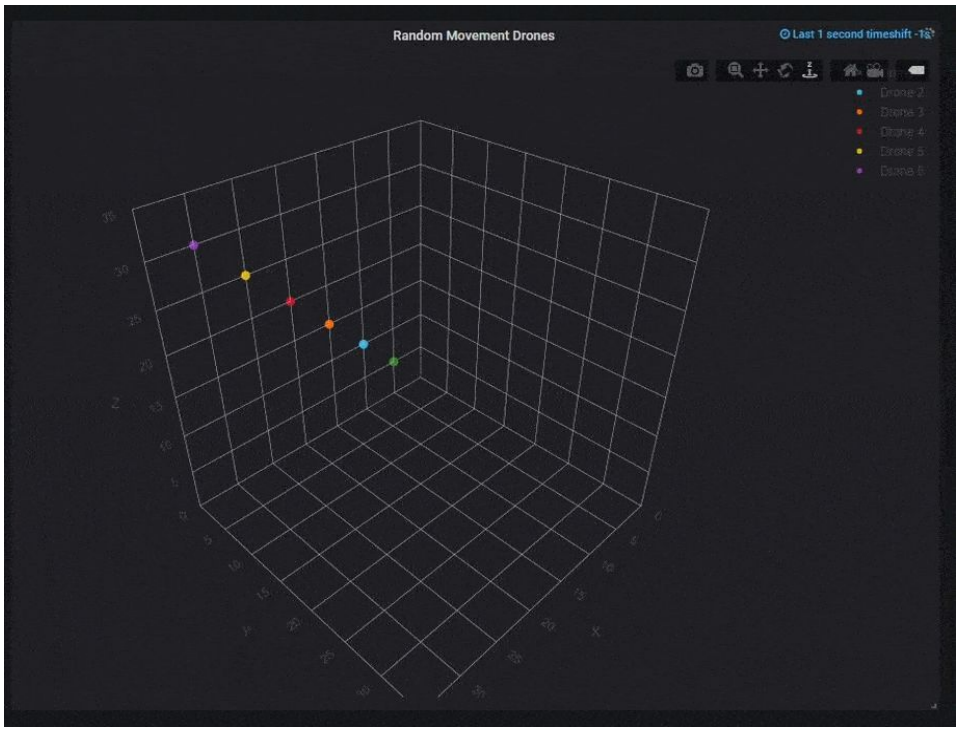
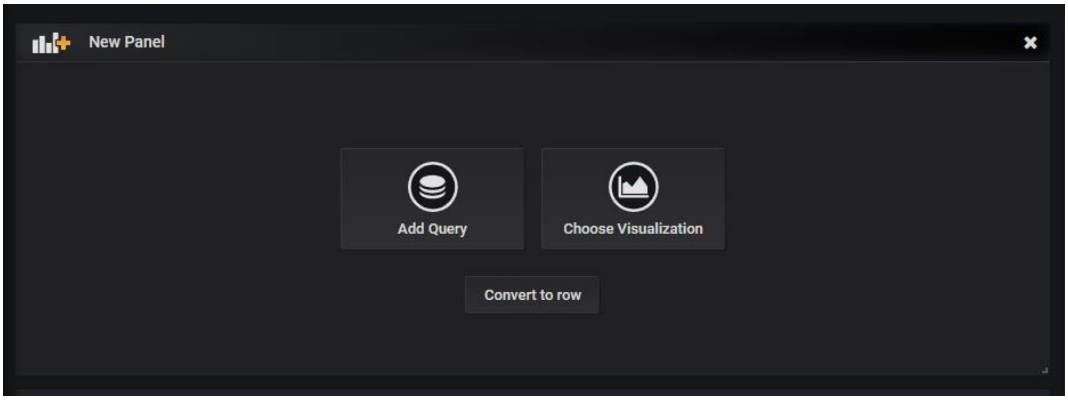
Configure Visualization Panel for Grafana/ Plotly 3D Scatterplot (Linux)

This panel will look something like this:



1. Enter Grafana (http://localhost:3000)
2. Install Plotly plugin

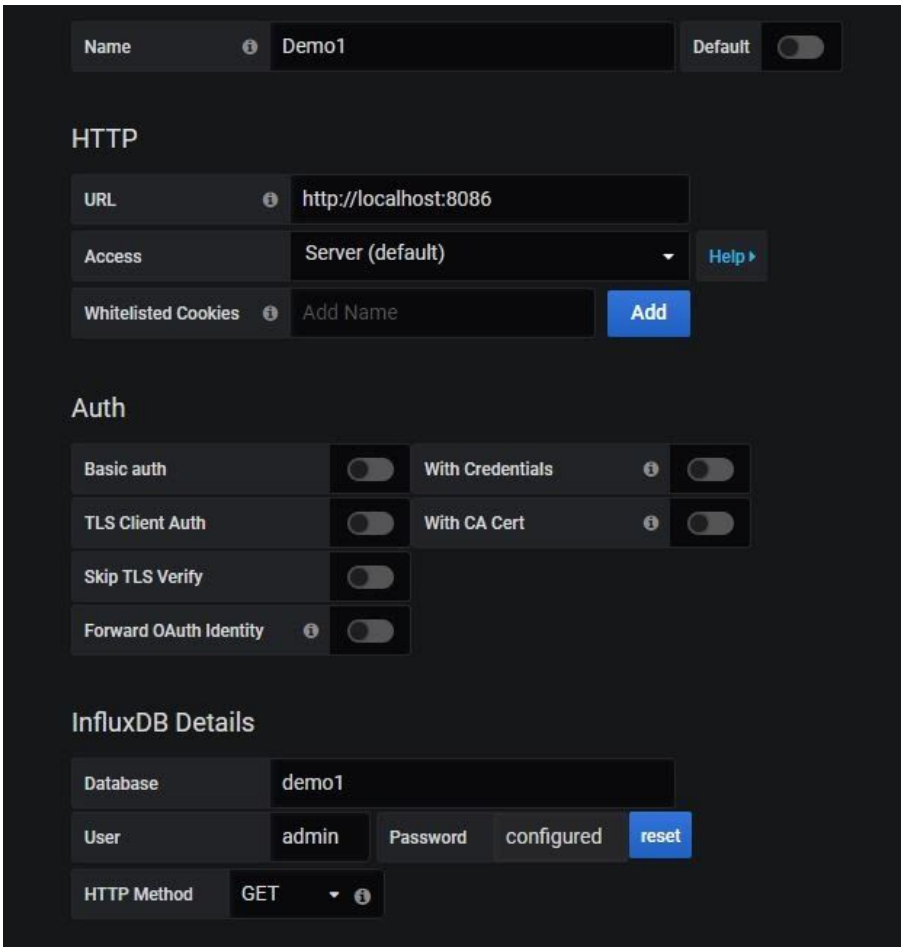
3. Go To Dashboard and Add Panel



a. Click add Query or Choose Visualization and Follow the Remaining Steps

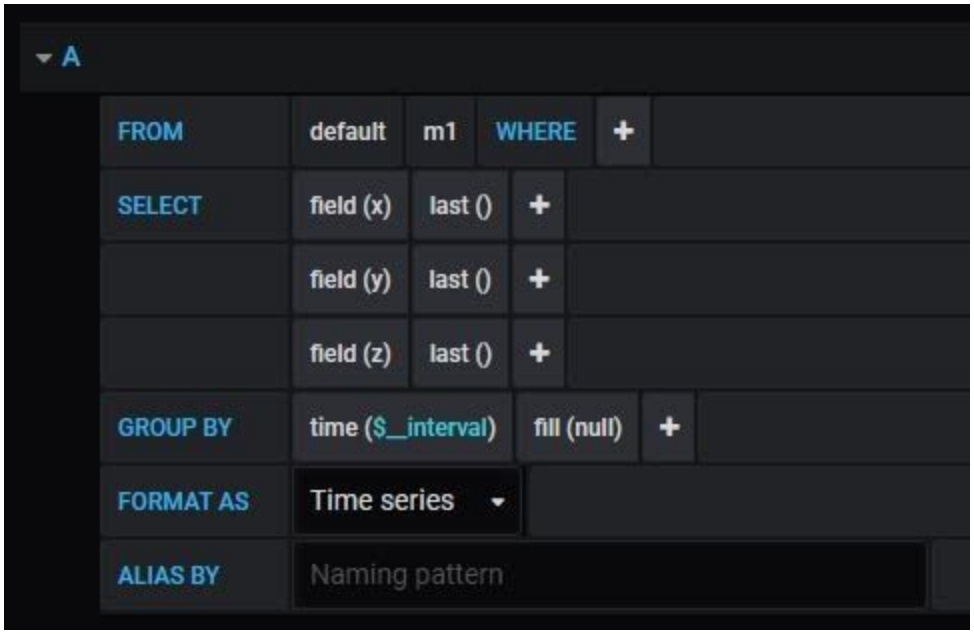
4. Configure Database Queries

a. The Query Process starts with adding a data source in Grafana (assuming you haven't done this already)
b. Set up the Data Source (InfluxDB)

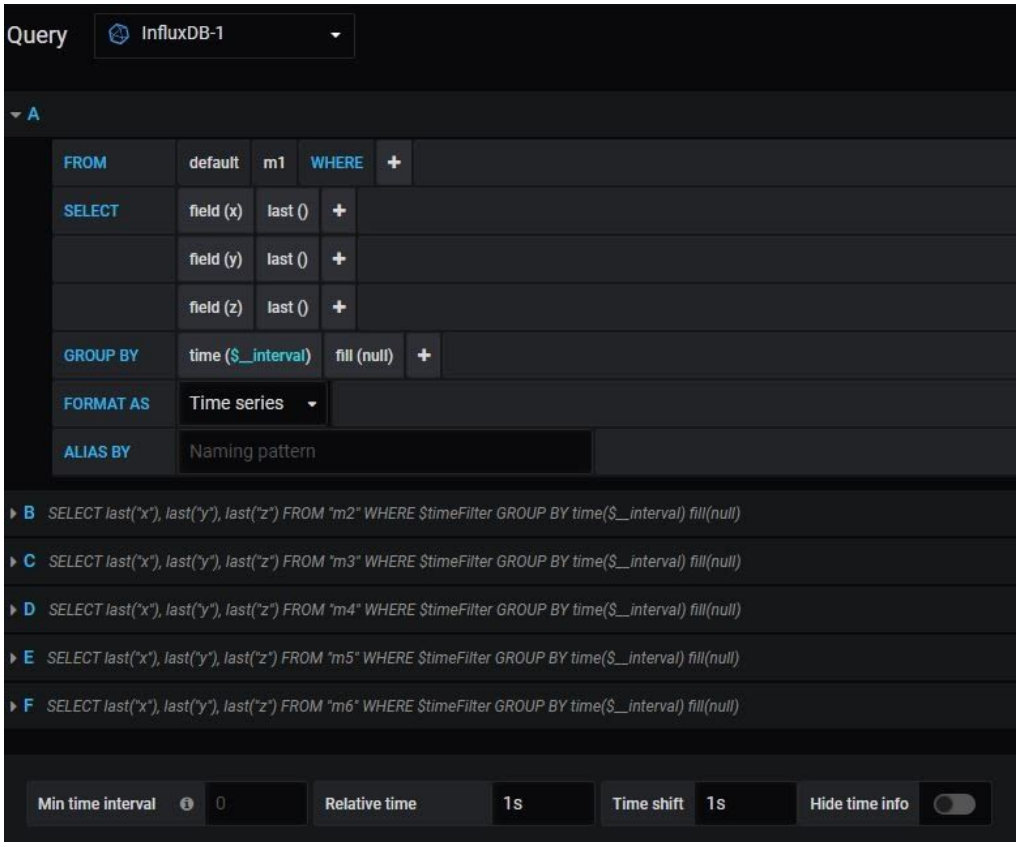


i. Name it whatever you want, that's for your organization
ii. Url is the port at which your datasource is, localhost:8086 is Influxdb's default
iii. Choose the database that you are using
iv. Put in your UserName and Password
v. Test and Save

c. Writing the Query



i. Pick the datasource that you just created
ii. Above is a template for a query for a single point/device
iii. x,y,z here are integer values and are used for plotting the point

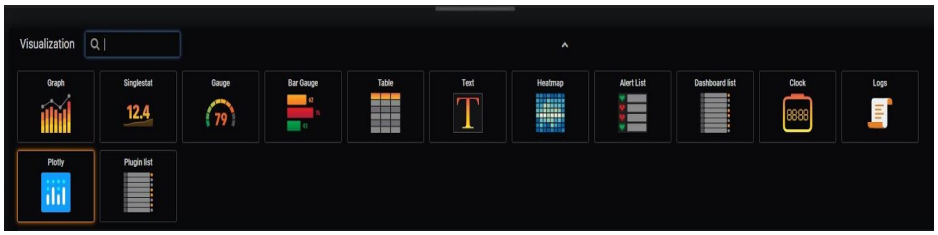


iv. For this example, there are 6 devices each with its own query on a different measurement

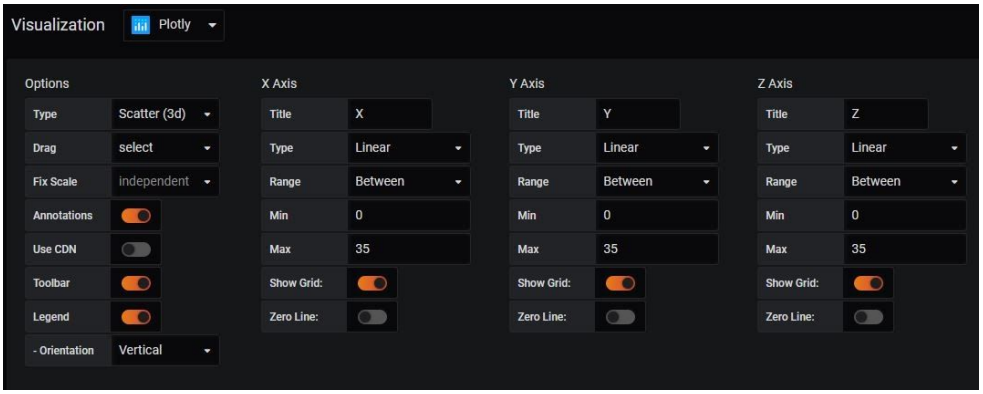
v. The six measurements are m1-m6 and you can duplicate the first query and just change the measurement name to be more efficient

5. Configure Visualization

a. Pick Plotly

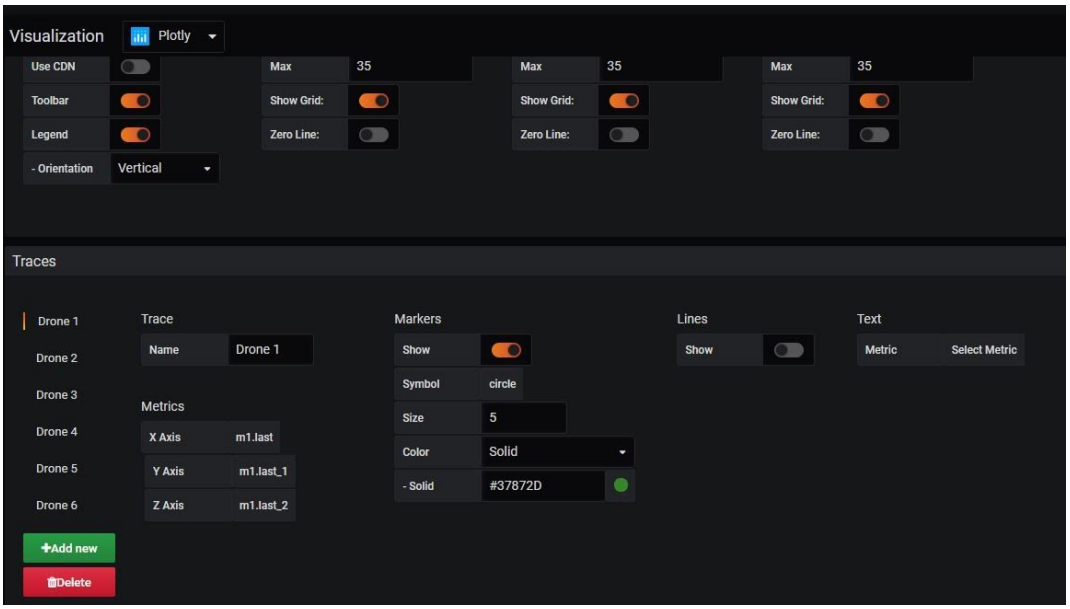


b. Configure the Plot



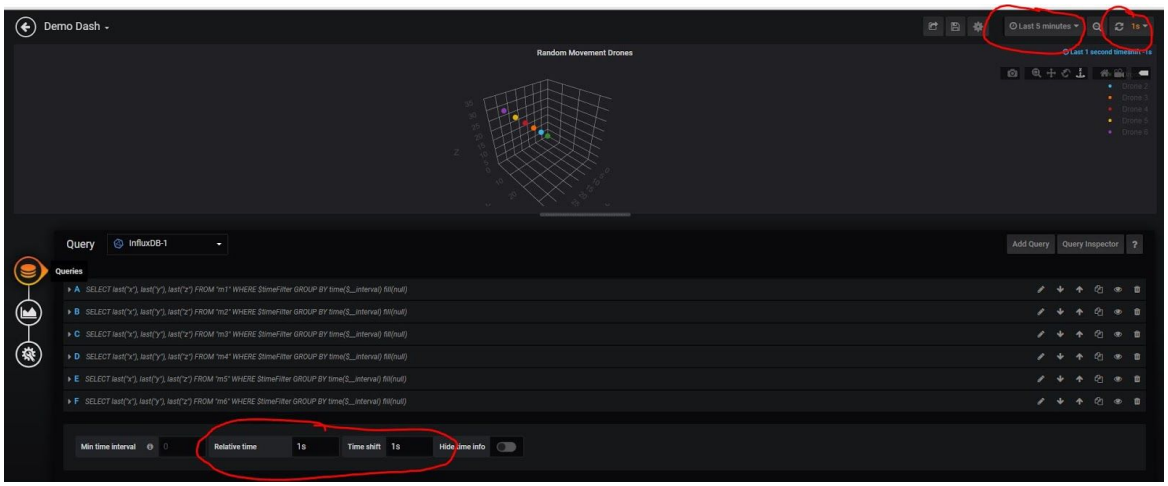
i. Select Scatter(3D)
ii. You can set the range of the axes, in this example every one is set between 0 & 35

c. Create the Traces



i. Above is an example of a Trace for the plot
ii. Name is irrelevant, except for you and the legend
iii. x,y,z should match the values that you have for each measurement
iv. For each other trace created, make sure that the metrics match the measurement that its representing
    1. i.e. Trace 2 should have m2 as the metric
    2. The metrics would be m2.last, etc

6. Set Refresh Time



a. You can change the relative time of various panels to be different than the relative time of the whole dashboard
b. For this script it is important that the relative time is 1s and the time shift is 1s for the display to work properly

7. Run Script