

1. Installing and Configuring Apache ZooKeeper

Access the site: <https://zookeeper.apache.org/releases.html#download>

1. Access the website: <https://zookeeper.apache.org/releases.html#download>
2. Download the zookeeper-3.4.13.tar.gz file
3. Unzip the file at the root of C:\
4. Enter the C:\zookeeper-3.4.14\conf directory
5. Copy and rename the file 'zoo_sample.cfg' to 'zoo.cfg'
6. Open the file 'zoo.cfg' with notepad and look for the option 'dataDir'
7. Change the dataDir option from: 'dataDir =/tmp /zookeeper' to: 'dataDir=\zookeeper-3.4.14\data', save and close the file
8. Add an environment variable called ZOOKEEPER_HOME = C:\zookeeper-3.4.14\
9. Add to the variable Path % ZOOKEEPER_HOME%\bin;
10. Open a Command Prompt and run: zkserver (this command will start ZooKeeper)

2. Apache Kafka Installation and Configuration

1. Access the website: <https://kafka.apache.org/downloads> and click on the link kafka_2.12-2.1.1.tgz of the option Binary Downloads;
2. Unzip the file at the root of C:\
3. Access the server.properties file which is located in the C:\kafka_2.12-2.1.1\config directory
4. Look for the log.dirs option and replace '=/tmp/kafka-logs' to 'C:\\kafka_2.12-2.1.1\\kafka-logs', save and close the file
5. Open a Command Prompt and navigate to the 'C:\kafka_2.12-2.1.1' directory
6. Run the command: .\bin\windows\kafka-server-start.bat .\config\server.properties
7. Apache Kafka will start

3. Creating the topic

1. Open a Command Prompt and navigate to the 'C:\kafka_2.12-2.1.1\bin\windows\' directory
2. Run the following command to create a topic called productEventTopic

```
kafka-topics.bat --create --zookeeper localhost:2181 --replication-factor 1 --partitions 1 --topic productEventTopic
```

3. A success message will be displayed;