# KAFKA TUTORIAL: USING KAFKA FROM THE COMMAND LINE

May 13, 2017

If you are not sure what Kafka is, start here "What is Kafka?" (http://cloudurable.com/blog/what-is-kafka/index.html).

# Getting started with Kafka tutorial

Let's show a simple example using producers and consumers from the Kafka command line.

Download Kafka 0.10.2.x from the Kafka download page (https://kafka.apache.org/downloads). Later versions will likely work, but this was example was done with 0.10.2.x.

We assume that you have Java SDK 1.8.x installed.

We unzipped the Kafka download and put it in `~/kafka-training/`, and then renamed the Kafka install folder to `kafka`. Please do the same.

Next, we are going to run *ZooKeeper* and then run *Kafka Server/Broker*. We will use some Kafka command line utilities, to create Kafka topics, send messages via a producer and consume messages from the command line.

## Run ZooKeeper for Kafka

Kafka relies on ZooKeeper. To keep things simple, we will use a single ZooKeeper node.

Kafka provides a startup script for ZooKeeper called `zookeeper-server-start.sh` which is located at `~/kafka-training/kafka/bin/zookeeper-server-start.sh`.

The Kafka distribution also provide a ZooKeeper config file which is setup to run single node.

To run ZooKeeper, we create this script in `kafka-training` and run it.

## ~/kafka-training/run-zookeeper.sh

```
#!/usr/bin/env bash
cd ~/kafka-training

kafka/bin/zookeeper-server-start.sh \
    kafka/config/zookeeper.properties
```

## Run run-zookeeper.sh

```
~/kafka-training
$ ./run-zookeeper.sh
```

Wait about 30 seconds or so for ZooKeeper to startup.

# Run Kafka Server

Kafka also provides a startup script for the Kafka server (http://cloudurable.com/blog/kafka-broker-startup/index.html) called `kafka-server-start.sh` which is located at `~/kafka-training/kafka/bin/kafka-server-start.sh`.

The Kafka distribution also provide a Kafka config file which is setup to run Kafka single node, and points to ZooKeeper running on `localhost:2181`.

To run Kafka, we create this script in `kafka-training` and run it in another terminal window.

## ~/kafka-training/run-kafka.sh

```
#!/usr/bin/env bash
cd ~/kafka-training

kafka/bin/kafka-server-start.sh \
    kafka/config/server.properties
```

### Run run-kafka.sh

```
~/kafka-training
$ ./run-kafka.sh
```

Wait about 30 seconds or so for Kafka to startup.

Now let's create the topic that we will send records on.

# Create Kafka Topic

Kafka also provides a utility to work with topics called `kafka-topics.sh` which is located at `~/kafka-training/kafka/bin/kafka-topics.sh`.

We will use this tool to create a topic called `my-topic` with a replication factor of 1 since we only have one server. We will use thirteen partitions for `my-topic`, which means we could have up to 13 Kafka consumers.

To run Kafka, create this script in `kafka-training\lab1`, and run it in another terminal window.

> Cloudurable provides Kafka training (http://cloudurable.com/kafka-training/index.html), Kafka consulting (http://cloudurable.com/kafka-aws-consulting/index.html), Kafka support (http://cloudurable.com/subscription_support/index.html) and helps setting up Kafka clusters in AWS (http://cloudurable.com/services/index.html).

### ~/kafka-training/lab1/create-topic.sh

```
#!/usr/bin/env bash

cd ~/kafka-training

# Create a topic
kafka/bin/kafka-topics.sh --create \
  --zookeeper localhost:2181 \
  --replication-factor 1 --partitions 13 \
  --topic my-topic
```

## Run create-topic.sh

```
~/kafka-training/lab1

$ ./create-topic.sh

Created topic "my-topic".
```

Notice we created a topic called `my-topic` .

## List Topics

You can see which topics that Kafka is managing using `kafka-topics.sh` as follows.

Create the file in `~/kafka-training/lab1/list-topics.sh` . and run it.

### ~/kafka-training/lab1/list-topics.sh

```
#!/usr/bin/env bash

cd ~/kafka-training

# List existing topics
kafka/bin/kafka-topics.sh --list \
    --zookeeper localhost:2181
```

Notice that we have to specify the location of the ZooKeeper cluster node which is running on `localhost` port `2181`.

## Run list-topics.sh

```
~/kafka-training/lab1
$ ./list-topics.sh
__consumer_offsets
_schemas
my-example-topic
my-example-topic2
my-topic
new-employees
```

You can see the topic `my-topic` in the list of topics.

## Run Kafka Producer Console

The Kafka distribution provides a command utility to send messages from the command line. It start up a terminal window where everything you type is sent to the Kafka topic.

Kafka provides the utility `kafka-console-producer.sh` which is located at `~/kafka-training/kafka/bin/kafka-console-producer.sh` to send messages to a topic on the command line.

Create the file in `~/kafka-training/lab1/start-producer-console.sh` and run it.

## ~/kafka-training/lab1/start-producer-console.sh

```bash
#!/usr/bin/env bash
cd ~/kafka-training

kafka/bin/kafka-console-producer.sh \
    --broker-list localhost:9092 \
    --topic my-topic
```

Notice that we specify the Kafka node which is running at `localhost:9092`.

## Run start-producer-console.sh and send at least four messages

```
~/kafka-training/lab1
$ ./start-producer-console.sh
This is message 1
This is message 2
This is message 3
Message 4
Message 5
```

In order to see these messages, we will need to run the consumer console.

## Run Kafka Consumer Console

The Kafka distribution provides a command utility to see messages from the command line. It displays the messages in various modes.

Kafka provides the utility `kafka-console-consumer.sh` which is located at `~/kafka-training/kafka/bin/kafka-console-producer.sh` to receive messages from a topic on the command line.

Create the file in `~/kafka-training/lab1/start-consumer-console.sh` and run it.

## ~/kafka-training/lab1/start-producer-console.sh

```bash
#!/usr/bin/env bash
cd ~/kafka-training

kafka/bin/kafka-console-consumer.sh \
    --bootstrap-server localhost:9092 \
    --topic my-topic \
    --from-beginning
```

Notice that we specify the Kafka node which is running at `localhost:9092` like we did before, but we also specify to read all of the messages from `my-topic` from the beginning `--from-beginning` .

## Run start-consumer-console.sh in another terminal

```
~/kafka-training/lab1
$ ./start-consumer-console.sh
Message 4
This is message 2
This is message 1
This is message 3
Message 5
Message 6
Message 7
```

Notice that the messages are not coming in order. This is because we only have one consumer so it is reading the messages from all 13 partitions. Order is only guaranteed within a partition.

# Review of using Kafka from the command line

## What server do you run first?

You need to run ZooKeeper than Kafka.

## What tool do you use to create a topic?

kafka-topics.sh

## What tool do you use to see topics?

kafka-topics.sh

## What tool did we use to send messages on the command line?

kafka-console-producer.sh

## What tool did we use to view messages in a topic?

kafka-console-consumer.sh

## Why were the messages coming out of order?

The messages were being sharded among 13 partitions.

## How could we get the messages to come in order from the consumer?

We could use only one partition or start up 13 consumers.

# More about Kafka

To learn about Kafka see Kafka architecture (http://cloudurable.com/blog/kafka-architecture/index.html), Kafka topic architecture (http://cloudurable.com/blog/kafka-architecture-topics/index.html) and Kafka producer architecture (http://cloudurable.com/blog/kafka-architecture-producers/index.html).

## Related content

- What is Kafka? (http://cloudurable.com/blog/what-is-kafka/index.html)
- Kafka Architecture (http://cloudurable.com/blog/kafka-architecture/index.html)
- Kafka Topic Architecture (http://cloudurable.com/blog/kafka-architecture-topics/index.html)
- Kafka Consumer Architecture (http://cloudurable.com/blog/kafka-architecture-consumers/index.html)
- Kafka Producer Architecture (http://cloudurable.com/blog/kafka-architecture-producers/index.html)

- Kafka Architecture and low level design (http://cloudurable.com/blog/kafka-architecture-low-level/index.html)
- Kafka and Schema Registry (http://cloudurable.com/blog/kafka-avro-schema-registry/index.html)
- Kafka and Avro (http://cloudurable.com/blog/avro/index.html)
- Kafka Ecosystem (http://cloudurable.com/blog/kafka-ecosystem/index.html)
- Kafka vs. JMS (http://cloudurable.com/blog/kafka-vs-jms/index.html)
- Kafka versus Kinesis (http://cloudurable.com/blog/kinesis-vs-kafka/index.html)
- Kafka Tutorial: Using Kafka from the command line (http://cloudurable.com/blog/kafka-tutorial-kafka-from-command-line/index.html)
- Kafka Tutorial: Kafka Broker Failover and Consumer Failover (http://cloudurable.com/blog/kafka-tutorial-kafka-failover-kafka-cluster/index.html)
- Kafka Tutorial (http://cloudurable.com/ppt/kafka-tutorial-cloudruable-v2.pdf)
- Kafka Tutorial: Writing a Kafka Producer example in Java (http://cloudurable.com/blog/kafka-tutorial-kafka-producer/index.html)
- Kafka Tutorial: Writing a Kafka Consumer example in Java (http://cloudurable.com/blog/kafka-tutorial-kafka-consumer/index.html)
- Kafka Architecture: Log Compaction (http://cloudurable.com/blog/kafka-architecture-log-compaction/index.html)

## About Cloudurable

We hope you enjoyed this article. Please provide feedback (http://cloudurable.com/contact/index.html). Cloudurable provides Kafka training (http://cloudurable.com/kafka-training/index.html), Kafka consulting (http://cloudurable.com/kafka-aws-consulting/index.html), Kafka support (http://cloudurable.com/subscription_support/index.html) and helps setting up Kafka clusters in AWS (http://cloudurable.com/services/index.html).

Check out our new GoLang course. We provide onsite Go Lang training which is instructor led (http://cloudurable.com/golang-onsite-instructor-led-training/index.html).

 Share          Tweet

                                        Like  49      Share

## SEARCH

| Search | 🔍 |

## SHARE

   Tweet

 Share
facebook

49
Like
Share

## FOLLOW

Follow @cloudurable

in Follow
64

facebook

## CATEGORIES

amazon-ebs (1) (http://cloudurable.com/categories/amazon-ebs/index.html)

amazon-ec2 (1) (http://cloudurable.com/categories/amazon-ec2/index.html)

amazon-vpc (1) (http://cloudurable.com/categories/amazon-vpc/index.html)

ansible (4) (http://cloudurable.com/categories/ansible/index.html)

avro (2) (http://cloudurable.com/categories/avro/index.html)

aws (4) (http://cloudurable.com/categories/aws/index.html)

aws-cassandra (6) (http://cloudurable.com/categories/aws-cassandra/index.html)

aws-command-line (1) (http://cloudurable.com/categories/aws-command-line/index.html)

cassandra (12) (http://cloudurable.com/categories/cassandra/index.html)

cassandra-aws (3) (http://cloudurable.com/categories/cassandra-aws/index.html)

cassandra-cluster (1) (http://cloudurable.com/categories/cassandra-cluster/index.html)

cassandra-database (2) (http://cloudurable.com/categories/cassandra-database/index.html)

cassandra-training (5) (http://cloudurable.com/categories/cassandra-training/index.html)

cassandra-tutorial (5) (http://cloudurable.com/categories/cassandra-tutorial/index.html)

cloud (4) (http://cloudurable.com/categories/cloud/index.html)

cloudformation (1) (http://cloudurable.com/categories/cloudformation/index.html)

cloudurable (15) (http://cloudurable.com/categories/cloudurable/index.html)

cluster (1) (http://cloudurable.com/categories/cluster/index.html)

devops (16) (http://cloudurable.com/categories/devops/index.html)

ebs (3) (http://cloudurable.com/categories/ebs/index.html)

ec2 (1) (http://cloudurable.com/categories/ec2/index.html)

kafka (13) (http://cloudurable.com/categories/kafka/index.html)

kafka-advanced-consumers (1) (http://cloudurable.com/categories/kafka-advanced-consumers/index.html)

kafka-architecture (13) (http://cloudurable.com/categories/kafka-architecture/index.html)

kafka-avro-serialization (1) (http://cloudurable.com/categories/kafka-avro-serialization/index.html)

kafka-consulting (2) (http://cloudurable.com/categories/kafka-consulting/index.html)

kafka-consumer (1) (http://cloudurable.com/categories/kafka-consumer/index.html)

kafka-consumers (1) (http://cloudurable.com/categories/kafka-consumers/index.html)

kafka-ecosystem (1) (http://cloudurable.com/categories/kafka-ecosystem/index.html)

kafka-schema-registry (1) (http://cloudurable.com/categories/kafka-schema-registry/index.html)

kafka-training (23) (http://cloudurable.com/categories/kafka-training/index.html)

kafka-tutorial (20) (http://cloudurable.com/categories/kafka-tutorial/index.html)

kaka-replication (1) (http://cloudurable.com/categories/kaka-replication/index.html)

kinesis (1) (http://cloudurable.com/categories/kinesis/index.html)

kinesis-consulting (1) (http://cloudurable.com/categories/kinesis-consulting/index.html)

linux (1) (http://cloudurable.com/categories/linux/index.html)

metricsd (1) (http://cloudurable.com/categories/metricsd/index.html)

microservices (3) (http://cloudurable.com/categories/microservices/index.html)

nodetool (1) (http://cloudurable.com/categories/nodetool/index.html)

schema-registry (1) (http://cloudurable.com/categories/schema-registry/index.html)

smack (3) (http://cloudurable.com/categories/smack/index.html)

spark (3) (http://cloudurable.com/categories/spark/index.html)

spark--cassandra (1) (http://cloudurable.com/categories/spark--cassandra/index.html)

spark--kafka (1) (http://cloudurable.com/categories/spark--kafka/index.html)

spark-training (3) (http://cloudurable.com/categories/spark-training/index.html)

spark-tutorial (3) (http://cloudurable.com/categories/spark-tutorial/index.html)

ssh (1) (http://cloudurable.com/categories/ssh/index.html)

ssh-config (1) (http://cloudurable.com/categories/ssh-config/index.html)

ssl (1) (http://cloudurable.com/categories/ssl/index.html)

systemd (1) (http://cloudurable.com/categories/systemd/index.html)

tls (1) (http://cloudurable.com/categories/tls/index.html)

vagrant (5) (http://cloudurable.com/categories/vagrant/index.html)

## TAGS

🏷 **AKKA (HTTP://CLOUDURABLE.COM/TAGS/AKKA/INDEX.HTML)**

🏷 **AKKA-CONSULTING (HTTP://CLOUDURABLE.COM/TAGS/AKKA-CONSULTING/INDEX.HTML)**

🏷 **AMAZON-EBS (HTTP://CLOUDURABLE.COM/TAGS/AMAZON-EBS/INDEX.HTML)**

🏷 **AMAZON-EC2 (HTTP://CLOUDURABLE.COM/TAGS/AMAZON-EC2/INDEX.HTML)**

🏷 **AMI (HTTP://CLOUDURABLE.COM/TAGS/AMI/INDEX.HTML)**  🏷 **ANSIBLE (HTTP://CLOUDURABLE.COM/TAGS/ANSIBLE/INDEX.HTML)**

🏷 **AVRO (HTTP://CLOUDURABLE.COM/TAGS/AVRO/INDEX.HTML)**

🏷 **AVRO-KAFKA (HTTP://CLOUDURABLE.COM/TAGS/AVRO-KAFKA/INDEX.HTML)**

🏷 **AWS (HTTP://CLOUDURABLE.COM/TAGS/AWS/INDEX.HTML)**

🏷 **AWS-CASSANDRA (HTTP://CLOUDURABLE.COM/TAGS/AWS-CASSANDRA/INDEX.HTML)**

🏷 **AWS-COMMAND-LINE (HTTP://CLOUDURABLE.COM/TAGS/AWS-COMMAND-LINE/INDEX.HTML)**

🏷 **CASSANDRA (HTTP://CLOUDURABLE.COM/TAGS/CASSANDRA/INDEX.HTML)**

🏷 **CASSANDRA-ARCHITECTURE (HTTP://CLOUDURABLE.COM/TAGS/CASSANDRA-ARCHITECTURE/INDEX.HTML)**

🏷 **CASSANDRA-AWS (HTTP://CLOUDURABLE.COM/TAGS/CASSANDRA-AWS/INDEX.HTML)**

🏷 **CASSANDRA-CLOUD (HTTP://CLOUDURABLE.COM/TAGS/CASSANDRA-CLOUD/INDEX.HTML)**

🏷 **CASSANDRA-CLUSTER (HTTP://CLOUDURABLE.COM/TAGS/CASSANDRA-CLUSTER/INDEX.HTML)**

🏷 **CASSANDRA-DATABASE (HTTP://CLOUDURABLE.COM/TAGS/CASSANDRA-DATABASE/INDEX.HTML)**

🏷 **CASSANDRA-DBA (HTTP://CLOUDURABLE.COM/TAGS/CASSANDRA-DBA/INDEX.HTML)**

🏷 **CASSANDRA-DEVOPS (HTTP://CLOUDURABLE.COM/TAGS/CASSANDRA-DEVOPS/INDEX.HTML)**

🏷 **CASSANDRA-OS-SYSTEM-MEMORY (HTTP://CLOUDURABLE.COM/TAGS/CASSANDRA-OS-SYSTEM-MEMORY/INDEX.HTML)**

🏷 **CASSANDRA-TRAINING (HTTP://CLOUDURABLE.COM/TAGS/CASSANDRA-TRAINING/INDEX.HTML)**

🏷 **CASSANDRA-TUTORIAL (HTTP://CLOUDURABLE.COM/TAGS/CASSANDRA-TUTORIAL/INDEX.HTML)**

🏷 **CLOUD (HTTP://CLOUDURABLE.COM/TAGS/CLOUD/INDEX.HTML)**

🏷 **CLOUDFORMATION (HTTP://CLOUDURABLE.COM/TAGS/CLOUDFORMATION/INDEX.HTML)**

🏷 **CLOUDFORMATION-TUTORIAL (HTTP://CLOUDURABLE.COM/TAGS/CLOUDFORMATION-TUTORIAL/INDEX.HTML)**

🏷 **CLOUDURABLE (HTTP://CLOUDURABLE.COM/TAGS/CLOUDURABLE/INDEX.HTML)**

🏷 **CLUSTER (HTTP://CLOUDURABLE.COM/TAGS/CLUSTER/INDEX.HTML)**

🏷 **COMPUTE (HTTP://CLOUDURABLE.COM/TAGS/COMPUTE/INDEX.HTML)**

🏷 **CONSUMERS (HTTP://CLOUDURABLE.COM/TAGS/CONSUMERS/INDEX.HTML)**

🏷 **DBA (HTTP://CLOUDURABLE.COM/TAGS/DBA/INDEX.HTML)**	🏷 **DEVOPS (HTTP://CLOUDURABLE.COM/TAGS/DEVOPS/INDEX.HTML)**

🏷 **EBS (HTTP://CLOUDURABLE.COM/TAGS/EBS/INDEX.HTML)**	🏷 **EC2 (HTTP://CLOUDURABLE.COM/TAGS/EC2/INDEX.HTML)**

🏷 **EC2-INSTANCE-STORE (HTTP://CLOUDURABLE.COM/TAGS/EC2-INSTANCE-STORE/INDEX.HTML)**

🏷 **ECU (HTTP://CLOUDURABLE.COM/TAGS/ECU/INDEX.HTML)**	🏷 **FAILOVER (HTTP://CLOUDURABLE.COM/TAGS/FAILOVER/INDEX.HTML)**

🏷 **IMAGES (HTTP://CLOUDURABLE.COM/TAGS/IMAGES/INDEX.HTML)**

🏷 **INSTANCES (HTTP://CLOUDURABLE.COM/TAGS/INSTANCES/INDEX.HTML)**	🏷 **JMS (HTTP://CLOUDURABLE.COM/TAGS/JMS/INDEX.HTML)**

🏷 **KAFKA (HTTP://CLOUDURABLE.COM/TAGS/KAFKA/INDEX.HTML)**

🏷 **KAFKA-ADVANCED-CONSUMERS (HTTP://CLOUDURABLE.COM/TAGS/KAFKA-ADVANCED-CONSUMERS/INDEX.HTML)**

🏷 **KAFKA-ADVANCED-PRODUCERS (HTTP://CLOUDURABLE.COM/TAGS/KAFKA-ADVANCED-PRODUCERS/INDEX.HTML)**

🏷 **KAFKA-ARCHITECTURE (HTTP://CLOUDURABLE.COM/TAGS/KAFKA-ARCHITECTURE/INDEX.HTML)**

🏷 **KAFKA-AVRO (HTTP://CLOUDURABLE.COM/TAGS/KAFKA-AVRO/INDEX.HTML)**

🏷 **KAFKA-CONNECT (HTTP://CLOUDURABLE.COM/TAGS/KAFKA-CONNECT/INDEX.HTML)**

🏷 **KAFKA-CONSULTING (HTTP://CLOUDURABLE.COM/TAGS/KAFKA-CONSULTING/INDEX.HTML)**

🏷 **KAFKA-CONSUMERS (HTTP://CLOUDURABLE.COM/TAGS/KAFKA-CONSUMERS/INDEX.HTML)**

🏷 **KAFKA-CONSUMERS-ADVANCED (HTTP://CLOUDURABLE.COM/TAGS/KAFKA-CONSUMERS-ADVANCED/INDEX.HTML)**

🏷 **KAFKA-ECOSYSTEM (HTTP://CLOUDURABLE.COM/TAGS/KAFKA-ECOSYSTEM/INDEX.HTML)**

🏷 **KAFKA-LOG-COMPACTION (HTTP://CLOUDURABLE.COM/TAGS/KAFKA-LOG-COMPACTION/INDEX.HTML)**

🏷 **KAFKA-REST-PROXY (HTTP://CLOUDURABLE.COM/TAGS/KAFKA-REST-PROXY/INDEX.HTML)**

🏷 **KAFKA-STREAMS (HTTP://CLOUDURABLE.COM/TAGS/KAFKA-STREAMS/INDEX.HTML)**

🏷 **KAFKA-TRAINING (HTTP://CLOUDURABLE.COM/TAGS/KAFKA-TRAINING/INDEX.HTML)**

🏷 **KAFKA-TUTORIAL (HTTP://CLOUDURABLE.COM/TAGS/KAFKA-TUTORIAL/INDEX.HTML)**

🏷 **KINESIS (HTTP://CLOUDURABLE.COM/TAGS/KINESIS/INDEX.HTML)**

🏷 **KINESIS-CONSULTING (HTTP://CLOUDURABLE.COM/TAGS/KINESIS-CONSULTING/INDEX.HTML)**

🏷 **LINUX (HTTP://CLOUDURABLE.COM/TAGS/LINUX/INDEX.HTML)**        🏷 **METRICSD (HTTP://CLOUDURABLE.COM/TAGS/METRICSD/INDEX.HTML)**

🏷 **MICROSERVICES (HTTP://CLOUDURABLE.COM/TAGS/MICROSERVICES/INDEX.HTML)**

🏷 **MICROSERVICES-ARCHITECTURE (HTTP://CLOUDURABLE.COM/TAGS/MICROSERVICES-ARCHITECTURE/INDEX.HTML)**

🏷 **NAT (HTTP://CLOUDURABLE.COM/TAGS/NAT/INDEX.HTML)**        🏷 **NODETOOL (HTTP://CLOUDURABLE.COM/TAGS/NODETOOL/INDEX.HTML)**

🏷 **NUMA (HTTP://CLOUDURABLE.COM/TAGS/NUMA/INDEX.HTML)**

🏷 **PRODUCERS (HTTP://CLOUDURABLE.COM/TAGS/PRODUCERS/INDEX.HTML)**

🏷 **QBIT (HTTP://CLOUDURABLE.COM/TAGS/QBIT/INDEX.HTML)**        🏷 **RAM (HTTP://CLOUDURABLE.COM/TAGS/RAM/INDEX.HTML)**

🏷 **REAKT (HTTP://CLOUDURABLE.COM/TAGS/REAKT/INDEX.HTML)**

🏷 **REPLICATION (HTTP://CLOUDURABLE.COM/TAGS/REPLICATION/INDEX.HTML)**

🏷 **SCHEMA-REGISTRY (HTTP://CLOUDURABLE.COM/TAGS/SCHEMA-REGISTRY/INDEX.HTML)**

🏷 **SMACK (HTTP://CLOUDURABLE.COM/TAGS/SMACK/INDEX.HTML)**        🏷 **SPARK (HTTP://CLOUDURABLE.COM/TAGS/SPARK/INDEX.HTML)**

🏷  **SPARK--CASSANDRA (HTTP://CLOUDURABLE.COM/TAGS/SPARK--CASSANDRA/INDEX.HTML)**

🏷  **SPARK-TRAINING (HTTP://CLOUDURABLE.COM/TAGS/SPARK-TRAINING/INDEX.HTML)**

🏷  **SPARK-TUTORIAL (HTTP://CLOUDURABLE.COM/TAGS/SPARK-TUTORIAL/INDEX.HTML)**

🏷  **SSH (HTTP://CLOUDURABLE.COM/TAGS/SSH/INDEX.HTML)**          🏷  **SSH-CONFIG (HTTP://CLOUDURABLE.COM/TAGS/SSH-CONFIG/INDEX.HTML)**

🏷  **SSL (HTTP://CLOUDURABLE.COM/TAGS/SSL/INDEX.HTML)**          🏷  **SYSTEMD (HTTP://CLOUDURABLE.COM/TAGS/SYSTEMD/INDEX.HTML)**

🏷  **TLS (HTTP://CLOUDURABLE.COM/TAGS/TLS/INDEX.HTML)**          🏷  **VAGRANT (HTTP://CLOUDURABLE.COM/TAGS/VAGRANT/INDEX.HTML)**

🏷  **VCPU (HTTP://CLOUDURABLE.COM/TAGS/VCPU/INDEX.HTML)**          🏷  **VPC (HTTP://CLOUDURABLE.COM/TAGS/VPC/INDEX.HTML)**

🏷  **WHAT-IS-KAFKA (HTTP://CLOUDURABLE.COM/TAGS/WHAT-IS-KAFKA/INDEX.HTML)**

Apache Spark Training (http://cloudurable.com/spark-training/index.html)
Kafka Tutorial (http://cloudurable.com/blog/kafka-tutorial/index.html)
Akka Consulting (http://cloudurable.com/akka-consulting/index.html)
Cassandra Training (http://cloudurable.com/cassandra-course/index.html)
AWS Cassandra Database Support (http://cloudurable.com/subscription_support_benefits_cassandra/index.html)
Kafka Support Pricing (http://cloudurable.com/subscription_support/index.html?q=kafka)
Cassandra Database Support Pricing (http://cloudurable.com/subscription_support/index.html?q=cassandra)
Non-stop Cassandra (http://cloudurable.com/cloudurable-cassandra-watchdog/index.html?q=cassandra)
Watchdog (http://cloudurable.com/cloudurable-cassandra-watchdog/index.html?q=watchdog)
Advantages of using Cloudurable™ (http://cloudurable.com/advantages/index.html)
Cassandra Consulting (http://cloudurable.com/service-quick-start-mentoring-cassandra-or-kafka-aws-ec2/index.html)
Cloudurable™| Guide to AWS Cassandra Deploy (http://cloudurable.com/ppt/amazon-cassandra.pdf)
Cloudurable™| AWS Cassandra Guidelines and Notes (http://cloudurable.com/ppt/amazon-cassandra-notes.pdf)
Free guide to deploying Cassandra on AWS (http://cloudurable.com/cassandra-aws-consulting/index.html)
Kafka Training (http://cloudurable.com/kafka-training/index.html)
Kafka Consulting (http://cloudurable.com/kafka-aws-consulting/index.html)
DynamoDB Training (http://cloudurable.com/dynamodb-training/index.html)
DynamoDB Consulting (http://cloudurable.com/dynamodb-consulting/index.html)

Kinesis Training (http://cloudurable.com/kinesis-training/index.html)

Kinesis Consulting (http://cloudurable.com/kinesis-consulting/index.html)

Kafka Tutorial PDF (http://cloudurable.com/blog/kafka-tutorial-v1/index.html)

Redis Consulting (http://cloudurable.com/redis-consulting/index.html)

Redis Training (http://cloudurable.com/redis-onsite-instructor-led-training/index.html)

ElasticSearch / ELK Consulting (http://cloudurable.com/elk-consulting/index.html)

ElasticSearch Training (http://cloudurable.com/elasticsearch-onsite-instructor-led-training/index.html)

InfluxDB/TICK Training (http://cloudurable.com/influxdb-onsite-instructor-led-training/index.html) TICK Consulting (http://cloudurable.com/tick-consulting/index.html)

## ABOUT US

Cloudurable™: Leader in AWS cloud computing for Kafka™, Cassandra™ Database, Apache Spark, AWS CloudFormation™ DevOps. We do **Cassandra training**, **Apache Spark**, **Kafka training**, **Kafka consulting** and **cassandra consulting** with a focus on AWS and data engineering. (FAQ (http://cloudurable.com/faq/index.html))

## FOLLOW CLOUDURABLE™

facebook page (https://www.facebook.com/cloudurable)

google plus (https://plus.google.com/116648719730180908239)

twitter (https://twitter.com/cloudurable)

linkedin (https://www.linkedin.com/company/17964258/)

*Why Cloudurable™?*

Advantage of using Cloudurable™ (http://cloudurable.com/advantages/index.html)

*About Cloudurable™?*

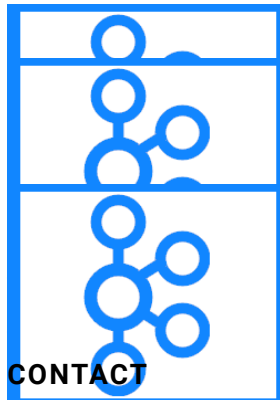About Cloudurable™ (http://cloudurable.com/faq/index.html)

*What are the benefits of using subscription support?*

Benefits of Subscription Cassandra Support (http://cloudurable.com/subscription_support_benefits_cassandra/index.html)

## RECENT POSTS

### KAFKA CONSUMER: ADVANCED CONSUMERS (HTTP://CLOUDURABLE.COM/BLOG/KAFKA-ADVANCED-CONSUMER-1/INDEX.HTML)

### KAFKA TUTORIAL (HTTP://CLOUDURABLE.COM/BLOG/KAFKA-TUTORIAL/INDEX.HTML)

**KAFKA TUTORIAL: CREATING ADVANCED KAFKA PRODUCERS IN JAVA (HTTP://CLOUDURABLE.COM/BLOG/KAFKA-TUTORIAL-KAFKA-PRODUCER-ADVANCED-JAVA-EXAMPLES/INDEX.HTML)**

**KAFKA CONSULTING (HTTP://CLOUDURABLE.COM/BLOG/KAFKA-CONSULTING/INDEX.HTML)**

m/blog/kafka-

m/blog/kafka-

**CONTACT**

://cloudurable.com/blog/kafka-

java

examples/index.html))

consulting/index.html))

**Cloudurable Tech**

101 California Street

San Francisco

CA 94111

USA

**America**

(415) 758-1113 (tel:14157581113)

**GO TO CONTACT PAGE (/CONTACT/INDEX.HTML)**

Apache Spark Training (http://cloudurable.com/spark-training/index.html), Akka Consulting (http://cloudurable.com/akka-consulting/index.html), AWS Cassandra Support (http://cloudurable.com/subscription_support_benefits_cassandra/index.html), Cassandra Training (http://cloudurable.com/cassandra-course/index.html), Kafka Training (http://cloudurable.com/kafka-training/index.html), Cassandra Consulting (http://cloudurable.com/service-architecture-analysis-cassandra-or-kafka-aws-ec2/index.html), Kafka Consulting (http://cloudurable.com/kafka-aws-consulting/index.html), Spark Training (http://cloudurable.com/spark-aws-emr-training/index.html), Spark Consulting (http://cloudurable.com/spark-aws-emr-consulting/index.html), Kafka Tutorial (http://cloudurable.com/blog/kafka-tutorial-v1/index.html)

Template by DevCows (https://github.com/devcows/hugo-universal-theme)