NoSQL FOR TELECOMMUNICATIONS

Support massive amounts of data while delivering value-add services in real time, all the time

Couchbase

Key benefits

- Deliver innovative experiences and value-add services at every user touchpoint

- Seamlessly scale to meet ever-increasing customer demands and high-volume peaks for streaming media

- Recommend offers or content for huge user bases in real time with high performance and low latency

- Aggregate data silos to manage call records, subscriber information, billing, and streaming media

Viber

"With less than half the servers, we're able to increase performance and gain a much better, scalable architecture."

– Amir Ish-Shalom, Senior Director of Operations and Chief Architect Viber
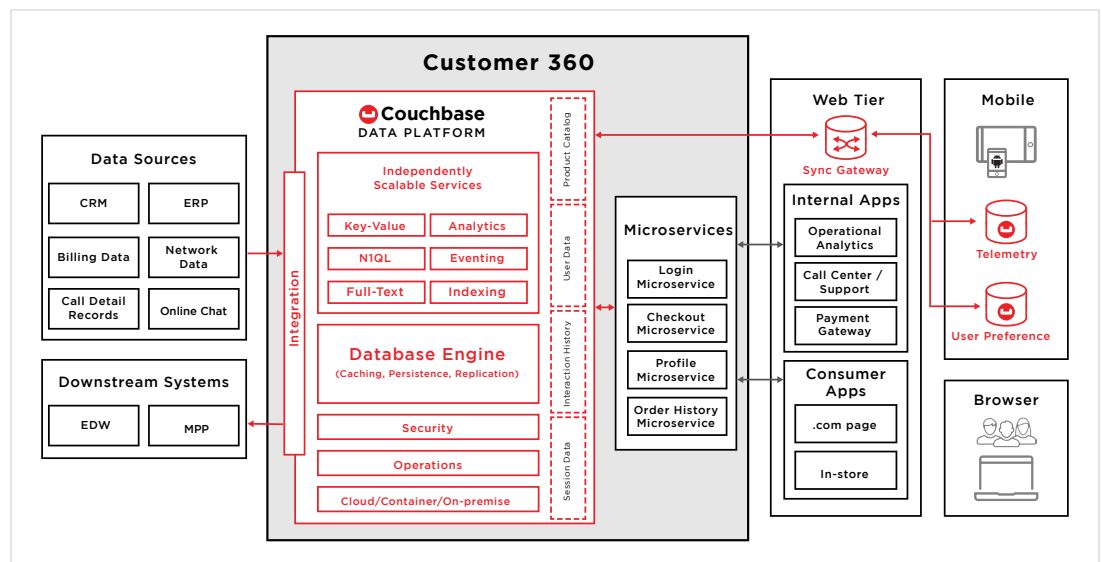
Architect your application to deliver speedy, contextualized, and real-time data

Today's telecommunication providers must manage a staggering amount of data that's being generated every second of every day, in addition to supporting their OSS, BSS, and OTT applications. Couple that with the pressure to deliver value-add services for customers who can easily switch to a competitor, and you have an application environment that demands speedy, contextualized, and real-time data. From managing call records, subscriber information, billing, and value-add services to streaming media, Couchbase helps providers to aggregate silos of data from different service offerings, offload critical applications from their mainframe, and architect brand new applications that will eventually be used by hundreds of millions of users.

Telecommunications runs on Couchbase

Developed as an alternative to traditionally inflexible relational databases, Couchbase makes it easier to capture, manipulate, and retrieve the data involved in every interaction. Our geo-distributed cloud-native NoSQL document-oriented database and key-value store provides unmatched developer agility and manageability, as well as unparalleled performance at any scale, from any cloud to the edge.

Figure 1: Customer 360 reference architecture for telecommunications on Couchbase

Why Couchbase for telecommunications

Easier, more affordable scalability

Couchbase's network-centric architecture with a high-performance replication backbone allows the database to be easily extended while maintaining performance at scale.

Better performance and higher availability than any other database

While other NoSQL databases like MongoDB™ require a third-party cache – adding to both cost and complexity – Couchbase has a fully integrated read-through and write-through caching layer. Couchbase's memory- and network-centric architecture consistently delivers the sub-millisecond responsiveness that today's users expect.

verizon

NoSQL database for over 16K developers at 3.5M ops per second

MEGAFON

50K ops/sec. for more than 80M mobile subscribers

CISCO

500ms response times at very large scale for key DVR in the cloud app

Viber

User profile, offline message storage, push-to-talk, and more for over 530M users

Telecommunications use cases:

- Content entitlement
- Mobile messaging
- Rate limiting
- Location manager
- Identity platform
- Program guide
- Media/content catalog
- Billing center
- User profile store
- Personalization
- Recommendations
- Asset management

Built-in high availability and disaster recovery

Couchbase provides five-nines availability with built-in high availability and cross datacenter replication that supports disaster recovery and data locality requirements. With Couchbase, you have full control over the topology – unidirectional, bidirectional, or any configuration you need.

Lower costs and faster time to market

Couchbase drives the flexibility and increased operational efficiency you need to keep up with the constantly updated and changing digital communication data. Tightly integrated full-text search, real-time analytics, and powerful eventing services make it easy to add new features to your application on the fly without moving data into and managing dozens of database technologies, finally putting an end to database sprawl.

Integrated mobile capabilities support omnichannel experiences

Couchbase is the only NoSQL database that supports experiences online, in store, or on the go. Extend your reach to the edge and enable locally connected applications like personalization, peer-to-peer messaging and sharing, and more.

Learn more

To learn more, contact your Couchbase sales representative today or visit:
www.couchbase.com/telco

About Couchbase

Couchbase's mission is to be the database platform that enables a revolution in application innovation. To make this possible, Couchbase created an enterprise-class NoSQL database to help deliver ever-richer and ever more personalized customer and employee experiences. Built with the most powerful NoSQL technology, Couchbase was architected on top of an open source foundation for the massively interactive enterprise. Our geo-distributed database provides unmatched developer agility and manageability, as well as unparalleled performance at any scale, from any cloud to the edge.

Couchbase has become pervasive in our everyday lives; our customers include industry leaders Amadeus, AT&T, BD (Becton, Dickinson and Company), Carrefour, Cisco, Comcast, Disney, DreamWorks Animation, eBay, Marriott, Neiman Marcus, Tesco, Tommy Hilfiger, United, Verizon, Wells Fargo, as well as hundreds of other household names. For more information, visit www.couchbase.com.

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