Smart Cities Hackathon
Tier 1 Challenge 2

Tier 1: Challenge 2

Challenge 2: Create Analytics Widgets

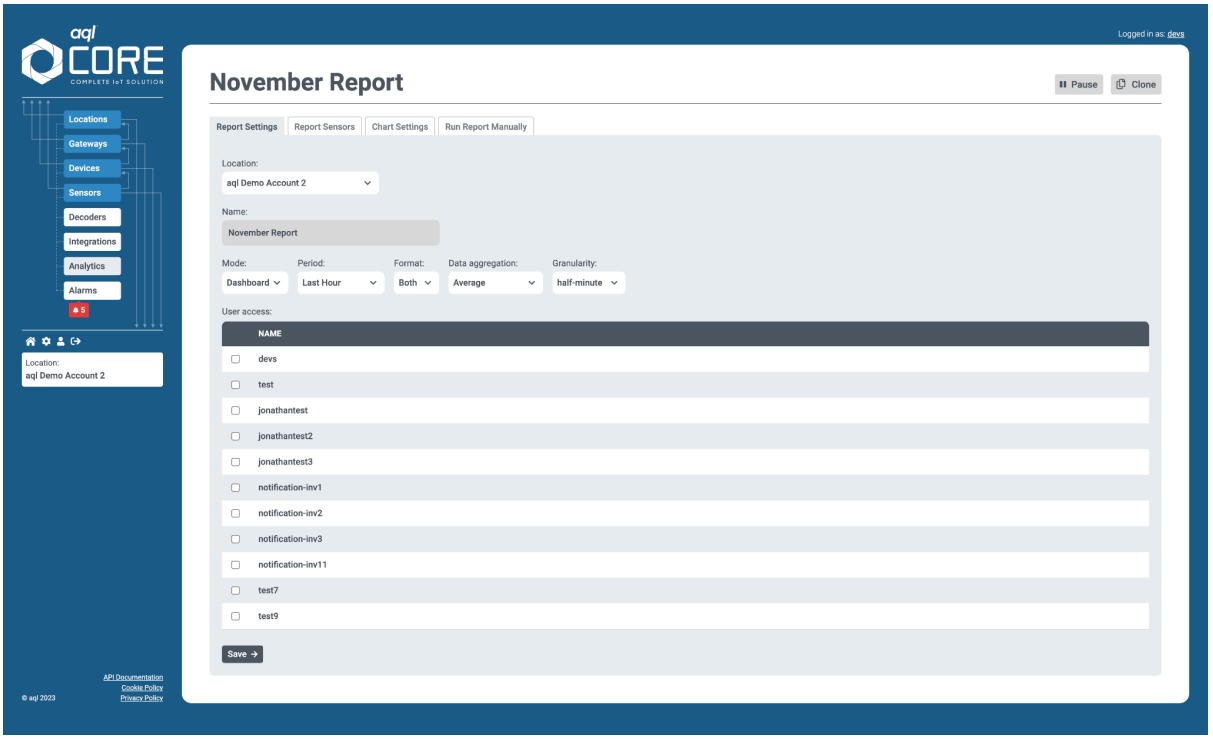
In this challenge, you will choose a selection of sensors from the differing samples and you will create a series of Widgets. Can you create a line, scatter, and bar chart with multiple Y Axis?

Step 1

Before creating your analytics widget, it will be beneficial to browse through the available devices and their respective sensor readings. This will show you relevant data that you may want to present within your analytics widget. To view a device's sensor readings, navigate to the "Devices" section on the left-hand menu, select a device from the table and browse through its available sensors. Selecting a sensor will display a graph that charts the sensor's readings. Once you see some sensors you wish to add to your analytics, make a note of their device's name & location so you can add them later on.

Step 2

Navigate to the "Analytics" section from the menu on the left, and select the "Add Analytics Report" button in the top right of the page. Enter a name for your team's analytics widget and select a desired location from the location field. It's important to select the location that has the devices you wish to use for this challenge.



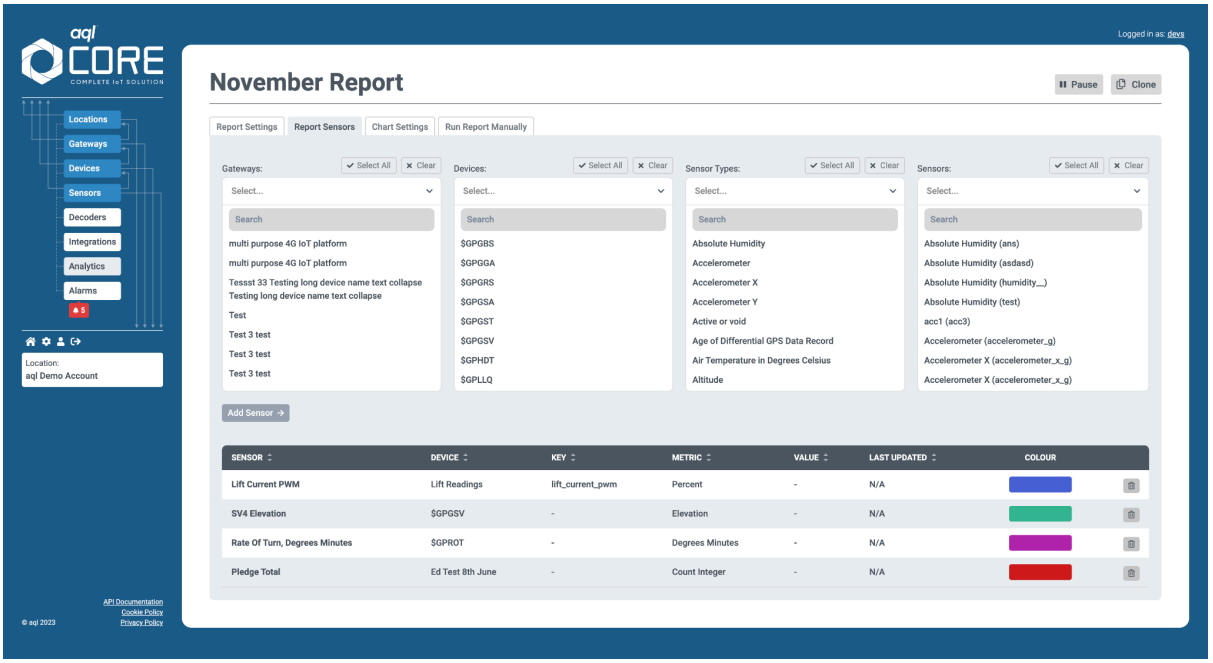
Step 3

From the "Configure" tab of your analytics: choose the data period, data aggregation, and granularity you want to use for your widget. "Mode" will need to be "Dashboard" for the purpose of this exercise & "Period" must extend over the time when you submitted readings

to the device. The “Granularity” should be adjusted for the time-difference between submissions.

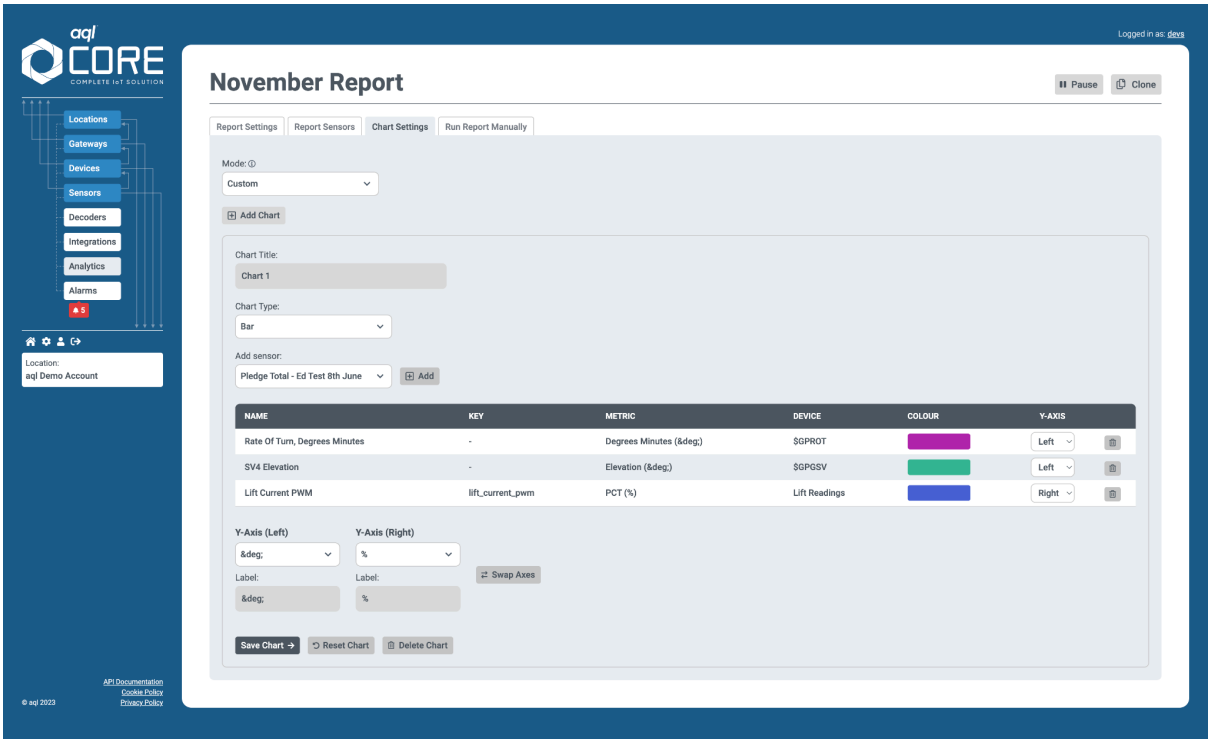
Step 4

On the second tab, click “Add sensors” and filter by device name to select the sensors you wish to include in the widget. You can allocate individual colours to set themes of colours based on the type of sensor. Remember to select “change” after picking a colour. Try the search box to help filter a selection of sensors based on the sensor key. For example, you may want temperature and humidity sensors on a widget to have the same colours on the chart. When these render you can **select** the sensor from the location dashboard and the widget will auto filter to the chosen sensor.



Step 5

Finally, select the charts tab and select the type of chart you wish to render. If you have chosen multiple sensors, select “Custom” mode to choose which are added. This gives increased functionality and you can add two Y axes to the widget. Name the chart, make necessary amendments and then select “Save” to save the chart.



Step 6

If you now navigate to the specified location you will see your custom analytics widget. You can create a custom dashboard by adjusting the size and position of the widgets.

Bonus: Try selecting a device from the devices widget and uploading readings to see how it updates your charts in real time.

Well done! Challenge 2 is now complete.