Barbini.dev

Custom Info

1. Intro

Like you already know, Control4 has an icon-based user experience. That is pretty good in most cases, but sometimes we need to be able to display information in text format or be able to concentrate several pieces of information in one page, like a resume page. This webview driver was created to fill that gap.

Features:

- The driver provides the ability to create from 1 to 6 boxes.
- Each box has a custom title, and you can configure from 0 to 3 buttons to trigger Control4 actions.
- Each title can contain real time variables of the system that dynamically change the text to be displayed.
- Each button can contain text or an icon from the driver database.
- The driver grabs all the wallpapers of the project, and can be selected to be displayed as a background image on the page to improve the user experience.
- The icon of the driver can be changed.
- The driver provides backup export/import of the driver configuration (not the programming part), useful if the driver must be re added or create a copy.
- The driver supports “live UI updating”. This means that any change you make of the driver, you can see applied to any UI that has the driver opened.
- The driver supports, in the Box Titles, the function ROUND to round float variables, and BOOL to automatically convert Boolean variables to more meaningful text without using custom variables. See ***Box titles formatting*** for more info.

Compatibility:

- T3/T4: Require OS 3.1.3+

- iOS and Android: Require OS 3.2+
- **OS 3.3.0+ is recommended**

2. Properties

- *Cloud Status*: Current status of the driver license.
- *Automatic Updates*: Enable driver automatics updates (Recommended!)
- *MAC:* MAC address of the director.
- *Driver*: Driver name.
- *Driver Version:* Current driver version.
- *Driver Information:* Last debug information.
- *Debug Mode:* If On, driver will print debug information on Lua output.
- *UI Icon:* With this property you can choose the icon suits you better.
- *Wallpaper:* The driver polls all the wallpapers that are being used in the project, and allows you to use any of them like a background image.
- *Wallpaper Transparency:* The transparency of the background image can be adjusted in order to improve the User Experience.
- *Buttons Background Color:* The boxes button can have black or gray background color.
- *Box Quantity:* From 1 to 6 boxes can be selected. Each box has a title and can also have buttons.
- *Box x Title:* The title of the x box. This text can contain real-time variables (you can use more than one per title) to shown (see “Using Real-Time variables” appendix for more info). TIP: You can use “
” or “
” (without quotes) to specify a new line (enter).
- *Box x Button Quantity:* You can choose from 0 to 3 buttons to display in each box.
    - *0:* No buttons.
    - *1:* Button Center will be displayed.
    - *2:* Button Left and Right will be displayed.
    - *3:* Button Left, Center and Right will be displayed.
- *Box x Button Left/Center/Right Text or Icon:* For each button you can select if you want an icon

or a text be display.

- *Box x Button Left/Center/Right Text:* For each button, if you selected “Text”, you can set the text you want to display. **Variables cannot be used here.**
- *Box x Button Left/Center/Right Icon:* For each button, if you selected “Icon”, you can set the icon you want to display.
- *Variable Selector:* This property was added to improve finding a variable pattern. Select the variable you want to display in the UI.
- *Variable Info:* Once the variable is selected, this property will show some info about the variable, such as its type and current value (at the moment it was selected).
- *Other Device Variables:* Allows you to easily surf across other variables of the device.
- *Variable Pattern:* Once you select the variable, this property appears with the complete pattern. This pattern should be inserted on the right property/properties so the driver will replace this patter with the variable value in real time.

3. Actions

- *Update Wallpapers:* This will search again all the wallpapers available in the project. Notice that every time the driver reloads (director reboot) it will search again all the wallpapers.
- *Refresh Titles:* This will reload all the box titles and the monitored variables. This should be used only if support tells you to do so.
- *Print Backup:* This will print an encoded text with the configuration of all the properties of the driver. This is useful if you need to remove the driver but you want to reload all the parameters in a future. NOTE: the programming actions WILL NOT be saved.
- *Restore Backup:* This will load a backup.

4. Commands

N.A.

5. Events

- *Box x 1 Left Button Pressed:* It will be triggered when the left button of the x box is pressed. Be aware that Left button is present if 2 or 3 buttons are selected on “*Box x Button Quantity*” property.

- *Box x 2 Center Button Pressed:* It will be triggered when the center button of the x box is pressed. Be aware that Center button is present if 1 or 3 buttons are selected on "*Box x Button Quantity*" property.
- *Box x 3 Right Button Pressed:* It will be triggered when the right button of the x box is pressed. Be aware that Right button is present if 2 or 3 buttons are selected on "*Box x Button Quantity*" property.

  NOTE: Be aware that if you program a button and then that button is eliminated because you changed the "*Box x Button Quantity*" or delete that box, the programming will be lost despite of added it again.

5. Driver Variables

- *LAST_MENU_SELECTED:* Last menu name that selected the driver.
- *LAST_ROOM_SELECTED:* Last ID of the room that selected the driver.

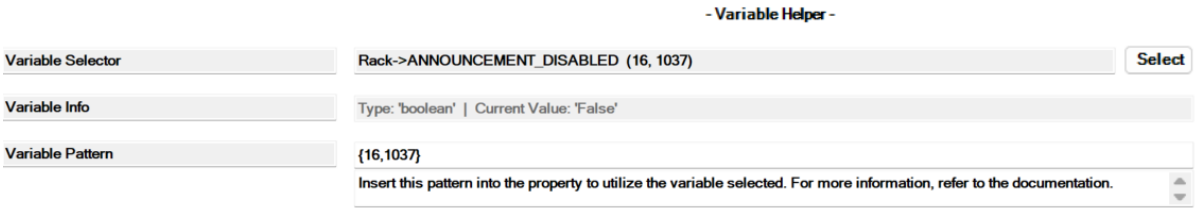
6. Using Real-Time variables

To use variables on the properties, we need the variables parameters. These are: deviceID and variableID.

With an update, the finding of the variable was improved. Here you have detailed the new method, and the legacy method (still works of course).

NEW METHOD

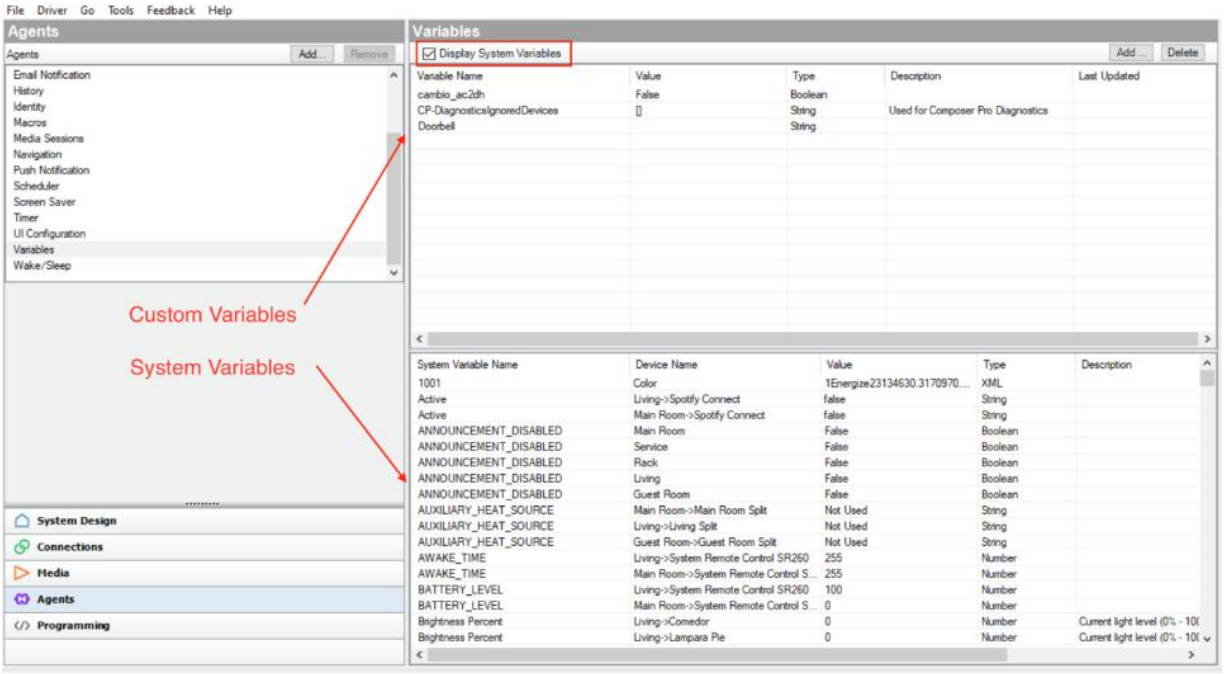
With a recent update, some properties were added to find a desired variable much faster than before.



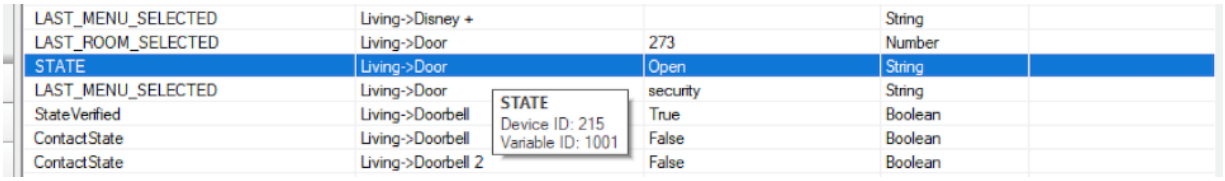
You only need to search for the variable in the "Variable Selector". Afterward, a "Variable Info" property will appear, displaying the variable type and current value (for reference purposes only). When you select a variable, the corresponding pattern will be presented. This pattern should be inserted into properties that support real-time variables, and the driver will replace it with the correct value.

LEGACY METHOD

To find them, we need to go to “Variables” Agent. If the variable is a custom variable (was created by the C4 programmer), you will see it on the sheet. If the variable was created by the system (or another driver), you must check the box “Display System Variables”.



Then, you must find the variable of interest, and then place the cursor above the variable to get the parameters:



In this case, deviceID=215 and variableID=1001.

To use it on the properties, we must use this format: **{xxx,yyyy}** where “xxx” is the deviceID of the variable, and “yyyy” is the variableID.

In this case would be **{215,1001}**.

7. Box titles formatting

Unfortunately, Control4 driver properties don't allow a better way to bring format to the box titles text of the web-based driver. So, you must use HTML tags to do it. This is quite simple, here you have some samples lines to test in the Box x Title properties:

- This is Bold
- This is Italic
- This is Bold and Italic

Also use
 or
 (both are equally valid) to make a new line in the box title.

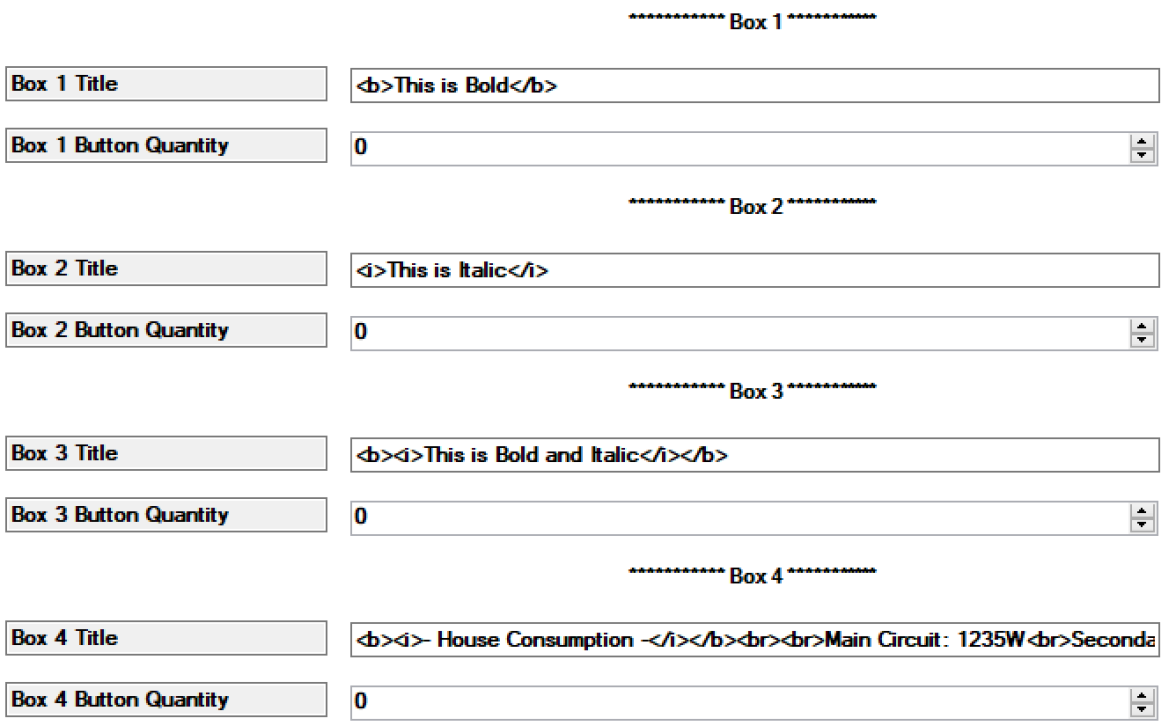
It is recommended to use a combination of this formats to display a good UI.

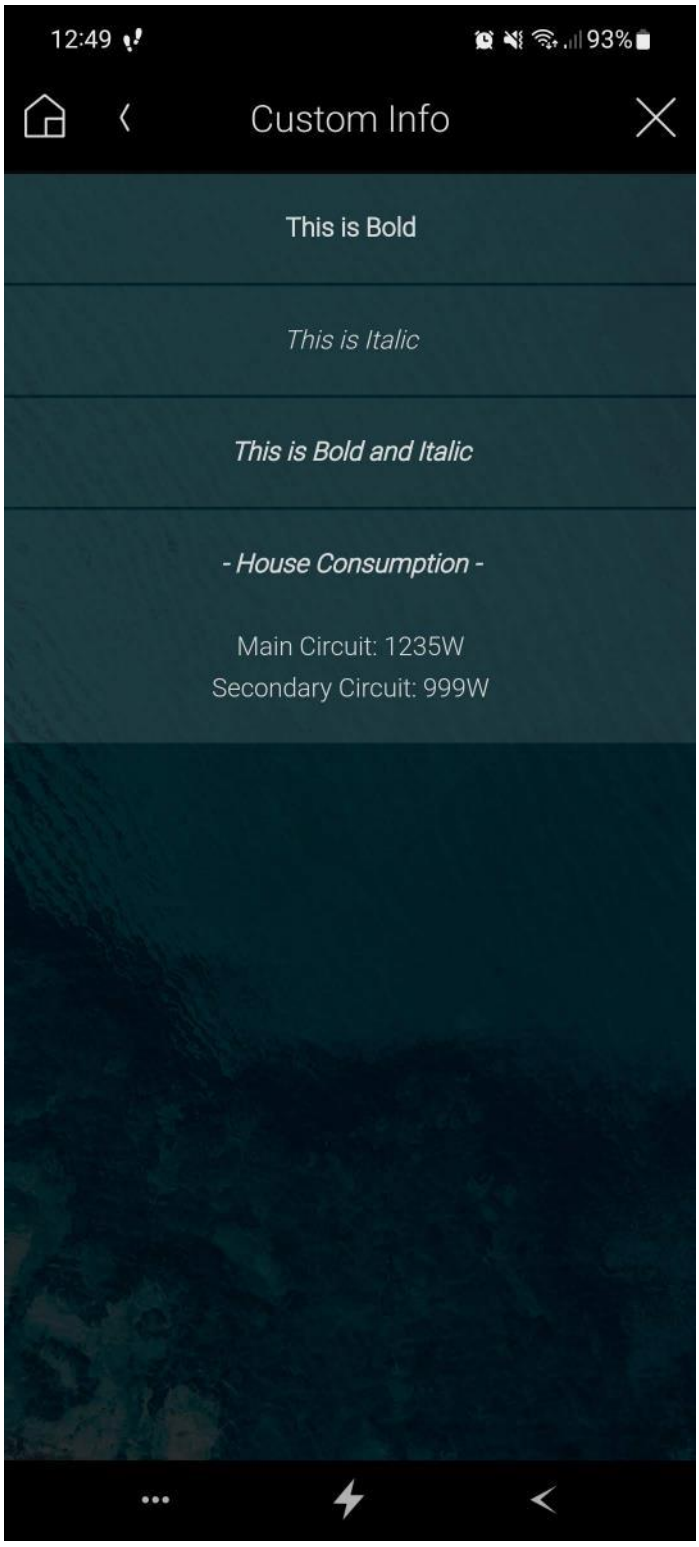
A complex test could be:

- - House Consumption -

Main Circuit: 1235W
Secondary Circuit: 999W

With this formatting and the use of variables, you can concentrate quite much information in one title with a good user experience. In the next images you can see these examples:





UPDATE 05/Jan/24

A new function to handle decimals in float numbers was added to improve the variable display performance.

You can use, in the BOX TITLE, this function:

ROUND(floatVar;decimalsPlaces)

Where:

- floatVar: Is the float variable in the format previously shown.
- decimalsPlaces: An int value that indicates the number of decimals desired.

Example of a Box Title:

- - House Current -

Main Circuit: ROUND({435,1002};2) A.

UPDATE March/25

A new function to handle Boolean variables was added to make the conversion from "True/False" or "1/0" to more meaningful text easier without creating custom string variables that change depending on a Boolean variable.

You can use this function in the BOX TITLE:

BOOL(boolVar;“TrueText”;”FalseText”)

Where:

- boolVar: Is the boolean variable (True/False or 1/0) in the format previously shown.
- “TrueText”: Is the text, between quotes, that will be displayed if the Boolean variable is true or 1.
- “FalseText”: Is the text, between quotes, that will be displayed if the Boolean variable is false or 0.

Example of a Box Title:

- - Weather Info -

 BOOL({435,1022};”Raining”; ”Not raining”).

8. Examples

This driver is so versatile, that shall be a lot of examples of application.

To better understand the use of variables and text formatting, the driver by default will have one box configuration with three buttons.

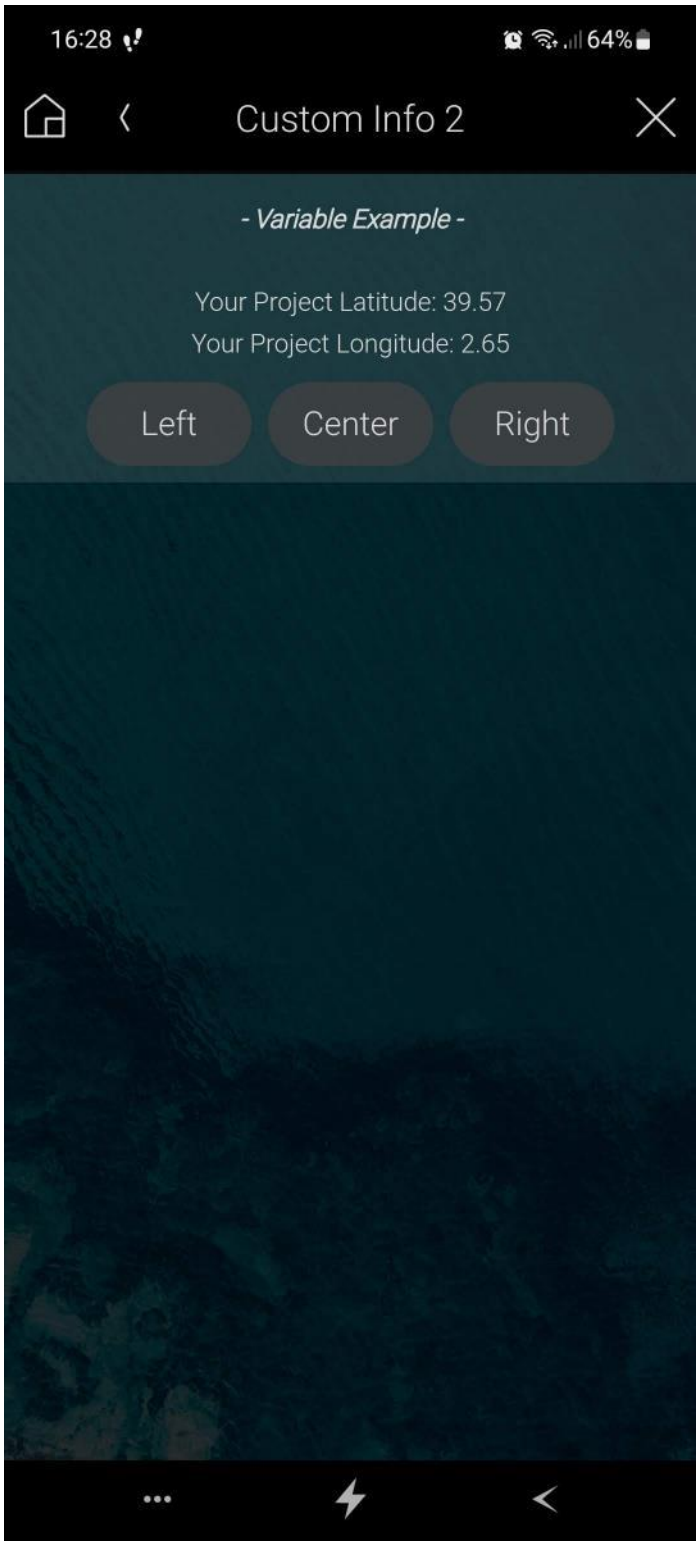
The box 1 title property will have this text:

- - Variable Example -

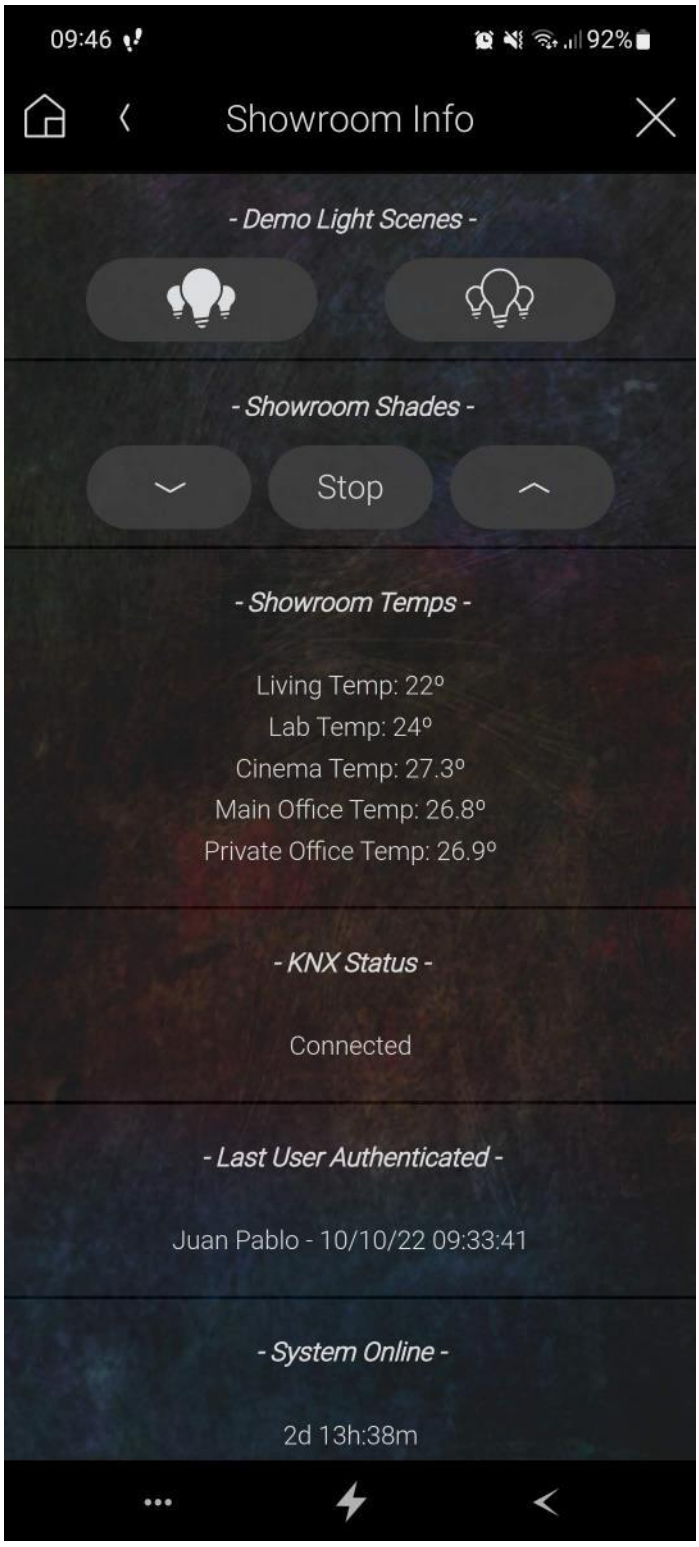
Your Project Latitude: {1,1001}
Your Project Longitude: {1,1002}

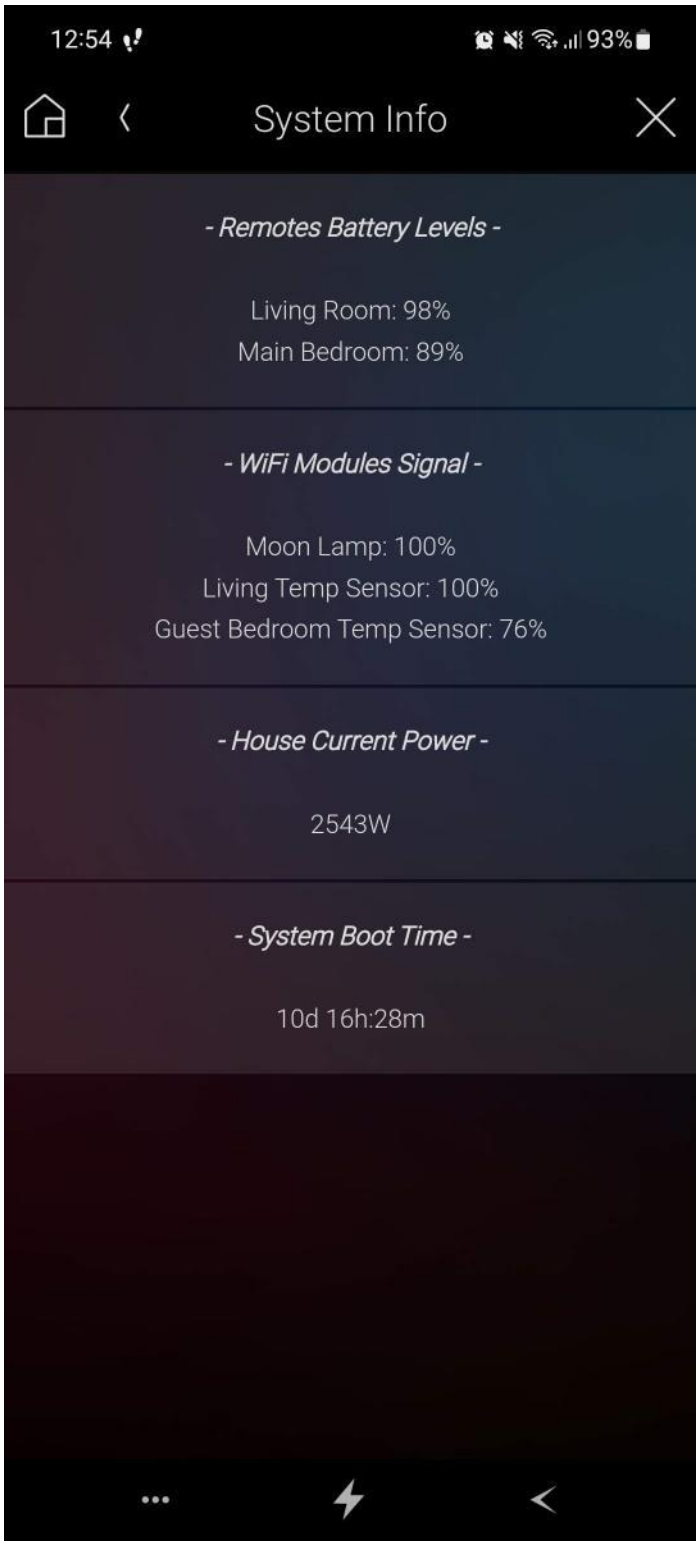
Note that **{1,1001}** and **{1,1002}** are general variables of all projects that indicate project latitude and longitude respectively.

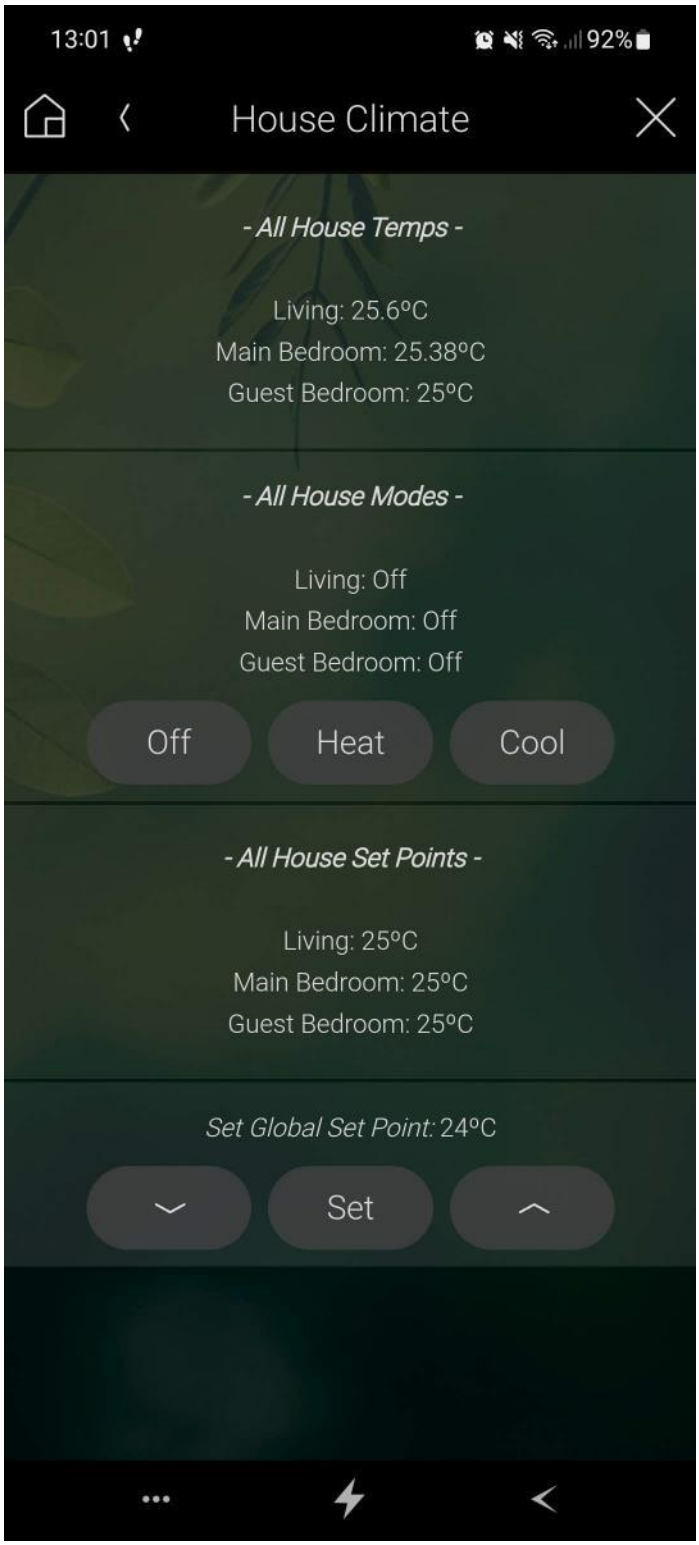
This should be the view of the driver opened for first time in the UI:



Some other examples of pages:

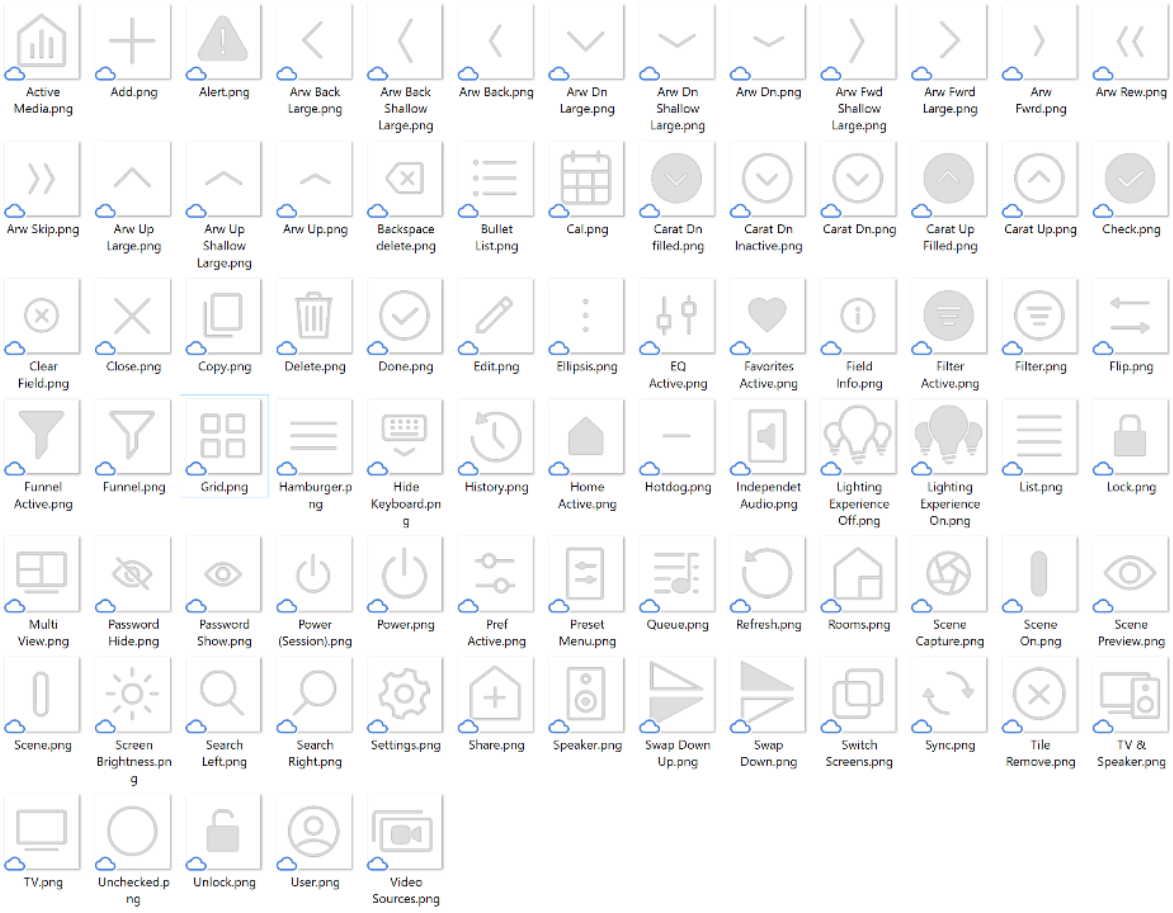

09:46
92%
Showroom Info
- Demo Light Scenes -
- Showroom Shades -
Stop
- Showroom Temps -
Living Temp: 22º
Lab Temp: 24º
Cinema Temp: 27.3º
Main Office Temp: 26.8º
Private Office Temp: 26.9º
- KNX Status -
Connected
- Last User Authenticated -
Juan Pablo - 10/10/22 09:33:41
- System Online -
2d 13h:38m


12:54
93%
System Info
- Remotes Battery Levels -
Living Room: 98%
Main Bedroom: 89%
- WiFi Modules Signal -
Moon Lamp: 100%
Living Temp Sensor: 100%
Guest Bedroom Temp Sensor: 76%
- House Current Power -
2543W
- System Boot Time -
10d 16h:28m


13:01
92%
House Climate
- All House Temps -
Living: 25.6ºC
Main Bedroom: 25.38ºC
Guest Bedroom: 25ºC
- All House Modes -
Living: Off
Main Bedroom: Off
Guest Bedroom: Off
Off
Heat
Cool
- All House Set Points -
Living: 25ºC
Main Bedroom: 25ºC
Guest Bedroom: 25ºC
Set Global Set Point: 24ºC
Set

9. Button icons

Here you can see the list of icons and their names, available to use in each button if the “icon” option was selected:



*More icons could be added in a future without updating this documentation

10. Limitations

These are the current driver limitations:

- Sometimes, when you select the driver in the UI, a black background and a spinning wheel can appear for a couple of seconds before the page shows up. Apparently, in that cases the Control4 app take more time to load the web-page and that is why you must wait a little bit.

11. Warranty and disclaimer

Barbini.dev provide drivers tested as much as possible. However, due to the highly variants of systems

setups and the constant changing of the electronics systems, updates and/or modifications may be required to fixing bugs or improve the driver functionality.

Many of our drivers interact with systems APIs (like Control4 and/or any other 3rd party system). Therefore, if any API changes, the driver may stop functionating correctly. **Barbini.dev** cannot guarantee long-term functionality of any driver developed that uses APIs. **Barbini.dev** has the right to repair, provide updates, or discontinue a driver at any time. These repairments or updates could be free or required additional expenses. Despite the above, our efforts will always be to maintain the drivers as long as possible and free of charge of upgrades as much as possible.

12. Trial and Showroom Licenses

All the drivers have 10 days of trial, allowing dealers to test the features of any driver in a customer project before purchasing it. The trial automatically begins when a driver is installed in a project.

We enable all the Showroom licenses to have unlimited access to the drivers.

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Barbini.dev

22101202 - Initial Release

22101701 - Improved black background

22102001 - Fixed iOS button icons not loading

22102102 - Fixed iOS wallpaper image not loading

22102103 - Added more UI icons

22111904 - Changed driver default with variable example, improve documentation, added more button icons, remove debug on timer, some other minor improvements.

23082301 - Added an improvement for boolean variables. Now they are displayed as "True" or "False" rather than "1" or "0".

230909xx - A new efficient method for quickly locating variables was introduced, eliminating the need to leave the driver page.

240105xx – New Round function added to handle float variables decimals.

240514xx – Fixed bug in iOS devices not working properly with the driver if there was an apostrophe symbol inside a string. Additionally, other maintenance fixes were implemented.

240514xx: – Fixed bug in iOS devices not working properly with the driver if there was an apostrophe symbol inside a string.

240516xx – Fixed a bug where some buttons were not executing the event correctly if they were pressed on the borders.

241217xx – Fixed a bug where the ROUND function wasn't working properly with comma (",") decimals.

250213xx – Added Wallpaper Transparency Property to improve the User Experience!

250317xx – Added BOOL function to convert Boolean variables in meaningful text, improved variable selector and improved driver disabled html.

250803xx – Improved variable search adding other device variables selector.

260115xx – Improved the subscription of variables in drivers that are not initialized correctly. Improved the default wallpapers in X4.