Couchbase

Capella Columnar

GET REAL-TIME ANALYSIS OF JSON DATA

Benefits

JSON-NATIVE
Seamlessly incorporate JSON data for real-time analysis.

UNIFIED INGESTION
Combine data from multiple databases and flat files for broader analytics.

DEVELOPER INDEPENDENCE
Perform ad hoc analysis faster, without overwhelming the BI team.

BETTER APPLICATIONS
Enhance user experience via new metrics and smarter AI responses.

Overview

For decades, organizations have separated transactional and analytic workloads to achieve high performance for both scenarios. For modern JSON-native applications with rapidly changing data, legacy analytic stores and tools were designed in a relational manner, which cause many challenges with JSON data. Additionally, analytic systems are also not designed to write data back to source systems, requiring extra work for organizations to utilize metrics back within applications.

Couchbase Capella™ is the only JSON-native Database-as-a-Service (DBaaS) optimized for real-time transactional and analytical workloads. Customers receive exceptional performance, scalability, and cost-effectiveness. It simplifies JSON data ingestion and transformation with zero-ETL capabilities, and use an optimized columnar storage engine to improve query efficiency. This enables developers to access analytics directly, reducing reliance on BI teams. With Capella iQ, our AI-powered coding assistant, users can perform interactive conversational analytics. Built-in write-back capabilities allow teams to enhance applications with real-time metrics, improving user experiences. Capella supports both transactions and real-time analysis, unifying operational and analytical workloads to reduce costs and streamline integration with existing systems.

Key Architectural Aspects of Capella Columnar

SPEED AND SCALE

- Columnar data engine
- Separated compute and storage
- Massively parallel processing (MPP)
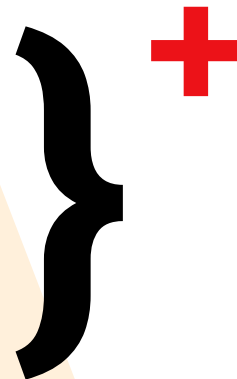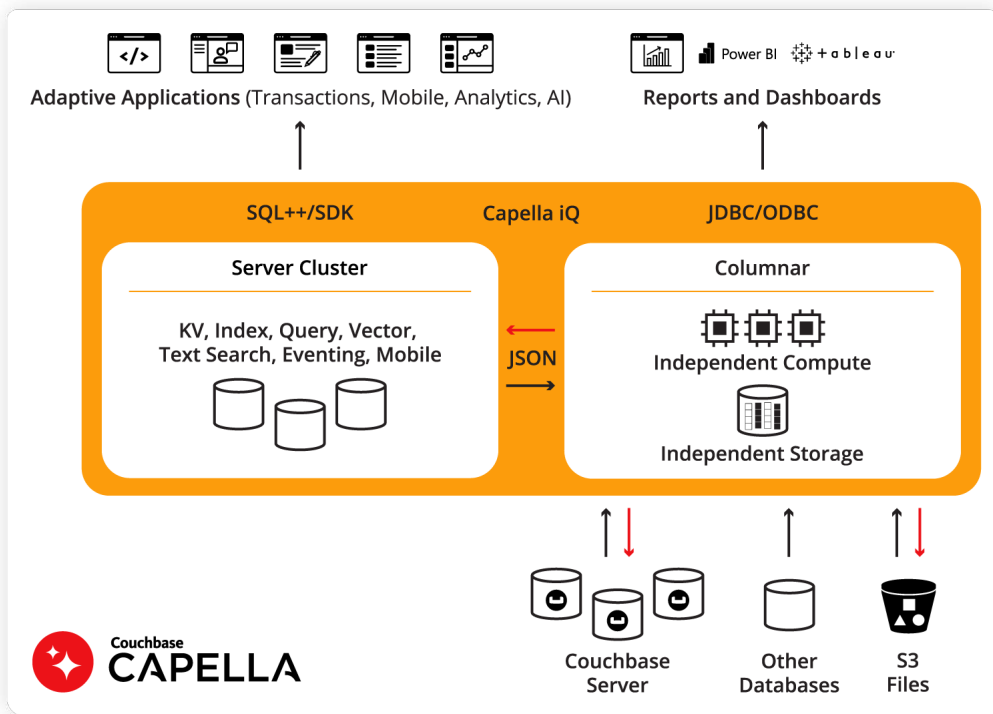- Cost-based optimizer

REAL-TIME ANALYTICS

- Zero ETL
- Schema on read

WRITE-BACK

- Into Capella & Couchbase Server
- AWS S3 bucket

PERFORMING AD HOC ANALYSIS

- Without needing to create indexes
- SQL++
- Capella iQ
- Tableau and Power BI

BENEFITS FOR DEVELOPERS

- Real-time conversational analytics
- No index creation steps
- No schema definition process required
- Zero-ETL data ingestion and transformation
- Enhanced query performance on JSON data
- Familiar query language support
- Real-time write-back into applications
- Managed service ease

BENEFITS FOR PRODUCT OWNERS

- Improved end-user experiences
- Enhanced application performance
- Real-time analytics and decision-making
- Scalability and future-proofing
- Faster deployment
- Cost efficiency

CAPELLA COLUMNAR KEY CAPABILITIES

With Capella, teams can build real-time insights into applications for better recommendations, hyper-personalization, and faster decision-making.

ZERO ETL FOR JSON

Automated translation of JSON to analytics-ready columnar storage.

MULTI-SOURCE INGESTION

Combine heterogeneous sources for broader analysis.

CONVERSATIONAL ANALYTICS

Natural language questions to charts in one click without the BI team.

OPERATIONAL WRITE-BACK

Deliver calculated metrics and insights in milliseconds.

LIGHTNING-FAST ANALYTICS

Columnar storage with MPP of SQL++ queries and innovative cost-based optimizer.

COMPUTE AND STORAGE SEPARATION

Combine fast scaling, S3 reliability, and unlimited data.

EASY ACCESS

Access insights via data BI tools.

SINGLE UI AND SECURITY

Control both operational and analytical data.

LEARN MORE

Find out more about Capella Columnar at:
https://www.couchbase.com/products/analytics/

Sign up for Capella for free and use it today:
https://cloud.couchbase.com/sign-up

Modern customer experiences need a flexible database platform that can power applications spanning from cloud to edge and everything in between. Couchbase's mission is to simplify how developers and architects develop, deploy and run modern applications wherever they are. We have reimagined the database with our fast, flexible and affordable cloud database platform Capella, allowing organizations to quickly build applications that deliver premium experiences to their customers – all with best-in-class price performance. More than 30% of the Fortune 100 trust Couchbase to power their modern applications. For more information, **visit www.couchbase.com** and follow us on X (formerly Twitter) @couchbase.