

Couchbase Mobile For Edge Computing

TAKE STORAGE AND SYNC FROM THE CLOUD TO THE EDGE

Key benefits

- Fast, efficient bidirectional synchronization of data from the edge to the cloud via a distributed architecture
- Powerful query language and full-text search support on the edge
- Always-on experience even with spotty network availability
- Scalability from hundreds to millions of users
- Built-in enterprise-grade security to safeguard data

Enable modern mobile and edge apps that are always fast and always on

Couchbase Mobile can help your developers meet end-user expectations by addressing the demands of business-critical apps. Build applications that seamlessly sync data between the cloud and edge devices, between the cloud and edge data centers, and directly between mobile devices, while automatically resolving data conflicts. Save transfer costs by using delta sync technology to sync only data that has changed. With Couchbase's full-featured Sync Gateway and embedded database, you can deliver an always-on experience with guaranteed data availability, even when network connectivity is intermittent.

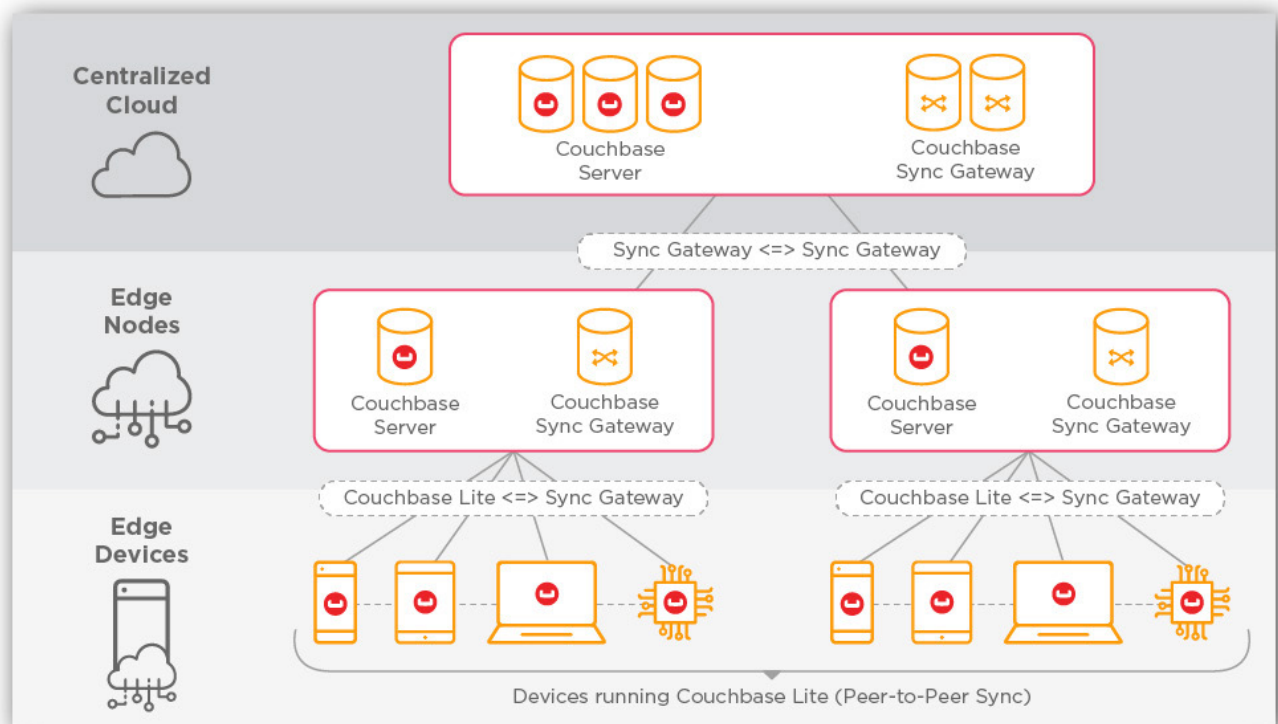
With support for key-value, SQL++, full-text search, scopes and collections, predictive queries with machine learning models, and eventing, Couchbase Mobile allows developers to build secure, resilient edge apps that provide real-time responsiveness and 100% business uptime. Built-in end-to-end data encryption and fine-grained access control help safeguard data while a consistent programming model for building web and mobile applications simplifies development. You can also add capacity at every tier (on the device, at the edge, and in the cloud) to easily scale to millions of users as demand grows.



Architecture

- **Couchbase Lite:** A full-featured embedded NoSQL JSON document database that enables offline-first apps with key-value, query, full-text search, eventing, and database encryption capabilities.

- **Secure data synchronization gateway:** A secure gateway for synchronization of data between the edge devices and the backend data store. Choose from fully managed sync with **Capella App Services**, or deploy and host Couchbase **Sync Gateway** yourself.
- **Couchbase database:** A distributed NoSQL JSON document database in the cloud. Choose from **Couchbase Capella**, the fully managed and hosted Database-as-a-Service, or deploy and host **Couchbase Server** yourself on premises or in any public or private cloud.



Key enablers

- Ability to securely store and process data either locally embedded within devices or co-located in distributed data centers at the edge. Guarantee real-time responsiveness and business uptime by keeping data closer to the applications that consume it.
- Ability to securely sync data from any cloud-to-edge device or edge data center. Leverage comprehensive sync technology to guarantee data integrity.
- Ability to operate in environments with low/no internet connectivity for extended periods of time. Guarantee an always-on experience for users.

Enterprise-grade security: Safeguard data and alleviate privacy concerns with built-in enterprise-grade encryption at rest and in transit. Isolate and secure data to comply with privacy and sovereignty regulations, sensitive data never has to leave the edge.

Speed and responsiveness: Guaranteed low latency and sub-millisecond data access times, regardless of internet bandwidth.

Deploy on premises, in any cloud, or at the edge: Deploy edge computing applications easily on any public cloud to gain greater agility. Enterprise users can deploy the same stack on premises so developers and QA teams can be more productive in their software development life-cycle.

lotum

Lotum uses Couchbase Mobile to provide a consistent and always-on experience for the millions of monthly active users of their most popular game title. Gamers can play wherever they go, even without internet.





Highly personalized travel application



Real-time product catalog application



Transforms patient experience



Gaining new insights in brain injury



Offline-first point of sale solution

Gain unequalled flexibility, scalable performance, and end-to-end security

UNMATCHED AGILITY AND FLEXIBILITY

Build seamless data sharing across multiple users and devices—online and offline. Capitalize on fast, efficient bidirectional synchronization of data from the edge to the cloud. Flexible data modeling lets you build applications that easily evolve over time. SQL++ means developers leverage familiar syntax, and can reuse the same queries across platforms and Couchbase Server and Couchbase Lite.

UNPARALLELED PERFORMANCE AT ANY SCALE

Deliver an always-on experience even with unreliable networks and dropped connections. Scale from hundreds to millions of users with the flexibility to add capacity at every tier—including the client tier (Couchbase Lite), middle tier (Sync Gateway), and storage tier (Couchbase Server).

EASE OF MANAGEMENT

Safeguard data with built-in enterprise-grade security for the full stack. Encrypt data at rest as well as in transit. Apply fine-grained access control policies to ensure that only authorized users have access to relevant subsets of data.

Learn more

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

couchbase.com/products/mobile

couchbase.com/products/capella/app-services





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 consume modern applications wherever they are. We have reimaged 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 Twitter.

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