





North America 2022

SneakOps

Getting Users to Use GitOps Without Them Even Knowing About It!

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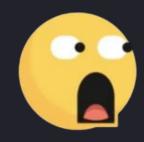
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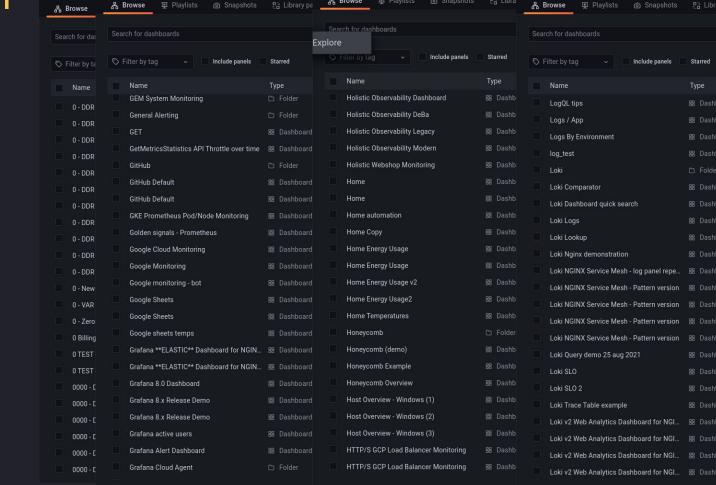


The Environment



The Situation





Dashboards

Dashboards



The Plan





The Challenge

Admins (us) want to use GitOps

Our end-users don't have time to learn it

Lack of use of it means the mess remains



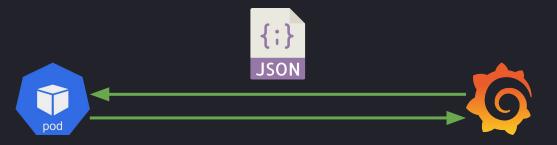


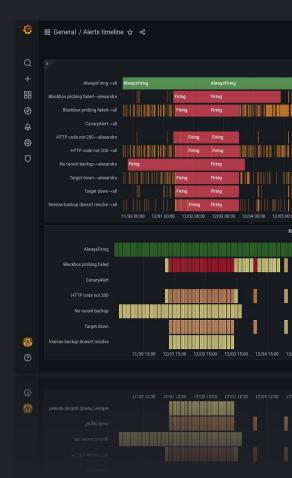
The Tools

Grafana

Many products, but in this case beautiful dashboarding!

- Full REST API JSON data
 - Securely query resources via an API key
- CRUD operations
- Upload new/updated Dashboards







Terraform

nfrastructure as Code!

- Idempotent state
- Supports multiple resource providers such as Grafana
 - Create, Delete, Update resources like dashboards!









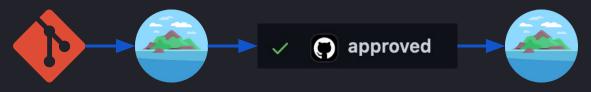
Atlantis

Running Terraform via Git Pull Requests

Manage Terraform by opening a PR

Run TF plan

- Negates the need to plan/run yourself
- Can ensure specific requirements met pre-applying
- Wonderful for a Git-centric pipeline GitOps!



Apply TF







GitHub Actions

Automate GitHub workflows based on events

- Triggered by GitHub events
 - PR creation
 - Comments
 - o Etc.
- Greatly helps improve CI/CD
- Can act as handy glue in a GitOps pipeline





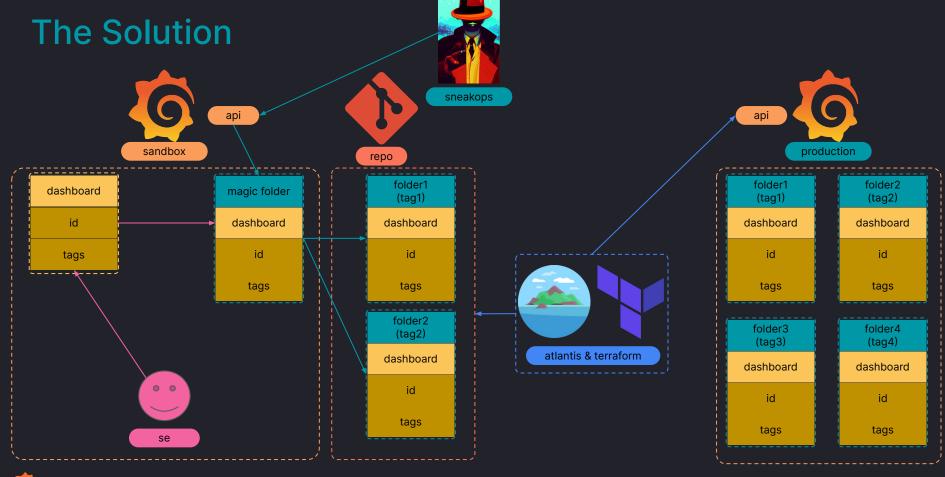








The Solution





Wait... What's that SneakOps daemon actually do?

Simply, it looks for dashboards in a 'golden' folder.

- A dashboard in the folder kicks it
- Look for tags to determine target folder and version
- Checks prod Grafana to ensure version > current version for dashboard
- Throws errors on version/folder mismatches
- Raises PRs for good folders
- All comms go to both logs and Slack
 - If an author is specified in dashboard tags, they get pinged!









Demo!



Recap

The Environment

- Large shared Grafana
- Tons of data sources
- Tons of integrations
- Lots of users

The Plan

- Sandbox Grafana
- Production Grafana
- Promote dashboards via GitOps

The Situation

- Massive dashboard sprawl
- Duplicate dashboards
- Broken dashboards
- Old dashboards

The Challenge

- End-users don't normally use Git
- No real time to become proficient
- Sprawl persists

The Solution

- Save dashboards to magic folder
- Retrieve via Grafana API
- Commit to Git folder structure
- Provision via Atlantis/Terraform





Wrap-up & Thoughts



Should you do this?



Maintenance



Future Roadmap







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Thank you!

Feel free to rate the session.