Elastic Search Project

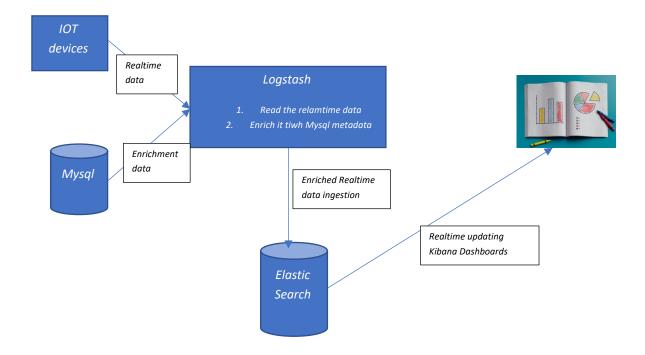
Objectives

Simulate the IOT data as a real-time IOT data

Metadata of the IOT machines is to be stored in MYSQL

Logstash will read the real-time data coming from IOT devices and will enrich the data. The enriched data is pushed to Elasticsearch

Kibana dashboards will be created on Elasticsearch, which will display the real-time stats about the IOT devices



Project exercises

- 1) Simulate IOT sensor data
- 2) Mysql is having the metadata information about different sensors there on the n/w
- 3) Use Logstash to continuously read the IOT sensor data
- 4) Use Logstash to enrich the sensor data, based on meta data stored in Mysql
- 5) Finally insert the enriched sensor data to Elasticsearch
- 6) Create index pattern on Kibana for the Sensor data stored via Logstash
- 7) Create the following Kibana charts:

Kibana Dashboards

- Team 1 Average humidity per hour per budling
- Team 2 Average Temperature per hour per budling
- Team 3 Min/Max humidity per department
- Team 4 Plot avg temperature on Map
- Team 5 Plot number of readings from each sensor

Important information about the project

The data for this project is shared in google drive with you. ELK -> exercise -> project

Along with it, I have shared some sample code pieces for you to start the things. Although have given sample solutions and how to execute them. But left in between blanks things, as need team to think through the things and understand & implement the concepts

Moreover, You might have to change few things in the solutions to make them work

Important things required to start the project

- Install ELK and Mysql
- Ensure you are using correct Mysql jar based on Mysql version

- Simulate the IOT devices, I have shared the commands and code on how to do that in same google drive.
- Start writing the ELK code and implement it extstyle extstyl