

# Introduction to



# mongoDB

## Hands-On Workshop

### Part 3 - Charts

## Overview

In Part 1 of this workshop you've set the foundation by creating a MongoDB cluster and loading some data.

In Part 2 we created microservices to expose the data via REST APIs and created a basic front-end application that leverages those APIs. Then we'll hosted our application in MongoDB Stitch!

For this Part 3, we will visualize our data in MongoDB Charts and embed our live Charts into our hosted application!

## Lab 10 - Visualize Your Data

MongoDB Charts allows you to quickly and easily unlock the value in your data. Let's do some analysis on our `sample_mflix.movies` data.



I love Keanu, so let's see in how many movies he has been compared to some of our other favorite actors...

## 10.A. Activate Charts

In the Stitch UI, click, < **Stitch Apps** in the upper left corner to return to the Atlas UI:



< Stitch Apps

Then click the **Charts** menu on the left:



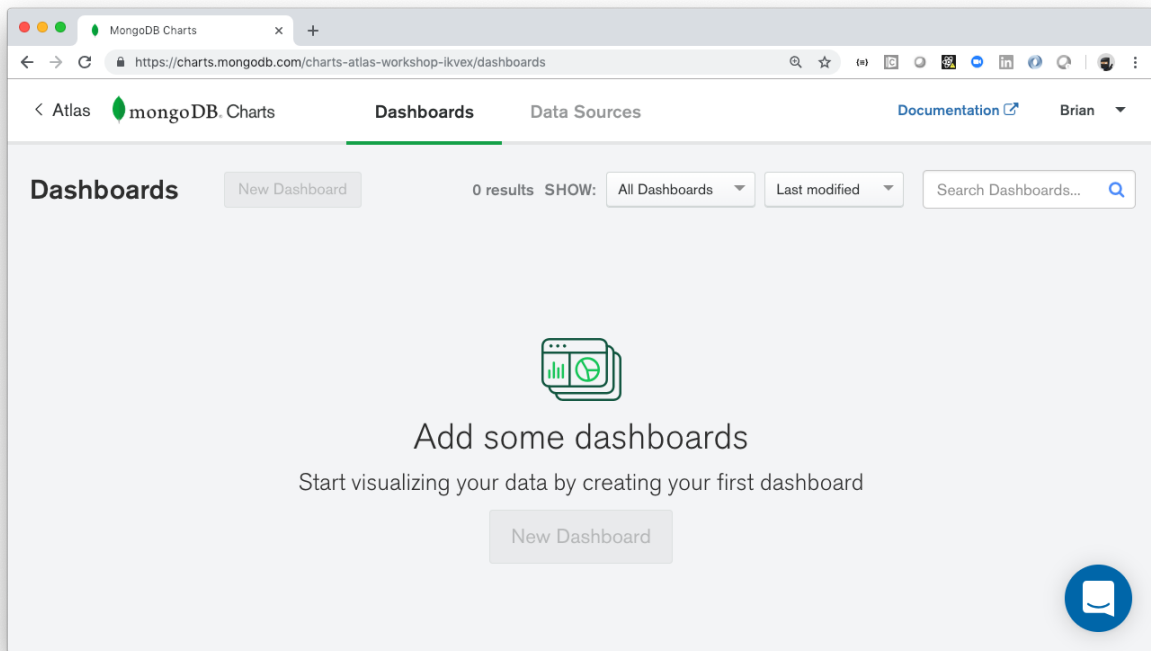
## Get Started with MongoDB Charts (Beta)

The fastest and easiest way to create visualizations from MongoDB Atlas

MongoDB Charts is currently in beta and is provided on an "as is" basis.

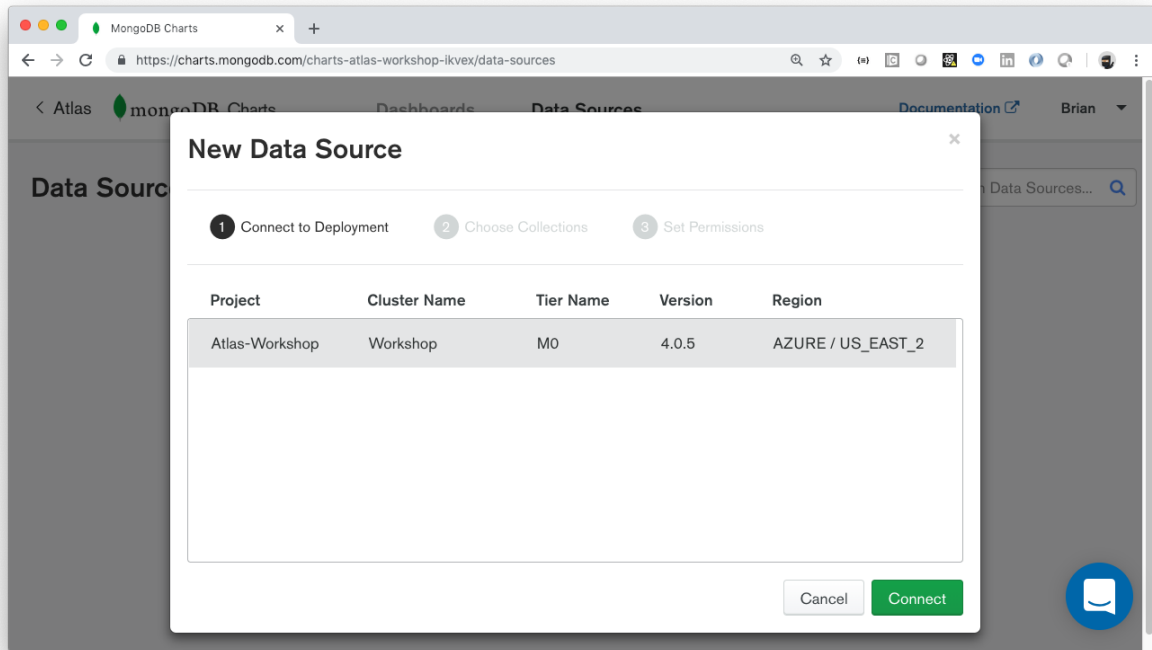
Activate MongoDB Charts

And **Activate MongoDB Charts**.



## 10.B. Connect to sample\_mflix.movies Data Source

Select **Data Sources** from the menu and add a **New Data Source**. As we only have one cluster in our project, there's only one data source to select:



Click **Connect**.

Next we have to select the collection(s) from the data source that we want to work with. Select the **movies** collection:

# New Data Source



Connect to Deployment

2

Choose Collections

3

Set Permissions

## Workshop

6 Databases

▶ sample_airbnb	<input type="checkbox"/>
▶ sample_geospatial	<input type="checkbox"/>
▼ sample_mflix	<input checked="" type="checkbox"/>
comments	<input type="checkbox"/>
movies	<input checked="" type="checkbox"/>
sessions	<input type="checkbox"/>
theaters	<input type="checkbox"/>
users	<input type="checkbox"/>

The read preference for all data sources within this cluster is being set to Secondary. This can be changed later once the data source is created. [View documentation](#)

Back

Cancel

Set Permissions

Click **Set Permissions**:

## New Data Source



Connect to Deployment



Choose Collections



Set Permissions

Share with specific users by name or email address...



Everyone in Hualme	VIEWER	ON
Karen Hualme	OWNER	
Shawn McCarthy	OWNER	

### Viewer

Viewers can see existing charts that use this data source, but cannot create new or edit existing charts.

### Author

Authors can create new or edit existing charts using this data source.

### Owner

In addition to Author privileges, Owners can modify any properties of this data source, as well as permissions.

The data source permissions defined here will be applied to all the collections you've selected from the previous step. You may modify the permissions for data sources individually after publishing.

Back

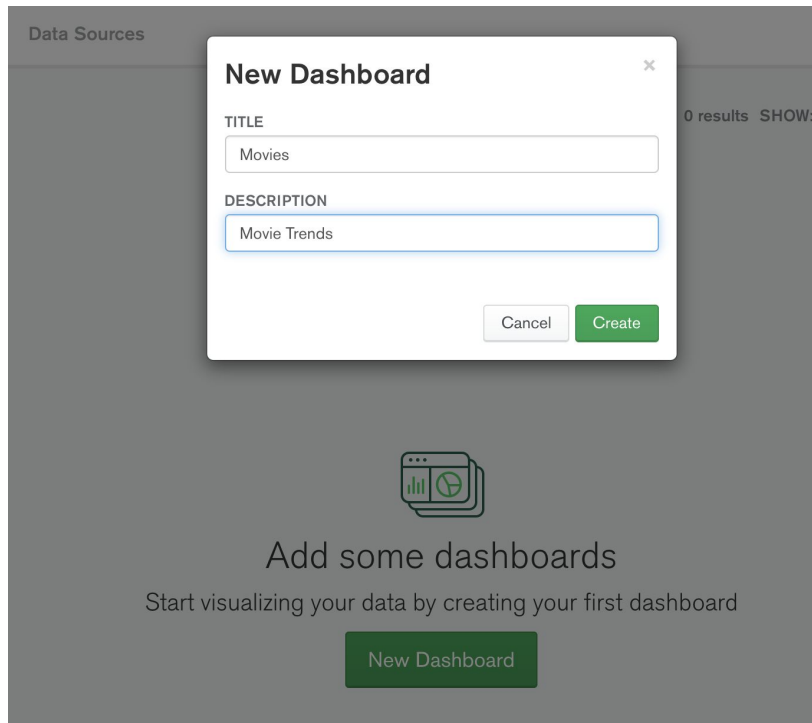
Cancel

Publish Data Source

And finally, **Publish Data Source**.

## 10.C. Create New Dashboard

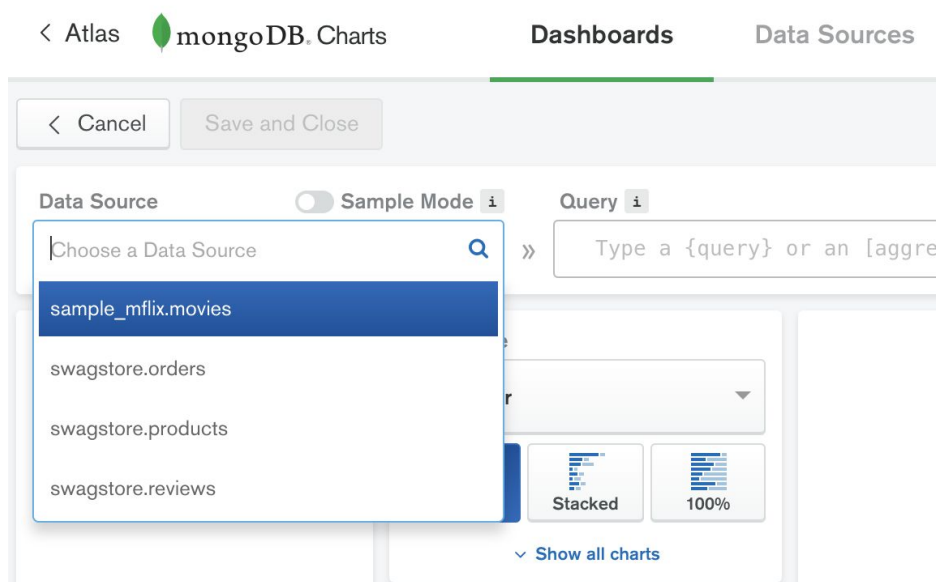
With our data source published, we're now ready to start building some dashboards. Click the **Dashboards** menu and **New Dashboard**. Name the dashboard **Movies** and describe it as **Movie Trends**:



Click **Create**.

## 10.D. Add New Chart to Dashboard

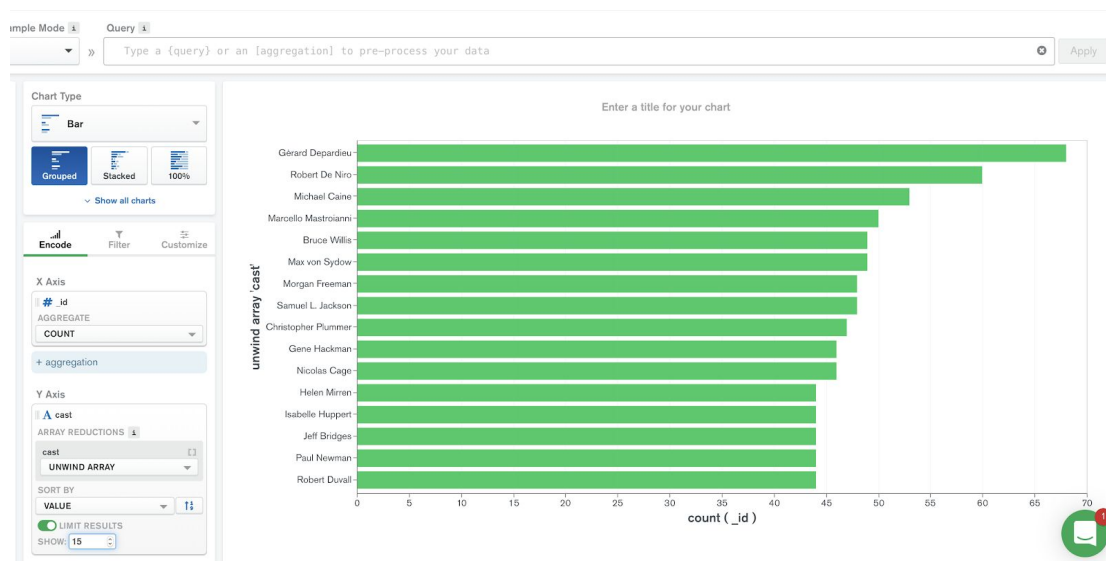
The next step is to add charts to the dashboard. Click **Add Chart** to load the chart builder and select the **sample\_mflix.movies** data source we just established:



Let's build a chart with some of our favorite actors!

1. Select the Bar Chart Type which is the default setting.
2. Since every document in the **sample\_mflix.movies** collection is a movie, simply DRAG the **\_id** field over to the x-axis. This should populate as count/
3. Next, drag the **cast** field over to y-axis.
4. Since this is an array, you have several options on what to do. Choose to unwind the array.

This will show you the actors with the most movies. There are just soooo many! So let's limit our results to only the top 15. Who knew Gerard Depardieu was so prolific?

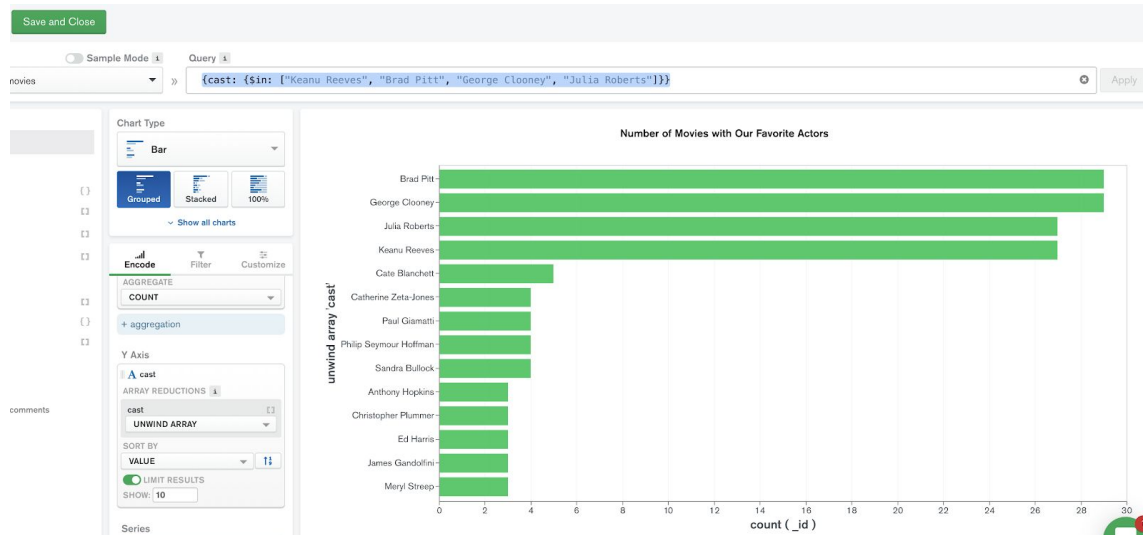


Now back to Keanu, to see his movies and any of our other favorites, use the filter bar at the top to fill in a query like the one below:

```
{cast: {$in: ["Keanu Reeves", "Brad Pitt", "George Clooney", "Julia Roberts"]}}
```

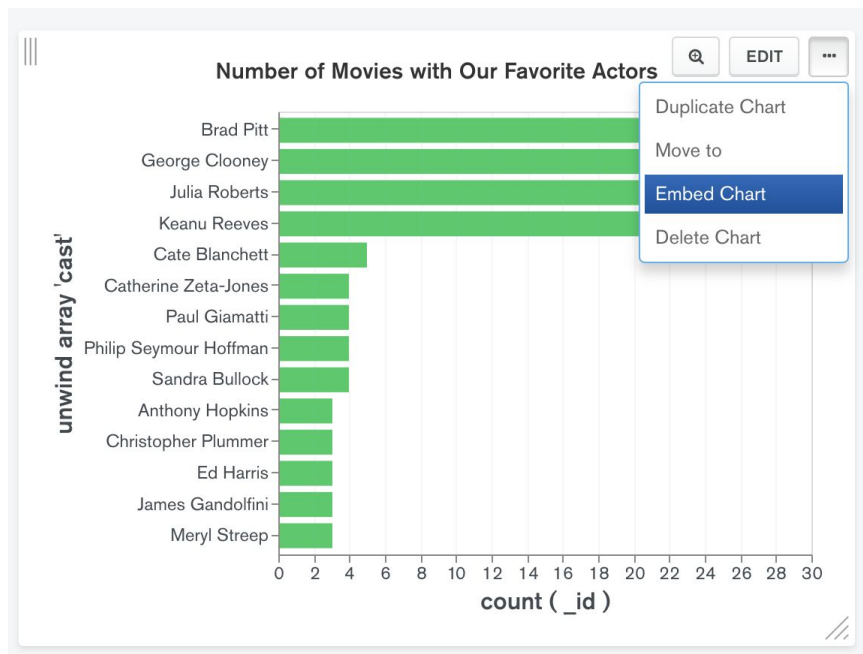
Now title the chart, **Number of Movies with Our Favorite Actors**. Hit **Save and Close**.





## Lab 11 - Embed Your Chart

Charts can be [embedded](#) into your application. Select the ellipses and **Embed Chart**.



Charts can be embedded unauthenticated or with a [verified signature](#). For the purpose of this workshop we'll add a simple unauthenticated chart to our application.

### Embedding Options

Enable external embedding for charts that use this data source ON

☐

 Verified Signature only i

☒

 Unauthenticated or Verified Signature i

[< Go Back](#)

Enable unauthenticated access and they copy the Embed Code:

### Embed Chart

Unauthenticated Verified Signature

Enable unauthenticated access ON

EMBED CODE:

```
<iframe style="border: none;border-radius: 2px;box-shadow: 0 2px 10px 0 rgba(70, 76, 79, .2);" width="640" height="480" src="https://charts.mongodb.com/charts-bl_atlas-workshop-rfjql/embed/charts?id=f9c3ac7b-2908-41df-8aab-7a3d96a72540&tenant=cf5bb63c-0bda-4262-befc-97e56b1ac7d5"></iframe>
```

[Close](#)

Copy and paste the iframe embed code into our index.html application after the “**results**” paragraph around line 30. Save and test the UI. Then host the UI in Stitch and test again.

## Movie Finder

This simple page demonstrates how MongoDB Stitch can [host](#) your application front-end.

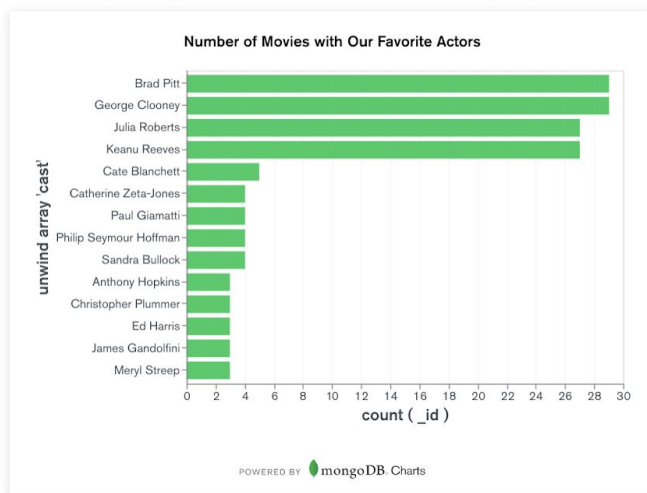
Movie name:

Point Break

1991

Cast: Patrick Swayze, Keanu Reeves, Gary Busey, and Lori Petty

An FBI agent goes undercover to catch a gang of bank robbers who may be surfers.



That's a Wrap!

We hope you have enjoyed this tour of MongoDB Atlas, Stitch, and Charts! Please share any feedback on whether this was helpful and how to make it better.

In addition, you can also check out the [Stitch Tutorials](#).