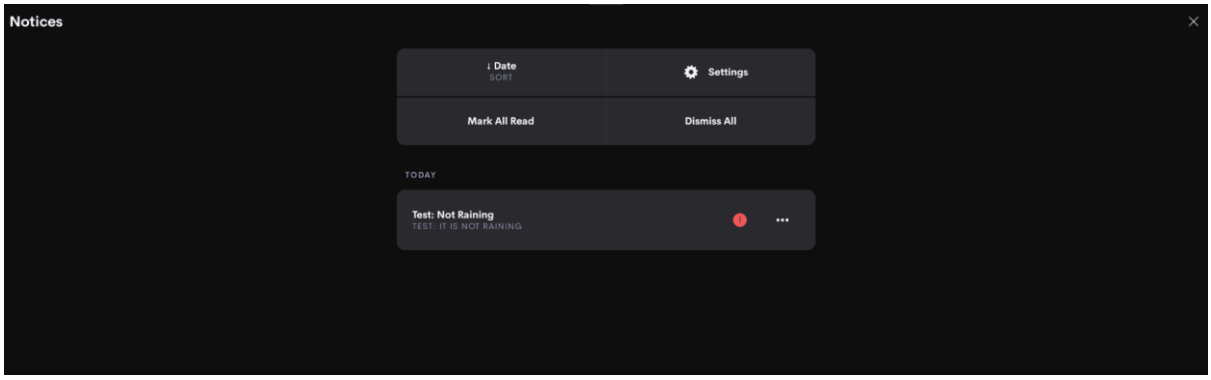
The notification can then be configured with a Priority, Title, and Message.



The polling rate for the notifications is based on what is configured in the weather station's web interface. For example, a condition such as Daily Rain Changed != 10 will trigger a notification whenever the condition is met. Further logic can be added with custom variables created in Crestron Home.

More advanced alert logic can be implemented with the additional operators "=", "!=", "<", "<=", ">", ">=".

This is how configured messages will appear within your Notice Tile.



Please note, the units (page five of this document) are defined during the driver installation. This means your defined thresholds for property change logic in your Notice tile messages must also be adjusted.

SUPPORT

If you have any issues with an integration solution please let us know by contacting Ultamation support on support@ultamation.com and please include as much detail about your issue as possible, such as a recent processor error log.

Licence verification messages are posted to the error log, so please ensure you have checked this.

LICENCING

This integration solution (including software, images and all other associated assets distributed as part of the purchased download package) is licenced on a PER PROCESSOR basis.

A purchase should not be completed without correct information as refunds cannot be issued for errors or changes made to details following purchase.

This is an electronic product and there is no physical delivery.

The integration solution is provided without any warranty with respect to the reliability of the controlled device or changes to device protocol. We will endeavour, through best efforts, to maintain the integration solution's functionality and any bug fixes will be provided free-of-charge. Additional functionality may be released as a variation of this integration solution and this will be a separate, purchasable, product.

CLOUD LICENCE

This integration solution contacts Ultamation's licencing server at startup. If the server finds a matching licence for the integration solution and processor then the integration solution will be licenced. Otherwise, the integration solution will check the offline licence key. If you purchase a licence **after** you have loaded the integration solution, please reboot the system to see changes take effect.

If you purchased a licence **before** it was migrated to the cloud service, i.e. you have a licence key already, you must enter this into the **Offline Key** user attribute. If you purchased the integration solution **after** it was migrated, and you don't have a licence key, no further action is required.

If no licence exists for the product/processor the integration solution will enter a short trial period (ONE HOUR) to allow for verification of correct control or evaluation.

To request an OFFLINE key, please contact support@ultamation.com with your order details and a brief explanation why you REQUIRE offline activation. Ultamation reserve the right to refuse offline activation.

NOTE: Once an offline key has been issued no further licence changes will be granted. Moving the integration solution to a new processor will require an additional licence purchase.