

To test if the messages have arrived in your Kafka topic using from a windows operation system, follow the below steps:

1. Download the [Confluent tool kit](#) as per the Mac instructions. In my case, I downloaded kafka_2.13-3.6.0.tgz into the C:\Kafka directory (A)

```
Administrator: Command Prompt
Microsoft Windows [Version 10.0.20348.2159]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Administrator>cd ../../
C:>cd Kafka

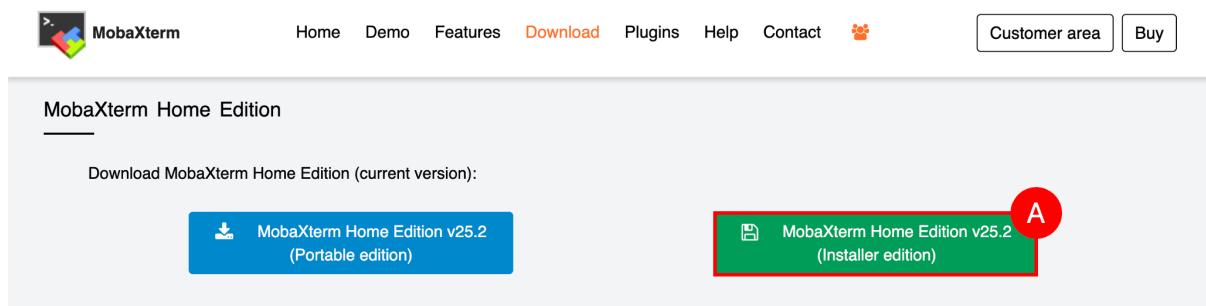
C:\Kafka>dir
Volume in drive C is 100GB
Volume Serial Number is 685A-D24E

Directory of C:\Kafka

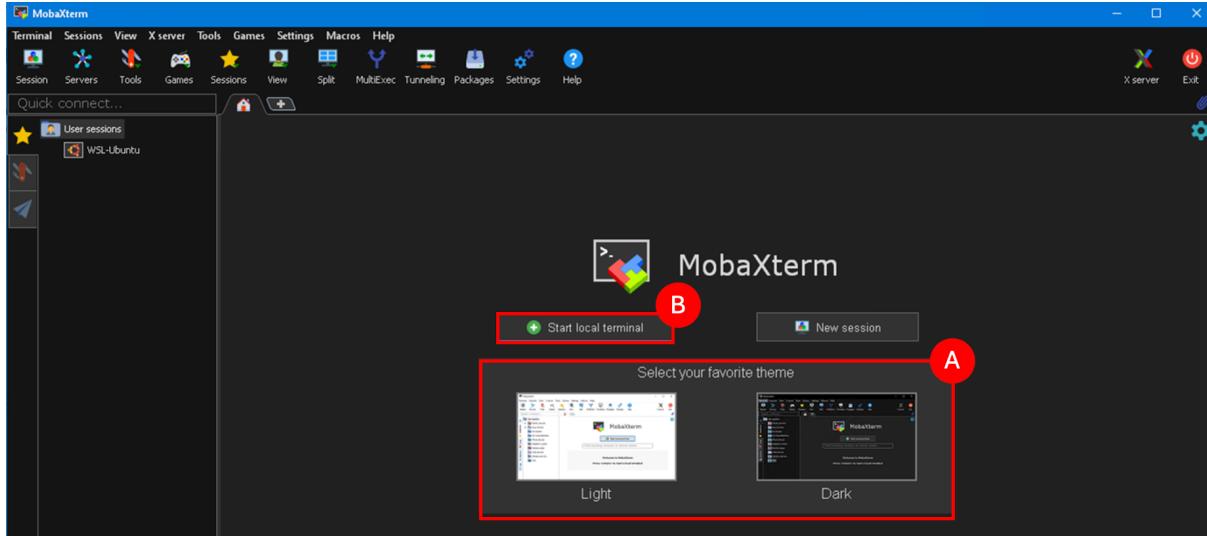
09/05/2025  12:32 PM    <DIR>
09/05/2025  11:47 AM      113,257,079  kafka_2.13-3.6.0.tgz
               1 File(s)   113,257,079 bytes
               1 Dir(s)  34,471,092,224 bytes free

C:\Kafka>
```

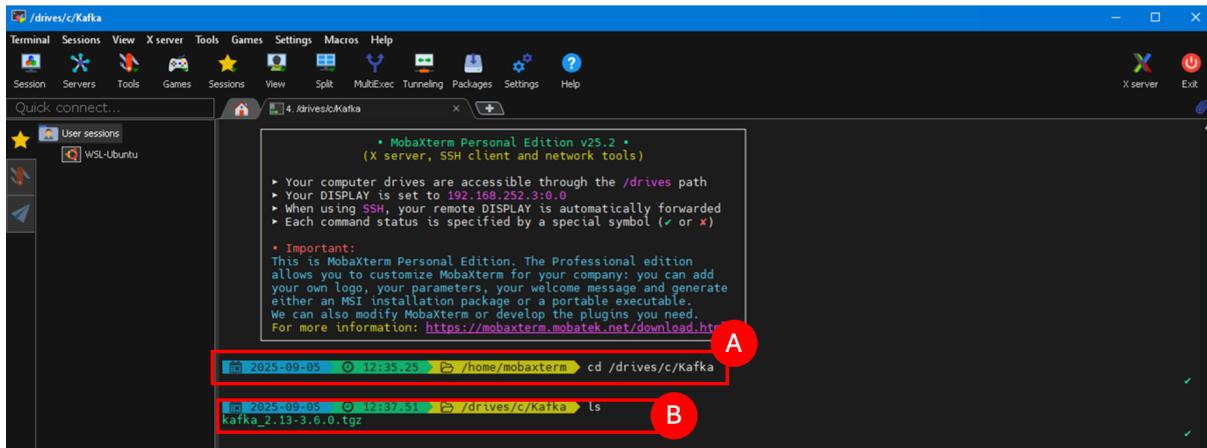
2. Download and install [java jdk version 21](#). I kept the default install location as C:\Program Files\Java\jdk-21.
3. Download and install [MobaXterm](#) (A)



4. Run MobaXterm and select your preferred theme (A) and then Start local terminal (B).



5. By default, your local windows drives are stored in the /drives folder in MobaXterm. Enter the command: cd /drives/<path to your downloaded kafka>. In my case, the command is **cd /drives/c/Kafka** (A). Then enter the command **ls** to ensure you're in the correct directory (B).



6. Enter the command `tar -xzf kafka_2.13-3.6.0.tgz` to extract the compressed files (A). List the contents of your directory using the command `ls` (B).

```
• MobaXterm Personal Edition v25.2 •  
Your computer drives are accessible through the /drives path  
Your DISPLAY is set to 192.168.252.3:0.0  
When using SSH, your remote DISPLAY is automatically forwarded  
Each command status is specified by a special symbol (✓ or ✘)  
  
Important:  
This is MobaXterm Personal edition.  
allow you to customize MobaXterm for your needs: you can add  
your own logo, your parameters, your welcome message... and more  
either an MSI installation package or a portable executable.  
We can also modify MobaXterm or develop the plugins you need.  
For more information: https://mobaxterm.mobatek.net/download.html  
2025-09-05 12:35:25 /home/mobaxterm cd /drives/c/Kafka  
2025-09-05 12:37:51 /drives/c/Kafka ls  
kafka_2.13-3.6.0.tgz  
2025-09-05 12:37:54 /drives/c/Kafka tar -xzf kafka_2.13-3.6.0.tgz  
2025-09-05 12:44:44 /drives/c/Kafka ls  
kafka_2.13-3.6.0 kafka_2.13-3.6.0.tgz
```

7. Ensure your `java_home` is set. Type the command: `vi ~/.bashrc` (A)

```
2025-09-05 13:34:55 /drives/c vi ~/.bashrc
```

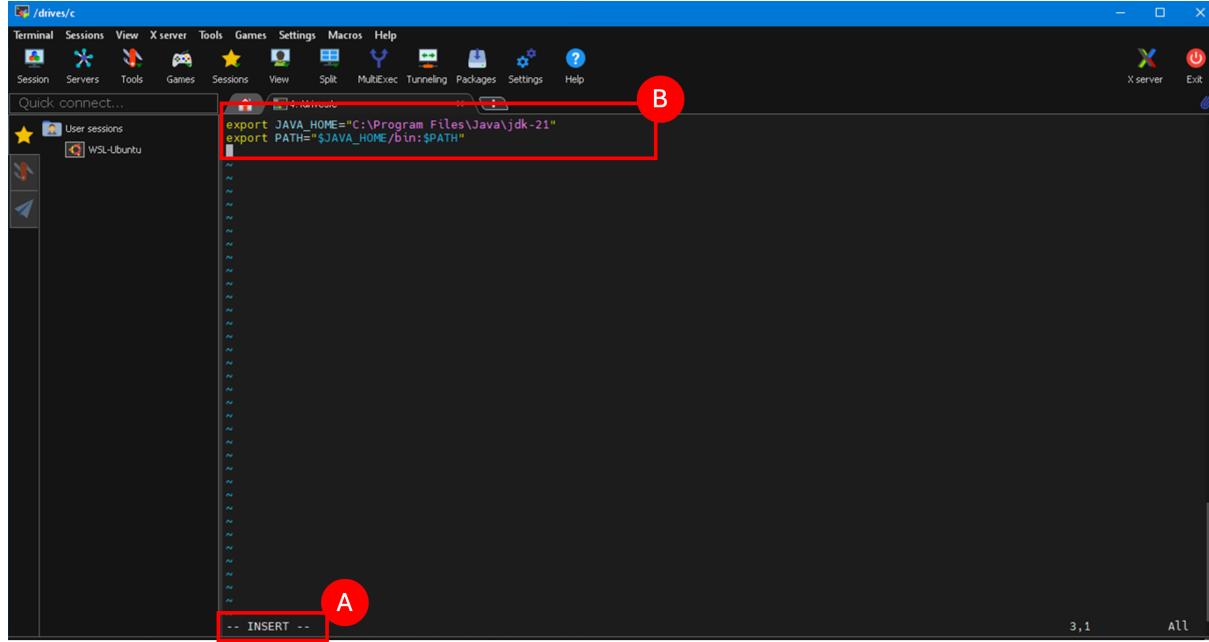
8. Enter INSERT mode in vi by entering the letter i (A)

9. Enter the below into vi (B):

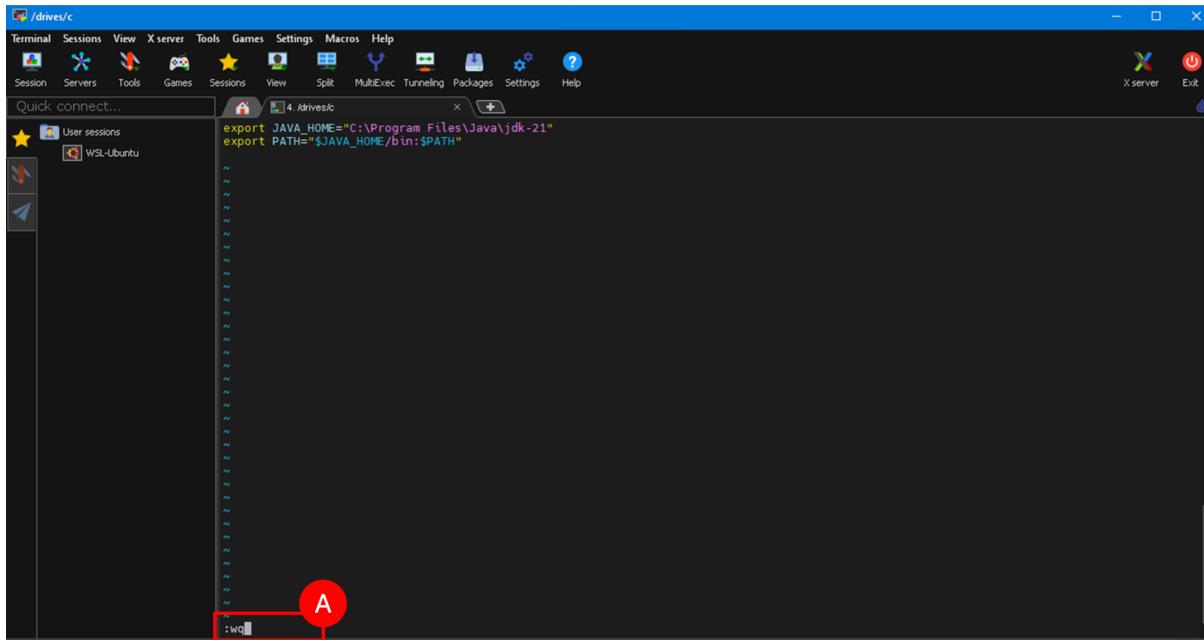
```
export JAVA_HOME="/path/to/your/jdk"  
export PATH="$JAVA_HOME/bin:$PATH"
```

In my case, the entries are:

```
export JAVA_HOME="C:\Program Files\Java\jdk-21"  
export PATH="$JAVA_HOME/bin:$PATH"
```



10. Press your escape key to exit INSERT mood, and then enter the command :wq to save your command and exit (A)

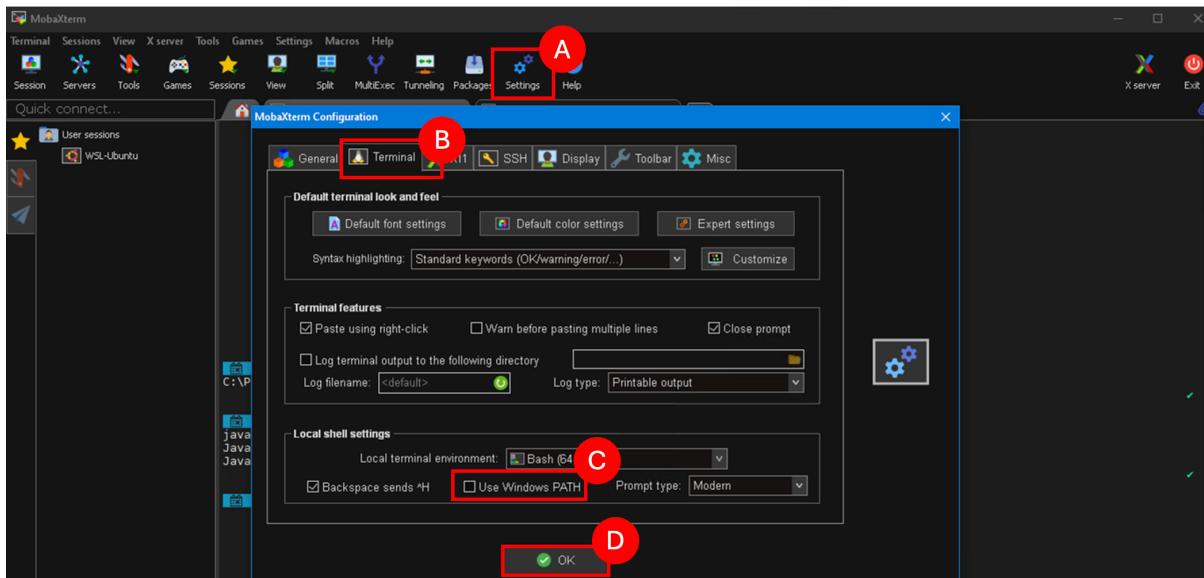


11. Open the **settings** section for mobaXterm by clicking the **Settings** button (A)

12. Click on the **Terminal** tab (B)

13. Uncheck the **Use Windows PATH** checkbox (C)

14. Click the **Ok** button (D)



15.Enter the command `java -version` to ensure you're using the correct jdk (A)

The screenshot shows the MobaXterm interface with a terminal window open. The terminal window title is 'home@mobaxterm'. The terminal content shows the Java version information:

```
* MobaXterm Personal Edition v25.2 *
* (X server, SSH client and network tools)
...
Important:
This is MobaXterm Personal Edition. The Professional edition
allows you to customize MobaXterm for your company: you can add
your own logo, your parameters, your welcome message and generate
either an MSI installation package or a portable executable.
We can also modify MobaXterm or develop the plugins you need.
For more information: https://mobaxterm.mobatek.net/download.html
2025-09-05 13:46:17 ~ /home/mobaxterm> echo $JAVA_HOME
C:\Program Files\Java\jdk-21
2025-09-05 13:46:24 ~ /home/mobaxterm> java -version
java version "21.0.7" 2025-04-15 LTS
Java(TM) SE Runtime Environment (build 21.0.7+8-LTS-245)
Java HotSpot(TM) 64-Bit Server VM (build 21.0.7+8-LTS-245, mixed mode, sharing)
```

A red box highlights the command and its output. A red circle labeled 'A' points to the output line.

16.Enter the command `cd /kafka<yourinstallationfolder>/bin` to enter the bin directory (A). You can optionally use the `ls` command to list the contents of this directory (B)

The screenshot shows the MobaXterm interface with a terminal window open. The terminal window title is '7/drives/c/Kafka/kafka_2.13-3.6.0/bin'. The terminal content shows the result of the cd command followed by an ls command:

```
2025-09-05 12:49:34 ~ /drives/c/Kafka> cd kafka_2.13-3.6.0/bin
2025-09-05 12:49:51 ~ /drives/c/Kafka/kafka_2.13-3.6.0/bin> ls
connect-distributed.sh          kafka-consumer-perf-test.sh    kafka-metadata-shell.sh      kafka-transactions.sh
connect-mirror-maker.sh         kafka-delegation-tokens.sh  kafka-mirror-maker.sh       kafka-verifiable-consumer.sh
connect-plugin-path.sh          kafka-delete-records.sh   kafka-producer-perf-test.sh  kafka-verifiable-producer.sh
connect-standalone.sh           kafka-dump-log.sh        kafka-reassignment-partitions.sh  trogrodor.sh
kafka-acls.sh                  kafka-eze-latency.sh     kafka-replica-verification.sh windows
kafka-broker-api-versions.sh   kafka-features.sh       kafka-run-class.sh        zookeeper-security-migration.sh
kafka-cluster.sh                kafka-get-offsets.sh    kafka-server-start.sh      zookeeper-server-start.sh
kafka-configs.sh                kafka-jmx.sh          kafka-server-stop.sh      zookeeper-server-stop.sh
kafka-console-consumer.sh       kafka-leader-election.sh  kafka-storage.sh          zookeeper-shell.sh
kafka-console-producer.sh       kafka-log-dir.sh      kafka-streams-application-reset.sh
kafka-consumer-groups.sh       kafka-metadata-quorum.sh  kafka-topics.sh
```

Two red boxes highlight the command and its output. A red circle labeled 'A' points to the command, and a red circle labeled 'B' points to the output of the ls command.

17.Now aligning with the published lab steps, create a `config.properties` file by entering the command: `vi config.properties`

18.Return to your IBM Event Streams browser tab and expand your service credentials, selecting the api_key value and copying it to clipboard (A)

The screenshot shows the 'Service credentials' section of the IBM Cloud interface. A table lists a single credential named 'Service-credentials-1'. The 'api_key' field contains the value 'vMFT9u9xa1PNWLp0oH5lqpgNhfmXocEWjC8kaGEOQcrN'. A red circle labeled 'A' is drawn around this specific value.

| Key name | Date created | Controlled by | One-time View |
|-----------------------|--------------------|-------------------------------------|---------------|
| Service-credentials-1 | 2025-09-03 2:40 PM | 6a74e38-f218-48ef-9dd2-df408747568e | Off |

19.Return to your MobaXterm session and type the letter i to enter INSERT mode in the vi editor (A). Paste the text below, substituting the api_key value that you copied in the previous step, into the password (B).

```
sasl.mechanism=PLAIN
```

```
sasl.jaas.config=org.apache.kafka.common.security.plain.PlainLoginModule required  
username="token" password="vMFT9u9xa1PNWLp0oH5lqpgNhfmXocEWjC8kaGEOQcrN";  
security.protocol=SASL_SSL
```

```
ssl.protocol=TLSv1.2
```

```
ssl.enabled.protocols=TLSv1.2
```

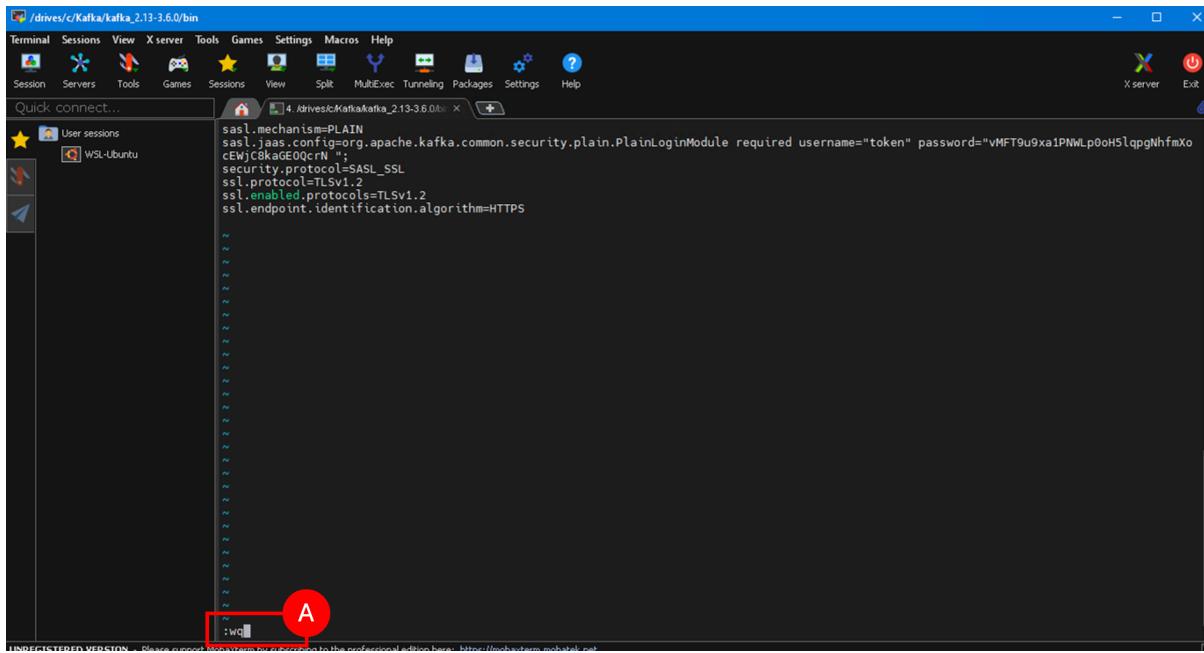
```
ssl.endpoint.identification.algorithm=HTTPS
```

The screenshot shows a MobaXterm window with a terminal session open. The terminal displays the configuration text for Kafka. A red box highlights the entire configuration block. A red circle labeled 'B' is positioned above the highlighted text. A red circle labeled 'A' is positioned below the highlighted text, pointing to the 'INSERT' indicator at the bottom of the terminal window.

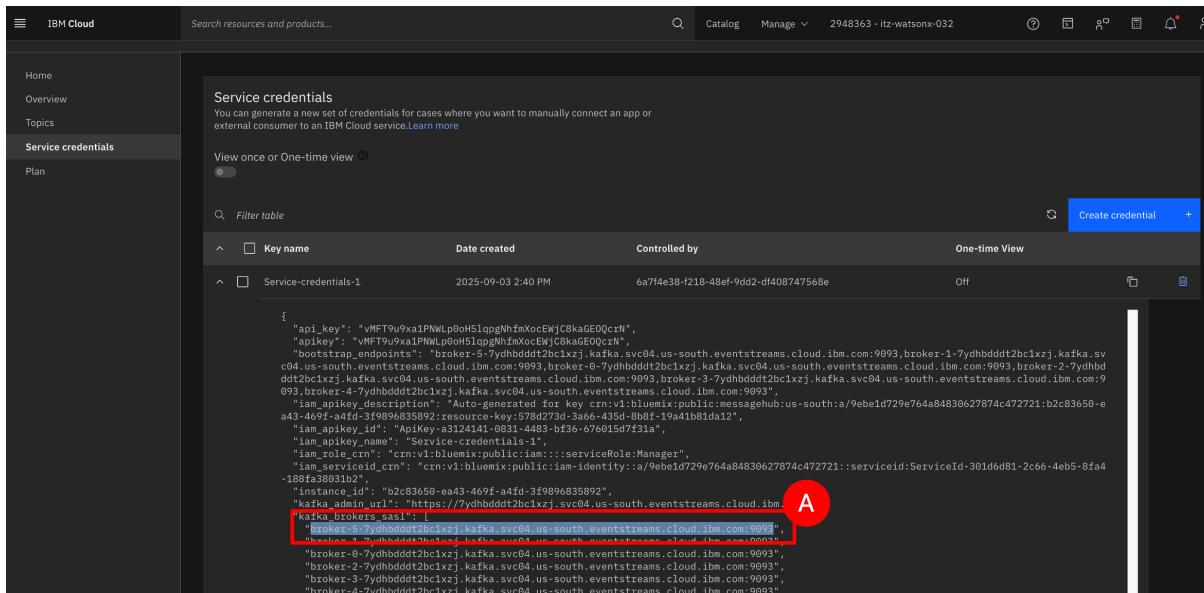
```
sasl.mechanism=PLAIN  
sasl.jaas.config=org.apache.kafka.common.security.plain.PlainLoginModule required username="token" password="vMFT9u9xa1PNWLp0oH5lqpgNhfmXocEWjC8kaGEOQcrN";  
security.protocol=SASL_SSL  
ssl.protocol=TLSv1.2  
ssl.enabled.protocols=TLSv1.2  
ssl.endpoint.identification.algorithm=HTTPS
```

20. Press the **escape** key to exit INSERT mode in vi.

21. Enter the command :wq to save and close your config.properties file.



22.Return to your IBM Event Streams browser tab, and **copy** one of the servers listed under your service credentials (A).



23.Returning to your MobaXterm session, **paste** the following command, substituting the server for the entry you copied in the previous step:

```
./kafka-console-consumer.sh --bootstrap-server broker-5-7ydhbddt2bc1xzj.kafka.svc04.us-south.eventstreams.cloud.ibm.com:9093 --topic Transactions --consumer.config ./config.properties --partition 0 --from-beginning
```

24. You should see your entries: