

## Objects - configuration in the Smart Home Manager

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## Introduction

Basic elements used in the Ampio UNI application are called *objects*. Objects are configured in the Smart Home Manager application. There are various ways of setting objects up, grouping them or creating connections.

# **Ampio Smart Home Manager**

In order to log into the Smart Home Manager application, you have to know the server's administrator password and the IP address. If the server is new, you can find the M-SERV server configuration guide helpful.

The server's IP address is automatically discovered in a local network. In other instances, you will have to enter it manually. If the server has never been connected to the Smart Home Manager application before, select *First connection*.

| 🙈 Ampio Smart Home Man | ager v 1.2.7d |                          |                    |                  |                  |              | _         |        |
|------------------------|---------------|--------------------------|--------------------|------------------|------------------|--------------|-----------|--------|
| File Edit Help Status: |               |                          |                    |                  |                  |              |           |        |
| Devices                | By All        | •                        |                    | Filter           | + Add wireless d | evice        | Search    |        |
| Jest Users             | Id            | Мас                      | Device Type        | Device name      | PCB Version      | Soft Version | Configure | Update |
| <b>?</b> Locations     | _             |                          |                    |                  |                  |              |           |        |
| Groups                 | _             |                          |                    |                  |                  |              |           |        |
| Objects                |               |                          |                    |                  |                  |              |           |        |
| Scenes                 |               |                          |                    |                  |                  |              |           |        |
| 🔚 Grouping             |               | III Server has been four | id !!!             |                  |                  | ×            |           |        |
| - Relations            |               |                          |                    |                  |                  |              |           |        |
| r Actions              |               | Host 1                   | 92.168.1.30        |                  |                  |              |           |        |
| <b>≓</b> Integrations  |               | Password [*              | *******            |                  | F .              |              |           |        |
| <b>Icons</b>           |               |                          | Show glass panels  | on device/object | list             |              |           |        |
| Resources              |               | ×                        | r kennember passwo |                  |                  |              |           |        |
| ·                      | ]             | Connect                  | Cancel             | Suppo            | rt First conne   | ection       |           |        |
|                        |               |                          |                    |                  |                  |              |           |        |
|                        |               |                          |                    |                  |                  |              |           |        |
|                        |               |                          |                    |                  |                  |              |           |        |
|                        |               |                          |                    |                  |                  |              |           |        |
|                        |               |                          |                    |                  |                  |              |           |        |
|                        |               |                          |                    |                  |                  |              |           |        |
|                        |               |                          |                    |                  |                  |              |           |        |
|                        |               |                          |                    |                  |                  |              |           |        |
|                        |               |                          |                    |                  |                  |              |           |        |

After logging in, you will see a list of devices.

|   |    |                      |                  | Filter      | + Add wireless device | Sear                 | ch       |
|---|----|----------------------|------------------|-------------|-----------------------|----------------------|----------|
| Users   | Id | Мас                  | Device Type      | Device name | PCB Version So        | ft Version Configure | Update   |
| P Locations   |    | 0 16 / 1             | M-SERV           |             | 0 508                 | Settings             |          |
| Groups  |    | 1 d13<br>2 4868 / b4 | M-LED<br>M-DOT-9 |             | 3 10050               | Settings             | -> 10226 |
| Scenes<br>Grouping<br>Relations                                 |    |                      |                  |             |                       |                      |          |
| Antions   |    |                      |                  |             |                       |                      |          |
| Actions<br>Integrations   |    |                      |                  |             |                       |                      |          |
| <ul> <li>Actions</li> <li>Integrations</li> <li>Cons</li> </ul> |    |                      |                  |             |                       |                      |          |

### Grouping objects to display in the Ampio UNI app

To display an object in the mobile app, you have to assign it to a group in the *Grouping* tab by ticking the box in the *Belongs* column and choosing the desired group from a drop-down list (*Select group*). In this tab, you can also filter or sort objects to find them easier. After selecting the objects, save their settings on the server using the *Ctrl+s* shortcut, or by going to *Edit ->* Save configuration on the server.

| , Ampie             | o Smart Home Mana | ager v 1.2.7d             |          |             |              |              | – 🗆 X     |
|---------------------|-------------------|---------------------------|----------|-------------|--------------|--------------|-----------|
| File Edi            | t Help Successf   | fully connected : 192.168 | 3.1.30   |             |              |              |           |
|                     | Devices           | Select Group: -1 Ma       | ain Menu | •           | Only grouped | By All       |           |
| :::                 | Users             | ·                         |          |             | ´ (          |              |           |
| <b>9</b>            | Locations         | Belongs                   | ID       | Object name | Device name  | Settings     | LP        |
|                     |                   | $\checkmark$              |          | inp 1       |              | Settings     | A         |
|                     | Groups            |                           | 2        | inp 2       | 1:           | Settings     |           |
|                     | Objects           |                           | 3        | inp 3       | 1:           | Settings     |           |
|                     | Objects           |                           | 4        | inp 4       | 1:           | ( Settings ) |           |
| <u>ଞ୍</u> ଟ         | Scenes            |                           | 5        | inp 5       | 1:           | Settings     |           |
|                     |                   |                           | 6        | inp 6       | 1:           | Settings     |           |
|                     | Grouping          |                           | 7        | inp 7       | 1:           | Settings     |           |
| BLe                 | Delations         |                           | 8        | inp 8       | 1:           | (Settings)   |           |
| <b>5</b> 7 <b>°</b> | Kelauolis         |                           | 9        | out 1       | 1:           | Settings     |           |
|                     | Actions           |                           | 10       | out 2       | 1:           | Settings     |           |
| <u> </u>            |                   |                           | 11       | out 3       | 1:           | (Settings)   |           |
| =                   | Integrations      |                           | 12       | out 4       | 1:           | Settings     |           |
|                     | 1 -               |                           | 13       | out 5       | 1:           | Settings     |           |
|                     | Icons             |                           | 14       | out 6       | 1:           | Settings     |           |
| Bì                  | Resources         |                           | 15       | out 7       | 1:           | (Settings)   |           |
|                     | resources         |                           | 16       | out 8       | 1:           | ( Settings ) |           |
|                     |                   |                           | 17       | inp 1       | 1:           | Settings     | $\forall$ |
|                     |                   |                           |          |             |              |              |           |

From now on, the object will be visible in the mobile app.



#### Adding a new group

If you wish to have more groups displayed in the app, you can add new groups in the *Groups* tab. You can define the new group's name in the *Description* field. In order to change e.g. the icon or the group's access settings, go to *Settings*.

| 🙈 Ampio Smart Home Mana | ger v 1.2.7d            |              |               |             |                      | - 0      | × |
|-------------------------|-------------------------|--------------|---------------|-------------|----------------------|----------|---|
| File Edit Help Successf | ully connected : 192.16 | i8.1.30      |               |             |                      |          |   |
| Devices                 | + Add                   | + Сору       | Remove By All | •           |                      | Filter   |   |
| Users Users             | Id                      | Parent group | Order in App  | Description | Extended description | Settings |   |
| P Locations             |                         | 0 Main Menu  | 0             | New Group   |                      | Settings |   |
| Groups                  |                         |              |               |             |                      |          |   |
| Objects                 |                         |              |               |             |                      |          |   |
| Scenes Scenes           |                         |              |               |             |                      |          |   |
| 🔡 Grouping              |                         |              |               |             |                      |          |   |
|                         |                         |              |               |             |                      |          |   |
| F Actions               |                         |              |               |             |                      |          |   |
| <b>≠</b> Integrations   |                         |              |               |             |                      |          |   |
| E Icons                 |                         |              |               |             |                      |          |   |
| Resources               |                         |              |               |             |                      |          |   |
|                         |                         |              |               |             |                      |          |   |
|                         |                         |              |               |             |                      |          |   |

### Adding a new object

Apart from automatically generated objects, you can also add your own objects and configure them accordingly. In order to do that, go to the *Objects* tab.

| 🙈 Ampio             | Smart Home Mana  | ger v 1.2.7d           |         |             |                 |                       | - 0      | Х |
|---------------------|------------------|------------------------|---------|-------------|-----------------|-----------------------|----------|---|
| File Edi            | t Help Successfi | uly connected : 192.16 | 58.1.30 |             |                 |                       |          |   |
|                     | Devices          | + Add                  | Remove  | Сору        | Ву              | All 🔻                 | Filter   |   |
|                     | Users            | Id                     | Device  | Description | Turn on time[x1 | Number Component type | Settings | _ |
| 0                   | Locations        | 1                      | 1:      | inp 1       | 0               | 1 Input               | Settings |   |
| •                   | Locations        | 2                      | 1:      | inp 2       | 0               | 2 Input               | Settings |   |
|                     | Groups           | 3                      | 1:      | inp 3       | 0               | 3 Input               | Settings |   |
|                     | 01.1             | 4                      | 1:      | inp 4       | 0               | 4 Input               | Settings |   |
|                     | Objects          | 5                      | 1:      | inp 5       | 0               | 5 Input               | Settings |   |
| 10 co               | Scenes           | 6                      | 1:      | inp 6       | 0               | 6 Input               | Settings |   |
|                     | States           | 7                      | 1:      | inp 7       | 0               | 7 Input               | Settings |   |
|                     | Grouping         | 8                      | 1:      | inp 8       | 0               | 8 Input               | Settings |   |
|                     | Delations        | 9                      | 1:      | out 1       | 0               | 1 Relay               | Settings |   |
| <b>8</b> 7 <b>°</b> | Kelations        | 10                     | 1:      | out 2       | 0               | 2 Relay               | Settings |   |
|                     | Actions          | 11                     | 1:      | out 3       | 0               | 3 Relay               | Settings |   |
|                     |                  | 12                     | 1:      | out 4       | 0               | 4 Relay               | Settings |   |
| =                   | Integrations     | 13                     | 1:      | out 5       | 0               | 5 Relay               | Settings |   |
|                     | T                | 14                     | 1:      | out 6       | 0               | 6 Relay               | Settings |   |
|                     | Icons            | 15                     | 1:      | out 7       | 0               | 7 Relay               | Settings |   |
| Bì                  | Resources        | 16                     | 1:      | out 8       | 0               | 8 Relay               | Settings |   |
|                     | Resources        | 17                     | 1:      | inp 1       | 0               | 1 Line input          | Settings |   |
|                     |                  | 18                     | 1:      | sens 1      | 0               | 1 Sensor              | Settings |   |
|                     |                  | 19                     | 1:      | sens 2      | 0               | 2 Sensor              | Settings |   |

Objects can be added (a new object will appear at the end of the list), deleted and copied. There is also an option of filtering and sorting. In the *Device* column, select the Ampio module that you would like to configure and add a chosen *Description. Turn on time* is the time after which the object will be activated, multiplied by 10ms (e.g. entering the value 10 will activate the output after 100ms). The *Number* column represents the number of input/output. Lastly, the *Settings* button provides you with a lot of other options.

| 🔦 New object – 🗆 🗙  |
|---|
| File  |
| Icon ON Icon OFF Ico |
| Select Select   |
| □ PIN Object type: Flag → Advanced  |
| □ Log every: 60 seconds (0 - data logged when changed) 🗹 Show in active devices   |
| Block when local connect Block when cloud connect Hide value on sketch icon Hide title in mobile app  |
| Interpretation 1 Read only Demonstrate Show connected as list Demonstrated Hide menu (3 dots)   |
| Access rights Toggle All  |
| Id Name   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
| Object is deleted Save Cancel   |

The most significant variable here is choosing the *Object type*. Each type has different options available in *Advanced* section. Below, you can find an example of *Advanced* options for the *Sensor* type.

| ۸   |                           |                             | – 🗆 X       |
|---|---------------------------|-----------------------------|-------------|
| File  |                           |                             |             |
| Unit:   |                           |                             |             |
|   |                           |                             |             |
| Type: Temperature                               |                           |                             | -           |
| Value   | Description               | Operator                    | Icon        |
|   |                           |                             |             |
| Add unit to description fro Use in weather None | om table  Add description | to icon 🗌 Add value to icor | 1           |
| String format:                                  |                           |                             | Save Cancel |

Additionally, selecting specifically a temperature sensor and the option *Divide by 10* will allow you to display temperature with one decimal place in the mobile application.

The field *String format* allows you to set up the value display mode, similarly to the *printf* function of C language. For example, if you want only one decimal place to be displayed, enter %.1f. This does not apply to the field *Temperature*, which is predefined.

What you might find useful is also the option of displaying a description instead of a value. For instance, for the IAQ air quality, you can define descriptions such as *Very good*, or *Very poor*. You should create a list of values and pick the appropriate logical conditions. The selection can be done from:

- Greater than >
- Smaller than <
- Equal to =
- Different from !=
- A range <> (enter two threshold values separated by a comma).

If a couple of conditions from the list are met, the last one will be executed.

|                            |                             |                                       | \          | _ |
|----------------------------|-----------------------------|---------------------------------------|------------|---|
| • <b>•</b> •               |                             |                                       |            | ` |
| File                       |                             |                                       |            |   |
| Unit: IAQ                  |                             |                                       |            |   |
| Divide by:                 |                             |                                       |            |   |
| Type: Linear input         |                             |                                       |            | Ŧ |
| Value                      | Description                 | Operator                              | Icon       |   |
| 1.0                        | not equal                   | !=                                    |            |   |
| 55.0                       | bigger than                 | >                                     |            |   |
| 55.0                       | equal                       | =                                     |            |   |
| 55.0                       | smaller than                | <                                     |            |   |
| 30.0,35.0                  | range                       | <>                                    |            |   |
|                            | ·                           | · · · · · · · · · · · · · · · · · · · |            |   |
| Add unit to description fi | rom table 🔲 Add description | to icon 🗌 Add value to icon           | 1          |   |
| Use in weather None        | •                           |                                       |            |   |
| String format:             |                             |                                       |            |   |
| Add Remove                 |                             |                                       | Save Cance | 1 |

### **Connecting objects**

There is also a possibility of merging a couple of objects into one. It makes the Ampio UNI app more visually neat and easier to operate.

| , Ampi   | o Smart Home Mana | ager v 1.2.7d            |         |             |              |               |           |             | - 0      | ×         |
|----------|-------------------|--------------------------|---------|-------------|--------------|---------------|-----------|-------------|----------|-----------|
| File Ed  | it Help Successf  | fully connected : 192.16 | 58.1.30 |             |              |               |           |             |          |           |
|          | Devices           | Select related object:   |         |             |              |               | → + → Add | Remo        | ve 🎤 📴 I | Edit      |
| ***      | Users             |                          |         | By All      |              |               |           |             |          | 5         |
| <b>Q</b> | Locations         |                          |         |             |              |               |           |             | 0        |           |
|          |                   | Id                       | Device  | Description | Extended des | Turn on time[ | Number    | Component t | Settings |           |
|          | Groups            | 1 1:                     |         | inp 1       | gr:0: inp 1  | 0             | 1         | Input       | Settings | A         |
|          | Oblight           | 2 1:                     |         | inp 2       | inp 2        | 0             | 2         | Input       | Settings |           |
|          | Objects           | 3 1:                     |         | inp 3       | inp 3        | 0             | 3         | Input       | Settings |           |
| 8.0      | Scenes            | 4 1:                     |         | inp 4       | inp 4        | 0             | 4         | Input       | Settings |           |
|          | occirco           | 5 1:                     |         | inp 5       | inp 5        | 0             | 5         | Input       | Settings |           |
|          | Grouping          | 6 1:                     |         | inp 6       | inp 6        | 0             | 6         | Input       | Settings |           |
|          | D.1.4             | 7 1:                     |         | inp 7       | inp 7        | 0             | 7         | Input       | Settings |           |
| ∎†•      | Kelations         | 8 1:                     |         | inp 8       | inp 8        | 0             | 8         | Input       | Settings |           |
|          | Actions           | 9 1:                     |         | out 1       | out 1        | 0             | 1         | Relay       | Settings |           |
|          | Actions           | 10 1:                    |         | out 2       | out 2        | 0             | 2         | Relay       | Settings |           |
| ≓        | Integrations      | 11 1:                    |         | out 3       | out 3        | 0             | 3         | Relay       | Settings |           |
|          | -                 | 12 1:                    |         | out 4       | out 4        | 0             | 4         | Relay       | Settings |           |
| L        | Icons             | 13 1:                    |         | out 5       | out 5        | 0             | 5         | Relay       | Settings |           |
| B        | D                 | 14 1:                    |         | out 6       | out 6        | 0             | 6         | Relay       | Settings |           |
|          | Resources         | 15 1:                    |         | out 7       | out 7        | 0             | 7         | Relay       | Settings |           |
|          |                   | 16 1:                    |         | out 8       | out 8        | 0             | 8         | Relay       | Settings |           |
|          |                   | 17 1:                    |         | inp 1       | inp 1        | 0             | 1         | Line input  | Settings | $\forall$ |

Create a new connection by clicking on *Add* in the *Relations* tab and adding a name. Then, select which elements should belong to the connection.

| Devices      | Select related object: | output_group |              |        | · + - Add | d Remove P    |
|--------------|------------------------|--------------|--------------|--------|-----------|---------------|
| L Users      |                        |              | B            | y All  | •         | Filter        |
| Locations    |                        |              | Relonas      | Object | name      | Extended name |
| Groups       | 1                      |              |              | inp 1  |           | inp 1         |
|              | 2                      |              |              | inp 2  |           | inp 2         |
| Jubjects     | 3                      |              |              | inp 3  |           | inp 3         |
| Scenes       | 4                      |              |              | inp 4  |           | inp 4         |
| , o controb  | - 5                    |              |              | inp 5  |           | inp 5         |
| Grouping     | 6                      |              |              | inp 6  |           | inp 6         |
| D.1.4        | 7                      |              |              | inp 7  |           | inp 7         |
| Kelations    | 8                      |              |              | inp 8  |           | inp 8         |
| Actions      | 9                      |              | $\checkmark$ | out 1  |           | out 1         |
| rectons      | _ 10                   |              | $\checkmark$ | out 2  |           | out 2         |
| Integrations | 11                     |              | $\checkmark$ | out 3  |           | out 3         |
| <u> </u>     | 12                     |              |              | out 4  |           | out 4         |
| ුද් Icons    | 13                     |              |              | out 5  |           | out 5         |
| Decommons    | 14                     |              |              | out 6  |           | out 6         |
| Kesources    | 15                     |              |              | out 7  |           | out 7         |
|              | 16                     |              |              | out 8  |           | out 8         |
|              | 17                     |              |              | inn 1  |           | inn 1         |

It is crucial to submit the object from the *Grouping* tab. From now on, you will be able to control outputs 1,2,3 with one button, as shown below.

