

---

# **Kafka Connect Datagen Documentation**

*Release 1.0*

**Xu Shiyan**

**Jul 10, 2018**



---

## Contents

---

<b>1 Quick Start</b>	<b>1</b>
<b>2 Table of Contents</b>	<b>3</b>
2.1 Development . . . . .	3
2.2 Configurations . . . . .	3
<b>3 Indices and tables</b>	<b>5</b>



# CHAPTER 1

---

## Quick Start

---

- Go to `example/quickstart/` and start all services

```
docker-compose up -d
```

- Run `docker-compose ps` to see all services' states

Name	Command	State	Ports
↪-----			
quickstart_broker_1	/etc/confluent/docker/run	Up	0.0.0.0:9092->
↪9092/tcp			
quickstart_connect_1	/etc/confluent/docker/run	Up	0.0.0.0:8083->
↪8083/tcp, 9092/tcp			
quickstart_kafka-connect-ui_1	/run.sh	Up	0.0.0.0:8001->
↪8000/tcp			
quickstart_kafka-rest-proxy_1	/etc/confluent/docker/run	Up	0.0.0.0:8082->
↪8082/tcp			
quickstart_kafka-topics-ui_1	/run.sh	Up	0.0.0.0:8000->
↪8000/tcp			
quickstart_zookeeper_1	/etc/confluent/docker/run	Up	0.0.0.0:2181->
↪2181/tcp, 2888/tcp, 3888/tcp			

*Wait for Kafka Broker and Kafka Connect cluster to be fully started.*

- Check <https://localhost:8000> to see the Broker UI
- Check <https://localhost:8001> to see the Connect UI

- Create data generation task

```
curl -X POST http://localhost:8083/connectors \
-H 'Content-Type:application/json' \
-H 'Accept:application/json' \
-d @connect.source.datagen.json | jq
```

- Based on the configurations, you should observe from Broker UI that

- messages are being published to topic `generated.events` at rate of 10 every 5 seconds
- every message is randomized over `status` and `direction` fields
- every message contains a timestamp field `event_ts`
- Go to Connect UI, select the “datagen” connector and click “PAUSE” or “DELETE”.

## 2.1 Development

### 2.1.1 Installation

#### Build from Source

- Import as Maven project
- Generate the jar file

```
mvn package
```

- Copy the jar file `target/kafka-connect-datagen-$version.jar` to a Kafka Connect worker's classpath

## 2.2 Configurations

### 2.2.1 Connector

**topic.name** Name of the Kafka topic to publish data to.

- Type: string
- Importance: high

**test.mode** Indicate test mode: either 'performance' or integration'

- Type: string
- Default: performance
- Importance: high

**poll.size** Number of messages to be sent in one poll.

- Type: int
- Default: 1
- Importance: medium

**poll.interval.ms** Time interval (ms) between two polls.

- Type: int
- Default: 10000
- Importance: medium

**message.template** Message template to be used for each message.

- Type: string
- Importance: medium

**random.fields** List of fields to be randomized.

- Type: list
- Importance: medium

**event.timestamp.field** Name of the field to store event timestamp.

- Type: string
- Default: ts
- Importance: low

## CHAPTER 3

---

### Indices and tables

---

- `genindex`
- `modindex`
- `search`