



Couchbase Mobile and Capella App Services Power Modern Mobile Applications

Couchbase Capella App Services and Couchbase Lite put critical data in users' hands around the globe in modern style. The following examples describe where Couchbase can be found at any time of day, anywhere on the planet.

AT SEA—MOLO17 and Italian Coast Guard



The MOLO17 development team built a location tracking and communication application for Barcolana, the world-renowned regatta in the Gulf of Trieste, leveraging Couchbase's fully managed backend designed for mobile, IoT, and edge applications—Capella App Services on AWS. Previously, it took hours to find sailors in the open sea and lack of internet connectivity while boats were on the water delayed rescue efforts. The solution built with Couchbase on AWS offers situational awareness, streamlined information flow, offline availability, near-real-time synchronization, and effortless integration with existing databases. The precise, one-tap location information from sailors now leads to safer events and faster emergency response times.

IN THE OPERATING ROOM—Arthrex



Arthrex is a global leader in minimally invasive surgical technology. The company selected Couchbase on AWS to improve patient outcomes with IoT data collected at the edge. Couchbase is used in customer hospitals and operating rooms to manage the capture, sync, and storage of patient data, surgical data, and media metadata, including captured images and videos from Arthrex devices.

The devices run a Linux-based application with Couchbase Lite embedded to store relevant data, allowing them to run 100% of the time regardless of internet connectivity and speed. This reduces latency and downtime for critical surgical instruments. Couchbase is then used to sync data from these edge devices across the hospital network in a reliable and secure manner.

In addition, automatic data sharding and replication provides high availability, while Couchbase Autonomous Operator running on Amazon Elastic Kubernetes Service (EKS) automatically handles cluster management, scheduling, and storage.

IN STORE—PMC / Crew Clothing



PMC used Couchbase Mobile on AWS to build a fully mobile application that could run on hand-held tablets. This solution enabled Crew staff members to service customers with all point-of-sale functions—including sales, refunds, customer service, and promotions—from any location. Couchbase Mobile allows data to be accessed, processed, and synchronized with or without internet connectivity, which enables a reliable and seamless customer experience anywhere and at any time. In total, 85% of transactions are processed through the new mobile solution—resulting in a vastly improved customer experience and 22% decrease in staff turnover due to a reduced workload.





WHILE CYCLING—Hammerhead

HAMMERHEAD

Hammerhead developed the Karoo 2, an advanced cycling computer with unique features such as predictive path technology, to amplify the cycling experience. With Couchbase on AWS, Hammerhead can ensure high performance and scalability, offline availability, and seamless data syncing for a smooth, reliable cycling experience for their users. With bidirectional syncing, cyclists can link their Karoo account to various third-party platforms. These platforms leverage the data from Karoo to evaluate cyclists' rides, provide feedback throughout their fitness journey, or allow them to engage with other individuals in the cycling community.

FOR WORKING UNDERGROUND—Groundhog

GROUNDHOG

GroundHog Apps creates intuitive, reliable, and scalable apps for some of the world's largest mining and oil companies. Its solutions are focused on solving complex business-critical problems and driving digital transformation. Because their clients often work in remote locations, GroundHog Apps leverages Couchbase on AWS for a robust and reliable platform that has built-in sync capabilities, provides a seamless experience with or without a network connection, and works in the cloud or on premises.



FOR POP-UP CLINICS—BackpackEMR

BackpackEMR has helped provide mobile clinics with critical technology that's missing from most standard patient-tracking solutions, totaling 50,000 patients across 19 countries. The BackpackEMR system seamlessly manages up to 20 devices and transfers up to 60K documents within seconds. With Couchbase and AWS BackpackEMR has greater efficiency, lower cost and most importantly for its patients—better care. Offline-first peer-to-peer networking creates a seamless patient experience and cuts charting costs by 20% compared to paper. When internet access is available, all patient records sync to the cloud, enabling clinics to access the data for future care. BackpackEMR's SaaS has reduced manual processes by 25% and increased the number of patients seen by 30%.

IN THE AIR—United Airlines



United relies on a crew of 41,000+ pilots, flight attendants, and flight schedulers to operate over 1.5 million flights a year on a tight schedule. Because their crew scheduling application was cumbersome to use and difficult to change, United decided to modernize their technology using Couchbase Server and Couchbase Mobile with AWS. After they successfully streamlined work processes and simplified data management, United continued using Couchbase to update more of their business-critical applications, including their online and mobile booking apps. Now the airline has a single source of truth—delivering reliable, accurate real-time data with low latency and concurrency for document creation, queries, and updates. Schedulers can quickly query and resolve issues from the field, ensuring a positive experience for travelers.

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 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.



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