

Couchbase on AWS Outposts

AWS Outposts

A distributed cloud architecture is fundamental to edge computing, which greatly reduces latency by storing and processing data closer to the applications and users that consume it, enabling innovations like connected homes, autonomous vehicles, robotic surgery, and advanced real-time gaming.

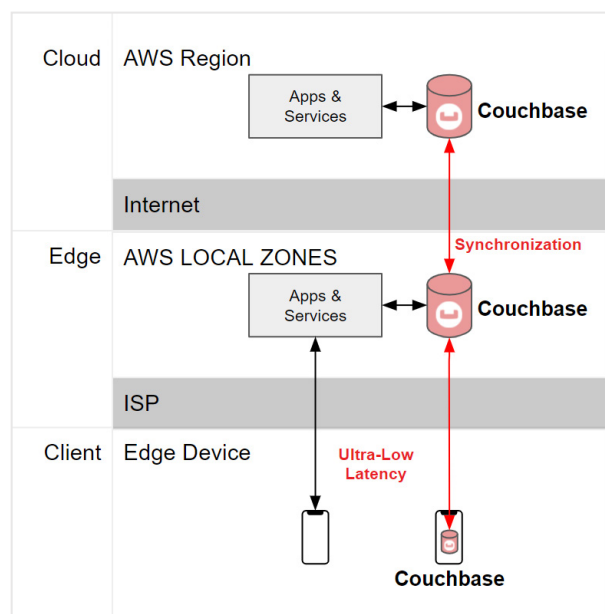
AWS Outposts is a fully managed edge service that offers the same AWS infrastructure, AWS services, APIs, and tools to virtually any data center, co-location space, or on-premises facility for a truly consistent hybrid experience. AWS Outposts is ideal for workloads that require low-latency access to on-premises systems, local data processing, data residency, and migration of applications with local system interdependencies.

Couchbase

Couchbase is a cloud-native, edge-ready distributed JSON document database that inherently supports the edge computing architecture. It fits seamlessly into the AWS Outposts infrastructure.

Running a Couchbase-powered data center at the edge on AWS Outposts ensures high guarantees of speed and availability, providing the fastest possible response times for applications that require ultra-low latency.

With Couchbase on AWS Outposts you can run standardized AWS services and store and process data on premises, dramatically reducing application latency for use cases across industries like manufacturing, telco, healthcare, retail, media, and more.



Couchbase Edge Computing Architecture



Benefits of Couchbase on AWS Outposts

Run AWS services and store and process data on premises

You can use the same AWS APIs, tools, and security controls to run, manage, and secure Couchbase-powered applications on premises just as in the cloud.

Achieve ultra-low latency for critical applications

Reduce dependencies on the internet and gain near-real-time responsiveness for applications by processing data locally.

Maintain full control of sensitive or private data

Securely store and process data that needs to remain on premises. Meet privacy requirements in highly regulated industries and in countries with data residency requirements.

Couchbase: Edge-Ready

Couchbase can be deployed in the cloud, at the edge, and even on edge devices. And its built-in sync features ensure that data is instantly synchronized between the cloud, the edge, and the devices, maintaining data integrity and eliminating data loss.

By deploying Couchbase to AWS Outposts, you essentially bring your data center on premises, eliminating the time needed for your applications to send data to distant cloud data centers for processing. When data is closer to the clients that use it, latency is reduced by orders of magnitude.

With this architecture you can support online and offline applications with the fastest and most reliable experience for users.

Industry Examples

Healthcare

Enable rapid retrieval of medical information by storing data locally on Outposts. Apply analytics and machine learning to health management systems that need to remain on premises due to low-latency processing requirements.

Financial services

Build next-gen trading and exchange platforms that serve all participants with ultra-low latency. Deliver banking, payments processing, and risk management services to customers from in-country locations to meet data locality requirements.

Media & entertainment

Process data on premises for graphics, audio and video rendering, and for running other media applications. Support live and real-time event streaming applications that require low latency.

With Couchbase on AWS Outposts, you can build and deploy applications at the edge that are always fast and always on!

Learn more about Couchbase for edge computing:
<https://www.couchbase.com/solutions/edge-computing>

Get the latest IDC report:
[Performance Accountability and Edge Decision Making with Couchbase](#)

Learn more about AWS Outposts:
<https://aws.amazon.com/outposts/>

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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. For more information, visit www.couchbase.com and follow us on Twitter.