MongoDB Architecture Guide: Overview

August 2019

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Industry Context

The success of every business today rests on its ability to use technology, and in particular software and data, to create a competitive advantage. Companies need to rapidly develop new digital products and services to drive expansion of revenue streams, improve customer experience by engaging them in more meaningful ways, and identify opportunities to reduce the risk and cost of doing business.

Organizations turn to multiple strategies to compete in the digital economy:

- Aligning behind new IT processes and methodologies such as Agile and DevOps to continuously deliver new functionality to the business.
- Adopting new architectures by moving to microservices and event-driven patterns while replatforming in the cloud and pushing more compute and data out to the network edge.
- Improving user experience and retention with mobile-first development, progressive web apps, and search based User Interfaces.
- Exploiting emerging technologies including AI and advanced analytics, AR/VR, and IoT with autonomous "things" – all underpinned by strong digital privacy and ethics.

By capturing the potential of the digital economy the World Economic Forum estimates the global economy is poised to unlock $100 trillion of value over the next decade. However, many organizations are struggling. IDG Research revealed that 64% of enterprises cited legacy IT infrastructure, processes, and/or tools as their largest barriers to transformation, while a Rimini Street survey found that 77% of organizations are spending too much "keeping the lights on" as the top roadblock to innovation. In research from Stripe, executives stated that access to developers was the largest constraint on their company's growth, with over 95% making developer productivity a top priority for the business.

Why are organizations facing these challenges? Software and data are at the heart of every business, and from our experience in working with startups, governments, and more than 50% of the Fortune 100, realizing their full potential is still a significant challenge:

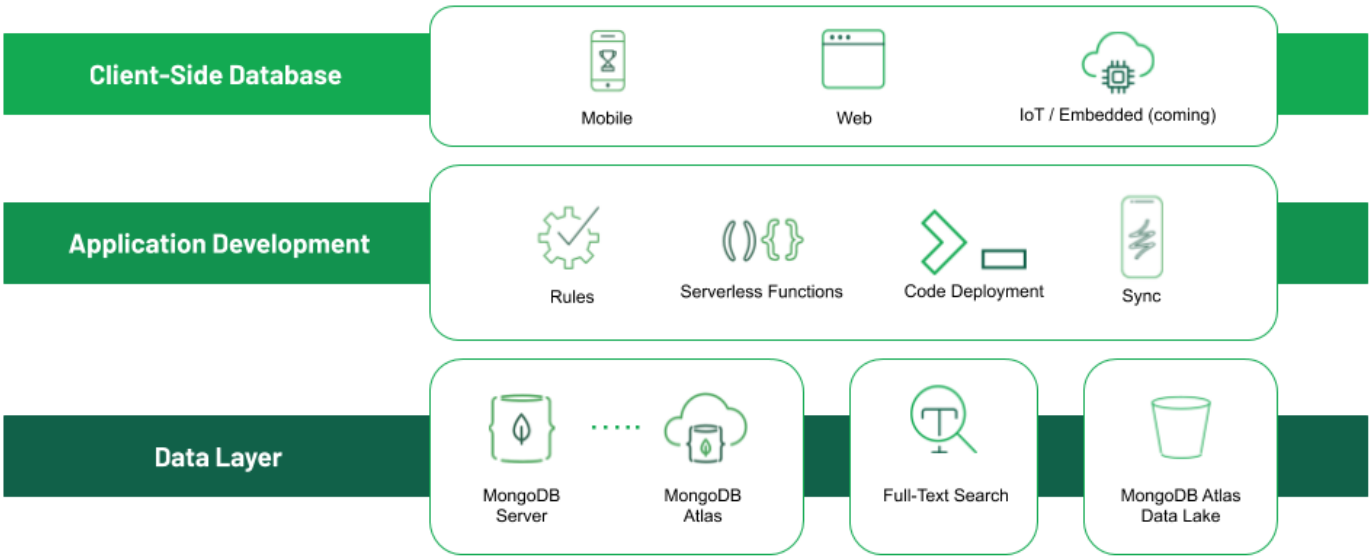

Figure 1: The MongoDB Data Platform

- Demands for higher developer productivity and faster time to market – with release cycles compressed to days and weeks – are being held back by rigid relational data models, legacy technologies, waterfall development, and organizational silos.
- The inability to manage massive increases in new, rapidly changing data types – structured, semi-structured, and polymorphic data generated by modern web, mobile, social, AI, and IoT applications. This is coupled with the inability to unlock value from that data wherever it is stored – on devices, in operational databases, and in vast repositories in the cloud.
- Difficulty in exploiting the wholesale shift to mobile platforms and cloud computing.

MongoDB has responded to these challenges by creating a data platform built around three core design principles that collectively enable you to build faster, and with higher quality:

1. The document data model – presenting you with **the best way to work with data**.
2. A distributed systems design – allowing you to **intelligently put data where you want it**.
3. A unified experience that gives you the **freedom to run anywhere** – allowing you to future-proof your work and eliminate vendor lock-in.

In this Guide, we provide an overview of the MongoDB data platform and its underlying architecture.

The MongoDB Data Platform

To build modern apps, developers need to be able to work with data wherever it lives – in both the client and in the data layer at the backend, with fine-grained access controls, seamless synchronization and reactive event-handling as data moves between each layer of the stack.

Data Layer

The MongoDB Server is a general purpose OLTP database designed to serve operational and real-time analytics workloads.

- Wherever you are thinking about using a relational database, you should consider MongoDB.
- Wherever you are thinking about using a NoSQL database, you should consider MongoDB.

Whether you plan to run your apps in your own facilities, as a serverless, cloud-native solution, or with a hybrid deployment model in between, MongoDB provides complete infrastructure agility. You can run MongoDB yourself on your own infrastructure, or use MongoDB Atlas,

our fully-managed and fully-automated global cloud database service, available on over 60 regions across AWS, Azure, and GCP.

For applications that need rich text search capabilities, MongoDB Atlas offers Full-Text Search, exposing a Lucene 8 process as part of your Atlas deployment. You can execute search queries using the MongoDB Query Language (MQL). There's no need to learn another language or export data and set up, maintain, and scale a separate search platform.

The MongoDB Atlas Data Lake extends the power and productivity of MongoDB to offline analytics workloads. The Atlas Data Lake allows you to quickly and easily query data in any format on Amazon S3 (with other cloud providers coming), using the regular MongoDB Query Language and tools. With Atlas Data Lake you can realize the value of your data lake faster: you don't have to move data anywhere, you can work with complex data immediately in its native form without first having to define a schema, and with its fully-managed, serverless architecture, you control costs and remove the operational burden.

By using MongoDB Atlas, you have a fully-integrated data layer:

- Operational apps with real-time analytics powered by MongoDB and Full-Text Search.
- Offline, long-running analytics powered by the Atlas Data Lake.

These services use the same query language, drivers and tools. They are fully managed side-by-side for you through the same cloud-native Atlas service with consolidated provisioning, permissioning, management, and billing – enabling you to serve a complete range of operational and analytical applications, all from a single platform.

Application Development

The MongoDB Realm and Stitch Platform helps you build better fullstack apps faster. It offers easily configurable rules for accessing data and services directly from your application frontend, along with serverless functions to execute application logic. You can automatically sync data between the client and backend data layer. Through integrations with your code repositories you can develop locally and then seamlessly deploy version-controlled application updates to test and production.

- Mobile developers can make use of Realm Database and services such as Sync to rapidly build mobile apps that continue to run with or without network connectivity.
- Web app teams can move faster with features such as QueryAnywhere – exposing the full power of MongoDB and the MongoDB Query Language (MQL) directly from your frontend – and static hosting, which allows you to host and deploy all your web assets in a single platform.

Client-Side Database

The MongoDB Realm Database is used by over 100,000 developers and has been installed over 2 billion times, offering a fast, easy-to-use, alternative to SQLite and Core Data. With support for complex queries, safe threading, a reactive architecture to create responsive and fluent UIs, encryption, and cross-platform support, developers can simplify their code and build powerful and engaging experiences on more devices.

In the following sections of this guide, we explore the three core architectural principles of MongoDB.

Documents: The Best Way to Work with Data

In contrast to the tabular data model used by relational databases, MongoDB uses the **document data model**. Documents are a much more natural way to represent data. They present a single structure, with related data embedded as sub-documents and arrays, collapsing what are otherwise separate parent-child tables linked by foreign keys in a relational database.

The following example JSON document in MongoDB demonstrates how a customer object is modeled in a single document structure, rather than across multiple separate tables in a relational database.

```
{
  "_id":
      ObjectId("5ad88534e3632e1a35a58d00"),
  "name": {
    "first": "John",
    "last": "Doe" },
  "address": [
    { "location": "work",
      "address": {
        "street": "16 Hatfields",
        "city": "London",
        "postal_code": "SE1 8DJ"},
      "geo": { "type": "Point", "coord": [
         51.5065752,-0.109081]}},
  ],
  "phone": [
    { "location": "work",
      "number": "+44-1234567890"},
     ],
  "dob": ISODate("1977-04-01T05:00:00Z"),
  "retirement_fund":
        NumberDecimal("1292815.75")
}
```

This example illustrates how documents are much more closely aligned to the structure of objects in today's programming languages and to messages streamed between APIs in modern microservices architectures. As a result, it's simpler and faster for you to model how application objects will map to data stored in the database.

Beyond ease-of-use, documents have many other key properties that improve developer productivity:

- Documents are **flexible**. You can modify your schema at any time, allowing you to continuously integrate new application functionality, without wrestling with complex schema migrations. With Schema Validation, you have the option to enforce a schema against the data, ensuring the presence of mandatory fields, permissible values, and appropriate data types.
- Documents are **polymorphic**: Documents in a collection (analogous to a table in a relational database) can have different structures compared to other documents in the same collection.
- Documents are **extensible**: You can model data in any way your application demands it – from rich, hierarchical documents through to flat, table-like structures, simple key-value pairs, text, geospatial data, and the nodes and edges used in graph processing.

As a result of these properties, you can serve many more classes of app on a single data platform – rather than using a multitude of different databases, each operating against its own copy of the data, and each with its own, incompatible APIs that slow you down.

Documents have become the preferred way for developers to work with data, and have been adopted by other databases. However, MongoDB gives you capabilities that you just don't get with other technologies:

- With multi-document ACID transactions, you can maintain the same data integrity guarantees you are used to in traditional databases, with a key difference being that MongoDB allows you to maintain transactional guarantees even across highly distributed clusters spanning the globe.
- MongoDB's expressive query language, secondary indexes, and aggregation pipeline allows you to query data almost any way your application needs – from simple lookups and range queries to creating sophisticated processing pipelines for data analytics and transformations, through to JOINs, geospatial processing, on-demand materialized views, and graph traversals. You can work with data using the same MongoDB Query Language and drivers across your databases supporting OLTP and real-time analytics, and your offline data lakes.
- With strong consistency by design, MongoDB allows you to read your own writes, eliminating the application complexity incurred by eventually consistent systems. MongoDB's consistency guarantees are fully tunable, allowing you to balance data freshness against performance.
- MongoDB stores data as JSON (JavaScript Object Notation) documents in a binary representation called BSON (Binary JSON). Unlike most databases that store JSON data as primitive strings and numbers, the BSON encoding extends the JSON representation to include additional types such as int, long, date, floating point, and decimal128. This makes it much easier for applications to reliably process, sort, and compare data.

Working with Document Data

To accelerate developer productivity, MongoDB provides native drivers for all popular programming languages and frameworks. Supported drivers include Java, Javascript, C#/.NET, Go, Python, Perl, PHP, Scala and others. All

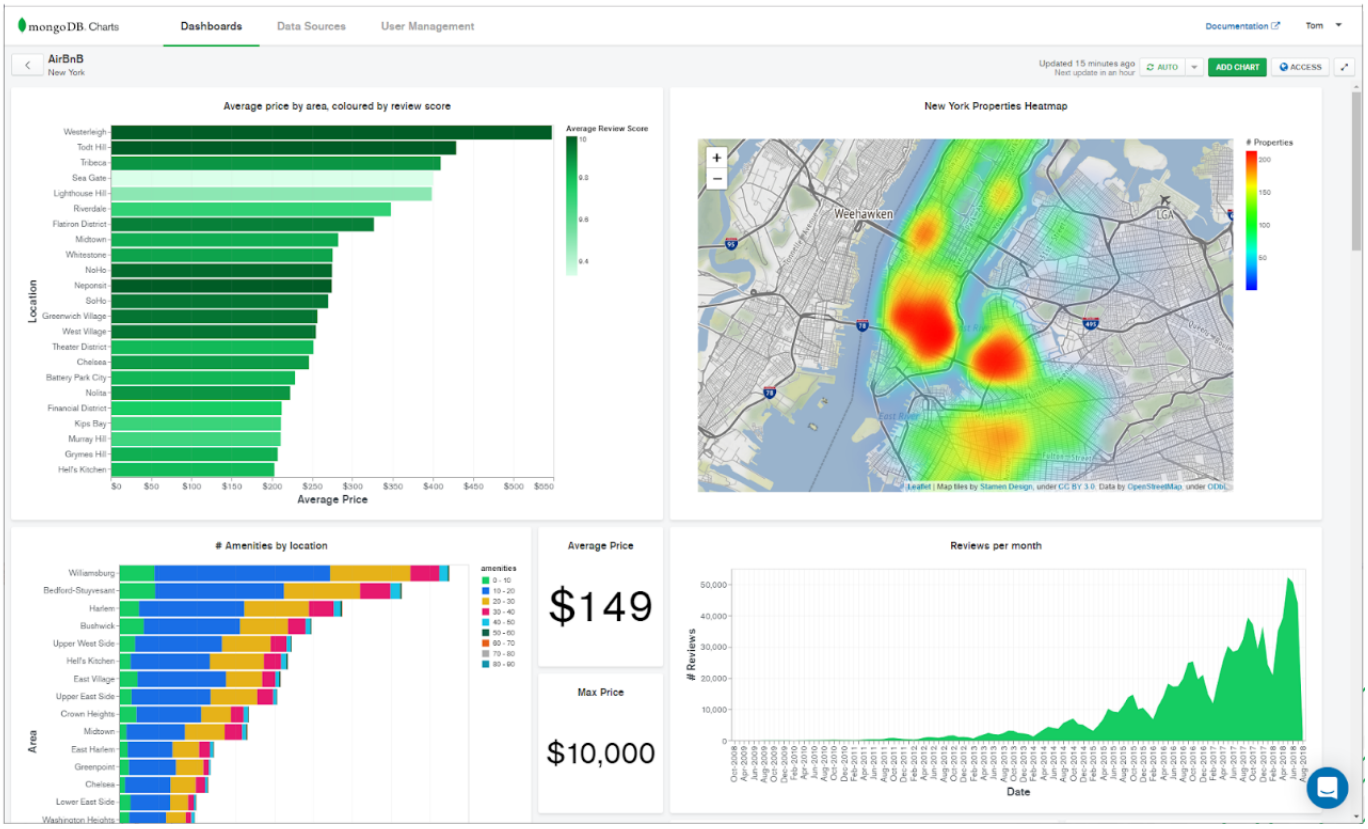

Figure 2: Creating rich visualizations of your data with MongoDB Charts

supported MongoDB drivers are designed to be idiomatic for the given programming language. This makes it much more natural for developers to work with data than string-based languages like SQL, and eliminates the need for cumbersome and fragile ORM abstraction layers.

You can also interact with MongoDB graphically using MongoDB Compass, the GUI for MongoDB. Through Compass you can explore and manipulate your data, visually create queries and aggregation pipelines from the GUI and then export them as code to your app; view and create indexes; build schema validation rules and views; and more.

Beyond working with documents through the MongoDB drivers, you need to make data accessible to business users, analysts, and data scientists so they can extract insights and hidden value in your application's data. MongoDB provides a range of visualization tools and connectors to make this straightforward:

- MongoDB Charts is the fastest and easiest way to create visualizations of MongoDB data. You can create graphs and build dashboards, sharing them with other users for collaboration, and embed them directly into your web apps to create engaging user experiences.
- The MongoDB Connector for BI lets you use MongoDB as a data source for your existing SQL-based BI and analytics platforms such as Tableau, Microstrategy, Looker, and more.
- The MongoDB Connector for Apache Spark exposes all of Spark's libraries, including Scala, Java, Python and R. MongoDB data is materialized as DataFrames and Datasets for analysis with machine learning, graph, streaming, and SQL APIs.

To make it easy for businesses to act on data in real time, many developers are building fully reactive, event driven data pipelines. MongoDB goes beyond many other databases with features like Change Streams that automatically detect and notify consuming applications of any data modifications in the database, while MongoDB Atlas Triggers allow you to execute server-side logic in response to database events. With the MongoDB Connector for Apache Kafka (beta), you can build robust data pipelines that move events between systems in real time, using MongoDB as both a source and sink for Kafka.

The connector is supported by MongoDB and verified by Confluent.

In summary, documents are the best way to work with data, and MongoDB gives you the most productive and fully-featured implementation of a document database anywhere.

Distributed Systems: Put Data Where You Want It

Through replica sets and sharding, MongoDB enables you to resiliently scale out your applications, and distribute data for low latency user access, while enforcing data sovereignty controls for new data privacy regulations such as the GDPR.

Replication and Workload Isolation

MongoDB replica sets enable you to create up to 50 copies of your data, which can be provisioned across separate nodes, racks, data centers, and geographic regions. Replica sets are predominantly designed for resilience: if a primary node suffers an outage or is taken down for maintenance, MongoDB will automatically elect a replacement in a few seconds, retrying any failed operations for you. You can also use replica sets to:

- Scale read operations, intelligently routing queries to a copy of the data that is physically closest to the user.
- Isolate different workloads on a single cluster. You can dedicate one set of replicas to handle operational applications, while replicating data to another set of replicas handling analytical queries that are updating reports and dashboards, or serving machine learning models. Through process separation, the workloads never contend for system resources. You can serve your operational applications with millisecond latency, while concurrently generating real time insights from your live, operational data without the fragility and latency of ETLing it into a separate database.

Scale-Out Globally

Through sharding, you can automatically scale your database out across multiple nodes to handle write-intensive workloads and growing data sizes. Sharding with MongoDB allows you to seamlessly scale the database as your apps grow beyond the hardware limits of a single server, and it does so without adding complexity to the application. To respond to changing workload demand, documents can be moved between shards, and nodes can be added or removed from the cluster in real time. MongoDB will automatically rebalance the data as needed without manual intervention.

By simply hashing a primary key value, many distributed databases randomly spray data across a cluster of nodes, imposing performance penalties when data is queried, or adding application complexity when data needs to be localized to a specific region. By exposing multiple sharding policies to developers, MongoDB offers a better approach. Data can be distributed according to query patterns or data placement requirements, giving you much higher scalability across a diverse set of workloads:

- **Ranged Sharding**. Documents are partitioned across shards according to the shard key value. Documents with shard key values close to one another are likely to be co-located on the same shard. This approach is well suited for applications that need to optimize range based queries, such as co-locating data for all customers in a specific region on a specific shard.
- **Hashed Sharding**. Documents are distributed according to an MD5 hash of the shard key value. This approach guarantees a uniform distribution of writes across shards, which is often optimal for ingesting streams of time-series and event data.
- **Zoned Sharding**. Provides the ability for developers to define specific rules governing data placement in a sharded cluster.

Global Clusters in MongoDB Atlas – the fully managed cloud database service – allows you to quickly implement zoned sharding using a visual UI or the Atlas API. Easily create distributed databases to support geographically distributed apps, with policies enforced for data sovereignty. Each zone is part of the same, single cluster

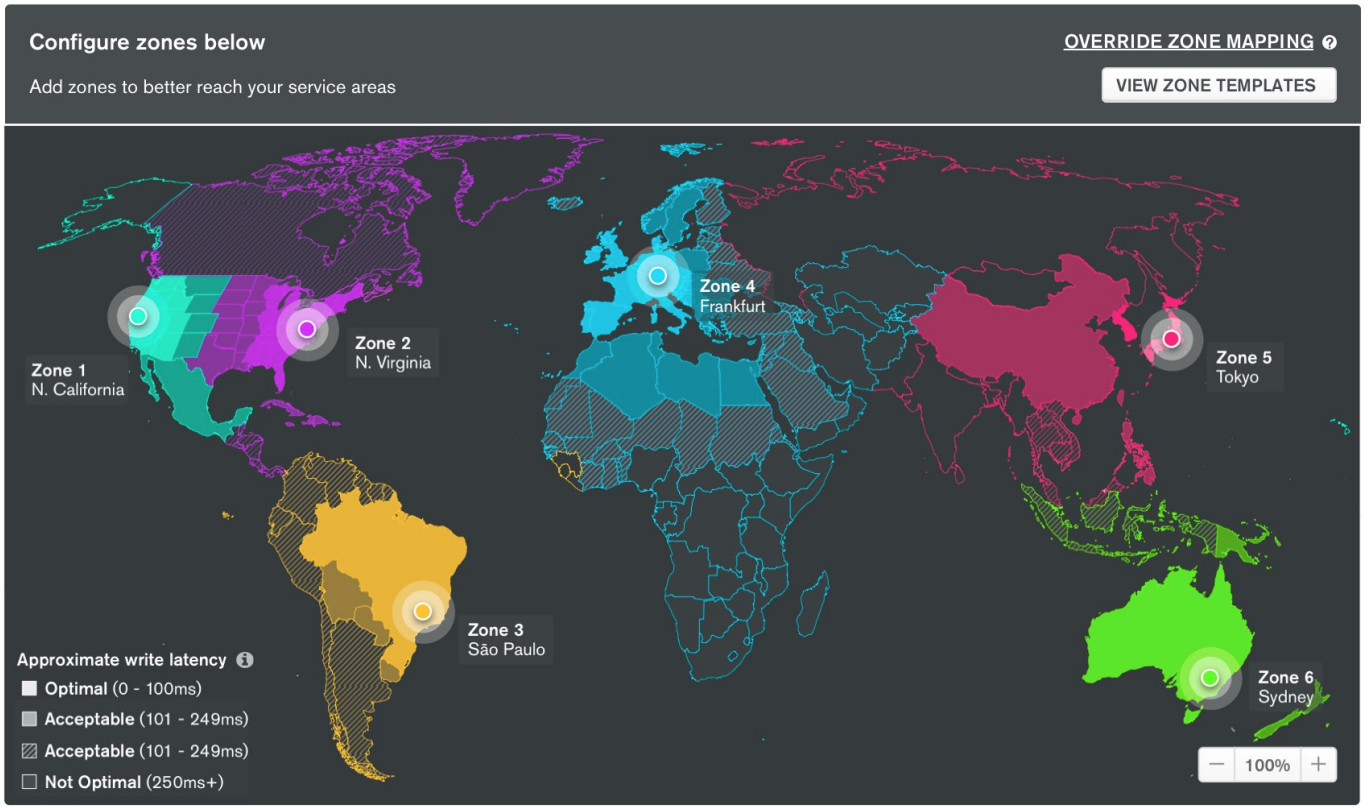

Figure 3: Serving always-on, globally distributed, write-everywhere apps with MongoDB Atlas Global Clusters

and can be queried globally, but data is pinned to shards in specific regions based on data locality demands.

By associating data to shards based on regional policies, developers can create global, always-on, write-everywhere clusters, with each shard serving operations local to it – enabling the database to serve distributed, write-heavy workloads with minimal latency. This design brings the benefits of "multi-master" databases without introducing the complexity of eventual consistency or data loss caused by conflicting writes.

Security

Having the freedom to put data where it's needed enables you to build powerful new classes of applications. However, you must also be confident that your data is secure wherever it is stored. MongoDB features extensive capabilities to defend, detect, and control access to data:

- **Authentication**. Simplifying access control to the database, MongoDB offers a strong Challenge-Response mechanism based on SCRAM-256, along with integration to enterprise security infrastructure including LDAP, Windows Active Directory, Kerberos, and x.509 certificates.
- **Authorization**. Role-Based Access Control (RBAC) enables you to configure granular permissions for a user or an application based on the privileges they need to do their job.
- **Auditing**. For regulatory compliance, security administrators can use MongoDB's native audit log to record all database activity and changes.
- **Encryption Everywhere**. MongoDB data can be encrypted while in motion across the network, while in use in the database, and while at rest, whether on disk or in backups.

With Client-Side Field Level Encryption (FLE), you have access to some of the most advanced data protection controls anywhere. You can selectively encrypt individual document fields, each optionally secured with its own key and decrypted seamlessly on the client. In MongoDB, FLE is totally separated from the database, making it transparent to the server, and instead handled exclusively within the MongoDB drivers on the client. All encrypted fields on the server – stored in-memory, in system logs,

at-rest, and in backups – are rendered as ciphertext, making them unreadable to any party who does not have both client access and the keys necessary to decrypt the data. This is a different and more comprehensive approach than column encryption used in many relational databases. Most handle encryption server-side — so data is still accessible to administrators who have access to the database instance itself, even if they have no client access privileges.

In summary, MongoDB's distributed systems design enables you to deliver more scalable applications faster, with higher resilience, performance, and security than other database platforms.

Freedom to Run Anywhere: Future-Proof Your Apps

To reduce the likelihood of lock-in, project teams should build their applications on data platforms that deliver a consistent experience across any environment. MongoDB can be deployed anywhere – from mobile devices with Realm, to mainframes, private cloud to the public cloud with the MongoDB Server and Atlas. The developer experience is entirely unaffected by the deployment model; similarly, teams responsible for standing up databases, maintaining them, and optimizing performance can also leverage a unified set of tools that deliver the same experience across different environments. With MongoDB, where you decide to run the platform becomes a deployment-time decision, rather than a design-time constraint.

MongoDB Atlas: Run by Us for You

MongoDB offers the fully managed, on-demand and global MongoDB Atlas service in the public cloud. Atlas enables you to take advantage of MongoDB's capabilities on AWS, Azure, or GCP without needing to deploy, operate, and scale the software or underlying infrastructure yourself.

MongoDB Atlas is available through a pay-as-you-go model and billed on an hourly basis. It's easy to get started – use a simple GUI or programmatic API calls to select the public cloud provider, region, instance size, and features you need – all configured with operational best practices that leave you free to concentrate on your app, rather than backend database operations. MongoDB Atlas provides:

- Automated database and infrastructure provisioning along with auto-scaling so teams can get the database resources they need, when they need them, and can scale elastically in response to application demands.
- Security features to protect your data, with network isolation, fine-grained access control, auditing, and end-to-end encryption of data in-motion, in-use, and at-rest, Certifications against global standards to help you achieve your compliance requirements, including ISO 27001, SOC 2, and more. Atlas can be used for workloads subject to regulatory standards such as HIPAA, PCI-DSS, and GDPR.
- Multi-region Replication and Global Clusters to create geographically distributed deployments offering resilience, scale, and data residency compliance.
- Fully managed backups with point-in-time recovery to protect against data corruption, and the ability to query backups in-place without full restores.
- Fine-grained monitoring and customizable alerts for comprehensive performance visibility to your developers and administrators.
- Automated patching and single-click upgrades for new major versions of the database, enabling you to take advantage of the latest MongoDB features
- Access to the MongoDB Realm and Stitch application platform, with QueryAnywhere, Functions, and Static Hosting delivered in a completely serverless model.
- The Full-Text Search service, providing rich search capabilities against your fully managed databases with no additional infrastructure to provision, manage, or scale.
- Live migration to move your self-managed MongoDB clusters into the Atlas service or to move Atlas clusters between cloud providers.

MongoDB Atlas is serving a vast range of workloads for startups, Fortune 500 companies, and government agencies, including mission-critical applications handling highly sensitive data in regulated industries. The developer experience across MongoDB Atlas and self-managed MongoDB is consistent, ensuring that you easily move

from on-premises to the public cloud, and between providers as your needs evolve.

MongoDB Atlas Data Lake (Beta)

MongoDB Atlas Data Lake allows you to quickly and easily query data in any format on Amazon S3 using the MongoDB Query Language (MQL) and tools.

Traditional data warehouses have been unable to keep up with the data avalanche generated by the digital economy, while Hadoop incurs massive cost and complexity. The Atlas Data Lake helps you tackle these challenges.

- **No schema definition required**. Any richly structured data stored in JSON, BSON, CSV, TSV, Avro, and Parquet formats can be analyzed in place without incurring the complexity, cost, and time-sink of ingestion, transformation, and metadata management.
- **Work with data at any scale, anywhere**. Decoupled compute and storage allows each tier of the data lake to independently expand and contract. Parallelize complex queries to take advantage of existing data partitioning across multiple S3 buckets, delivering performance – even for global analytics that access data in multiple AWS regions.
- **Accelerate productivity of your developer and data teams**. Spin up your data lake right alongside your Atlas OLTP clusters from a common UI. Then query and visualize your data using the same MQL and tools. Applications written in JavaScript, Perl, Python, C, C++, Java, Ruby, Go, Scala, R and many other languages can access Data Lake using standard MongoDB drivers. Data scientists will be able to use tools such as R Studio with the R driver or Jupyter Notebooks with the Python driver for statistics, machine learning, and data lake analytics.
- **On-demand and serverless**. Simply provide access to your existing S3 buckets with a few clicks from the Atlas UI and start running queries immediately. Atlas Data Lake is completely serverless so there is no infrastructure to set up and manage, and you pay only for the queries run and only when actively working with the data.

MongoDB Atlas Data Lake is designed to get the best from your data lake with the tools and platforms already used by millions of developers, whether you want to analyze data, build data services, feed machine learning and AI, or build active archives.

MongoDB Run by You, with Tools from Us

If you need to run the database on your own self-managed infrastructure for business or regulatory requirements, MongoDB offers on-premises or cloud-based management tools. These tools can be used to power a MongoDB database behind a single app, or to build your own private database service and expose it to your internal development teams.

MongoDB Ops Manager is the simplest way to run MongoDB on premises or in a private cloud, making it easy for operations teams to automate deployment, monitoring, backup, and scaling of MongoDB. The capabilities of Ops Manager are also available in MongoDB Cloud Manager delivered as SaaS in the cloud. Through Ops Manager, you can manage the complete lifecycle of your MongoDB databases via a powerful GUI, or programmatically with APIs to enable integration with your Infrastructure as a Code tools.

Kubernetes Integration

Kubernetes is the industry leading container orchestration platform. It provides you with a consistent automation and management experience anywhere from on-premises infrastructure to the public cloud. Kubernetes users can use the MongoDB Enterprise Operator for Kubernetes that integrates with MongoDB Ops Manager to automate and manage MongoDB clusters. You have full control over your MongoDB deployment from a single Kubernetes control plane. You can use the operator with upstream Kubernetes, or with any popular distribution such as Red Hat OpenShift and Pivotal Container Service (PKS).

With the MongoDB Atlas Service Broker (coming soon), you will be able to spin up and manage Atlas clusters directly from Kubernetes, controlling infrastructure provisioning, database setup, global distribution, and more. Compatible with the Open Service Broker API, the Atlas Service Broker will make MongoDB Atlas part of your Kubernetes service catalog, allowing cluster creation and management directly from Kubernetes.

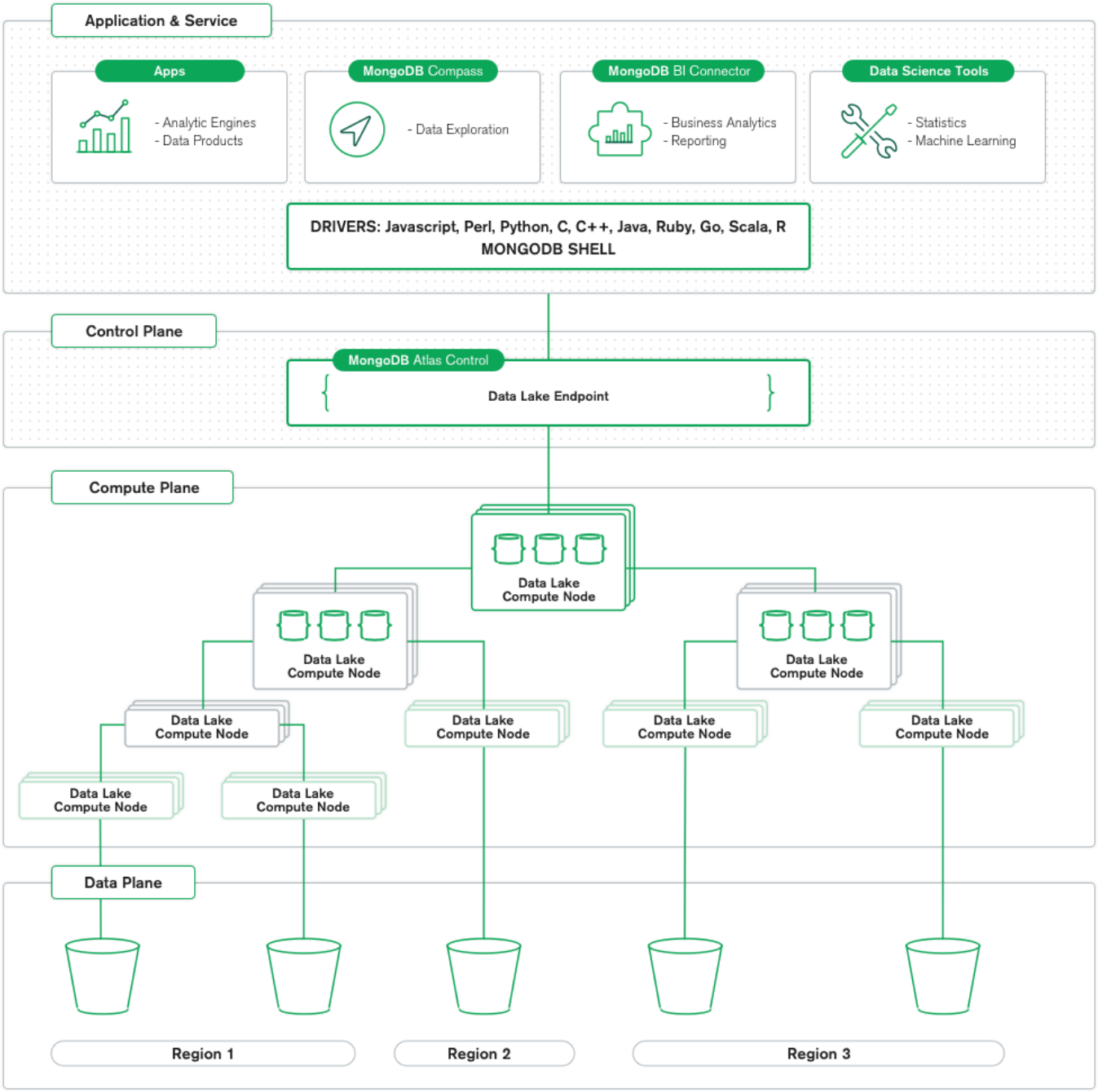

Figure 4: MongoDB Atlas Data Lake architecture

Conclusion and Next Steps

Every industry is being transformed by data and digital technologies. As you build or remake your company for a digital world, speed matters – measured by how fast you build apps, how fast you scale them, and how fast you can gain insights from the data they generate. These are the keys to applications that provide better customer experiences, enable deeper, data-driven insights, and make new products or business models possible.

With the MongoDB Data Platform, we enable you through:

1. The document data model – presenting you with **the best way to work with data**.
2. A distributed systems design – allowing you to **intelligently put data where you want it**.

3. A unified experience that gives you the **freedom to run anywhere** – allowing you to future-proof your work and eliminate vendor lock-in.

In this guide we have explored the foundational concepts that underpin the architecture of MongoDB. Other guides on topics such as performance, operations, and security best practices can be found at mongodb.com.

You can get started now with MongoDB by:

1. Spinning up a fully managed MongoDB instance on the Atlas free tier
2. Downloading MongoDB for your own environment
3. Reviewing the MongoDB manuals and tutorials on our documentation page

Safe Harbor

The development, release, and timing of any features or functionality described for our products remains at our sole discretion. This information is merely intended to outline our general product direction and it should not be relied on in making a purchasing decision nor is this a commitment, promise or legal obligation to deliver any material, code, or functionality.

We Can Help

We are the company that builds and runs MongoDB. Over 14,200 organizations rely on our commercial products. We offer software and services to make your life easier:

MongoDB Atlas is the database as a service for MongoDB, available on AWS, Azure, and GCP. It lets you focus on apps instead of ops. With MongoDB Atlas, you only pay for what you use with a convenient hourly billing model. Atlas auto-scales in response to application demand with no downtime, offering full security, resilience, and high performance.

MongoDB Enterprise Advanced is the best way to run MongoDB on your own infrastructure. It's a finely-tuned package of advanced software, support, certifications, and other services designed for the way you do business.

MongoDB Atlas Data Lake allows you to quickly and easily query data in any format on Amazon S3 using the MongoDB Query Language and tools. You don't have to move data anywhere, you can work with complex data immediately in its native form, and with its fully-managed, serverless architecture, you control costs and remove the operational burden.

MongoDB Charts is the best way to create visualizations of MongoDB data anywhere. Build visualizations quickly and easily to analyze complex, nested data. Embed individual charts into any web application or assemble them into live dashboards for sharing.

MongoDB Stitch is a serverless platform which accelerates application development with simple, secure access to data and services from the client – getting your apps to market faster while reducing operational costs and effort.

MongoDB Realm will combine Realm, the popular mobile database and data synchronization technology, and MongoDB Stitch, the serverless platform for MongoDB, into a unified solution that makes it easy for you to build powerful and engaging experiences on more devices..

MongoDB Cloud Manager is a cloud-based tool that helps you manage MongoDB on your own infrastructure. With automated provisioning, fine-grained monitoring, and continuous backups, you get a full management suite that reduces operational overhead, while maintaining full control over your databases.

MongoDB Consulting packages get you to production faster, help you tune performance in production, help you scale, and free you up to focus on your next release.

MongoDB Training helps you become a MongoDB expert, from design to operating mission-critical systems at scale. Whether you're a developer, DBA, or architect, we can make you better at MongoDB.

Resources

For more information, please visit mongodb.com or contact us at sales@mongodb.com.

Case Studies (mongodb.com/customers)
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Webinars and Events (mongodb.com/events)
Documentation (docs.mongodb.com)
MongoDB Atlas database as a service for MongoDB (mongodb.com/cloud)
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MongoDB Stitch Serverless Platform (mongodb.com/cloud/stitch)
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