Запуск Kafka с KRaft

1. Редактировать файл /opt/kafka/config/kraft/server.properties

```
process.roles=broker,controller
node.id=1
controller.quorum.voters=1@localhost:9093
listeners=PLAINTEXT://:9092,CONTROLLER://:9093
inter.broker.listener.name=PLAINTEXT
advertised.listeners=PLAINTEXT://localhost:9092
controller.listener.names=CONTROLLER
listener.security.protocol.map=CONTROLLER:PLAINTEXT,PLAINTEXT:PLAINTEXT,SSL:SSL,SASL_PLAINTEXT:SASL_PLAINTEXT,SASL_SSL:SASL_SSL
num.network.threads=3
num.io.threads=8
socket.send.buffer.bytes=102400
socket.receive.buffer.bytes=102400
socket.request.max.bytes=104857600
log.dirs=/opt/kafka/data/kraft
num.partitions=1
num.recovery.threads.per.data.dir=1
offsets.topic.replication.factor=1
transaction.state.log.replication.factor=1
transaction.state.log.min.isr=1
log.retention.hours=168
log.segment.bytes=1073741824
log.retention.check.interval.ms=300000
```

2. Создать cluster ID

```
export KAFKA_CLUSTER_ID="$(bin/kafka-storage.sh random-uuid)"
```

```
[alex@MacBook-Pro-Alexander kafka % export KAFKA_CLUSTER_ID="$(bin/kafka-storage.sh random-uuid)"
[alex@MacBook-Pro-Alexander kafka % echo $KAFKA_CLUSTER_ID
geuIXoERQjCVx7QTsIshfw
```

3. Форматировать каталог данных

```
bin/kafka-storage.sh format -t $KAFKA_CLUSTER_ID -c
config/kraft/server.properties
```

```
[alex@MacBook-Pro-Alexander kafka % bin/kafka-storage.sh format -t $KAFKA_CLUSTER_ID -c config/kraft/server.properties
metaPropertiesEnsemble=MetaPropertiesEnsemble(metadataLogDir=Optional.empty, dirs={/opt/kafka/data/kraft: EMPTY})
Formatting /opt/kafka/data/kraft with metadata.version 3.7-IV4.
[alex@MacBook-Pro-Alexander kafka % ls /opt/kafka/data/kraft
bootstrap.checkpoint     meta.properties
```

4. Запустить брокер

```
bin/kafka-server-start.sh -daemon config/kraft/server.properties
```

5. Выполнить проверку

```
bin/kafka-cluster.sh cluster-id --bootstrap-server localhost:9092
```

```
[alex@MacBook-Pro-Alexander kafka % bin/kafka-server-start.sh -daemon config/kraft/server.properties
[alex@MacBook-Pro-Alexander kafka % bin/kafka-cluster.sh cluster-id --bootstrap-server localhost:9092
Cluster ID: geuIXoERQjCVx7QTsIshfw
[alex@MacBook-Pro-Alexander kafka % echo $KAFKA_CLUSTER_ID
geuIXoERQjCVx7QTsIshfw
```

Настройка аутентификации SASL/PLAIN

6. Записать настройки в файл server-sasl.properties

```
process.roles=broker,controller
node.id=1
controller.quorum.voters=1@localhost:9093

listeners=SASL_PLAINTEXT://:9092,CONTROLLER://:9093
advertised.listeners=SASL_PLAINTEXT://localhost:9092
listener.security.protocol.map=CONTROLLER:SASL_PLAINTEXT,SASL_PLAINTEX
T:SASL_PLAINTEXT

inter.broker.listener.name=SASL_PLAINTEXT
controller.listener.names=CONTROLLER

sasl.enabled.mechanisms=PLAIN
sasl.mechanism.controller.protocol=PLAIN
sasl.mechanism.inter.broker.protocol=PLAIN

num.network.threads=3
num.io.threads=8

socket.send.buffer.bytes=102400
socket.receive.buffer.bytes=102400
socket.request.max.bytes=104857600

log.dirs=/opt/kafka/data/kraft
num.partitions=1
num.recovery.threads.per.data.dir=1

offsets.topic.replication.factor=1
transaction.state.log.replication.factor=1
transaction.state.log.min.isr=1

log.retention.hours=168
log.segment.bytes=1073741824
log.retention.check.interval.ms=300000
```

7. Создать файл kafka_server_jaas.conf и записать в него следующие настройки

```
KafkaServer {
        org.apache.kafka.common.security.plain.PlainLoginModule required
        serviceName="kafka"
        username="kafkabroker"
        password="kafkabroker-secret"
        user_kafkabroker="kafkabroker-secret"
        user_kafka-broker-metric-reporter= \"kafkabroker-metric-reporter-secret"
        user_client="client-secret";
};

Client {
        org.apache.kafka.common.security.plain.PlainLoginModule required
        username="kafka"
        password="kafka-secret";
};
```

8. Запустить kafka, указав созданные файлы с настройками аутентификации на стороне брокера

```
KAFKA_OPTS="-Djava.security.auth.login.config=/opt/kafka/config/kraft/
kafka_server_jaas.conf" /opt/kafka/bin/kafka-server-start.sh -daemon
/opt/kafka/config/kraft/server-sasl.properties
```

9. Создать файл client-sasl.properties с настройками аутентификации на стороне клиента

```
security.protocol=SASL_PLAINTEXT
sasl.mechanism=PLAIN
sasl.jaas.config= \
        org.apache.kafka.common.security.plain.PlainLoginModule \
        required username="client" password="client-secret";
```

10. Проверка с аутентификацией

```
bin/kafka-topics.sh --list --bootstrap-server localhost:9092
--command-config config/kraft/client-sasl.properties
```

Результат - пустой список, потому что топики еще не созданы

11. Проверка без аутентификации

```
bin/kafka-topics.sh --list --bootstrap-server localhost:9092
```

Зависает и не выдает ошибку

Добавление пользователей

12. Добавить пользователей в файл kafka_server_jaas.conf

```
KafkaServer {
        org.apache.kafka.common.security.plain.PlainLoginModule required
        serviceName="kafka"
        username="kafkabroker"
        password="kafkabroker-secret"
        user_kafkabroker="kafkabroker-secret"
        user_kafka-broker-metric-reporter= \
                "kafkabroker-metric-reporter-secret"
        user_client="client-secret"
        user_user1="pass1"
        user_user2="pass2"
        user_user3="pass3";
};

Client {
        org.apache.kafka.common.security.plain.PlainLoginModule required
        username="kafkabroker"
        password="kafkabroker-secret";
};
```

13. Перезапустить kafka

```
bin/kafka-server-stop.sh

KAFKA_OPTS="-Djava.security.auth.login.config=/opt/kafka/config/kraft/
kafka_server_jaas.conf" /opt/kafka/bin/kafka-server-start.sh -daemon
/opt/kafka/config/kraft/server-sasl.properties
```

14. Создать файлы для подключения этих пользователей
config/kraft/client-user1-sasl.properties

```
security.protocol=SASL_PLAINTEXT
sasl.mechanism=PLAIN
sasl.jaas.config= \
     org.apache.kafka.common.security.plain.PlainLoginModule \
     required username="user1" password="pass1";
```

config/kraft/client-user2-sasl.properties

```
security.protocol=SASL_PLAINTEXT
sasl.mechanism=PLAIN
sasl.jaas.config= \
     org.apache.kafka.common.security.plain.PlainLoginModule \
     required username="user2" password="pass2";
```

config/kraft/client-user3-sasl.properties

```
security.protocol=SASL_PLAINTEXT
sasl.mechanism=PLAIN
sasl.jaas.config= \
     org.apache.kafka.common.security.plain.PlainLoginModule \
     required username="user3" password="pass3";
```

15. Проверить подключение

```
bin/kafka-topics.sh --list --bootstrap-server localhost:9092
--command-config config/kraft/client-user1-sasl.properties

bin/kafka-topics.sh --list --bootstrap-server localhost:9092
--command-config config/kraft/client-user2-sasl.properties

bin/kafka-topics.sh --list --bootstrap-server localhost:9092
--command-config config/kraft/client-user3-sasl.properties
```

В ответе пустые списки, потому что топики не созданы

Настройка авторизации

16. Остановить kafka
```
bin/kafka-server-stop.sh
```

17. Добавить в server-sasl.properties
```
authorizer.class.name= \
        org.apache.kafka.metadata.authorizer.StandardAuthorizer
super.users=User:kafkabroker;User:client
```

18. Запустить kafka
```
KAFKA_OPTS="-Djava.security.auth.login.config=/opt/kafka/config/kraft/
kafka_server_jaas.conf" /opt/kafka/bin/kafka-server-start.sh -daemon
/opt/kafka/config/kraft/server-sasl.properties
```

19. Создать топик test и запросить список от имени суперпользователя и других пользователей
```
bin/kafka-topics.sh --create --bootstrap-server localhost:9092
--partitions 2 --topic test --command-config
config/kraft/client-sasl.properties

bin/kafka-topics.sh --list --bootstrap-server localhost:9092
--command-config config/kraft/client-sasl.properties
```

```
alex@MacBook-Pro-Alexander kafka % KAFKA_OPTS="-Djava.security.auth.login.config=/opt/kafka/config/kraft/kafka_se
rver_jaas.conf" /opt/kafka/bin/kafka-server-start.sh -daemon /opt/kafka/config/kraft/server-sasl.properties
alex@MacBook-Pro-Alexander kafka % bin/kafka-topics.sh --create --bootstrap-server localhost:9092 --partitions 2
--topic test --command-config config/kraft/client-sasl.properties
Created topic test.
alex@MacBook-Pro-Alexander kafka % bin/kafka-topics.sh --list --bootstrap-server localhost:9092 --command-config
config/kraft/client-sasl.properties
test
alex@MacBook-Pro-Alexander kafka %
alex@MacBook-Pro-Alexander kafka %
alex@MacBook-Pro-Alexander kafka %
alex@MacBook-Pro-Alexander kafka % bin/kafka-topics.sh --list --bootstrap-server localhost:9092 --command-config
config/kraft/client-user1-sasl.properties

alex@MacBook-Pro-Alexander kafka % bin/kafka-topics.sh --list --bootstrap-server localhost:9092 --command-config
config/kraft/client-user2-sasl.properties

alex@MacBook-Pro-Alexander kafka % bin/kafka-topics.sh --list --bootstrap-server localhost:9092 --command-config
config/kraft/client-user3-sasl.properties

alex@MacBook-Pro-Alexander kafka %
```

20. Указать права доступа и прочитать их
```
bin/kafka-acls.sh --bootstrap-server localhost:9092 --add
--allow-principal User:user1 --operation Write --topic test
--command-config config/kraft/client-sasl.properties

bin/kafka-acls.sh --bootstrap-server localhost:9092 --add
--allow-principal User:user2 --operation Read --topic test
--command-config config/kraft/client-sasl.properties

bin/kafka-acls.sh --bootstrap-server localhost:9092 --list
--command-config config/kraft/client-sasl.properties
```

```
alex@MacBook-Pro-Alexander kafka % bin/kafka-acls.sh --bootstrap-server localhost:9092 --add --allow-principal User:user1
--operation Write --topic test --command-config config/kraft/client-sasl.properties
Adding ACLs for resource `ResourcePattern(resourceType=TOPIC, name=test, patternType=LITERAL)`:
        (principal=User:user1, host=*, operation=WRITE, permissionType=ALLOW)

Current ACLs for resource `ResourcePattern(resourceType=TOPIC, name=test, patternType=LITERAL)`:
        (principal=User:user1, host=*, operation=WRITE, permissionType=ALLOW)

alex@MacBook-Pro-Alexander kafka % bin/kafka-acls.sh --bootstrap-server localhost:9092 --add --allow-principal User:user2
--operation Read --topic test --command-config config/kraft/client-sasl.properties
Adding ACLs for resource `ResourcePattern(resourceType=TOPIC, name=test, patternType=LITERAL)`:
        (principal=User:user2, host=*, operation=READ, permissionType=ALLOW)

Current ACLs for resource `ResourcePattern(resourceType=TOPIC, name=test, patternType=LITERAL)`:
        (principal=User:user2, host=*, operation=READ, permissionType=ALLOW)
        (principal=User:user1, host=*, operation=WRITE, permissionType=ALLOW)

alex@MacBook-Pro-Alexander kafka % bin/kafka-acls.sh --bootstrap-server localhost:9092 --list --command-config config/kraf
t/client-sasl.properties
Current ACLs for resource `ResourcePattern(resourceType=TOPIC, name=test, patternType=LITERAL)`:
        (principal=User:user2, host=*, operation=READ, permissionType=ALLOW)
        (principal=User:user1, host=*, operation=WRITE, permissionType=ALLOW)

alex@MacBook-Pro-Alexander kafka % 
```

21. Выполнить операции от имени пользователя user1

```
bin/kafka-topics.sh --list --bootstrap-server localhost:9092
--command-config config/kraft/client-user1-sasl.properties

bin/kafka-console-producer.sh --bootstrap-server localhost:9092
--topic test --producer.config
config/kraft/client-user1-sasl.properties

bin/kafka-console-consumer.sh --bootstrap-server localhost:9092
--topic test --consumer.config
config/kraft/client-user1-sasl.properties
```

```
alex@MacBook-Pro-Alexander kafka % bin/kafka-topics.sh --list --bootstrap-server localhost:9092 --command-config config/kr
aft/client-user1-sasl.properties
test
alex@MacBook-Pro-Alexander kafka % bin/kafka-console-producer.sh --bootstrap-server localhost:9092 --topic test --producer
.config config/kraft/client-user1-sasl.properties
>message1
>message2
>message3
>message4
>message5
>^C%
alex@MacBook-Pro-Alexander kafka % bin/kafka-console-consumer.sh --bootstrap-server localhost:9092 --topic test --consumer
.config config/kraft/client-user1-sasl.properties
[2024-04-02 14:53:05,552] ERROR Error processing message, terminating consumer process:  (kafka.tools.ConsoleConsumer$)
org.apache.kafka.common.errors.GroupAuthorizationException: Not authorized to access group: console-consumer-82394
Processed a total of 0 messages    _
```

22. Выполнить операции от имени пользователя user2

```
bin/kafka-topics.sh --list --bootstrap-server localhost:9092
--command-config config/kraft/client-user2-sasl.properties

bin/kafka-console-producer.sh --bootstrap-server localhost:9092
--topic test --producer.config
config/kraft/client-user2-sasl.properties

bin/kafka-console-consumer.sh --bootstrap-server localhost:9092
--topic test --consumer.config
config/kraft/client-user2-sasl.properties --from-beginning
```

```
[alex@MacBook-Pro-Alexander kafka % bin/kafka-topics.sh --list --bootstrap-server localhost:9092 --command-config config/kr
aft/client-user2-sasl.properties
test
[alex@MacBook-Pro-Alexander kafka % bin/kafka-console-producer.sh --bootstrap-server localhost:9092 --topic test --producer
.config config/kraft/client-user2-sasl.properties
>123
[2024-04-02 15:43:07,559] ERROR [Producer clientId=console-producer] Aborting producer batches due to fatal error (org.apa
che.kafka.clients.producer.internals.Sender)
org.apache.kafka.common.errors.ClusterAuthorizationException: Cluster authorization failed.
[2024-04-02 15:43:07,560] ERROR Error when sending message to topic test with key: null, value: 3 bytes with error: (org.a
pache.kafka.clients.producer.internals.ErrorLoggingCallback)
org.apache.kafka.common.errors.ClusterAuthorizationException: Cluster authorization failed.
org.apache.kafka.common.KafkaException: Cannot execute transactional method because we are in an error state
        at org.apache.kafka.clients.producer.internals.TransactionManager.maybeFailWithError(TransactionManager.java:1041)
        at org.apache.kafka.clients.producer.internals.TransactionManager.maybeAddPartition(TransactionManager.java:385)
        at org.apache.kafka.clients.producer.KafkaProducer.doSend(KafkaProducer.java:1063)
        at org.apache.kafka.clients.producer.KafkaProducer.send(KafkaProducer.java:964)
        at kafka.tools.ConsoleProducer$.send(ConsoleProducer.scala:117)
        at kafka.tools.ConsoleProducer$.loopReader(ConsoleProducer.scala:90)
        at kafka.tools.ConsoleProducer$.main(ConsoleProducer.scala:99)
        at kafka.tools.ConsoleProducer.main(ConsoleProducer.scala)
Caused by: org.apache.kafka.common.errors.ClusterAuthorizationException: Cluster authorization failed.
[alex@MacBook-Pro-Alexander kafka % bin/kafka-console-consumer.sh --bootstrap-server localhost:9092 --topic test --consumer
.config config/kraft/client-user2-sasl.properties -from-beginning
[2024-04-02 15:43:16,934] ERROR Error processing message, terminating consumer process:  (kafka.tools.ConsoleConsumer$)
org.apache.kafka.common.errors.GroupAuthorizationException: Not authorized to access group: console-consumer-77830
Processed a total of 0 messages
```

23. Выполнить операции от имени пользователя user3

```
bin/kafka-topics.sh --list --bootstrap-server localhost:9092
--command-config config/kraft/client-user3-sasl.properties

bin/kafka-console-producer.sh --bootstrap-server localhost:9092
--topic test --producer.config
config/kraft/client-user3-sasl.properties

bin/kafka-console-consumer.sh --bootstrap-server localhost:9092
--topic test --consumer.config
config/kraft/client-user3-sasl.properties --from-beginning
```

```
[alex@MacBook-Pro-Alexander kafka % bin/kafka-topics.sh --list --bootstrap-server localhost:9092 --command-config config/kr
aft/client-user3-sasl.properties

[alex@MacBook-Pro-Alexander kafka % bin/kafka-console-producer.sh --bootstrap-server localhost:9092 --topic test --producer
.config config/kraft/client-user3-sasl.properties
>123
[2024-04-02 15:44:54,688] WARN [Producer clientId=console-producer] Error while fetching metadata with correlation id 1724
4 : {test=TOPIC_AUTHORIZATION_FAILED} (org.apache.kafka.clients.NetworkClient)
[2024-04-02 15:44:54,690] ERROR [Producer clientId=console-producer] Topic authorization failed for topics [test] (org.apa
che.kafka.clients.Metadata)
[2024-04-02 15:44:54,691] ERROR Error when sending message to topic test with key: null, value: 3 bytes with error: (org.a
pache.kafka.clients.producer.internals.ErrorLoggingCallback)
org.apache.kafka.common.errors.TopicAuthorizationException: Not authorized to access topics: [test]
>[2024-04-02 15:44:54,771] ERROR [Producer clientId=console-producer] Topic authorization failed for topics [test] (org.ap
ache.kafka.clients.Metadata)

[2024-04-02 15:45:00,416] WARN [Producer clientId=console-producer] Error while fetching metadata with correlation id 1132
73 : {test=TOPIC_AUTHORIZATION_FAILED} (org.apache.kafka.clients.NetworkClient)
[2024-04-02 15:45:00,416] ERROR [Producer clientId=console-producer] Topic authorization failed for topics [test] (org.apa
che.kafka.clients.Metadata)
[2024-04-02 15:45:00,416] ERROR Error when sending message to topic test with key: null, value: 0 bytes with error: (org.a
pache.kafka.clients.producer.internals.ErrorLoggingCallback)
org.apache.kafka.common.errors.TopicAuthorizationException: Not authorized to access topics: [test]
>
[2024-04-02 15:45:01,325] WARN [Producer clientId=console-producer] Error while fetching metadata with correlation id 1288
47 : {test=TOPIC_AUTHORIZATION_FAILED} (org.apache.kafka.clients.NetworkClient)
[2024-04-02 15:45:01,325] ERROR [Producer clientId=console-producer] Topic authorization failed for topics [test] (org.apa
che.kafka.clients.Metadata)
[2024-04-02 15:45:01,325] ERROR Error when sending message to topic test with key: null, value: 0 bytes with error: (org.a
pache.kafka.clients.producer.internals.ErrorLoggingCallback)
org.apache.kafka.common.errors.TopicAuthorizationException: Not authorized to access topics: [test]
>^C
alex@MacBook-Pro-Alexander kafka %
[alex@MacBook-Pro-Alexander kafka % bin/kafka-console-consumer.sh --bootstrap-server localhost:9092 --topic test --consumer
.config config/kraft/client-user3-sasl.properties -from-beginning
[2024-04-02 15:45:13,850] WARN [Consumer clientId=console-consumer, groupId=console-consumer-72466] Error while fetching m
etadata with correlation id 2 : {test=TOPIC_AUTHORIZATION_FAILED} (org.apache.kafka.clients.NetworkClient)
[2024-04-02 15:45:13,851] ERROR [Consumer clientId=console-consumer, groupId=console-consumer-72466] Topic authorization f
ailed for topics [test] (org.apache.kafka.clients.Metadata)
[2024-04-02 15:45:13,851] ERROR Error processing message, terminating consumer process:  (kafka.tools.ConsoleConsumer$)
org.apache.kafka.common.errors.TopicAuthorizationException: Not authorized to access topics: [test]
Processed a total of 0 messages
```

Дать пользователям права на группу потребителей и выполнить операции от имени пользователей

24. Дать пользователям доступ ко всем группам

```
bin/kafka-acls.sh --bootstrap-server localhost:9092 --add --allow-principal
User:user1 --operation Read --group 'console-consumer-' --command-config
config/kraft/client-sasl.properties --resource-pattern-type prefixed

bin/kafka-acls.sh --bootstrap-server localhost:9092 --add --allow-principal
User:user2 --operation Read --group 'console-consumer-' --command-config
config/kraft/client-sasl.properties --resource-pattern-type prefixed

bin/kafka-acls.sh --bootstrap-server localhost:9092 --add --allow-principal
User:user3 --operation Read --group 'console-consumer-' --command-config
config/kraft/client-sasl.properties --resource-pattern-type prefixed
```

```
[alex@MacBook-Pro-Alexander kafka % bin/kafka-acls.sh --bootstrap-server localhost:9092 --add --allow-principal User:user3
 --operation Read --group 'console-consumer-' --command-config config/kraft/client-sasl.properties --resource-pattern-type
 prefixed
Adding ACLs for resource `ResourcePattern(resourceType=GROUP, name=console-consumer-, patternType=PREFIXED)`:
        (principal=User:user3, host=*, operation=READ, permissionType=ALLOW)

Current ACLs for resource `ResourcePattern(resourceType=GROUP, name=console-consumer-, patternType=PREFIXED)`:
        (principal=User:user1, host=*, operation=READ, permissionType=ALLOW)
        (principal=User:user2, host=*, operation=READ, permissionType=ALLOW)
        (principal=User:user3, host=*, operation=READ, permissionType=ALLOW)

[alex@MacBook-Pro-Alexander kafka % bin/kafka-acls.sh --bootstrap-server localhost:9092 --list --command-config config/kraf
t/client-sasl.properties
Current ACLs for resource `ResourcePattern(resourceType=GROUP, name=console-consumer-, patternType=PREFIXED)`:
        (principal=User:user1, host=*, operation=READ, permissionType=ALLOW)
        (principal=User:user2, host=*, operation=READ, permissionType=ALLOW)
        (principal=User:user3, host=*, operation=READ, permissionType=ALLOW)

Current ACLs for resource `ResourcePattern(resourceType=TOPIC, name=test, patternType=LITERAL)`:
        (principal=User:user2, host=*, operation=READ, permissionType=ALLOW)
        (principal=User:user1, host=*, operation=WRITE, permissionType=ALLOW)

Current ACLs for resource `ResourcePattern(resourceType=GROUP, name=test_group, patternType=LITERAL)`:
        (principal=User:user2, host=*, operation=READ, permissionType=ALLOW)
        (principal=User:user1, host=*, operation=READ, permissionType=ALLOW)
```

25. Выполнить операции от имени пользователя user1

```
bin/kafka-topics.sh --list --bootstrap-server localhost:9092
--command-config config/kraft/client-user1-sasl.properties

bin/kafka-console-producer.sh --bootstrap-server localhost:9092 --topic test
--producer.config config/kraft/client-user1-sasl.properties

bin/kafka-console-consumer.sh --bootstrap-server localhost:9092 --topic test
--consumer.config config/kraft/client-user1-sasl.properties --from-beginning
```

```
alex@MacBook-Pro-Alexander kafka % bin/kafka-topics.sh --list --bootstrap-server localhost:9092 --command-config config/kr
aft/client-user1-sasl.properties
test
alex@MacBook-Pro-Alexander kafka % bin/kafka-console-producer.sh --bootstrap-server localhost:9092 --topic test --producer
.config config/kraft/client-user1-sasl.properties
>message9
>
>^C%
alex@MacBook-Pro-Alexander kafka % bin/kafka-console-consumer.sh --bootstrap-server localhost:9092 --topic test --consumer
.config config/kraft/client-user1-sasl.properties --from-beginning
[2024-04-02 16:07:33,416] WARN [Consumer clientId=console-consumer, groupId=console-consumer-27336] Not authorized to read
 from partition test-1. (org.apache.kafka.clients.consumer.internals.FetchCollector)
[2024-04-02 16:07:33,418] ERROR Error processing message, terminating consumer process:  (kafka.tools.ConsoleConsumer$)
org.apache.kafka.common.errors.TopicAuthorizationException: Not authorized to access topics: [test]
Processed a total of 0 messages
```

26. Выполнить операции от имени пользователя user2

```
bin/kafka-topics.sh --list --bootstrap-server localhost:9092
--command-config config/kraft/client-user2-sasl.properties
```

```
bin/kafka-console-producer.sh --bootstrap-server localhost:9092 --topic test
--producer.config config/kraft/client-user2-sasl.properties

bin/kafka-console-consumer.sh --bootstrap-server localhost:9092 --topic test
--consumer.config config/kraft/client-user2-sasl.properties --from-beginning
```

```
alex@MacBook-Pro-Alexander kafka % bin/kafka-topics.sh --list --bootstrap-server localhost:9092 --command-config config/kr
aft/client-user2-sasl.properties
test
alex@MacBook-Pro-Alexander kafka % bin/kafka-console-producer.sh --bootstrap-server localhost:9092 --topic test --producer
.config config/kraft/client-user2-sasl.properties
>123
[2024-04-02 16:10:50,798] ERROR [Producer clientId=console-producer] Aborting producer batches due to fatal error (org.apa
che.kafka.clients.producer.internals.Sender)
org.apache.kafka.common.errors.ClusterAuthorizationException: Cluster authorization failed.
[2024-04-02 16:10:50,799] ERROR Error when sending message to topic test with key: null, value: 3 bytes with error: (org.a
pache.kafka.clients.producer.internals.ErrorLoggingCallback)
org.apache.kafka.common.errors.ClusterAuthorizationException: Cluster authorization failed.
org.apache.kafka.common.KafkaException: Cannot execute transactional method because we are in an error state
        at org.apache.kafka.clients.producer.internals.TransactionManager.maybeFailWithError(TransactionManager.java:1041)
        at org.apache.kafka.clients.producer.internals.TransactionManager.maybeAddPartition(TransactionManager.java:385)
        at org.apache.kafka.clients.producer.KafkaProducer.doSend(KafkaProducer.java:1063)
        at org.apache.kafka.clients.producer.KafkaProducer.send(KafkaProducer.java:964)
        at kafka.tools.ConsoleProducer$.send(ConsoleProducer.scala:117)
        at kafka.tools.ConsoleProducer$.loopReader(ConsoleProducer.scala:90)
        at kafka.tools.ConsoleProducer$.main(ConsoleProducer.scala:99)
        at kafka.tools.ConsoleProducer.main(ConsoleProducer.scala)
Caused by: org.apache.kafka.common.errors.ClusterAuthorizationException: Cluster authorization failed.
alex@MacBook-Pro-Alexander kafka % bin/kafka-console-consumer.sh --bootstrap-server localhost:9092 --topic test --consumer
.config config/kraft/client-user2-sasl.properties --from-beginning
message1
message2
message3
message4
message5
message6
message7
message8
message9
```

27. Выполнить операции от имени пользователя user3

```
bin/kafka-topics.sh --list --bootstrap-server localhost:9092
--command-config config/kraft/client-user3-sasl.properties

bin/kafka-console-producer.sh --bootstrap-server localhost:9092
--topic test --producer.config
config/kraft/client-user3-sasl.properties

bin/kafka-console-consumer.sh --bootstrap-server localhost:9092
--topic test --consumer.config
config/kraft/client-user3-sasl.properties --from-beginning
```

```
alex@MacBook-Pro-Alexander kafka % bin/kafka-topics.sh --list --bootstrap-server localhost:9092 --command-config config/kr
aft/client-user3-sasl.properties

alex@MacBook-Pro-Alexander kafka % bin/kafka-console-producer.sh --bootstrap-server localhost:9092 --topic test --producer
.config config/kraft/client-user3-sasl.properties
>123
[2024-04-02 16:11:48,762] WARN [Producer clientId=console-producer] Error while fetching metadata with correlation id 2348
6 : {test=TOPIC_AUTHORIZATION_FAILED} (org.apache.kafka.clients.NetworkClient)
[2024-04-02 16:11:48,765] ERROR [Producer clientId=console-producer] Topic authorization failed for topics [test] (org.apa
che.kafka.clients.Metadata)
[2024-04-02 16:11:48,765] ERROR Error when sending message to topic test with key: null, value: 3 bytes with error: (org.a
pache.kafka.clients.producer.internals.ErrorLoggingCallback)
org.apache.kafka.common.errors.TopicAuthorizationException: Not authorized to access topics: [test]
>^C%
alex@MacBook-Pro-Alexander kafka %
alex@MacBook-Pro-Alexander kafka % bin/kafka-console-consumer.sh --bootstrap-server localhost:9092 --topic test --consumer
.config config/kraft/client-user3-sasl.properties --from-beginning
[2024-04-02 16:12:01,281] WARN [Consumer clientId=console-consumer, groupId=console-consumer-26179] Error while fetching m
etadata with correlation id 2 : {test=TOPIC_AUTHORIZATION_FAILED} (org.apache.kafka.clients.NetworkClient)
[2024-04-02 16:12:01,281] ERROR [Consumer clientId=console-consumer, groupId=console-consumer-26179] Topic authorization f
ailed for topics [test] (org.apache.kafka.clients.Metadata)
[2024-04-02 16:12:01,282] ERROR Error processing message, terminating consumer process:  (kafka.tools.ConsoleConsumer$)
org.apache.kafka.common.errors.TopicAuthorizationException: Not authorized to access topics: [test]
Processed a total of 0 messages
alex@MacBook-Pro-Alexander kafka %
```