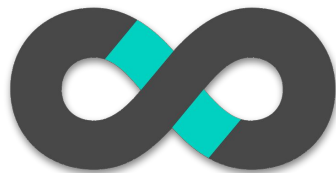


Superset Roadmap

Meetup Nov 11, 2020



Intros



Bence Orlai

PM at Preset

[linkedin.com/in/benceorlai/](https://www.linkedin.com/in/benceorlai/)

Agenda

1. The tipping point is near
2. Defining Superset 1.0
3. Beyond 1.0

Where did Superset come from?



Initially, Superset was born out of a hackathon project.

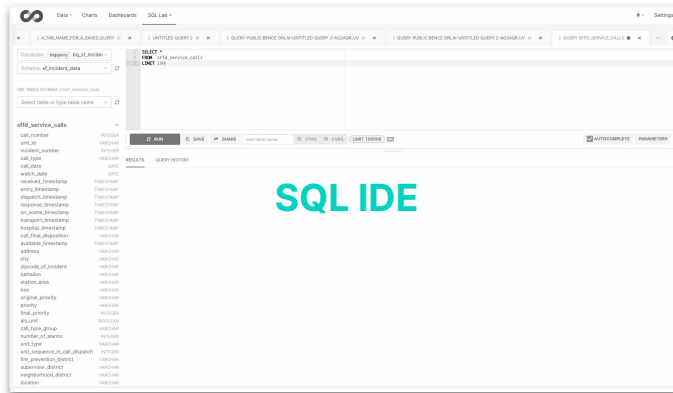
As an Open Source project it gained popularity quickly in the data teams of many modern, data driven companies.

It has proven itself in enterprise, at petabyte scale and it has become the tool of choice for “post-modern” data teams

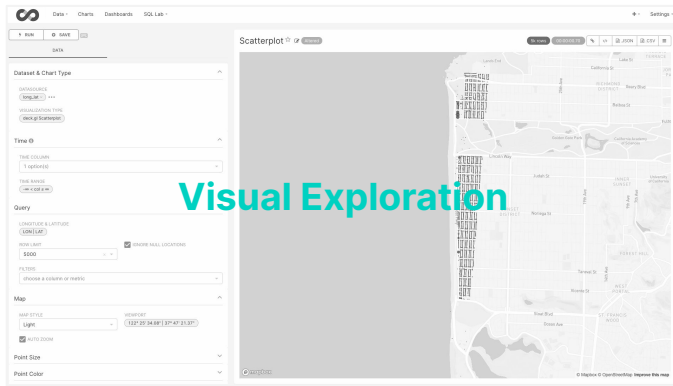
What is Superset?

[illegible]

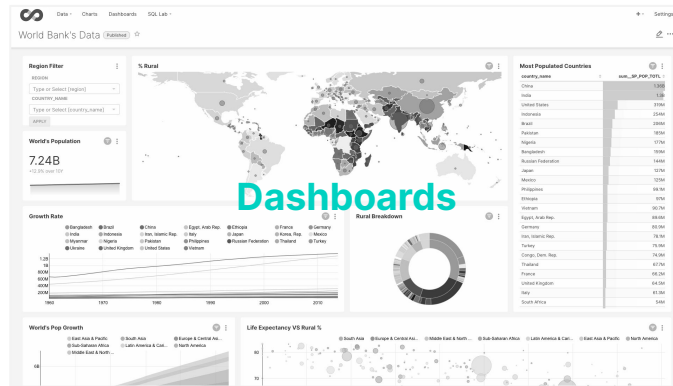
Data source connectivity



SQL IDE



Visual Exploration



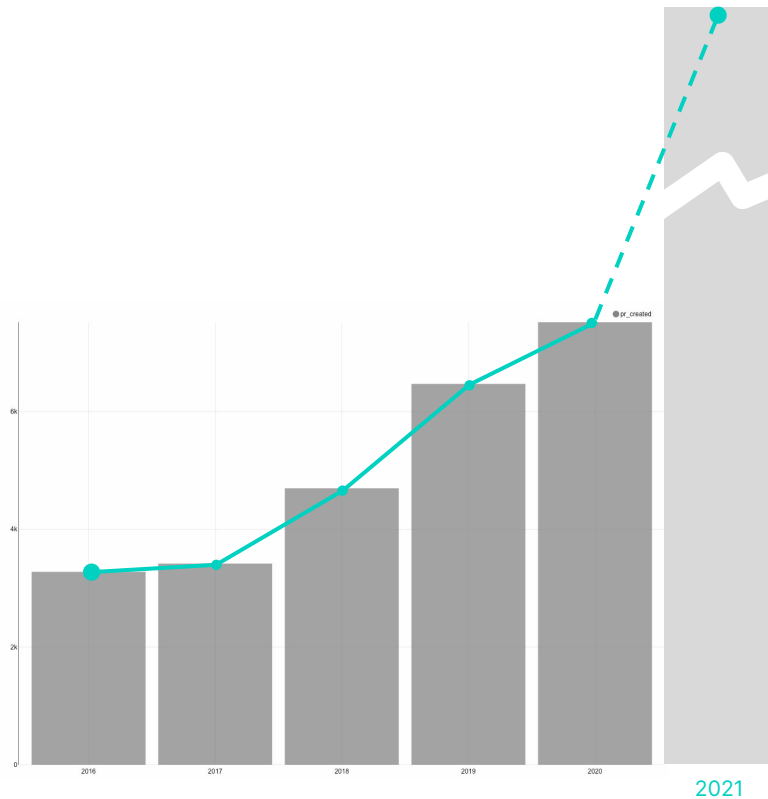
Dashboards

The opportunity

Superset has the potential to:

- Make every team a data team with the power of Open Source Software!
- Enable everyone to level up their data skills with next generation data tools that are powerful yet accessible

The “tipping point” is near



0.38 → 1.0

Defining Superset 1.0

Long list of 50+ projects

- From users and the community
- Architectural maturity
- Technical debt
- Design, UX debt

Key driver: user impact / engineering effort aka. “low hanging fruits”

Superset 1.0 - Main product themes

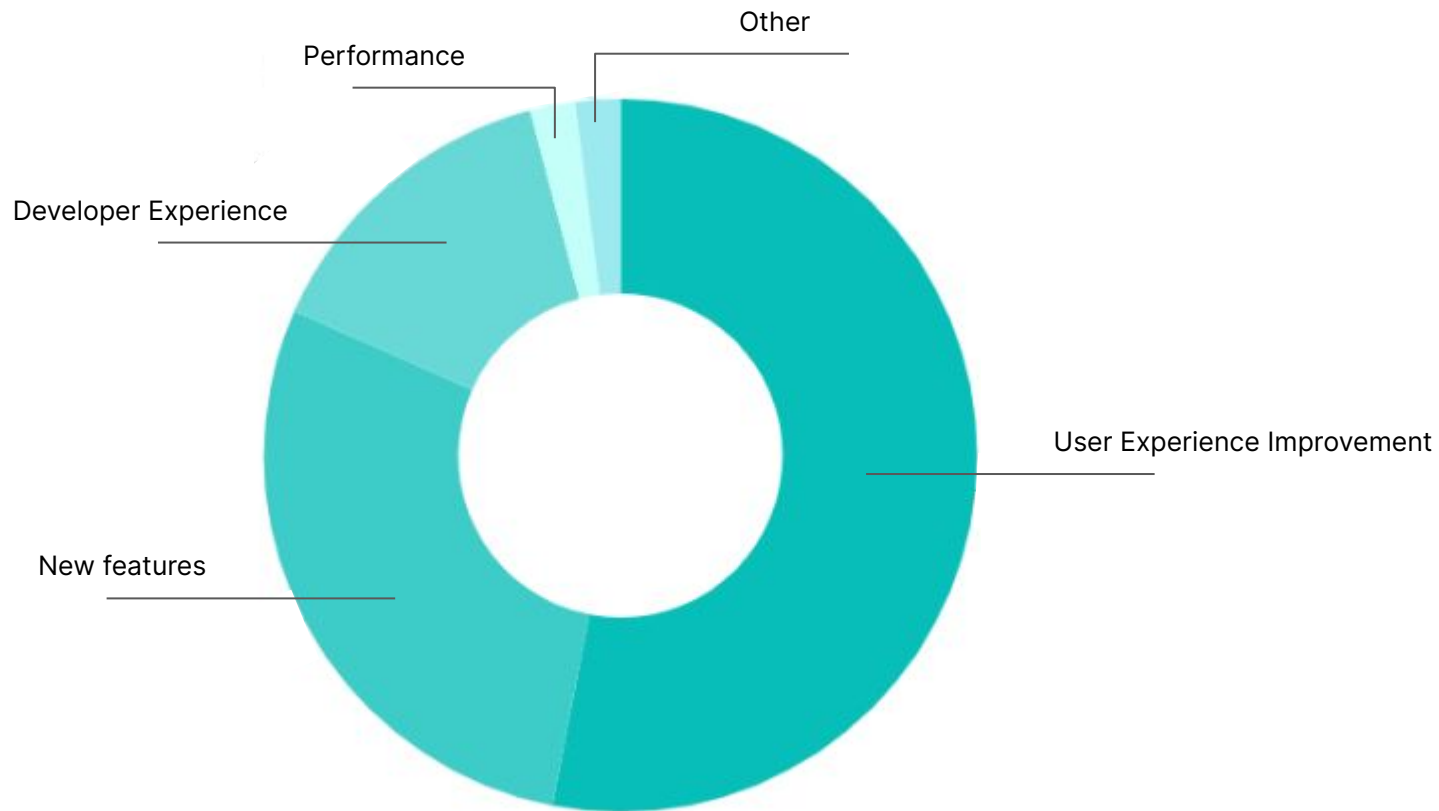
User Experience Improvement: simpler, more intuitive UI

New features: Discovery & Navigation, Visualizations, Sharing and Collaboration

Developer Experience Improvement: make it easier for developers to build, deploy and maintain Superset functionality

Performance: enhance Superset scalability and efficiency

1.0 Projects



Roadmap

The screenshot displays the Apache Superset roadmap on the GitHub interface. The page title is "apache-superset / superset-roadmap". The navigation bar includes links for Code, Issues (46), Pull requests, Actions, Projects (1), Wiki, Security, Insights, and Settings. The roadmap is organized into a Kanban board with the following columns:

- In Progress (25 items):**
 - [Product Area - Dashboard] consolidate property setting modal (Added by junlincc)
 - [Product Area - Dashboard Markdown] apache/incubator-superset#11477 (Refactor Markdown component, Added by junlincc)
 - 1 Reference
 - 1 Edit dashboard metadata now throws Dashboard collision warning on save (2 of 3, #11477 opened by zuzana-vej in apache/incubator-superset, #bug, .dashboard)
 - [Product Area - Dashboard] dashboard properties saving flow (apache/incubator-superset#11477, Added by junlincc)
 - 1 Reference
 - 1 Edit dashboard metadata now throws Dashboard collision warning on save (2 of 3, #11477 opened by zuzana-vej in apache/incubator-superset, #bug, .dashboard)
 - [Product Area - Profile Page] Redesign profile page
- Done (13 items):**
 - Requested by zuzana-vej (apache/incubator-superset#10333, Added by benceorlai)
 - 1 Reference
 - 1 [SQL Lab] Make Query results table column width adjustable (#10333 opened by zuzana-vej in apache/incubator-superset, #enhancement)
 - Requested by zuzana-vej (apache/incubator-superset#10332, Added by benceorlai)
 - 1 Reference
 - 1 [SQL Lab] Copy SQL Lab result to clipboard in a way that you can paste directly into Google sheet (#10332 opened by zuzana-vej in apache/incubator-superset, #enhancement, .pinned)
 - 1 Deprecate Druid REST connector [SIP-11] (#18 opened by benceorlai, .Data)
 - 1 Global Search MVP (#45 opened by benceorlai, .System, .epic)
- Committed (15 items):**
 - 1 Custom Error Messages - Network errors (#43 opened by benceorlai, .System, .epic)
 - 1 Fix incorrect redirects after CRUD Save/Back (#37 opened by benceorlai, .System, .epic)
 - 1 UX/UI improvements in Explore chart controls panel for better consistency (#20 opened by benceorlai, .Explore, .epic)
 - 1 UX/consistency quick wins: Explore top toolbar (#21 opened by benceorlai, .Explore, .epic)
 - 1 Global Async Query Support [SIP-39] (#24 opened by benceorlai, .Non-functional)
 - 1 Reports (scheduled delivery of Charts and Dashboards outside of Preset) (#51 opened by benceorlai, .Other)
 - 1 Alerts (send notification when a condition is met)
- In Development (13 items):**
 - 1 Date picker UX/UI improvements (#34 opened by benceorlai, .System, .epic)
 - 1 Native dashboard filter component (#7 opened by benceorlai, .Dashboards, .epic)
 - 1 Superset Component library - Phase 1 (#23 opened by benceorlai, .Non-functional, .epic)
 - 1 Implement Annotations in Echarts based visualizations (#56 opened by benceorlai, .Visualizations)
 - 1 CSS templates CRUD screen + list view refactor/redesign (#39 opened by benceorlai, .System, .epic)
 - 1 Custom Error Messages - SQL Lab Errors (#53 opened by benceorlai, .SQL Lab)
 - 1 Improved export functionality (#35 opened by benceorlai, .System, .epic)
- Backlog (14 items):**
 - 1 Improve UX for Dashboard filter application status (#9 opened by benceorlai, .Dashboards, .epic)
 - 1 Home Screen MVP (#32 opened by benceorlai, .System, .epic)
 - 1 Card layout view for Dashboards (#58 opened by benceorlai, .Dashboards)
 - 1 Viz plugin rearchitecture (#46 opened by benceorlai, .Visualizations, .epic)
 - 1 Requested by zuzana-vej (apache/incubator-superset#10327, Added by zuzana-vej)
 - 1 Reference
 - 1 Disable co-editing dashboard to prevent changes being lost (#10327 opened by zuzana-vej in apache/incubator-superset, #enhancement, .dashboard)
 - 1 New top navigation bar layout (#33 opened by benceorlai, .System, .epic)

Roadmap documents

→ [SIP-53](#)

→ [Roadmap board](#)

→ [superset-roadmap/README.md](#)

1.0 Highlights

User Experience Improvements

Card layout

Native dashboard filter component

Filter status indicator

Explore control panel and time picker

Query result preview

Improve SQL Lab to Explore flow

Visualizations

Visualization Plugin Architecture

Echarts integration and annotation

Dynamic viz plugin imports

Discovery & Navigation

Home Screen

Global Search

Sharing & Collaboration

Alerts & Reports

Developer Experience

Single Page Application

Component Library

Performance

Global Async Query support

User Experience Improvements

Card layout

Present list of Charts and Dashboards in a new format, using a grid of thumbnails. Makes it easier to discover and find Charts and Dashboards, especially when there is a lot of them in your Superset instance

Explore Controls

Visualization controls are being updated to create a more consistent and modernized interface. Refactoring will include updates to the content/labeling/ordering of these controls as well as updating their styling and simplifying their interactions and layout. This will line us up for features like drag-and-drop controls, and dynamically populated control inputs.

Improve SQL Lab to Explore flow

Gives users the ability to create and name a new dataset or update an existing dataset when moving from SQL Lab to Explore. When going back to SQL Lab, the underlying query for the dataset will be shown, allowing users to easily make changes and update their dataset when moving between SQL Lab and Explore.

Charts

BULK SELECT

+ CHARTS

...



Owner: Me

Favorite: All

Type: All

Datasource: All

Q Search

Sort: Alphabetical



Chart name

SJ MC BO TD LK



Chart name

SJ MC BO TD LK

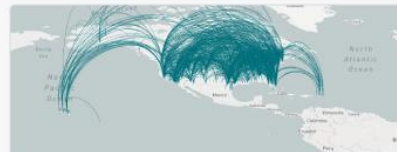


Chart name

SJ MC BO TD LK

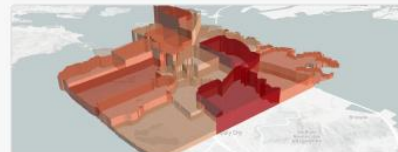


Chart name

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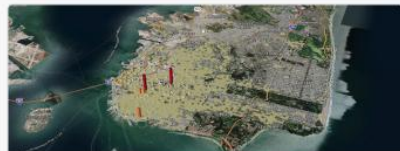


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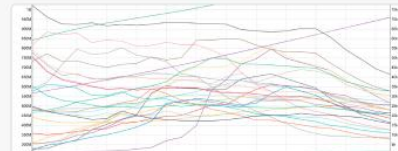


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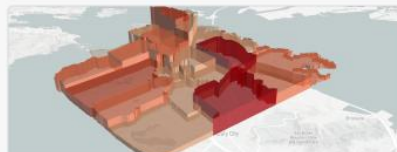


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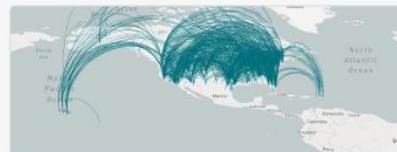


Chart name

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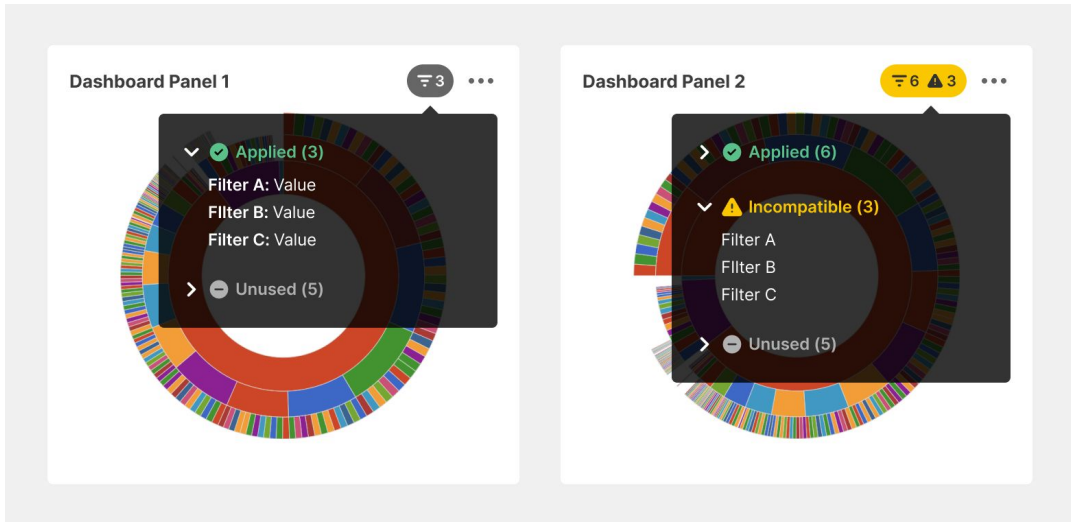


User Experience Improvements

Filter Status Indicators

Charts on dashboards have been updated to concisely show which filters are in scope, have been applied, or are in error.

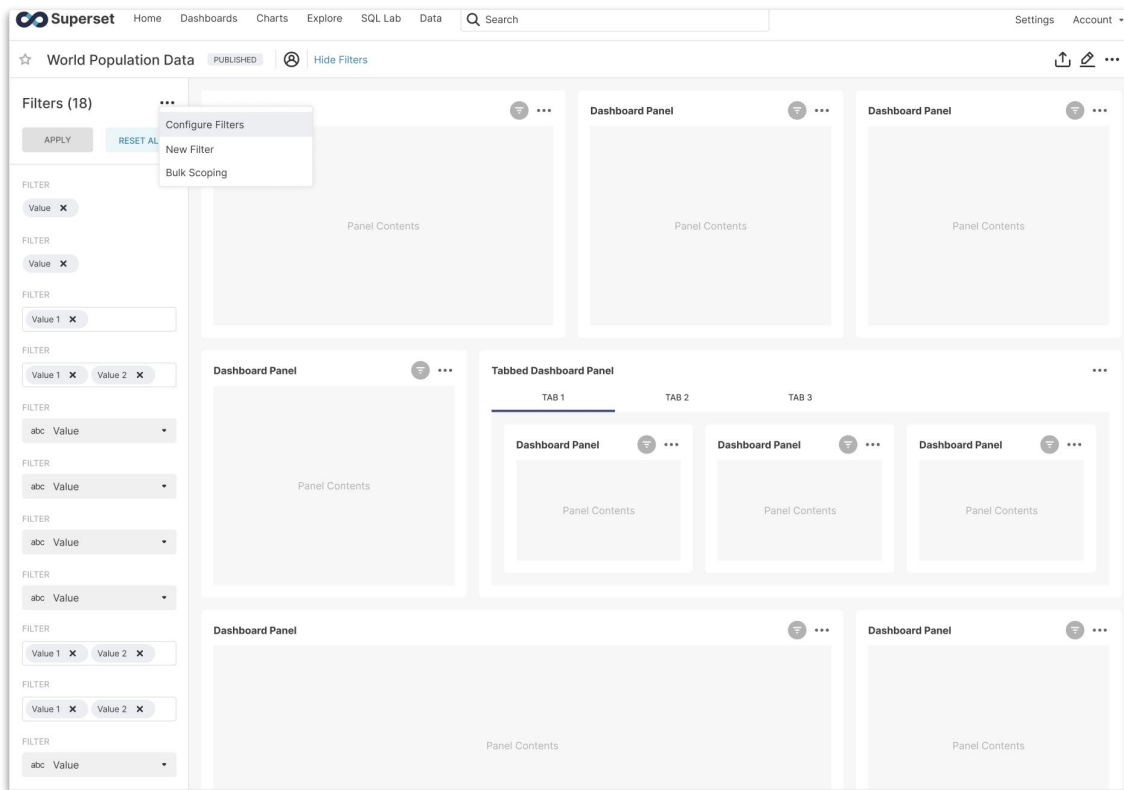
Context around filter changes has been increased, by highlighting scoped charts when a filter is selected, and increasing visibility of charts with incompatible filters applied.



User Experience Improvements

Native Dashboard Filter Component

Unlike many other BI tools in the market, our current dashboard filter lives as a chart, which needs to be created in the Explore view, and added to dashboard as a chart/component. To improve the usability and user experience, we are introducing a new dashboard filter as a dashboard-native component, allowing users to create, add, and edit filters quickly at the dashboard level.



Data Visualizations

Visualization Plugin Architecture

Data viz plugins are now easier to build, test, style, and configure. They can now be built in a single repository, in a single language. They're powered by a new, extensible API, and largely decoupled from Superset for ease of development and maintenance.

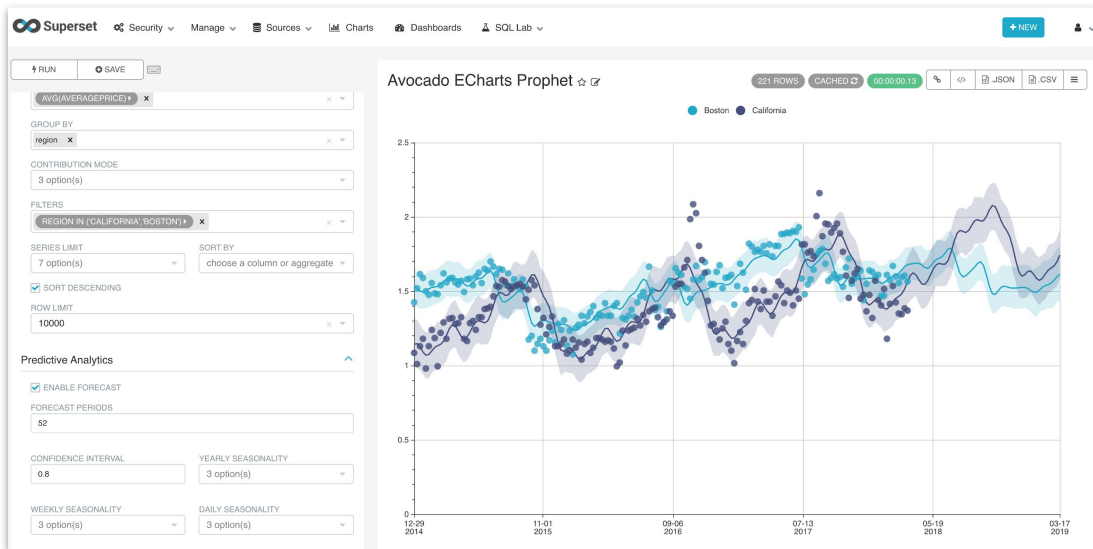
Dynamic viz plugin imports

This will allow Superset to load data visualization plugins as stand-alone Javascript bundles, hosted anywhere on the internet, allowing developers to more easily use or share their custom plugins, as well as enabling Superset users to easily load custom plugins on-demand

Data Visualizations

Echarts integration

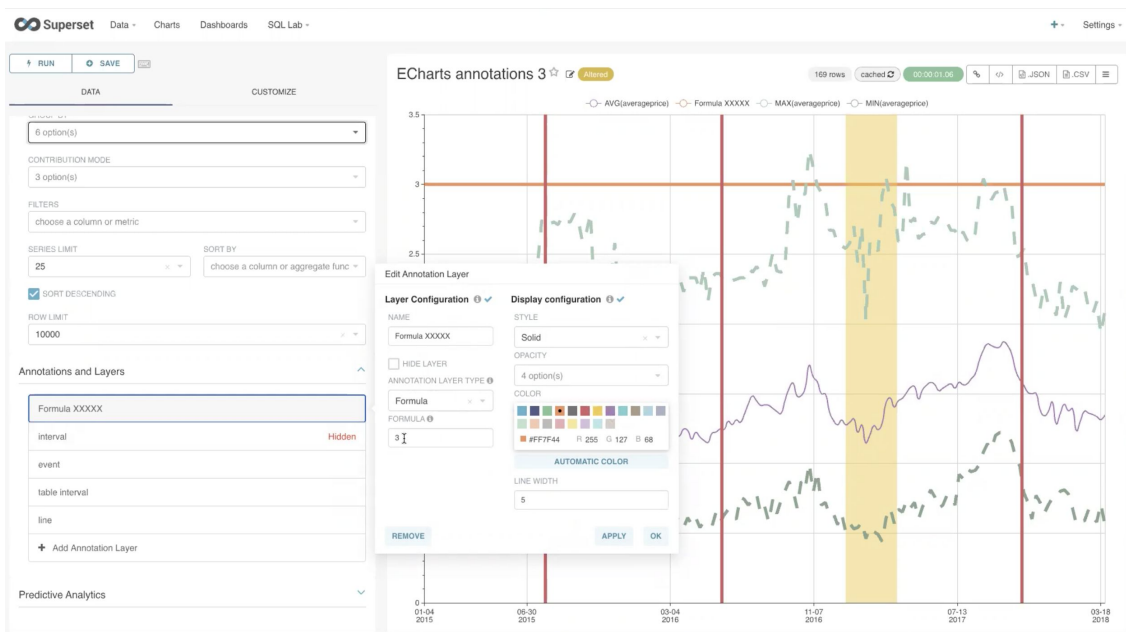
Superset has adopted Apache ECharts (incubating) as the core library for new visualizations. It offers powerful charting and visualization capabilities, with intuitive, interactive, and highly customizable charts. It will replace or augment legacy plugins in phases, to increase both visual and code consistency. Completed charts include a new unified Time-Series chart, Pie Chart and Box Plot.



Data Visualizations

Echarts Annotations

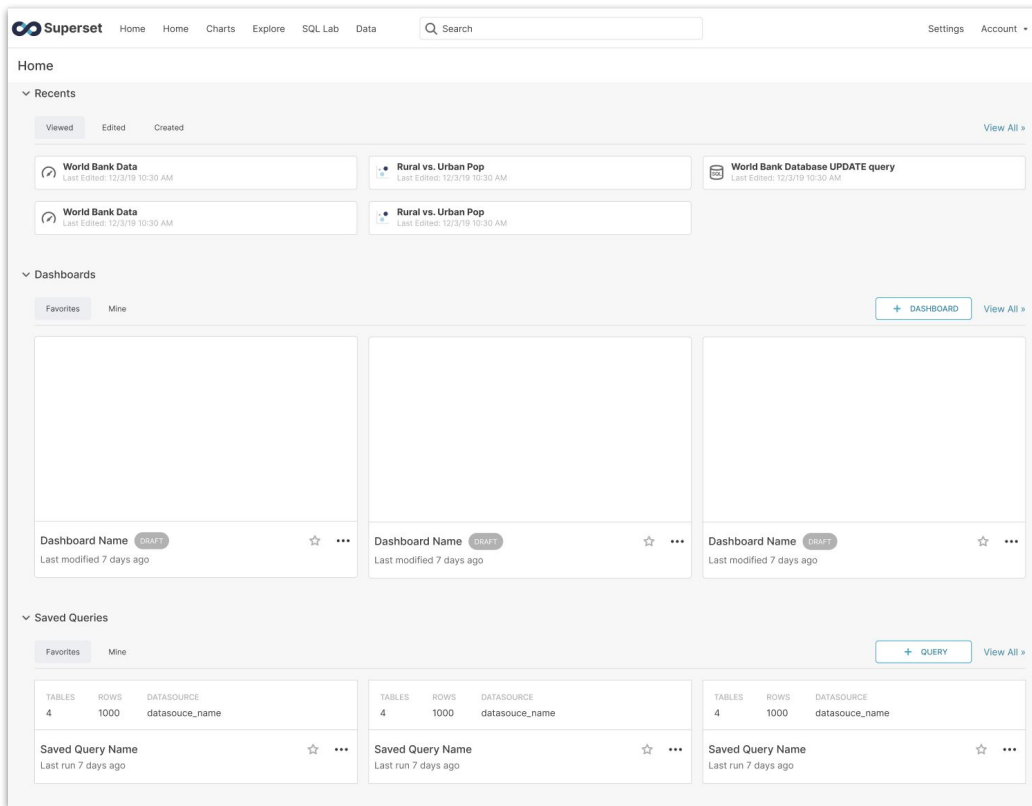
Along with the Echarts integration, we are also introducing a better set of annotation features. Formula annotation, which allows users to plot any mathematical function on the chart; Interval and Event annotations, will allow users to add context to the trend in Time-Series; and Line annotation, which use a predefined chart as the source of annotation.



Discovery & Navigation

Home Screen

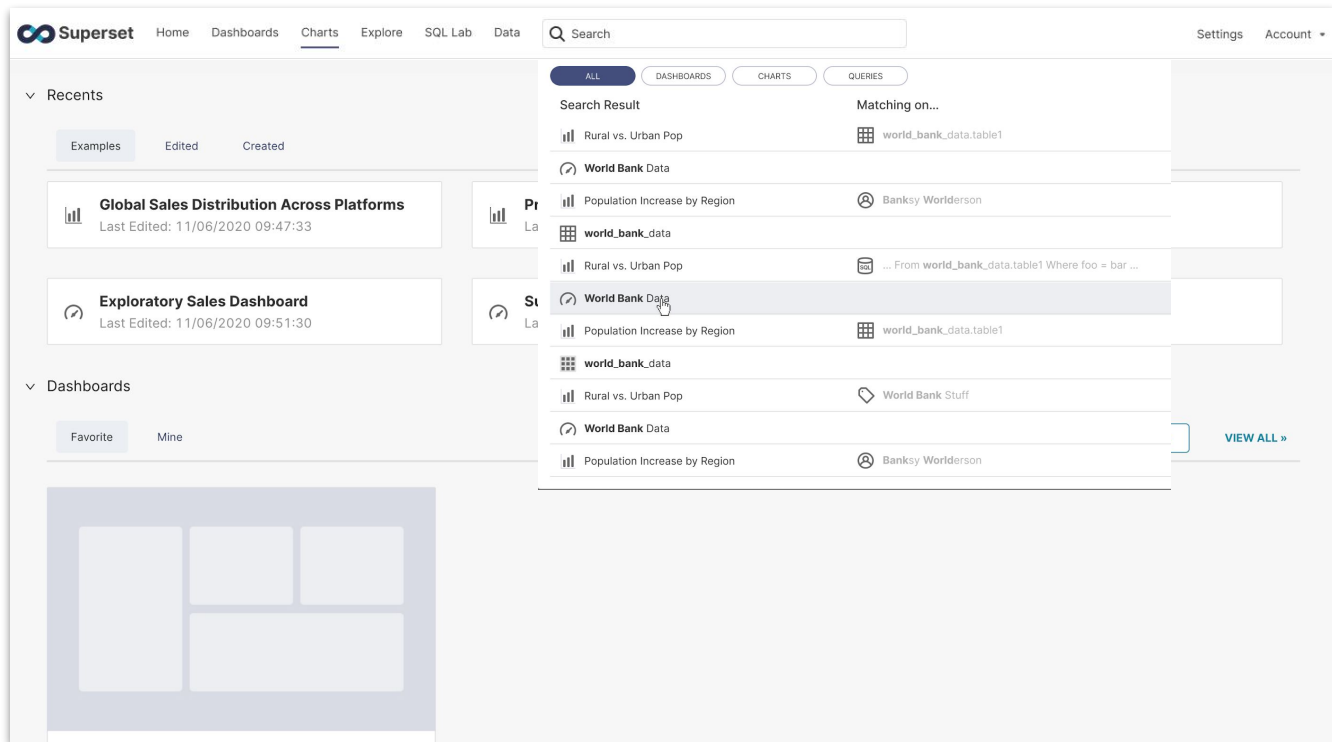
A personalized landing page that the user sees when they log into Superset. It shows items relevant to the user (Charts, Dashboards, Saved Queries, etc) and serves as a hub to discover content and access recent items quickly.



Discovery & Navigation

Global Search

Gives users the ability to access search from all pages in the app to search across databases, datasets, charts, dashboards, and queries. This will be a first step towards a more robust search experience.



Sharing & Collaboration

Alerts & Reports

Alerts are used to trigger a notification when a metrics reaches a threshold. Reports are schedule driven delivery of a Chart or Dashboard snapshot. We are building a more intuitive UI for these features as well as a robust backend.

The screenshot displays the Apache Superset 'Alerts & Reports' management interface. The top navigation bar includes links for Home, Dashboards, Charts, Explore, SQL Lab, and Data, along with a search bar and user settings. The 'Alerts & Reports' section has tabs for 'Alerts' and 'Reports'. Below the tabs is a filter bar with 'Created by' and 'Status' dropdowns, and a search input. The main table lists several alerts, each with a 'Name', 'Email', 'Slack', 'Schedule', 'Status' (e.g., Alerting, OK, Failure), 'Owners' (represented by colored circles), 'Active' toggle, and 'Actions' menu. An 'Add Alert' modal is open, providing a form to create a new alert. The modal is divided into several sections: 'Basic Info' (Alert Name, Owners), 'Alert Condition' (Source, SQL Query, Alert If), 'Delivery Method' (Email, Slack), 'Message Content' (Dashboard, Chart), 'Alert Condition Schedule' (CRON Expression, Schedule Settings), and 'Schedule Settings' (Last Retention, Grace Period). The 'Add' button is at the bottom right of the modal.

Developer Experience

Single Page Application

Superset is currently built as a suite of separate React applications, each bundled, served, and loaded as separate pages. This upgrade will allow Superset to be loaded in a single page, enabling snappier response times when transitioning between areas of Superset, and enabling higher component reusability and tighter integration between Superset features.

Component library

This effort is an attempt to modernize, consolidate, and simplify the interface elements of Superset, benefiting the user, the developer, and the designer. Highly-used components being visually updated, refactored to modern component libraries, integrated with React Storybook for immediate visibility, and consolidated with their test/styles. This will ease developer experience and create a more consistent and modern aesthetic throughout the user experience.

Performance

Global Async Query support

Enable asynchronous data loading for charts (dashboards, Explore) and SQL Lab. This will improve performance and user experience when loading query results, especially when there are many charts in a Dashboard or when queries are long running.

Beyond 1.0

An open roadmap

The screenshot displays the Apache Superset roadmap page on GitHub, which is structured as a Kanban board. The board is divided into several columns: **Inbox** (25 items), **Discussion** (13 items), **Committed** (15 items), **In Development** (13 items), and **Done** (14 items). Each column contains a list of issues, many of which are linked to specific pull requests or have references to other issues. The issues are categorized by type (e.g., **bug**, **enhancement**, **system**, **epic**) and priority (e.g., **high**, **medium**, **low**). A callout box is overlaid on the **Committed** column, highlighting a specific issue: **#43 opened by SupersetChampion**. The callout box also indicates that the issue is a **System** **epic** and is related to **Superset 1.x**. The callout box includes a green checkmark icon and a profile picture of the user SupersetChampion.

Search or jump to... Pull requests Issues Marketplace Explore

apache-superset / superset-roadmap

Unwatch 14 Unstar 11 Fork 1

Code Issues 46 Pull requests Actions Projects 1 Wiki Security Insights Settings

Superset Roadmap Updated 5 hours ago

Filter cards Add cards Fullscreen Menu

25 Inbox

- [Product Area - Dashboard]consolidate property setting modal Added by junlincc
- [Product Area - Dashboard Markdown] apache/incubator-superset#11477 Refactor Markdown component Added by junlincc
- 1 Reference
- ① Edit dashboard metadata now throws Dashboard collision warning on save #11477 opened by zuzana-vej in apache/incubator-superset #bug .dashboard
- [Product Area - Dashboard] dashboard properties saving flow apache/incubator-superset#11477 Added by junlincc
- 1 Reference
- ① Edit dashboard metadata now throws Dashboard collision warning on save #11477 opened by zuzana-vej in apache/incubator-superset #bug .dashboard
- [Product Area - Profile Page]Redesign profile page

13 Discussion

- Requested by zuzana-vej apache/incubator-superset#10333 Added by benceorai
- 1 Reference
- ① [SQL Lab] Copy SQL Lab result to clipboard in a way that you can paste directly into Google sheet #10333 opened by zuzana-vej in apache/incubator-superset #enhancement .pinned
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- ① Global Search MVP #45 opened by benceorai #System .epic Superset 1.0

15 Committed

- ① Custom Error Messages - Network errors #43 opened by SupersetChampion #System .epic Superset 1.x
- ① UX/consistency quick wins: Explore top toolbar #21 opened by benceorai #Explore .epic Superset 1.0
- ① Global Async Query Support [SIP-39] #24 opened by benceorai #Non-functional Superset 1.0
- ① Reports (scheduled delivery of Charts and Dashboards outside of Preset) #51 opened by benceorai #Other Superset 1.0
- ① Alerts (send notification when a condition is met)

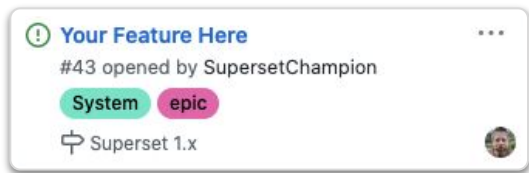
13 In Development

- ① Implement Annotations in Echarts based visualizations #56 opened by benceorai #Visualizations .epic Superset 1.0
- ① CSS templates CRUD screen + list view refactor/redesign #39 opened by benceorai #System .epic Superset 1.0
- ① Custom Error Messages - SQL Lab Errors #53 opened by benceorai #SQL Lab Superset 1.0
- ① Improved export functionality #35 opened by benceorai #System .epic

14 Done

- ① Improve UX for Dashboard filter application status #9 opened by benceorai #Dashboards .epic Superset 1.0
- ① Home Screen MVP #32 opened by benceorai #System .epic Superset 1.0
- ① Card layout view for Dashboards #58 opened by benceorai #Dashboards Superset 1.0
- ① Viz plugin rearchitecture #46 opened by benceorai #Visualizations .epic Superset 1.0
- Requested by zuzana-vej apache/incubator-superset#10327 Added by zuzana-vej
- 1 Reference
- ① Disable co-editing dashboard to prevent changes being lost #10327 opened by zuzana-vej in apache/incubator-superset #enhancement .dashboard
- ① New top navigation bar layout #33 opened by benceorai #System .epic

Roadmap collaboration



- Start with a feature idea
- Create an item in the public roadmap
- Community members will work with you to define the project
- Discuss & collaborate in the open
- Find a team to work with

For more information, see

→ [SIP-53](#)

→ [apache-superset/superset-roadmap/README.md](https://github.com/apache-superset/superset-roadmap/README.md)

Q & A