

# Apache Kafka

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[docs.academyofdata.com/orange](https://docs.academyofdata.com/orange)

# Day 1

## Big data architecture evolution and Ingestion Layer

### Apache Kafka origins, vanilla vs Confluent, deployment options, use cases

9:30 - 11:00

### Apache Kafka concepts

11:00 -11:15 break

- Topics
- Brokers
- Producers
- Consumers
- How data is stored
- Retention policies
  - Delete
  - Log compaction

11:15 - 12:45

12:45 - 13:45 lunch break

13:45 - 15:15

15:15 - 15:30 break

15:30 - 17:00

### Producer & Consumer console & hands on exercises

17:00 - 17: 30 Q&A

# Day 2

## Recap Day 1

### Time and messages order in Kafka

**Add/remove brokers - what happens when we add/remove/loose a broker**

**9:30 - 11:00**

**(demo kafka reassignment tool)**

**11:00 -11:15 break**

### Architecture

**11:15 - 12:45**

- Role of Zookeeper
- Add/Removing Nodes

**12:45 - 13:45 lunch break**

**13:45 - 15:15**

### Kafka Connect

**15:15 - 15:30 break**

- Concepts and architecture
- Connector FileStream - Kafka - hands on
- MySQL connector - getting mySQL data into Kafka

**15:30 - 17:00**

**17:00 - 17: 30 Q&A**

### Encryption, authorization and SLA's

# Day 3

## Kafka streams intro

- Streams concepts: Tables and streams
- Persistent queries
- State handling
- KSQL intro

9:30 - 11:00

11:00 - 11:15 break

## KSQL concepts and architecture

11:15 - 12:45

- Streams and tables
- Persistent queries
- Queries and aggregations
- Handling State
- What happens when the application fails
- Working with different messages formats like text and JSON

12:45 - 13:45 lunch break

13:45 - 15:15

15:15 - 15:30 break

15:30 - 17:00

17:00 - 17:30 Q&A

## Schema Registry

- How to work with AVRO type

# Intro trainer & participants

Valentina Crisan

Computer Science graduate

Certified Solution Architect ( Telecom Value Added solutions)

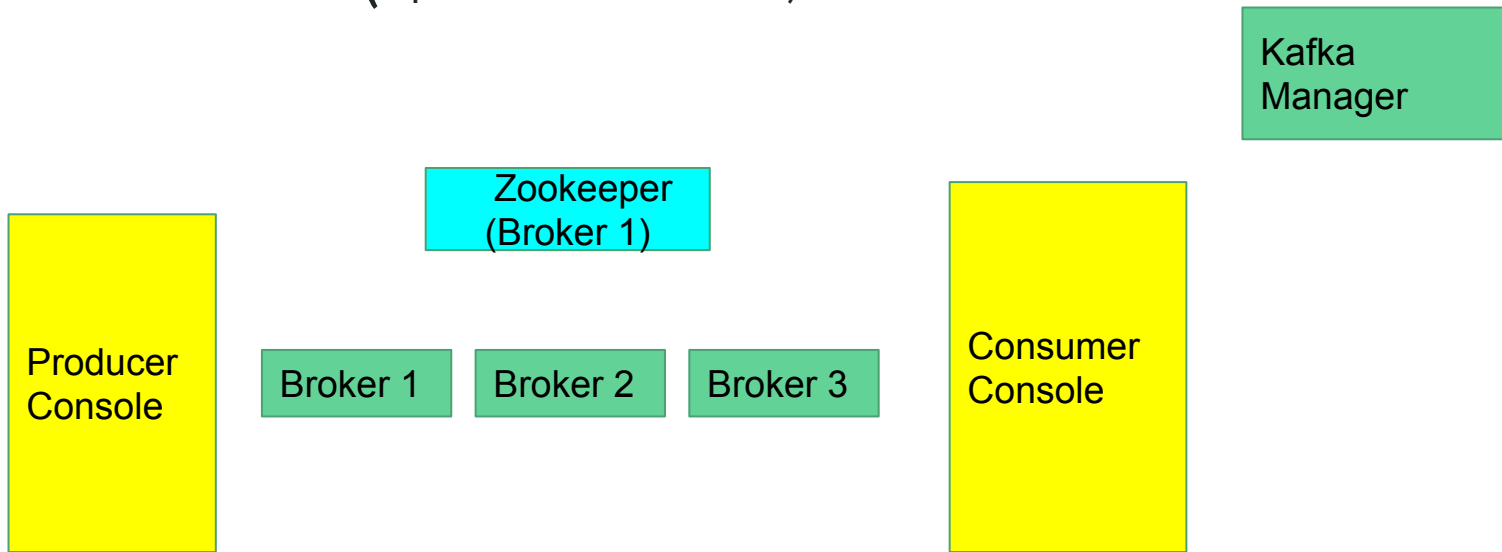
Nowadays Data Modeling & Big Data Architecture Consulting & Training @ Densodata

Academy Of Data

Bucharest Big Data Meetup

Bigdata.ro

# Apache Kafka (Apache Kafka 2.6.2)



## Confluent Open Source v5.4.0.

