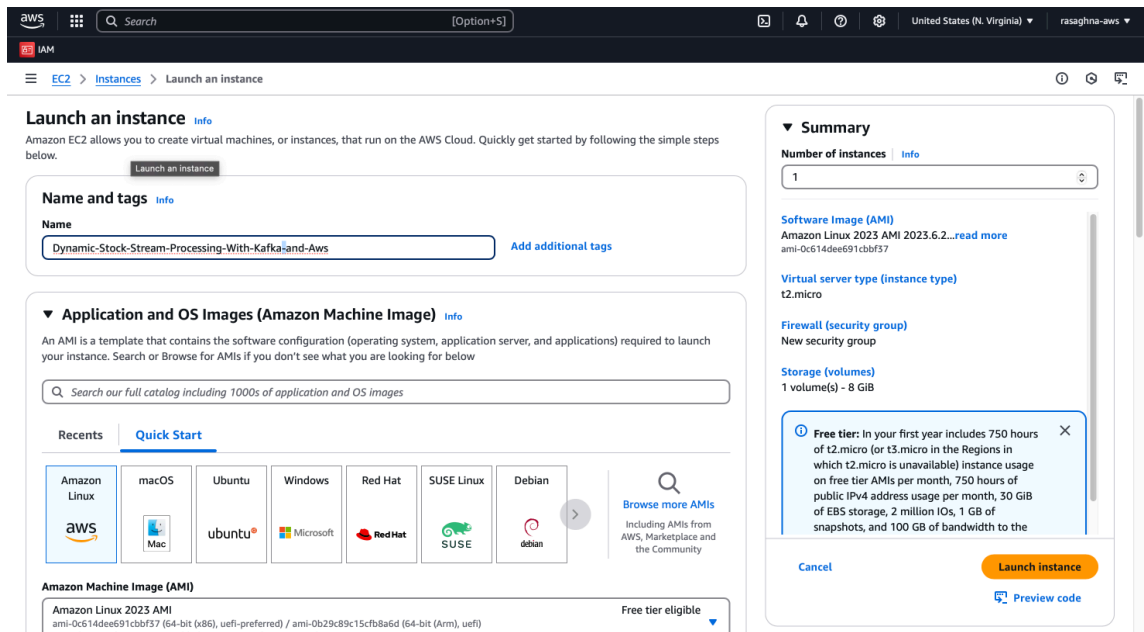


## 1. Create a EC2 instance in your AWS console



## 2. Refer to this document and connect to the EC2 instance through the Terminal

<https://docs.aws.amazon.com/msk/latest/developerguide/mkc-create-topic.html>

## 3. Download apache kafka compressed version “wget

[https://archive.apache.org/dist/kafka/2.2.1/kafka\\_2.12-2.2.1.tgz](https://archive.apache.org/dist/kafka/2.2.1/kafka_2.12-2.2.1.tgz)”

4. Kafka runs on JAVA so install java “sudo yum install java-1.8.0-openjdk” on your local machine

5. Start zookeeper in your Kafka “c”

6. Connect to EC2 instance via new terminal

7. Run this command “cd kafka\_2.12-2.2.1/” check the kafka version while running the command

8. Edit the inbound rules to take all the traffic from Ipv4

9. Open a separate terminal to create topics for consumer and producer to consume.

10. bin/kafka-topics.sh --create --topic stock\_market\_demo --bootstrap-server 3.83.127.4:9092 --replication-factor 1 --partitions 1

11. As I am using older version of kafka here is the command to run the producers  
“bin/kafka-console-producer.sh --topic stock\_market\_demo --broker-list 3.83.127.4:9092”

12. Here is the code to run the consumers

“bin/kafka-console-consumer.sh --topic stock\_market\_demo--bootstrap-server 3.83.127.4:9092”  
bin/kafka-console-consumer.sh --topic stock\_market\_demo --bootstrap-server 3.83.127.4:9092

**Possible error:** Missing the EC2 port in the producer and consumer code

Python version error python >3.10 might cause some errors, so downgrade the python version

Producer not actually sending messages to Kafka

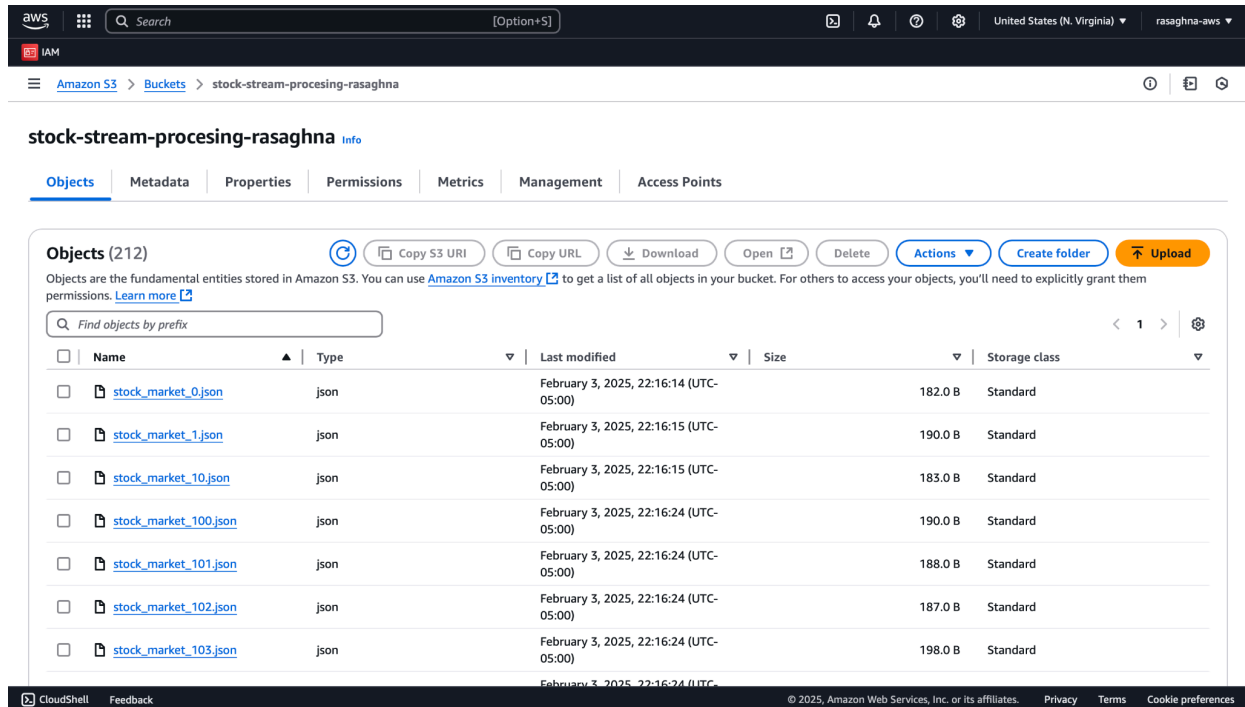
Consumer is listening but unable to find messages

Wrong Kafka topic setup

Offset reset settings in the consumer

Kafka logs for potential errors

## Data in S3 bucket :



The screenshot shows the AWS S3 console interface for the bucket 'stock-stream-processing-rasaghna'. The 'Objects' tab is selected, displaying a list of 212 objects. The objects are JSON files named 'stock\_market\_0.json' through 'stock\_market\_103.json'. Each object is a 'json' type, last modified on February 3, 2025, at 22:16:14 (UTC-05:00), and has a size ranging from 182.0 B to 198.0 B, all stored in the 'Standard' storage class.

Name	Type	Last modified	Size	Storage class
<a href="#">stock_market_0.json</a>	json	February 3, 2025, 22:16:14 (UTC-05:00)	182.0 B	Standard
<a href="#">stock_market_1.json</a>	json	February 3, 2025, 22:16:15 (UTC-05:00)	190.0 B	Standard
<a href="#">stock_market_10.json</a>	json	February 3, 2025, 22:16:15 (UTC-05:00)	183.0 B	Standard
<a href="#">stock_market_100.json</a>	json	February 3, 2025, 22:16:24 (UTC-05:00)	190.0 B	Standard
<a href="#">stock_market_101.json</a>	json	February 3, 2025, 22:16:24 (UTC-05:00)	188.0 B	Standard
<a href="#">stock_market_102.json</a>	json	February 3, 2025, 22:16:24 (UTC-05:00)	187.0 B	Standard
<a href="#">stock_market_103.json</a>	json	February 3, 2025, 22:16:24 (UTC-05:00)	198.0 B	Standard

## Setting up the Glue crawler :

aws

Search

[Option+S]

United States (N. Virginia)

rasaghna-aws

AWS Glue

Getting started

ETL jobs

Visual ETL

Notebooks

Job run monitoring

Data Catalog tables

Data connections

Workflows (orchestration)

Zero-ETL integrations

Data Catalog

Databases

Tables

Stream schema registries

Schemas

Connections

Crawlers

Classifiers

Catalog settings

Data Integration and ETL

Legacy pages

What's New

Documentation

AWS Marketplace

stock\_market\_kafka\_rk

Last updated (UTC)

February 4, 2025 at 03:54:19

Run crawler

Edit

Delete

Crawler properties

Name

stock\_market\_kafka\_rk

IAM role

aws-stock-market-kafka

Database

stock-market-kafka

State

READY

Description

-

Security configuration

-

Lake Formation configuration

-

Table prefix

-

Maximum table threshold

-

Advanced settings

Crawler runs

Schedule

Data sources

Classifiers

Tags

Crawler runs (3)

The list of crawler runs for this crawler.

Filter data

Filter by a date and time range

< 1 >

	Start time (UTC)	End time (UTC)	Current/last duration	Status	DPU hours	Table changes
	February 4, 2025 at 03:18:50	February 4, 2025 at 03:20:13	01 min 22 s	Completed	0.042	1 table change, 0 partition changes
	February 4, 2025 at 03:13:56	February 4, 2025 at 03:15:09	01 min 12 s	Completed	0.047	2 table changes, 0 partition changes
	February 4, 2025 at 03:02:04	February 4, 2025 at 03:04:14	02 min 10 s	Completed	0.042	1 table change, 1 partition change

CloudShell

Feedback

© 2025, Amazon Web Services, Inc. or its affiliates.

Privacy

Terms

Cookie preferences

Querying in AWS Athena:

Amazon Athena

Query editor tabs

Data source

AwsDataCatalog

catalogue

None

Database

stock-market-kafka

Tables and views

Create

Filter tables and views

Tables (1)

stock\_stream\_procesing\_rasaghna

Views (0)

1

SELECT \* FROM "stock-market-kafka"."stock\_stream\_procesing\_rasaghna" limit 10;

SQL

Ln 1, Col 79

Run again

Explain

Cancel

Clear

Create

Reuse query results

up to 60 minutes ago

Query results

Query status

Completed

Time in queue: 118 ms

Run time: 532 ms

Data scanned: 2.40 KB

Results (10)

Search rows

< 1 >

#	index	date	open	high	low	close	adj close	volume
1	HSI	1997-03-13	13056.29981	13056.29981	12877.09961	12917.09961	12917.09961	0.0
2	IXIC	1980-04-21	133.080002	133.080002	133.080002	133.080002	133.080002	0.0

CloudShell

Feedback

© 2025, Amazon Web Services, Inc. or its affiliates.

Privacy

Terms

Cookie preferences