Enabling Operational Data Flows with NoSQL and Apache Kafka®

A Confluent and Couchbase Solution Brief

Publish and consume operational changes in real-time with Couchbase on Confluent.

Couchbase is an open-source, distributed multi-model NoSQL document-oriented database that is optimized for interactive and scalable applications. The integration with the Confluent Platform enables Couchbase to continuously publish to Kafka and continuously consume Kafka topics from a queue and persist them in Couchbase. It’s an out-of-the-box solution for creating operational “data flows”.

Couchbase and Confluent Platform Ecosystem Overview

Together, Confluent and Couchbase help customers:

- Improve operational efficiency through event streaming
- Enable real-time monitoring and alerting with Event Streaming
- Integrate, synchronize, aggregate and distribute data through Confluent Platform
- Execute applications in real-time, with high performance and high availability
Couchbase is engineered for performance at scale
Built on the most powerful NoSQL technology, Couchbase delivers unparalleled performance at scale, on-premises and in any cloud. With features like memory-first architecture, geo-distributed deployments, and workload isolation, Couchbase excels at supporting mission-critical applications at scale while maintaining sub-millisecond latencies and 99.999% availability. Plus, with the most comprehensive SQL-compatible query language (N1QL), including ANSI joins compatibility, migrating from RDBMS to Couchbase is easy.

Use cases include:
- Ingesting data from Kafka at high throughput, low latency, and storing it in Couchbase
- Aggregating data from multiple sources and persisting that data in Couchbase
- Integrating Couchbase data with other data warehouses and big data platforms such as Spark, Hadoop

Confluent brings Kafka data to life
Confluent Platform enables organizations to harness business value of event data. The Confluent Platform, based on Kafka, manages the barrage of event streams and makes it available throughout an organization. It provides various industries, from retail, logistics and manufacturing, to financial services and online social networking, a scalable, unified, real-time data pipeline that enables applications ranging from large volume data integration to big data analysis with Hadoop to real-time stream processing.

Confluent Platform and Couchbase - enterprise-ready
Confluent Platform Confluent Platform is the only enterprise stream platform built entirely on Kafka that makes implementing, managing and deploying an enterprise streaming platform with Kafka easy, reliable, secure and auditable. With Couchbase, we have an out-of-the-box solution for creating operational “data flows”, improving operational efficiencies and realizing the true value of interactive applications.