# MONGODB.L{}CAL CHICAGO

# Wesley Faulkner

MongoDB Atlas Jumpstart [Intro to Atlas] @wesley83

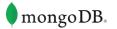


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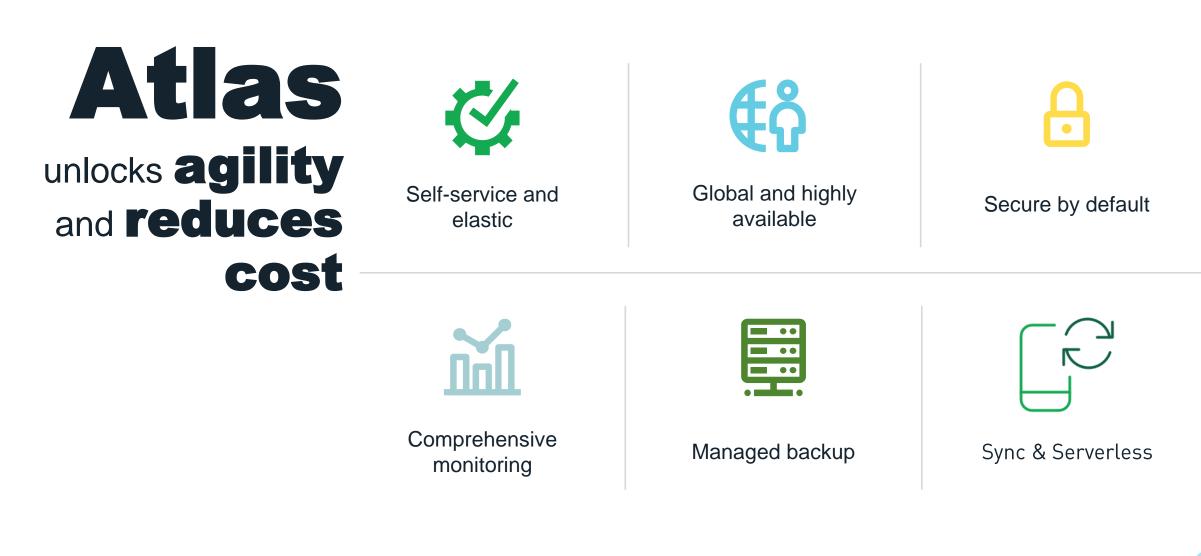
# **Wesley Faulkner**

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# What to Expect

- Atlas History
- Security at the Core
- Our Cloud Advantage
- Platform Saves Time & Money



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# MongoDB Atlas — Global Cloud Database

Self-service & elastic	Global & cloud-agnostic	Enterprise-grade security & SLAs
Deploy, modify, and upgrade on demand with best-in-class operational automation Automated database maintenance Database and infrastructure resources as code Scale up, out, or down in a few clicks or API calls	Available in 60+ regions across AWS, Azure, GCP Global clusters for read/write anywhere deployments and multi-region fault tolerance Easy migrations with a consistent experience across cloud providers	Network isolation, VPC peering, end-to-end encryption, and role-based access controls Encryption key management, LDAP integration, granular database auditing SOC 2 / Privacy Shield / HIPAA Guaranteed reliability with SLAs
Comprehensive monitoring Deep visibility into 100+ KPIs with proactive alerting Real-time performance tracking and Performance Advisor APIs to integrate with monitoring dashboards	<b>Managed backup</b> Point-in-time data recovery Queryable backup snapshots Consistent snapshots of sharded deployments Cloud data mobility	Sync and Serverless Simple, serverless functions for backend logic, service integrations, and APIs Database access from your frontend secured by straightforward, field-level access rules Database and authentication triggers to react to changes in real time

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# The evolution of MongoDB

Document Validation \$lookup Fast Failover Simpler Scalability Aggregation ++ Encryption At Rest In-Memory Storage Engine BI Connector MongoDB Compass APM Integration Auto Index Builds Backups to File System

Linearizable reads Intra-cluster compression Read only views Log Redaction Graph Processing Decimal Collations Faceted Navigation Aggregation ++ Auto-balancing ++ ARM, Power, zSeries BI & Spark Connectors ++ Compass ++ LDAP Authorization Encrypted Backups **Cloud Foundry Integration**  Change Streams Retryable Writes Expressive Array Updates Query Expressivity Causal Consistency Consistent Sharded Sec. Reads Ops Manager ++ Query Advisor Schema Validation End to End Compression IP Whitelisting Default Bind to Localhost Sessions WiredTiger 1m+ Collections Expressive \$lookUp R Driver Atlas Cross Region Replication Atlas Auto Storage Scaling

**Replica Set Transactions** Atlas Global Clusters Atlas HIPAA Atlas LDAP Atlas Audit Atlas Enc. Storage Engine Atlas Backup Snapshots Type Conversions 40% Faster Shard Migrations Snapshot Reads Non-Blocking Sec. Reads SHA-2 TLS 1.1+ Compass Agg Pipeline Builder Compass Export to Code Charts Beta Free Monitoring Cloud Service Ops Manager K8s Beta MongoDB Stitch GA MongoDB Mobile Beta

**Distributed Transactions** Global Point in Time Reads Large Transactions Mutable Shard Key Values Atlas Data Lake (Beta) Atlas Auto Scaling (Beta) Atlas Full-Text Search (Beta) Atlas ISO Compliance Atlas Service Broker Field Level Encryption (Beta) Multi-CAs & Online Rotation **On-Demand Materialized Views** Wildcard Indexes Aga Pipeline ++ **Expressive Updates** Apache Kafka Connector (Beta) MongoDB Charts GA Retryable Reads & Writes New Index Builds 10x Faster stepDown Storage Node Watchdog Zstandard Compression **Ops Manager Headless Backup** Ops Manager K8s GA **Ops Manager Single Agent** 

4.2

3.2	3.4	3.6	4.0
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# **Trusted and Proven**



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# mongoDB. Atlas : The only *true* multi-cloud database as a service

**Azure** 



aws

Consistent experience across AWS, Azure, and GCP

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# Coverage in any geography

( )

Deploy in 59 regions worldwide

Create globally distributed databases with a few clicks

# Leverage the benefits of a multi-cloud strategy

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**Google** Cloud Platform

Exploit the benefits of AWS, Azure, or GCP services on your data

#### Avoid lock-in

Easily migrate data between cloud providers

# **Live Demo**

- Creating an account
- Creating a cluster
- Explorer the interface

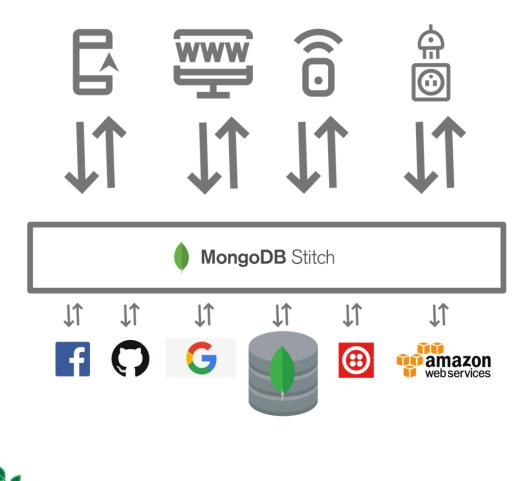


#### Write Everywhere:

zoned sharding routes data to the regions where it's needed



### **MongoDB Stitch Serverless Platform**



Streamlines app development with simple, secure access to data and services from the client with thousands of lines less code to write and no infrastructure to manage.

Getting your apps to market faster while reducing operational costs.



#### Save weeks of development and thousands of lines of code

Backend

Without Stitch With Stitch Provision backend server Install runtime environment Add code to make backend HA Add code to scale backend Monitor & manage backend infrastructure Code REST API for frontend to use backend Code backend application logic Code user authentication Code data access controls Code application frontend Code against each external service API

Continuously poll database for changes

#### Handled automatically by Stitch and Atlas

Provide JS code for Stitch Functions

Simple JSON Config

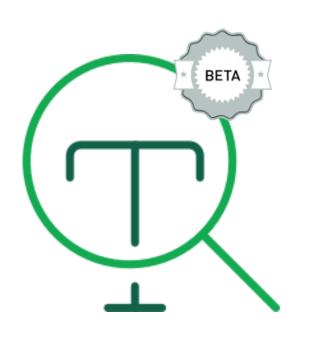
Code frontend using single SDK/API to access backend services

Data Access

Frontend

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## New: MongoDB Atlas Full Text Search (Beta)



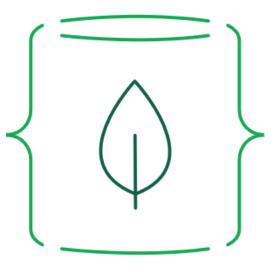
- Adds Full Text Search as a fully managed service to your Atlas cluster
  - Power of Lucene 8, without provisioning and running a separate search platform
  - Integrated with MongoDB Query Language, so no separate APIs to learn
  - Dynamic and static indexing supporting fuzzy & wildcard search, Boolean & compound queries, language analyzers, scoring and snippets
  - Configured via Atlas Data Explorer or API

# What we Covered

- The Evolving Atlas Platform
- Our Flexible Cloud Architecture
- Security and Stability Best Practices
- Leverage our Severless Tools



# When should you make the move to Atlas?



- When you're starting a new project
- Migrating off old infrastructure
- Moving to a major revision
- Forced to move due to regulation

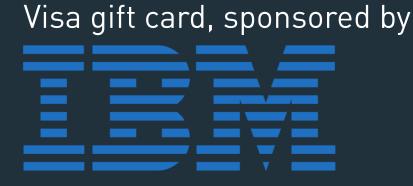


# WF200

## Get \$200 of MongoDB Atlas credit with this code!







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# THANK YOU

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