There's No Place Like Production

Paige Cruz, Chronosphere

chronosphere

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"

i test in prod

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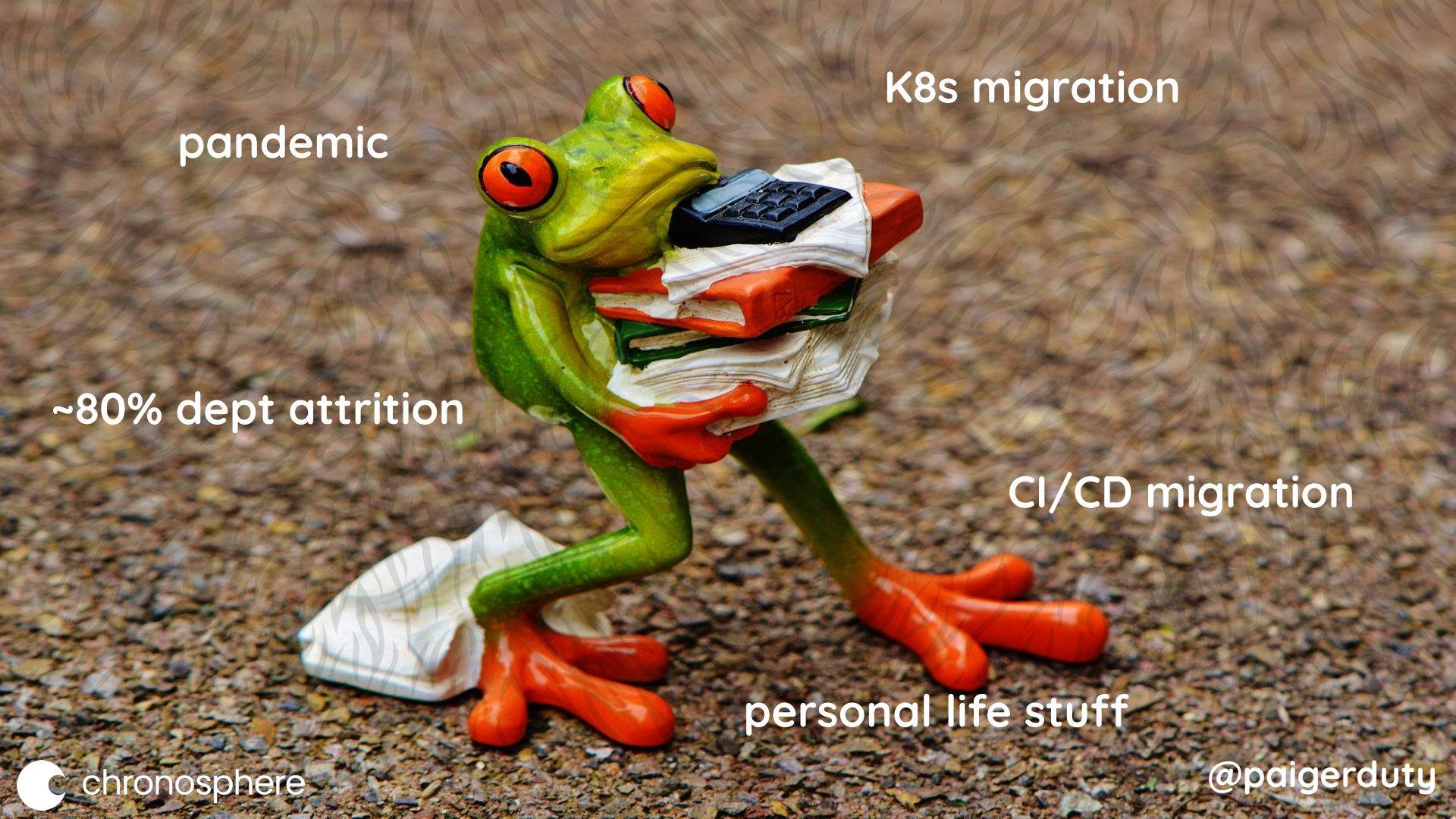
K8s migration
pandemic
~80% dept attrition
CI/CD migration
personal life stuff
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A cannabis technology platform providing integrated solutions for consumers and businesses
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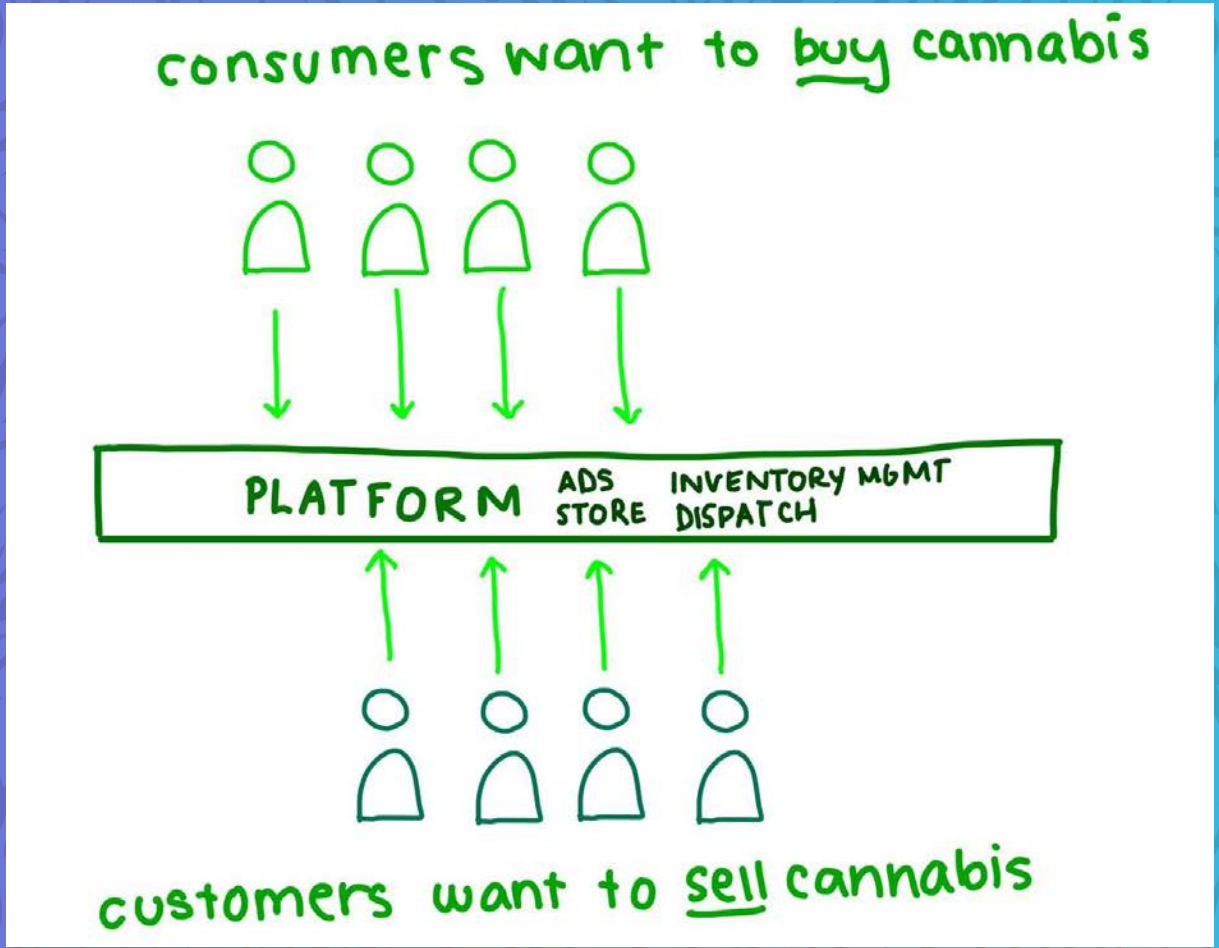
consumers want to buy cannabis
PLATFORM
ADS
STORE
INVENTORY MGMT
DISPATCH
customers want to sell cannabis

The Stack*

træfik

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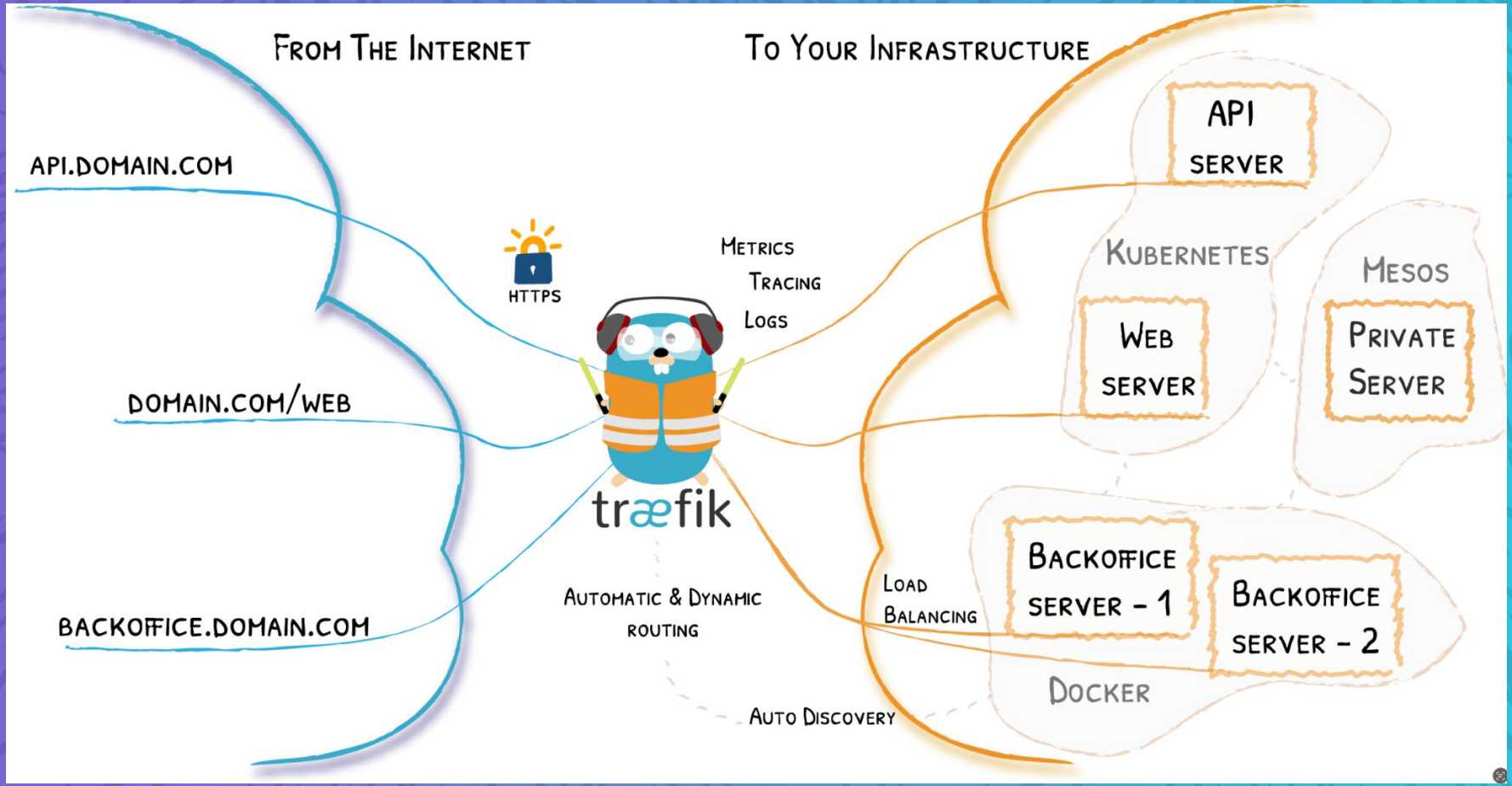
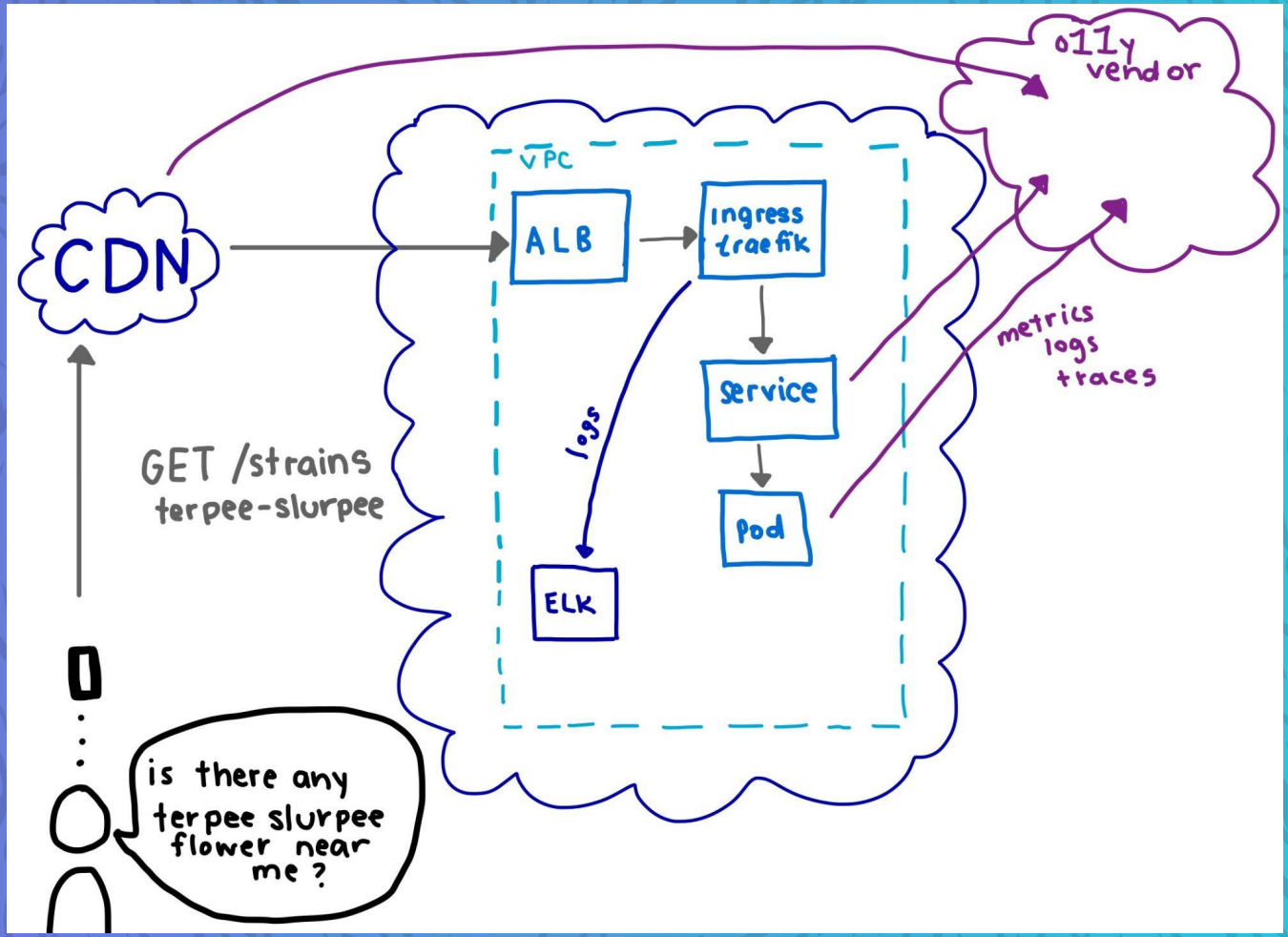

From The Internet
To Your Infrastructure
API.DOMAIN.COM
DOMAIN.COM/WEB
BACKOFFICE.DOMAIN.COM
HTTPS
Metrics
Tracing
Logs
træfik
Automatic & Dynamic routing
Load Balancing
Auto Discovery
API server
Kubernetes
Web server
Mesos
Private Server
Backoffice server - 1
Backoffice server - 2
Docker

The Stack*


o11y vendor
VPC
CDN
ALB
ingress traefik
Service
Pod
ELK
logs
metrics
logs
traces
GET /strains
terpee-slurpee
is there any terpee slurpee flower near me?

#justSREThings

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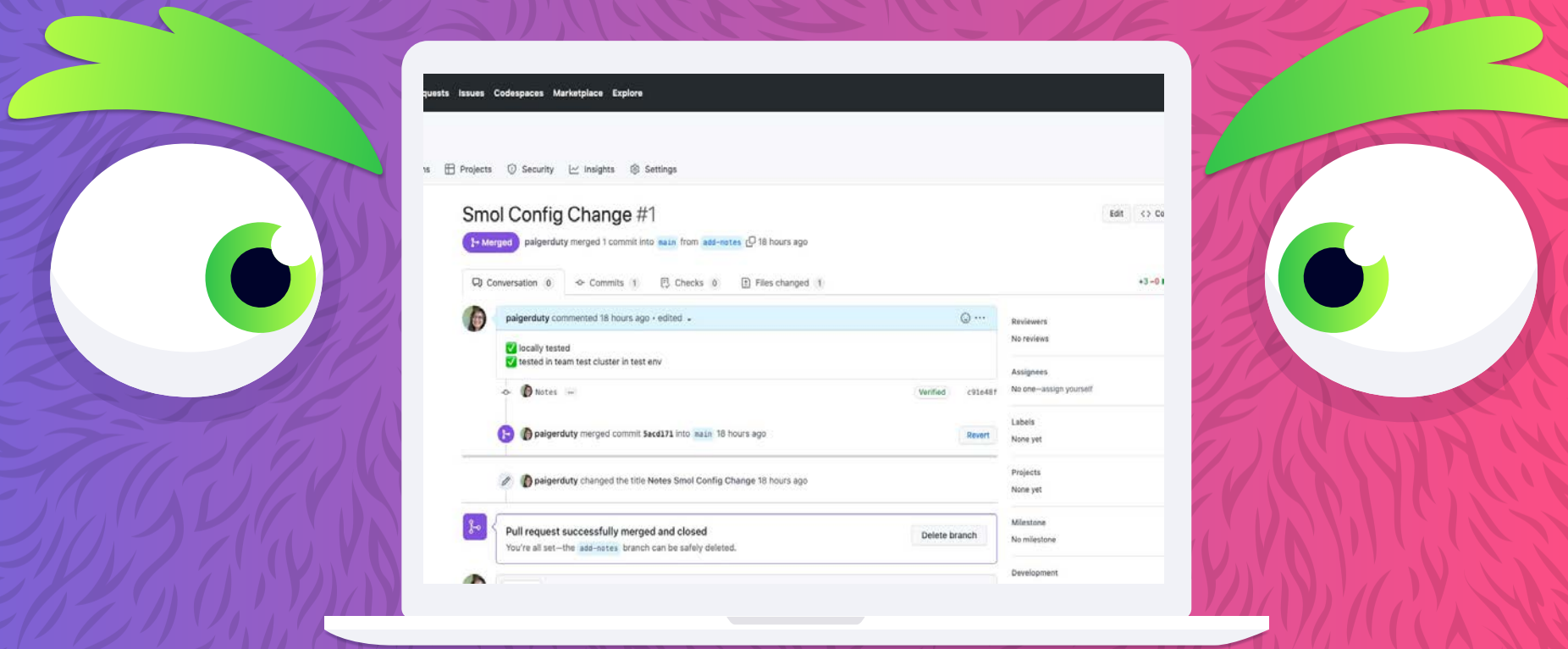
The Change

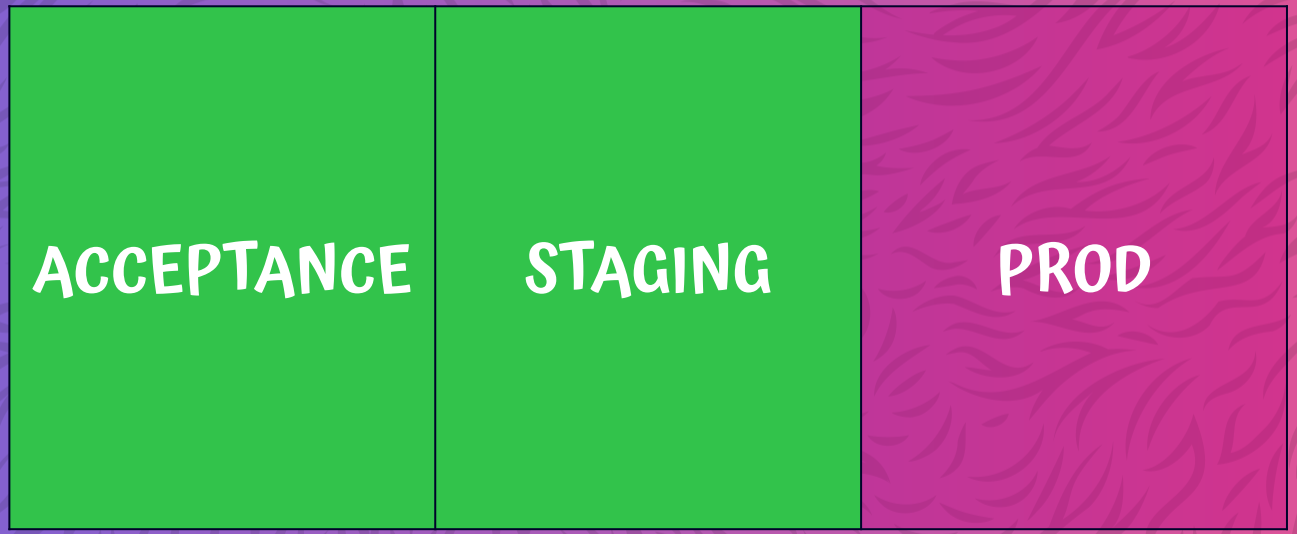
Foolproof Plan

```
- [X] traefik pr
  - [X] test
  - [X] add new deployment process
  - [X] announce changes to acceptance/staging
  - [X] let it bake
  - [ ] schedule and find a quiet time to try it tomorrow in prod
```


quests Issues Codespaces Marketplace Explore
Projects Security Insights Settings
Smol Config Change #1
Edit
Merged paigerduty merged 1 commit into main from add-notes 18 hours ago
Conversation 0 Commits 1 Checks 0 Files changed 1
paigerduty commented 18 hours ago • edited
locally tested
tested in team test cluster in test env
Notes
Verified
paigerduty merged commit 5ecd171 into main 18 hours ago
Revert
paigerduty changed the title Notes Smol Config Change 18 hours ago
Pull request successfully merged and closed
You're all set—the add-notes branch can be safely deleted.
Delete branch
Reviewers
No reviews
Assignees
No one—assign yourself
Labels
None yet
Projects
None yet
Milestone
No milestone
Development

Let's Ship It

Let's Ship It



Let's Ship It

ACCEPTANCE	STAGING	PROD

SRE
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The Incident

555-3215

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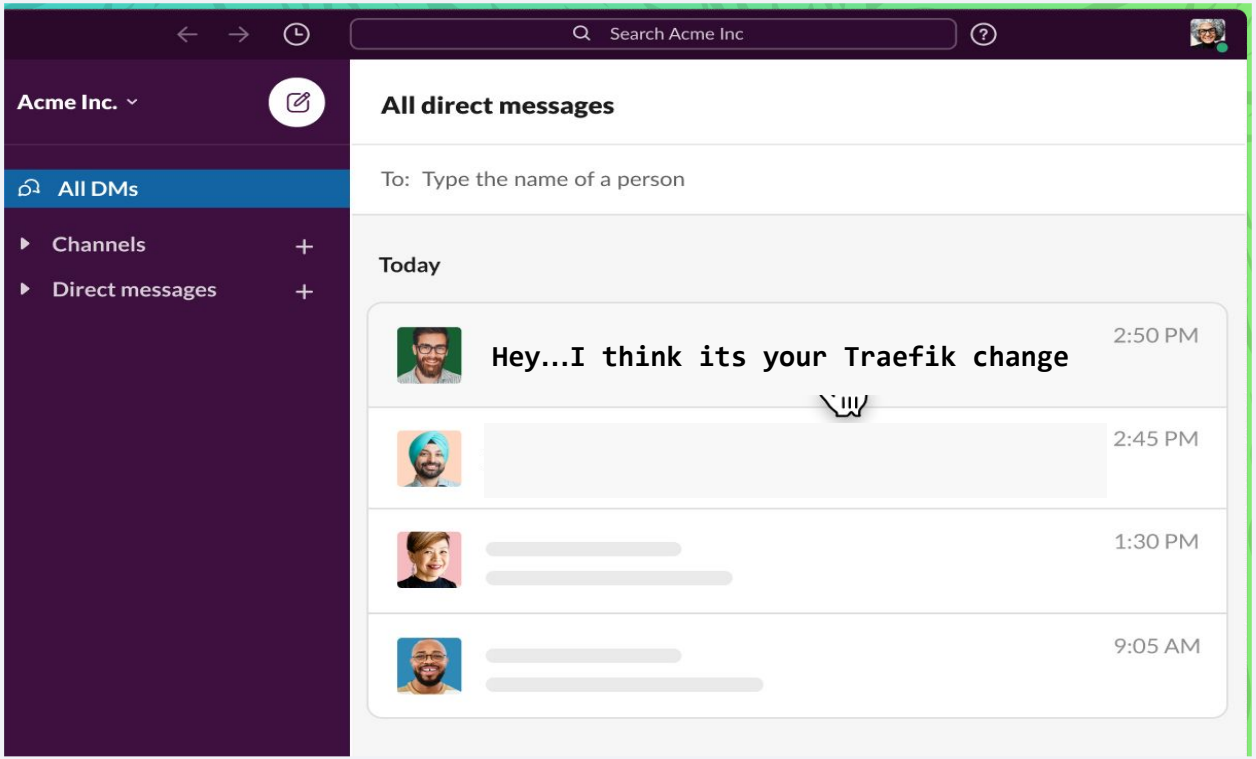
Search Acme Inc
Acme Inc.
All direct messages
All DMs
To: Type the name of a person
Channels
Direct messages
Today
Hey...I think its your Traefik change
2:50 PM
2:45 PM
1:30 PM
9:05 AM

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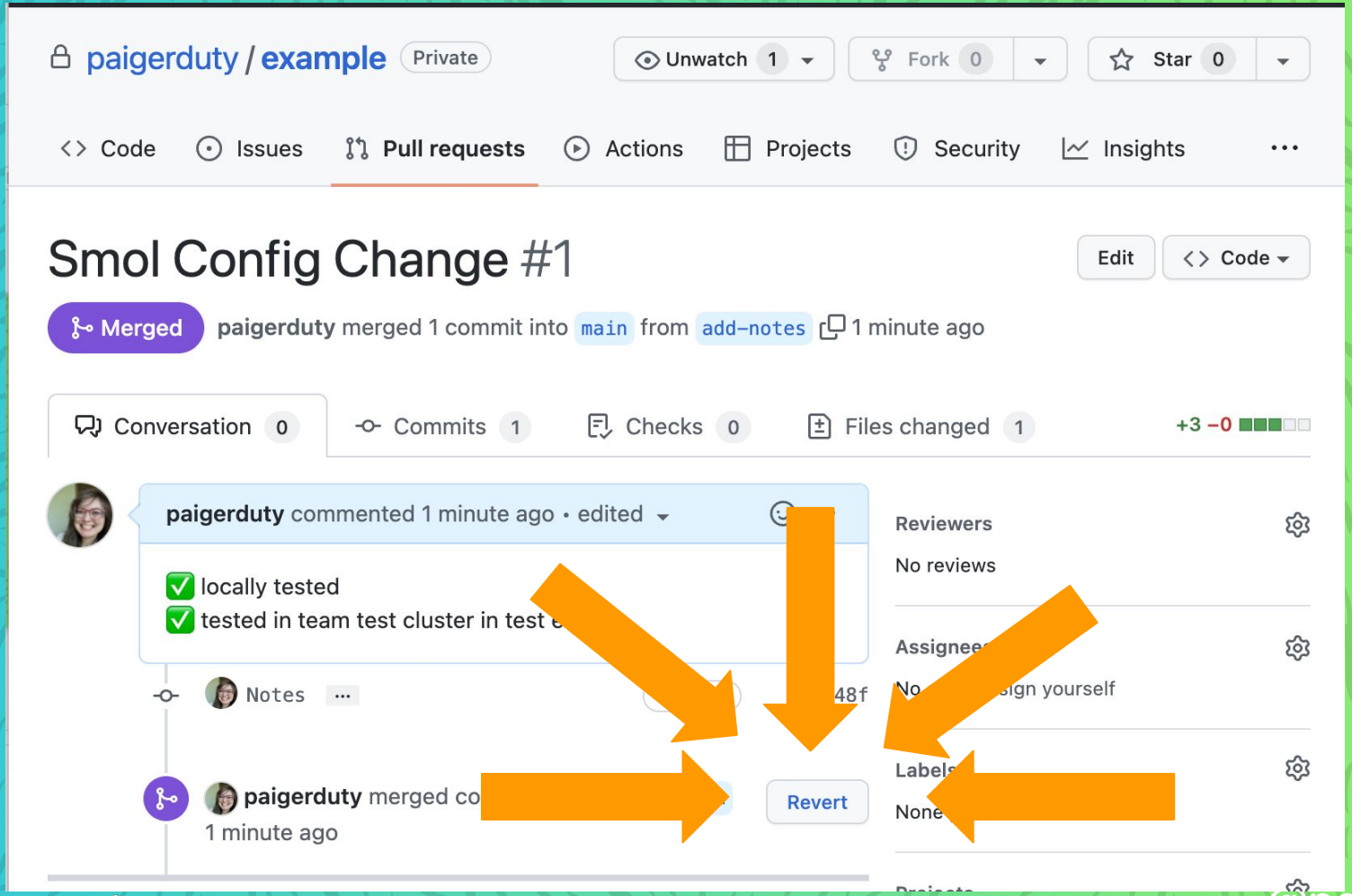
paigerduty / example
Private
Unwatch 1
Fork 0
Star 0
Code
Issues
Pull requests
Actions
Projects
Security
Insights
Smol Config Change #1
Edit
Code
Merged
paigerduty merged 1 commit into main from add-notes 1 minute ago
Conversation 0
Commits 1
Checks 0
Files changed 1
+3 −0
paigerduty commented 1 minute ago • edited
✅ locally tested
✅ tested in team test cluster in test
Notes
48f
paigerduty merged co
1 minute ago
Revert
Reviewers
No reviews
Assignee
No
sign yourself
Label
None

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Pssst. Hey I think was really cool how you handled yourself during the incident!
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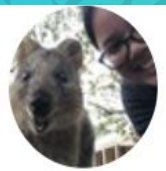

amy nguyen
@amyngyn

COWORKER: we need to find the root cause asap
ME: *takes long drag* the root cause is that our processes are not robust enough to prevent a person from making this mistake
COWORKER: amy please not right now

11:38 AM · Dec 11, 2018

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The Next Day

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Get in betch, we're *learning* from this incident

~~post-mortem~~

Incident Review

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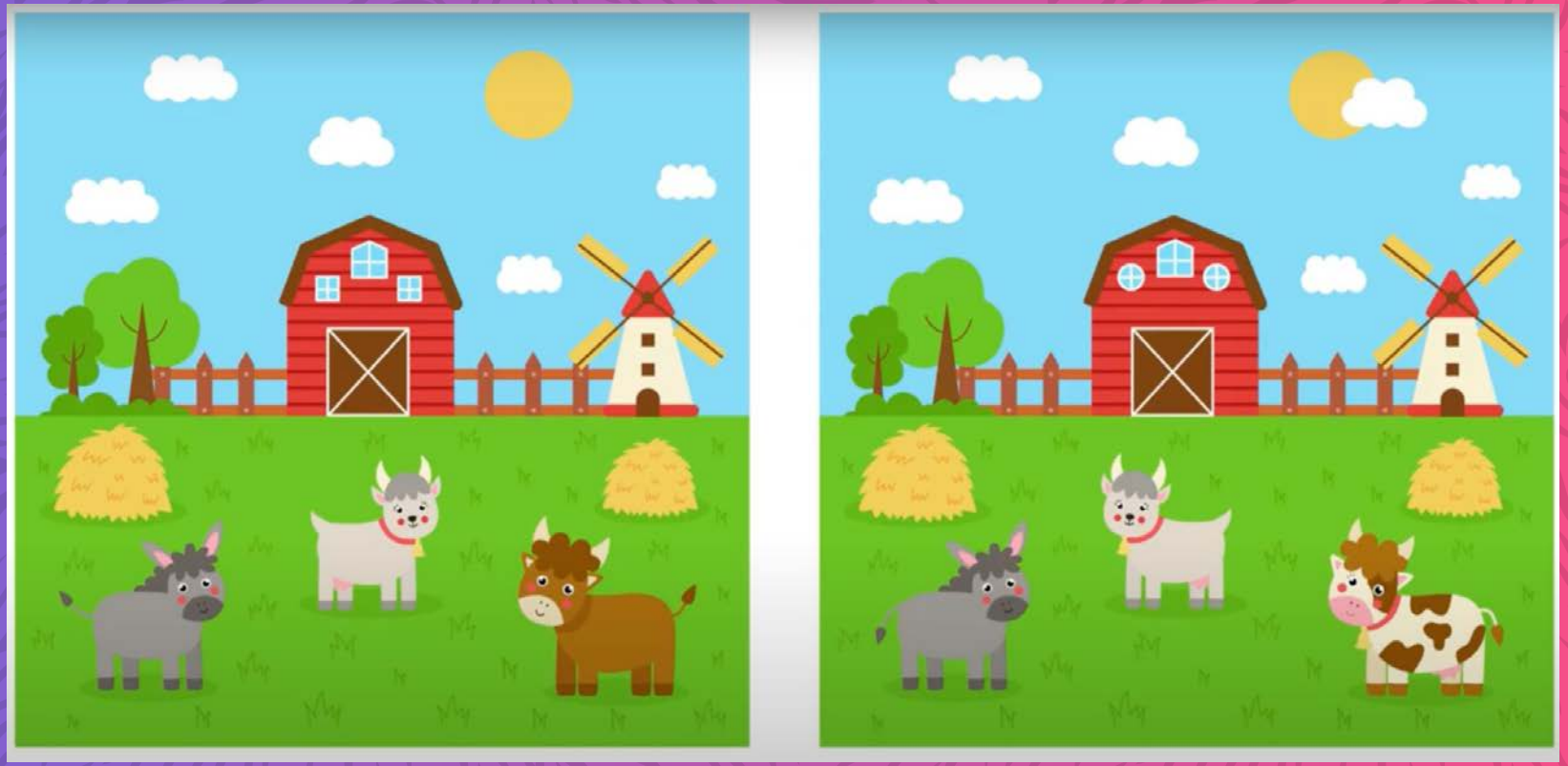
Spot the Differences: HARD MODE



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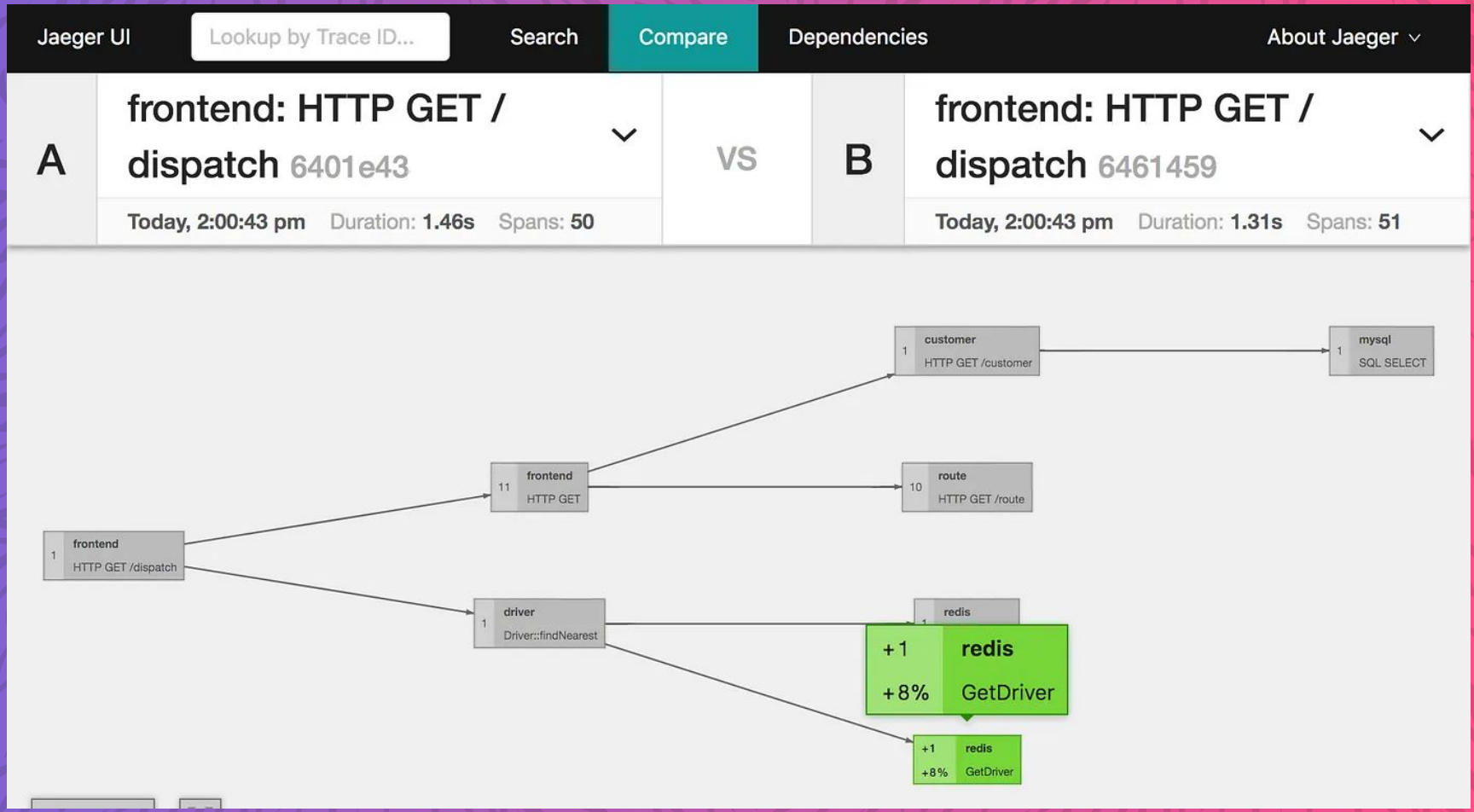
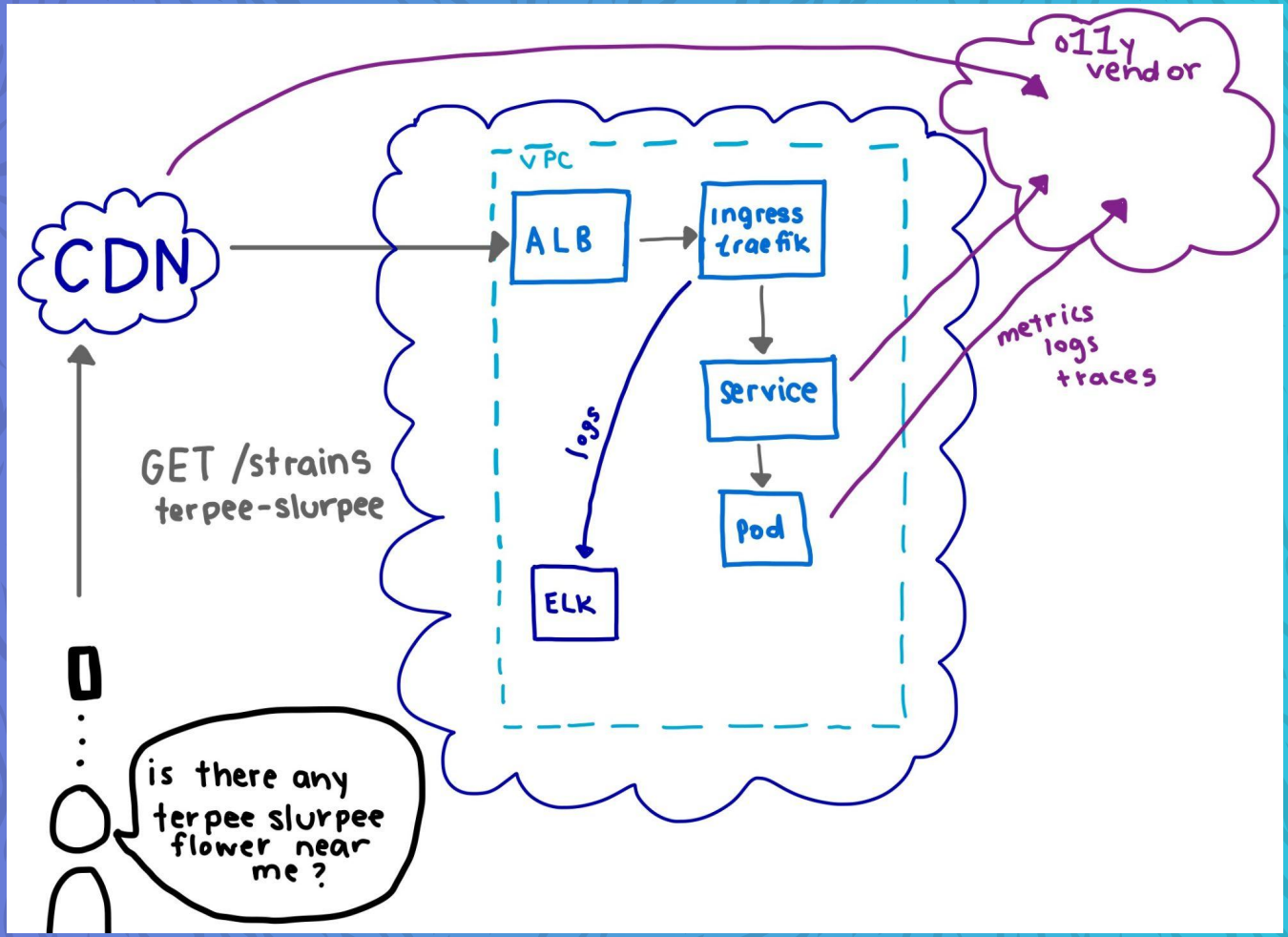

Jaeger UI
Lookup by Trace ID...
Search
Compare
Dependencies
About Jaeger
A
frontend: HTTP GET / dispatch 6401e43
Today, 2:00:43 pm Duration: 1.46s Spans: 50
VS
B
frontend: HTTP GET / dispatch 6461459
Today, 2:00:43 pm Duration: 1.31s Spans: 51
1 frontend HTTP GET /dispatch
11 frontend HTTP GET
1 customer HTTP GET /customer
1 mysql SQL SELECT
10 route HTTP GET /route
1 driver Driver::findNearest
redis
+1 redis
+8% GetDriver
+1 redis
+8% GetDriver

The Stack*


o11y vendor
VPC
CDN
ALB
ingress traefik
Service
Pod
ELK
logs
metrics
logs
traces
GET /strains
terpee-slurpee
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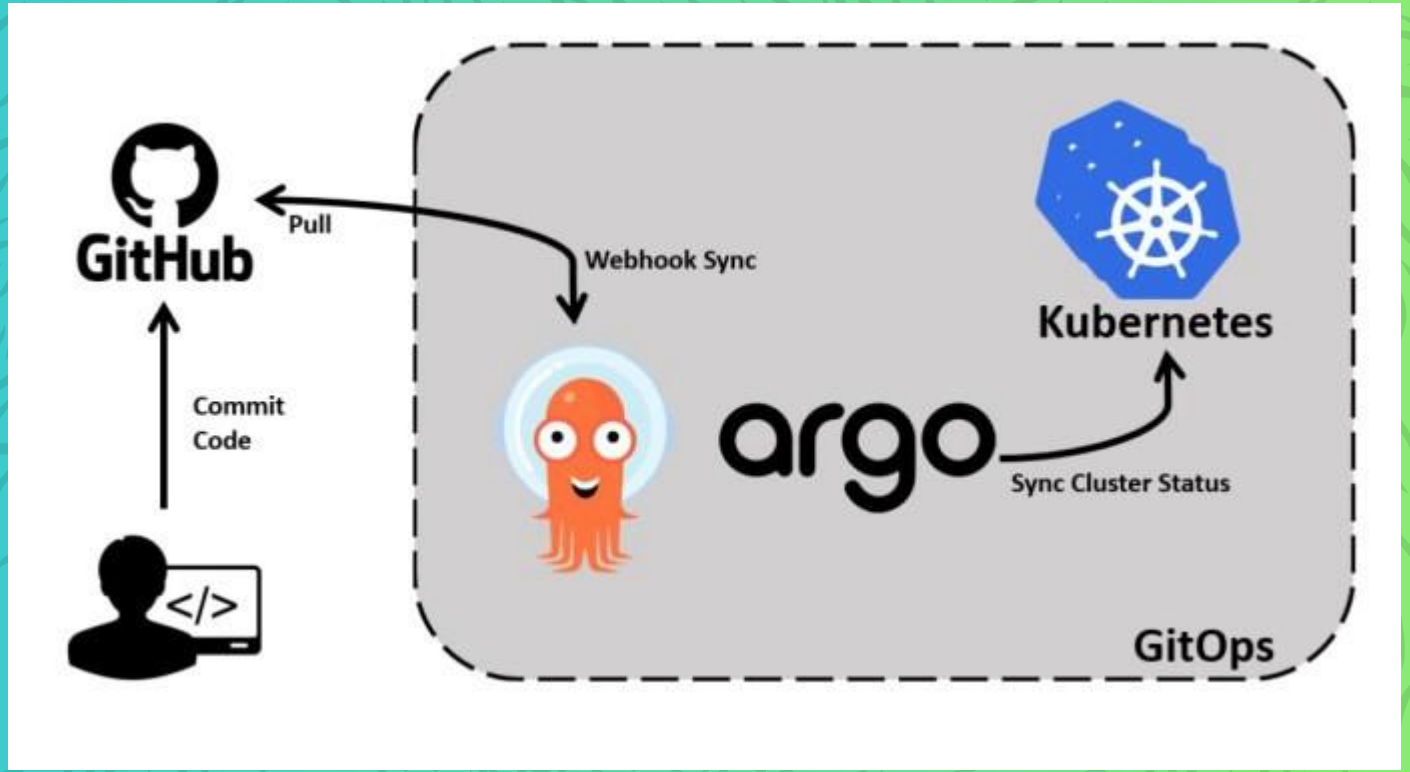
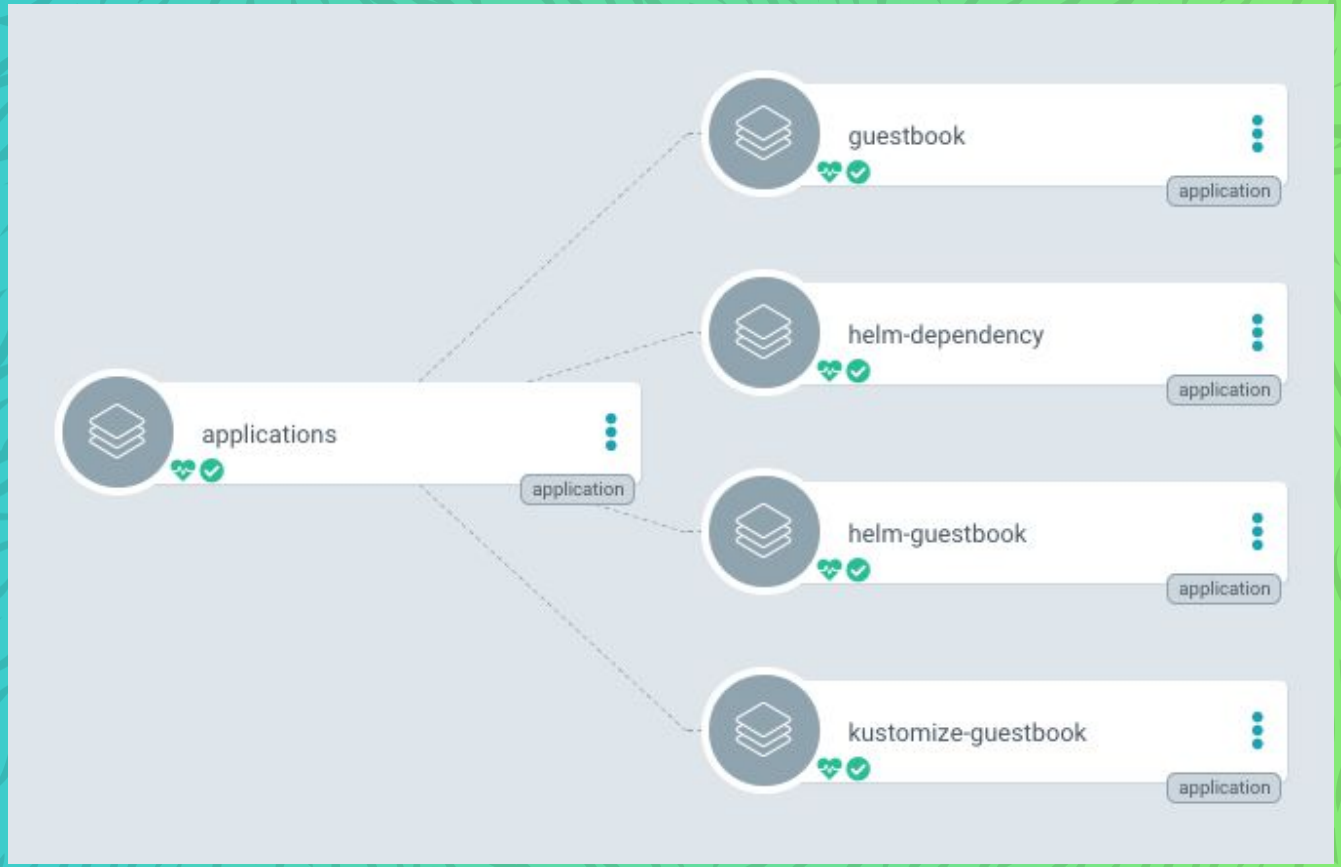
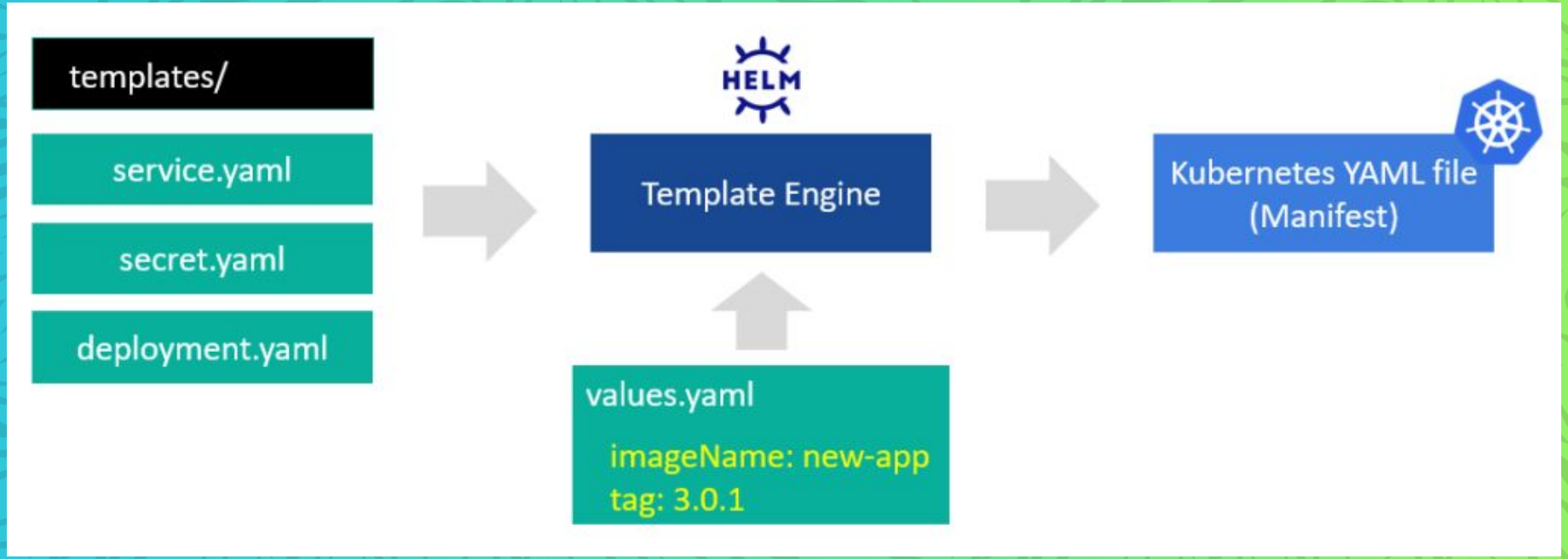
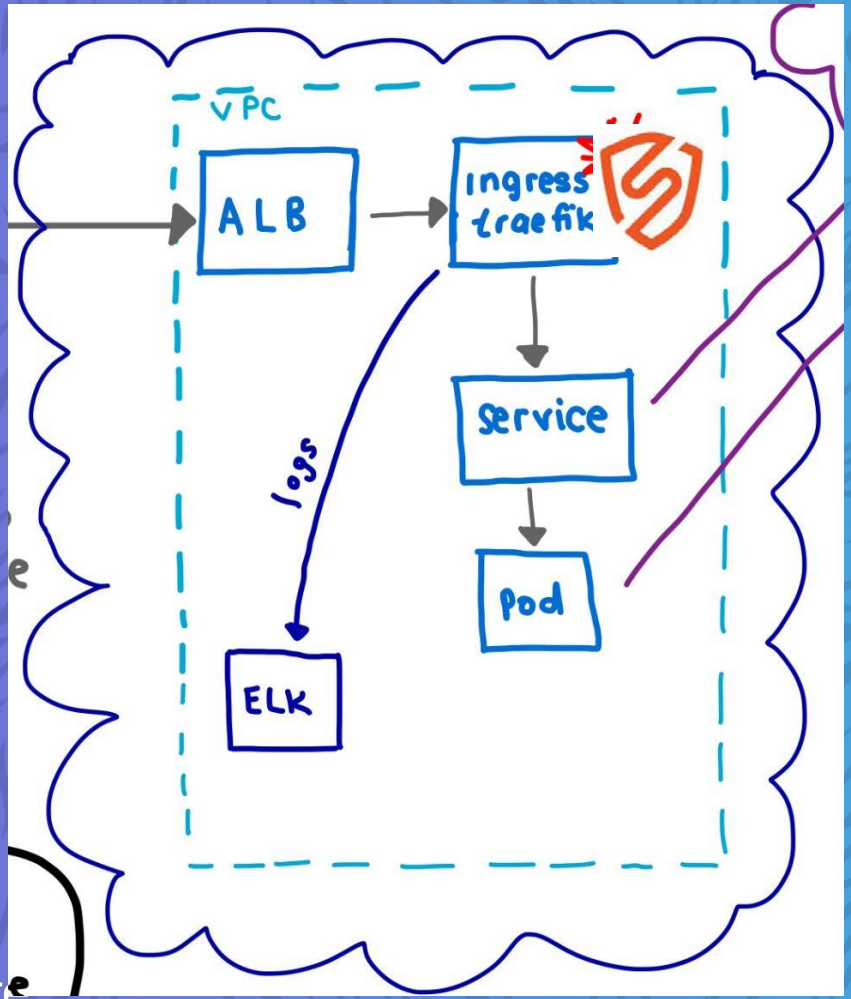

GitHub
Pull
Webhook Sync
Kubernetes
Commit
Code
argo
Sync Cluster Status
</>
GitOps


guestbook
application
helm-dependency
application
applications
application
helm-guestbook
application
kustomize-guestbook
application


templates/
service.yaml
secret.yaml
deployment.yaml
HELM
Template Engine
values.yaml
imageName: new-app
tag: 3.0.1
Kubernetes YAML file
(Manifest)


VPC
ALB
ingress
traefik
Service
Pod
logs
ELK

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Learnings

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Incident Retro
Chapter BE
chronosphere
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Incident Retro
Chapter BE
Chapter FE
chronosphere
@paigerduty

Incident Retro
Chapter BE
Chapter FE
SRE Study Time
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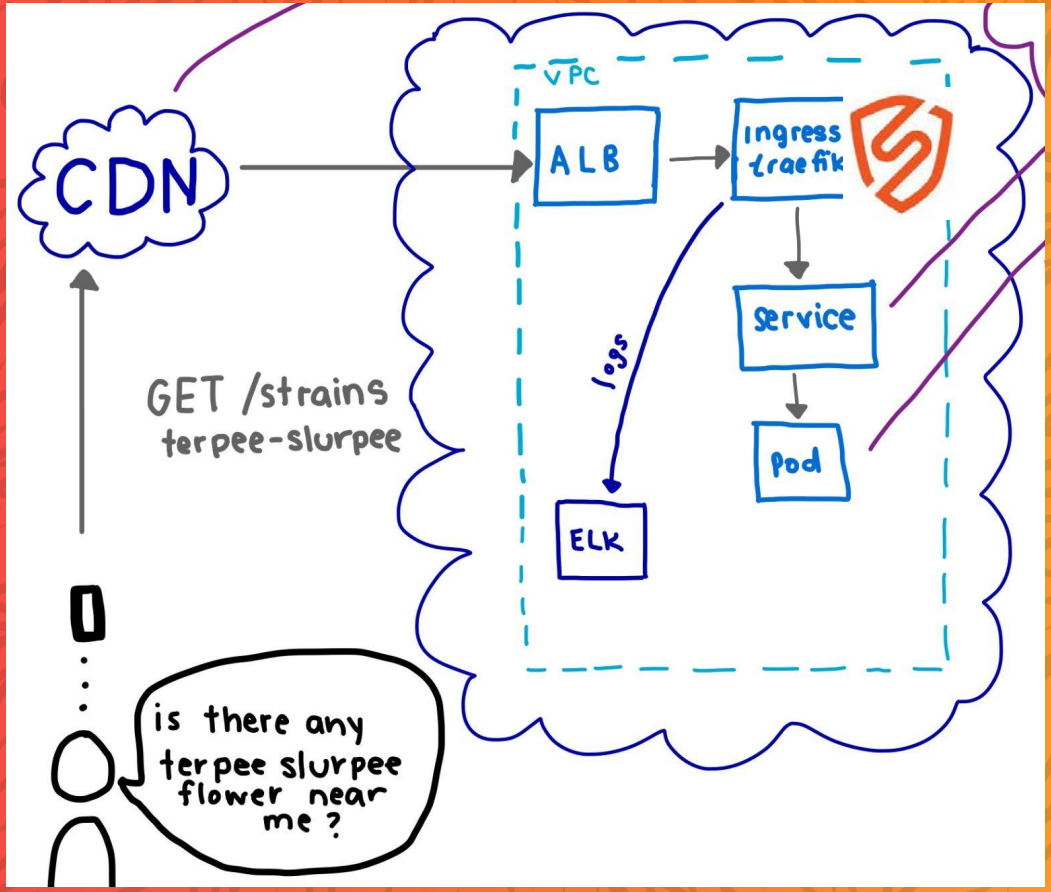
GO
Helm
K8s
Argo
chronosphere
@paigerduty


VPC
CDN
ALB
ingress
traefik
service
pod
logs
ELK
GET /strains
terpee-slurpee
is there any terpee slurpee flower near me ?

Distributed tracing is failing, how can we save it?

Joel Groen on May 18th 2023

Blog • CLOUD NATIVE / OBSERVABILITY

Available Telemetry
• Traces? Events? Logs?
• Instrumentation
• Querying
• Tags/Attrs
SRE CON AMERICAS

Storytelling physiology

I see all the nine signals

"

we all test in prod

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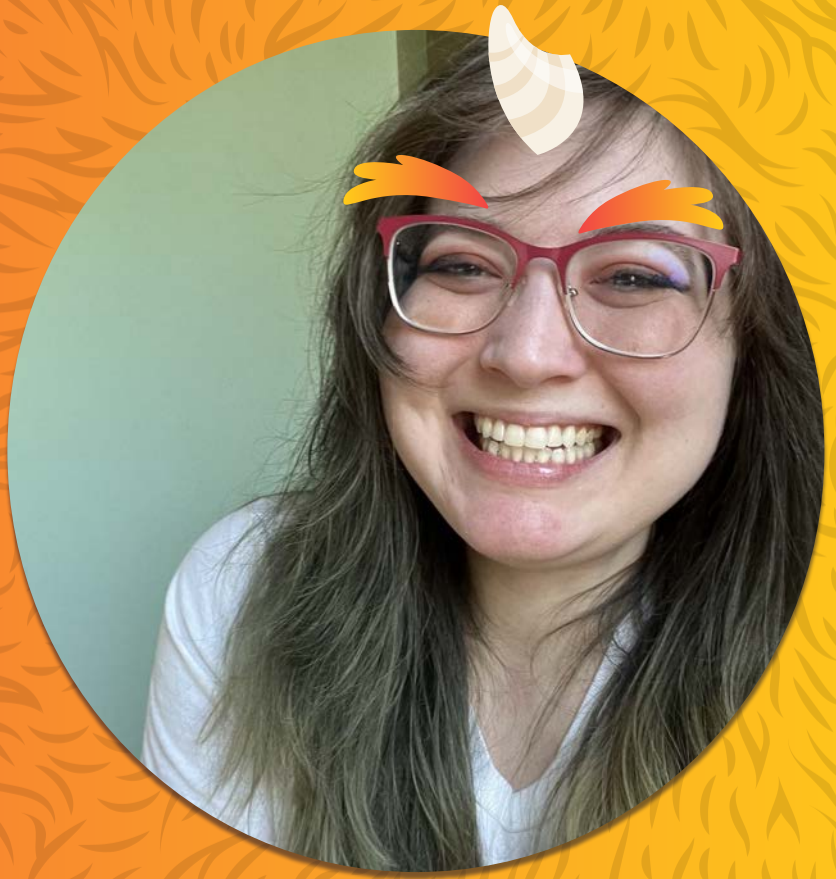
Thanks!

You can find me at:

- paigerduty @chronosphere.io
- @hachyderm.io
- Template by SlidesCarnival
- Images by Unsplash, Pexels, Pixabay



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