Introduction to Apache Kafka for Developers



Apache Kafka is an open-source distributed event streaming platform used by thousands of companies for high-performance data pipelines, streaming analytics, data integration, and mission-critical applications.

Lab files

Every lab folder has a README.md with instructions on how to complete the lab, and a solution folder with a working version of the lab for reference. Please use the README.md and solution folder as a guide to completing the labs.

Lab Instructions

The latest instructions for the labs can be found below.

- 1. Lab 1 Basic Kafka
- 2. Lab 1.2 Understanding Failover
- 3. Lab 2 Writing a simple Java Producer
- 4. Lab 3 Writing a simple Java Consumer
- 5. <u>Lab 5.1</u> Advanced Producers
- 6. Lab 5.2 Clean shutdown
- 7. Lab 5.3 Configuring Producer Durability
- 8. Lab 5.4 Metrics and Replication Verification
- 9. Lab 5.5
- 10. Lab 5.6 Retry, timeouts, in-flight, back-off
- 11. Lab 5.7
- 12. <u>Lab 5.8</u>
- 13. <u>Lab 6.1</u> Advanced Consumer
- 14. Lab 6.2 Position Consumer in Topic Log
- 15. Lab 6.3 At-Most-Once and At-Least-Once Semantics
- 16. Lab 6.4 Exactly-Once message semantics
- 17. Lab 6.5 Thread per consumer
- 18. Lab 6.6 Consumer with worker threads
- 19. Lab 6.7 Priority queue with consumer.assign
- 20. <u>Lab Streams 1</u> Kafka Streams Lab 1
- 21. <u>Lab Streams 2</u> Kafka Streams Lab 2