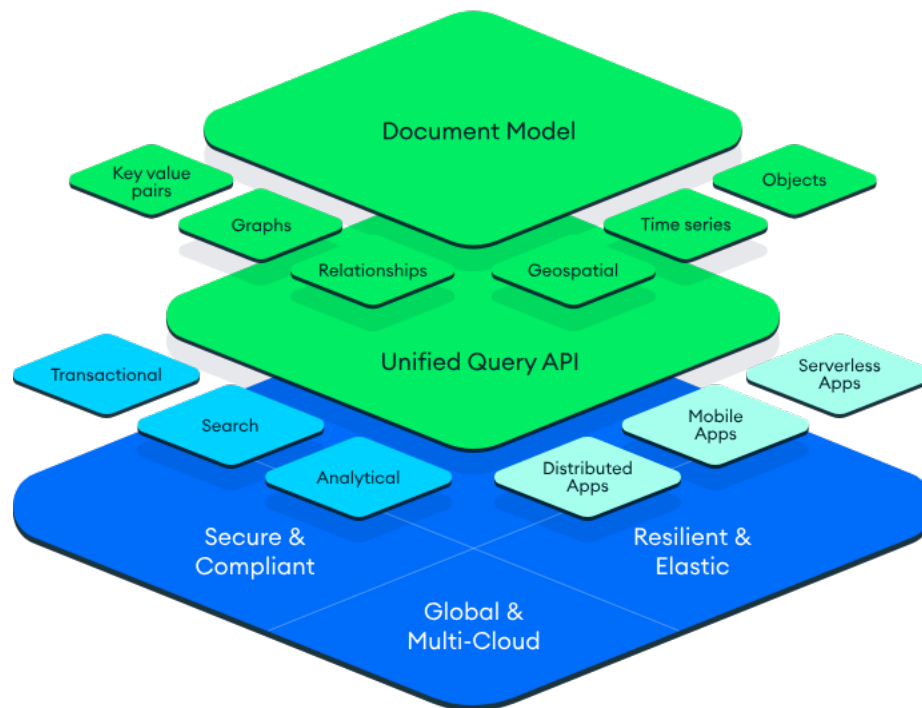


What is New in the MongoDB Releases

The first version of the MongoDB database shipped in August 2009. The 1.0 release and those that followed shortly after were focused on validating a new and largely unproven approach to database design — built on a JSON-like **document data model** and layered onto an elastic and distributed systems foundation. Those early MongoDB releases attracted adoption across startups and enterprises alike.

With early usage validating product-developer fit, the MongoDB engineering team's focus shifted to expanding the system beyond a niche NoSQL database into the industry's first developer data platform. From operational and transactional workloads with integrated full-text search to real-time analytics and mobile computing at the network edge, **MongoDB Atlas** developer data platform accelerates and simplifies how developers build with data for any class of modern application, all accessed via a unified API.



2023 — MongoDB 7.0

- MongoDB 7.0 introduces major improvements across four key areas: Migrations, security, performance and developer experience.
- Migration operations are streamlined with updates to [Cluster-to-Cluster Sync \(mongosync\)](#), providing flexibility for syncing between clusters with unlike topologies, enabling specific subsets of databases and collections to be synced and oplog buffering to keep the source & destination clusters in sync.
- Security is reinforced with the general availability of [Queryable Encryption](#) which provides customers the ability to encrypt sensitive workloads throughout its lifecycle while additionally are able to query the encrypted data as well
- Performance improvements include an advanced query execution strategy becoming the default for find() and prefix of aggregate() queries. Sharded clusters have faster chunk migrations with a [new high throughput parameter](#). [Balancer chunk auto-merge](#) ensures linear growth in the number of chunks is not required when scaling a sharded cluster.
- Updates to the Query API introduce [bitwise operators](#), [percentile operators](#), and user role variables in the Aggregation Framework as well as ad-hoc updates and deletes for time series collections. Developers will no longer experience unexpected errors in [change streams with large documents](#). Sharded clusters are easier to create and develop for thanks to [shard key analysis commands](#) and the [ability to store application data on sharding configuration servers](#).
- MongoDB 7.0 also introduces a [MongoDB driver for Kotlin](#), adding to the wide array of language options available.

[MongoDB 7.0 release notes](#)

2022 — MongoDB 6.0

- [MongoDB 6.0](#) includes more features and optimizations for time series collections; improved support for event-driven architectures; full support for sharded joins and graph traversal; improvements to operational resilience and

sharding; and the ability to [run expressive queries on fully randomized encrypted data](#).

- General availability of [Atlas Serverless instances](#), [Atlas Data API](#), [Atlas CLI](#), and [Flexible Sync](#), which enables the cloud-to-edge synchronization of only the data that's relevant to a given user or device.
- [Atlas Data Lake](#) (in preview), a fully managed storage service for analytical workloads; [Atlas Data Federation](#), which allows you to seamlessly query, transform, and aggregate data from one or more MongoDB Atlas databases, Atlas Data Lakes, or AWS S3 buckets; and new [Atlas SQL Interface](#) with support for popular SQL-based tools.
- [Cluster-to-cluster sync](#), which allows you to continuously synchronize data between MongoDB clusters in the same or hybrid environments, including Atlas, private cloud, on-premises, and at the edge.

[MongoDB release notes](#)

2021-2022 — MongoDB 5.0 and Rapid Releases

- [MongoDB 5.x](#) with native [time series collections](#) optimized for IoT and financial apps; live resharding so you can change your shard key on-demand with no database downtime; distributed cross-shard JOINS and graph traversals for sophisticated analytics against live data, faster initial sync via file copy, new aggregation operators, and more.
- The [MongoDB Stable API](#) future-proofs your applications. You can upgrade to the latest MongoDB releases without the risk of backward-breaking changes.
- [Atlas Serverless instances](#) (preview) automatically and dynamically scale to meet your workload and you pay only for the resources consumed.
- The [MongoDB Atlas Data API](#) (preview) provides a fully managed, REST-like API for accessing your Atlas data without the need for database drivers.

[MongoDB release notes](#)

2020 — MongoDB 4.4

- [MongoDB 4.4](#) offering richer aggregations with UNION; streaming replication reducing data synchronization latency across a distributed database cluster by up to 50% ; hedged and mirrored reads for consistent low latency in the face of infrastructure failures.
- [MongoDB Atlas Online Archive](#) to automatically tier aged data from your database to fully managed, queryable object storage, optimizing scalability, performance, and cost.
- [Realm & Sync](#), delivering best-in-class experiences at the edge of the network with an embedded mobile database and automated sync to MongoDB Atlas in the cloud, keeping data updated across users, devices, and your backend.
- [MongoDB Atlas multi-cloud clusters](#) providing the ability to distribute data in a single cluster across multiple public clouds simultaneously, or move workloads seamlessly between them.

[MongoDB release notes](#)

2019 — MongoDB 4.2

- [MongoDB 4.2](#) brings distributed, cross-shard ACID transactions for data integrity at global scale; [client-side field-level encryption](#), providing some of the strongest privacy controls anywhere; on-demand materialized views for blazing fast analytics.
- [MongoDB Atlas Search](#), combining the power of Apache Lucene with the Atlas platform, making it easy to build fast, relevant, full-text search on top of your data in the cloud.
- [MongoDB Atlas Data Lake](#), enabling you to quickly and easily query data in any format on Amazon S3 using the MongoDB Query API.

- [MongoDB Operator for Kubernetes](#) and [MongoDB Connector for Apache Kafka](#), simplifying MongoDB integration into your application estate.

[MongoDB release notes](#)

2018 — MongoDB 4.0

- MongoDB 4.0 offers [multi-document ACID transactions](#), making it even easier to address a complete range of use cases with MongoDB and simplifying legacy database migrations.
- [MongoDB Atlas](#) Global Clusters, creating fully managed, globally distributed database deployments for low-latency reads and writes, plus data placement controls for regulatory compliance.
- [MongoDB Atlas enterprise security controls](#) with LDAP integration; bring-your-own KMS for encrypting data at rest; and granular event audit logging.
- [MongoDB Charts](#) is a modern data visualization and analytics tool that allows you to easily create, share, and embed visualizations from Atlas and Atlas Data Lake.

[MongoDB release notes](#)

2017 — MongoDB 3.6

- [Fully managed MongoDB Atlas](#) database service is now expanded from AWS to Azure and Google Cloud, providing unmatched data distribution across all of the leading cloud providers.
- [Change streams](#) to build always-on, real time, reactive applications and [retryable writes](#) enabling developers to build more resilient apps with less client-side code.

- Further improved data integrity with [schema validation](#) to enforce a schema against your data.
- Implementation of a global logical clock to enforce consistent time across every operation in a distributed cluster, further improving data integrity and resilience, along with [causal consistency guarantees](#) for read-your-own-write consistency.

[MongoDB release notes](#)

2016 — MongoDB 3.4

- [Fully-managed MongoDB Atlas](#) database service launched on AWS, providing built-in automation for resource and workload optimization and always-on security, backed by a 99.995% uptime SLA.
- Native graph processing with [\\$graphLookup](#) to identify patterns in connected data; the [decimal data type](#) for high-precision processing of financial and scientific data; and [read-only views](#) to filter and mask data.
- [Zoned sharding](#) to localize data within specific regions and 10x faster data rebalancing across elastically scaled database clusters.
- [MongoDB Connector for Apache Spark](#) providing seamless integration into data science and AI workflows.

[MongoDB release notes](#)

2015 (Late) — MongoDB 3.2

- The [Encrypted Storage Engine](#) provides native at-rest encryption without the performance or management overhead of separate file system encryption; the [In-Memory Storage Engine](#) delivers high performance and predictable latency; and the [\\$lookup aggregation pipeline stage](#) joins documents from different collections and databases.

- The launch of [MongoDB Compass](#) provides a GUI for MongoDB development and administration; the [MongoDB Connector for BI](#) exposing MongoDB data for analysis and visualization via SQL.
- Higher database resilience with faster failure detection and recovery via the RAFT-based replication consensus protocol.

[MongoDB release notes](#)

2015 (Early) — MongoDB 3.0

- [MongoDB 3.0 with the WiredTiger Storage Engine](#) offers document-level concurrency control and built-in compression for an order of magnitude more scalability.
- [MongoDB Ops Manager](#) is the self-hosted management platform that enables you to deploy, monitor, back up, and scale MongoDB on your own infrastructure with 95% lower operational overhead.
- 50-member replica sets, providing global data distribution.