**Stock market analysis using kafka streaming**

Defining Steps and procedures

Diagram

Description automatically generated

**Kafka –**

Distributed event store and steam-processing platform.

Diagram

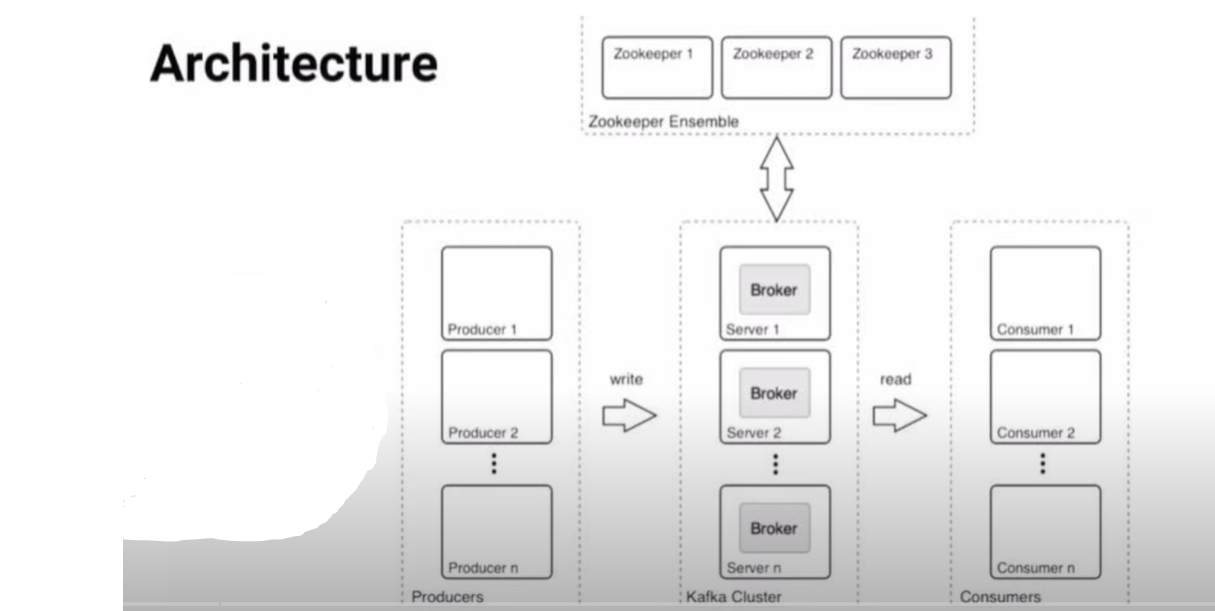
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Diagram

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Diagram

Description automatically generated



Timeline

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**zookeeper**

* cluster management
* failure detection & recovery
* store ACLs (access control list) & secrets
* distributed key value pair
* provides distributed synchronization/ reliable co-ordination.

Graphical user interface, diagram, application

Description automatically generated

Diagram

Description automatically generated

Graphical user interface, text, application

Description automatically generated

Diagram

Description automatically generated

Text

Description automatically generated

All the implementation screenshots ->

Ec2 instance running --

Text

Description automatically generated

Unzipping tar kafka --

Text

Description automatically generated

A picture containing graphical user interface

Description automatically generated

Text

Description automatically generated

wget https://downloads.apache.org/kafka/3.4.0/kafka\_2.12-3.4.0.tgz

tar -xvf kafka\_2.12-3.4.0.tgz

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Text

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java -version

sudo yum install java-1.8.0-openjdk

java -version

cd kafka\_2.12-3.3.1

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Do a "sudo nano config/server.properties" - change ADVERTISED\_LISTENERS to public ip of the EC2 instance

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**Start Zoo-keeper:**

bin/zookeeper-server-start.sh config/zookeeper.properties

If you want to stop 🡪 sudo bin/zookeeper-server-stop.sh

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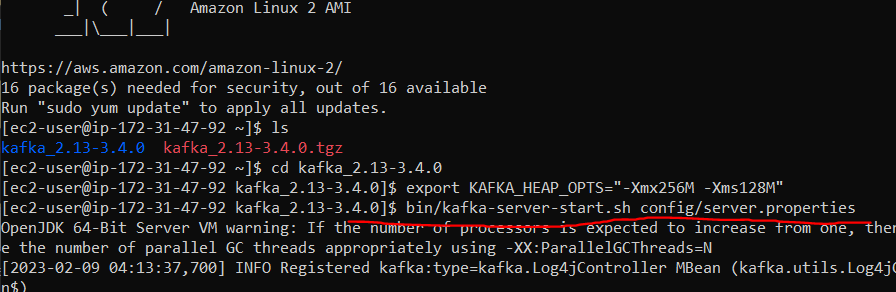
Start Kafka-server:

Duplicate the session & enter in a new console --

export KAFKA\_HEAP\_OPTS="-Xmx256M -Xms128M"

cd kafka\_2.12-3.3.1

bin/kafka-server-start.sh config/server.properties



Create the topic:

Duplicate the session & enter in a new console --

cd kafka\_2.12-3.3.1

bin/kafka-topics.sh --create --topic demo\_testing2 --bootstrap-server {Public IP of your EC2 Instance:9092} --replication-factor 1 --partitions 1

ex - bin/kafka-topics.sh --create --topic demo\_testing3 --bootstrap-server 18.222.144.249:9092 --replication-factor 1 --partitions 1

Start Producer:

bin/kafka-console-producer.sh --topic demo\_testing2 --bootstrap-server {Public IP of your EC2

Instance:9092}

Ex- bin/kafka-console-producer.sh --topic demo\_testing3 --bootstrap-server 18.222.144.249:9092

Text

Description automatically generated

Start Consumer:

Duplicate the session & enter in a new console --

cd kafka\_2.12-3.3.1

bin/kafka-console-consumer.sh --topic demo\_testing2 --bootstrap-server {Public IP of your EC2 Instance:9092}

ex- bin/kafka-console-consumer.sh --topic demo\_testing3 --bootstrap-server 18.222.144.249:9092

Text

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Text

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Graphical user interface, text, application, email, website

Description automatically generated

Graphical user interface, text, application, email

Description automatically generated

Graphical user interface, text, application, email

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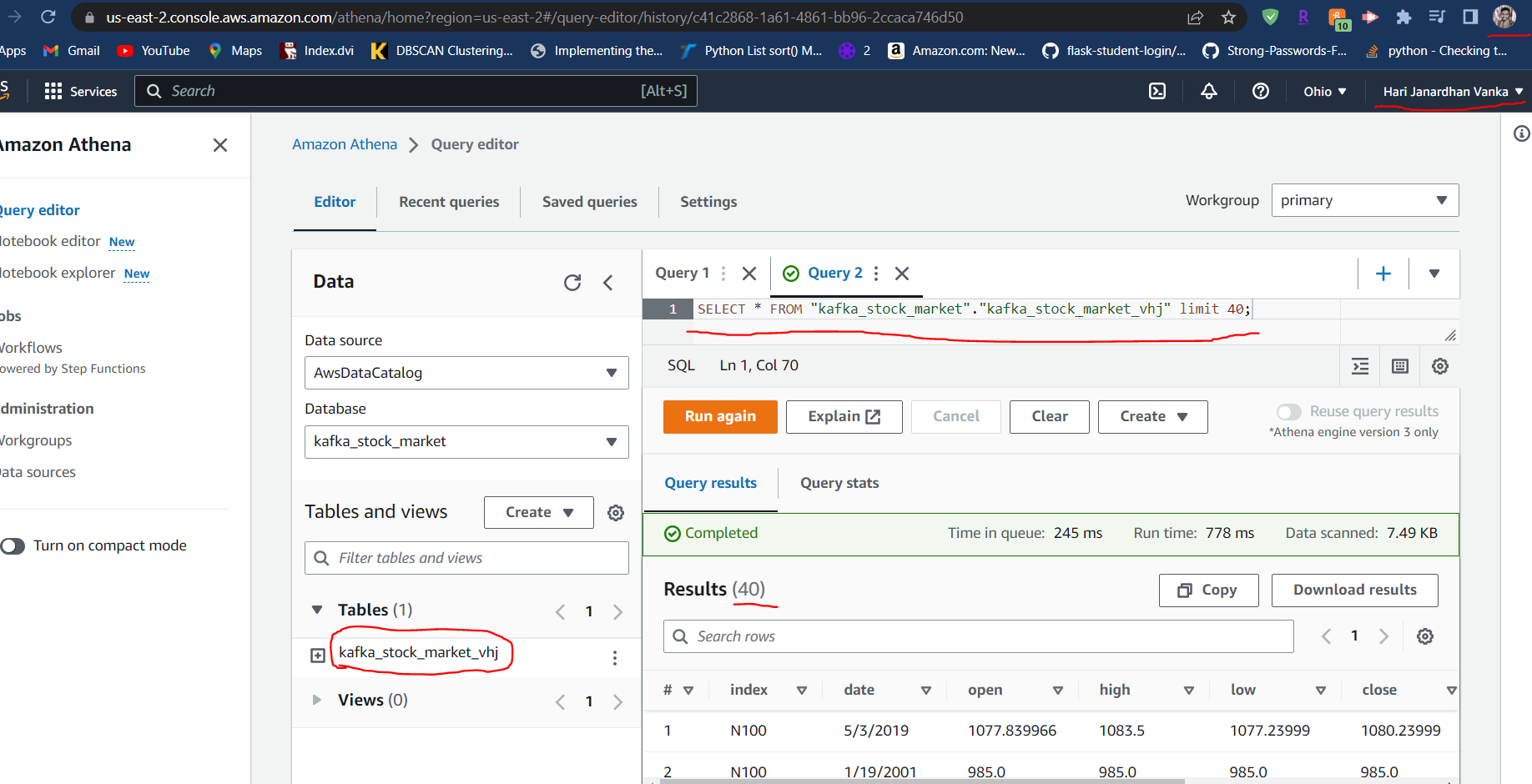
Graphical user interface, text, application

Description automatically generated

* while creating crawler, go to glue and select crawler and to create crawler,
* firstly you need have s3 bucket name to assign, create I am role and create database and finally create crawler.
* Working on Athena query editor by assigning database to the left and go to settings and set the end target or target location where query can store temporary results by choosing any bucket location.
* Then preview the query results by clicking on table.

Graphical user interface, text, application, email

Description automatically generated



Graphical user interface, text, application, email

Description automatically generated

Graphical user interface, application

Description automatically generated