KAFKA

Apache Kafka is an open-source distributed event streaming platform used by thousands of companies for high-performance data pipelines, streaming analytics, data integration, and mission-critical applications

Kafka includes five core apis:

1. The [Producer](https://kafka.apache.org/documentation/#producerapi) API allows applications to send streams of data to topics in the Kafka cluster.
2. The [Consumer](https://kafka.apache.org/documentation/#consumerapi) API allows applications to read streams of data from topics in the Kafka cluster.
3. The [Streams](https://kafka.apache.org/documentation/#streamsapi) API allows transforming streams of data from input topics to output topics.
4. The [Connect](https://kafka.apache.org/documentation/#connectapi) API allows implementing connectors that continually pull from some source system or application into Kafka or push from Kafka into some sink system or application.
5. The [Admin](https://kafka.apache.org/documentation/#adminapi) API allows managing and inspecting topics, brokers, and other Kafka objects.

Download Kafka from: - https://kafka.apache.org/downloads

Step to be followed:

* Start Zookeeper
* Start Kafka
* Create Topic
* Partition Count
* Replication Factor

Default Port

* Zookeeper: 2181
* Kafka : 9092

Commands

* Run zookeeper
  + bin\windows\zookeeper-server-start.bat config\zookeeper.properties
* Run Kafka server:-
  + bin\windows\kafka-server-start.bat config\server.properties
* Create a Topic
  + bin\windows\kafka-topics.bat --bootstrap-server localhost:9092 --create --topic Barcode-Topic --replication-factor 1 --partitions 3
* Display list of topics
  + bin\windows\kafka-topics.bat --bootstrap-server localhost:9092 --list
* Describe topic
  + bin\windows\kafka-topics.bat --bootstrap-server localhost:9092 --describe --topic Barcode-Topic
* Push message to topic
  + bin\windows\kafka-console-producer.bat --broker-list localhost:9092 --topic Barcode-Topic
* Push bulk message to topic
  + bin\windows\kafka-console-producer.bat --broker-list localhost:9092 --topic Barcode-Topic <<file\_path>

Start consumer to consume message from beginning

* bin\windows\kafka-console-consumer.bat --bootstrap-server localhost:9092 --topic Barcode-Topic --from-beginning

