Ewon® BY HMS NETWORKS

Runtime counters

How to set up Argos Runtime counters

APPLICATION NOTES

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1.0	“20221014”

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Argos – Runtime Counter

Function Description

The Netbiter gateway can track runtime based on a signal condition. Up to 4 timers can be utilized in the Netbiter gateway. The runtime counter has a minute resolution.

A typical use case is to track the uptime of a device, an example of this is to track the number of hours that a generator has been running. Once the generator has been running 500 hours, we want to trigger a service notification.

This application note will describe this example use case, but the runtime trigger can be any input condition.

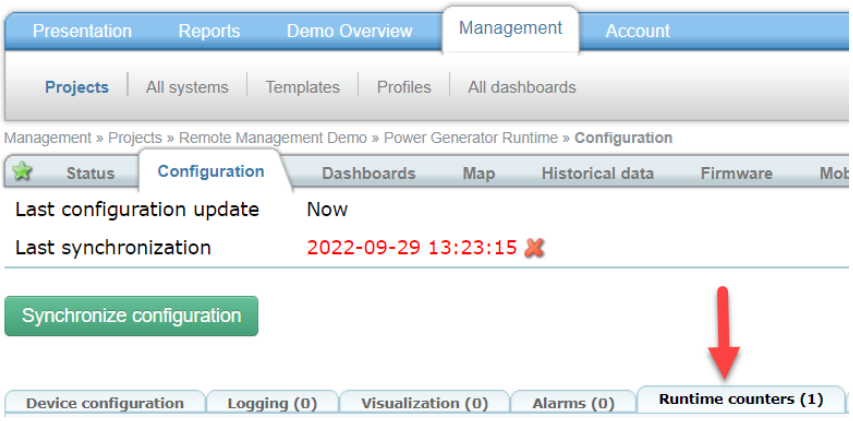
A generator output signal will affect a digital input on the Netbiter gateway to indicate that the generator is running. We want to **track** the length of time that this input is activated. When the input has been activated for 500 hours, we want to **trigger** an alarm.
We also want to view **when** the generator has been running based on this timer and lastly generate a **report** to know the **utilization** ratio of the generator during a time period.

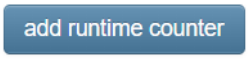
To achieve this, we are going to go through the following steps, we assume you have a basic understanding of the Argos system and the access rights.

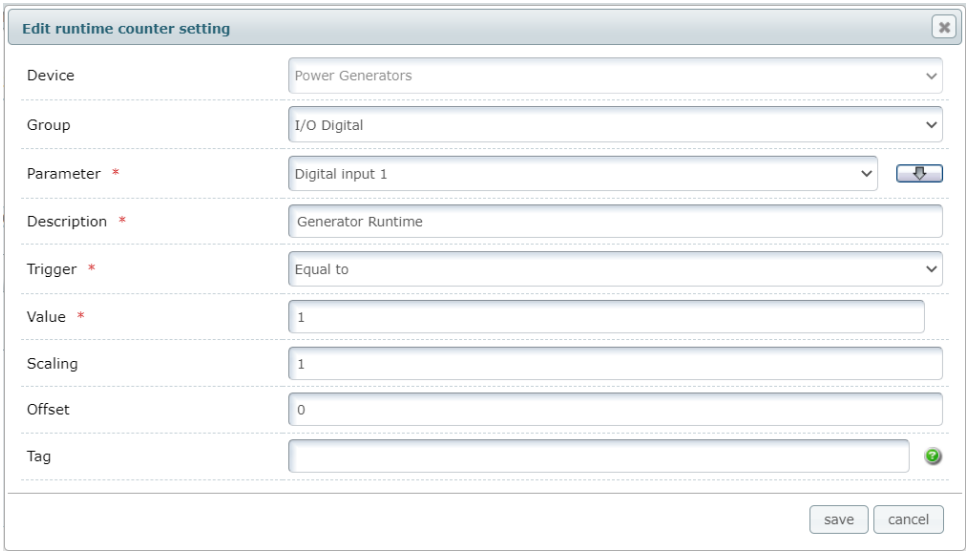
1. Set up the condition that will trigger the runtime counter.
2. Setup a logging parameter, this to enable visualization on the runtime.
3. Setup an alarm trigger for the runtime counter.
4. How to reset a runtime counter.
5. Utilize the runtime counter widget to view the utilization or in a visualization in a dashboard.
6. Generate a runtime report.

Set up the Runtime counter

The Runtime counters menu can be found under Management/Project /System/Configuration



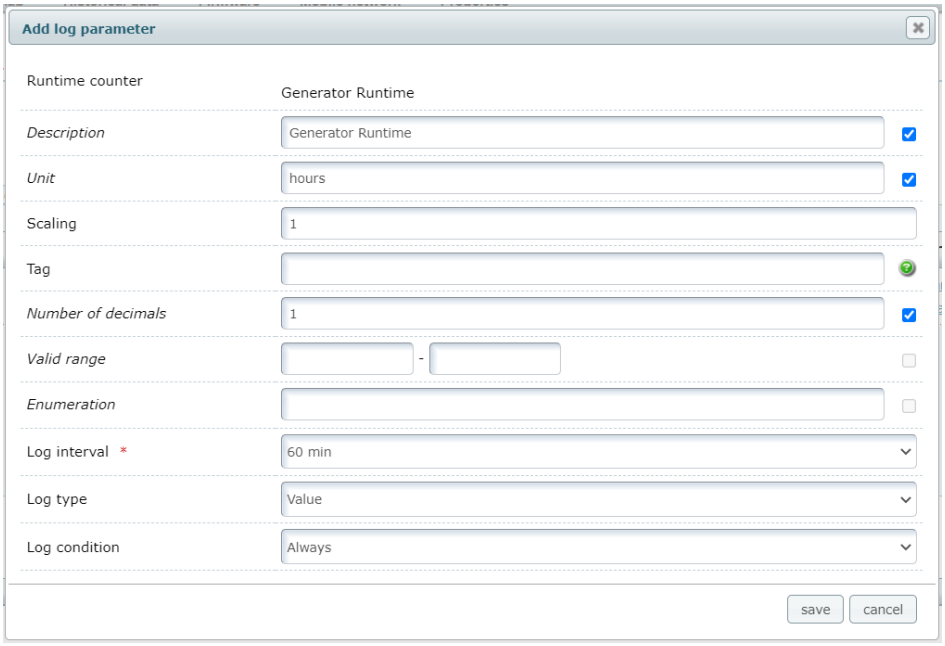
Press the add runtime counter button 



Here we select the parameter that will activate the runtime counter, in our case the Digital input 1 on the Netbiter gateway. When active (1) the Netbiter will count the time.

Add the Logging of the Runtime counter

You can add the logging from the Runtime counters tab.

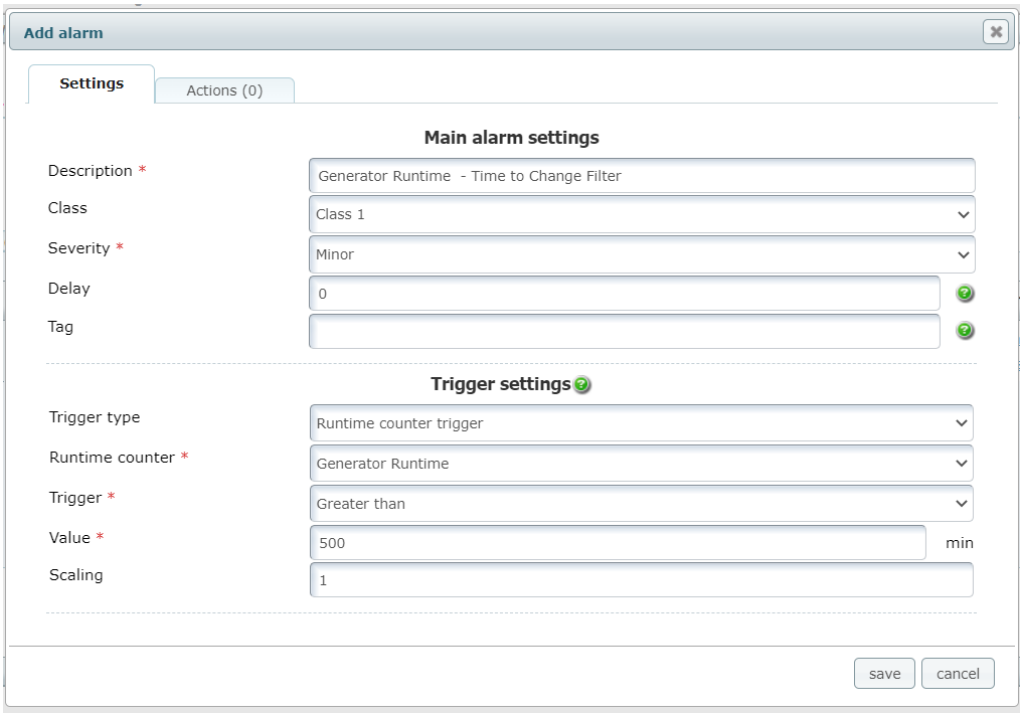


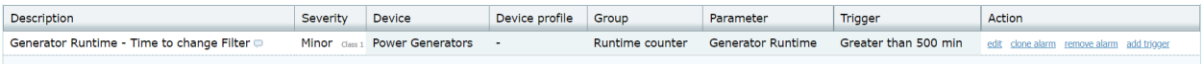
Specify the logging interval (Resolution). This will also be the value that will be presented as how many of the logging interval has passed. By default, the interval is set to number of minutes. To present the value as hours, set scaling to 60, however please note that the runtime widget will scale the availability with the same factor (see below for runtime widget).

Add an Alarm for the Runtime counter.

To create a notification when the runtime has reached a certain time. This can be set up under the Runtime counters tab or through the standard Alarms tab by selecting Runtime counter trigger as the Trigger type.

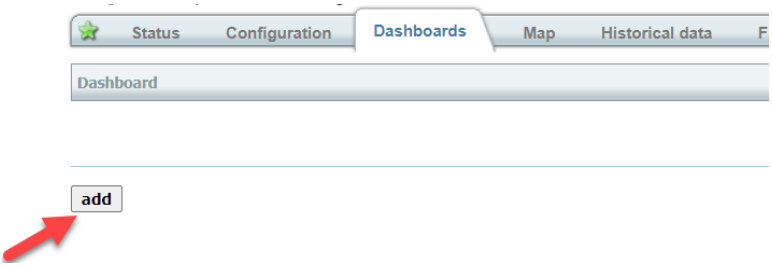
Add the alarm condition.



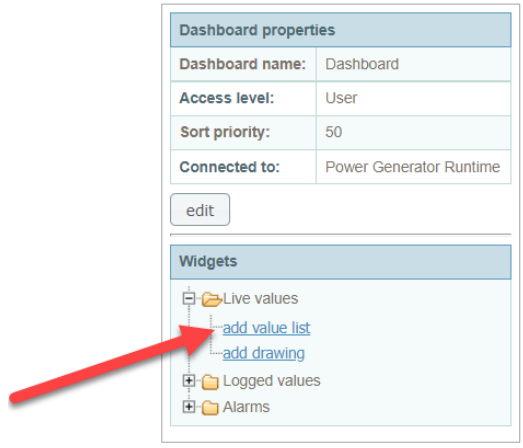


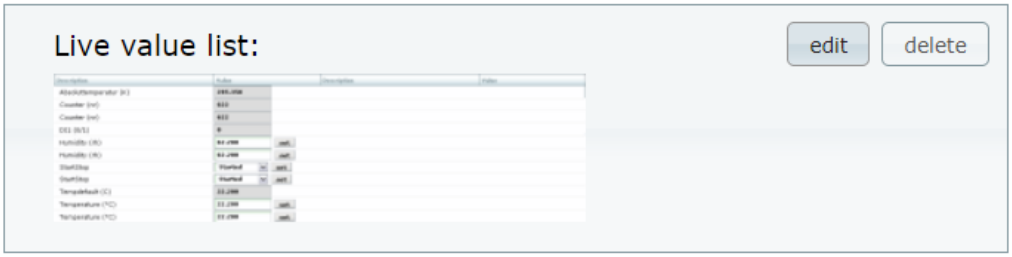
How to Reset a Runtime counter

To reset a counter after it has reached a certain level, for instance after a service visit, you do the following:
Add a Dashboard

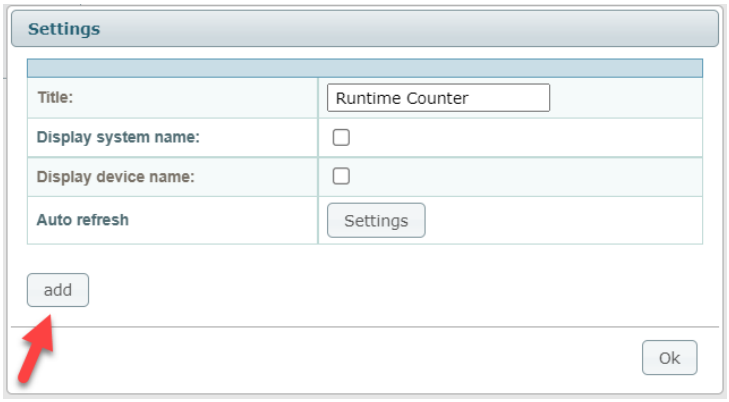


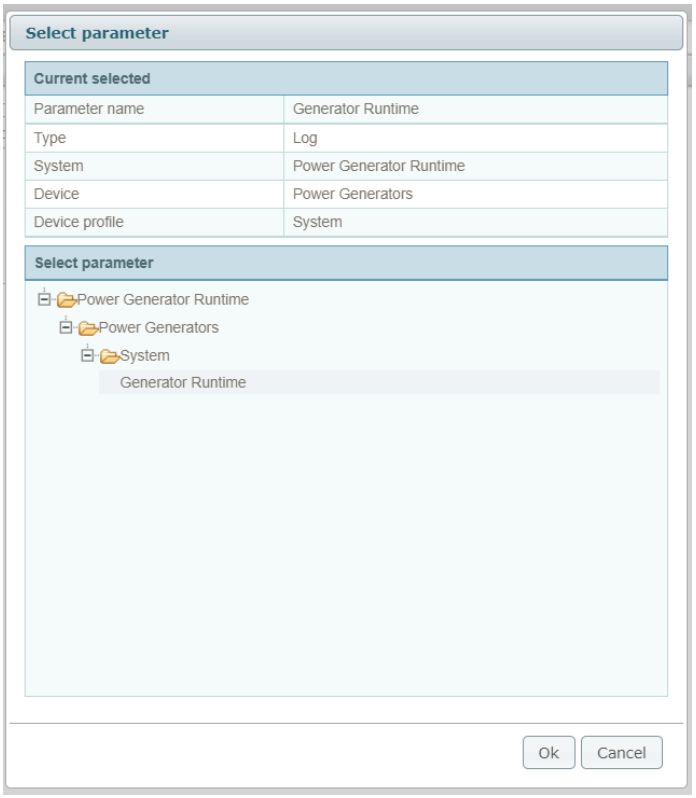
From the widget list select the Value list widget



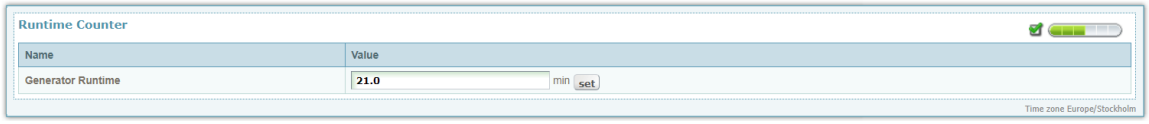


Press Edit
Add title and set the refresh settings if required, then press the add button.



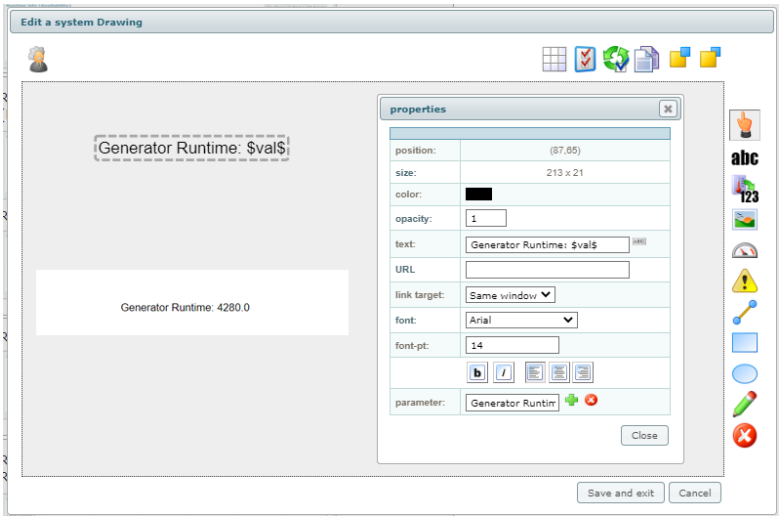


Select the Generator Runtime parameter you created previously.
This will be used to enable the reset of the value from the widget.
To reset the value write the value zero in the field and press the set button.

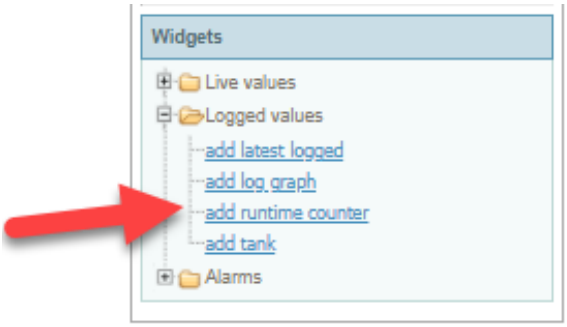


About Runtime and availability Widget

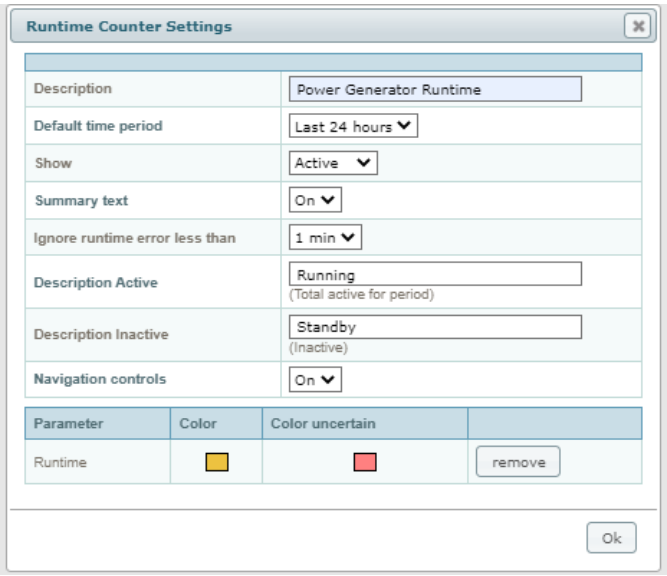
A runtime counter can be placed on any dashboard as a standard parameter.



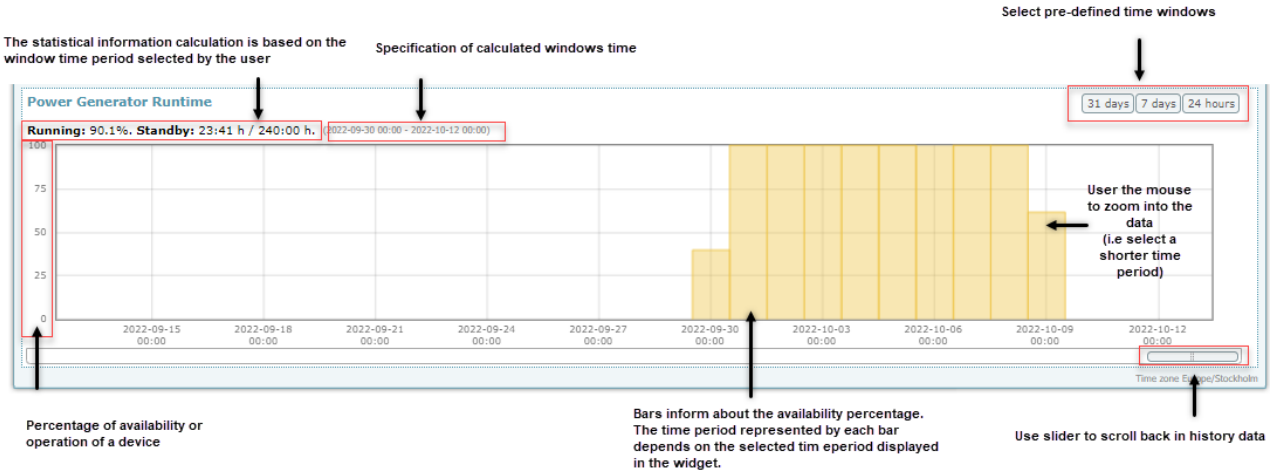
There is also a dedicated dashboard widget that can be used.



This widget will be added to your dashboard



The widget provides graphical and statistical information. Default time periods to be displayed/evaluated are 31 days, 7 days, and 24 hours. Shorter time periods may be selected by using the mouse to zoom into the data. The text based statistical summary at the top of the widget is based on the **time period** selected by the user. Historical data can be visualized by using the slider at the bottom of the window.

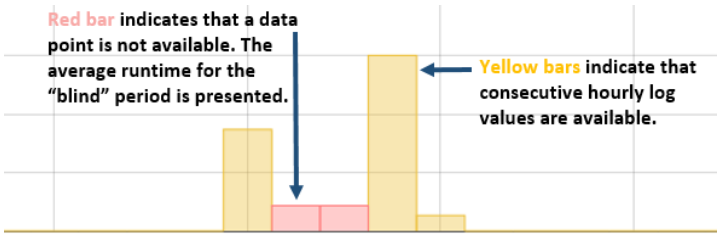


The time in the statistical information is linked to the time period displayed in the graphic and specified in the widget.

Please note: Dashboards are subject to change as widgets may be updated. Examples of dashboard pictures in this document may not exactly match how the dashboard looks like in your Netbiter Argos account.

In Netbiter Argos, logged data points might be missing, maybe due to power loss or reboot of the Netbiter gateway. In this case, the delta between two available log points is divided by the time that no data point was available. This way, an average runtime for the time

during the outage is derived. In the runtime widget, calculated averaged runtime values are indicated by red bars. Available runtime data points are presented by yellow bars.

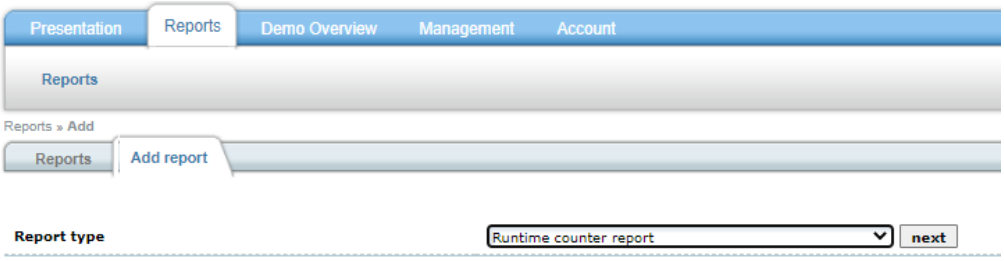


Please note: The data used is the difference between each aggregated period (for 24h and 7 day view each period is 1 hour, for 31 day view it's 24 hours), due to this the current and previous period isn't shown (delayed).

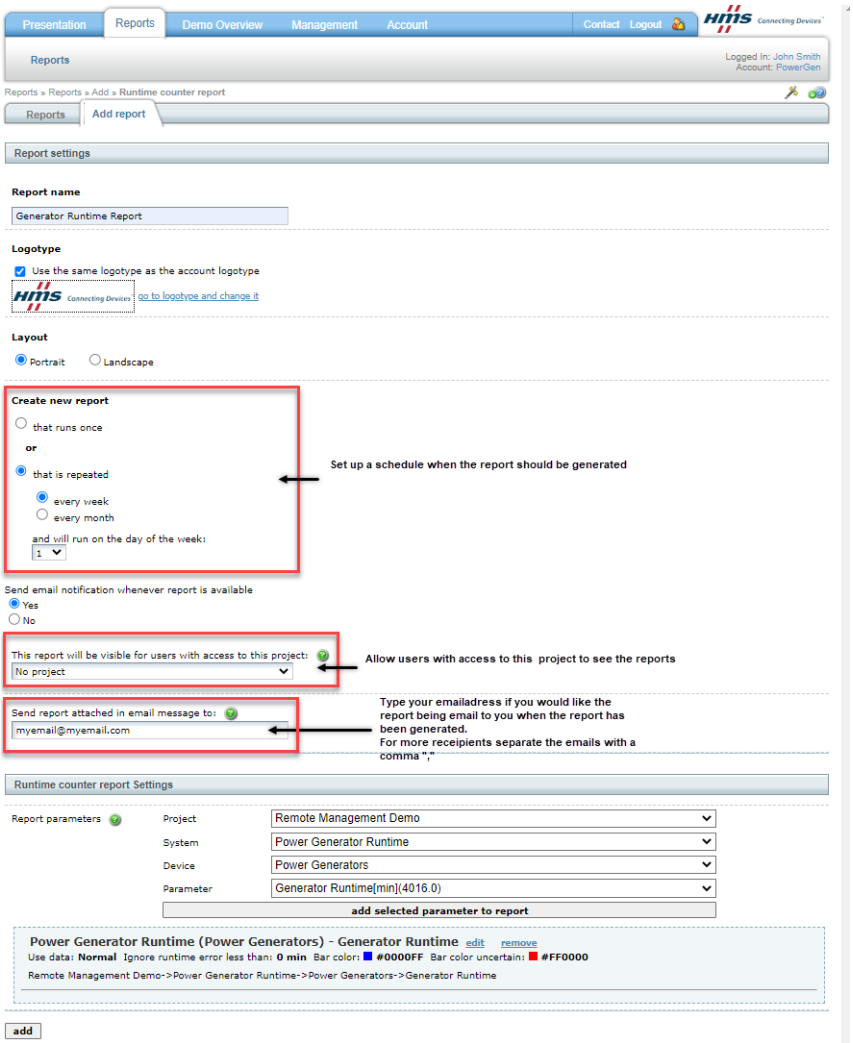
Create a Runtime counter Report

In Argos, a runtime counter report can be generated.

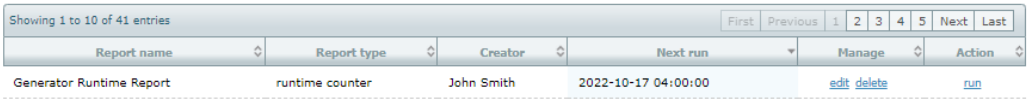
From the Report menu select the Report type Runtime counter report.



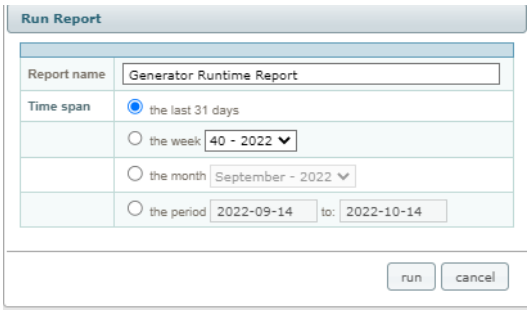
Enter your report requirement and select the runtime parameter that the report should be generated on.



The report will be added to report lists.



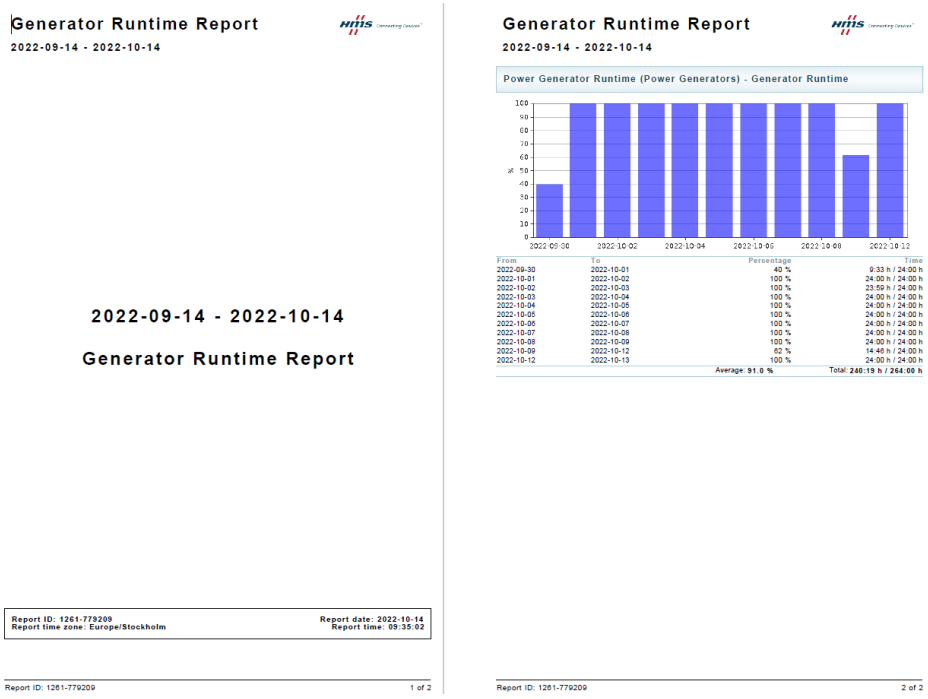
The report will automatically be generated on the predefined schedule.
Press the run link to create an independent run of the report.



Once completed you will be either notified or receive the report in your inbox depending on your preferences.

From the Generated report section press the download link

View the report.



For more information about Netbiter, please contact your local HMS Networks support department.