Logs

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Logs are structured records of events or messages generated by a system or application—that is, a series of text records with status updates from your system or app. They generally include timestamps, messages, and context information like the severity of the logged event.

The logs visualization displays these records from data sources that support logs, such as Elastic, Influx, and Loki. The logs visualization shows, by default, the timestamp, a colored string representing the log status, the log line body, as well as collapsible log events that help you analyze the information generated.

{{< figure src="/media/docs/grafana/panels-visualizations/screenshot-logs-v12.3.png" max-width="750px" alt="Logs visualization" >}}

When the log line details are open, you have access to the following additional options:

- Explain log line in Assistant
- Scroll to log line
- Show or hide log line
- Copy to clipboard
- Copy shortlink
- Switch to condensed view
- Anchor to the right

{{< figure src="/media/docs/grafana/panels-visualizations/screenshot-logs-options-v12.3.png" max-width="750px" alt="Log icons" >}}

You can access the first three options from the log line details or from the log line menu:

{{< figure src="/media/docs/grafana/panels-visualizations/screenshot-log-line-menu-v12.3.png" max-width="300px" alt="The log line menu" >}}

{{< docs/play title="Logs Panel" url="https://play.grafana.org/d/6NmftOxZz/" >}}

Typically, you use logs with a graph visualization to display the log output of a related process. If you have an incident in your application or systems, such as a website disruption or code failure, you can use the logs visualization to help you figure out what went wrong, when, and even why.

Configure a log visualization

The following video provides a walkthrough of creating a logs visualization. You'll also learn how to customize some settings and log visualization caveats:

{{< youtube id="jSSi_x-fD_8" >}}

Supported data formats

The logs visualization works best with log-type datasets such as queries from data sources like Loki, Elastic, and InfluxDB.

The preferred dataplane log format uses a `timestamp` time field and a `body` string field. It can also include optional `severity`, `id`, and `labels` fields.

You can also build legacy log-formatted data from other data sources as long as the first field is a time type followed by string, number, and time fields. The leading time field is used to sort and timestamp the logs and if the data contains other time-type fields, they’re included as elements of the logged record.

The second field is used as the log record title regardless of whether it’s a time, numeric, or string field. Usually the second field is a text field containing multiple string elements, but if the message level (or `lvl`) is present, the visualization uses the values in it to add colors to the record, as described in Log levels integration.

Subsequent fields are collapsed inside of each log record.

To limit the number of log lines rendered in the visualization, you can use the **Max data points** setting in the panel **Query options**. If that option isn't set, then the data source typically enforces its own default limit.

Example

Time	TitleMessage	Element1	Element2	Element3
2023-02-01 12:00:00	title=Log1 lvl=info	1	server2	2023-02-01 11:00:00
2023-02-01 11:30:00	title=Log1 lvl=error	1	server2	2023-02-01 11:00:00
2023-02-01 11:00:00	title=Log1 lvl=trace	1	server2	2023-02-01 11:00:00

{{< figure src="/media/docs/grafana/panels-visualizations/screenshot-logs-example2-v12.3.png" max-width="750px" alt="Logs example" >}}

Log level

Grafana determines the log level from the first matching `level`, `detected_level`, `lvl`, or `loglevel` label and updates color accordingly. If the log doesn't have one of these labels, Grafana tries to find out if its content matches any of the supported expressions. If Grafana can't determine a log level, it visualizes the line with **unknown** log level. Refer to supported log levels and mappings of log level abbreviation and expressions.

Configuration options

{{< docs/shared lookup="visualizations/config-options-intro.md" source="grafana" version="<GRAFANA_VERSION>" >}}

Panel options

{{< docs/shared lookup="visualizations/panel-options.md" source="grafana" version="<GRAFANA_VERSION>" >}}

Logs options

Use these settings to refine your visualization:

Option	Description
Show timestamps	Show or hide the time column. This is the timestamp associated with the log line as reported from the data source. The default is off.
Timestamp resolution	Choose the timestamp precision: **Milliseconds** or **Nanoseconds**.
Display log level	Show or hide the detected log level.

Option	Description
Font size	Choose from **Default** or **Small**.
Wrap lines	Turn line wrapping on or off.
Prettify JSON	Toggle the switch on to pretty print all JSON logs. This setting does not affect logs in any format other than JSON.
Enable columns for displayed fields	Show selected displayed fields as columns.
Enable logs highlighting	Use a predefined syntax coloring grammar to highlight relevant parts of the log lines.
Enable log details	Toggle the switch on to see an extendable area with log details including labels and detected fields. Each field or label has a stats icon to display free-form statistics in relation to all displayed logs. The default setting is on.
Log Details panel mode	Choose to display the log details in a sidebar panel or inline, below the log line.
Enable infinite scrolling	Request more results by scrolling to the bottom of the logs list.
Show controls	Display controls to jump to the last or first log line and filter by log level.
Display download control	Display a control to download log lines when **Show controls** is enabled.
Font size	Select between the default font size and small font size.
Unique labels	Show or hide the unique labels column, which shows only non-common labels.
Deduplication	Hide log messages that are duplicates of others shown, according to your selected criteria. Choose from: • **None** - Don't deduplicate log lines. • **Exact** - Ignoring ISO datetimes. • **Numbers** - Ignoring only those that differ by numbers such as IPs or latencies. • **Signature** - Removing successive lines with identical punctuation and white space.
Order	Set whether to show results **Newest first** or **Oldest first**.

□□□ #2
□ □□□ □□□ 2026-10-31 16:38:06 UTC
□ □□□ □□□ 2026-10-31 16:38:10 UTC