

## autoHome Demo #1 User Documentation

Group #1

Calvin Chiu

Elie Rosen

Elvison Dominguez

Paul Kania

Rohith Dronadula

Wayne Chang

http://autohome.mylifeiscomputers.net:3000/dashboard https://github.com/autohomeproject The autoHome web interface was designed to be very user-friendly. Upon logging into the system, the user is greeted with their **Dashboard**. The autoHome **Dashboard** provides several important aspects including Active Rules, Active Devices, and Important Alerts. The listed Active Rules and Active Devices can be clicked on for additional information about the respective rules or devices. Important Alerts are color coded to catch the user's attention. Alerts are colored red for critical alerts, and yellow for warnings.

On the left side of the screen, the user is greeted with a number of options. The other pages that the user can access consist of Devices, Device Types, Rooms & Locations, Configure Rules, Users, Logs & Alerts and Backup/Restore. We will traverse the list from top to bottom and talk about each page.

The **Devices** page shows the user all devices that are currently connected to the system. The **Dashboard** simply shows the user active devices on the system (devices that are currently "on" in the house), whereas on the **Devices** page, all devices are shown regardless of activity. Devices are listed in a tabular format to make it easier to read. The device table shows the device name, what type of device it is, what room the device is located in, the state of the device (if it is on or off), the default value of the device, and the options to show all information about the device in a new window (separate from the table), edit the device, or destroy (delete) the device from the system. In addition, on the top-right corner of the table, the user can click on "Add New Device" to add a new device to the system and specify their own values for each category in the table. The tabular format also allows for a number of additional functionalities. First, the user can sort the table based on any of the aforementioned categories. There is also the functionality to search the table for keywords that appear in any category. This is especially useful since in a house, there will be a lot of different devices, device types, and rooms. If a user types "kitchen" into the search box. all devices that are located in the kitchen will only appear. This proves to be especially useful when looking for a single device or a cluster of related devices (e.g. all devices in the kitchen). The tabular format makes it easier to have many entries (devices) and allows them to be displayed on multiple pages. Thus, our **Devices** page has page functionalities such as First, Previous, Next, Last, and a list of all page numbers for travelling to a specific page, directly built into the table.

Next on the list is the **Device Types** page. This page provides a very similar look to the **Devices** page in terms of the same tabular format. However, the categories in the table for this page consist of the name of the device type, the device type name that the system recognizes (module name), data type of the device (either analog or binary), data flow of the device (the units in which the device measures, e.g. volts, Celsius), and the same options of show, edit, and destroy. Just like the **Devices** page, users can search the table and sort it as they please. The user can also add a new device type to the table, specifying each value, in every category, as they desire.

The next page is the **Rooms & Locations** page. This page is also in a tabular format and shows all rooms and locations in the house. The show, edit, and destroy options are also included in the same, tabular style as the other pages. It may seem confusing at first as to what the difference between rooms and locations are. Rooms are rooms in the house, whereas locations are the locations of where the devices are in a certain room. Clicking on a certain room or location will bring up another page with all devices in the specified room. Just like other page functionalities, the user can add a room or location if they desire, specifying the room or location name, the floor that it is on, and a description of it.

**Configure Rules** page is the most complex of the pages. The user is provided with three different tables; Rule Sets, Condition Sets, and Action Sets. Each table has the same search and sorting functionalities as the other tables. Rule Sets use both an Action Set and Condition Set to form a Rule Set. Thus, the user should start by either making an Action Set or a Condition Set, let's start with an Action Set. The Action Set table provides the name of the Action Set, a description, the user who made it, as well as the show, edit, and destroy options found in the other tables. An Action Set is simply something that the system should do when a certain condition is met. So, this table allows the user to set the action they want to happen. However, now the user must make a condition set in order for the action to initiate. The Condition Set table is identical to the Action Set table, but obviously the user would want to set conditions rather than actions in the Condition Set table. Now that the Condition Sets and Action Sets table entries are entered, the user can categorize them into Rule Sets. The Rule Set table has the categories of name, the condition set it uses, the action set it uses, the user that created it, the description of the Rule Set, if the Rule Set is active or not, and the generic show, edit and destroy options.

The **Users** page is very straightforward. The table lists the User Name, last login time, if the user is an administrator or not, their hashed password, last IP address they used to log in, their phone number, and the show, edit, and destroy options. The table adopts the same search and sort functionalities, and users can create additional user accounts for the system.

The **Logs & Alerts** tab on the left of the page displays a number next to it to inform the user of any alerts they may have missed in the **Dashboard**. The **Logs & Alerts** page shows alerts by default, including all critical alerts, warnings, and successes of the system. The Logs tab on the page shows all events that have happened in the system since the system was last booted.

The last tab on the side of the autoHome page is **Backup/Restore**. This page allows the user to start the system backup or restore process. The page prompts the user to select a backup or restore device, and to then continue the process to finish backing up or restoring the autoHome system. In addition, the top of the page provides a notification of when the last backup was performed. A backup is scheduled on a

daily basis to ensure that if the system were to crash, the user would lose as little as possible.

Overall, the autoHome web interface is laid out in a clean manner, while also being highly effective for the user. This documentation should answer most questions that the user may have, while also giving a step-by-step guide on how to use the web interface.