The goal of our application is to retrieve data from IoT sensors and gain insight on what is happening, in real-time.

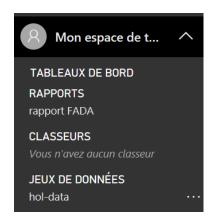
Thanks to PowerBI we can create easily dashboard:

- to follow indicators like temperature (also max, min or average value)
- to check if the probability of failure is high

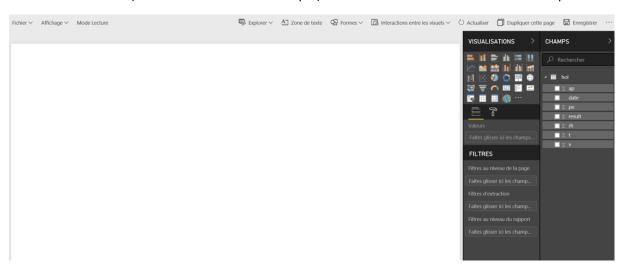
And take the good action at the appropriate time with alert system.

We will see how to do that.

The PowerBi output of Stream Analytics generate automatically a dataset in Power.com

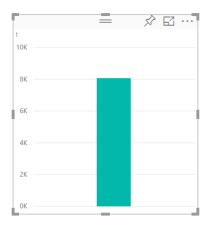


Click on the dataset (called hol-data in this exemple) to access to the interface to create a report.

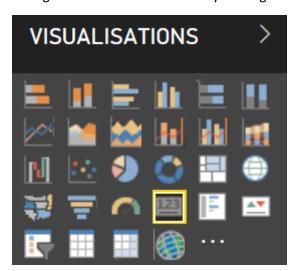


You can find the different fields available on the right, just click and drop one of them on the blank canvas to start creating a report.

Here is an example by dropping "t" (temperature):



Change the kind of visualization by clicking for example on "carte" (in yellow) :

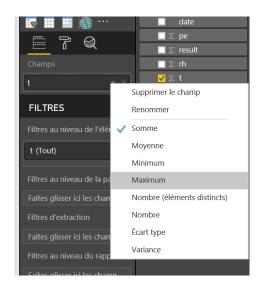


Temperature now appears this way:



By default, this is a summary of all the temperature values. To get the maximum value, change the field in the visualization component:

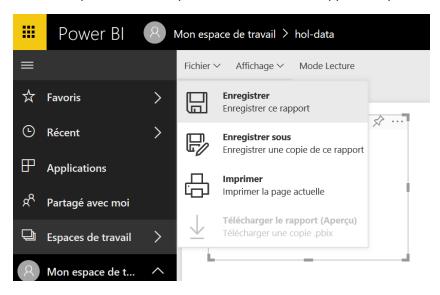


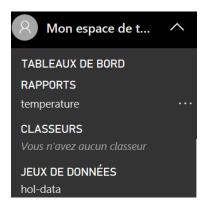


We have created our first indicator:

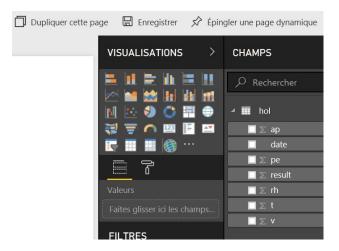


Save the report under "temperature" name, it now appears in your workspace :

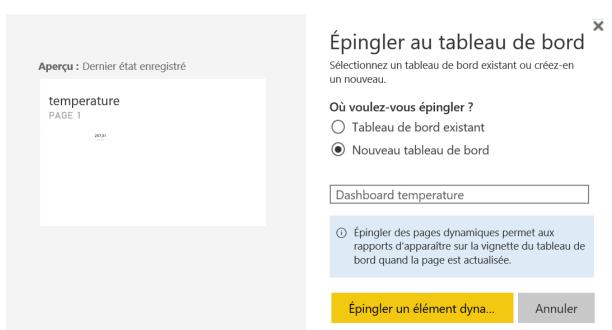




One of our goal is to generate a dynamical dashboard to visualize real-time data. Let's click on "épingler une page dynamique":

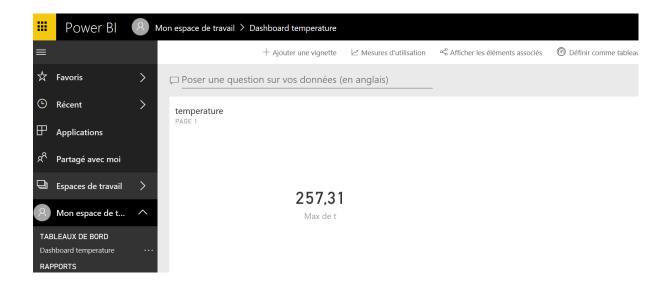


Give a name to the dashboard:



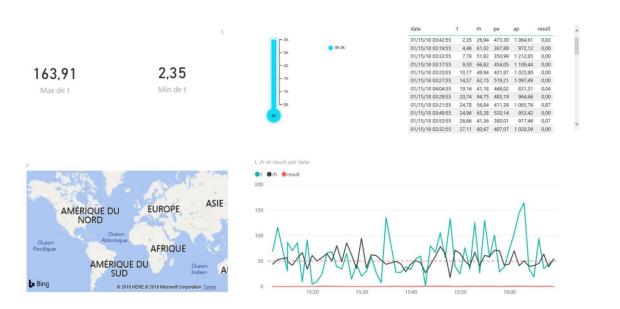
The dashboard is available on the left menu.

The value will change dynamically according to the stream analytics output.



Repeating this operation for several indicators, you can populate the dashboard.

HOL / Suivi des températures : Risque de panne



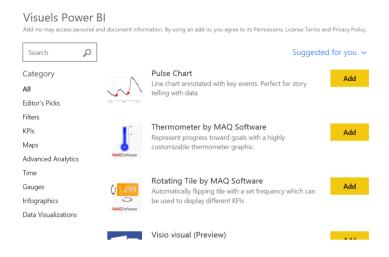
PowerBI offers native and custom visualizations. The thermometer is a custom one.

To get it, click on "..." then



"Import from the marketplace" and choose the good visualization.

In this example we choose the thermometer, it now appears in the panel (at the last position):





The majority of the component can be enriched using the "Analytique" menu.

In our situation, we added a constant line to visualize clearly when the probability reaches a specific limit (50% here).

This option is set up in this menu:

