



MongoDB Launches Advanced Data Management Capabilities to Run Applications Anywhere

September 26, 2023

MongoDB Atlas for the Edge enables organizations to build, deploy, and manage highly reliable, data-driven applications anywhere—across devices, on-premises data centers, and the cloud

AWS and Cloneable among partners and customers working with MongoDB Atlas for the Edge

LONDON, Sept. 26, 2023 /PRNewswire/ -- MongoDB, Inc. (NASDAQ: MDB) today at MongoDB.local London announced MongoDB Atlas for the Edge, a set of capabilities that make it easier for organizations to deploy applications closer to where real-time data is generated, processed, and stored—across devices, on-premises data centers, and major cloud providers. With MongoDB Atlas for the Edge, data is securely stored and synchronized in real time across data sources and destinations to provide highly available, resilient, and reliable applications. Organizations can now use MongoDB Atlas for the Edge to build, deploy, and manage applications that are accessible virtually anywhere for use cases like connected vehicles, smart factories, and supply chain optimization—without the complexity typically associated with operating distributed applications at the edge. To get started with MongoDB Atlas for the Edge, visit mongodb.com/use-cases/edge-computing.



"Flexibility and abstracting away complexity is one of the key attributes of a development experience that our customers have come to expect from us," said Sahir Azam, Chief Product Officer at MongoDB. "Atlas for the Edge delivers a consistent development experience across the data layer for applications running anywhere—from mobile devices, kiosks in retail locations, remote manufacturing facilities, and on-premises data centers all the way to the cloud. Now, customers can more easily build and manage distributed applications securely using data at the edge with high availability, resilience, and reliability—and without the complexity and heavy lifting of managing complex edge deployments."

Advancements in edge computing offer significant opportunities for organizations to deploy distributed applications to reach end users anywhere with real-time experiences. However, many organizations today that want to take advantage of edge computing lack the technical expertise to manage the complexity of networking and high volumes of distributed data required to deliver reliable applications that run anywhere. Many edge deployments involve stitching together hardware and software solutions from multiple vendors, resulting in complex and fragile systems that are often built using legacy technology that is limited by one-way data movement and requires specialized skills to manage and operate. Further, edge devices may require constant optimization due to their constraints—like limited data storage and intermittent network access—which makes keeping operational data in sync between edge locations and the cloud difficult. Edge deployments can also be prone to security vulnerabilities, and data stored and shared across edge locations must be encrypted in transit and at rest with centralized access management controls to ensure data privacy and compliance. As a result of this complexity, many organizations struggle to deploy and run distributed applications that can reach end users with real-time experiences wherever they are.

MongoDB Atlas for the Edge eliminates this complexity, providing capabilities to build, manage, and deploy distributed applications that can securely use real-time data in the cloud and at the edge with high availability, resilience, and reliability. Tens of thousands of customers and millions of developers today rely on MongoDB Atlas to run business-critical applications for real-time inventory management, predictive maintenance, and high-volume financial transactions. With MongoDB Atlas for the Edge, organizations can now use a single, unified interface to deliver a consistent and frictionless development experience from the edge to the cloud—and everything in between—with the ability to build distributed applications that can process, analyze, and synchronize virtually any type of data across locations. Together, the capabilities included with MongoDB Atlas for the Edge allow organizations to significantly reduce the complexity of building, deploying, and managing the distributed data systems that are required to run modern applications anywhere:

- **Deploy MongoDB on a variety of edge infrastructure for high reliability with ultra-low latency:** With MongoDB Atlas for the Edge, organizations can run applications on MongoDB using a wide variety of infrastructure, including self-managed on-premises servers, such as those in remote warehouses or hospitals, in addition to edge infrastructure managed by major cloud providers including Amazon Web Services (AWS), Google Cloud, and Microsoft Azure. For example, data stored in MongoDB Enterprise Advanced on self-managed servers can be automatically synced with MongoDB Atlas Edge Server on AWS Local Zones and MongoDB Atlas in the cloud to deliver real-time application experiences to edge devices with high reliability and single-digit millisecond latency. MongoDB Atlas for the Edge allows organizations to deploy applications anywhere, even in remote, traditionally disconnected locations—and keep data synchronized between edge devices, edge infrastructure, and the cloud—to enable data-rich, fault-tolerant, real-time application experiences.
- **Run applications in locations with intermittent network connectivity:** With MongoDB Atlas Edge Server and Atlas Device Sync, organizations can use a pre-built, local-first data synchronization layer for applications running on kiosks or

on mobile and IoT devices to prevent data loss and improve offline application experiences. MongoDB Atlas Edge Servers can be deployed in remote locations to allow devices to sync directly with each other—without the need for connectivity to the cloud—using built-in network management capabilities. Once network connectivity is available, data is automatically synchronized between devices and the cloud to ensure applications are up to date for use cases like inventory and package tracking across supply chains, optimizing delivery routes in remote locations, and accessing electronic health records with intermittent network connectivity.

- **Build and deploy AI-powered applications at the edge:** MongoDB Atlas for the Edge provides integrations with generative AI and machine learning technologies to provide low-latency, intelligent functionality at the edge directly on devices—even when network connectivity is unavailable. For example, MongoDB Atlas Search and Atlas Vector Search make it faster and easier to build intelligent applications with search and generative AI capabilities that take advantage of vector embeddings (numeric representations of data such as text, images, and audio) and large language models. Once embeddings are generated and stored in MongoDB Atlas, edge applications running on the Atlas Device SDK (formerly Realm)—a fast, scalable platform with mobile-to-cloud data synchronization that makes building real-time, reactive mobile applications easy—can use embeddings stored locally for use cases like real-time image similarity search and classification to identify potential product defects on factory lines. Developers can also use the Atlas Device SDK to build, train, deploy, and manage machine learning models on edge devices using popular frameworks like CoreML, TensorFlow, and PyTorch for customized applications that take advantage of real-time data.
- **Store and process real-time and batch data from IoT devices to make it actionable:** With MongoDB Atlas Stream Processing, organizations can ingest and process high-velocity, high-volume data from millions of IoT devices (e.g., equipment sensors, factory machinery, medical devices) in real-time streams or in batches when network connectivity is available. Data can then be easily aggregated, stored, and analyzed using MongoDB Time Series collections for use cases like predictive maintenance and anomaly detection with real-time reporting and alerting capabilities. MongoDB Atlas for the Edge provides all of the tools necessary to process and synchronize virtually any type of data across edge locations and the cloud to ensure consistency and availability.
- **Easily secure edge applications for data privacy and compliance:** MongoDB Atlas for the Edge helps organizations ensure their edge deployments are secure with built-in security capabilities. The Atlas Device SDK provides out-of-the-box data encryption at rest, on devices, and in transit over networks to ensure data is protected and secure. Additionally, Atlas Device Sync provides fine-grained role-based access, with built-in identity and access management (IAM) capabilities that can also be combined with third-party IAM services to easily integrate edge deployments with existing security and compliance solutions.

"High reliability and ultra-low latency are key requirements that impact customers' ability to access and process their data. This is where AWS's edge services help meet customers' data-intensive workload needs," said Amir Rao, Director of Product Management for Telco at AWS. "With MongoDB Atlas for the Edge, customers can take advantage of managed edge infrastructure like AWS Local Zones, AWS Wavelength, and AWS Outposts to process data closer to end users and power applications across generative AI and machine learning, IoT, and robotics—making it easier for them to build, manage, and deploy their applications anywhere."

Cloneable provides low/no-code tools to enable instant deployment of AI applications to a spectrum of devices—mobile, IoT devices, robots, and beyond. "We collaborated with MongoDB because Atlas for the Edge provided capabilities that allowed us to move faster while providing enterprise-grade experiences," said Tyler Collins, CTO at Cloneable. "For example, the local data persistence and built-in cloud synchronization provided by Atlas Device Sync enables real-time updates and high reliability, which is key for Cloneable clients bringing complex, deep tech capabilities to the edge. Machine learning models distributed down to devices can provide low-latency inference, computer vision, and augmented reality. Atlas Vector Search enables vector embeddings from images and data collected from various devices to allow for improved search and analyses. MongoDB supports our ability to streamline and simplify heavy data processes for the enterprise."

About MongoDB Atlas

MongoDB Atlas is the leading multi-cloud developer data platform that accelerates and simplifies building applications with data. MongoDB Atlas provides an integrated set of data and application services in a unified environment that enables development teams to quickly build with the performance and scale modern applications require. Tens of thousands of customers and millions of developers worldwide rely on MongoDB Atlas every day to power their business-critical applications. To get started with MongoDB Atlas, visit mongodb.com/atlas.

About MongoDB

Headquartered in New York, MongoDB's mission is to empower innovators to create, transform, and disrupt industries by unleashing the power of software and data. Built by developers, for developers, our developer data platform is a database with an integrated set of related services that allow development teams to address the growing requirements for today's wide variety of modern applications, all in a unified and consistent user experience. MongoDB has tens of thousands of customers in over 100 countries. The MongoDB database platform has been downloaded hundreds of millions of times since 2007, and there have been millions of builders trained through MongoDB University courses. To learn more, visit mongodb.com.

Forward-looking Statements

This press release includes certain "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, including statements concerning MongoDB's technology and offerings. These forward-looking statements include, but are not limited to, plans, objectives, expectations and intentions and other statements contained in this press release that are not historical facts and statements identified by words such as "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "plan," "project," "will," "would" or the negative or plural of these words or similar expressions or variations. These

forward-looking statements reflect our current views about our plans, intentions, expectations, strategies and prospects, which are based on the information currently available to us and on assumptions we have made. Although we believe that our plans, intentions, expectations, strategies and prospects as reflected in or suggested by those forward-looking statements are reasonable, we can give no assurance that the plans, intentions, expectations or strategies will be attained or achieved. Furthermore, actual results may differ materially from those described in the forward-looking statements and are subject to a variety of assumptions, uncertainties, risks and factors that are beyond our control including, without limitation: the impact the COVID-19 pandemic may have on our business and on our customers and our potential customers; the effects of the ongoing military conflict between Russia and Ukraine on our business and future operating results; economic downturns and/or the effects of rising interest rates, inflation and volatility in the global economy and financial markets on our business and future operating results; our potential failure to meet publicly announced guidance or other expectations about our business and future operating results; our limited operating history; our history of losses; failure of our platform to satisfy customer demands; the effects of increased competition; our investments in new products and our ability to introduce new features, services or enhancements; our ability to effectively expand our sales and marketing organization; our ability to continue to build and maintain credibility with the developer community; our ability to add new customers or increase sales to our existing customers; our ability to maintain, protect, enforce and enhance our intellectual property; the growth and expansion of the market for database products and our ability to penetrate that market; our ability to integrate acquired businesses and technologies successfully or achieve the expected benefits of such acquisitions; our ability to maintain the security of our software and adequately address privacy concerns; our ability to manage our growth effectively and successfully recruit and retain additional highly-qualified personnel; and the price volatility of our common stock. These and other risks and uncertainties are more fully described in our filings with the Securities and Exchange Commission ("SEC"), including under the caption "Risk Factors" in our Quarterly Report on Form 10-Q for the quarter ended April 30, 2023, filed with the SEC on June 2, 2023 and other filings and reports that we may file from time to time with the SEC. Except as required by law, we undertake no duty or obligation to update any forward-looking statements contained in this release as a result of new information, future events, changes in expectations or otherwise.

MongoDB Public Relations
press@mongodb.com

 View original content to download multimedia: <https://www.prnewswire.com/news-releases/mongodb-launches-advanced-data-management-capabilities-to-run-applications-anywhere-301938466.html>

SOURCE MongoDB, Inc.