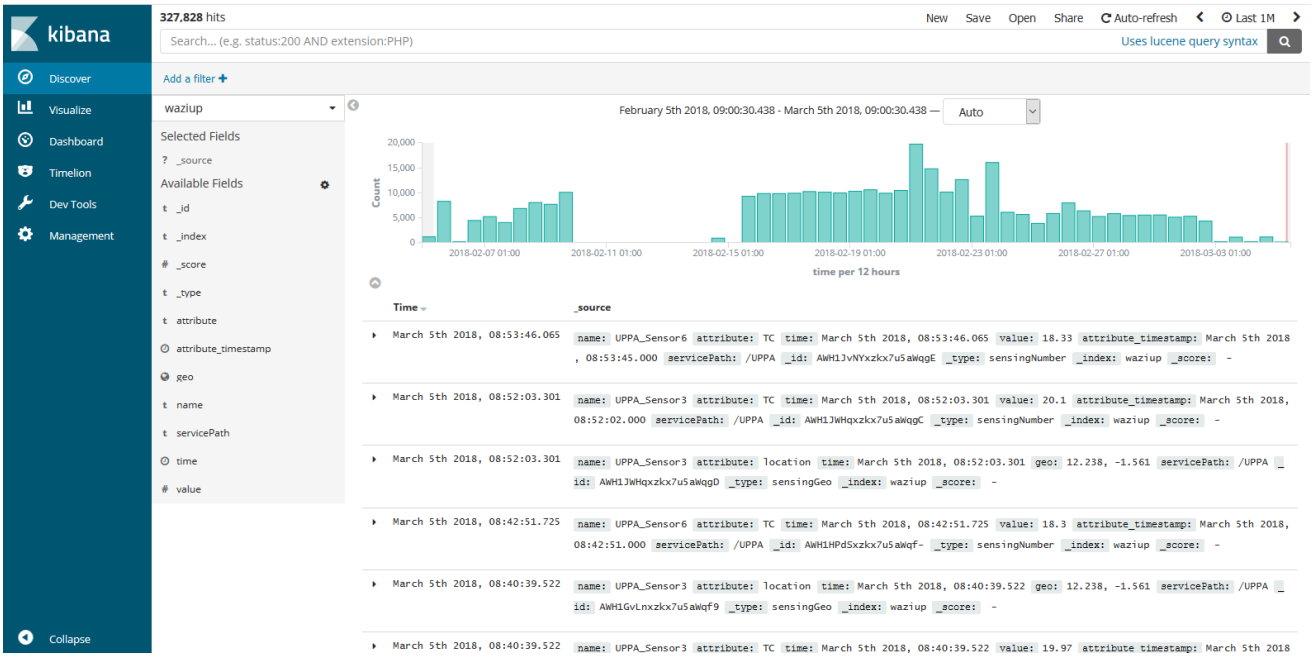
Tutorial: How to see WAZIUP data on KIBANA?

This document describes how to see the data that are pushed to the WAZIUP platform with Kibana interface.

First connect to: https://kibana.waziup.io



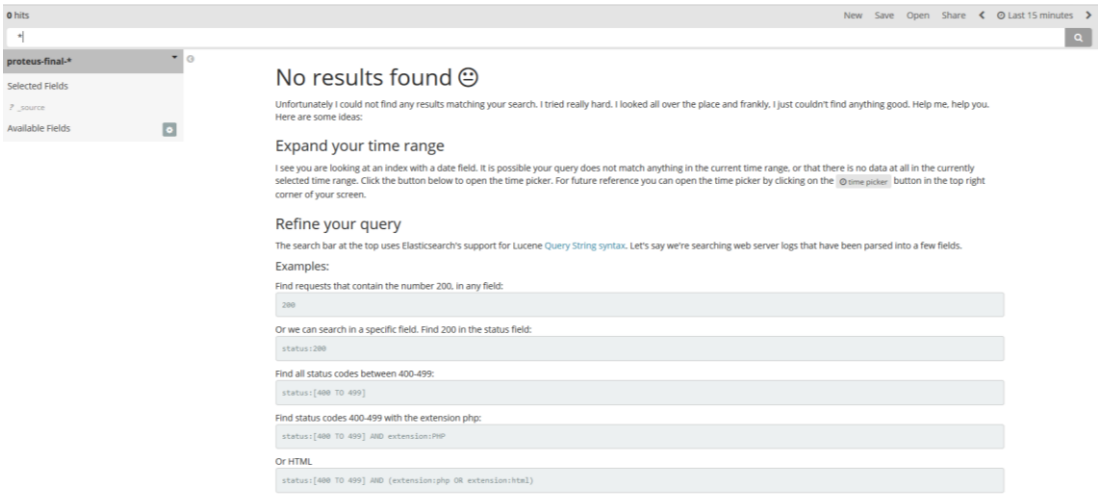
When you enter the interface, you will see the data discovery tab.

On the left of the screen, here are the tabs you will need:

- Discovery: where you see all the data arriving on Kibana
- Visualise: where you can create data visualisation
- Dashboard: where you can create a dashboard with several visualisations
- Management: Kibana parameters. Please don't modify any parameters.
- Dev Tools and Timelion tabs are for advanced users and won't be explained in this tutorial

Discovery tab

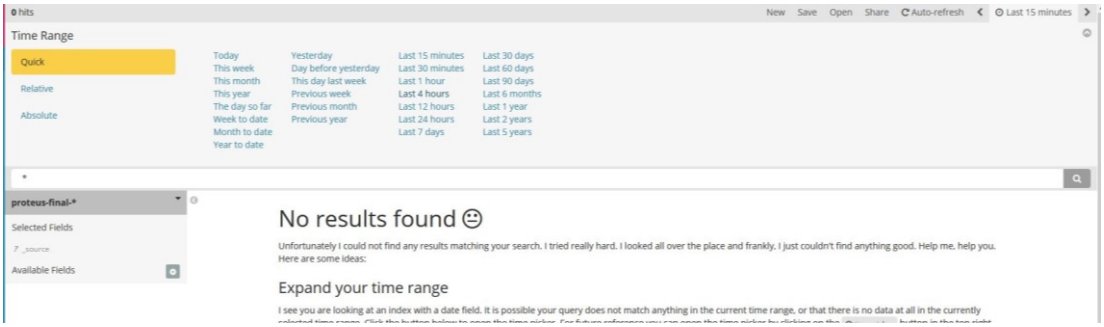
By default, you will see in the discovery tab the last 15 minutes of data. If you see the screen “no results found”, it means that there is no data arriving on Kibana in the last 15 minutes.



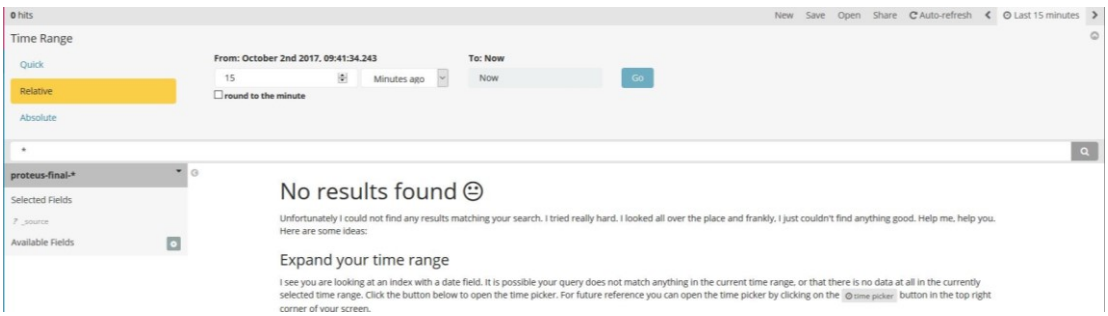
To change that, click on the time selector (“last 15 minutes”) on the right corner of the screen.

A new tab will appear where you will be able to choose time.

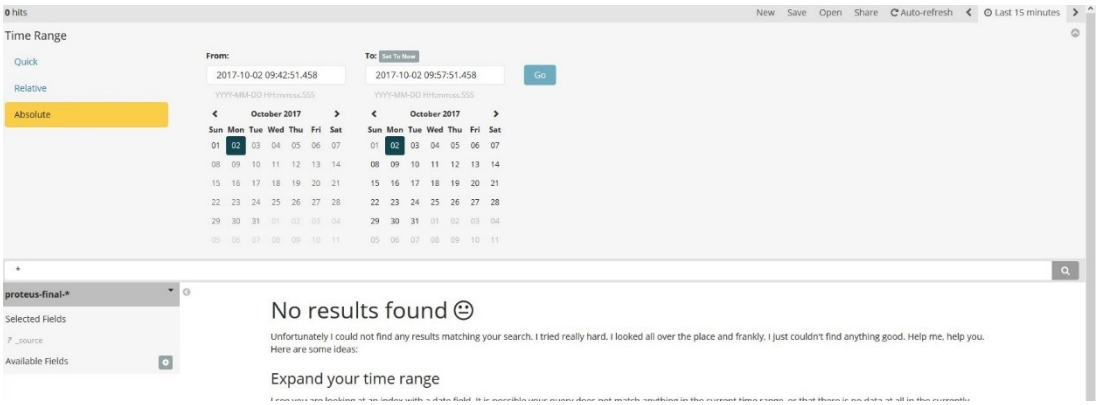
You have quick selection like “today”, “last 4 hours”, “previous month”, etc…



You have also relative selection where you can choose the last x minutes, hours, days, months or year.

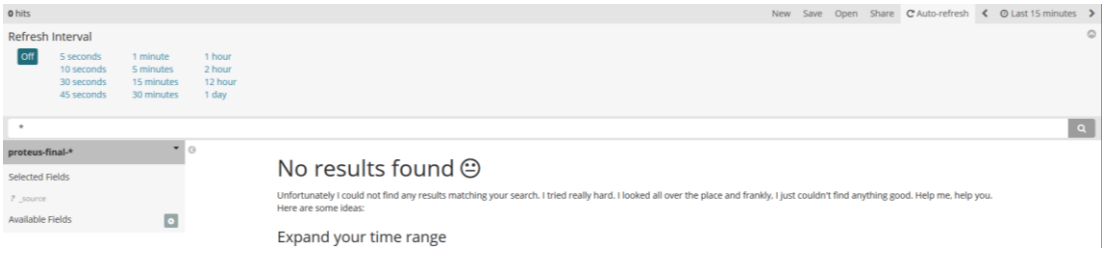


Finally you have the absolute selection where you can choose the exact time frame.



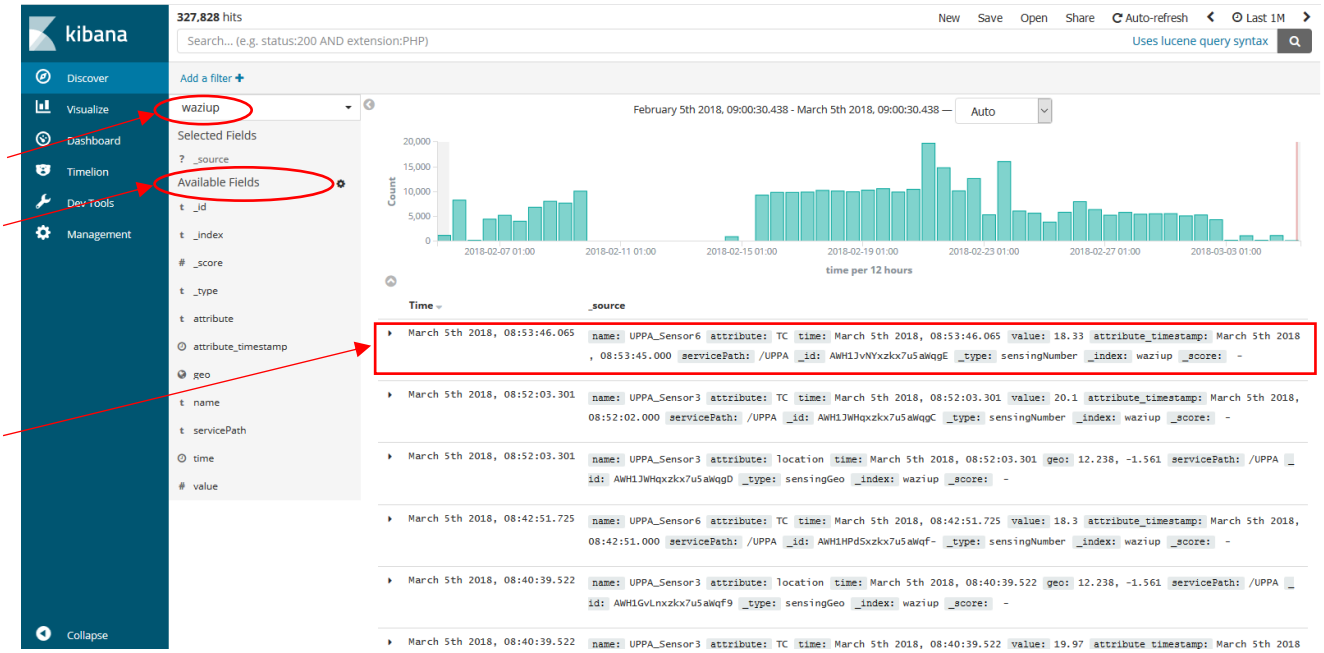
When the time selector tab is open, you can also access to the auto-refresh tab.

By default, auto-refresh is off, but you can choose to refresh automatically to up to 5 seconds.



Click on this button  to close the tab.

When you have selected a correct time frame where data is present, you will see the data like this:



Elasticsearch index name

Available fields in the incoming data

One data

There is several information in this display.

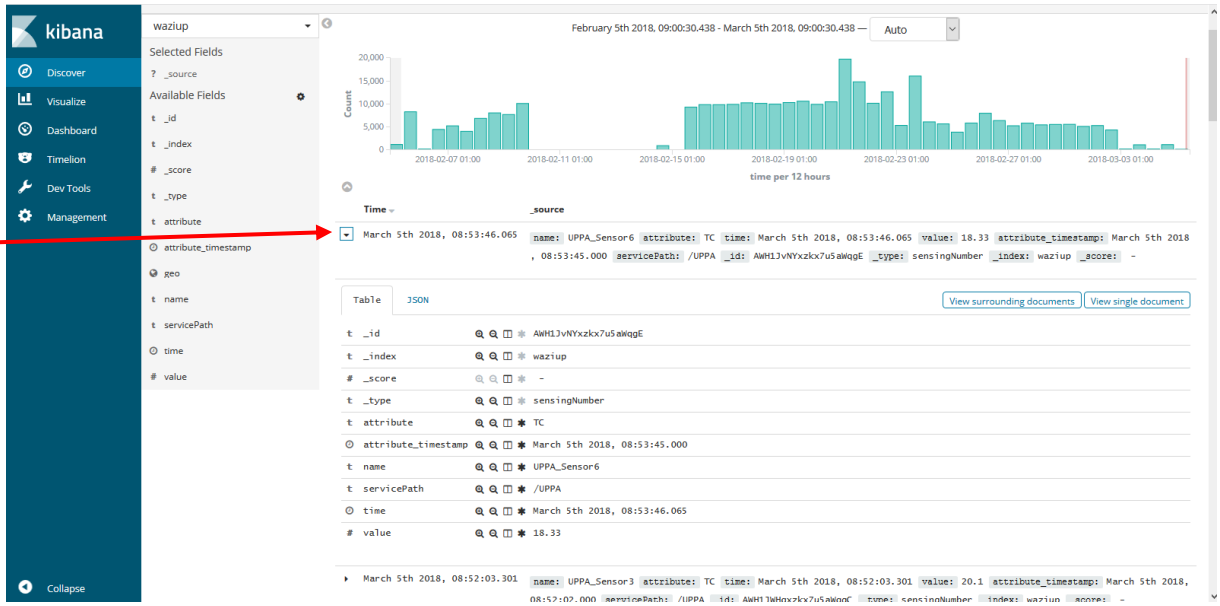
On the left you have the data index name. Select “waziup” to see all data that exists on waziup platform. Otherwise, you can find your data by selecting the index corresponding to the servicepath you created. For example for service path FL/MVP/WATER, the correct index is “waziup-fl-mvp-water”. If you want to see all data that are coming to FL, choose “waziup-fl*”.

You also can find on the left the available fields in the incoming data. This is very convenient for filtering out the data. See more details of the filtering process later in the tutorial.

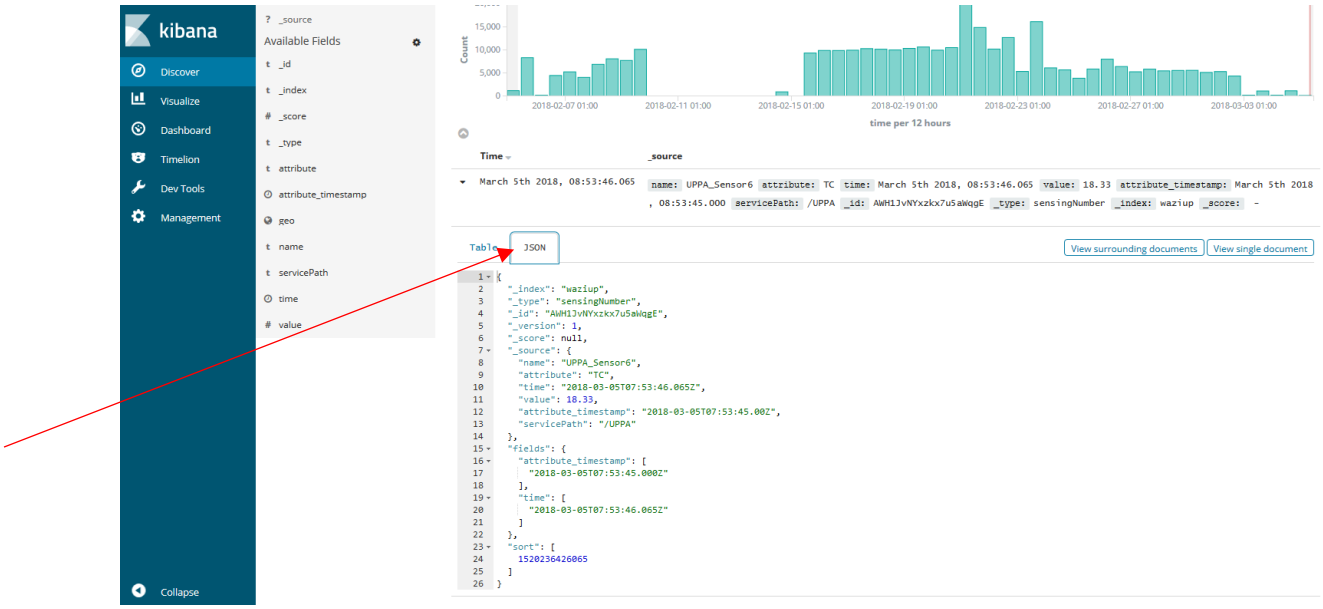
In the middle you can find the data itself. You have the timestamp (“time”), which is the timestamp of when the data is received on the platform (not the same timestamp of the metadata which is “attribute_timestamp”) and the core message. If you click on the data, you will have more details appearing.

In the details of the data you will see the value of all fields.

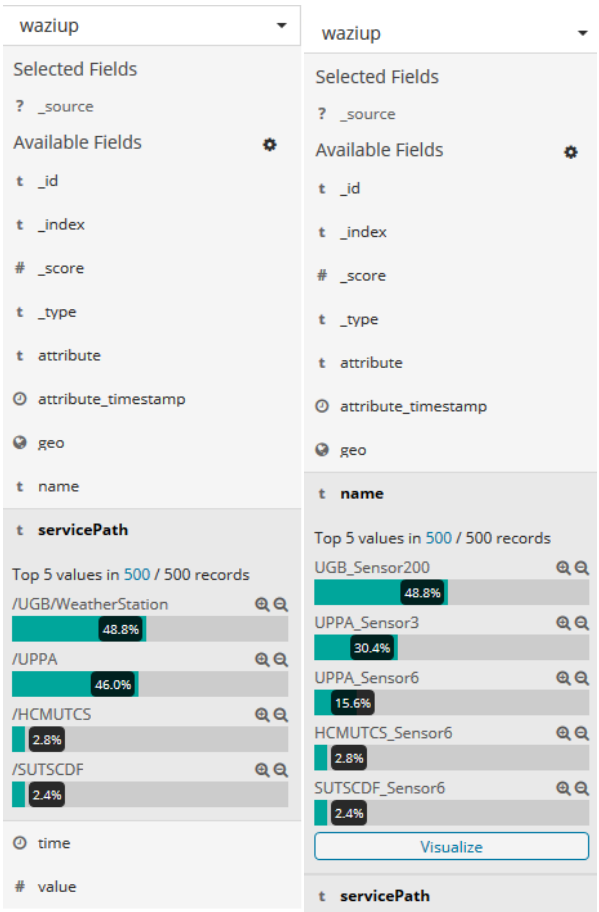
Click here to open the details



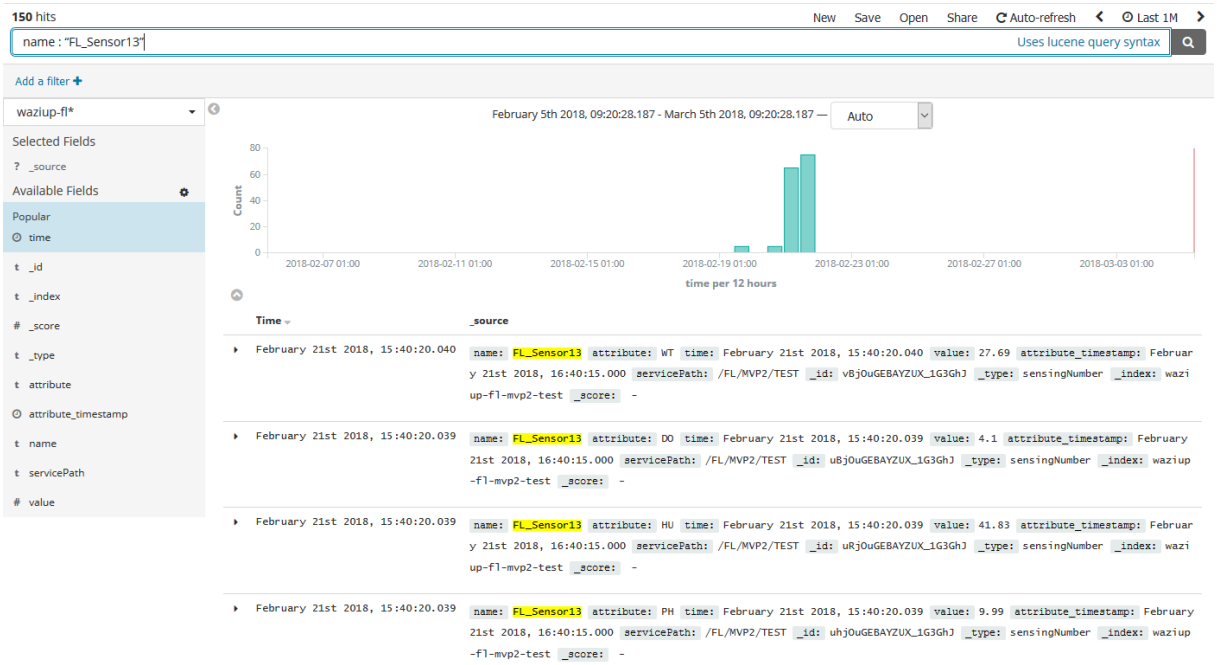
You can also click on json tab to see the data in json format.



The other important feature in the discovery tab is the filter options. You can see the top 5 hits results of each field if you click on it and display quick filters. If you want to display only the results where servicePath = A, click on the  button of the servicePath A. If you want to display the results of all servicePaths except servicePath A, click on the  button of the servicePath A.



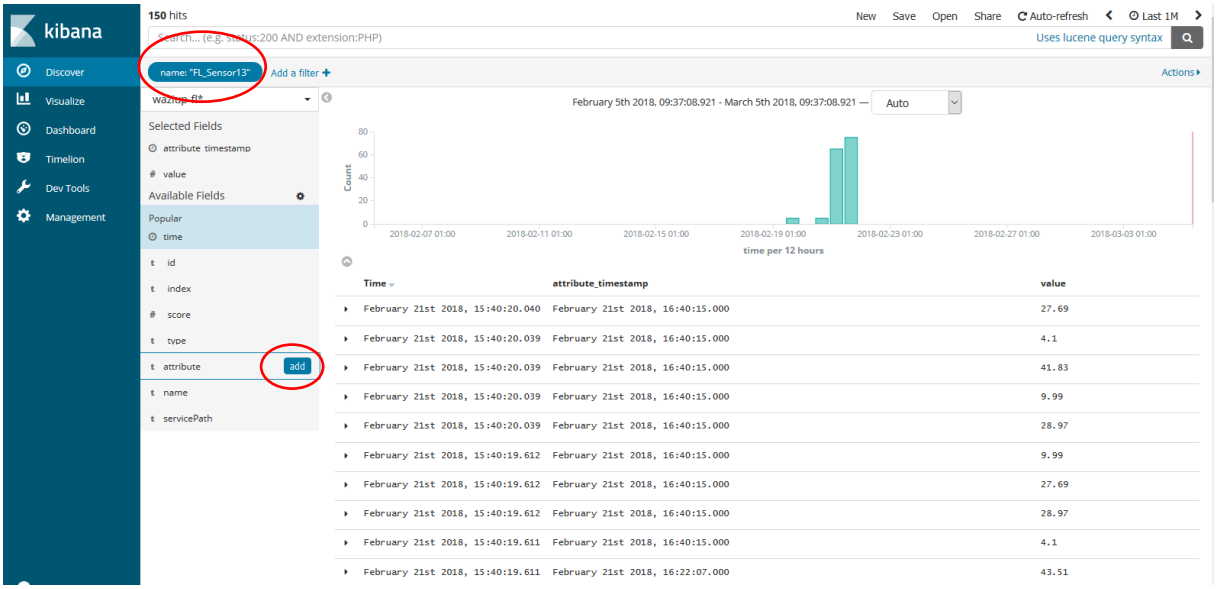
As the results of the quick filter options display only the top 5 hits, you can manually enter the filter option that you wish in the search bar on the top. For example in the name, I can't find FL_Sensor13 and I want to display only the data that correspond to this sensor. All I need to do is to enter manually => name : "FL_Sensor13" in the search bar.



You can of course multiply the filters as much as you want.

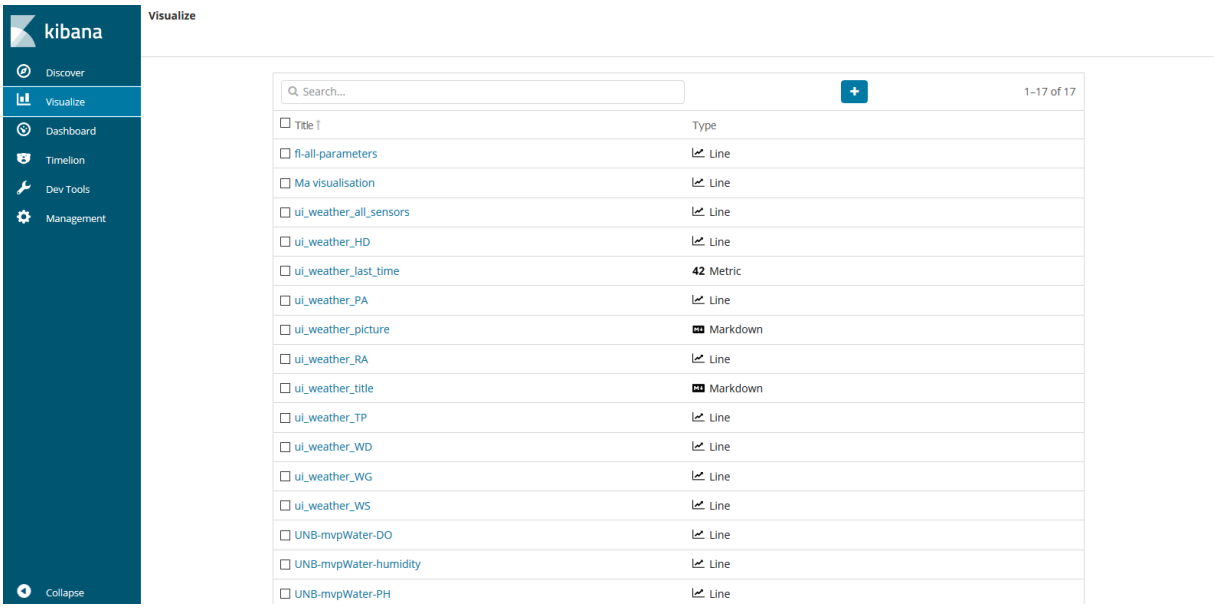
For more clarity, you can also choose to display only your fields of interest. If you put your mouse on an available field on the left, you will see a "add" button appear. Click on it to display only this field.

In the following example, we have filtered the data with a particular sensor name (name: "FL_sensor13") and and only display the metrics value and attribute_timestamp.

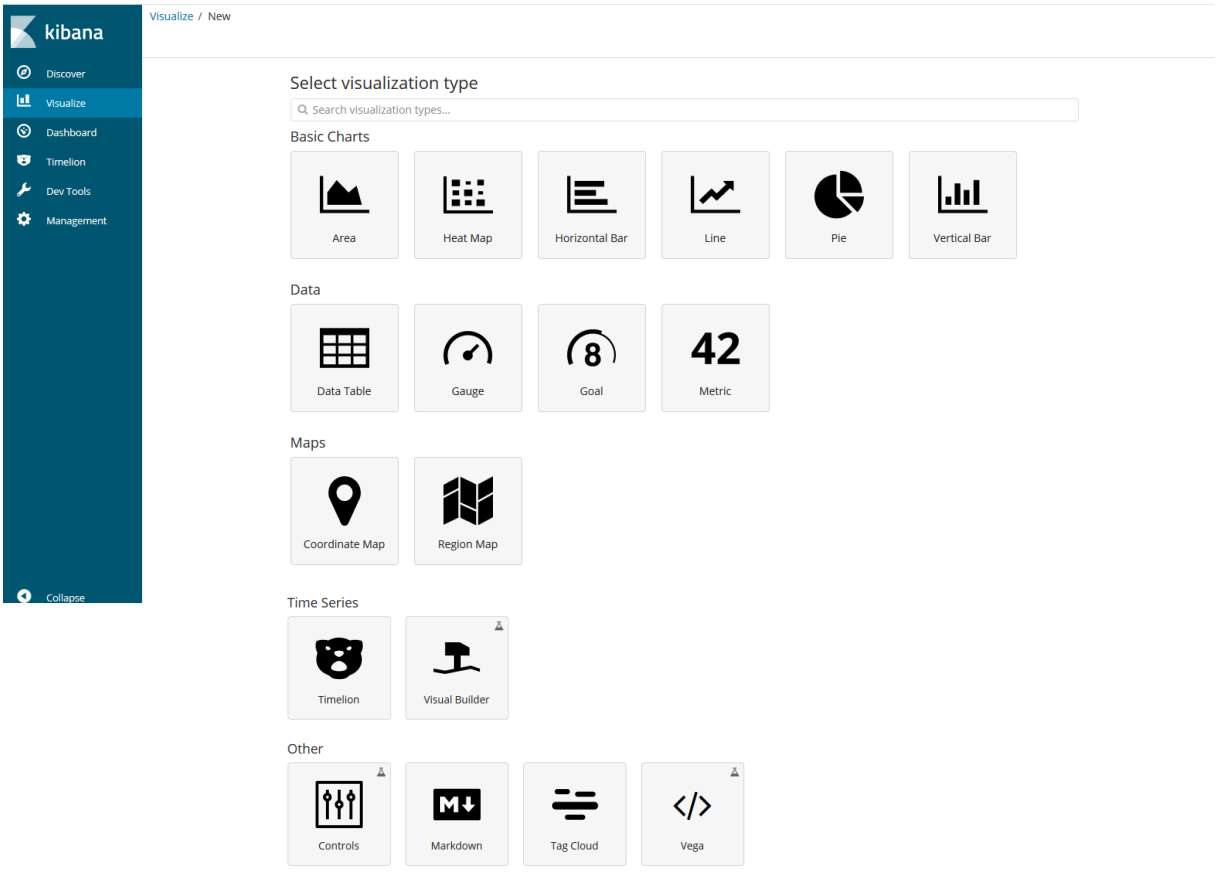


Visualise tab

In this tab you will be able to create visualisation with your data. By default, when you enter into visualisation tab, you will see a list of saved visualisation. Please do not modify or delete them if they are not your visualisation.

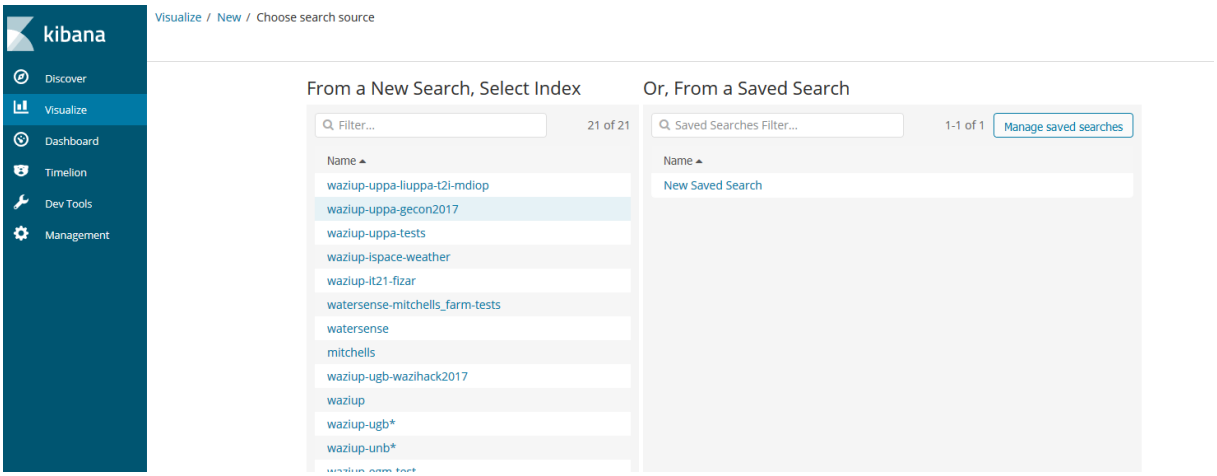


To create a visualisation click on the + button. You will see some choice of visualisation type.



You can choose the best-fitted visualisation for your data. We are going to detail the line chart visualisation.

You will be asked first to choose an index.



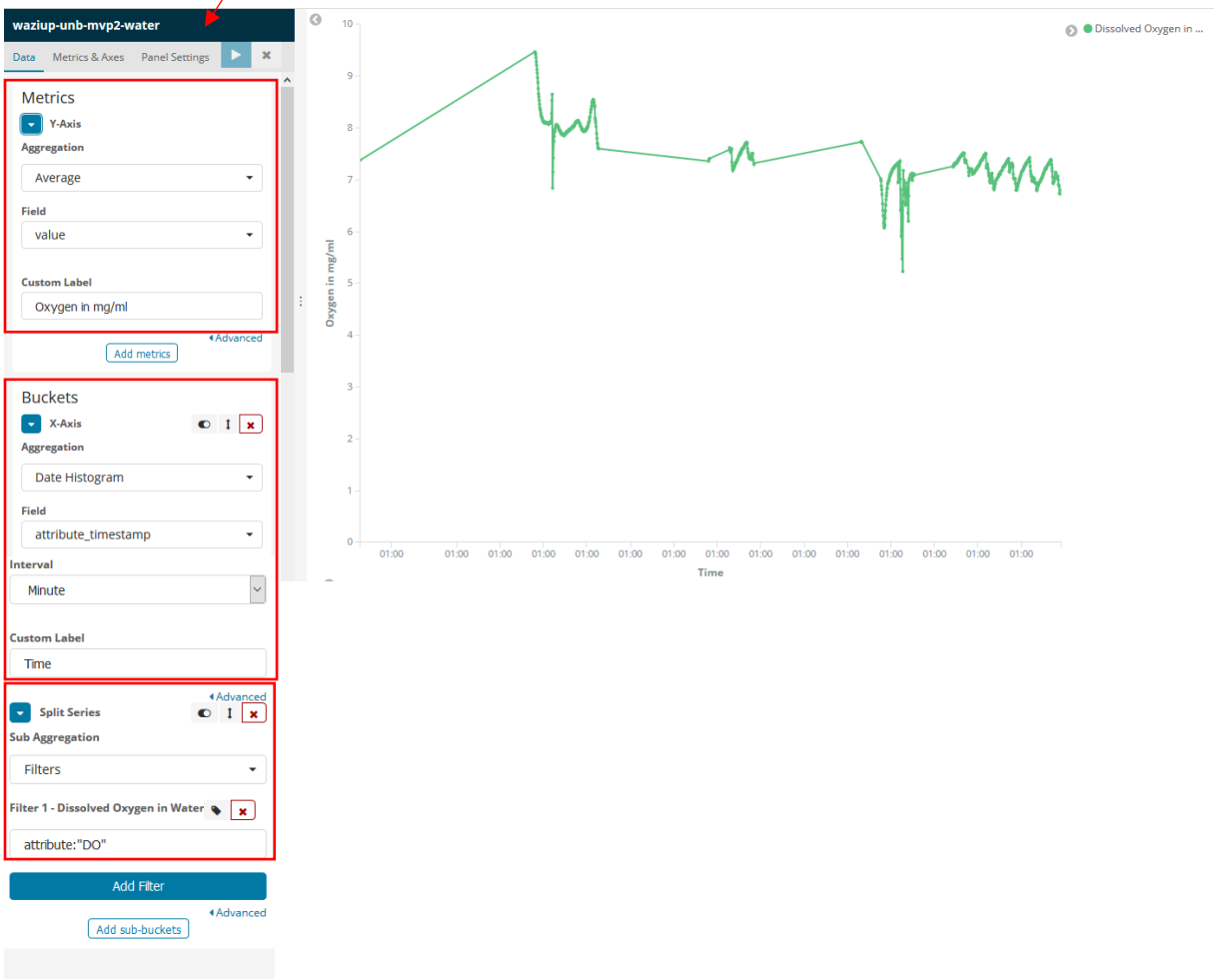
Then, the configuration is rather intuitive. You need to choose some parameters in y-axis and generally a timestamp in x-axis.

Select only one topic

Display metrics value

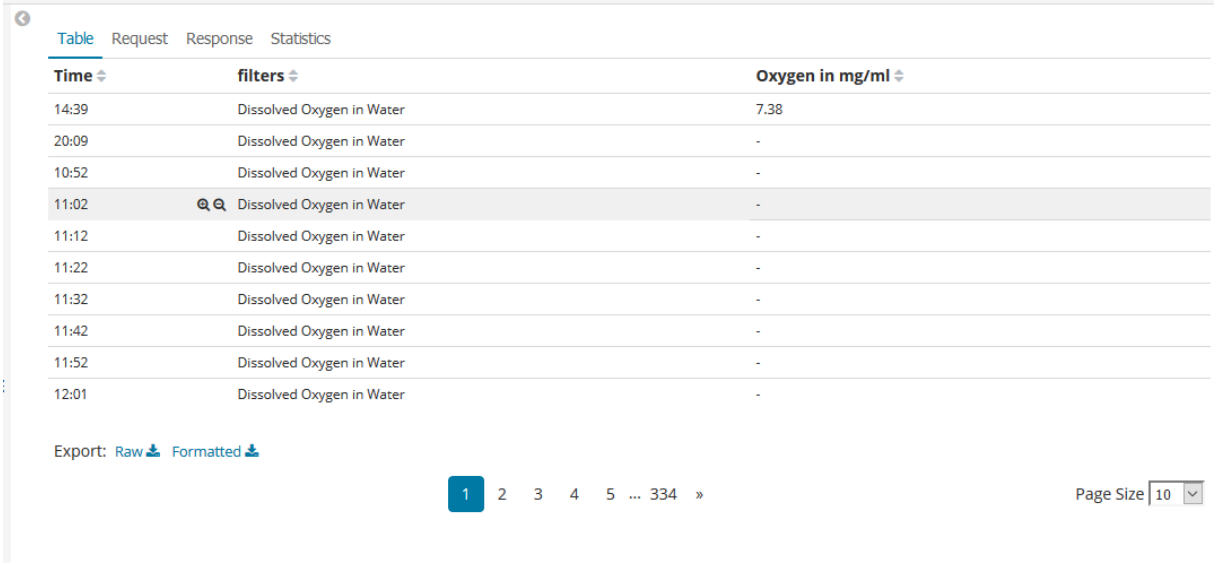
Choose metrics timestamp as x-axis

Choose the correct metrics name



Save your visualisation, and you will be able to see it in the saved visualisation list.

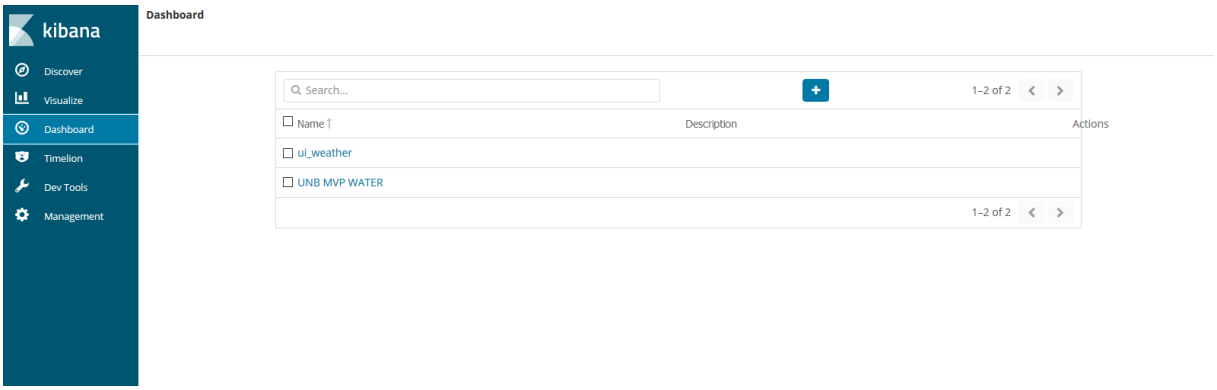
You can open the table format of the data by clicking on this button  in the down-right corner.



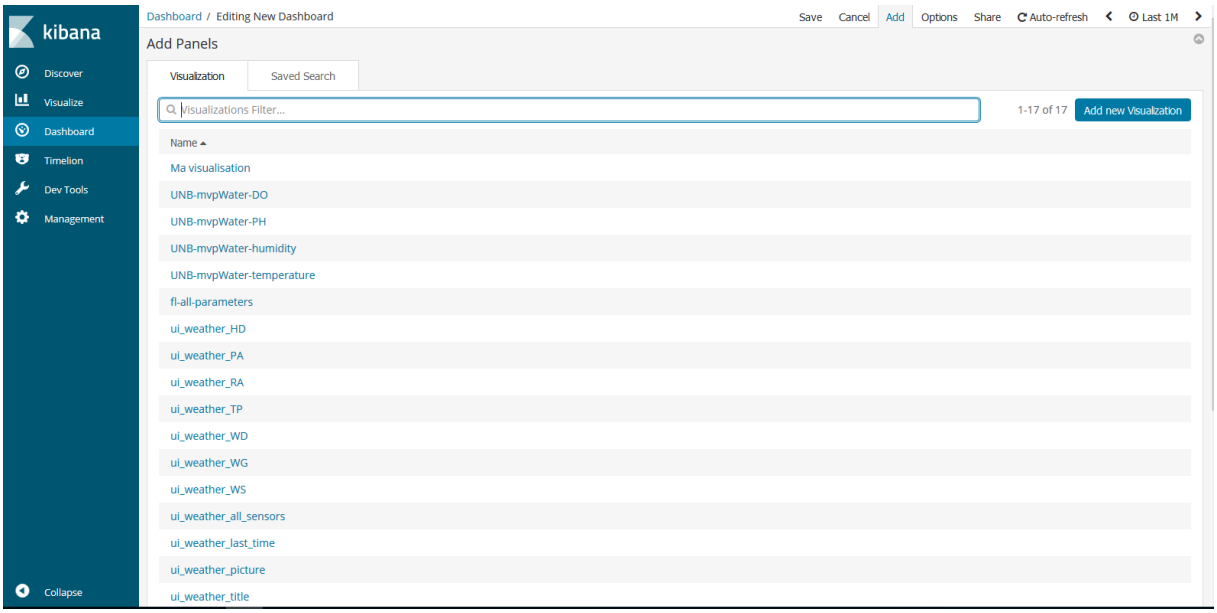
Then you will be able to export raw or formatted data in .csv

Dashboard tab

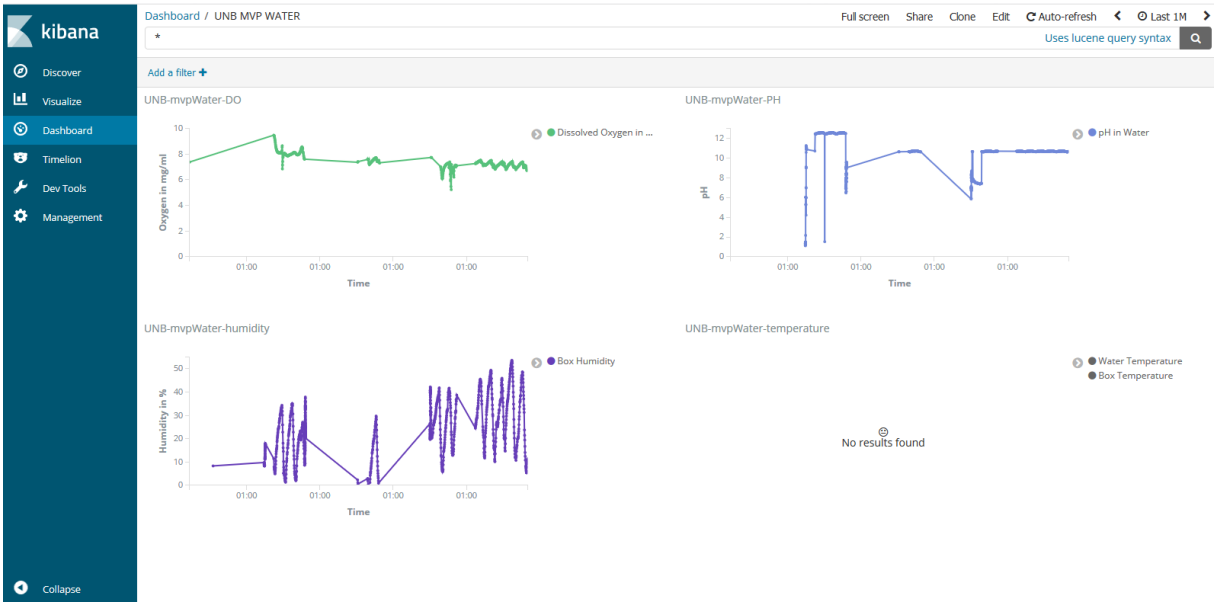
In the dashboard tab, you can prepare visualisation dashboard to share with others.



To create a new dashboard, click on the  button, then click on the “add” tab to add saved visualisations to the dashboard. You will be able then to display the visualisation as you like on your dashboard.



This is an example of a dashboard with several visualisations.



If you want to share dashboard with others, click on the “share” tab, and you will see several links and options.