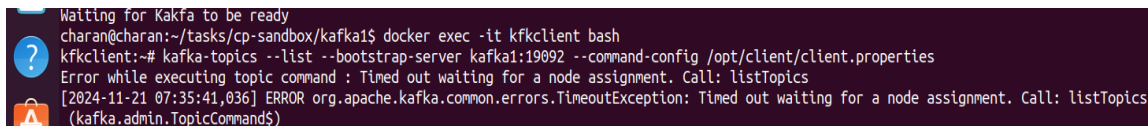# Scenario 11

Problem-statement :

The client is unable to produce/consume from the topic `inventory_changes` using the command -

Observation :

All the containers are up but while listing the topics via port 19092 port of kafka1 broker with sasl_plaintext protocol not producing timeout error is coming . But while listing topics with other port 29092 and 39092 ports it is listing

Errors :

```
Waiting for Kakfa to be ready
charan@charan:~/tasks/cp-sandbox/kafka1$ docker exec -it kfkclient bash
kfkclient:~# kafka-topics --list --bootstrap-server kafka1:19092 --command-config /opt/client/client.properties
Error while executing topic command : Timed out waiting for a node assignment. Call: listTopics
[2024-11-21 07:35:41,036] ERROR org.apache.kafka.common.errors.TimeoutException: Timed out waiting for a node assignment. Call: listTopics
 (kafka.admin.TopicCommand$)
```

Error while executing topic command : Timed out waiting for a node assignment. Call: listTopics
[2024-11-21 07:35:41,036] ERROR org.apache.kafka.common.errors.TimeoutException: Timed out waiting for a node assignment. Call: listTopics
 (kafka.admin.TopicCommand$)

Aproach / Method :

TLS (renewal of certificates) &&

Checking the network connectivity issue (netcat, nmap methods, ping)

Detailed Solution :

1. **Renewal of certificates** :
   While I up the docker-compose first I observed the kafka-brokers are down and then I logged the each containers then I have got the ssl certificate errors .then I have checked the certificate validities and passwords and correct paths and matched . I pointed out that error was due to certificate validity they have expired .
   Then I have renewed the certificates of all brokers by using commands
   Commands :

   keytool -keystore kafka.server.keystore.jks -alias localhost -certreq -file kafka-broker-new.csr

openssl x509 -req -CA ~/tasks/cp-sandbox/certs/ca-cert -CAkey
~/tasks/cp-sandbox/certs/ca-key -in kafka-broker-new.csr -out
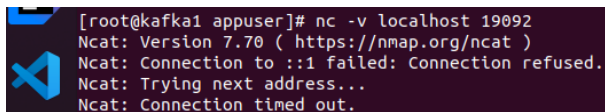kafka-broker-new-signed-cert.pem -days 365 -CAcreateserial

keytool -keystore kafka.server.keystore.jks -alias localhost -import -file
kafka-broker-new-signed-cert.pem

Again then I have checked the certificates and then watched the validate the
expiry date its good and updated for 365 days.

2. Check the network connectivity :

While the specific kafka1 port 19092 is not properly working when
listing or producing creating the topics check the network connectivity like tcp
connectivity so use netcat methods to check the connectivity for dns or host
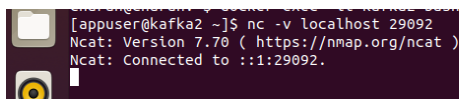ports like ..

- Check for 19092 kafka1 inside the kafka1 container
  Command : ncat -v localhost 19092

```
[root@kafka1 appuser]# nc -v localhost 19092
Ncat: Version 7.70 ( https://nmap.org/ncat )
Ncat: Connection to ::1 failed: Connection refused.
Ncat: Trying next address...
Ncat: Connection timed out.
```
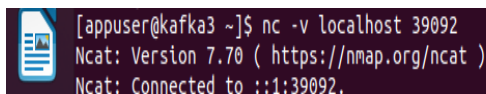
Failed to connect

- Check for 29092 kafka1 inside the kafka2 container
  Command : ncat -v localhost 29092

```
[appuser@kafka2 ~]$ nc -v localhost 29092
Ncat: Version 7.70 ( https://nmap.org/ncat )
Ncat: Connected to ::1:29092.
```

Connected

- Check for 19092 kafka1 inside the kafka1 container
  Command : ncat -v localhost 19092

```
[appuser@kafka3 ~]$ nc -v localhost 39092
Ncat: Version 7.70 ( https://nmap.org/ncat )
Ncat: Connected to ::1:39092.
```
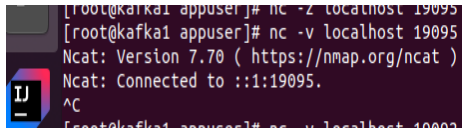
connected

Check the available ports and replace it by that
So after I changed the port number for the sasl_plaintext (plain module
mechanism port) from 19092 >>> 19095

listeners=CLIENT://:19095,BROKER://:19093,TOKEN://:19094

advertised.listeners=CLIENT://kafka1:19095,BROKER://kafka1:19093,TOKEN://kafka1:19094

```
[root@kafka1 appuser]# nc -z localhost 19095
[root@kafka1 appuser]# nc -v localhost 19095
Ncat: Version 7.70 ( https://nmap.org/ncat )
Ncat: Connected to ::1:19095.
^C
[root@kafka1 appuser]# nc -v localhost 19093
```

Conclusion :

- [ ] For the port if we get the metadata errors and NoLeaderOrFollower exception then we can move to check the network connectivity for that broker and then check the port accessibility using the netcat methods and nmap and also use ping method to solve that
- [ ] After that change to the available ports