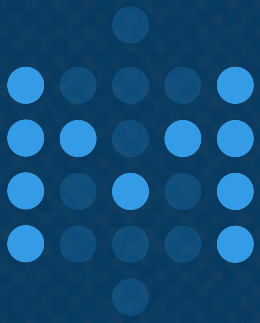
HEVO

EBOOK

METABASE VS REDASH:
AN IN-DEPTH COMPARISON



VS

Metabase

Redash

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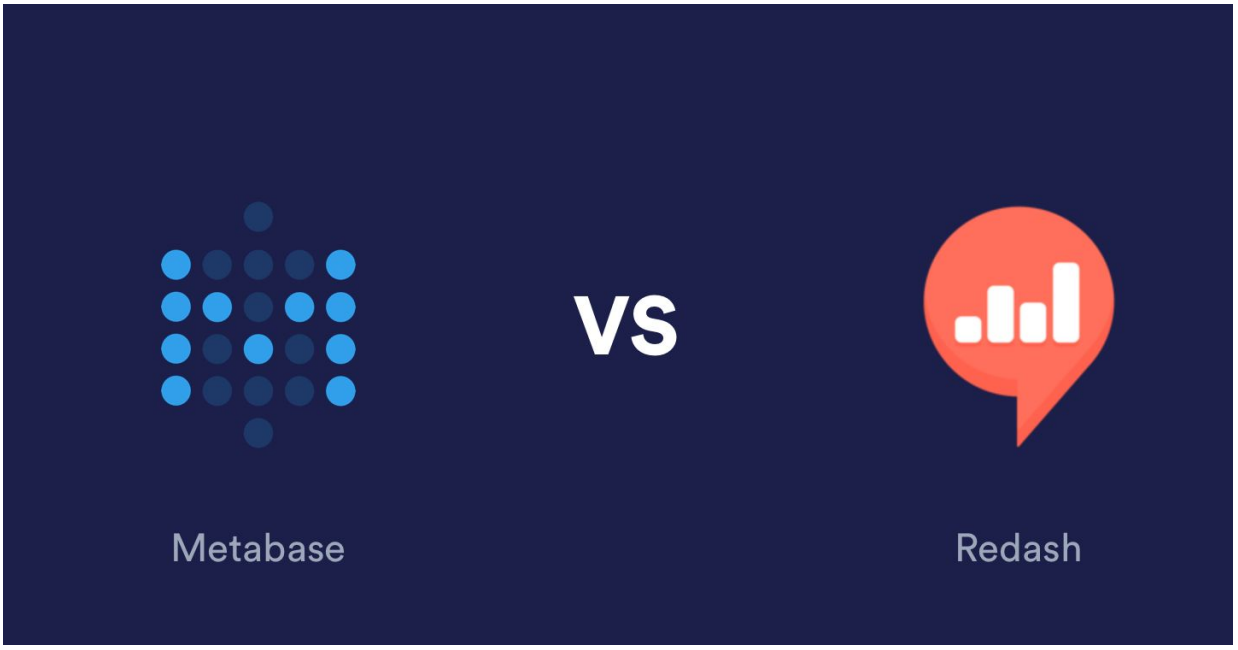
Metabase or Redash: Comparing Two Most Powerful Open Source Data Visualization Tools



With the advent of growing data mindset among organizations, a sophisticated data visualization tool has become the need of the hour. With 100s of vendors offering a variety of solution to visualizing data, Metabase and Redash have emerged as two of the most favored Data Visualization tools in the open source segment. However, with a wide array of use cases and feature list at your disposal, deciding on the one that suits you best can get overwhelming.

In this ebook we have compiled a detailed comparison between Metabase and Redash based on various parameters spanning from ease of deployment to extension platforms.

Overview

Both Metabase and Redash provide a simple interface to generate charts and dashboards and answer ad hoc queries using SQL.

With an easy onboarding and low set-up time, Metabase provides a quick way to share data insights within the organization. Metabase works only on a self-hosted model. They however provide paid support for maintenance, if you do want to delegate it. Metabase also allows you to embed the dashboard into your app for in-app analytics.

Redash is a python based open source tool that can connect to a wide array of sources to provide simple yet powerful visualizations. Redash provides the option to use a hosted solution or install it on your own.

Data Sources to Connect to

Both Metabase and Redash allow you to connect to wide array of data sources. They both boast backend support to OLTP systems like MySQL, MongoDB, Redshift, etc. and also Data Warehouses like Amazon Redshift and Google BigQuery.

Redash provides support to more data sources including Cassandra, Snowflake, TreasureData, Graphite, Hive, Impala and more whereas Metabase does not. The only source that is supported by Metabase and not by Redash is Crate. Unless your business heavily depends on Crate, you have no reason to biased towards either of the tools as yet.

Click here to get to the complete list of sources supported by Metabase and Redash.

Check the following table out for a quick comparison of the most popular sources:

Data Sources: Metabase vs Redash

Data Sources	Metabase	Redash
Amazon Redshift	✓	✓
Google BigQuery	✓	✓
Cassandra	x	✓
MongoDB	✓	✓
PostgreSQL	✓	✓
MySQL	✓	✓
Google Analytics	✓	✓
Snowflake	x	✓
Druid	✓	✓
Oracle	✓	✓
Crate	✓	x
Vertica	✓	✓

Ease of Set Up

Metbase compulsorily has to be hosted on your own infrastructure. Installing Metabase needs you to deploy their Java jar file and run it with a simple command. Metabase also provides paid support to maintain the set up on your behalf.

Redash's free version can be hosted on your own infrastructure. Redash can be installed through AWS AMI, Docker or custom shell script. Each of these pose a specific set of challenges while installation. Without an existing AMI/Docker deployment and internal talent with these skill sets, it becomes hard to set up Redash. Even with custom scripts, asks for a clean machine for deployment. This becomes a problem if you have an existing instance alongside other applications. As compared to Metabase, setting up Redash might take longer.

Redash also has a paid cloud-hosted version that you can opt for.

Data Visualization

Both Metabase and Redash allow to create custom SQL queries and display the results visually. Users can plug multiple such visualizations to create Dashboards that can be shared across the organization.

Metabase allows users to ask "Questions" through a simple point and click interface or through a custom SQL query builder. In either case, the result is displayed with a default visualization. You can also change the visualization to suit your need.

Unlike Metabase, Redash allows you to fetch results through SQL queries only. The results are displayed as a table similar to SQL query result display. You can convert this table into a visual report through Visualization Editor. Here is a complete list of charts and visualizations supported by both:

Data Visualization Options Metabase vs Redash

Visualization Type	Metabase	Redash
Number	✓	×
Progress Bar	✓	×
Table	✓	✓
Line Chart	✓	✓
Area Chart	✓	✓
Bar Chart	✓	✓
Scatter	✓	✓
Pie Chart	✓	✓
Map	✓	✓
Funnel	✓	×
Boxplot	×	✓
Cohort	×	✓
Wordcloud	×	✓
Sankey	×	✓
Pivot Table	×	✓

Report Notifications

Metabase allows you to set up “Pulses” that schedule reports and send them over email and slack. This ensures that the reports that matter to you reach right into your inbox without you having to log in to the dashboard.

Although Redash does not have a feature to schedule reports, they allow you to set “Alerts” that notify you on slack and email when the data set meets a condition. For example, you can set an alert that notifies you when Sales Value for the day exceeds $1 million, or when average time spent on the blog falls below 30 seconds.

Extension Platform

Being open source, both Metabase and Redash allow you to tweak the source code to include customizations into your tool. Let’s say, you want to include seconds/sub seconds data in the time series graph (not available by default), this can be easily coded by your engineer.

Redash is developed in Python while Metabase is developed on Clojure. You would need in-house talent with these skill sets for any edits.

Access Control and Permissions

Both Metabase and Redash allow you to restrict access to databases, queries, and dashboards as per the need. You can also create user groups, for eg: Sales, Marketing, Product, etc. and provide limited access to parts of your account.

Metabase also provides the ability to restrict access to select tables of individual databases. This makes it easy for admins to manage access to sensitive data.

Other Important Factors to Consider

What other factors should you consider before making the choice?

Let us say you want to find out the revenue generated by Google's organic traffic for the past week. To be able to answer this, you will have to bring the data from your transactional database and Google Analytics together. Both Metabase and Redash do not allow you to compute cross system queries like this. In fact, no visualization tools enable that.

To fully leverage the raw data and get real insights, you need to coalesce siloed systems into one central place, say a Data Warehouse, and then implement analytics infrastructure on top of it. Check this article out to understand the nitty gritties of building the data stack for powerful analytics.

When you have gazillions of rows of data, scattered across multiple sources, manually bringing data together pose their own bundle of problems. Engineering bandwidth will have to be allocated to extract, clean, enrich and move the data into the warehouse.

However, writing complex scripts to automate all of this is not easy. It gets harder if you want to stream your data real-time. Data loss becomes an everyday phenomenon due to issues that crop up with changing sources, unstructured & unclean data, incorrect data mapping at the warehouse and more. These are only a few of the many issues that will arise.

With Hevo's Unified Data Integration platform you can simplify the complex task of bringing data from 100s of sources into the warehouse. Sign up today for a free trial and unleash the full potential of your data.