# Loki

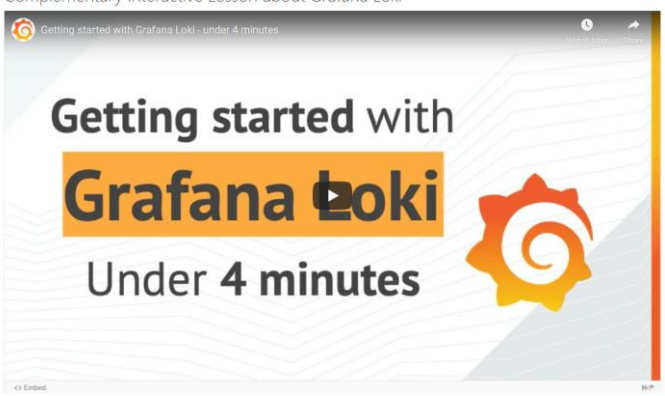
## Overview of Loki

**Loki** is a horizontally-scalable, highly-available, multi-tenant log aggregation system inspired by Prometheus. It is designed to be very cost-effective and easy to operate. Unlike other logging systems, it does not index the contents of the logs, but rather a set of labels for each log stream.

Loki supports multi-tenancy so that data between tenants is completely separated. Multi-tenancy is achieved through a tenant ID (which is represented as an alphanumeric string). When multi-tenancy mode is disabled, all requests are internally given a tenant ID of “fake”.

Loki is optimized for both running locally (or at small scale) and for scaling horizontally: Loki comes with a single process mode that runs all of the required microservices in one process. The single process mode is great for testing Loki or for running it at a small scale. For horizontal scalability, the microservices of Loki can be broken out into separate processes, allowing them to scale independently of each other.

Complementary Interactive Lesson about Grafana Loki

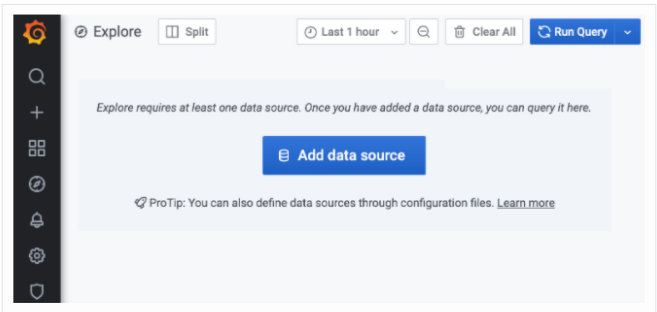



# Exploring

## Explore

**Explore** is one of Grafana's most exciting features; it is a kind of data-driven scratchpad for exploring a data source prior to implementing it on a dashboard graph. It is integrated with Loki, Grafana's new system for ad hoc data exploration.

If you've ever worked with a dashboard-driven tool such as Grafana, you might have started with a dashboard, loaded up a graph panel, fed it the data, and then messaged queries or time frames looking for patterns. What if you could dispense with the overhead of building and configuring dashboard panels and go straight to the analysis? That is what Explore mode is for:

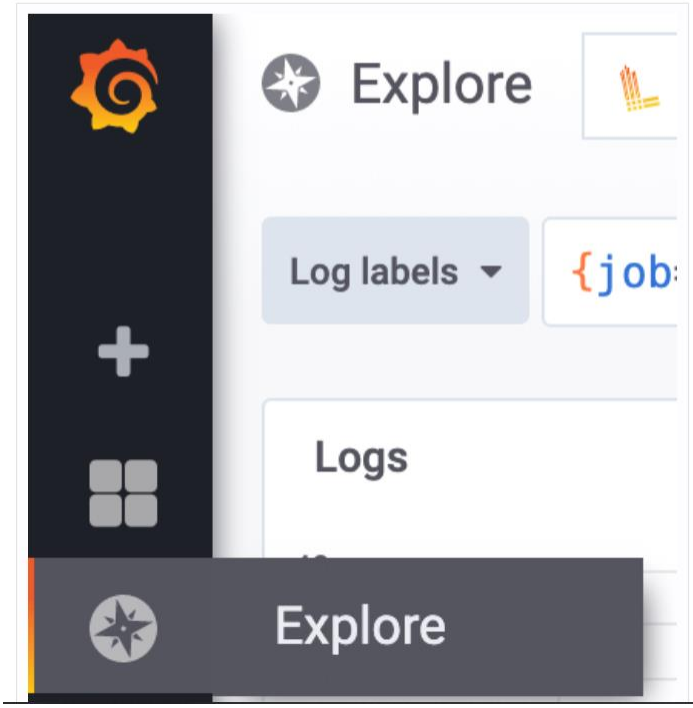



Explore gives you a fullscreen panel, so you can then immediately start exploring your data without concerning yourself with the panel or its appearance on a dashboard. With Loki, Explore takes things a step further. By integrating logging with your metrics, you can correlate metric indicators with significant logged events. If you've tried to troubleshoot a problem by repeatedly flipping back and forth between your graphs and logs, imagine working with them on the same interface!

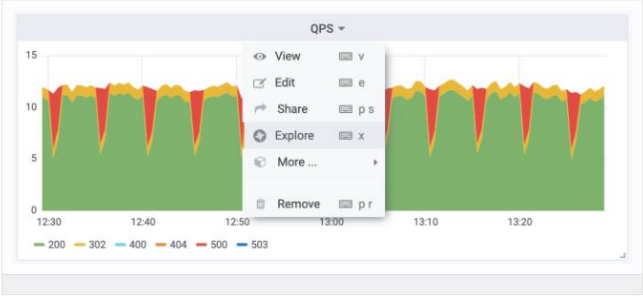
## Start Exploring

> Note: By default, users with the Viewer role cannot edit and do not have access to Explore. module.

There is an **Explore** icon on the menu bar to the left. This opens an empty Explore tab.




If you want to start with an existing query in a panel then choose the **Explore **option from the Panel menu. This opens an Explore tab with the query from the panel and allows you to tweak or iterate in the query outside of your dashboard.

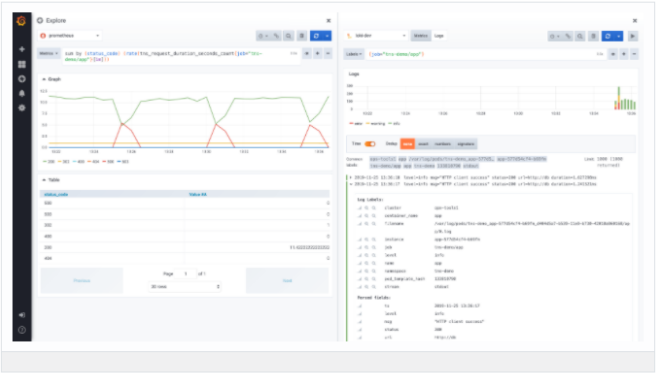



Choose your **data source** from the dropdown in the top left. Prometheus has a custom Explore implementation, the other data sources (for now) use their standard query editor.

The query field is where you can write your query and explore your data. There are three buttons beside the query field, a clear button (X), an add query button (+), and the remove query button (-). Just like the normal query editor, you can add and remove multiple queries

## Split and Compare

The **split** view feature is an easy way to compare graphs and tables side-by-side or to look at related data together on one page. Click the split button to duplicate the current query and split the page into two side-by-side queries. It is possible to select another data source for the new query which for example, allows you to compare the same query for two different servers or to compare the staging environment to the production environment.



In split view, timepickers for both panels can be linked (if you change one, the other gets changed as well) by clicking on one of the time-sync buttons attached to the timepickers. Linking of timepickers helps with keeping the start and the end times of the split view queries in sync and it will ensure that you're looking at the same time interval in both split panels.

You can close the newly created query by clicking on the **Close Split** button.