

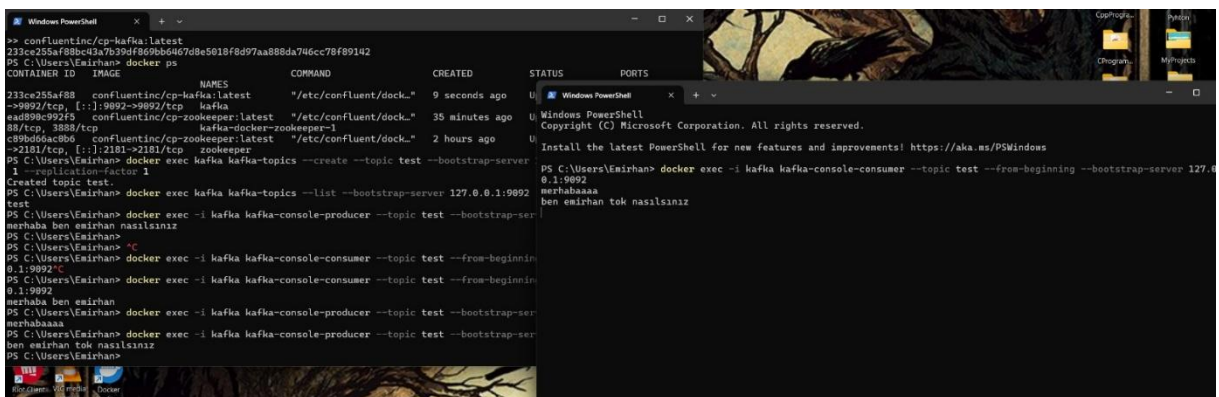
```
PS C:\Users\Emirhan> docker ps
CONTAINER ID   IMAGE                                NAMES      COMMAND                                CREATED        STATUS        PORTS
d338e9d480f    confluentinc/cp-zookeeper:latest   zookeeper  "/etc/confluent/dock..."  15 seconds ago Up 14 seconds 0.0.0.0:2181
->2181/tcp, [::]:2181->2181/tcp
83f92dd25771    confluentinc/cp-kafka:latest       kafka      "/etc/confluent/dock..."  3 minutes ago  Up 3 minutes  0.0.0.0:9092
->9092/tcp, [::]:9092->9092/tcp
PS C:\Users\Emirhan> docker exec kafka kafka-topics --create --topic test --bootstrap-server 127.0.0.1:9092 --partitions
1 --replication-factor 1
Created topic test.
PS C:\Users\Emirhan> docker exec kafka kafka-topics --list --bootstrap-server 127.0.0.1:9092
test
PS C:\Users\Emirhan> docker exec -i kafka kafka-console-producer --topic deneme --bootstrap-server 127.0.0.1:9092
Merhaba ben Toko Bugun staja baslayacagiz
PS C:\Users\Emirhan> docker exec -i kafka kafka-console-producer --topic deneme --bootstrap-server 127.0.0.1:9092
hello world
PS C:\Users\Emirhan> docker ps
CONTAINER ID   IMAGE                                NAMES      COMMAND                                CREATED        STATUS        PORTS
d338e9d480f    confluentinc/cp-zookeeper:latest   zookeeper  "/etc/confluent/dock..."  22 minutes ago Up 22 minutes 0.0.0.0:2181
->2181/tcp, [::]:2181->2181/tcp
83f92dd25771    confluentinc/cp-kafka:latest       kafka      "/etc/confluent/dock..."  25 minutes ago Up 25 minutes  0.0.0.0:9092
->9092/tcp, [::]:9092->9092/tcp
PS C:\Users\Emirhan>
```

```
Run (StudentConsumer) x Run (StudentConsumer) x Run (StudentConsumer) x
--- exec-maven-plugin:3.0.0:exec (default-cli) @StudentConsumer
SLF4J: Failed to load class "org.slf4j.impl.StaticLoggerBinder".
SLF4J: Defaulting to no-operation (NOP) logger implementation.
SLF4J: See http://www.slf4j.org/ for more details.
Mesaj gönderildi: {"id":"61","name":"Toklar Demir"}

BUILD SUCCESS

Total time: 1.166 s
Finished at: 2025-07-01T13:06:52+03:00
```

```
PS C:\Users\Emirhan> docker ps
CONTAINER ID   IMAGE                                NAMES      COMMAND                                CREATED        STATUS        PORTS
233ce255af88    confluentinc/cp-kafka:latest       kafka      "/etc/confluent/dock..."  9 seconds ago  Up 9 seconds  0.0.0.0:9092
->9092/tcp, [::]:9092->9092/tcp
ead890c992f5    confluentinc/cp-zookeeper:latest   zookeeper  "/etc/confluent/dock..."  35 minutes ago Up 35 minutes  2181/tcp, 28
88/tcp, 3888/tcp
c89bd66ac0b6    confluentinc/cp-zookeeper:latest   zookeeper  "/etc/confluent/dock..."  2 hours ago    Up 2 hours    0.0.0.0:2181
->2181/tcp, [::]:2181->2181/tcp
PS C:\Users\Emirhan> docker exec kafka kafka-topics --create --topic test --bootstrap-server 127.0.0.1:9092 --partitions
1 --replication-factor 1
Created topic test.
PS C:\Users\Emirhan> docker exec kafka kafka-topics --list --bootstrap-server 127.0.0.1:9092
test
PS C:\Users\Emirhan> docker exec -i kafka kafka-console-producer --topic test --bootstrap-server 127.0.0.1:9092
merhaba ben emirhan nasilsiniz
PS C:\Users\Emirhan>
PS C:\Users\Emirhan> ^C
PS C:\Users\Emirhan> docker exec -i kafka kafka-console-consumer --topic test --from-beginning --bootstrap-server 127.0.
0.1:9092^C
PS C:\Users\Emirhan> docker exec -i kafka kafka-console-consumer --topic test --from-beginning --bootstrap-server 127.0.
0.1:9092
merhaba ben emirhan
PS C:\Users\Emirhan> docker exec -i kafka kafka-console-producer --topic test --bootstrap-server 127.0.0.1:9092
merhabaaaa
PS C:\Users\Emirhan> docker exec -i kafka kafka-console-producer --topic test --bootstrap-server 127.0.0.1:9092
ben emirhan tok nasilsiniz
PS C:\Users\Emirhan>
```



```
PS C:\Users\Emirhan> docker run -d --name zookeeper -p 2181:2181 confluentinc/cp-zookeeper:latest
```

```
a591e0169bd0efd9cccb30f123e4819dfe8453907d45e58a037fd703ab94e54b
```

```
PS C:\Users\Emirhan> [guid]::NewGuid().ToString()
```

```
5fde378f-a35d-431f-9e17-900a1cdbaf53
```

```
PS C:\Users\Emirhan> docker run -d --name kafka -p 9092:9092 `
```

```
>> -e CLUSTER_ID=5fde378f-a35d-431f-9e17-900a1cdbaf53 `
```

```
>> -e KAFKA_PROCESS_ROLES=broker,controller `
```

```
>> -e KAFKA_NODE_ID=1 `
```

```
>> -e KAFKA_LISTENERS=PLAINTEXT://0.0.0.0:9092,CONTROLLER://0.0.0.0:9093 `
```

```
>> -e KAFKA_ADVERTISED_LISTENERS=PLAINTEXT://127.0.0.1:9092 `
```

```
>> -e KAFKA_CONTROLLER_QUORUM_VOTERS=1@127.0.0.1:9093 `
```

```
>> -e KAFKA_CONTROLLER_LISTENER_NAMES=CONTROLLER `
```

```
>> -e KAFKA_OFFSETS_TOPIC_REPLICATION_FACTOR=1 `
```

```
>> -e KAFKA_LISTENER_SECURITY_PROTOCOL_MAP=CONTROLLER:PLAINTEXT,PLAINTEXT:PLAINTEXT `
```

```
>> confluentinc/cp-kafka:latest
```

```
83f92dd257714c39e76add4bd68caee230a7be6db0c219c5878bc578cb55bd48
```

```
PS C:\Users\Emirhan> docker run -d --name zookeeper -p 2181:2181 -e ZOOKEEPER_CLIENT_PORT=2181 confluentinc/cp-zookeeper:latest
```

```
d330e49c440facdb029ea42e925e2a43077ebee095fc2e3c9cb03d91f45d5298
```

```
PS C:\Users\Emirhan> docker ps
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS
d330e49c440f	confluentinc/cp-zookeeper:latest	"/etc/confluent/dock..."	15 seconds ago	Up 14 seconds	0.0.0.0:2181->2181/tcp, [::]:2181->2181/tcp
83f92dd25771	confluentinc/cp-kafka:latest	"/etc/confluent/dock..."	3 minutes ago	Up 3 minutes	0.0.0.0:9092->9092/tcp, [::]:9092->9092/tcp

```
PS C:\Users\Emirhan> docker exec kafka kafka-topics --create --topic test --bootstrap-server 127.0.0.1:9092 --partitions 1 --replication-factor 1
```

```
Created topic test.
```

```
PS C:\Users\Emirhan> docker exec kafka kafka-topics --list --bootstrap-server 127.0.0.1:9092
```

```
test
```

```
PS C:\Users\Emirhan> docker exec kafka kafka-topics --create --topic deneme --bootstrap-server 127.0.0.1:9092 --partitions 1 --replication-factor 1
```

Created topic deneme.

```
PS C:\Users\Emirhan> docker exec kafka kafka-topics --list --bootstrap-server 127.0.0.1:9092
```

deneme

test

```
PS C:\Users\Emirhan> docker exec -i kafka kafka-console-producer --topic deneme --bootstrap-server 127.0.0.1:9092
```

Merhaba ben Toko Bugun staja baslayacagiz

```
PS C:\Users\Emirhan> docker exec -i kafka kafka-console-producer --topic deneme --bootstrap-server 127.0.0.1:9092
```

hello world

```
PS C:\Users\Emirhan> docker ps
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS
d330e49c440f	confluentinc/cp-zookeeper:latest	"/etc/confluent/dock..."	22 minutes ago	Up 22 minutes	0.0.0.0:2181->2181/tcp, [::]:2181->2181/tcp
83f92dd25771	confluentinc/cp-kafka:latest	"/etc/confluent/dock..."	25 minutes ago	Up 25 minutes	0.0.0.0:9092->9092/tcp, [::]:9092->9092/tcp

```
PS C:\Users\Emirhan>
```

hazelcast

- `docker pull hazelcast/hazelcast:latest` komutu ile Hazelcast imajı indirildi.
- `docker run -d --name hazelcast --net hazelnet -p 5701:5701 hazelcast/hazelcast:latest` komutu ile Hazelcast container'ı başlatıldı.
- `docker pull hazelcast/management-center:latest` ile Management Center imajı indirildi.
- `docker run -d --name hazelcast-mancenter --net hazelnet -p 8080:8080 hazelcast/management-center:latest` komutu ile Management Center container'ı başlatıldı.
- <http://localhost:8080> adresine gidilerek Management Center arayüzü açıldı.
- Cluster'da 1 aktif üye (hazelcast container'ı) görüldü.

```
PS C:\Users\Emirhan> docker pull hazelcast/hazelcast:latest
latest: Pulling from hazelcast/hazelcast
55616a374a54: Pull complete
c6a83fedfae6: Pull complete
216ad42146a9: Pull complete
62e8b27655a8: Pull complete
4f4fb788ef54: Pull complete
8efcd156da8f: Pull complete
Digest: sha256:5dd5d51c7a86e5d832f402eba03556898689ce85796c6b038132e93b7c8d77bd9
Status: Downloaded newer image for hazelcast/hazelcast:latest
docker.io/hazelcast/hazelcast:latest
PS C:\Users\Emirhan> docker run -d --name hazelcast -p 5701:5701 hazelcast/hazelcast:latest
afc7db5f76a5a5d8d420370363c57ac69dcec637191a508397745e26b53d0
PS C:\Users\Emirhan> docker ps
CONTAINER ID   IMAGE                                COMMAND                  CREATED        STATUS        PORTS                               NAMES
afc7db5f76a5   hazelcast/hazelcast:latest          "hz start"              20 seconds ago Up 19 seconds 0.0.0.0:5701->5701/tcp, [::]:5701->5701/tcp   hazelcast
d338e49c448f   confluentinc/cp-zookeeper:latest   "/etc/confluent/dock..." 37 minutes ago Up 37 minutes 0.0.0.0:2181->2181/tcp, [::]:2181->2181/tcp   zookeeper
83f92d25771    confluentinc/cp-kafka:latest        "/etc/confluent/dock..." 40 minutes ago Up 40 minutes 0.0.0.0:9092->9092/tcp, [::]:9092->9092/tcp   kafka
PS C:\Users\Emirhan> docker run --rm -p 8080:8080 --name hazelcast-mancenter hazelcast/management-center:latest
Unable to find image 'hazelcast/management-center:latest' locally
latest: Pulling from hazelcast/management-center
d68e7755d713: Pull complete
61eadfd7855: Pull complete
4f4fb788ef54: Pull complete
28f83c1faede: Pull complete
719fed365262: Pull complete
0accb8d97e70: Pull complete
dc6fb299f6972: Pull complete
fc6fbcb6e68a: Pull complete
Digest: sha256:3e281b9d9fcb6a2cd42328e0b12e987cb831de7b17d885ab02423085e5851f3
Status: Downloaded newer image for hazelcast/management-center:latest
Trying to upgrade H2 in /data
Clean start. Nothing to upgrade
Container support enabled. Using automatic heap sizing. JVM will use up to 80% of the memory limit of the host.
+ exec java -server -Dloader.path=/opt/hazelcast/management-center/bin/user-lib --add-opens java.base/java.lang=ALL-UNNAMED --add-opens java.base/sun.nio.ch=ALL-UNNAMED -Dhazelcast.mc.home=/data -Djava.net.preferIPv4Stack=true -XX:MaxRAMPercentage=80 -cp /opt/hazelcast/management-center/bin/./hazelcast-management-center-5.8.0.jar org.springframework.boot.loader.launch.PropertiesLauncher
2025-07-01 10:20:15.261 [ INFO] [main] [c.h.w.MCApplication]: Starting MCApplication using Java 21.0.7 with PID 1 (/opt/hazelcast/management-center/hazelcast-management-center-5.8.0.jar started by hazelcast in /opt/hazelcast/management-center)
2025-07-01 10:20:15.272 [ INFO] [main] [c.h.w.MCApplication]: No active profile set, falling back to 1 default profile: "default"
2025-07-01 10:20:15.346 [ INFO] [main] [l.lockservice]: Successfully acquired change log lock
2025-07-01 10:20:15.737 [ INFO] [main] [l.util]: UPDATE SUMMARY
2025-07-01 10:20:15.737 [ INFO] [main] [l.util]: Run: 30
2025-07-01 10:20:15.738 [ INFO] [main] [l.util]: Previously run: 0
2025-07-01 10:20:15.738 [ INFO] [main] [l.util]: Filtered out: 0
2025-07-01 10:20:15.738 [ INFO] [main] [l.util]: -----
2025-07-01 10:20:15.738 [ INFO] [main] [l.util]: Total change sets: 30
2025-07-01 10:20:15.739 [ INFO] [main] [l.util]: Update summary generated
2025-07-01 10:20:15.743 [ INFO] [main] [l.lockservice]: Successfully released change log lock
2025-07-01 10:20:15.744 [ INFO] [main] [c.h.w.s.s.i.DisableLoginStrategy]: Login will be disabled for 5 seconds after 3 failed login attempts. For every 3 consecutive failed login attempts, disable period will be multiplied by 10.
2025-07-01 10:20:15.744 [ INFO] [main] [c.h.w.s.i.r.RocksDBLoader]: '/tmp' is used as RocksDB shared library directory
2025-07-01 10:20:15.744 [ INFO] [main] [c.h.w.s.i.r.RocksDBLoader]: '/tmp' is used as RocksDB shared library directory
2025-07-01 10:20:22.770 [ INFO] [main] [c.h.w.MCApplication]: Started MCApplication in 7.966 seconds (process running for 8.816)
2025-07-01 10:20:22.782 [ INFO] [main] [c.h.w.MCApplication]:
```

Burada hazelcast indirildi

HAZELCAST

Management Center

Select Cluster

Cluster Connections

+

Connect Cluster

Quick Links

Cluster Connections

Connecting to Hazelcast Cluster

Connecting to a Cluster from the UI

dev

State:

Safe Members: 1/1

Clients: 0

Stream Processing and SQL

VIEW CLUSTER

Management Center'ın web arayüzü (<http://localhost:8080>) açık ve cluster'ın görünür olduğu sayfa (örneğin "Safe Members: 1/1" yazan ekran)

```
Members [1] {  
    Member [172.17.0.4]:5701 - 62e4796c-fb29-4c55-a2ff-bbf155f76b51  
}
```

```
Tem 01, 2025 2:26:19 ÖS com.hazelcast.client.impl.statistics.ClientStatisticsService  
INFO: Client statistics is enabled with period 5 seconds.  
Person{name='Person 0'}  
Person{name='Person 1'}  
Person{name='Person 2'}  
Person{name='Person 3'}  
Person{name='Person 4'}  
Person{name='Person 5'}  
Person{name='Person 6'}  
Person{name='Person 7'}  
Person{name='Person 8'}  
Person{name='Person 9'}  
Tem 01. 2025 2:26:24 ÖS com.hazelcast.core.LifecycleService
```

```
Windows PowerShell  
Copyright (C) Microsoft Corporation. All rights reserved.  
  
Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows  
  
PS C:\Users\Emirhan> ping 34.42.4.205  
  
Pinging 34.42.4.205 with 32 bytes of data:  
Reply from 34.42.4.205: bytes=32 time=165ms TTL=52  
Reply from 34.42.4.205: bytes=32 time=165ms TTL=52  
Reply from 34.42.4.205: bytes=32 time=165ms TTL=52  
Reply from 34.42.4.205: bytes=32 time=164ms TTL=52  
  
Ping statistics for 34.42.4.205:  
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),  
    Approximate round trip times in milli-seconds:  
        Minimum = 164ms, Maximum = 165ms, Average = 164ms  
PS C:\Users\Emirhan> |
```

```
C:\Users\Emirhan>docker exec -it kafka bash  
[appuser@83f92dd25771 ~]$ kafka-topics --create \  
--bootstrap-server localhost:9092 \  
--replication-factor 1 \  
--partitions 1 \  
--topic example  
Created topic example.  
[appuser@83f92dd25771 ~]$ kafka-topics --list --bootstrap-server localhost:9092  
__consumer_offsets  
deneme  
example  
test  
test-topic  
[appuser@83f92dd25771 ~]$ kafka-console-producer --bootstrap-server localhost:9092 --topic example  
>kafka ornek mesaj 1  
>kafka nerelisin nereden geliyorsun  
>merhaba powershell  
>
```

```
Microsoft Windows [Version 10.0.26100.4351]  
(c) Microsoft Corporation. Tüm hakları saklıdır.  
  
C:\Users\Emirhan>docker exec -it kafka bash  
[appuser@83f92dd25771 ~]$ kafka-console-consumer --bootstrap-server localhost:9092 --topic test-topic --from-beginning  
merhaba kafka  
kafka-console-producer --bootstrap-server localhost:9092 --topic test-topic  
kafka nasılsın  
test mesajıdır  
kafka-console-consumer --bootstrap-server localhost:9092 --topic example --from-beginning  
C:\Users\Emirhan>kafka-console-consumer --bootstrap-server localhost:9092 --topic example --from-beginning  
'kafka-console-consumer' is not recognized as an internal or external command,  
operable program or batch file.  
  
C:\Users\Emirhan>kafka-console-consumer --bootstrap-server localhost:9092 --topic example --from-beginning  
'kafka-console-consumer' is not recognized as an internal or external command,  
operable program or batch file.  
  
C:\Users\Emirhan>docker exec -it kafka bash  
[appuser@83f92dd25771 ~]$ kafka-console-consumer --bootstrap-server localhost:9092 --topic example --from-beginning  
kafka ornek mesaj 1  
kafka nerelisin nnereden geliyorsun  
merhaba powershell  
|
```

```
4 import org.apache.kafka.clients.producer.*;
5
6 import java.util.Properties;
7
8 public class StudentProducer {
9
10     private final static String TOPIC = "java";
11     private final static String BOOTSTRAP_SERVERS = "127.0.0.1:9092";
12
13     public static void main(String[] args) {
14
15         Properties props = new Properties();
16         props.put(ProducerConfig.BOOTSTRAP_SERVERS_CONFIG, BOOTSTRAP_SERVERS);
17         props.put(ProducerConfig.KEY_SERIALIZER_CLASS_CONFIG, "org.apache.kafka.common.serialization.StringSerializer");
18         props.put(ProducerConfig.VALUE_SERIALIZER_CLASS_CONFIG, "org.apache.kafka.common.serialization.StringSerializer");
19
20         KafkaProducer<String, String> producer = new KafkaProducer<>(props);
21         Gson gson = new Gson();
22
23         Student student = new Student(34, "istanbul");
24
25         // Mesajı JSON'a çevir
26         String studentJson = gson.toJson(student);
27
28         ProducerRecord<String, String> record = new ProducerRecord<>(TOPIC, studentJson);
29
30         producer.send(record, (metadata, exception) -> {
31             if (exception == null) {
32                 System.out.println("Mesaj gönderildi: " + record.value());
33             } else {
34                 exception.printStackTrace();
35             }
36         });
37     }
38 }
```

```
Microsoft Windows [Version 10.0.26100.4351]
(c) Microsoft Corporation. Tüm hakları saklıdır.

C:\Users\Emirhan>docker exec -it kafka bash
[appuser@83f92dd25771 ~]$ kafka-console-consumer --bootstrap-server localhost:9092 --topic java --from-beginning
{"id":61,"name":"Toklar"}
{"id":1,"name":"Adana"}
{"id":34,"name":"istanbul"}
```

```
SLF4J: Defaulting to no-operation (NOP) logger implementation
SLF4J: See http://www.slf4j.org/codes.html#StaticLoggerBinder for further details.
Mesaj gönderildi: {"id":34,"name":"istanbul"}
-----
BUILD SUCCESS
-----
Total time: 1.275 s
Finished at: 2025-07-01T17:36:45+03:00
-----
```

Burada netbeans üzerinden gördüğünüz gibi kayıt yapılıyor consumer tarafından dinleniyor producer ın ürettiği obje istemcide görünüyor