WELCOME

App-Driven Analytics

Livestream 1

Jay Runkel
Distinguished Solutions Architect
MongoDB

jay.runkel@mongodb.com
@jayrunkel

Who Am I?

```
{
    "name": "Jay Runkel",
    "title": "Distinguished Solutions Architect",
    "company": "MongoDB",
    "tenure": 9.5,
    "documentDatabaseExperience": 14,
    "email": "jay.runkel@mongodb.com",
    "twitter": "@jayrunkel",
}
```

Agenda

Livestream	Objective	Topics
Prework	Setup Development Environment	Install Compass Create Atlas Account Deploy Free Cluster Configure Security Test
1	Build App Driven Analytics	Atlas Developer Data Platform Overview Rocket Use Case Overview Load, Inspect & Query Data Analytics with Aggregation Framework Analytics with Charts
2	Search & Visualizations	Search, Charts, Triggers
3	In Depth Analytics	Data Lake, Data Federation, Atlas SQL

3 Week Agenda

Livestream	Objective	Time
Prework	Setup Development Environment	Before March 15th
1	Build App Driven Analytics Capabilities	March 15th, 10:00 AM ET
2	Search, Visualizations, & Triggers	March 22th, 10:00 AM ET
3	Business Visualizations	March 29th, 10:00 AM ET

You can find everything in github

https://github.com/jayrunkel/rocketLivestream

- Instructions
- Video links
- Slides
- Code
- Data
- Configuration

Today's Agenda

Livestream	Objective	Topics
Prework	Setup Development Environment	Install Compass Create Atlas Account Deploy Free Cluster Configure Security Test
1	Build App Driven Analytics Capabilities	Atlas Developer Data Platform Overview Rocket Use Case Overview Load, Inspect & Query Data Analytics with Aggregation Framework Analytics with Charts

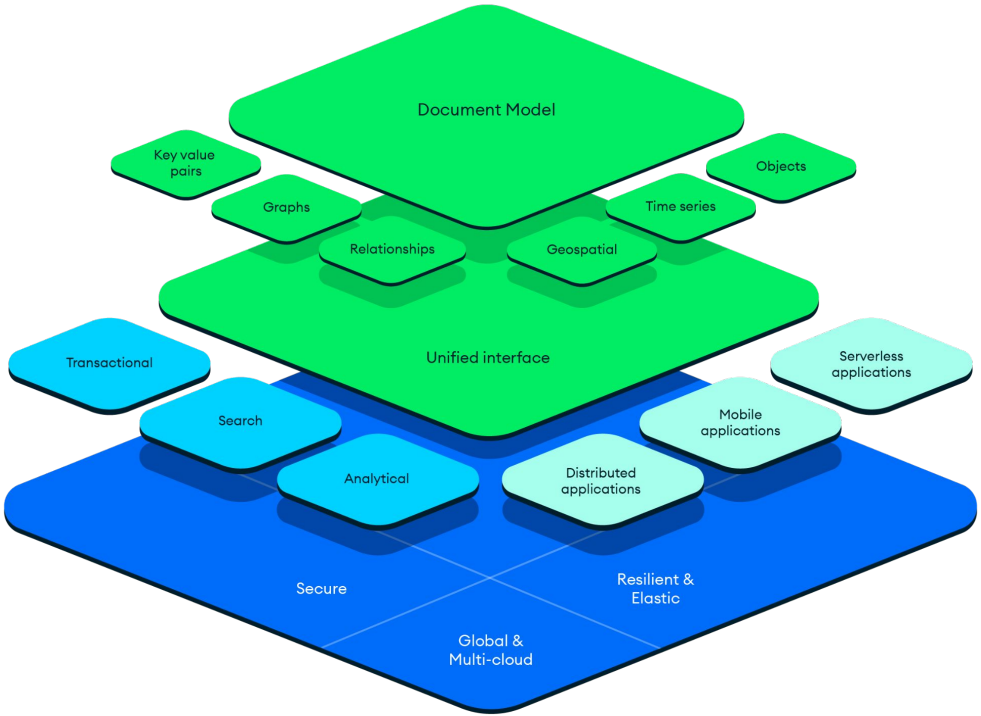
MongoDB Atlas Developer Data Platform

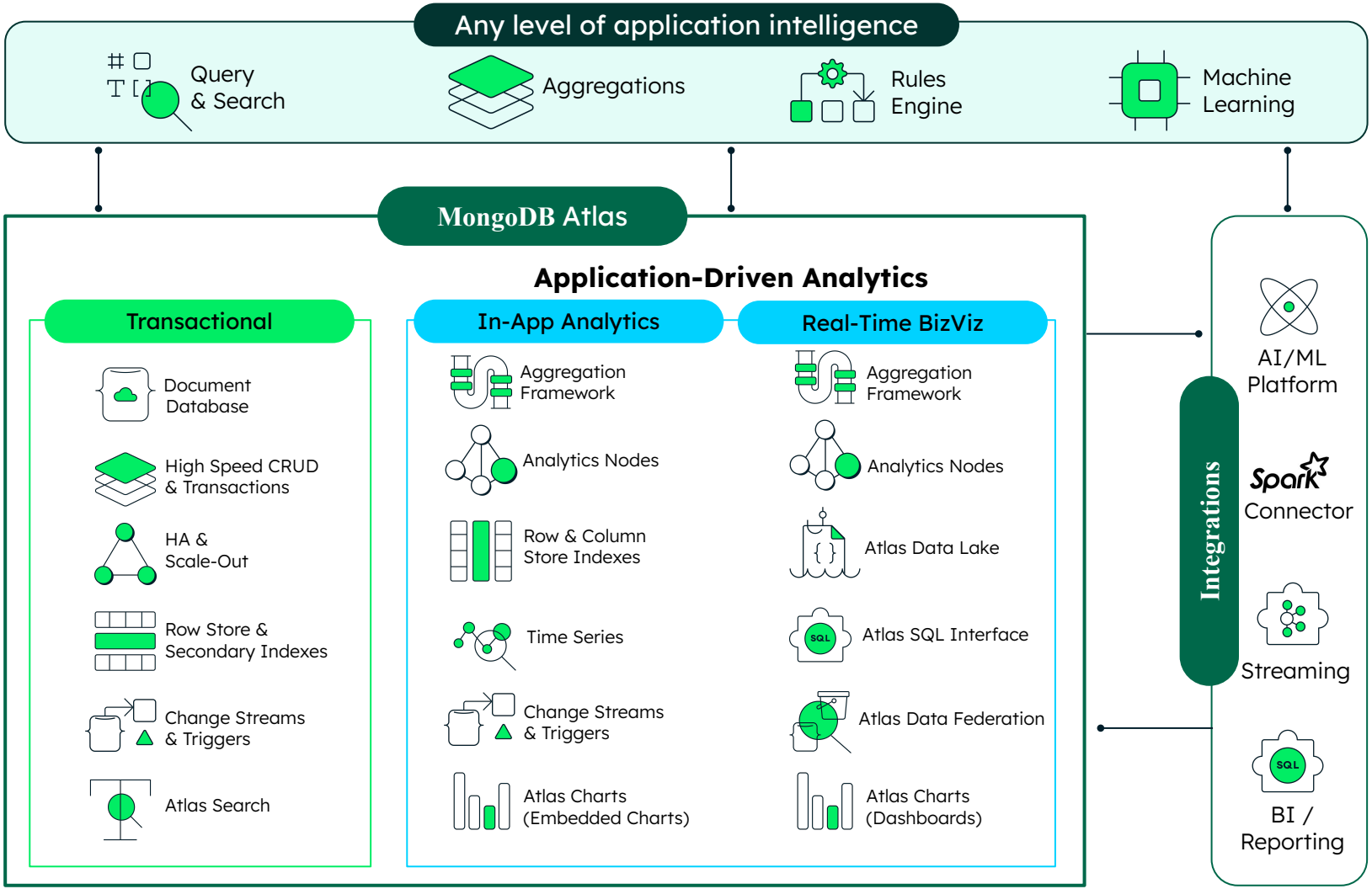
Foundation: MongoDB Document Database

Fully managed, scalable, & resilient

Enhanced With Additional Capabilities

Tightly Integrated with Common Query Language




Any level of application intelligence
Query & Search
Aggregations
Rules Engine
Machine Learning
MongoDB Atlas
Application-Driven Analytics
Transactional
Document Database
High Speed CRUD & Transactions
HA & Scale-Out
Row Store & Secondary Indexes
Change Streams & Triggers
Atlas Search
In-App Analytics
Aggregation Framework
Analytics Nodes
Row & Column Store Indexes
Time Series
Change Streams & Triggers
Atlas Charts (Embedded Charts)
Real-Time BizViz
Aggregation Framework
Analytics Nodes
Atlas Data Lake
Atlas SQL Interface
Atlas Data Federation
Atlas Charts (Dashboards)
Integrations
AI/ML Platform
Spark Connector
Streaming
SQL
BI / Reporting

Rocket Analytics Use Case

Our organization manages rocket launches

- Typical rocket launch lasts 8 hours
- Generates 1M metrics per second
- Need to understand what is happening in real-time during launch
- In-depth analytics post launch

Rocket Analytics Architecture in Atlas

Atlas Cluster

Time Series
launch metrics

Asymmetric Nodes

Atlas Search
notes

App-Driven Analytics

Compass

Atlas Charts

Aggregation Framework

Tabular Analytics

DBeaver

Atlas Data Federation

Atlas SQL

weather S3

Rocket Analytics Architecture in Atlas

Atlas Cluster

App-Driven Analytics

Tabular Analytics

ver

We are going to build this!!!!

Atlas Search

notes

Atlas
Data Federation

Atlas
SQL

weather S3

SPACE
OPERATIONS COMMAND

3 Week Agenda

Livestream	Objective	Time
Prework	Setup Development Environment	Before March 15th
1	Build App Driven Analytics Capabilities	March 15th, 10:00 AM ET
2	Search, Visualizations, & Triggers	March 22th, 10:00 AM ET
3	Business Visualizations	March 29th, 10:00 AM ET

Thank you for your time.