/opt/kafka/bin/kafka-topics.sh --zookeeper 10.156.0.12:2181 --list

/opt/kafka/bin/kafka-topics.sh --zookeeper 10.156.0.12:2181 --topic test --create --partitions 3 --replication-factor 3

/opt/kafka/bin/kafka-console-producer.sh --broker-list localhost:9092 --topic test

Hello

world

Since we used replication 3 for the test topic - we will find all our data on all 3 nodes. Check on your node: /tmp/kafka-logs directory

cd /tmp/kafka-logs

You can see the directories that represent the partitions for the topic.

**test-0**

**test-1**

**test-2**

/opt/kafka/bin/kafka-run-class.sh kafka.tools.DumpLogSegments --deep-iteration --print-data-log --files /tmp/kafka-logs/test-0/00000000000000000000.log

Dumping /tmp/kafka-logs/test-0/00000000000000000000.log

Starting offset: 0

baseOffset: 0 lastOffset: 0 count: 1 baseSequence: -1 lastSequence: -1 producerId: -1 producerEpoch: -1 partitionLeaderEpoch: 0 isTransactional: false isControl: false position: 0 CreateTime: 1572280215671 size: 73 magic: 2 compresscodec: NONE crc: 2796885206 isvalid: true

| offset: 0 CreateTime: 1572280215671 keysize: -1 valuesize: 5 sequence: -1 headerKeys: [] **payload: hello**

Dumping /tmp/kafka-logs/test-2/00000000000000000000.log

Starting offset: 0

baseOffset: 0 lastOffset: 0 count: 1 baseSequence: -1 lastSequence: -1 producerId: -1 producerEpoch: -1 partitionLeaderEpoch: 0 isTransactional: false isControl: false position: 0 CreateTime: 1572280217483 size: 73 magic: 2 compresscodec: NONE crc: 16635642 isvalid: true

| offset: 0 CreateTime: 1572280217483 keysize: -1 valuesize: 5 sequence: -1 headerKeys: [] payload: **world**

Partition might be the standard unit of storage in Kafka, but it is not the lowest level of abstraction provided. Each partition is sub-divided into segments. A segment is simply a collection of messages of a partition. Instead of storing all the messages of a partition in a single file (think of the log file analogy again), Kafka splits them into chunks called segments (default size 1GB). Each segment file has segment.log, segment.index and segment.timeindex files.