



A deep dive into Persees, the
GitOps Native dashboard
visualization tool

Congratulations Persees



Persees is a dashboard tool to visualize observability data from Prometheus/Thanos/Jaeger.

Persees was accepted to CNCF on August 29, 2024 at the **Sandbox** maturity level.

VISIT PROJECT WEBSITE





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What is Perses anyway?

What are Perses' Goals?

1. Become a **standard** dashboard visualization tool for Prometheus and other datasources. It will focus on being GitOps-compatible and thus enabling a smooth Dashboard-as-Code workflow, via a new and well-defined dashboard definition model.
2. Provide different npm packages, so that anyone that would like to embed charts and dashboards in their own UI could benefit from the work achieved here. For example, these packages might be used in the future to improve the display of the data in the Prometheus UI.
3. Offer a Kubernetes-native mode in which dashboard definitions can be deployed into and read from individual application namespaces (using CRDs). For more information you can take a look at [the doc](#) which would give you an idea of how it would work.
4. To be friendly to Dashboard-as-Code users, by providing a complete static validation of the dashboard format. That means you will be able to validate your dashboards in a CI/CD using the Perses CLI (named percli)
5. Support plugins, to allow users to extend the capacities natively provided



What are Perseus' Goals?

1. Standard dashboard visualization tool for Prometheus
2. GitOps-compatible
3. Provide different npm packages
4. Kubernetes-native
5. Static validation of the dashboard format
6. Support plugins



Live Demo



There is also an CLI tool: percli

- like kubectl
- but than for perces
- should have been called perctl
- percli is a bit easier to pronounce though
- not sure if it is per-CEE-EL-EYE or perklee



Live Demo

How does it stack up against Grafana?

- Customisations –
- Style -+
- Ease of use ==
- GitOpsability +
- Future +?



Dashboards-as-Code (DaC)

- CUE or go SDK



What is CUE anyway?

- <https://cuelang.org/>
 - Configure Unify Execute
 - “Validate, define, and use dynamic and text-based data”
- CUE is an open-source data validation language and inference engine with its roots in logic programming.
- CUE static types are generated from go types



Gotchas

- dashboards AND panels don't save unless you click save
- names don't match the names in the CLI
 - ui: **SRE day 2024!**
 - cli: sre_day_2024_
- quite some "units" are missing and not customizable
 - very "cloud native" focused (bytes, time, rates)
 - missing: currencies & SI units
- entire k8s integration is still missing
- EphemeralDashboard sounds like a great idea, doesn't work with percli (yet?)]
- docs are quite limited
- percli dac setup fails on macos

