

Résumé des Commandes - Compte Rendu Lab3 Apache Kafka

1. Installation et Démarrage de Kafka

- `docker start hadoop-master hadoop-slave1 hadoop-slave2`
- `docker exec -it hadoop-master bash`
- `./start-hadoop.sh`
- `./start-kafka-zookeeper.sh`
- `jps`

2. Première Utilisation d'Apache Kafka

- `kafka-topics.sh --create --bootstrap-server localhost:9092 --replication-factor 1 --partitions 1 --topic Hello-Kafka`
- `kafka-topics.sh --list --bootstrap-server localhost:9092`
- `kafka-topics.sh --describe --topic Hello-Kafka --bootstrap-server localhost:9092`
- `kafka-console-producer.sh --bootstrap-server localhost:9092 --topic Hello-Kafka`
- `kafka-console-consumer.sh --bootstrap-server localhost:9092 --topic Hello-Kafka --from-beginning`

3. Application Kafka (Producer/Consumer Java)

- `mvn clean package`
- `java -jar kafka-producer-app-jar-with-dependencies.jar Hello-Kafka`
- `java -jar kafka-consumer-app-jar-with-dependencies.jar Hello-Kafka`

4. Kafka Connect (Pipeline Source/Sink)

- `echo "plugin.path=/usr/local/kafka/libs/" >> $KAFKA_HOME/config/connect-standalone.properties`
- `kafka-topics.sh --create --bootstrap-server localhost:9092 --replication-factor 1 --partitions 1 --topic connect-topic`
- `echo "Bonjour Kafka" > /tmp/test-source.txt`
- `cat /tmp/test-source.txt`
- `$KAFKA_HOME/bin/connect-standalone.sh \`
- `$KAFKA_HOME/config/connect-standalone.properties \`
- `$KAFKA_HOME/config/connect-file-source.properties \`
- `$KAFKA_HOME/config/connect-file-sink.properties`
- `cat /tmp/test-sink.txt`

5. Application WordCount (Kafka Streams)

- `kafka-topics.sh --create --bootstrap-server localhost:9092 --replication-factor 1 --partitions 1 --topic input-topic`
- `kafka-topics.sh --create --bootstrap-server localhost:9092 --replication-factor 1 --partitions 1 --topic output-topic`

- `java -jar kafka-wordcount-app-jar-with-dependencies.jar input-topic output-topic`
- `kafka-console-producer.sh --bootstrap-server localhost:9092 --topic input-topic`
- `kafka-console-consumer.sh --bootstrap-server localhost:9092 --topic output-topic --from-beginning --property print.key=true`

6. Cluster Kafka Multi-Brokers

- `cp server.properties server-one.properties`
- `cp server.properties server-two.properties`
- `mkdir -p /tmp/kafka-logs-1`
- `mkdir -p /tmp/kafka-logs-2`
- `kafka-server-start.sh $KAFKA_HOME/config/server-one.properties`
- `kafka-server-start.sh $KAFKA_HOME/config/server-two.properties`
- `kafka-topics.sh --create --bootstrap-server localhost:9092 --replication-factor 2 --partitions 2 --topic WordCount-Topic`