

# SIG-UI Deep Dive



kubernetes

# Outline

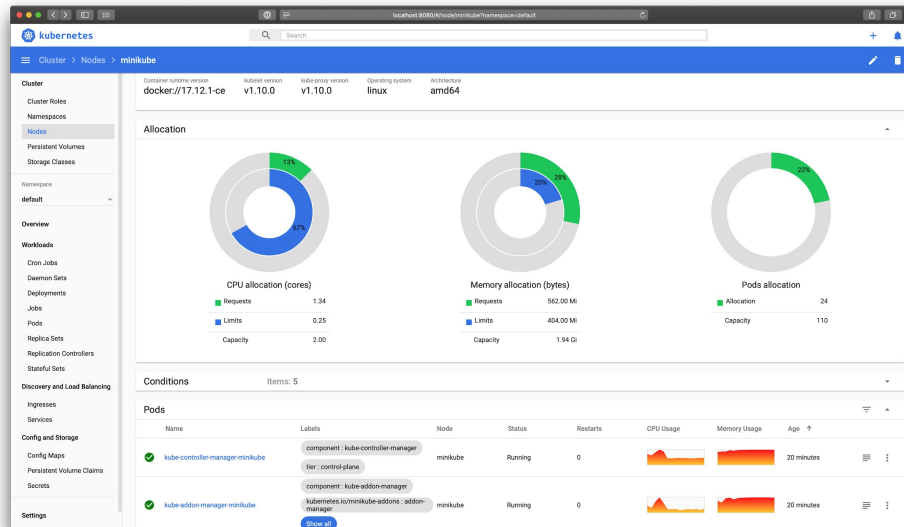


- Intro
- Code Walkthrough
- Developer Practices
- Project Roadmap
- Call For Contributors
- Questions

# What is the Dashboard?



Kubernetes Dashboard is a general purpose, web-based UI for Kubernetes clusters. It allows users to manage applications running in the cluster and troubleshoot them, as well as manage the cluster itself.



# Effort Recap



- Angular Rewrite
- Metrics Server Support
- GSOC

# Code Structure - /



```
aio/  
  deploy/  
  gulp/  
  scripts/  
node_modules/  
src/  
  app/  
    backend/  
    frontend/  
vendor/  
Gopkg.toml  
package.json
```

# Code Structure - /



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```

All-in-one

Contains scripts and build artifacts required for deploying the Dashboard

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```

Kubernetes deployment YAML files

Recommended - Supported  
deployments that should handle 99%  
of users

Alternative - Edge case and  
experimental deployment scripts.

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```

Various npm/gulp-related tasks and functions.

```
`npm build`  
`npm start`  
`npm run check`
```



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```

Bash scripts supporting “complex”  
logic

Starting/Stopping a local “KinD” cluster  
Defining environment variables  
Static file linting

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```

JavaScript "Vendor" directory

Generated via `npm i` or `npm ci`

Should never be manually modified

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    frontend/  
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package.json
```

Contains all application code

# Code Structure - /



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```

golang portion of Dashboard code.

Handles authentication, aggregation,  
and caching of results



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```

Javascript portion of the Dashboard

Built using Angular framework and  
uses the Material Design style.

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    backend/  
    frontend/  
vendor/  
Gopkg.toml  
package.json
```

Golang "Vendor" directory

Generated via `dep ensure`

Should never be manually modified



# Code Structure - /



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```

Defines all Golang dependencies.

Currently using godeps.

Eventually moving to use gomod.

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```

Defines all Javascript dependencies.

Also defines all commands run via  
`npm``



# Developer Practices



- Always clear `node_modules` and `npm ci` when checking out PRs.
- Save time. Run `npm test` and `npm run check` locally.
- Use `minikube` or `kind` for local development.
- Smaller PRs are better PRs.

## Demo

# Project Roadmap



- Better OAuth Support
- CRDs
- Convert over to using Gomod
- Plugin System
  - Prometheus
  - Cloud Providers

# How you can contribute



- [Good First Issues](#)
- Propose new features!
- Review PRs and ask questions

<https://github.com/kubernetes/dashboard>

# Where to find us



- Owner
  - @bryk
- Leads
  - @danielromlein
  - @floreks
  - @jeefy
  - @maciaszczykm
- Home page: <https://github.com/kubernetes/dashboard>
- Slack channel: <https://kubernetes.slack.com/messages/sig-ui>
- List: <https://groups.google.com/forum/#!forum/kubernetes-sig-ui>