WP T2 - Deliverable 4.2
User manal on launching the interface (dashboard)

Improving Resources Efficiency of Agribusiness supply chains by Minimizing waste using Internet of Things sensors (REAMIT)

User manual
REAMIT dashboard

Summary of contents

Manual REAMIT dashboard

The REAMIT dashboard has many features and is built in such a way that you need almost no explanation for adding them. Below is an explanation of the basic features.
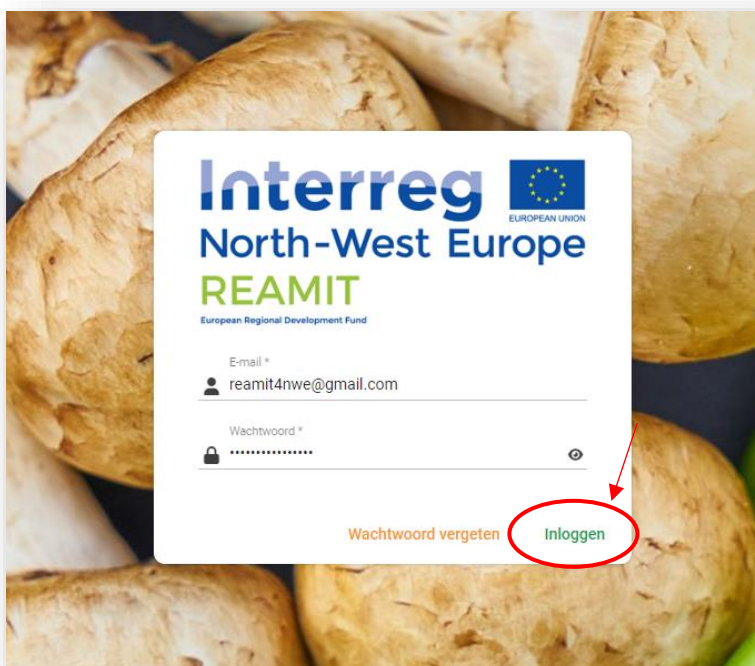
1. Accessing the dashboard step by step

Step 1:
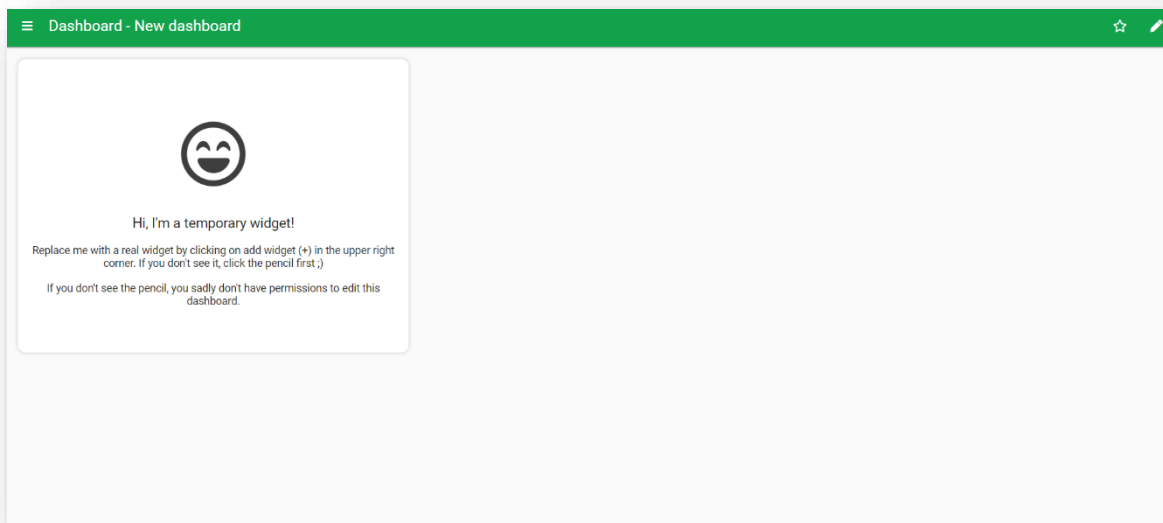Go to: https://reamit.whysor.com/, you will then see a login screen:

Step 2:
Now enter your e-mail address and password and click on 'Login':

After logging in, you will see the this:

2. Main menu

After logging into the dashboard (https://reamit.whysor.com/), click on the three lines at the top left, you will see a menu:
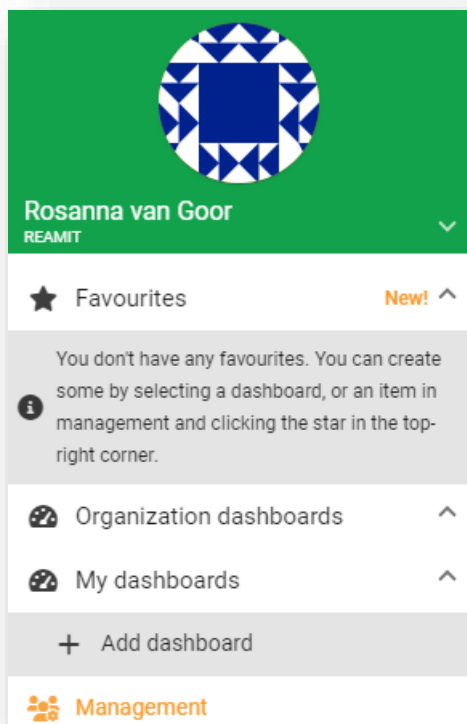

Figure 1 - The menu of the Whysor platform

This chapter explains what you can find in this main menu.

2.1 Personal settings

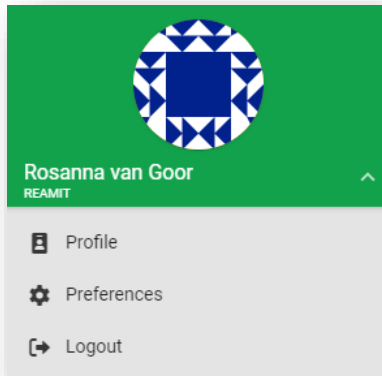When you click on your name you will see a menu where you can view your profile, set your preferences and log out:

Figure 2 - Personal settings

2.2 Profile

When you click on 'Profile', you will see the screen below with your personal details. Here you can add your phone number to receive notifications from your device and change your password. In addition, under Sessions you can see whether you are still logged in on other computers (and undo this):
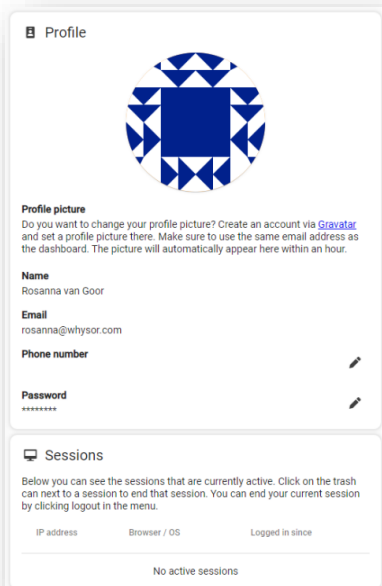

Figure 3 - Profile

2.3 Preferences

If you click on the three dashes at the top left again, then click on your name and go to 'Preferences' you will be shown various setting options.

You can choose different languages here. Whether you want a light or dark background (theme). You can choose whether you want the menu items to be closed or open by default and in what order the

dashboards and favourites should be sorted in the menu. Finally, you can choose whether you want the 'Management' menu to show only your favourite organisations or all organisations to which you have rights:
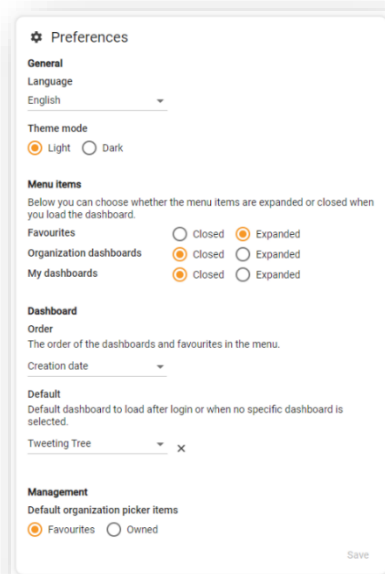

Figure 4 - Preferences

2.4 Favourites

You can add companies or dashboards here for quick access. When you have access to multiple REAMIT organisations, you will see other companies in "Management - Organizations".

When you click on an organisation in the left-hand menu via "Management", you can click on the star on the right-hand side. The company is now added to your "Favourites" for quick access.
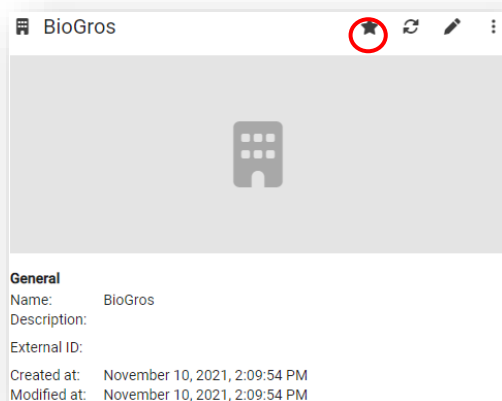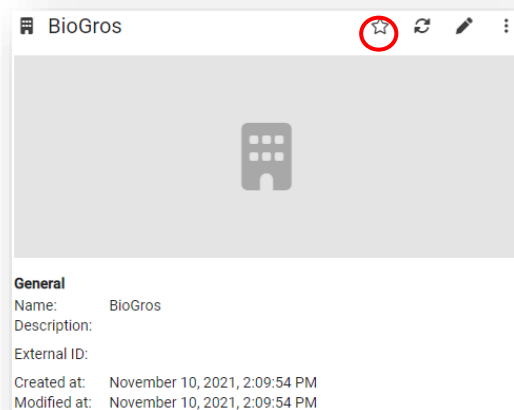

Figure 5 - Favourite is enabled

Figure 6 - Favourite not enabled

3. Dashboard

Different devices are used within the REAMIT organisation. Naturally, you want to be able to read clearly what each device is measuring. To do this, you create a dashboard.

3.1 Create a dashboard

At 'Organisation dashboards' you'll see all dashboards that have been created for a REAMIT organisation and which are visible to everyone within that organisation.

To create a dashboard, go to 'Management' via the left menu and click on the relevant organisation you want to create a dashboard for. Under the icons, click on 'Organization dashboards'.
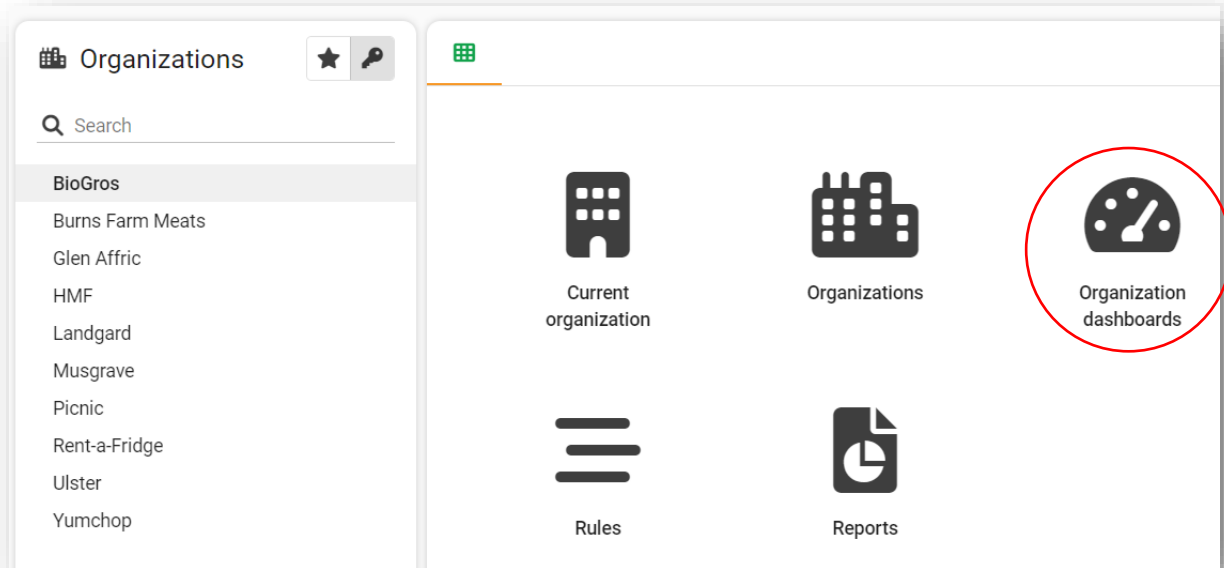
Figure 7 – Create an organisation dashboard

Then click on the plus + at the top and give your dashboard a name. Then click on 'add':
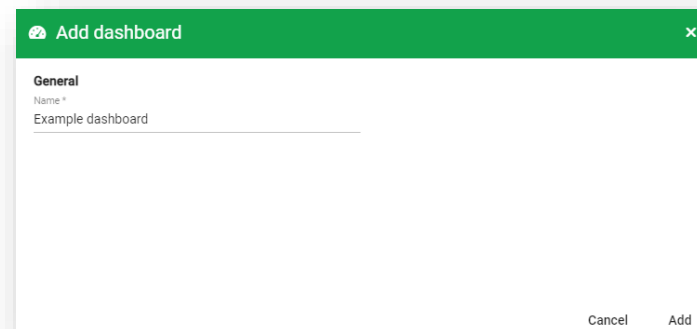

Figure 8 - Give your new dashboard a name

Your dashboard has now been added to the organisation, but of course it still needs to be filled now! Select the dashboard you have just created and then click on the pencil at the very top right, you will then see this:
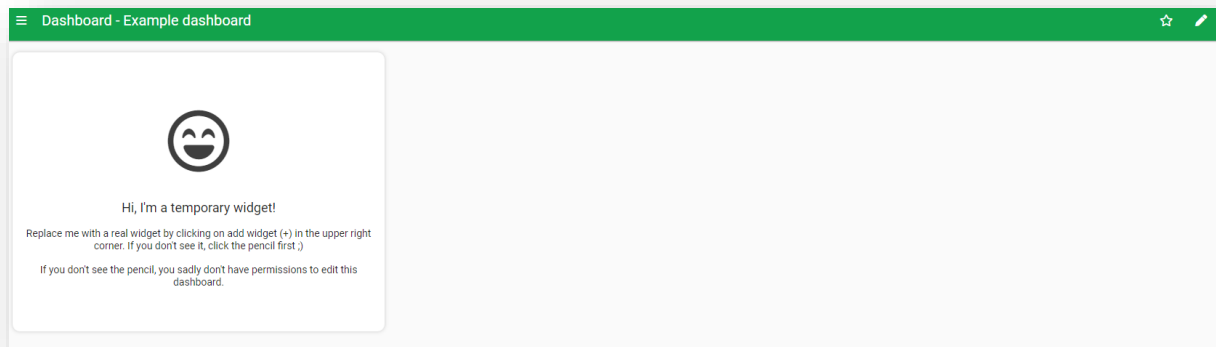

Figure 9 - Creating a new dashboard

Click on the pencil at the top right and then the plus to add your widgets of choice.

There are several options within the dashboard. It is designed so that you can get started on your own without too much explanation. For a few widgets, how to add them is explained below.

3.2 Line chart

To create a line chart, when you are in the dashboard, go to the pencil icon in the top right and then click on the plus sign. You click left under 'Widget' for a line chart, then choose which REAMIT organisation. Then choose which device you want to use, then choose which sensor or sensors you would like to use, click the green "Add" button and when you have added all the sensors click 'Add' again at the bottom right, the graph is now created.
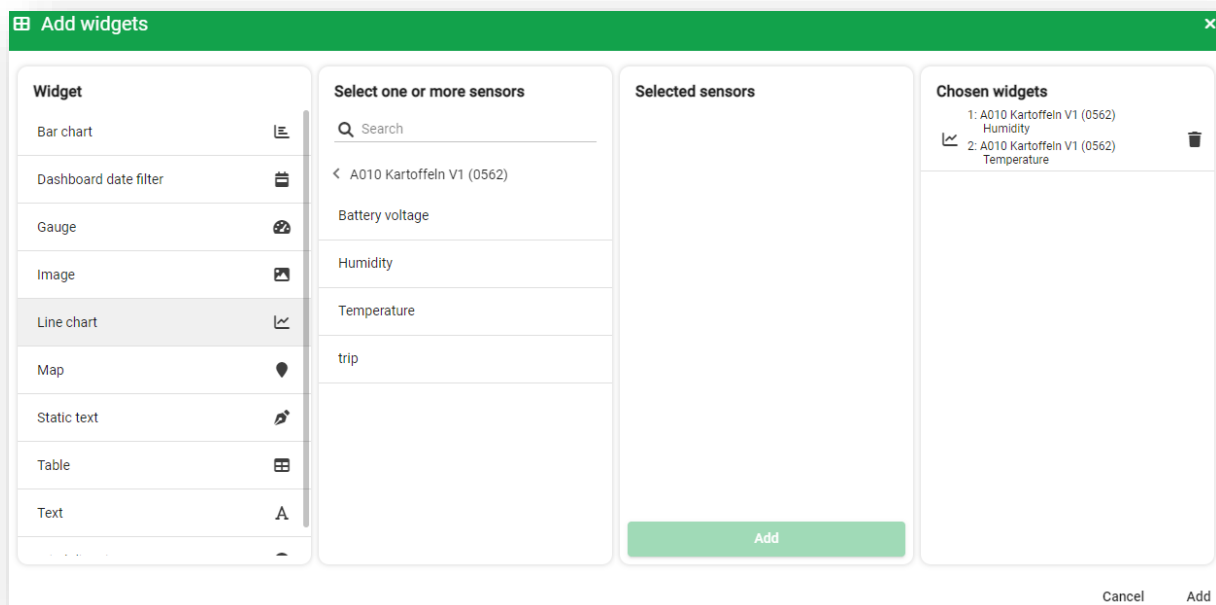

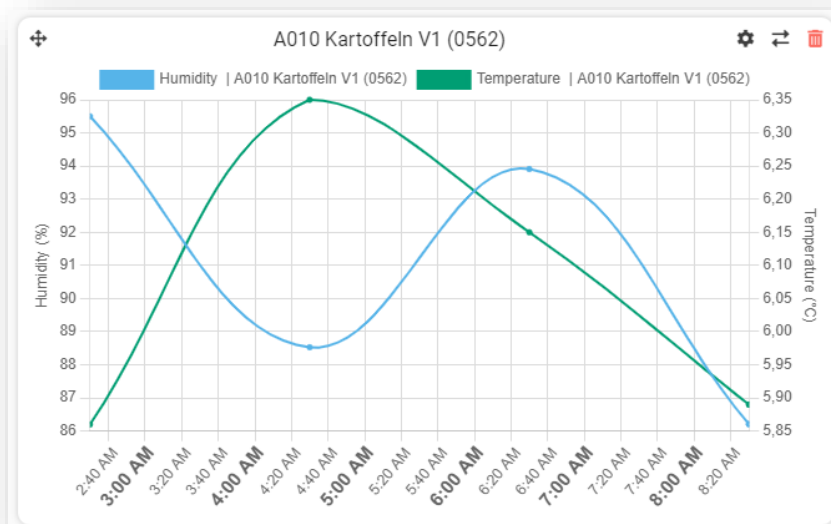*Figure 10 - Adding a line chart for two sensors*

Figure 11 - The line chart that has been created

When the line graph has been created, clicking on the cogwheel allows you to adjust several more settings. After clicking on the cogwheel, you first enter the 'General' tab:

Figure 12 - Change setting in tab 'General'

You can change and add various things here. For example:

1. Rename the graph.
2. Tick 'Show toolbar' to add a filter and an export button.
3. Change the interval from 8 hours to 8 days to see more data.

Under the 'Grouping' tab, you can group the data. For example, if you want to see the average value of 1 day.

Figure 13 - Setting in tab 'Grouping'

In the 'Y-axes' tab, you can define the positions of the scale. This is useful when displaying data from multiple sensors. In this example, humidity is set on the left and temperature on the right. You can also specify the scale yourself.

3.3 Gauge widget

To add a gauge widget, click on the plus sign at the top right of the dashboard. Under 'Widget', select 'Gauge'. Then choose the organisation, device and sensor. Click on 'Add'. In this example, battery voltage and humidity has been chosen.
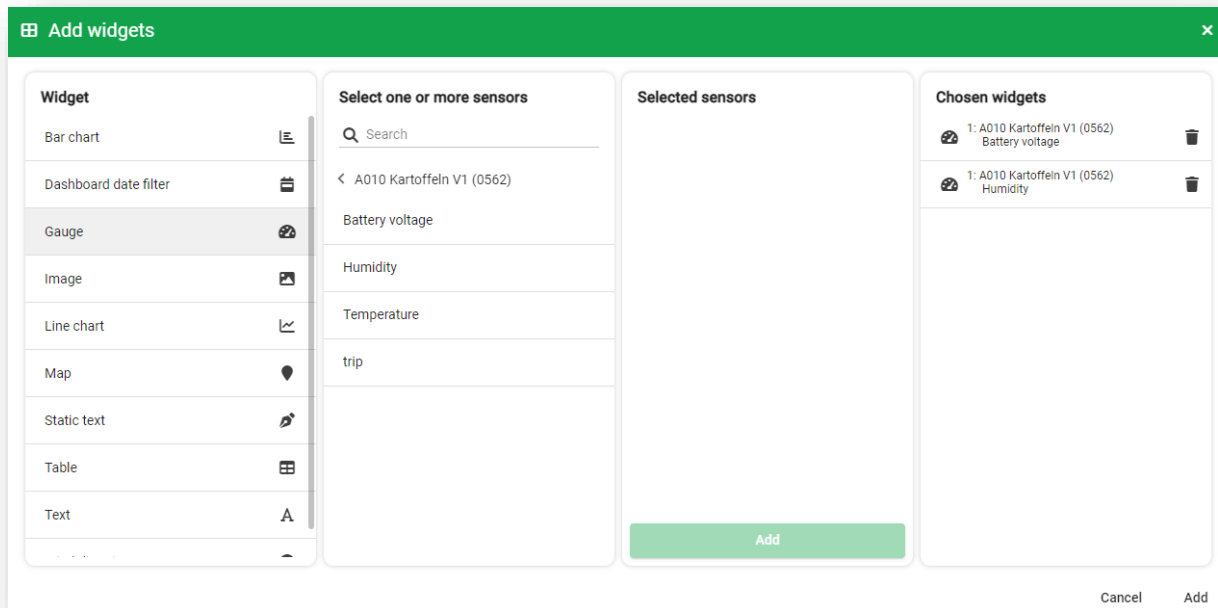

Figure 14 - Adding a battery voltage and humidity gauge to the dashboard

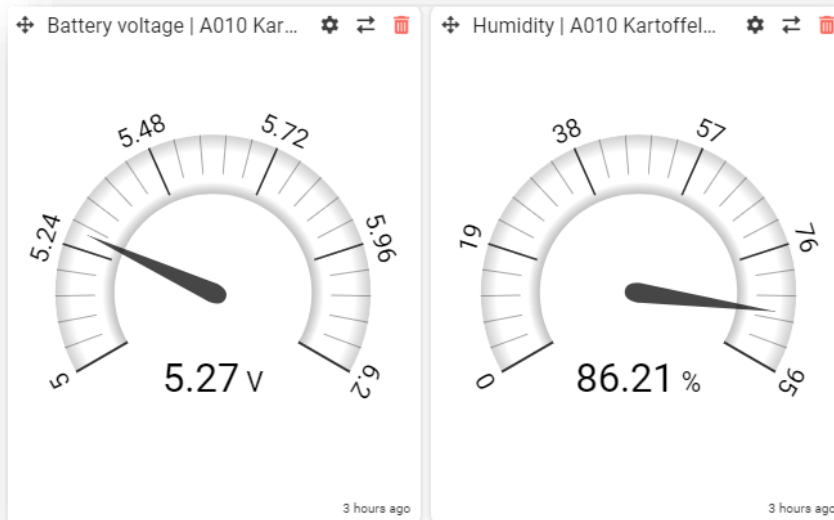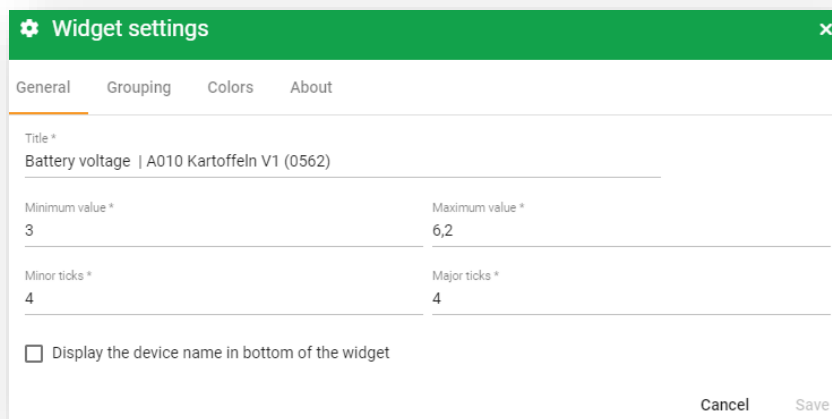The gauge widgets are added to the dashboard:

Figure 15 - The gauge widget

In the widget settings, under the 'General' tab, you can set the gauge scale values yourself.
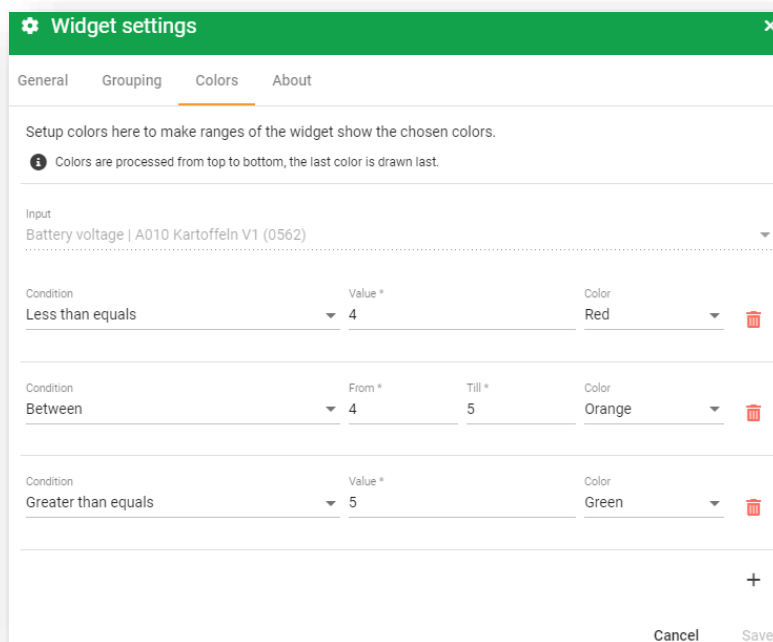
Figure 16 - General tab of the widget settings

You can choose to define different ranges in the widget's settings under the 'Colors' tab. For example, green when the battery voltage is good, orange when the batteries almost need replacing and red when the batteries need replacing.

Figure 17 – 'Colors' tab of the widget settings
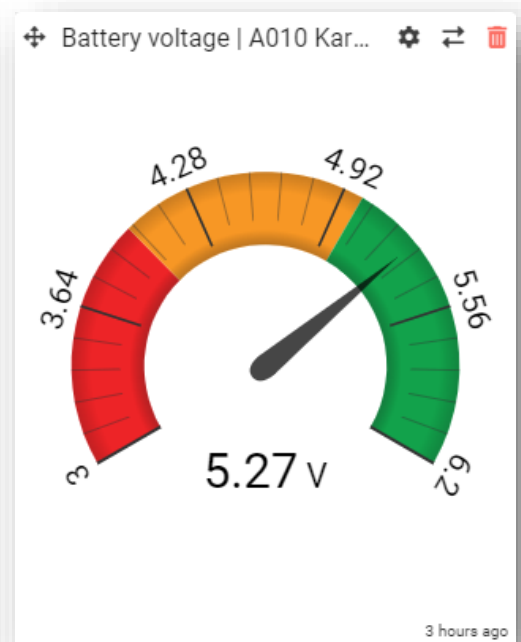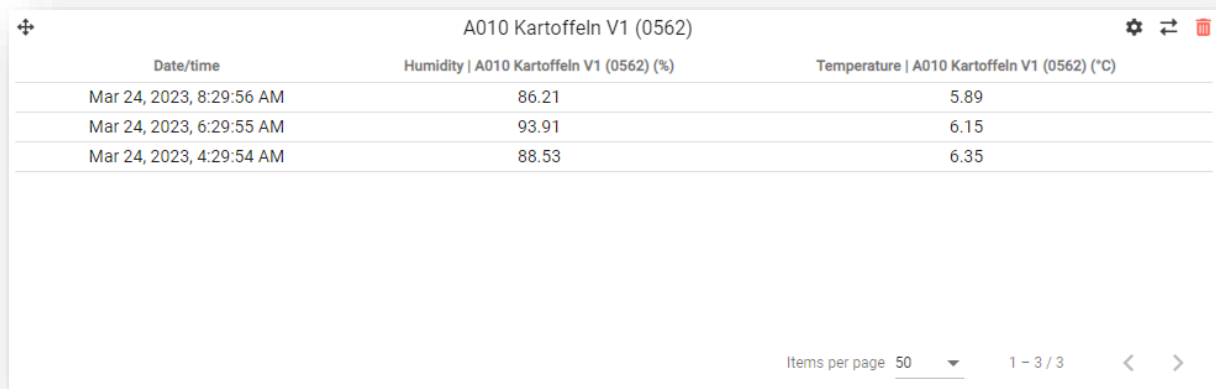

Figure 18 - Adding colors to the gauge widget

3.4 Table widget

The table widget lets you display data from one or more sensors in a table. To add them, go to the plus sign at the top right again, choose the table widget, organization, device and sensors you want to add. After clicking 'Add', the table is created right away:
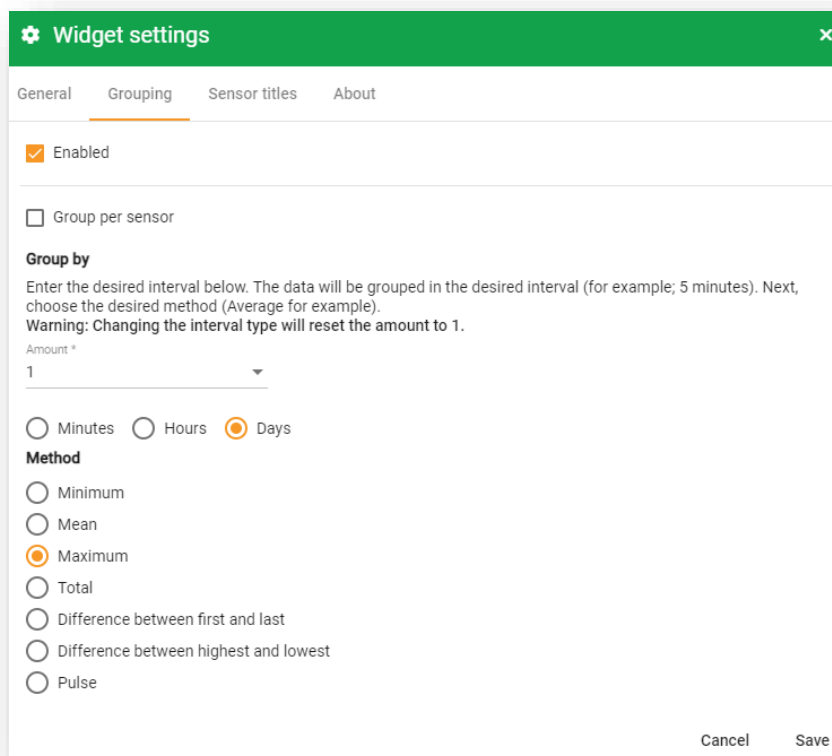

Figure 19 - Adding a table widget to the dashboard

In the widget's settings, 'General' tab, you can add a toolbar (date filter and export button). You can also adjust the interval.

To avoid showing too much data, you can specify in the settings under the 'Grouping' tab at what interval you want to see the data. For example, only the maximum value of 1 day .

Figure 20 - Changing the interval settings at the 'Grouping' tab
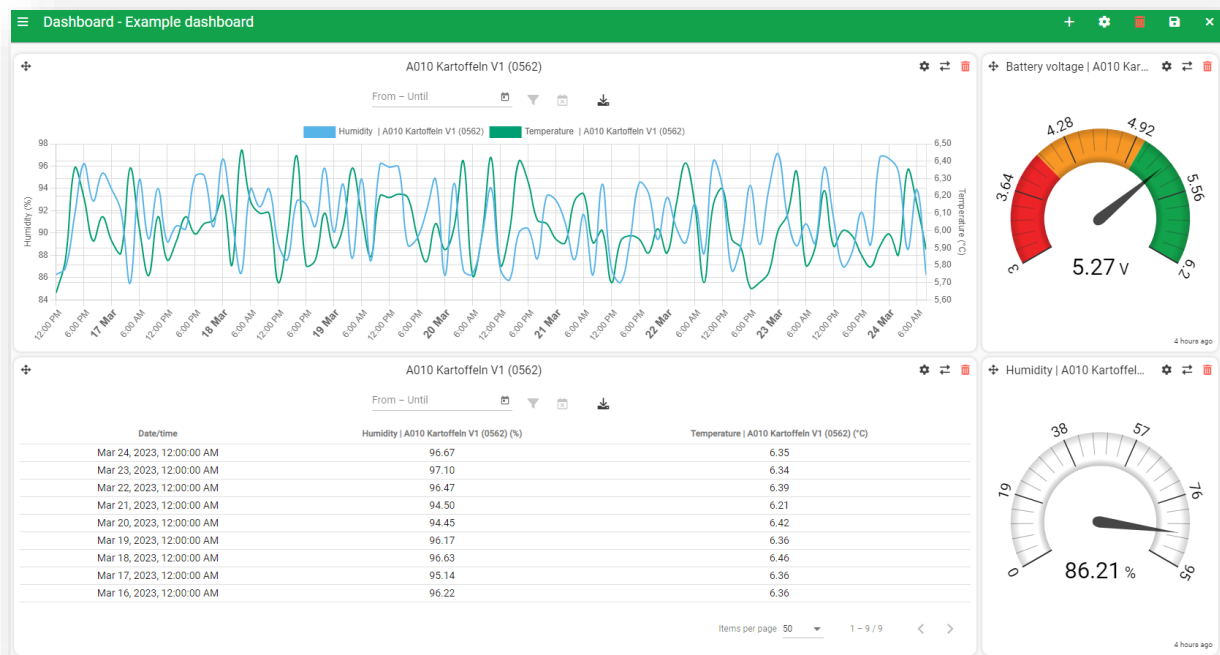
This is now how the dashboard looks like:

Figure 21 - An example of a complete dashboard

There are lots of options within the dashboard. You can compose it however you want.

Don't forget to save your dashboard! When you click the pencil icon again (top right), you can continue adding widgets or customising existing ones.

3.5 Exporting data

You can easily export data to then reapply in another place. For a widget, make sure you add the toolbar or the export button.

After adding it, click on the button (at the top of the widget, figure 20). You can choose to download the data in a CSV or JSON file. Some widgets can also be downloaded as images.
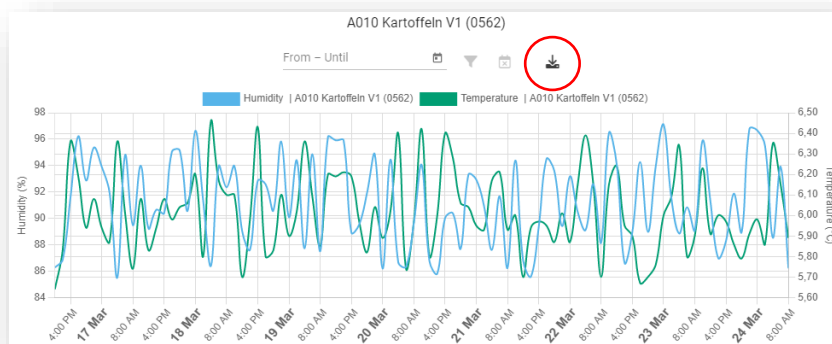

Figure 22 - Export button

3.6 Dashboard scalability

When you are on location and away from your computer, it can be convenient to view the dashboard on your mobile device. The dashboard is scalable and therefore easy to view on mobile devices. So you can access sensor data from anywhere.
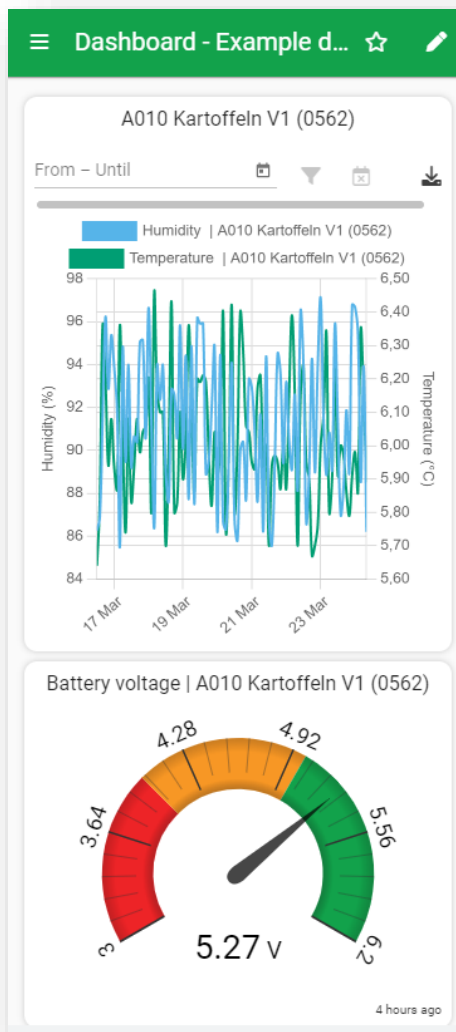

Figure 23 - Mobile view of the Whysor dashboard

4. Adding alerts to a device

You can't always keep an eye on your devices. But it would be unfortunate if, for example, a device's batteries ran out without you noticing and you lost data as a result. Or when the temperature of a freezer rises and the quality of a product is compromised. To prevent this, you can set alerts in the Whysor dashboard. You will receive an email or text message when certain conditions are triggered.

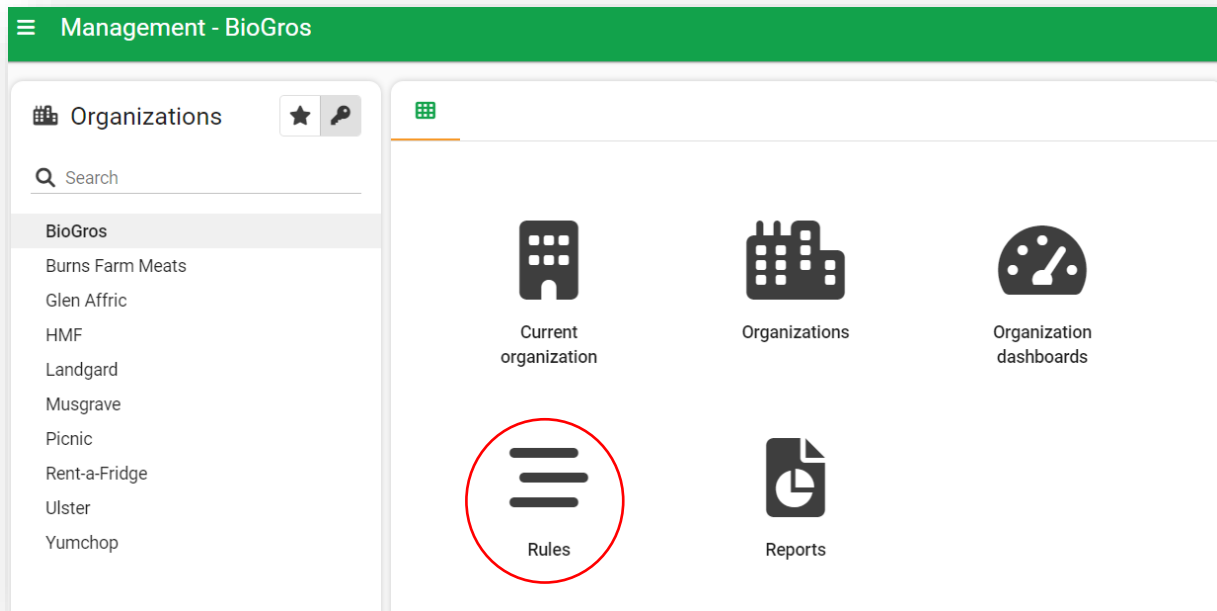To set rules, go to 'Management' and then click on the 'Rules' icon:

Figure 24 - Click on the rule icon to create a new rule

Click on the plus sign in the top right centre to set a new rule. In this example, a rule is created for low battery voltage.

Enter the name of the rule, choose a name from which you can tell what the rule is set for.
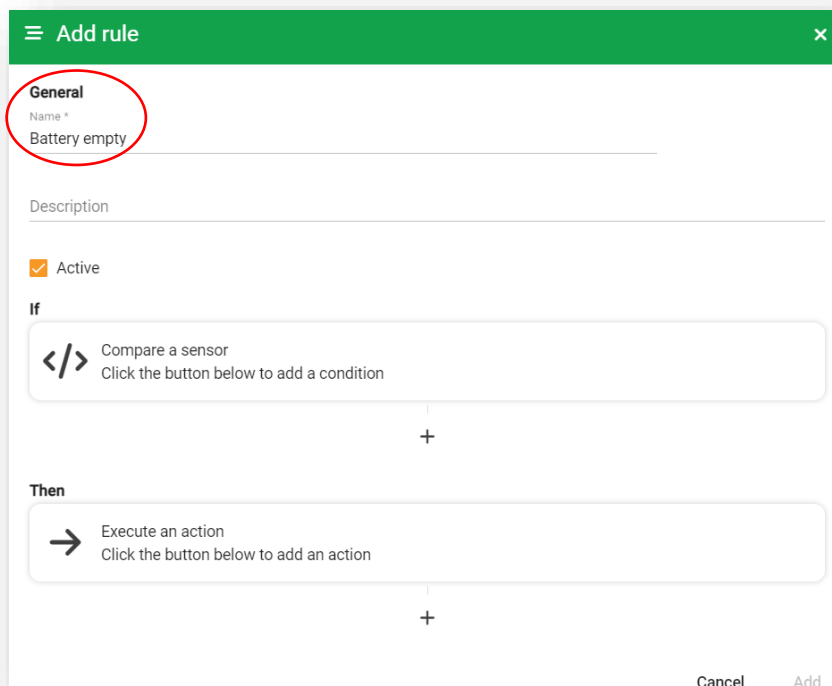

Figure 25 - Give the rule recognisable a name

Now under 'if', click the plus to add the device whose battery voltage you want to monitor and set conditions.

Follow the steps, clearly indicated, to add the device (input, 1) and conditions (2). You can choose from lots of different conditions, allowing you to use the rules in many different ways.

Figure 26 - Adding the device (input) and conditions to the rule

After adding the 'if' by clicking on 'add' (3), click on the plus sign next to 'then'. Here you decide how you want to send the alert (e-mail or SMS) and who should receive it. In this example, an e-mail was chosen. You can also add an extra message (4). Click 'Add' again when everything is entered (5).

Figure 27 - Add an action to be executed when a rule is valid

Now the rule is created. Just click 'Add' (6) and the rule is set. Once it is measured that these rules are met, an e-mail will be sent.

Figure 28 - The rule is created

5. Receive a report

It is nice to look at a dashboard regularly to read data, but in addition, it is also possible to receive a report, say weekly or monthly, showing what kind of data has been received.

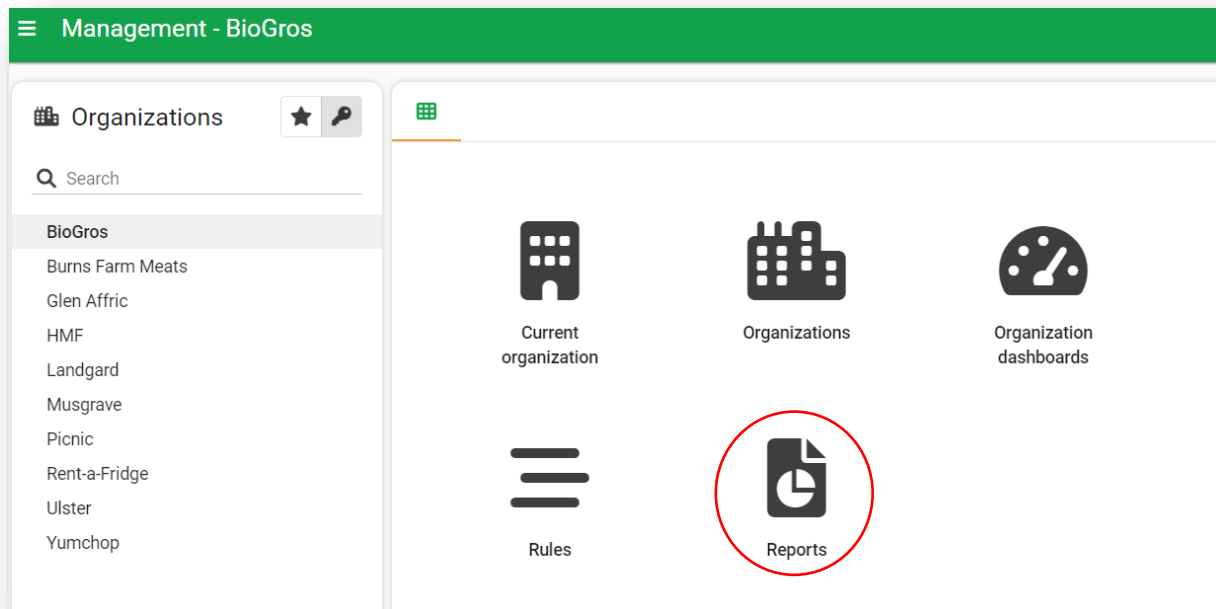To create a report, click on the 'Reports' icon in the 'Management' overview.

Figure 29 - To create a report click on the report icon in management

To create a new report, click the plus sign in the top-right centre.

Figure 30 - The step you have to fill in for creating a report

1. First, insert the name you want to give the report.
2. Then choose the template. A template has already been created for you in advance.
3. Specify when and how often you want to receive a report.
4. Choose which e-mail address to send the report to.
5. And click 'Add'.

After clicking 'Add', the following screen opens:

Figure 31 - Pairing the sensor for the report

Select the sensor you would like to pair up first (from the template, it shows which types of sensors are needed). Next, select the REAMIT organisation and then the device. It then automatically indicates which sensor to pair. Then follow the steps that speak for themselves.

Figure 32 - Select the correct sensor for the report

Click 'Save' and the report is created.