



WELCOME

# App-Driven Analytics

## Livestream 2



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# Who Am I?

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



# 3 Week Agenda

Livestream	Objective	Time
<del>P</del> rework	<del>S</del> etup Development Environment	<del>B</del> efore March 15th
4	<del>B</del> uild App-Driven Analytics Capabilities	<del>M</del> arch 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

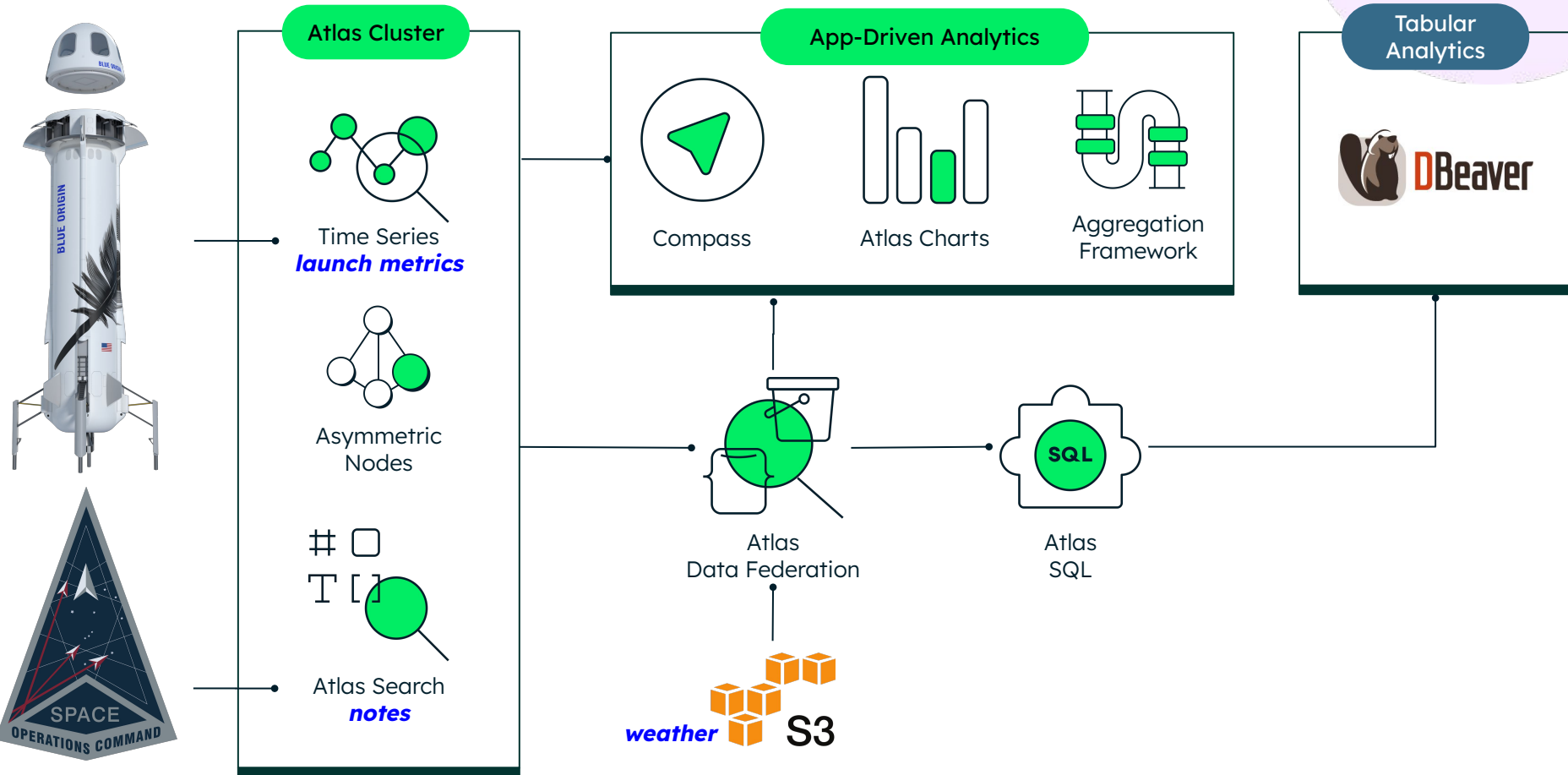
Livestream	Objective	Topics
2	Search, Visualizations, & Triggers	Embed Charts into React Application Configure Atlas Search Indexes Write Search Queries Write and Test Atlas Triggers

# 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



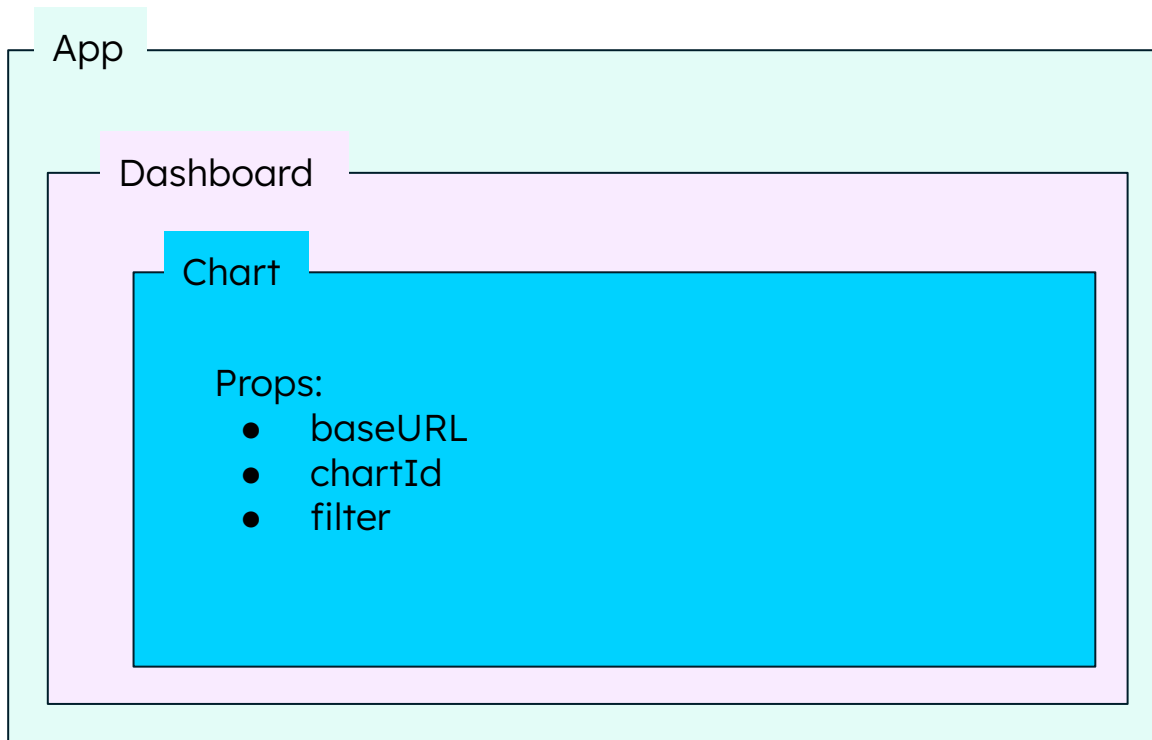


# Chart Embedding





# React App Component Structure

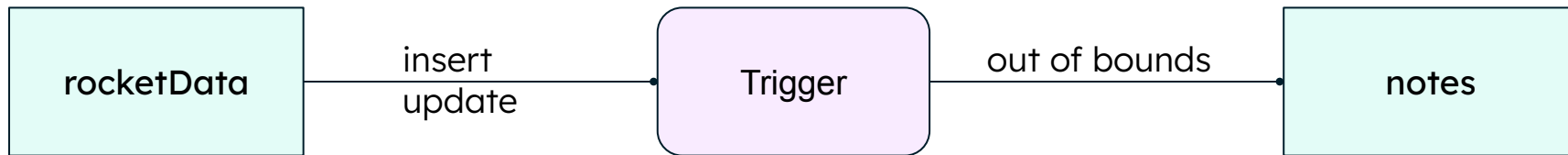




# Atlas Triggers



# Generating Notes With Atlas Triggers





# 3 Week Agenda

Livestream	Objective	Time
Pework	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



# Free 50 Atlas Credits

Livestream 3 will use some paid Atlas Features

- M10 cluster
- Atlas Data Lake
- Atlas Data Federation
- Atlas SQL

We have 100 x \$50 free Atlas codes available

The Atlas code is in rocketData collection.

Find the document where the sum of the sum of the **truth\_pos\_CON\_ECEF\_ECEF\_M1** and **truth\_vel\_CON\_ECEF\_ECEF\_MpS3** equals **-1387989.7605416959**

Hint: You may need to use the \$expr operator

Thank you for  
your time.