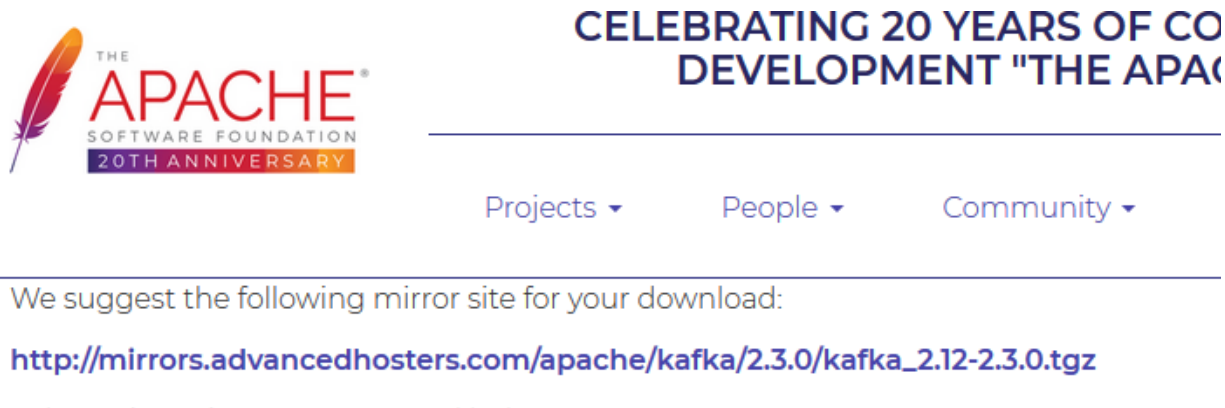
PART 1 – Download & Unzip Binary File

1. Visit ***https://www.apache.org/dyn/closer.cgi?path=/kafka/2.3.0/kafka_2.12-2.3.0.tgz***

2. Click on this shown link in the download web page



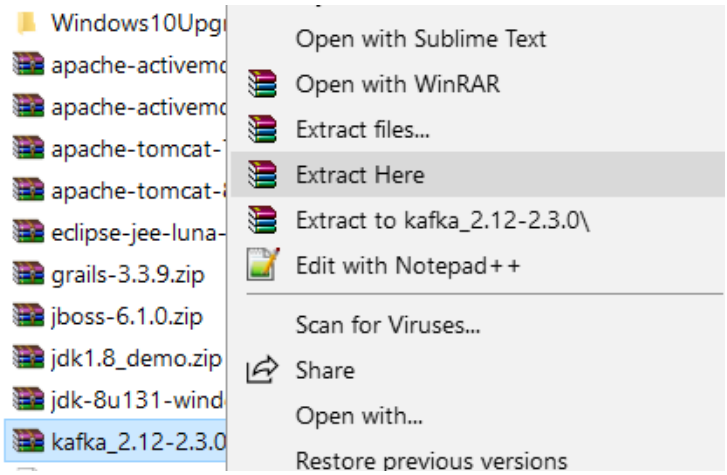
3. Move **"kafka_2.12-2.3.0.tgz"** to C:\

4. You may need WinRAR software to unzip

5. Visit here to download & install **WinRAR** tool

https://www.win-rar.com/download.html?&L=0

6. Right click on **kafka_2.12-2.3.0.tgz** and unzip using WinRAR



7. You will see a folder called **kafka_2.12-2.3.0 in C:**

8. For Windows platform, we need to use command scripts from

C:\kafka_2.12-2.3.0\bin\windows

So, go to this folder

 # cd C:\kafka_2.12-2.3.0 (You can copy/paste this path from Windows Explorer)

PART 2 – Start Servers

9. Start Zookeeper server

ZooKeeper is a centralized service for maintaining configuration information, naming, providing distributed synchronization, and providing group services.

Kafka uses Zookeeper for maintaining heart beats of its nodes, maintain configuration, and most importantly to elect leaders.

```
# bin\windows\zookeeper-server-start.bat config\zookeeper.properties
```

```
Server logs as shown below
```

```
ZooKeeperServer)
[2019-10-23 16:27:36,466] INFO Server environment:java.io.tmpdir=C:\Users\Nanda\AppData\Local\Temp\ (org.apach
r.server.ZooKeeperServer)
[2019-10-23 16:27:36,470] INFO Server environment:java.compiler=<NA> (org.apache.zookeeper.server.ZooKeeperSer
[2019-10-23 16:27:36,471] INFO Server environment:os.name=Windows 10 (org.apache.zookeeper.server.ZooKeeperSer
[2019-10-23 16:27:36,472] INFO Server environment:os.arch=amd64 (org.apache.zookeeper.server.ZooKeeperServer)
[2019-10-23 16:27:36,473] INFO Server environment:os.version=10.0 (org.apache.zookeeper.server.ZooKeeperServer
[2019-10-23 16:27:36,474] INFO Server environment:user.name=Nanda (org.apache.zookeeper.server.ZooKeeperServer
[2019-10-23 16:27:36,474] INFO Server environment:user.home=C:\Users\Nanda (org.apache.zookeeper.server.ZooKee

[2019-10-23 16:27:36,475] INFO Server environment:user.dir=C:\kafka_2.12-2.3.0 (org.apache.zookeeper.server.Zo
ver)
[2019-10-23 16:27:36,488] INFO tickTime set to 3000 (org.apache.zookeeper.server.ZooKeeperServer)
[2019-10-23 16:27:36,489] INFO minSessionTimeout set to -1 (org.apache.zookeeper.server.ZooKeeperServer)
[2019-10-23 16:27:36,490] INFO maxSessionTimeout set to -1 (org.apache.zookeeper.server.ZooKeeperServer)
[2019-10-23 16:27:36,608] INFO Using org.apache.zookeeper.server.NIOServerCnxnFactory as server connection fac
apache.zookeeper.server.ServerCnxnFactory)
[2019-10-23 16:27:36,623] INFO binding to port 0.0.0.0/0.0.0.0:2181 (org.apache.zookeeper.server.NIOServerCnxn
```

10. Open another CMD prompt and cd to **C:\kafka_2.12-2.3.0** folder

11. Start Kafka Server as shown below:

 # bin\windows\kafka-server-start.bat config\server.properties

Observe logs as shown below:

```
[2019-10-23 16:32:16,292] INFO [Transaction Marker Channel Manager 0]: Starting (kafka.coordinator.transaction.T
onMarkerChannelManager)
[2019-10-23 16:32:16,292] INFO [TransactionCoordinator id=0] Startup complete. (kafka.coordinator.transaction.Tr
nCoordinator)
[2019-10-23 16:32:16,382] INFO [/config/changes-event-process-thread]: Starting (kafka.common.ZkNodeChangeNotifi
stener$ChangeEventProcessThread)
[2019-10-23 16:32:16,411] INFO [SocketServer brokerId=0] Started data-plane processors for 1 acceptors (kafka.ne
cketServer)
[2019-10-23 16:32:16,431] INFO Kafka version: 2.3.0 (org.apache.kafka.common.utils.AppInfoParser)
[2019-10-23 16:32:16,449] INFO Kafka commitId: fc1aaa116b661c8a (org.apache.kafka.common.utils.AppInfoParser)
[2019-10-23 16:32:16,451] INFO Kafka startTimeMs: 1571862736414 (org.apache.kafka.common.utils.AppInfoParser)
[2019-10-23 16:32:16,480] INFO [KafkaServer id=0] started (kafka.server.KafkaServer)
```

11. Let's create a topic named "test" with a single partition and only one replica:

```
> bin\windows\kafka-topics.bat --create --bootstrap-server localhost:9092 --replication-factor 1 --partitions 1 --topic test
```

We can now see that topic if we run the list topic command:

```
> bin\windows\kafka-topics.bat --list --bootstrap-server localhost:9092
test
```

Alternatively, instead of manually creating topics you can also configure your brokers to auto-create topics when a non-existent topic is published to.

12. Send some messages

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.

```
> bin\windows\kafka-console-producer.bat --broker-list localhost:9092 --topic test
This is a message
This is another message
```

13. Start a consumer

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

```
> bin\windows\kafka-console-consumer.bat --bootstrap-server localhost:9092 --topic test --from-beginning
This is a message
This is another message
```

If you have each of the above commands running in a different terminal then you should now be able to type messages into the producer terminal and see them appear in the consumer terminal.

All of the command line tools have additional options; running the command with no arguments will display usage information documenting them in more detail.

14. Type few more messages in Producer window

See that consumer get those messages

15. Start ANOTHER consumer

Open another CMD prompt

```
> bin\windows\kafka-console-consumer.bat --bootstrap-server localhost:9092 --topic test --from-beginning
This is a message
This is another message
```

16. Type few more messages in Producer window

See that both the consumers get those messages