

# INSIGHT

# USER MANUAL

Revision 1.6  
9 August 2023

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## Introduction

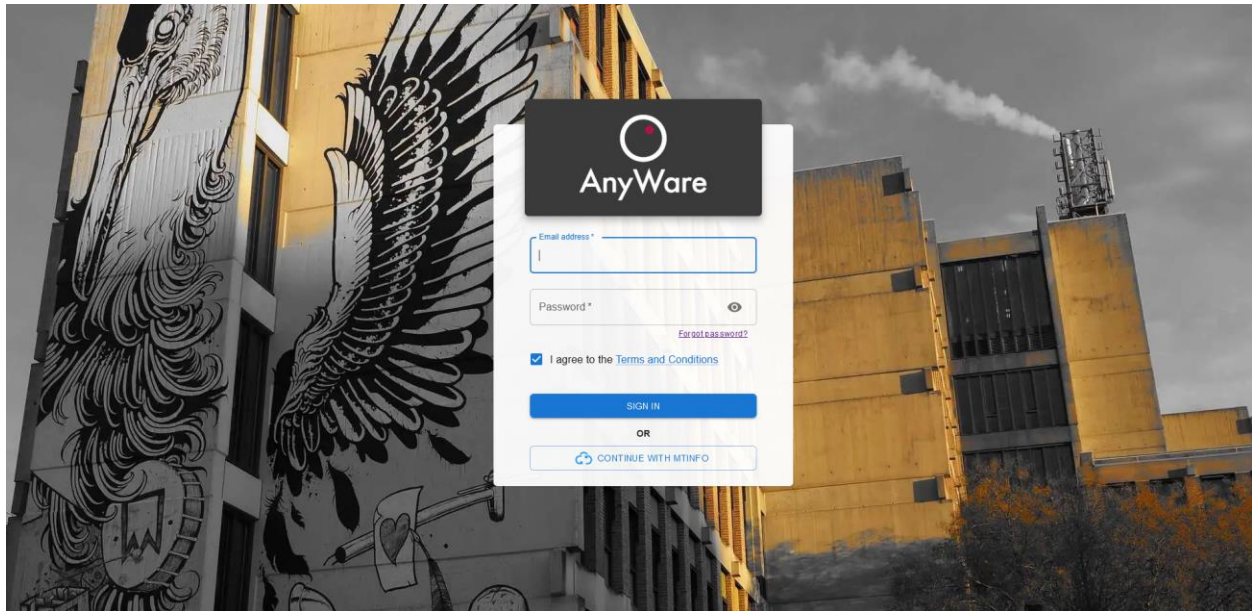
INSIGHT is the front end of AnyWare's state-of-the-art private cloud eco-system where real-time asset data is provided from all kinds of different (existing) systems and is linked to digitized domain knowledge where they can be monitored and controlled.

There are three different asset connection types which can be monitored and controlled in INSIGHT:

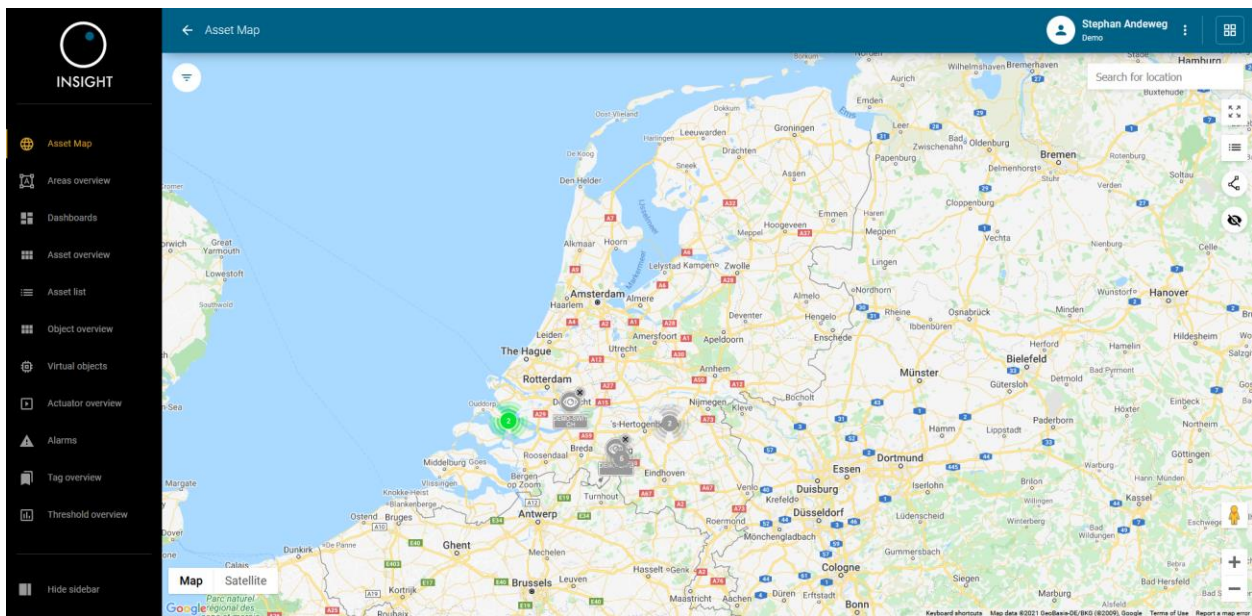
Connected	A connected asset has a connection via secure cellular networks and is able to send data.
Unconnected	An unconnected asset has no connection via secure cellular networks and is not able to send data.
Intelligible	An intelligible asset has a connection via secure cellular networks by linking a connected asset with an unconnected asset.

# 1 Login and home screen

At the login page fill in Email address and Password or use MTINFO credentials:



After successful login the home screen is shown with a menu bar at the left side, by default it shows the asset map:




On the left side there is a menu with the following items:

Menu item	Description
Asset Map	A map where all assets are located for location based navigation
Areas overview	Shows an overview of all assets in a certain area
Dashboards	Create custom dashboards to have all the information needed in 1 screen
Asset overview	Generic overview of all asset types. Filtering is possible to get the required overview
Asset list	Generic overview of all assets. Filtering is possible to get the required overview
Object overview	Shows all "sensors" (objects)
Virtual objects	Show and add virtual sensors to devices based on simple calculations
Actuator overview	With actuators an action can be called on an asset when a threshold has been exceeded, for example: if the temperature is lower than 5 degrees, a relay needs to be switched
Alarms	Shows a list of configured alarms in case thresholds are exceeded
Tag overview	Shows a list of configured tags to be able to see a certain group of assets
Threshold Overview	The threshold overview shows a list of all thresholds set on assets or asset types

On the top right (  ) the language for the user profile can be changed by selecting "Profile":

User settings



Name  
Stephan

Last name  
Andeweg

Email  
stephan.andeweg@any-ware.nl

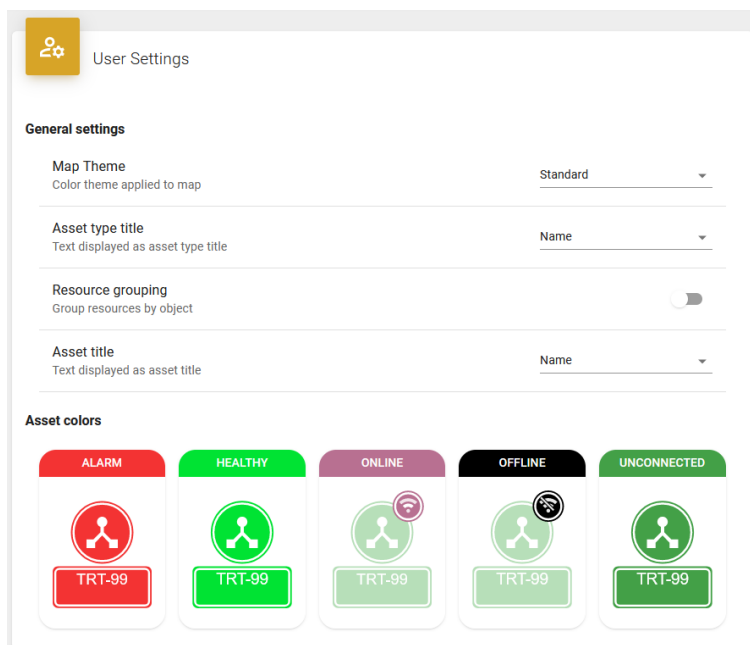
Language  
English

- English
- Dutch
- French

GO BACK SAVE

Click SAVE to commit the changes.

Also the user and/or notification settings can be changed by selecting “Settings”:



**User Settings**

**General settings**

**Map Theme**  
Color theme applied to map Standard

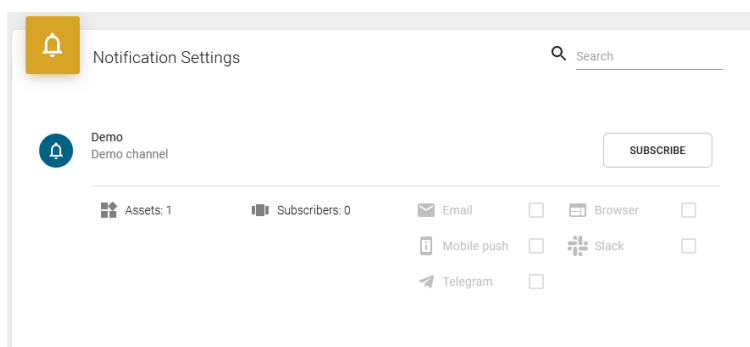
**Asset type title**  
Text displayed as asset type title Name

**Resource grouping**  
Group resources by object ☐

**Asset title**  
Text displayed as asset title Name

**Asset colors**

ALARM	HEALTHY	ONLINE	OFFLINE	UNCONNECTED
TRT-99	TRT-99	TRT-99	TRT-99	TRT-99



**Notification Settings**

Search

**Demo**  
Demo channel SUBSCRIBE

**Assets:** 1 **Subscribers:** 0

☐ Email ☐ Browser ☐

☐ Mobile push ☐ Slack ☐

☐ Telegram

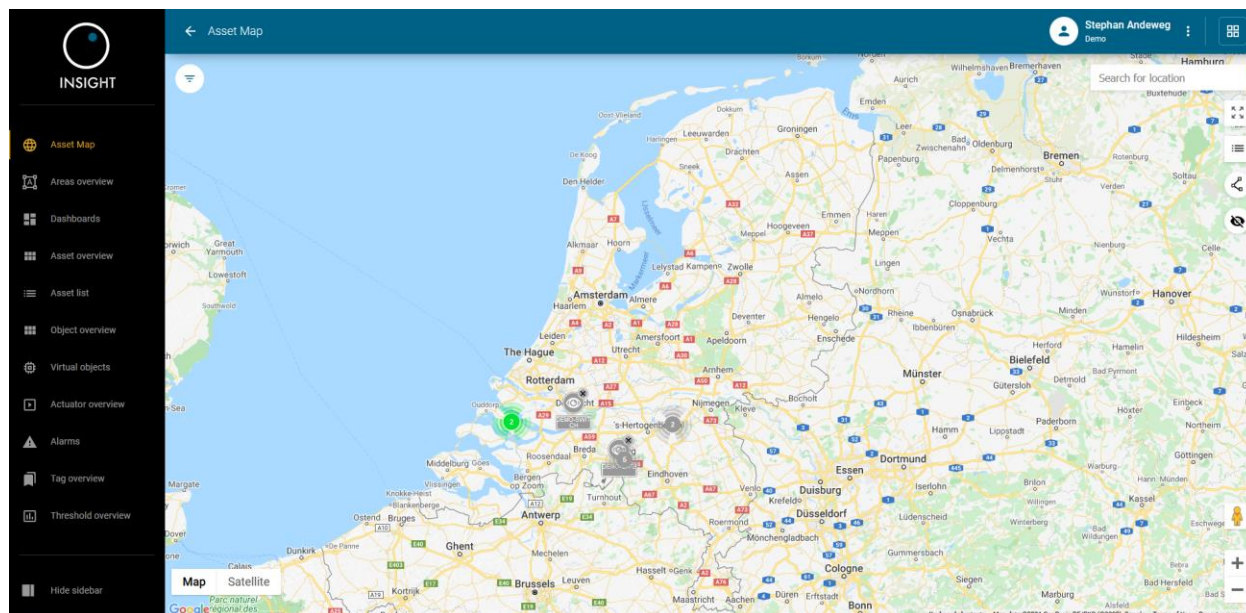
The above default settings are defined in Provisioning.




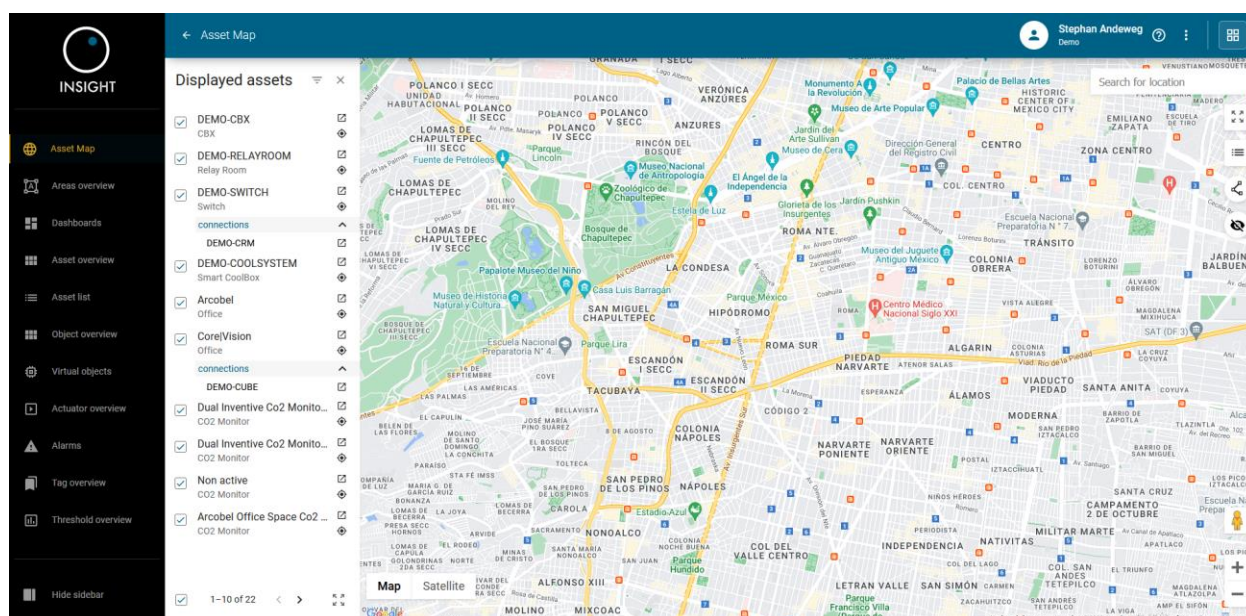
## 2 Menu items

### 2.1 Asset Map

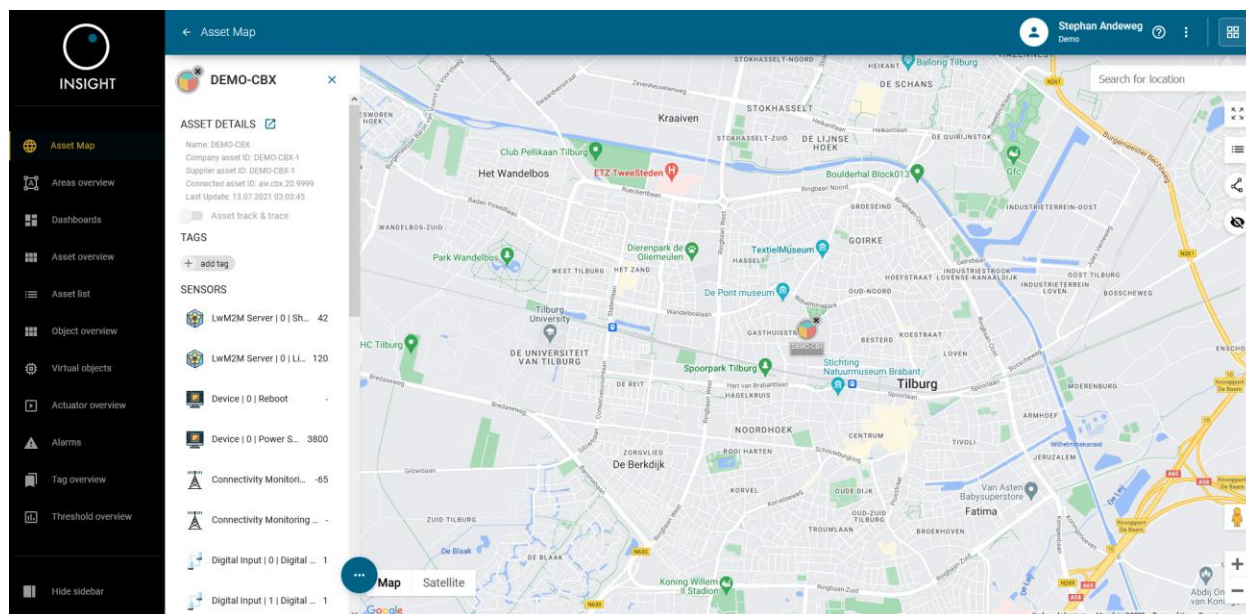
The **Asset Map** menu item shows assets in a certain region:



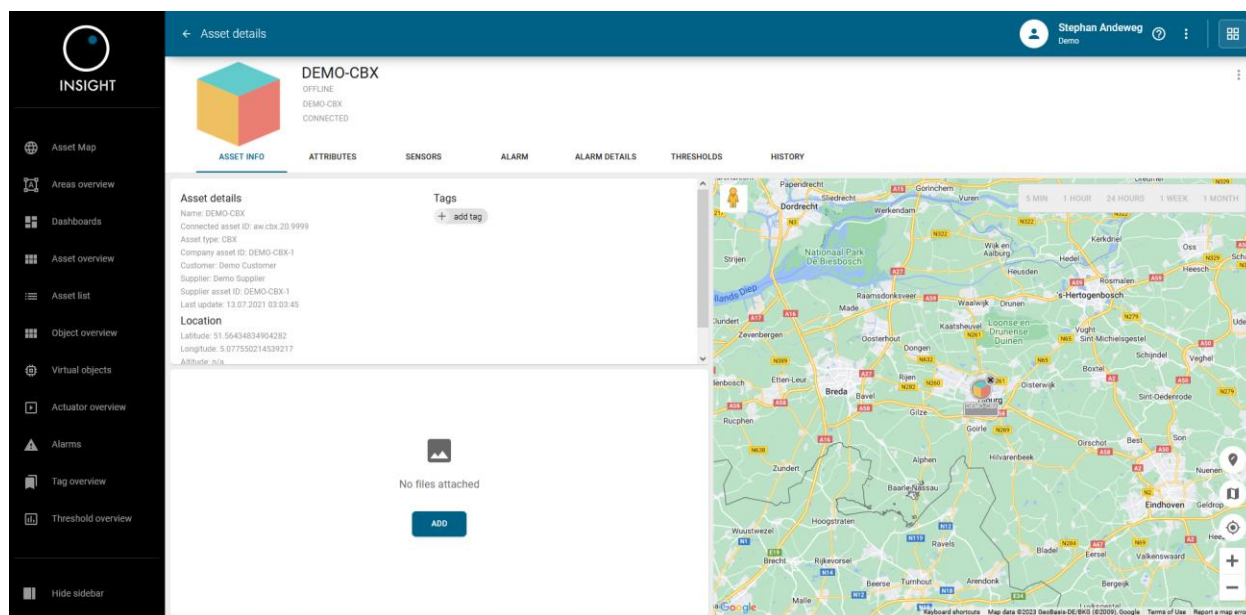
When clicking on the filter icon (  ) the displayed assets can be filtered:



When clicking on an asset more details are shown, for example:



When clicking on ASSET DETAILS, detailed information of the selected asset will be displayed:





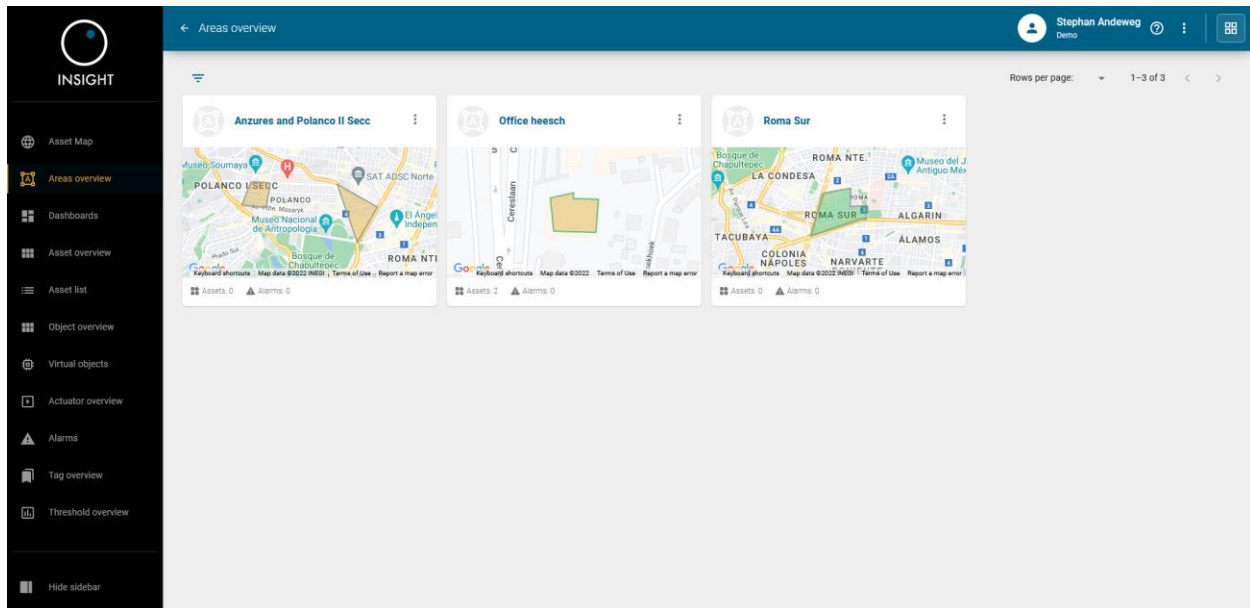
Menu item	Description
Asset info	Detailed information of the asset and location
Attributes	A list of all attributes of the asset via the asset details
Sensors	Historical sensor data can be visualized via graphs or bar charts with different aggregation types
Alarm	A list of alarms of the asset
Alarm details	Historical details of an alarm which can be selected on the left side
Thresholds	A list of thresholds which are used to generate alarms/notifications
Tickets	A list of tickets of the asset
History	Shows the history of the asset

It's possible to add a tag which can be useful when filtering within overviews.


Via menu item **Asset list** the same detailed information page will be shown.


## 2.2 Areas overview

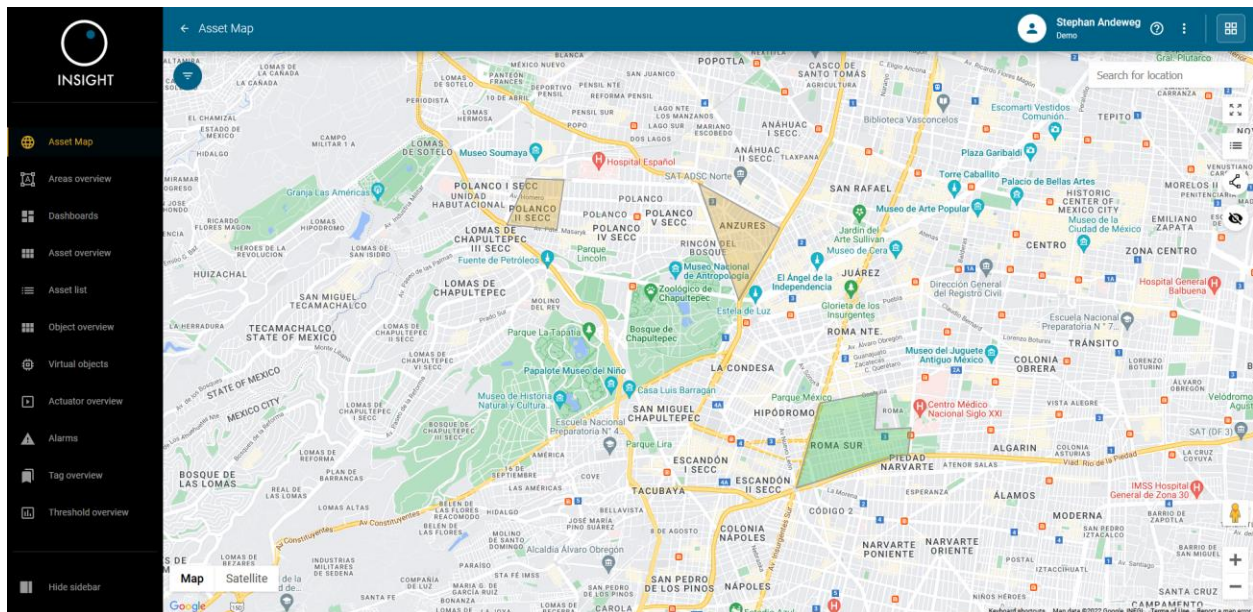
The **Areas overview** menu item shows all customized areas which have been created, for example:



When selecting an area or area title, the area map will be opened and it will show the selected area in more detail.


When hovering over an area and by clicking on  for one or more areas, they can be shown together on the area map.


By clicking on the  icon, the asset map will be shown and the selected areas are visible, for example:




## 2.2.1 Creating an area

In the asset map an area can be created by clicking the following icon on the right side: 

More areas can be created (and will be considered as one single area) by clicking the following icon on the center top: 

If an area should be removed then this can be done by clicking the following icon on the center top: 

After drawing one or multiple areas it must be saved by clicking the following icon on the center top: 

A name must be entered to create the area:

Create area

Name \*

Anzures

Fill color

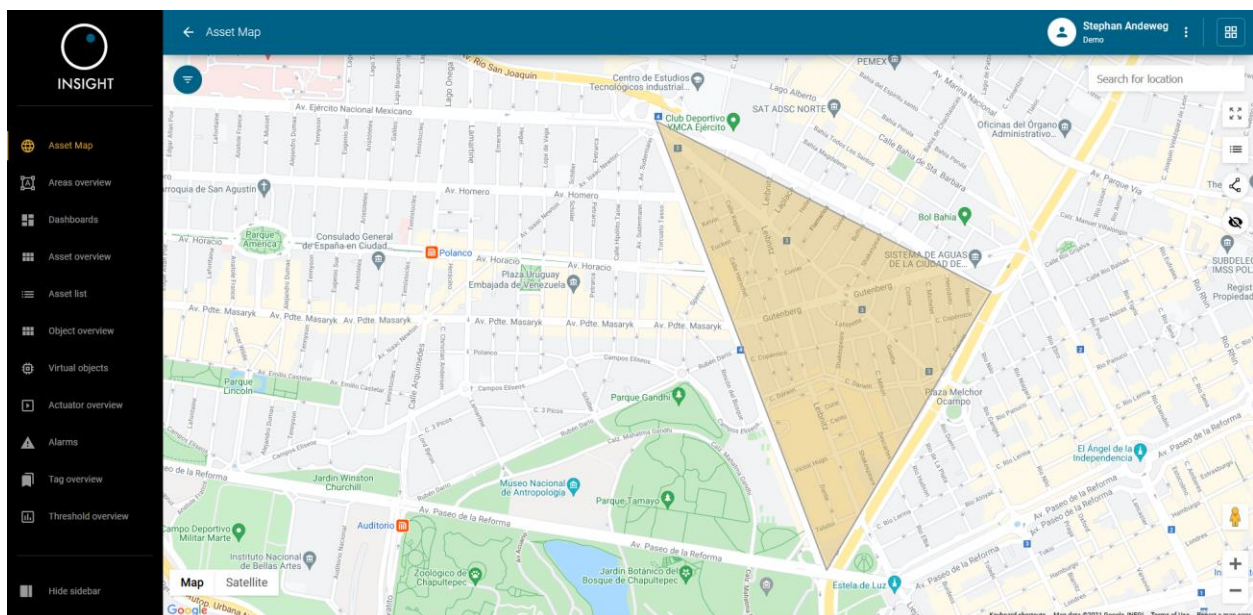
#D7A427

HEX

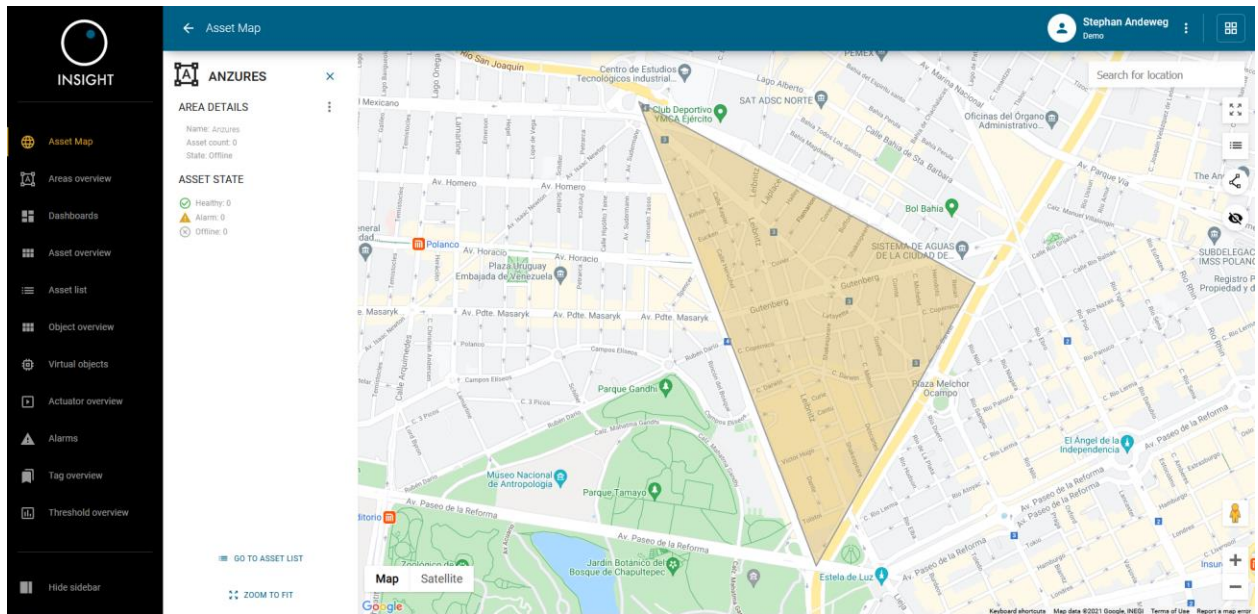
CANCEL

CREATE

The area is now visible in the asset map:



When clicking on the area, more detailed area information is displayed:



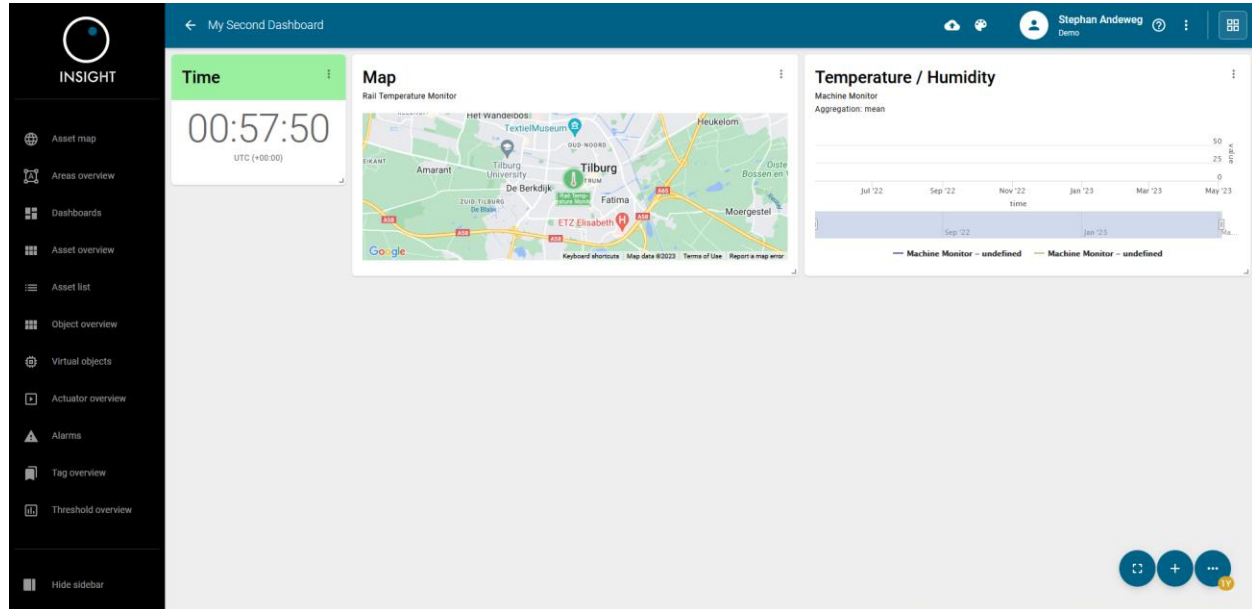
It shows area details and the state of the asset(s) inside the area.

It's also possible to edit or remove the selected area (⋮) as well as going to the asset list at the bottom.




## 2.3 Dashboards

The **Dashboards** menu item shows the available dashboards:



### 2.3.1 Creating a dashboard

To create a new dashboard click on the  icon on the lower right corner:

#### Add dashboard

Name \*


My Second Dashboard

19/255


CANCEL ADD


Define a name for the dashboard and click ADD to create the dashboard.

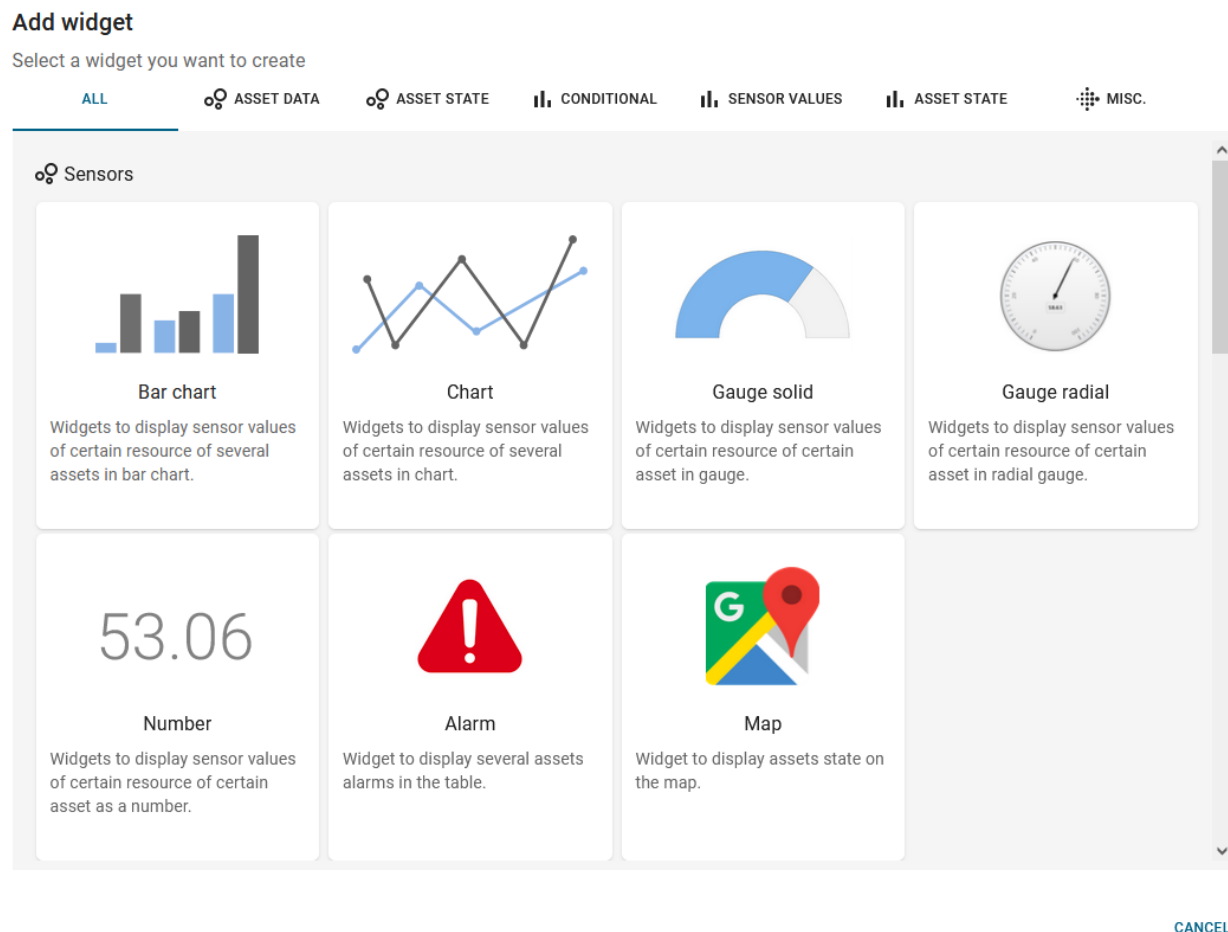
When clicking on the  icon, a background and/or font color can be selected.

When clicking on the  icon, a dashboard icon can be uploaded.

## 2.3.2 Widgets

For each widget it's possible to edit or remove it by clicking the  icon. It's also possible for some widgets to show the widget in full screen or to see more details.

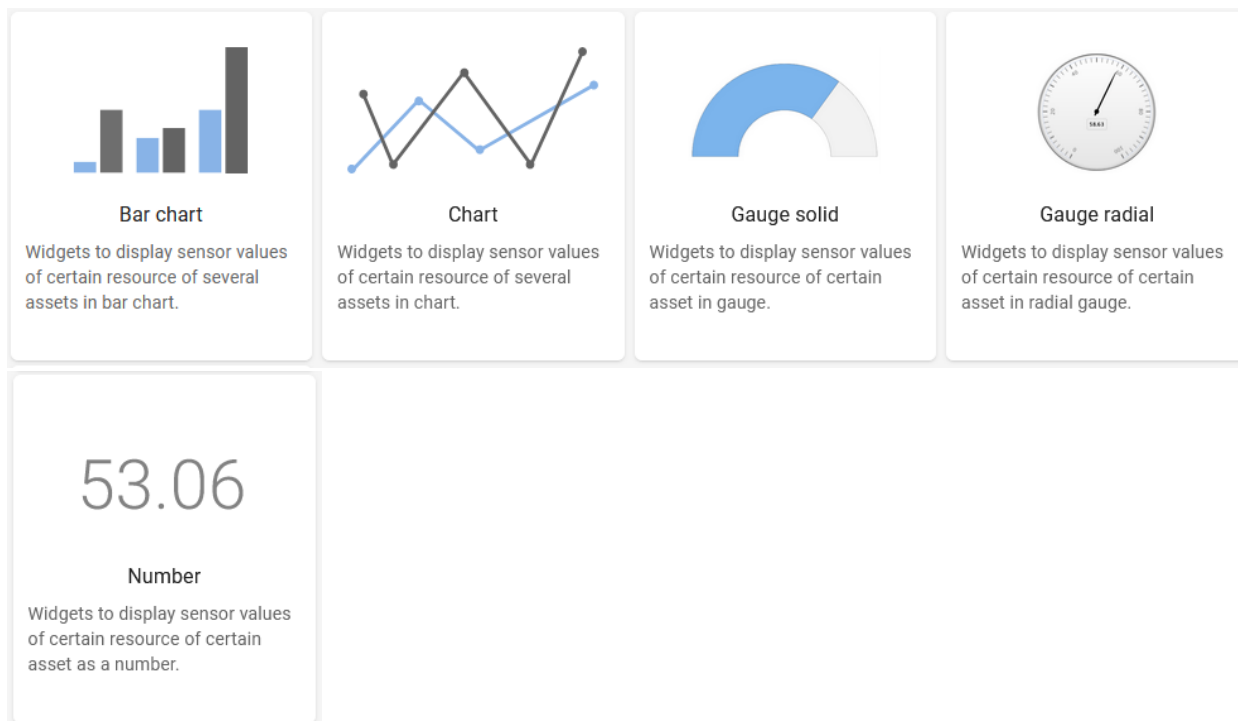
To add a new widget click on the  icon on the lower right corner. The following window will be displayed:



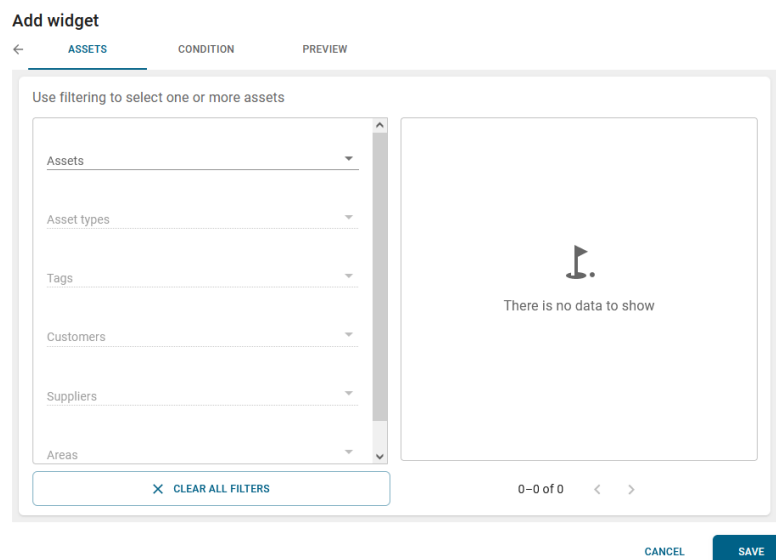
The tab ALL will show all available widget variants to choose from. The following chapters will describe each tab in more detail.

### 2.3.3 Asset data (sensors)

The following widget variants are available:



When selecting for example **Number**, the *Add widget* window will appear:

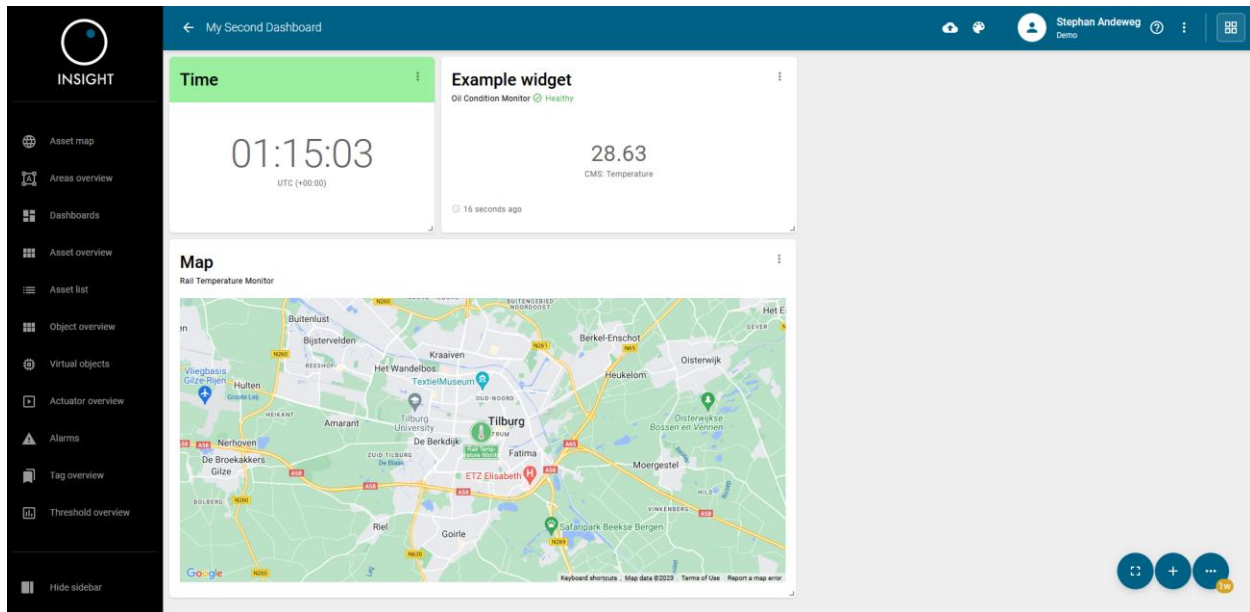


A filter must be configured in tab ASSETS.

A condition must be configured in tab CONDITION.

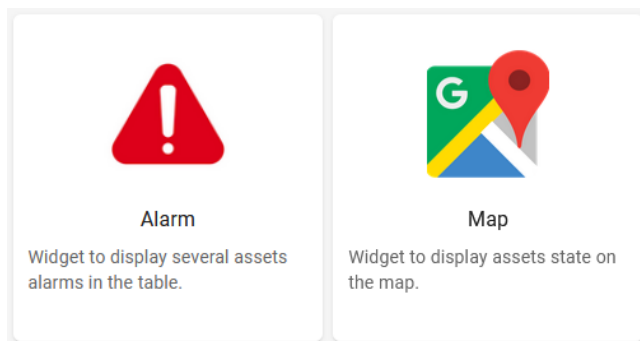
A title must be set and a preview will be shown in tab PREVIEW.

Click SAVE to create the sensor widget and show on the dashboard:



## 2.3.4 Asset state (sensors)

The following widget variants are available:



When selecting for example **Map**, the *Add widget* window will appear:

## Add widget

ASSETS 14

PREVIEW

Use filtering to select one or more assets

Assets

Asset types

Tags

Customers

Suppliers

Areas

Brick Molding Machine

Construction Sign

Doll Painter

Factory Radio - Lego Edition

John's Lego Factory

Lego Cart

Lego Transporter

Machine Monitor

CLEAR ALL FILTERS

1-12 of 14

CANCEL

SAVE

A filter must be configured in tab ASSETS.

A title must be set and a preview will be shown in tab PREVIEW.

Click SAVE to create the sensor widget and show on the dashboard:

INSIGHT

Asset map

Areas overview

Dashboards

Asset overview

Asset list

Object overview

Virtual objects

Actuator overview

Alarms

Tag overview

Threshold overview

Hide sidebar

My Second Dashboard

Time

01:23:01

UTC (+00:00)

Example widget

Oil Condition Monitor Healthy

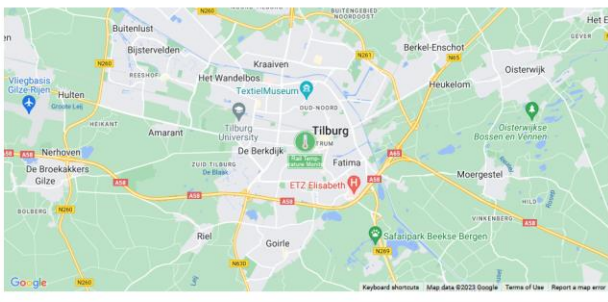
28.62

CMS: Temperature

2 minutes ago

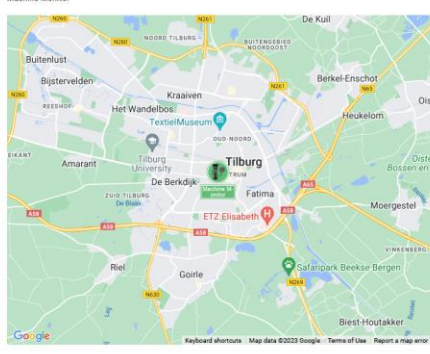
Map

Rail Temperature Monitor



Map for RMF Systems

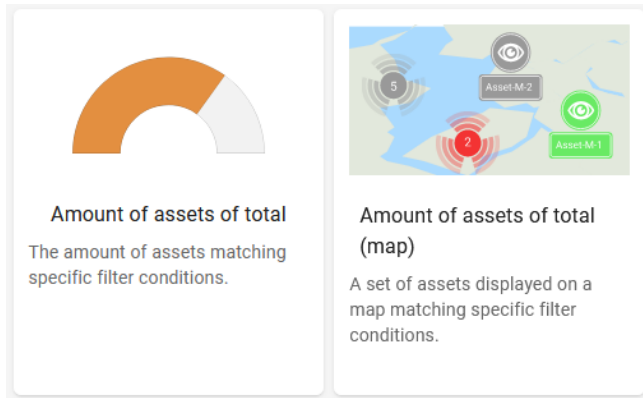
Machine Monitor



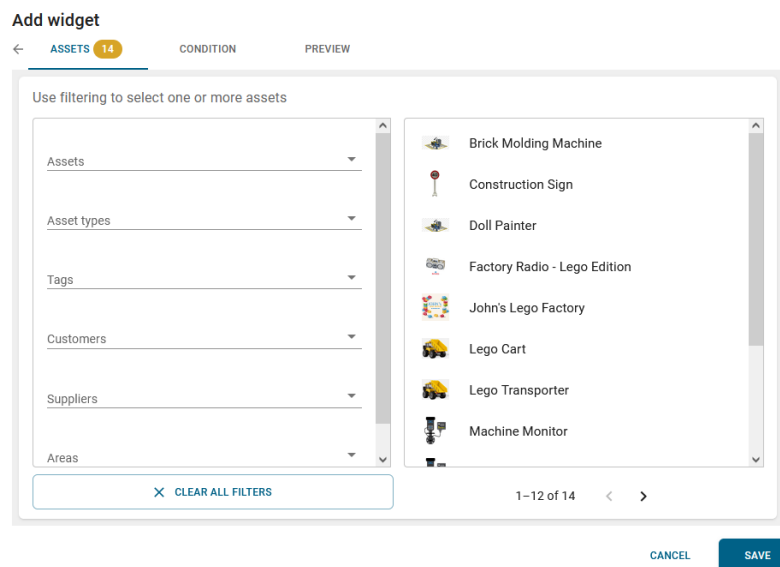


### 2.3.5 Conditional (statistics)

The following widget variants are available:



When selecting for example **Amount of assets of total (map)**, the *Add widget* window will appear:



A filter must be configured in tab ASSETS.

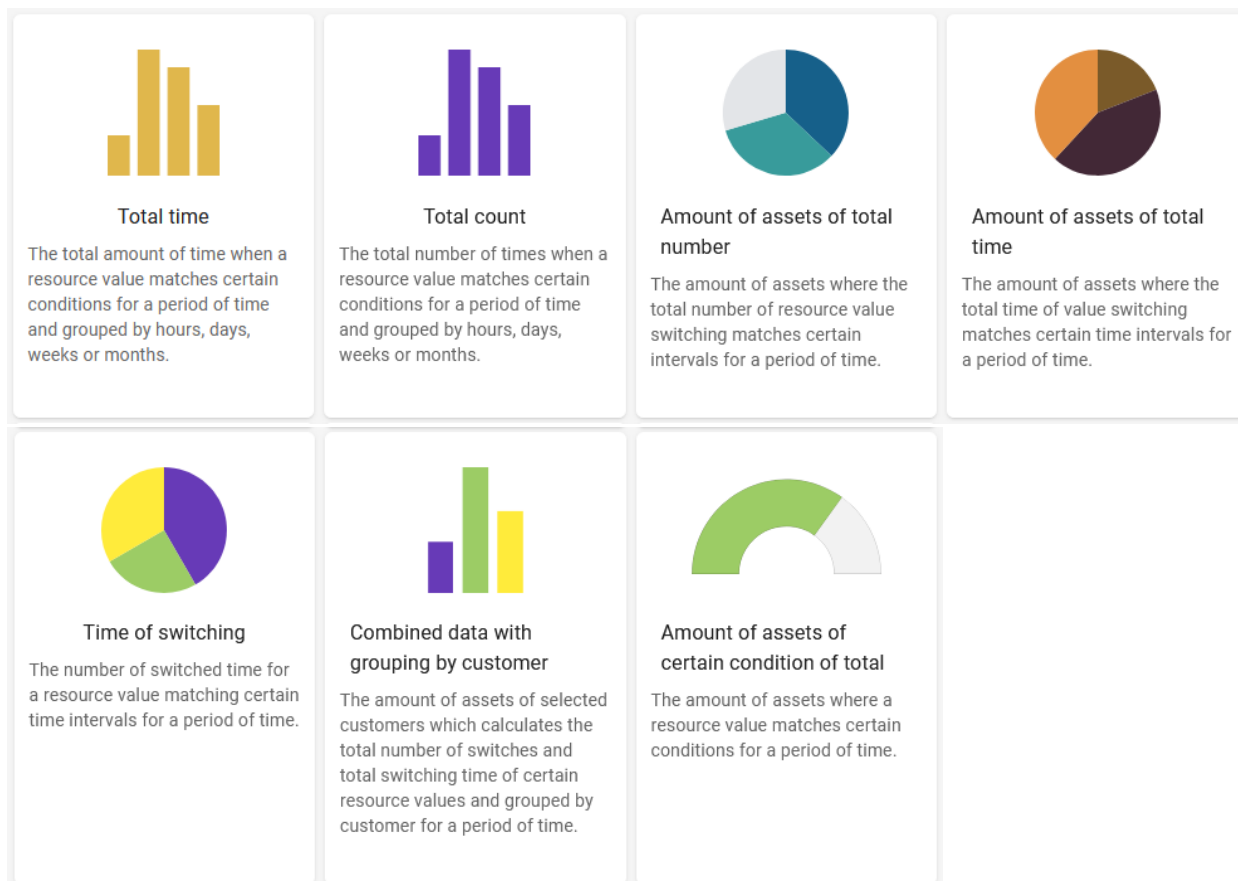
A condition must be configured in tab CONDITION.

A title must be set and a preview will be shown in tab PREVIEW.

Click SAVE to create the statistics widget and show on the dashboard.

## 2.3.6 Sensor values (statistics)

The following widget variants are available:



When selecting a variant, the *Add widget* window will appear as described in Chapter 2.3.3.

A filter must be configured in tab ASSETS.

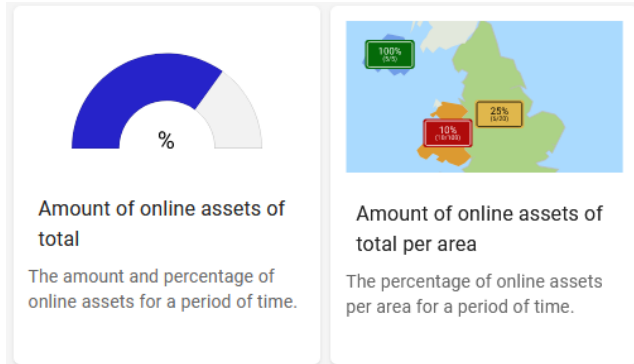
A condition must be configured in tab CONDITION.

A title must be set and a preview will be shown in tab PREVIEW.

Click **SAVE** to create the statistics widget and show on the dashboard.

### 2.3.7 Asset state (statistics)

The following widget variants are available:



When selecting a variant, the *Add widget* window will appear as described in Chapter 2.3.3.

A filter must be configured in tab ASSETS.

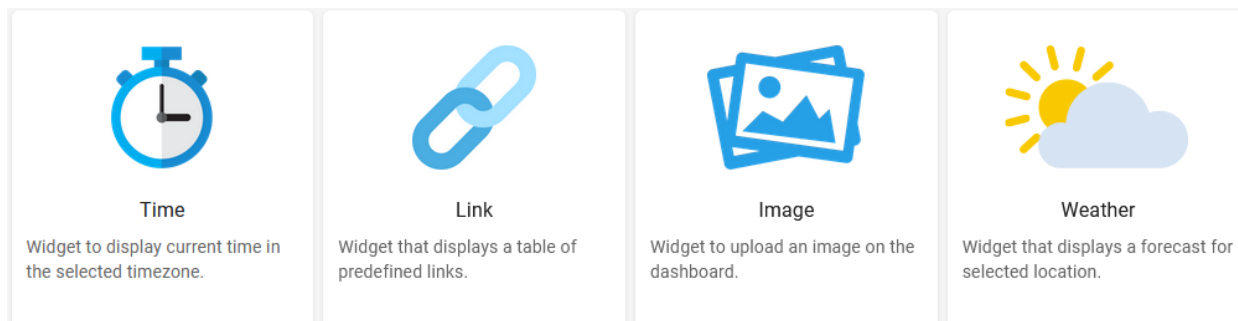
A condition must be configured in tab CONDITION.

A title must be set and a preview will be shown in tab PREVIEW.

Click **SAVE** to create the statistics widget and show on the dashboard.

## 2.3.8 Miscellaneous

The following widget variants are available:



When selecting a variant, the *Add widget* window will appear.

A value must be configured in tab VALUES.


A title must be set and a preview will be shown in tab PREVIEW.

When **Image** is selected, a file needs to be uploaded.

When **Weather** is selected, a location must be chosen.

Click SAVE to create the widget and show on the dashboard.

## 2.3.9 Editing a dashboard

To edit a dashboard click on the  icon on the upper right corner and click Edit:

### Edit dashboard

Name \*

My Second Dashboard

19/255

Share within your company ☐

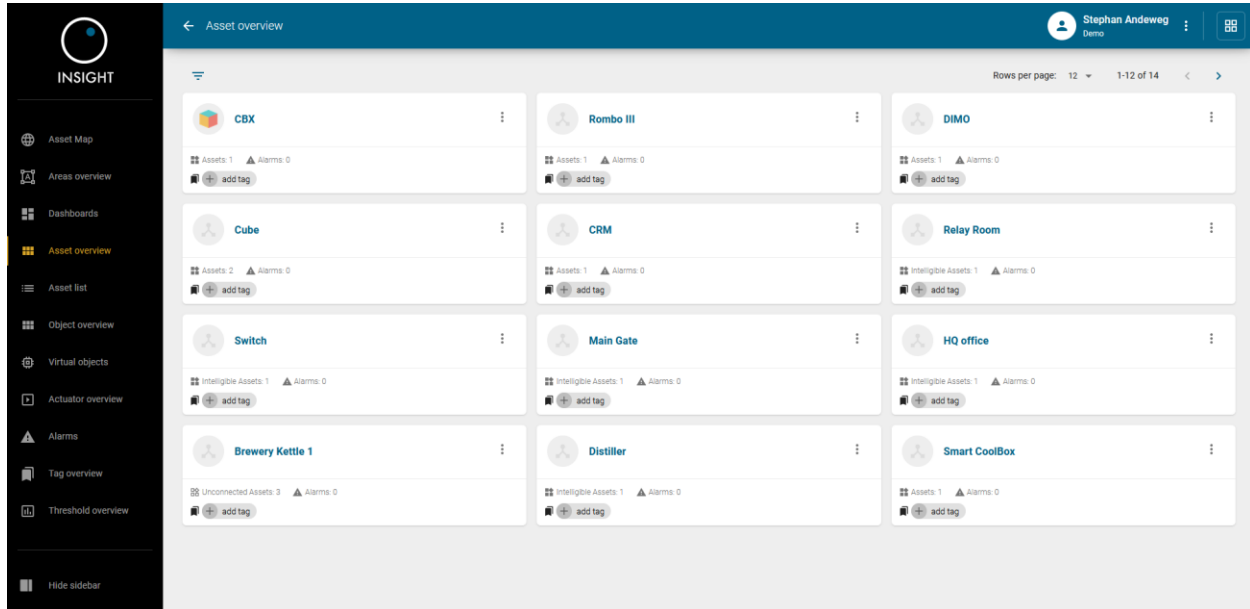
Share with customers ☐


[CANCEL](#) [SAVE](#)

The dashboard name can be changed and as well the dashboard can be shared within the company or with customers.

## 2.4 Asset overview


The **Asset overview** menu item gives an overview of all available asset types:



When clicking on  it's possible to add or remove virtual objects (see Chapter 2.7 for virtual object creation) and see the asset components in Digital Warehousing:

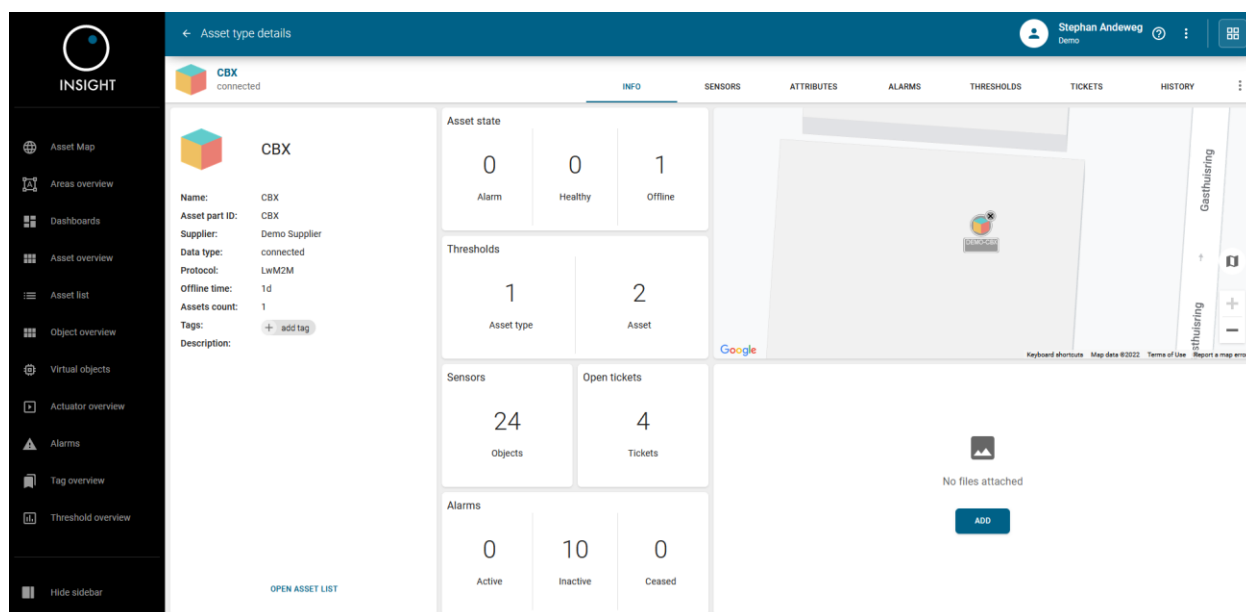
Add virtual objects

Remove virtual objects


See asset components 



When clicking on an asset type, it will show the asset type details for the selected asset type, for example:

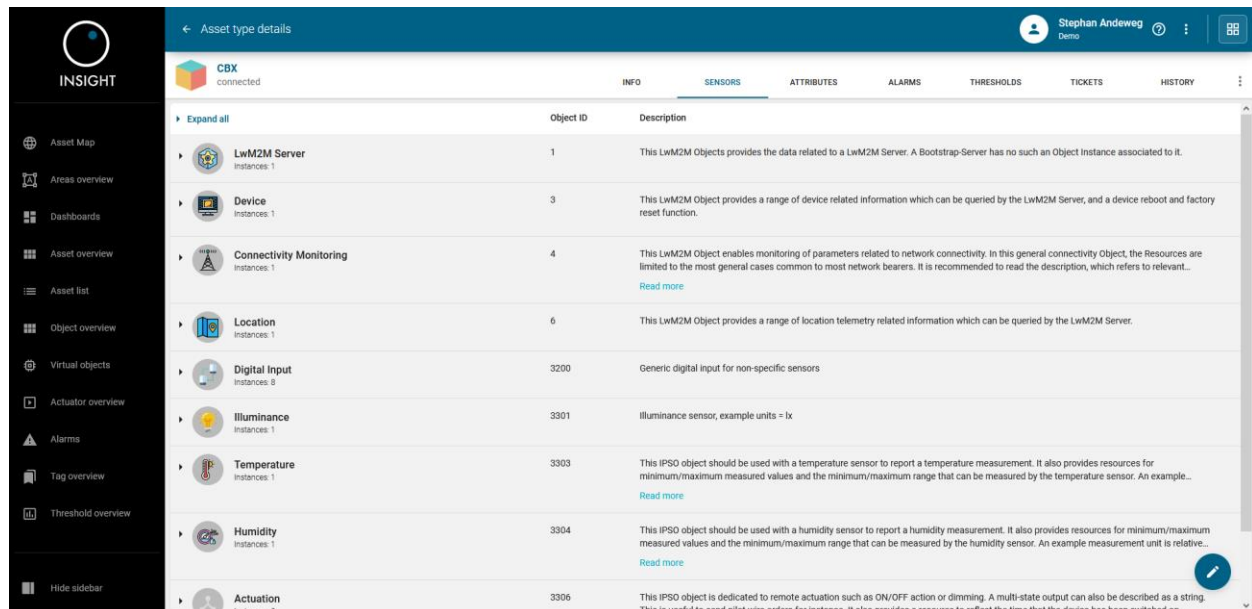


Menu item	Description
Info	Detailed information of the asset type and locations
Sensors	Historical sensor data can be visualized via graphs or bar charts with different aggregation types
Attributes	A list of all attributes of the asset via the asset details
Alarms	A list of alarms of the asset type
Thresholds	A list of thresholds which are used to generate alarms/notifications
Tickets	A list of tickets of the asset type
History	Shows the history of the asset type

To go to Provisioning, click on the  icon on the top right corner

To go to the asset list, filtered for this particular asset type, click on [OPEN ASSET LIST](#)

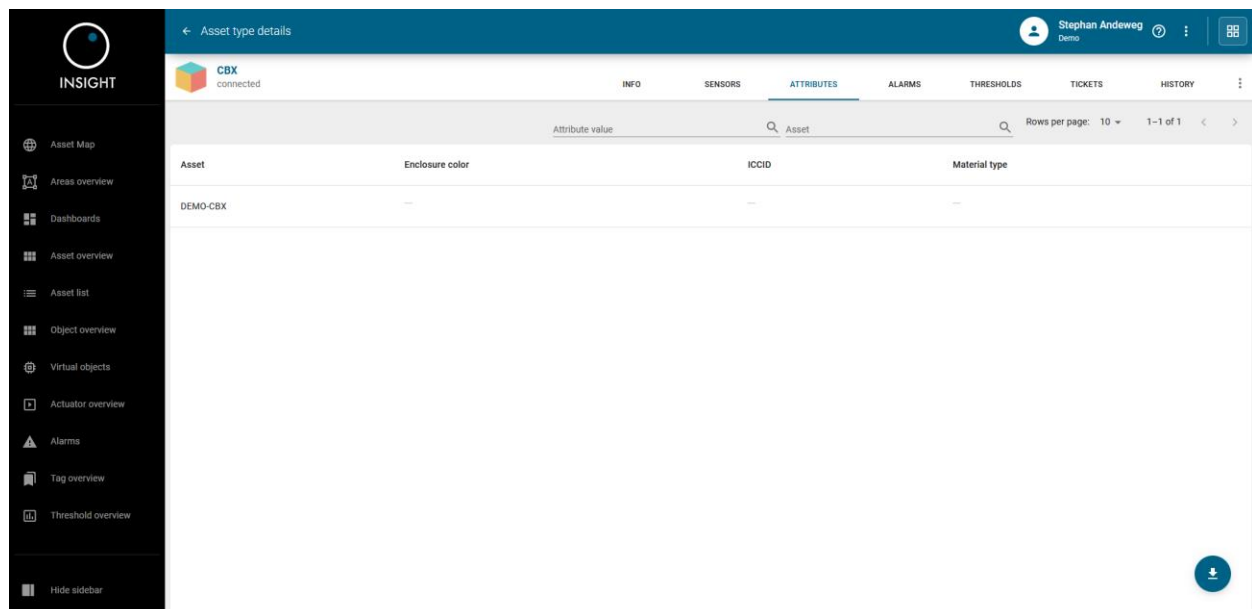
When clicking on SENSORS it will show a list of (virtual) objects and object description, for example:



The screenshot shows the 'SENSORS' tab in the INSIGHT interface. The left sidebar contains navigation options like Asset Map, Areas overview, Dashboards, Asset overview, Asset list, Object overview, Virtual objects, Actuator overview, Alarms, Tag overview, and Threshold overview. The main content area displays a table of virtual objects with columns for Object ID and Description. The table lists several objects including LwM2M Server, Device, Connectivity Monitoring, Location, Digital Input, Illuminance, Temperature, Humidity, and Actuation, each with a brief description and a 'Read more' link.

Object ID	Description
1	This LwM2M Object provides the data related to a LwM2M Server. A Bootstrap-Server has no such an Object Instance associated to it.
3	This LwM2M Object provides a range of device related information which can be queried by the LwM2M Server, and a device reboot and factory reset function.
4	This LwM2M Object enables monitoring of parameters related to network connectivity. In this general connectivity Object, the Resources are limited to the most general cases common to most network bearers. It is recommended to read the description, which refers to relevant...
6	This LwM2M Object provides a range of location telemetry related information which can be queried by the LwM2M Server.
3200	Generic digital input for non-specific sensors
3301	Illuminance sensor, example units = lx
3303	This IPSO object should be used with a temperature sensor to report a temperature measurement. It also provides resources for minimum/maximum measured values and the minimum/maximum range that can be measured by the temperature sensor. An example...
3304	This IPSO object should be used with a humidity sensor to report a humidity measurement. It also provides resources for minimum/maximum measured values and the minimum/maximum range that can be measured by the humidity sensor. An example measurement unit is relative...
3306	This IPSO object is dedicated to remote actuation such as ON/OFF action or dimming. A multi-state output can also be described as a string. This is useful to send robot wire orders for instance. It also provides a resource to reflect the time that the device has been switched on.

When clicking on ATTRIBUTES it will show the list of attributes for the particular asset, for example:



The screenshot shows the 'ATTRIBUTES' tab in the INSIGHT interface. The left sidebar is the same as in the previous screenshot. The main content area displays a table of attributes for a specific asset. The table has columns for Attribute value, Asset, Enclosure color, ICCID, and Material type. The table shows one row for the asset 'DEMO-CBX'.

Attribute value	Asset	Enclosure color	ICCID	Material type
	DEMO-CBX			

When clicking on ALARMS it will show alarm details, see for more details Chapter 2.9.

When clicking on THRESHOLDS it will show the configured thresholds which are used to generate alarms, create a service ticket, send notifications and/or execute an actuator.

By clicking the  icon on the lower right side, it's possible to set a threshold, for example:

### Set threshold

Attribute  
Service Date

Type  
↓ BELOW

Value  
Actual date Actual ☒ ×

Offset  
10 days

Raise alarm ☒

Create service ticket ☐

Execute actuator ☐


Notify via channel ☐

### Set threshold

Resource  
Illuminance | 0 | Sensor Value

Type  
↓ BELOW

Value  
60

Occurrence type Value  
 Counts 1

Raise alarm ☒

Create service ticket ☐


Notify via channel ☐

Execute actuator ☐

CANCEL ADD


CANCEL ADD

Click ADD to save the threshold.

By selecting the check box ☒ on the left side of the threshold, it's possible to edit an existing threshold by clicking the  icon on the lower right side. If the threshold was created by another user, the following warning will be displayed:


### Reassign threshold

Threshold was created by **Thomas Brekelmans** Would you like to edit the threshold?



Thomas Brekelmans

→



Stephan Andeweg

NO

YES

Click YES to continue to edit the threshold:

## Edit threshold

Attribute  
Service Date

Type  
↓ BELOW

Value  
Actual date ☒ ×  
Offset  
10 days

State: active ☒

Raise alarm ☒

Create service ticket ☒

Execute actuator ☐

Notify via channel ☒

Notification channels \*  
Demo

Override alarm message ☐

CANCEL SAVE

## Edit threshold

Resource  
Temperature | 0 | Sensor Value

Type  
↑ ABOVE

Value  
20

Occurrence type  
Counts 1

State: active ☒

Raise alarm ☒

Create service ticket ☒

Notify via channel ☒


Notification channels \*  
Info channel - Demo Cust...

Execute actuator ☐

CANCEL SAVE


Click SAVE to commit the changes.

When clicking on TICKETS it will show an overview of all tickets for the selected asset type, for example:



- Asset Map
- Areas overview
- Dashboards
- Asset overview
- Asset list
- Object overview
- Virtual objects
- Actuator overview
- Alarms
- Tag overview
- Threshold overview
- Hide sidebar

← Asset type details



INFOSENSORSATTRIBUTESALARMS

THRESHOLDS

TICKETS

HISTORY

Asset

Ticket name / reference

Status  
Open tickets

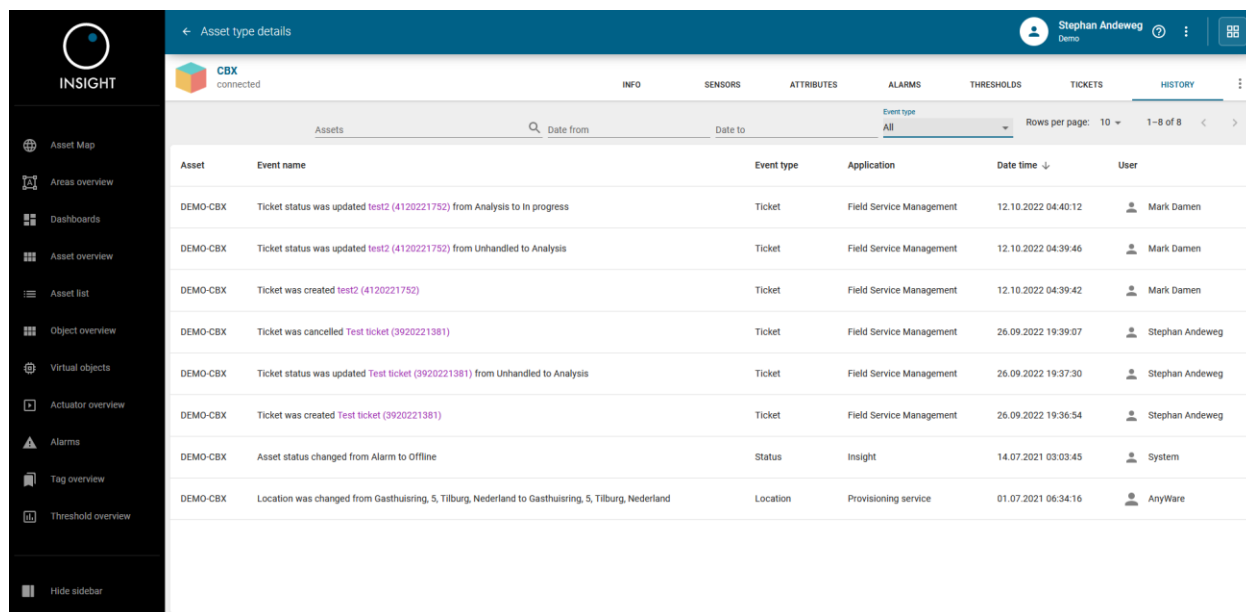
Priority

Rows per page: 10

1-4 of 4

Asset ↑	Reference	Title	Status	Priority	Create date
DEMO-CBX	1520210016	Check Error in CBX	On hold	Low	13.04.2021
DEMO-CBX	1820210031	ALARM: DEMO-CBX	Analyse	Medium	04.05.2021
DEMO-CBX	2020210033	ALARM: DEMO-CBX	Analyse	Medium	19.05.2021
DEMO-CBX	4120221752	test2	In progress	Medium	12.10.2022

When clicking on HISTORY it will show an overview of the asset type, for example:



Asset	Event name	Event type	Application	Date time	User
DEMO-CBX	Ticket status was updated <b>test2</b> (4120221752) from Analysis to In progress	Ticket	Field Service Management	12.10.2022 04:40:12	Mark Damen
DEMO-CBX	Ticket status was updated <b>test2</b> (4120221752) from Unhandled to Analysis	Ticket	Field Service Management	12.10.2022 04:39:46	Mark Damen
DEMO-CBX	Ticket was created <b>test2</b> (4120221752)	Ticket	Field Service Management	12.10.2022 04:39:42	Mark Damen
DEMO-CBX	Ticket was cancelled <b>Test ticket</b> (3920221381)	Ticket	Field Service Management	26.09.2022 19:39:07	Stephan Andeweg
DEMO-CBX	Ticket status was updated <b>Test ticket</b> (3920221381) from Unhandled to Analysis	Ticket	Field Service Management	26.09.2022 19:37:30	Stephan Andeweg
DEMO-CBX	Ticket was created <b>Test ticket</b> (3920221381)	Ticket	Field Service Management	26.09.2022 19:36:54	Stephan Andeweg
DEMO-CBX	Asset status changed from Alarm to Offline	Status	Insight	14.07.2021 03:03:45	System
DEMO-CBX	Location was changed from Gasthuisring, 5, Tilburg, Nederland to Gasthuisring, 5, Tilburg, Nederland	Location	Provisioning service	01.07.2021 06:34:16	AnyWare

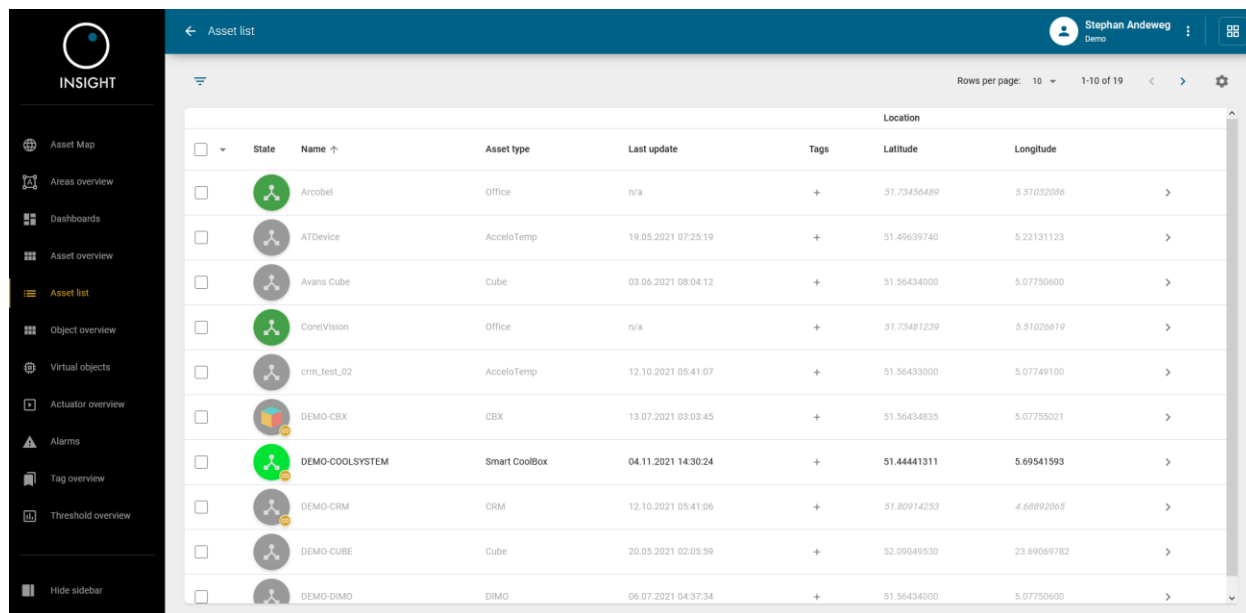
The list can be filtered on the top of the screen by using the following fields:

Assets	🔍 Date from	Date to	Event type All
--------	-------------	---------	-------------------



## 2.5 Asset list

The **Asset list** menu item gives an overview of all available assets:

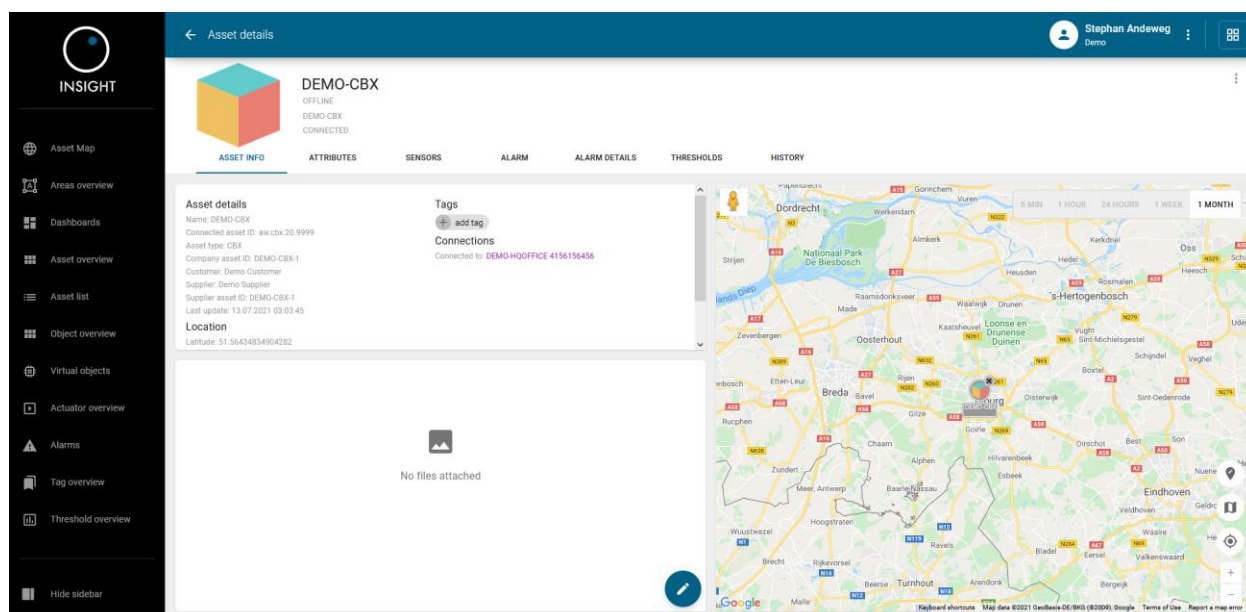


State	Name	Asset type	Last update	Tags	Location
					Latitude Longitude
	Arcobell	Office	n/a	+	51.73456489 5.51032086
	ATDevice	AcceloTemp	19.05.2021 07:25:19	+	51.49639740 5.22131123
	Avans Cube	Cube	03.06.2021 08:04:12	+	51.56434000 5.07750600
	CoreVision	Office	n/a	+	51.73481239 5.51026619
	crm_test_02	AcceloTemp	12.10.2021 05:41:07	+	51.56433000 5.07749100
	DEMO-CBX	CBX	13.07.2021 03:03:45	+	51.56434835 5.07755021
	DEMO-COOLSYSTEM	Smart CoolBox	04.11.2021 14:30:24	+	51.44441311 5.69541593
	DEMO-CRM	CRM	12.10.2021 05:41:06	+	51.80914253 4.68892065
	DEMO-CUBE	Cube	20.05.2021 02:05:59	+	52.09049530 23.69069782
	DEMO-DIMO	DIMO	06.07.2021 04:37:34	+	51.56434000 5.07750600

Menu item	Description
State	Shows the state of the asset, for example healthy or offline
Name	Shows the asset name
Asset type	Shows the type of the asset
Last update	Shows date and time the asset sent data for the last time
Tags	Shows which tags the asset has
Latitude	Shows the latitude of the asset
Longitude	Shows the longitude of the asset

With the  icon the column headers can be adjusted.

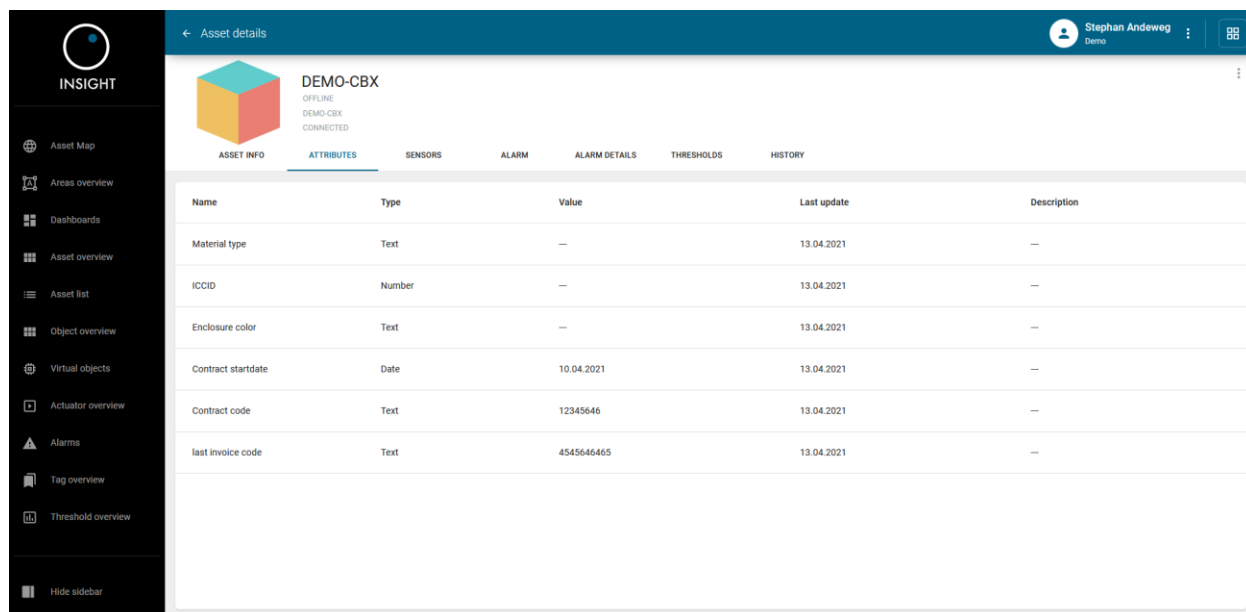
When clicking on an asset, detailed information of the selected asset will be displayed in ASSET INFO:



Menu item	Description
Asset info	Detailed information of the asset and location
Attributes	A list of all attributes of the asset via the asset details
Sensors	Historical sensor data can be visualized via graphs or bar charts with different aggregation types
Alarm	A list of alarms of the asset
Alarm details	Historical details of an alarm which can be selected on the left side
Thresholds	A list of thresholds which are used to generate alarms/notifications
Tickets	A list of tickets of the asset
History	Shows the history of the asset

It's possible to add a tag which can be useful when filtering within overviews.

When clicking on ATTRIBUTES it will show the attributes for the asset, for example:

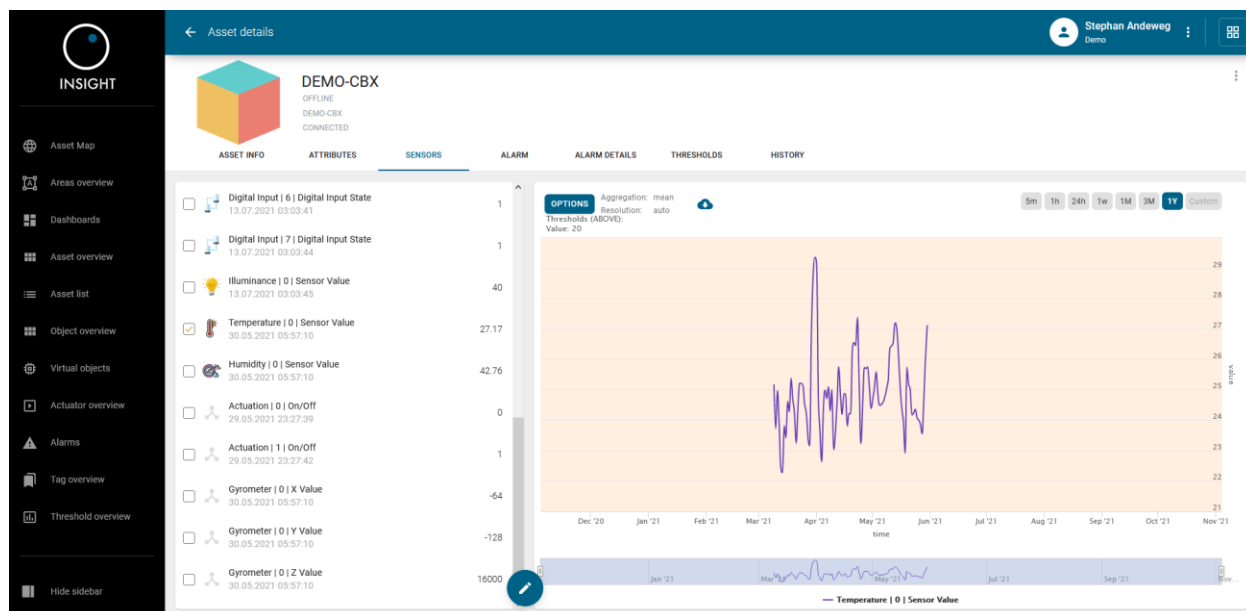


The screenshot shows the 'Asset details' page for 'DEMO-CBX'. The 'ATTRIBUTES' tab is selected, displaying a table of asset attributes. The table has columns for Name, Type, Value, Last update, and Description.


Name	Type	Value	Last update	Description
Material type	Text	—	13.04.2021	—
ICCID	Number	—	13.04.2021	—
Enclosure color	Text	—	13.04.2021	—
Contract startdate	Date	10.04.2021	13.04.2021	—
Contract code	Text	12345646	13.04.2021	—
last invoice code	Text	4545646465	13.04.2021	—

Note: When an asset is in alarm state, the following icon is shown for the affected attribute: 

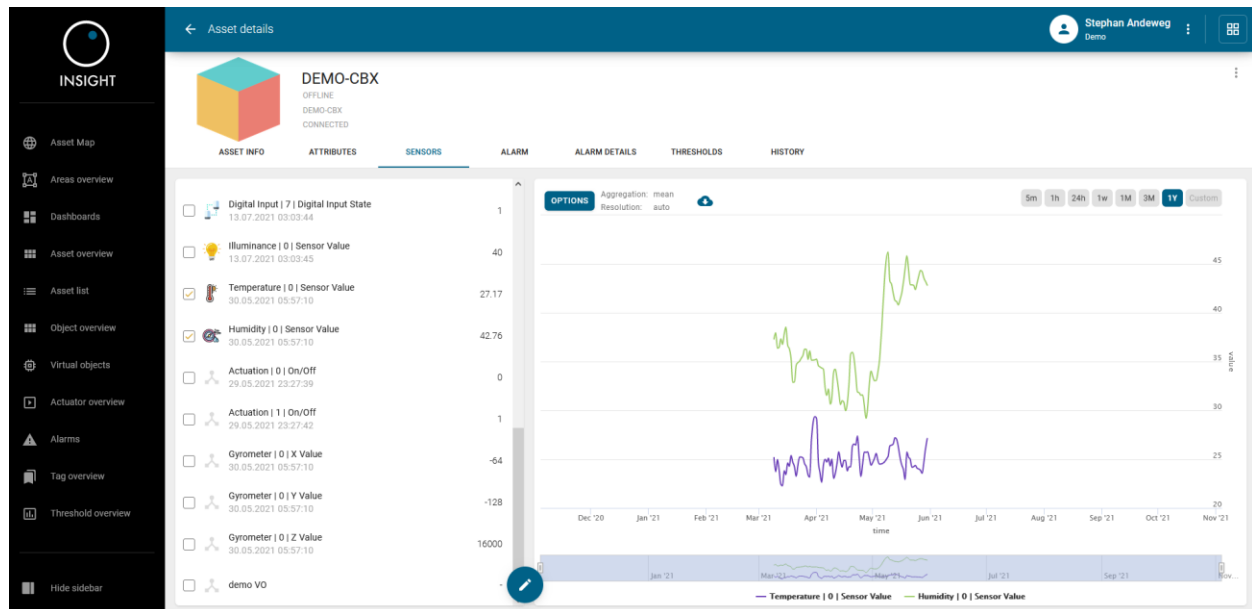
When clicking on SENSORS it will show historical sensor data, for example Temperature:



The screenshot shows the 'Asset details' page for 'DEMO-CBX'. The 'SENSORS' tab is selected, displaying a list of sensors on the left and a historical data chart on the right. The chart shows 'Temperature | 0 | Sensor Value' over time from December 2020 to November 2021. The chart includes a legend, aggregation options (mean, resolution: auto, thresholds: MOV), and a download icon.


The time frame can be adjusted to the user's wishes. Also, the data can be downloaded by clicking the  icon.

Multiple sensors can be selected and shown in the same graph, for example Temperature and Humidity:



When clicking on ALARM or ALARM DETAILS it will show (historical) alarm details, see for more details Chapter 2.9.

When clicking on THRESHOLDS it will show the configured thresholds which are used to generate alarms, create a service ticket, send notifications and/or execute an actuator.

By clicking the  icon on the lower right side, it's possible to set a threshold, for example:

### Set threshold

Attribute  
Service Date

Type  
↓ BELOW

Value  
Actual date Actual date ☒ ×

Offset  
10 days

Raise alarm ☒

Create service ticket ☐

Execute actuator ☐

Notify via channel ☐

CANCEL ADD

### Set threshold

Resource  
Illuminance | 0 | Sensor Value

Type  
↓ BELOW

Value  
60

Occurrence type Value  
Counts 1

Raise alarm ☒


Create service ticket ☐

Notify via channel ☐

Execute actuator ☐


CANCEL ADD

Click ADD to save the threshold.


By selecting the check box ☒ on the left side of the threshold, it's possible to edit an existing threshold by clicking the  icon on the lower right side. If the threshold was created by another user, the following warning will be displayed:


### Reassign threshold

Threshold was created by **Thomas Brekelmans** Would you like to edit the threshold?



**Thomas Brekelmans**





**Stephan Andeweg**

NO

YES

Click YES to continue to edit the threshold:

## Edit threshold

Attribute  
Service Date

Type  
↓ BELOW

Value  
Actual date ☒ ×

Offset  
10 days

State: active ☒

Raise alarm ☒

Create service ticket ☒

Execute actuator ☐

Notify via channel ☒

Notification channels \*  
Demo

Override alarm message ☐

CANCEL SAVE

## Edit threshold

Resource  
Temperature | 0 | Sensor Value

Type  
↑ ABOVE

Value  
20

Occurrence type  
Counts 1

State: active ☒

Raise alarm ☒

Create service ticket ☒

Notify via channel ☒

Notification channels \*  
Info channel - Demo Cust...

Execute actuator ☐

CANCEL SAVE

Click SAVE to commit the changes.

By selecting one or multiple assets in the asset list, it is possible to show them directly in the asset map by clicking on the icon on the top:

INSIGHT

Asset list

Stephan Andeweg Demo

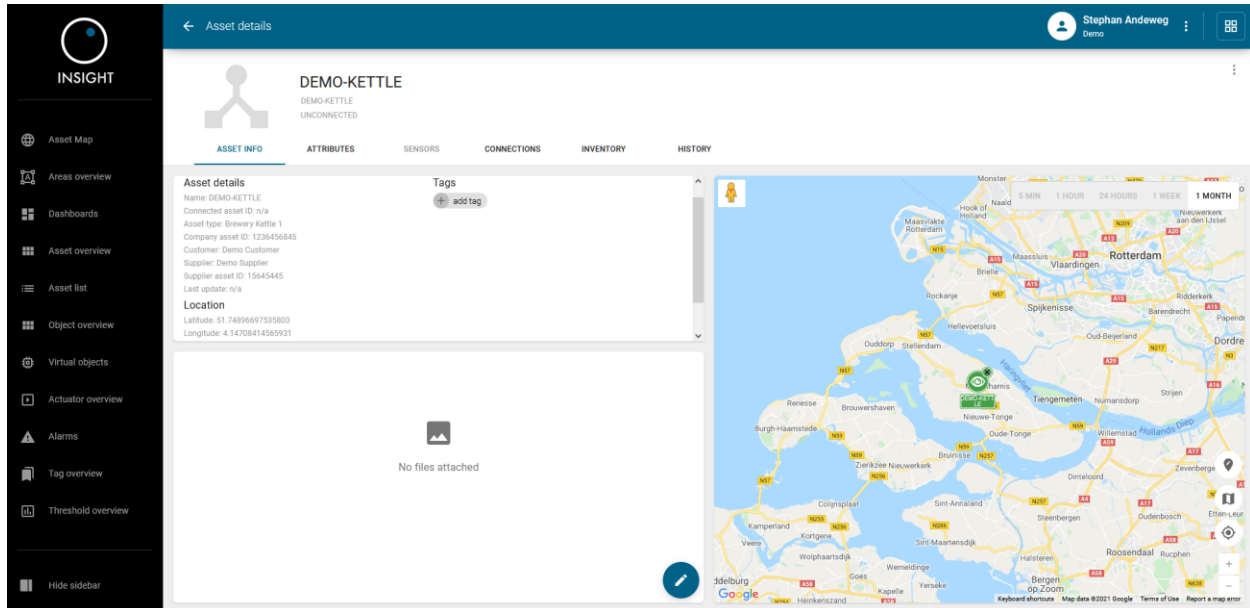
Rows per page: 10 1-10 of 24

	State	Name	Asset type	Last update	Tags	Location
						Latitude Longitude
<input type="checkbox"/>		Arcobel	Office	n/a	+	51.73456489 5.51032086
<input checked="" type="checkbox"/>		Arcobel Meeting Room Co2 Monitor	CO2 Monitor	10.03.2023 15:52:07	Arcobel +	51.73460641 5.51034164
<input type="checkbox"/>		Arcobel Office Space Co2 Monitor	CO2 Monitor	10.03.2023 15:53:23	Arcobel +	51.56434000 5.07750600
<input checked="" type="checkbox"/>		CoreVision Meeting Room Co2 Monitor	CO2 Monitor	10.03.2023 15:52:29	CoreVision +	51.56434000 5.07750600
<input type="checkbox"/>		CoreVision	Office	n/a	+	52.09049530 23.69066782
<input type="checkbox"/>		Crane-V-Movements-001	Crane 123	n/a	Verhuurd aan LGS +	51.62018300 4.91961745
<input type="checkbox"/>		DEMO-CBX	CBX	13.07.2021 03:03:45	+	51.56434835 5.07755021
<input type="checkbox"/>		DEMO-COOLSYSTEM	Smart CoolBox	10.03.2023 16:03:30	+	51.44441311 5.69541593
<input type="checkbox"/>		DEMO-CRM	CRM	07.02.2022 09:39:40	+	51.80914253 4.68892065
<input type="checkbox"/>		DEMO-CUBE	Cube	20.05.2021 02:05:59	+	52.09049530 23.69066782

Hide sidebar

## 2.5.1 Connections and Inventory

When clicking on a different asset with Connection and Inventory information, detailed information of that selected asset will be displayed:



Menu item	Description
Asset info	Detailed information of the asset and location
Attributes	A list of all attributes of the asset via the asset details
Sensors	Historical sensor data can be visualized via graphs or bar charts with different aggregation types
Connections	Connect multiple assets
Inventory	Add inventory to unconnected assets. Mainly intended for cargo and transport
History	Shows the history of the asset



## 2.5.2 Asset State and Connection type

Assets can have the following states and connection types:

State

All ▼

Alarm state

All ▼

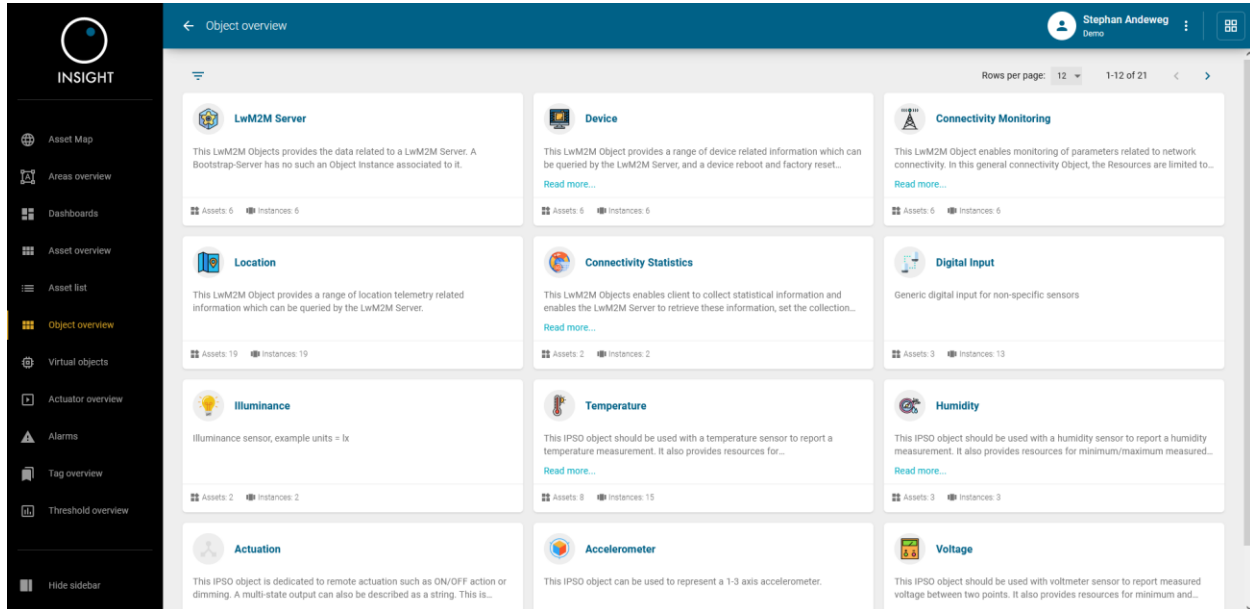
Connection type ▲

☐ Connected
 ☐ Unconnected
 ☐ Intelligible

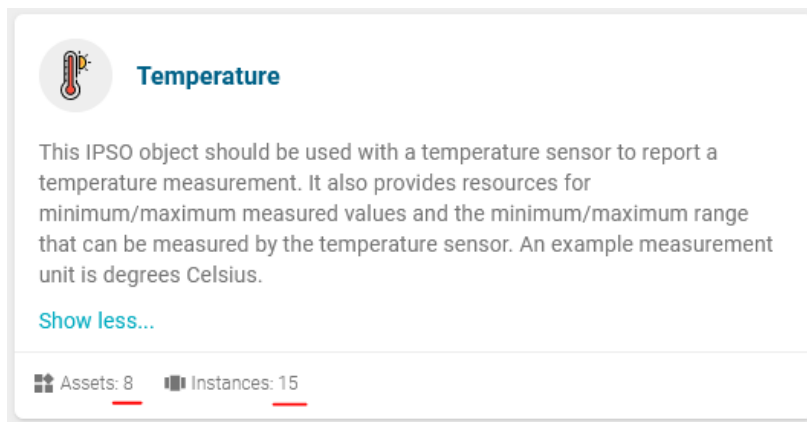
Menu item	Description
Online	The asset is in <i>online</i> state
Offline	The asset is in <i>offline</i> state
Healthy	The asset is in <i>healthy</i> state (OK)
Alarm	The asset is in <i>alarm</i> state
Connected	The asset has a <i>connected</i> connection type; it is able to send data
Unconnected	The asset has an <i>unconnected</i> connection type; it is not able to send data
Intelligible	The asset has an <i>intelligible</i> connection type; a <i>connected</i> asset has been linked to an <i>unconnected</i> asset

## 2.6 Object overview

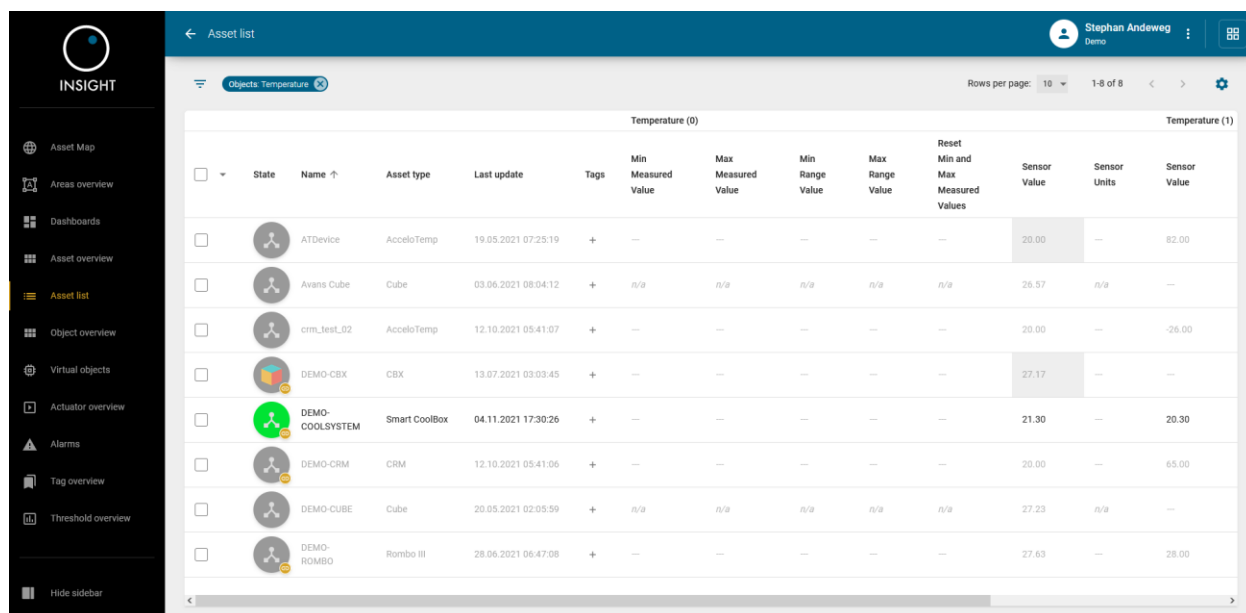
The **Object overview** menu item gives an overview of all available objects:



Each object shows at the bottom of its box the quantity of assets and instances it has, for example temperate:



When clicking on an object it will show the asset list of all assets which have the selected object, for example Temperature:



State	Name	Asset type	Last update	Tags	Min Measured Value	Max Measured Value	Min Range Value	Max Range Value	Reset Min and Max Measured Values	Sensor Value	Sensor Units	Sensor Value
	ATDevice	AcceloTemp	19.05.2021 07:25:19	+	—	—	—	—	—	20.00	—	82.00
	Avans Cube	Cube	03.06.2021 08:04:12	+	n/a	n/a	n/a	n/a	n/a	26.57	n/a	—
	crm_test_02	AcceloTemp	12.10.2021 05:41:07	+	—	—	—	—	—	20.00	—	-26.00
	DEMO-CBX	CBX	13.07.2021 03:03:45	+	—	—	—	—	—	27.17	—	—
	DEMO-COOLSYSTEM	Smart CoolBox	04.11.2021 17:30:26	+	—	—	—	—	—	21.30	—	20.30
	DEMO-CRM	CRM	12.10.2021 05:41:06	+	—	—	—	—	—	20.00	—	65.00
	DEMO-CUBE	Cube	20.05.2021 02:05:59	+	n/a	n/a	n/a	n/a	n/a	27.23	n/a	—
	DEMO-ROMBO	Rombo III	28.06.2021 06:47:08	+	—	—	—	—	—	27.63	—	28.00

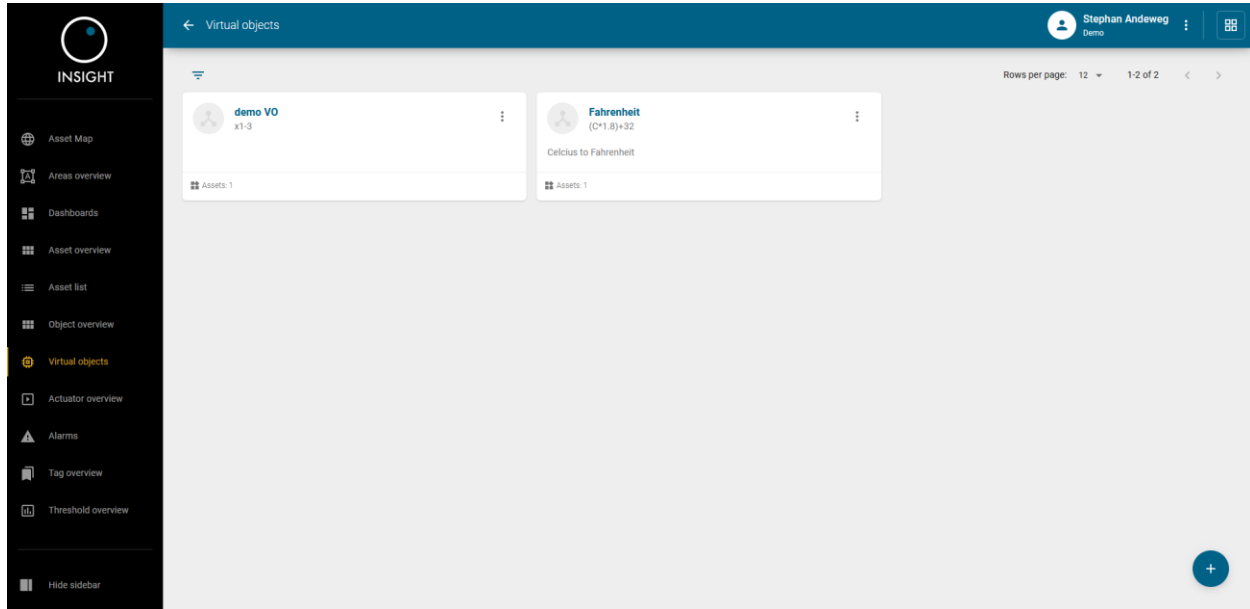
Menu item	Description
State	Shows the state of the asset, for example healthy or offline
Name	Shows the asset name
Asset type	Shows the type of the asset
Last update	Shows Date and time the asset sent data for the last time
Tags	Shows which tags the asset has
Latitude	Shows the latitude of the asset
Longitude	Shows the longitude of the asset

With the  icon the column headers can be adjusted.

When clicking on an asset, detailed information of the selected asset will be displayed as described in Chapter 2.4.


## 2.7 Virtual objects

The **Virtual objects** menu item gives an overview of all virtual objects:



### 2.7.1 Creating a virtual object

To create a virtual object click on the + sign at the lower right. To create a virtual object which converts degrees Celsius to Fahrenheit, the following can be done:



### New virtual object

#### Main info

Name\*

Fahrenheit

10/32

Units

Degrees

7/8

Description

Celcius to Fahrenheit

21/255

#### Expression and variables

Expression\*

$(C * 1.8) + 32$

10/128

##### Variable C

☒ Resource
 ☐ Virtual object

Object\*

Temperature

Resource\*

Sensor Value

Instance

0


☐ Use previous sensor value
 

Default value

CANCEL

SAVE

Click SAVE to create the virtual object.

When clicking on  it's possible to edit or remove virtual objects and see the asset components:

Edit

Remove

The edit window will enable to make changes to the existing virtual object:

Edit virtual object

Main info

Name \*

Fahrenheit

10/32

Units

Degrees

7/8

Description

Celcius to Fahrenheit

21/255

Expression and variables

Expression \*

(C\*1.8)+32

10/128

Variable C

☒ Resource

☐ Virtual object

Object \*

Temperature

Resource \*


Sensor Value

Instance

0

☐ Use previous sensor value

Default value

 After edit all previous data series will be lost. Use recalculation option to get data.

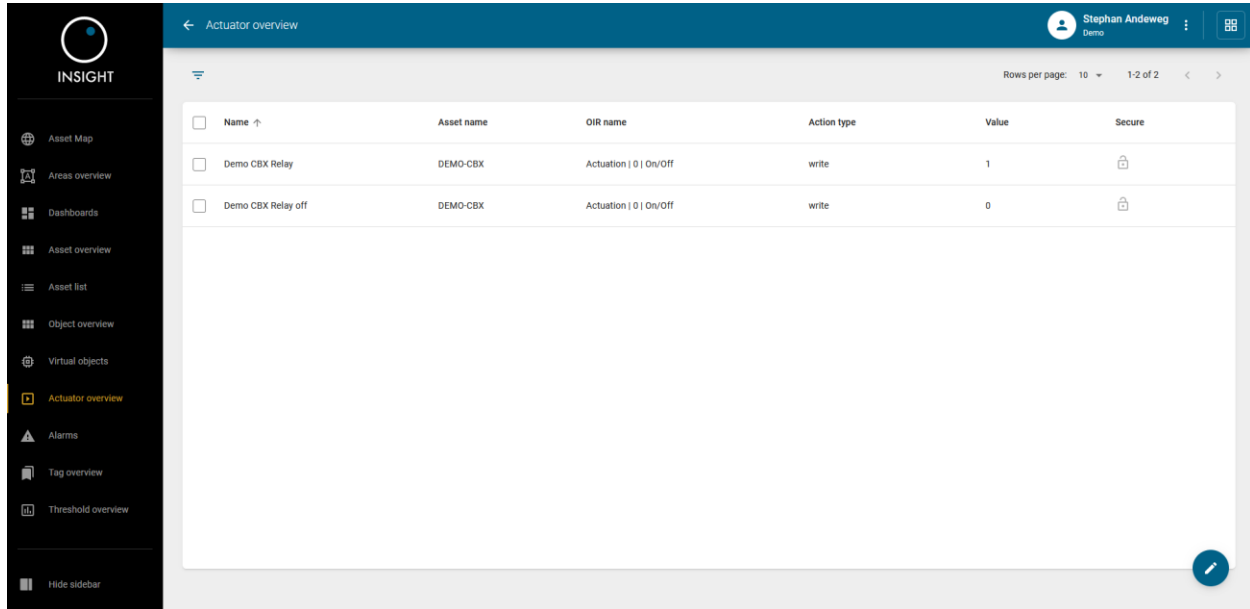
CANCEL

SAVE

INSIGHT USER MANUAL | 40

## 2.8 Actuator overview

The **Actuator overview** menu item gives an overview of all actuators:



Name	Asset name	OIR name	Action type	Value	Secure
Demo CBX Relay	DEMO-CBX	Actuation   0   On/Off	write	1	
Demo CBX Relay off	DEMO-CBX	Actuation   0   On/Off	write	0	

### 2.8.1 Creating an actuator

To create an actuator click on the pencil sign at the lower right. To create an actuator to reboot a device, the following can be done:

#### Create actuator

Name\*

Create test actuator

Description

Create test actuator

Action type\*

Execute

Asset\*

DEMO-CBX



OIR\*

Device | 0 | Reboot

CANCEL

SAVE

Click SAVE to create the actuator.

When clicking on the selection box (  ) in front of the actuator, it's possible to edit or remove it by clicking on the  icon at the lower right:

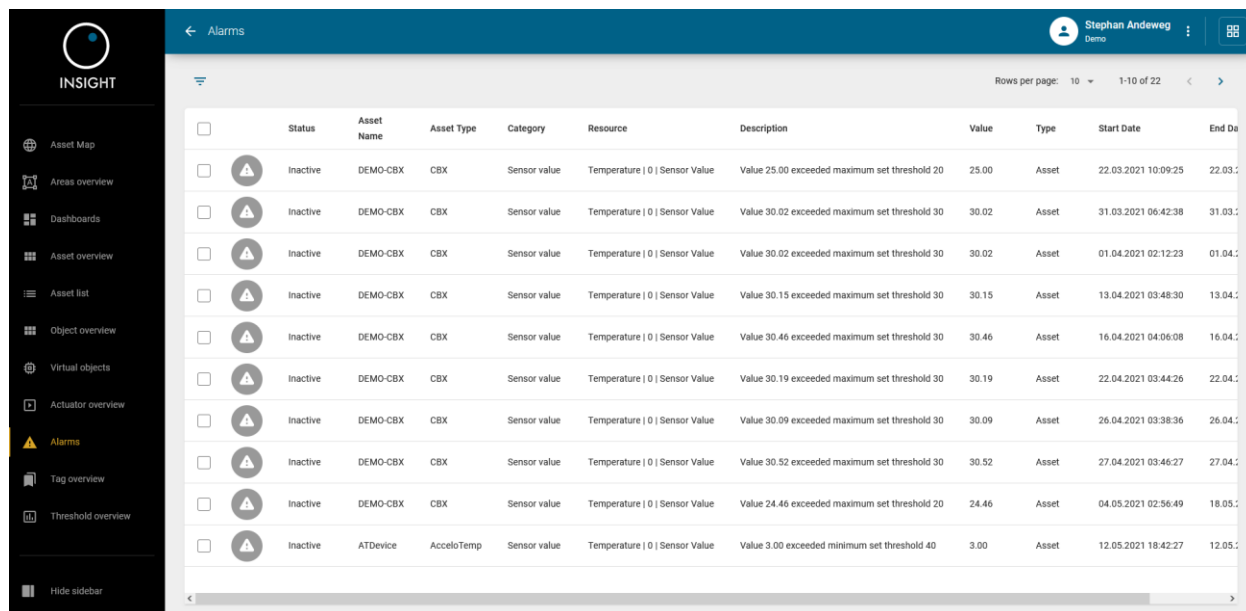
Edit actuator

Remove actuator



## 2.9 Alarms

The **Alarms** menu item gives an overview of all alarms:



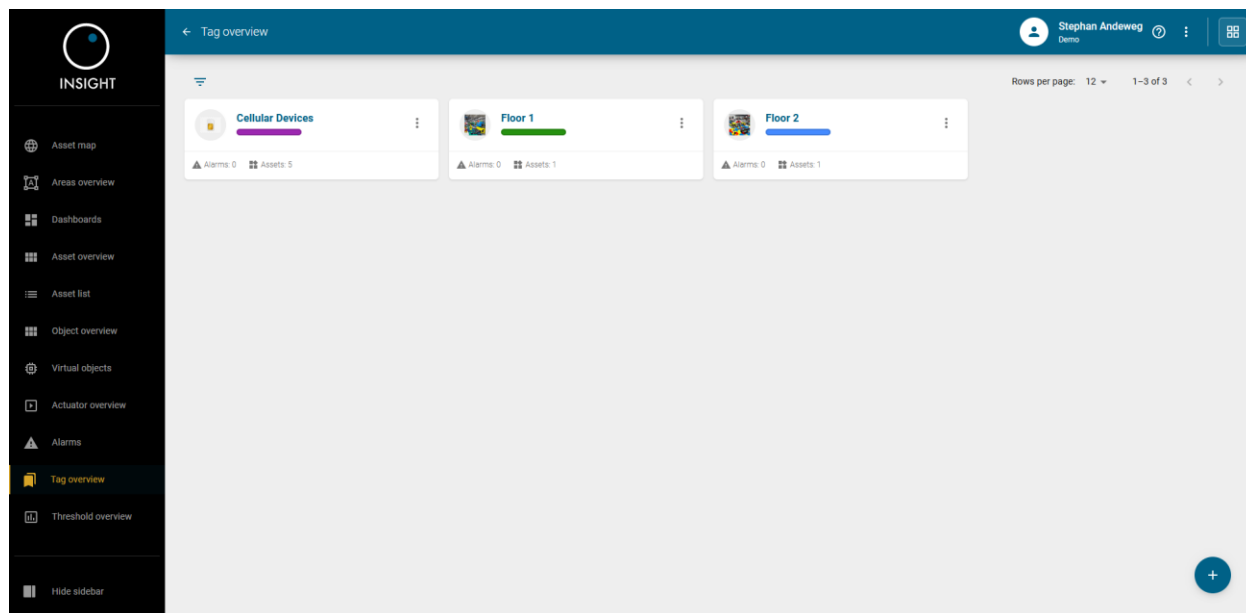
	Status	Asset Name	Asset Type	Category	Resource	Description	Value	Type	Start Date	End Date
<input type="checkbox"/>	Inactive	DEMO-CBX	CBX	Sensor value	Temperature   0   Sensor Value	Value 25.00 exceeded maximum set threshold 20	25.00	Asset	22.03.2021 10:09:25	22.03.2021 10:09:25
<input type="checkbox"/>	Inactive	DEMO-CBX	CBX	Sensor value	Temperature   0   Sensor Value	Value 30.02 exceeded maximum set threshold 30	30.02	Asset	31.03.2021 06:42:38	31.03.2021 06:42:38
<input type="checkbox"/>	Inactive	DEMO-CBX	CBX	Sensor value	Temperature   0   Sensor Value	Value 30.02 exceeded maximum set threshold 30	30.02	Asset	01.04.2021 02:12:23	01.04.2021 02:12:23
<input type="checkbox"/>	Inactive	DEMO-CBX	CBX	Sensor value	Temperature   0   Sensor Value	Value 30.15 exceeded maximum set threshold 30	30.15	Asset	13.04.2021 03:48:30	13.04.2021 03:48:30
<input type="checkbox"/>	Inactive	DEMO-CBX	CBX	Sensor value	Temperature   0   Sensor Value	Value 30.46 exceeded maximum set threshold 30	30.46	Asset	16.04.2021 04:06:08	16.04.2021 04:06:08
<input type="checkbox"/>	Inactive	DEMO-CBX	CBX	Sensor value	Temperature   0   Sensor Value	Value 30.19 exceeded maximum set threshold 30	30.19	Asset	22.04.2021 03:44:26	22.04.2021 03:44:26
<input type="checkbox"/>	Inactive	DEMO-CBX	CBX	Sensor value	Temperature   0   Sensor Value	Value 30.09 exceeded maximum set threshold 30	30.09	Asset	26.04.2021 03:38:36	26.04.2021 03:38:36
<input type="checkbox"/>	Inactive	DEMO-CBX	CBX	Sensor value	Temperature   0   Sensor Value	Value 30.52 exceeded maximum set threshold 30	30.52	Asset	27.04.2021 03:46:27	27.04.2021 03:46:27
<input type="checkbox"/>	Inactive	DEMO-CBX	CBX	Sensor value	Temperature   0   Sensor Value	Value 24.46 exceeded maximum set threshold 20	24.46	Asset	04.05.2021 02:56:49	18.05.2021 02:56:49
<input type="checkbox"/>	Inactive	ATDevice	AcceloTemp	Sensor value	Temperature   0   Sensor Value	Value 3.00 exceeded minimum set threshold 40	3.00	Asset	12.05.2021 18:42:27	12.05.2021 18:42:27

Menu item	Description
Status	Shows the status of the alarm, for example active or inactive
Asset Name	Shows the asset name for the alarm
Asset type	Shows the type of the asset for the alarm
Category	Shows the category for the alarm
Resource	Shows which resource has the alarm
Description	Shows the description for the alarm
Value	Shows the alarm value
Type	Shows the type of the alarm
Start Date	Shows the start date for the alarm
End Date	Shows the end date for the alarm

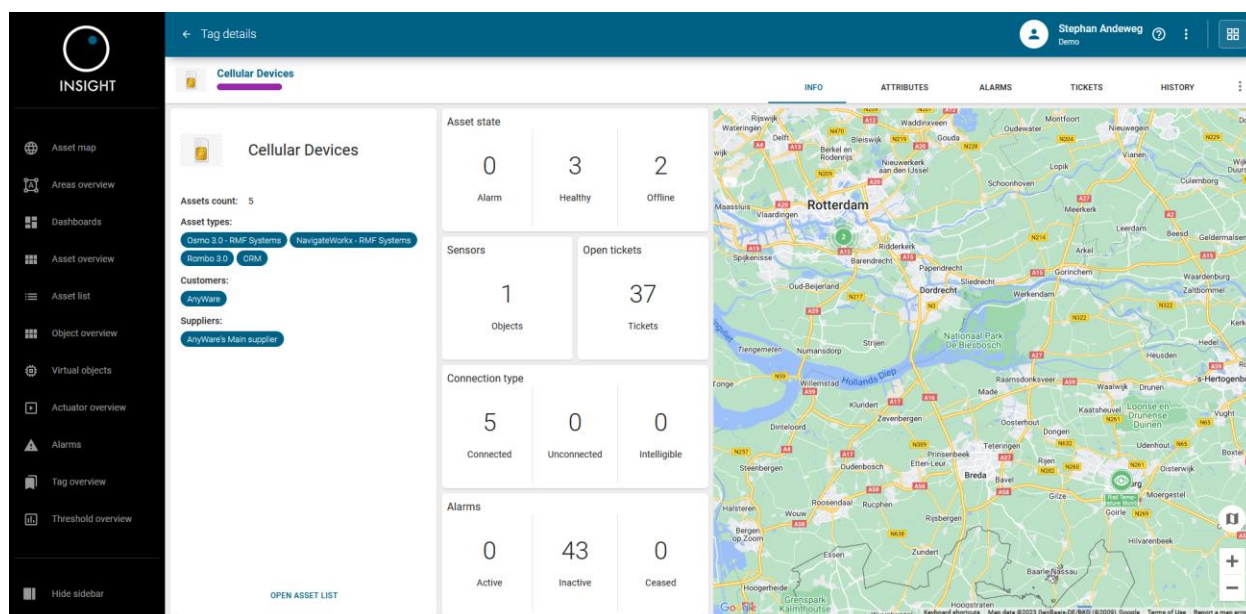
When clicking on the icon on the left side, it will show the sensors on the asset details page for the selected asset, see Chapter 2.4.

## 2.10 Tag overview

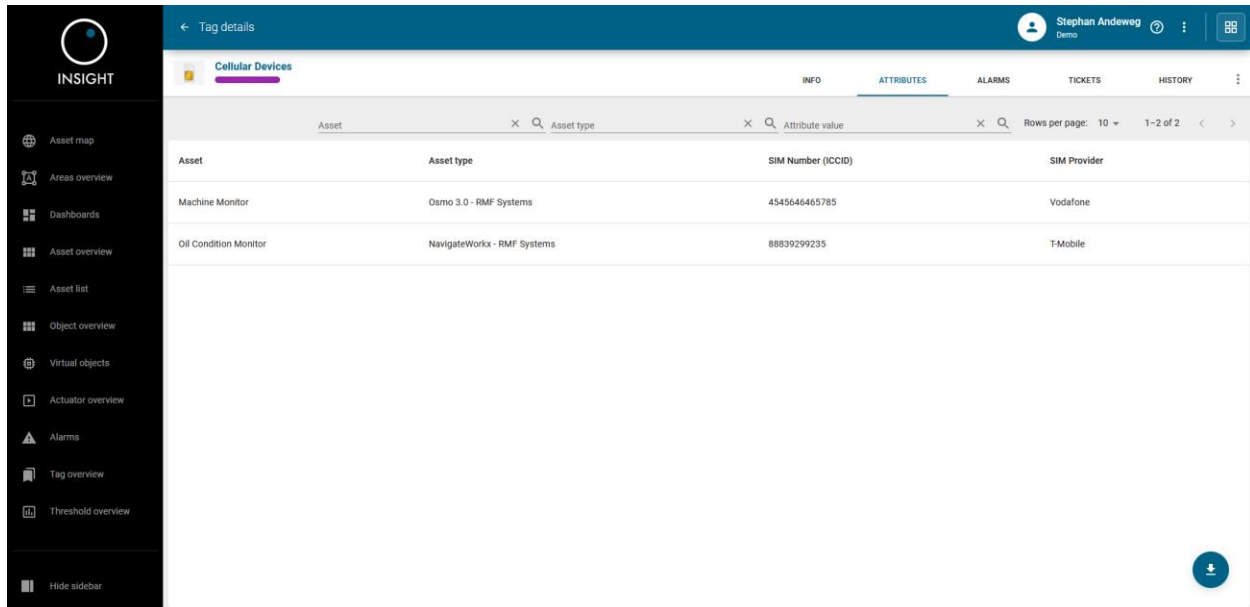
The **Tag overview** menu item gives an overview of all defined tags:



When clicking on a tag, by default it will display the INFO tab and shows all assets which have that tag defined and details such as open tickets, alarms and asset state, for example:

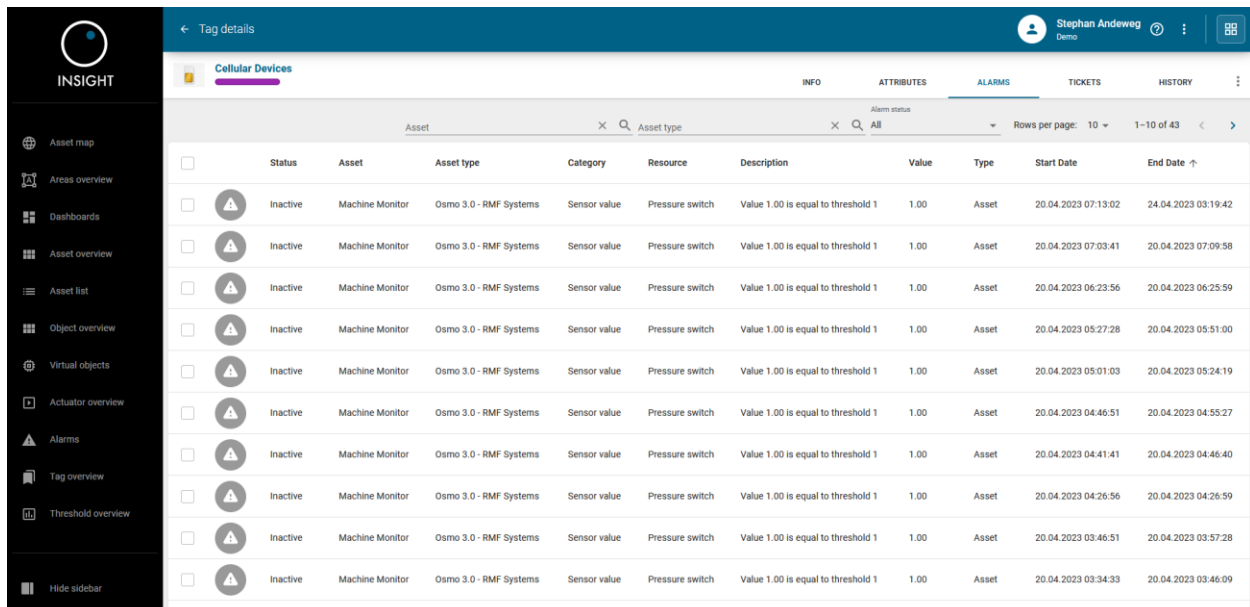


When clicking on the ATTRIBUTES tab, it will display the asset, asset type and other specific attributes with that tag, for example:



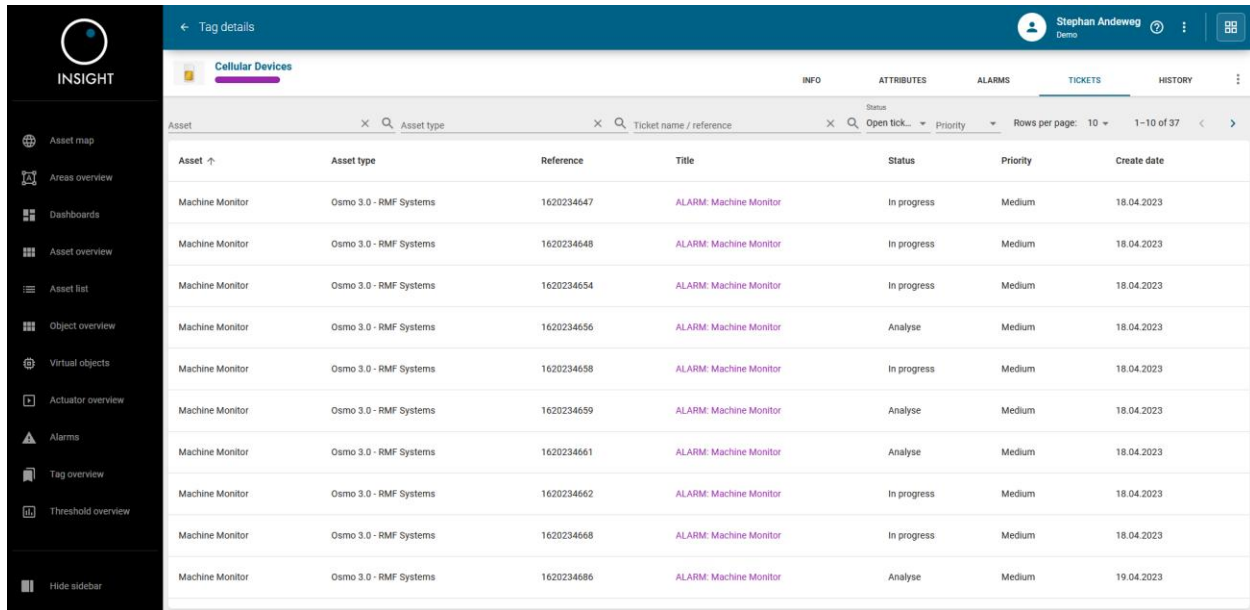
Asset	Asset type	SIM Number (ICCID)	SIM Provider
Machine Monitor	Osmo 3.0 - RMF Systems	4545646465785	Vodafone
Oil Condition Monitor	NavigateWorkx - RMF Systems	88839299235	T-Mobile

When clicking on the ALARMS tab, it will display the alarm details for assets with that tag, for example:



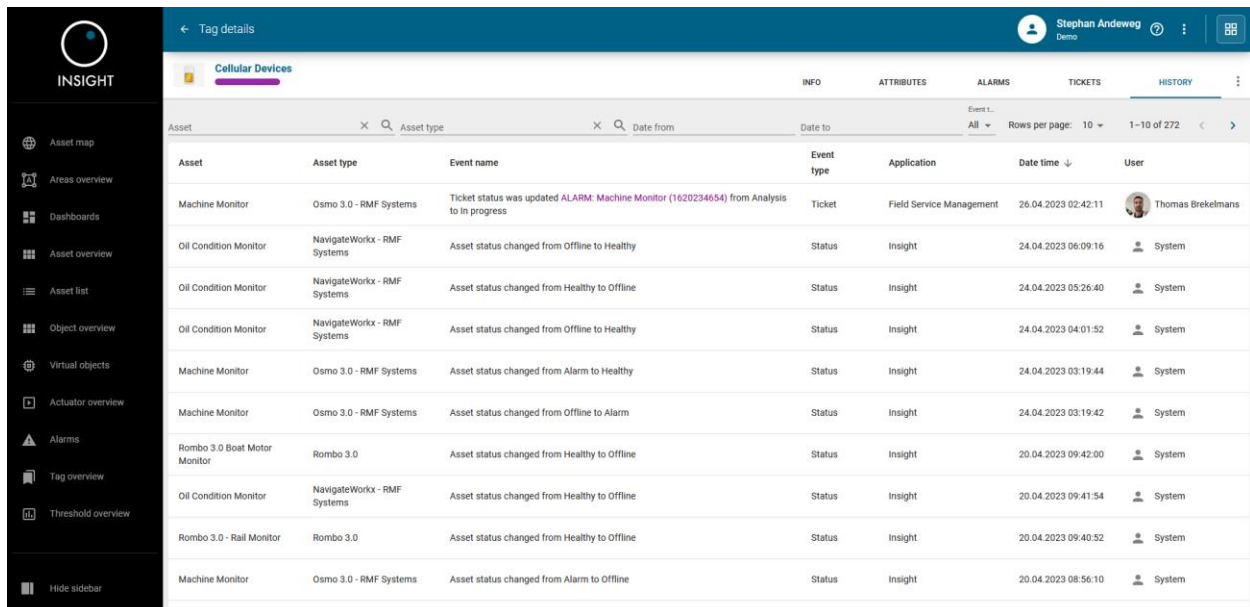
Status	Asset	Asset type	Category	Resource	Description	Value	Type	Start Date	End Date
Inactive	Machine Monitor	Osmo 3.0 - RMF Systems	Sensor value	Pressure switch	Value 1.00 is equal to threshold 1	1.00	Asset	20.04.2023 07:13:02	24.04.2023 03:19:42
Inactive	Machine Monitor	Osmo 3.0 - RMF Systems	Sensor value	Pressure switch	Value 1.00 is equal to threshold 1	1.00	Asset	20.04.2023 07:03:41	20.04.2023 07:09:58
Inactive	Machine Monitor	Osmo 3.0 - RMF Systems	Sensor value	Pressure switch	Value 1.00 is equal to threshold 1	1.00	Asset	20.04.2023 06:23:56	20.04.2023 06:25:59
Inactive	Machine Monitor	Osmo 3.0 - RMF Systems	Sensor value	Pressure switch	Value 1.00 is equal to threshold 1	1.00	Asset	20.04.2023 05:27:28	20.04.2023 05:51:00
Inactive	Machine Monitor	Osmo 3.0 - RMF Systems	Sensor value	Pressure switch	Value 1.00 is equal to threshold 1	1.00	Asset	20.04.2023 05:01:03	20.04.2023 05:24:19
Inactive	Machine Monitor	Osmo 3.0 - RMF Systems	Sensor value	Pressure switch	Value 1.00 is equal to threshold 1	1.00	Asset	20.04.2023 04:46:51	20.04.2023 04:55:27
Inactive	Machine Monitor	Osmo 3.0 - RMF Systems	Sensor value	Pressure switch	Value 1.00 is equal to threshold 1	1.00	Asset	20.04.2023 04:41:41	20.04.2023 04:46:40
Inactive	Machine Monitor	Osmo 3.0 - RMF Systems	Sensor value	Pressure switch	Value 1.00 is equal to threshold 1	1.00	Asset	20.04.2023 04:26:56	20.04.2023 04:26:59
Inactive	Machine Monitor	Osmo 3.0 - RMF Systems	Sensor value	Pressure switch	Value 1.00 is equal to threshold 1	1.00	Asset	20.04.2023 03:46:51	20.04.2023 03:57:28
Inactive	Machine Monitor	Osmo 3.0 - RMF Systems	Sensor value	Pressure switch	Value 1.00 is equal to threshold 1	1.00	Asset	20.04.2023 03:34:33	20.04.2023 03:46:09

When clicking on the TICKETS tab, it will display the ticket details for assets with that tag, for example:




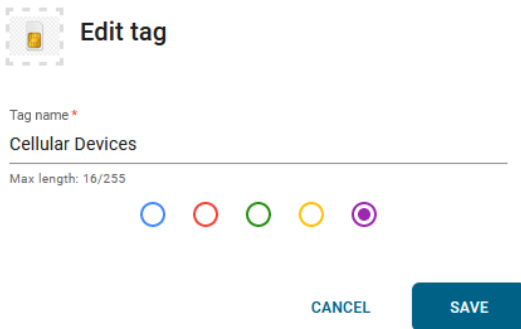
Asset	Asset type	Reference	Title	Status	Priority	Create date
Machine Monitor	Osmo 3.0 - RMF Systems	1620234647	ALARM: Machine Monitor	In progress	Medium	18.04.2023
Machine Monitor	Osmo 3.0 - RMF Systems	1620234648	ALARM: Machine Monitor	In progress	Medium	18.04.2023
Machine Monitor	Osmo 3.0 - RMF Systems	1620234654	ALARM: Machine Monitor	In progress	Medium	18.04.2023
Machine Monitor	Osmo 3.0 - RMF Systems	1620234656	ALARM: Machine Monitor	Analyse	Medium	18.04.2023
Machine Monitor	Osmo 3.0 - RMF Systems	1620234658	ALARM: Machine Monitor	In progress	Medium	18.04.2023
Machine Monitor	Osmo 3.0 - RMF Systems	1620234659	ALARM: Machine Monitor	Analyse	Medium	18.04.2023
Machine Monitor	Osmo 3.0 - RMF Systems	1620234661	ALARM: Machine Monitor	Analyse	Medium	18.04.2023
Machine Monitor	Osmo 3.0 - RMF Systems	1620234662	ALARM: Machine Monitor	In progress	Medium	18.04.2023
Machine Monitor	Osmo 3.0 - RMF Systems	1620234668	ALARM: Machine Monitor	In progress	Medium	18.04.2023
Machine Monitor	Osmo 3.0 - RMF Systems	1620234686	ALARM: Machine Monitor	Analyse	Medium	19.04.2023

When clicking on the HISTORY tab, it will display the application historical events across the different applications for assets with that tag, for example:



Asset	Asset type	Event name	Event type	Application	Date time	User
Machine Monitor	Osmo 3.0 - RMF Systems	Ticket status was updated ALARM: Machine Monitor (1620234654) from Analysis to In progress	Ticket	Field Service Management	26.04.2023 02:42:11	Thomas Brekelmans
Oil Condition Monitor	NavigateWorkx - RMF Systems	Asset status changed from Offline to Healthy	Status	Insight	24.04.2023 06:09:16	System
Oil Condition Monitor	NavigateWorkx - RMF Systems	Asset status changed from Healthy to Offline	Status	Insight	24.04.2023 05:26:40	System
Oil Condition Monitor	NavigateWorkx - RMF Systems	Asset status changed from Offline to Healthy	Status	Insight	24.04.2023 04:01:52	System
Machine Monitor	Osmo 3.0 - RMF Systems	Asset status changed from Alarm to Healthy	Status	Insight	24.04.2023 03:19:44	System
Machine Monitor	Osmo 3.0 - RMF Systems	Asset status changed from Offline to Alarm	Status	Insight	24.04.2023 03:19:42	System
Rombo 3.0 Boat Motor Monitor	Rombo 3.0	Asset status changed from Healthy to Offline	Status	Insight	20.04.2023 09:42:00	System
Oil Condition Monitor	NavigateWorkx - RMF Systems	Asset status changed from Healthy to Offline	Status	Insight	20.04.2023 09:41:54	System
Rombo 3.0 - Rail Monitor	Rombo 3.0	Asset status changed from Healthy to Offline	Status	Insight	20.04.2023 09:40:52	System
Machine Monitor	Osmo 3.0 - RMF Systems	Asset status changed from Alarm to Offline	Status	Insight	20.04.2023 08:56:10	System

When clicking on  it's possible to remove the tag from the assets or edit the tag and change the name and/or color:



**Edit tag**

Tag name\*

Cellular Devices

Max length: 16/255

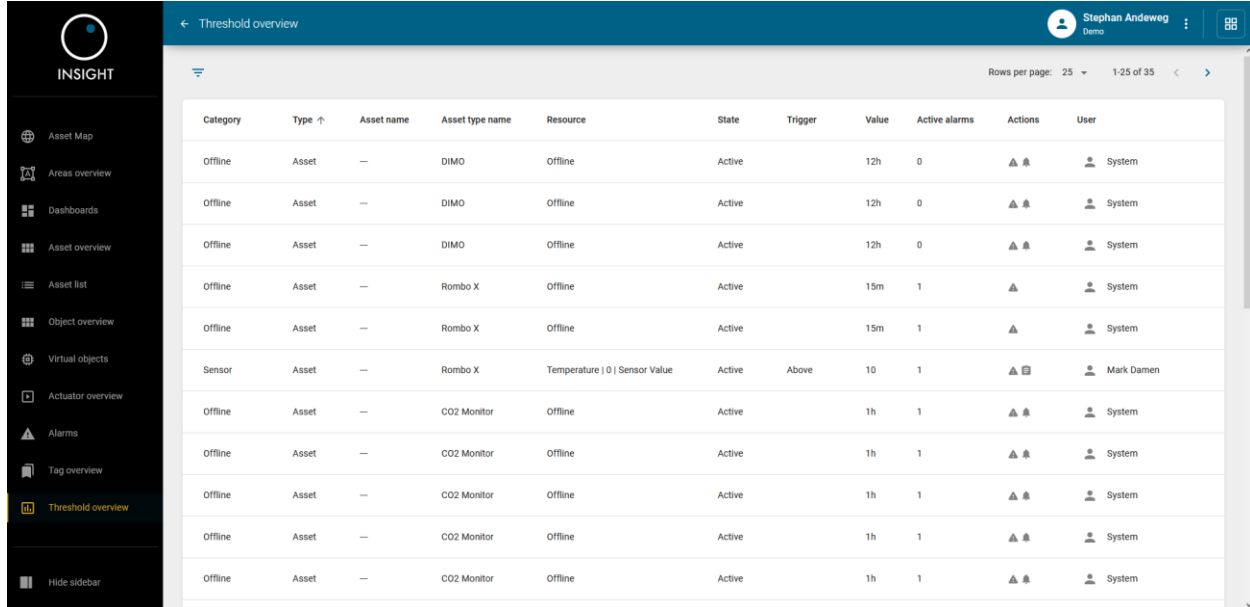
☐ ☐ ☐ ☐ ☒

**CANCEL** **SAVE**

Click SAVE to commit the changes.

## 2.11 Threshold overview

The **Threshold overview** menu item gives an overview of all defined thresholds:



Category	Type	Asset name	Asset type name	Resource	State	Trigger	Value	Active alarms	Actions	User
Offline	Asset	—	DIMO	Offline	Active		12h	0	⚠️ 🔔	System
Offline	Asset	—	DIMO	Offline	Active		12h	0	⚠️ 🔔	System
Offline	Asset	—	DIMO	Offline	Active		12h	0	⚠️ 🔔	System
Offline	Asset	—	Rombo X	Offline	Active		15m	1	⚠️ 🔔	System
Offline	Asset	—	Rombo X	Offline	Active		15m	1	⚠️ 🔔	System
Sensor	Asset	—	Rombo X	Temperature   0   Sensor Value	Active	Above	10	1	⚠️ 📄	Mark Damen
Offline	Asset	—	CO2 Monitor	Offline	Active		1h	1	⚠️ 🔔	System
Offline	Asset	—	CO2 Monitor	Offline	Active		1h	1	⚠️ 🔔	System
Offline	Asset	—	CO2 Monitor	Offline	Active		1h	1	⚠️ 🔔	System
Offline	Asset	—	CO2 Monitor	Offline	Active		1h	1	⚠️ 🔔	System
Offline	Asset	—	CO2 Monitor	Offline	Active		1h	1	⚠️ 🔔	System

Menu item	Description
Category	Shows the category for the threshold
Type	Shows the type for the threshold
Asset name	Shows the asset name of the threshold
Asset type name	Shows the asset type name of the threshold
Resource	Shows which resource has the threshold
State	Shows the state for the threshold
Trigger	Shows the trigger value
Value	Shows the threshold value
Active alarms	Shows the amount of active alarms for the threshold
Actions	Shows the actions to be taken when the threshold is reached <ul style="list-style-type: none"> <li>- Raise alarm</li> <li>- Create service ticket</li> <li>- Execute actuator</li> <li>- Notify via channel</li> </ul>
User	Shows the owner for the threshold

### 3 Glossary

Feature	Description
Thresholds	Setting Thresholds on sensor values
Asset coupling	Connect "connected assets" to "unconnected assets"
Alarms	Raise alarms in case thresholds are exceeded
Notifications	Be notified via email or telegram in case thresholds are exceeded
Asset Inventory	Add inventory to unconnected assets. Mainly intended for cargo and transport
Asset Details	Detailed information of the asset
Asset List	Generic overview of all assets. Filtering is possible to get the required overview
Asset Map	A map where all assets are located for location based navigation
Dashboards	Create custom dashboards to have all the information needed in 1 screen
LwM2M integration	Integration with LwM2M can read/write/observe/execute directly towards the device via the asset details
FSM Integration	Create tickets directly or when thresholds are exceeded
Tagging	Add tags to assets to group them
Object List	Show all "sensors" (objects)
Track & Trace	show the trace of track & trace devices
Attribute View	A list of all attributes of the asset via the asset details
Sensor Graphs & Bars	Historical sensor data can be visualized via graphs or bar charts with different aggregation types
Alarm Details	Shows how often a certain alarm was raised
Raw Data export	Export sensor data to csv
Secure Device Communication	Protects the execution of actions on a device with a PIN code
"If this then that"	When a threshold is exceeded an action on a device can be executed
Virtual Objects	Add virtual sensors to devices based on simple calculations
Update Asset Location	From the asset details page the user can update the asset
Events	All important events can be seen and exported. Events like added or changed thresholds, when the asset goes offline/online
Actuators	With actuators you can call for an action on an asset when a threshold has been exceeded. As an example: If the temperature on CRM XYZ is lower than 5 degrees, a relay on Rombo III needs to be switched
Threshold Overview	The threshold overview gives you a one-page overview of all thresholds set on assets or asset types



Exporting Sensor Data	Sensor data from all selected assets can be exported to a csv
Exporting Asset Details	A report from all selected assets can be exported to a PDF containing all information and last sensor values
Offline notifications	Get notifications when asset become offline