

Couchbase Server

SCALABLE NOSQL DATABASE WITH SQL AND ACID TRANSACTIONS

Key benefits

- Native JSON document support
- SQL compatible query language (N1QL)
- ACID transactions to assure data correctness
- Full-text search support
- Performance and workload isolation using Multi-Dimensional Scaling
- Multi-master, multi-region clusters using bidirectional cross datacenter replication
- Commercially and community-supported with an open source foundation available under the Apache License

Business today has evolved to meet the real-time, anytime and ever-changing needs of customers. This requires a new type of database that is flexible enough to store data without a rigid schema. This database needs to be available 24x7x365 and scale to meet the needs of increased data and utilization especially when there are unpredictable spikes.

The relational databases of yesteryear aren't flexible enough or scalable enough to meet the needs of today's business. As a result, organizations have deployed a myriad of expensive, complex, and hard-to-manage point solutions. What is needed is a database that is as capable as an RDBMS but provides the scale and flexibility of a NoSQL database. Couchbase Server is that database.

Couchbase Server can be deployed on premises or on any cloud. Its cross-data center replication (XDCR) feature allows it to bidirectionally support multiple data centers or cloud regions.

Couchbase Server's memory-first architecture requires no external cache solution and delivers submillisecond response time and 99.999% availability, easily handling unpredictable spikes in demand.

Unlike most NoSQL databases, Couchbase provides a comprehensive SQL-compatible query language that allows for ANSI joins, `net`, `unnest`, `group`, `sort`, and other data manipulation functions. Couchbase also supports ACID transactions to assure data correctness.

Couchbase Server combined with Couchbase Mobile and Sync Gateway allows developers to deploy desktop and mobile applications that are resilient and reliable from the client to the edge and on to the cloud.

Couchbase Server supports a comprehensive developer ecosystem with support for languages including Java, C#, .NET, Node.js, JavaScript, C, Go, PHP, Python, and Scala. When combined with Couchbase Mobile, developers can use Xamarin, C#, Swift, Java, Objective-C, and JavaScript. Mobile developers can target both iOS and Android platforms as well as rich desktop interfaces.

ACID transactions and SQL on NoSQL

Organizations are forced to extract data from NoSQL databases into more traditional databases that support SQL. Couchbase allows analysts to query data directly using the tools they already know. Even use cases requiring ACID guarantees can use Couchbase and organizations don't need to maintain a traditional database anymore.

Full-text search

Much of today's data is unstructured, and searching for matching text requires specific techniques. Couchbase natively supports full-text search on SQL queries.

Analytics

In the era of the cloud, shipping data everywhere for each use case is a non-starter. Use an integrated massively parallel processing (MPP) engine to execute real-time analytics queries.

Isolate and scale workloads independently

Rather than deploy lots of independent databases and copy data to avoid different workloads from interfering with each other, Couchbase allows you to make specific resources available for each type of workload.

Learn more

To learn more, contact your Couchbase sales representative today or visit:

www.couchbase.com/products/server
www.couchbase.com/downloads

COUCHBASE SERVER NODES

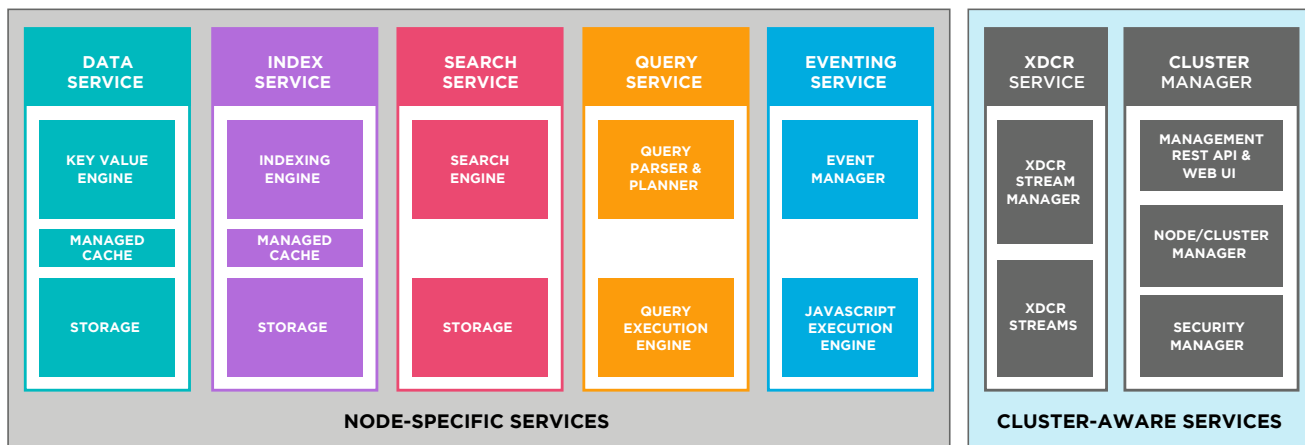


Figure 1: Couchbase Server architecture offers a variety of services that can be deployed on a single node or scaled independently to any number of nodes to provide workload isolation and predictable performance.





Powering 10+ million queries per second across all servers and clusters



Hundreds of millions of user profiles accessed with less than 1ms response times



Inventory management system with 30 million documents delivering optimized response time



Supports 10 million products and 35 thousand requests per second

amadeus

“At Amadeus, our booking platforms process nearly 500 billion travel-related data requests per day. We work with Couchbase to help support these services and keep the travel industry moving. Couchbase Server delivers impressive new capabilities, from enhanced security features to significantly faster data access and queries, which allows us to expand and accelerate our use of Couchbase to support more applications and use cases.”

— MICHAEL HIRSCHBERG, Senior System Engineer





At Couchbase, we believe data is at the heart of the enterprise. We empower developers and architects to build, deploy, and run their mission-critical applications. Couchbase delivers a high-performance, flexible and scalable modern database that runs across the data center and any cloud. Many of the world's largest enterprises rely on Couchbase to power the core applications their businesses depend on.

For more information, visit www.couchbase.com.

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