Kafka is a distributed publish-subscribe messaging solution. It is fast, scalable, and durable as compared to traditional messaging systems. If you think about traditional publish-subscribe messaging system, producers produce/write messages to topic and on another side consumers consume/read messages from this topic. Kafka is designed in a manner where topics can be partitioned and replicated across multiple servers.

1.   Download Kafka from [here](http://kafka.apache.org/downloads.html) (kafka\_2.11-2.0.0) and unzip at your desired location.

2.   Go to **<kafka\_dir>\config\server.properties** file and change log file location property 'log.dirs' as per your environment.

**log.dirs=<kafka\_dir>\kafka-logs**

# A comma separated list of directories under which to store log files

log.dirs=C:\\Users\\Tecmax\\Downloads\\kafka\_2.11-2.0.0\\tmp\\kafka-logs

3.   Go to **<kafka\_dir>\config\zookeeper.properties** file and change data directory location property 'dataDir' as per your environment

**dataDir=<kafka\_dir>\zookeeper**

dataDir=C:\\Users\\Tecmax\\Downloads\\kafka\_2.11-2.0.0\\zookeeper

**Start Zookeeper and Kafka Servers**

Kafka internally uses Zookeeper. If you would like to get more detail on Zookeeper you can refer this [link](https://zookeeper.apache.org/).

First you need to start Zookeeper server. To start it, execute below command:

**<kafka\_dir>\bin\windows\zookeeper-server-start.bat ..\..\config\zookeeper.properties**

Now open another command prompt and start Kafka server:

**<kafka\_dir>\bin\windows\kafka-server-start.bat ..\..\config\server.properties**

**Create Topic**

Now you need to create topic to publish and subscribe messages. To create topic you just need to execute below command. As per below command you will be creating topic 'mytopic' with single partition.

**<kafka\_dir>\bin\windows\kafka-topics.bat --create --zookeeper localhost:2181 --replication-factor 1 --partitions 1 --topic mytopic**

Kafka comes with a command line client that will take input from a file or from standard input and send it out as messages to the Kafka cluster. By default, each line will be sent as a separate message.

Run the producer and then type a few messages into the console to send to the server.

|  |  |
| --- | --- |
| 1  2  3 | **<kafka\_dir>\bin\windows\**kafka-console-producer.bat --broker-list localhost:9092  --topic test  This is a message  This is another message |

Kafka also has a command line consumer that will dump out messages to standard output.

|  |  |
| --- | --- |
| 1  2  3 | **<kafka\_dir>\bin\windows\**kafka-console-consumer.sh --bootstrap-server  localhost:9092 --topic test --from-beginning  This is a message  This is another message |