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**Zookeeper Installation and setup:**

Download the apache zookeeper tar file from below link:

[**https://archive.apache.org/dist/zookeeper/zookeeper-3.8.1/apache-zookeeper-3.8.1-bin.tar.gz**](https://archive.apache.org/dist/zookeeper/zookeeper-3.8.1/apache-zookeeper-3.8.1-bin.tar.gz)

Once tar file is downloaded follow below steps:

1. **Extract the tar file.**
2. **Go inside zoo.cfg file and make below changes:**

admin.serverPort=8090

4lw.commands.whitelist=\*

1. The admin. serverPort is for the port of admin because by default admin port is 8080 and in our local system 8080 is assigned to Jenkins so it will throw error hence, we have changed it.
2. 4lw is for enabling the 4 letter words such as stats dumps etc.
3. Now to run a zookeeper server we will run below command:

bin/zkServer.sh start-foreground

If we want to run it in background, we can use below command:

bin/zkServer.sh start

1. To verify if zookeeper server is running or not we can use below command:

echo stat | nc localhost 2181

**Kafka Installation and setup:**

For Kafka installation we need only binary files which we can download from below link:

<https://downloads.apache.org/kafka/3.4.0/kafka_2.13-3.4.0.tgz>

Above binary is for latest stable version of Kafka.

Once binary is downloaded follow below steps:

1. Extract Kafka files.

2. go inside extracted files --> kafka\_2.13-3.4.0\config\server.properties and make required changes:

broker.id=1 (give unique broker\_id by default it is 0)

listeners=PLAINTEXT://localhost:9092 (uncomment this by default it is commented. and give our host name eg. localhost)

check zookeeper.connect=localhost:2181

3. To start broker in foreground:

bin/kafka-server-start.sh config/server.properties (It requires server.properties file to run so we have provided the path of that file.)

4. To check how many brokers are running and conneted to zookeeper:

echo dump | nc localhost 2181 | grep brokers

5. To stop the broker:

bin/kafka-server-stop.sh

6. To start broker in daemon mode:

bin/kafka-server-start.sh -daemon config/server.properties