Platforms aren't tools, they are experiences.

And Kubernetes isn’t a platform, it’s a foundation

Abby Bangser (she/her)

a_bangser

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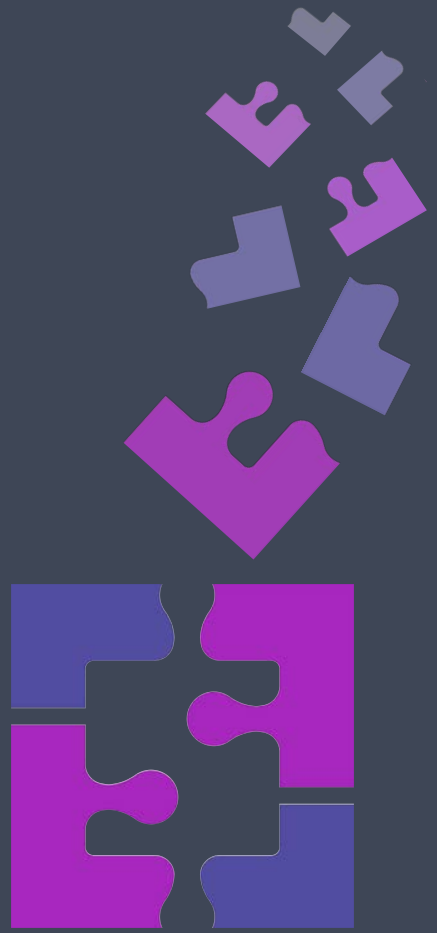


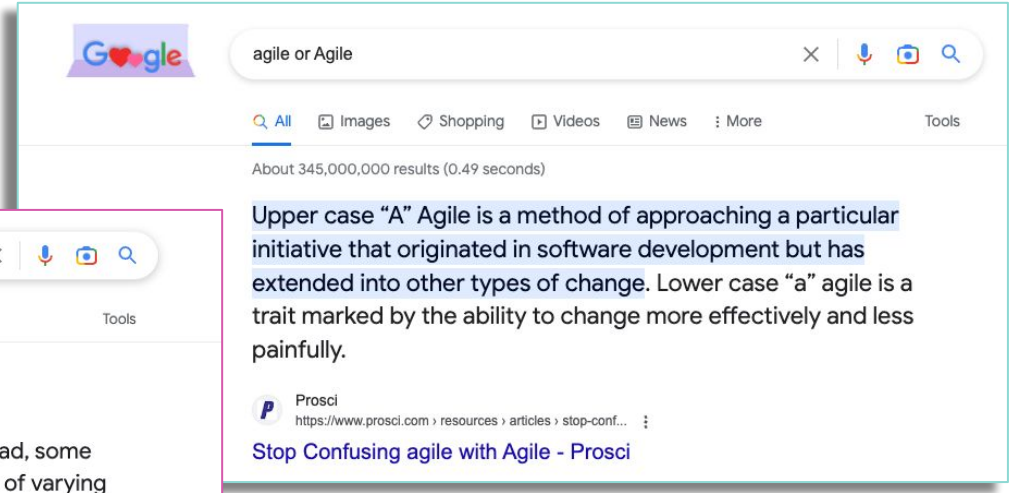
SYNTASSO

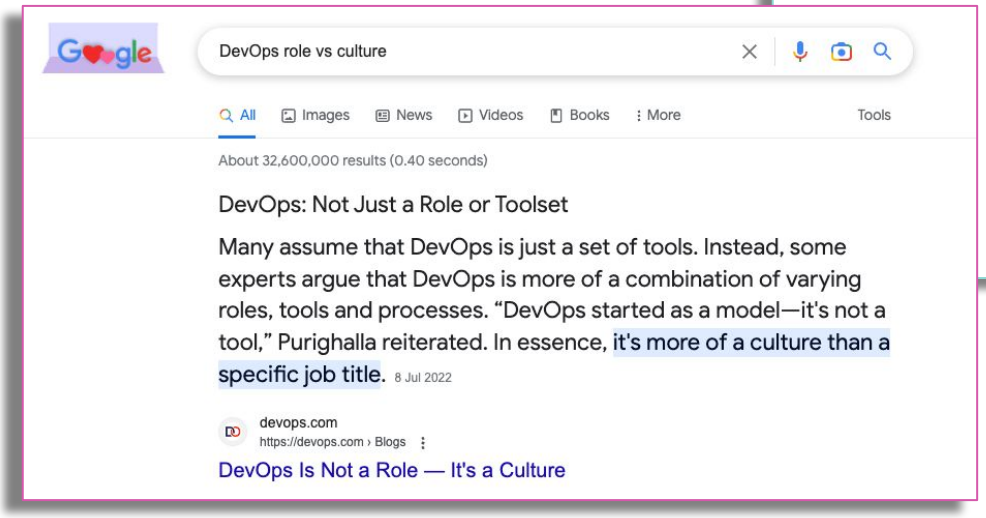
SYNTASSO

Platforms and
Platform Engineering
are at risk of entering
buzzword territory

Platforms and
Platform Engineering
are ~~*at risk of*~~ entering
buzzword territory

We have been here before and it makes me sad





SYNTASSO

What are the symptoms of becoming a buzzword?

- New job titles pop up without any change in role
- Vendors pay for the search term for existing tools
- “State of” reports are published
- Confusion ensues as the internet argues if the term is new or not and if it is useful or not

My particular pet peeve:

The new ideas and terms usually introduce a **nuanced improvement**, but the bandwagoning use of the term confuses attempts to understand this nuance.

Nothing like a Gartner report to confirm you have made it!

Gartner

Insights / Information Technology / Article

What Is Platform Engineering?

October 05, 2022
Contributor: Lori Perri

Platform engineering is an emerging technology approach that can accelerate the delivery of applications and the pace at which they produce business value.

Platform engineering improves developer experience and productivity by providing self-service capabilities with automated infrastructure operations. Platform engineering is trending because of its promise to optimize the developer experience and accelerate product teams' delivery of customer value.

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Hmmm… Sounds a lot like DevOps here huh?

Gartner

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SYNTASSO

It is made too easy to read the headlines and miss the nuance

Gartner

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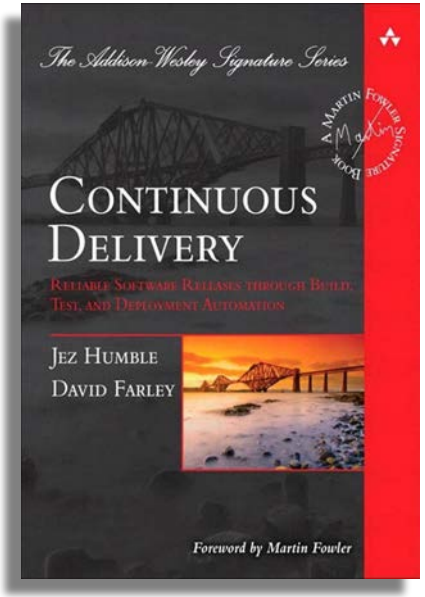
SYNTASSO

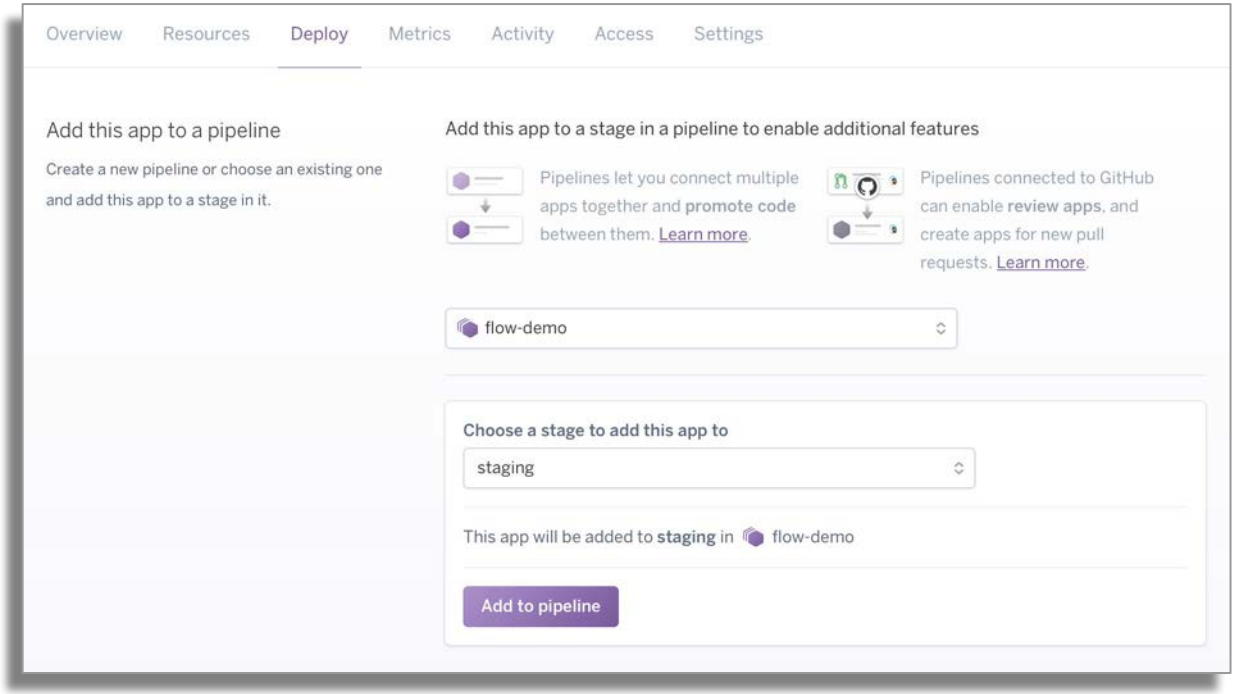
Tech has already been accelerating the delivery of business value



And with Platforms-as-a-Service (PaaS)

HEROKU

Since 2009



SYNTASSO

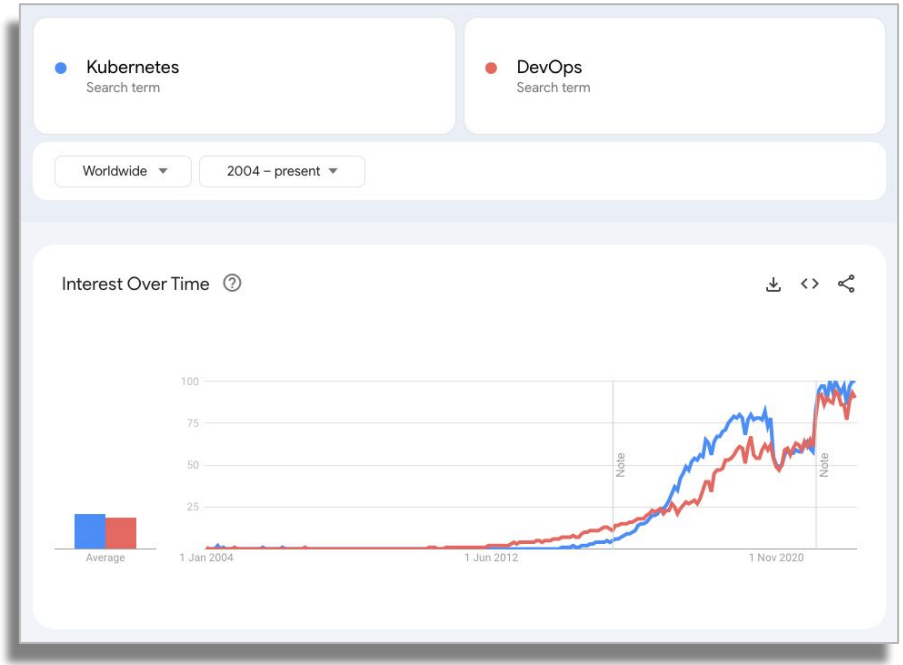
But, like the title says, platform engineering is more than just tools

- Incident management
- Testing
- Customer support
- Compliance
- Onboarding and offboarding

PaaS experiences showed the power of autonomy and service offerings.

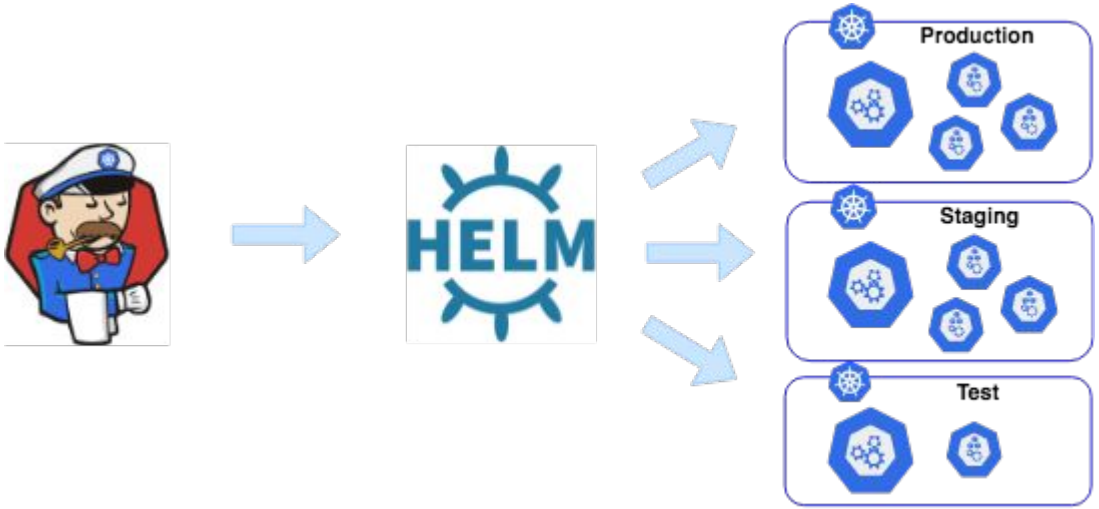
Application teams wanted more.

Kubernetes answers the call for more broad and bespoke solutions



SYNTASSO

A simple helm install could deliver any tool with any configuration



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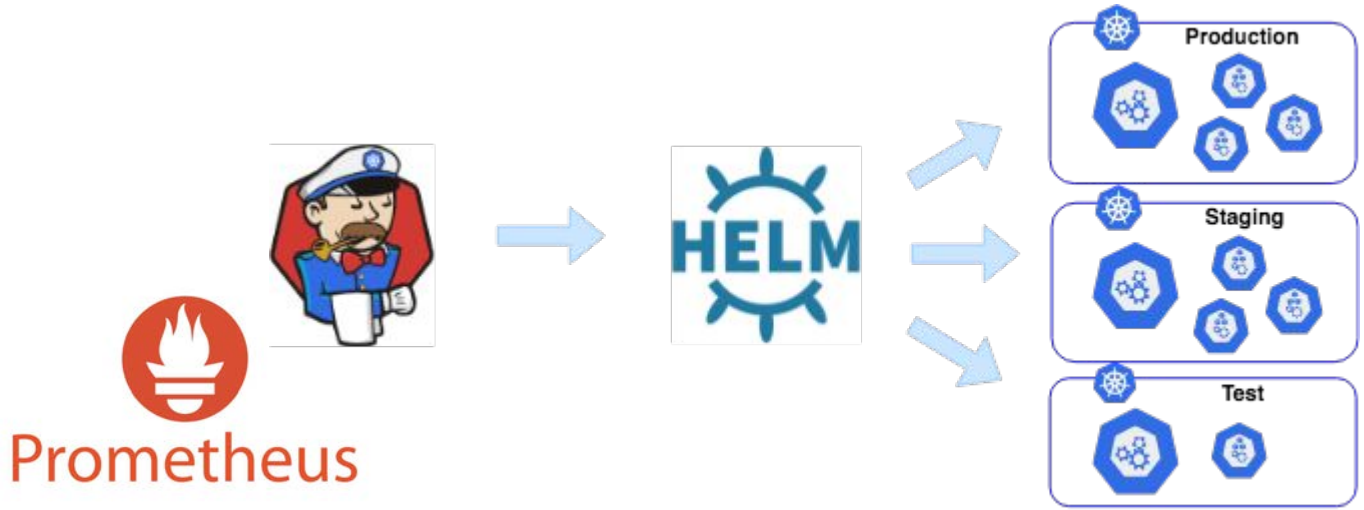

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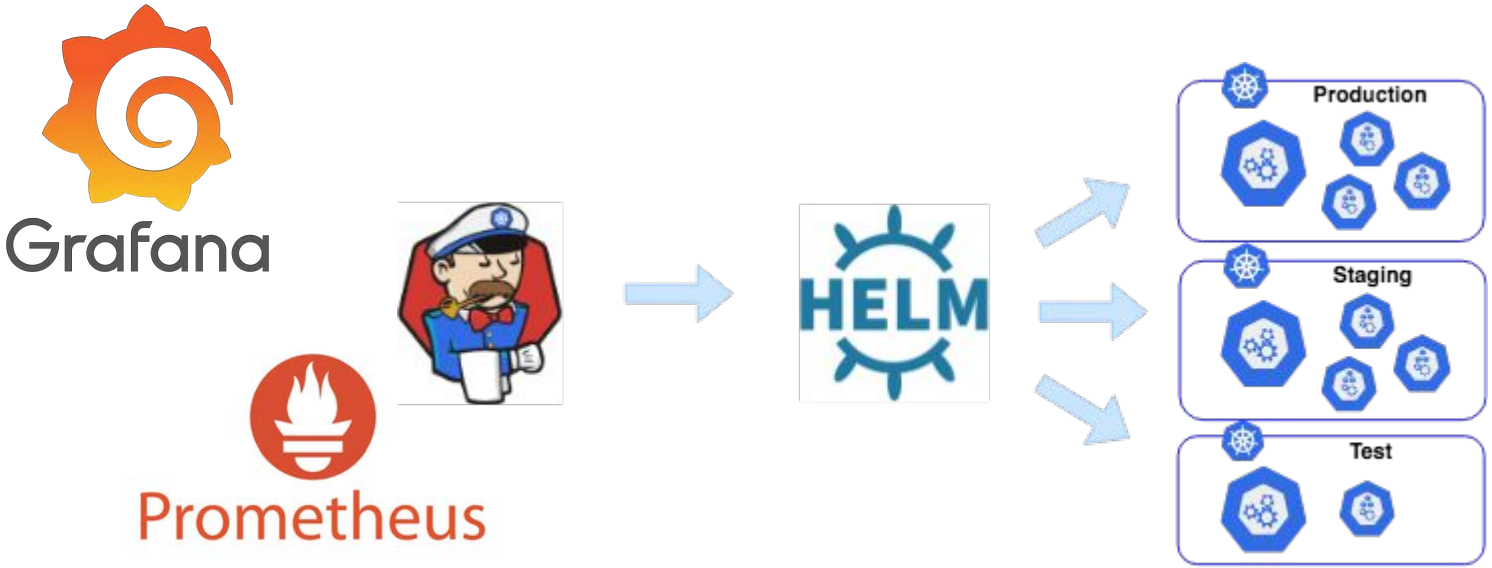

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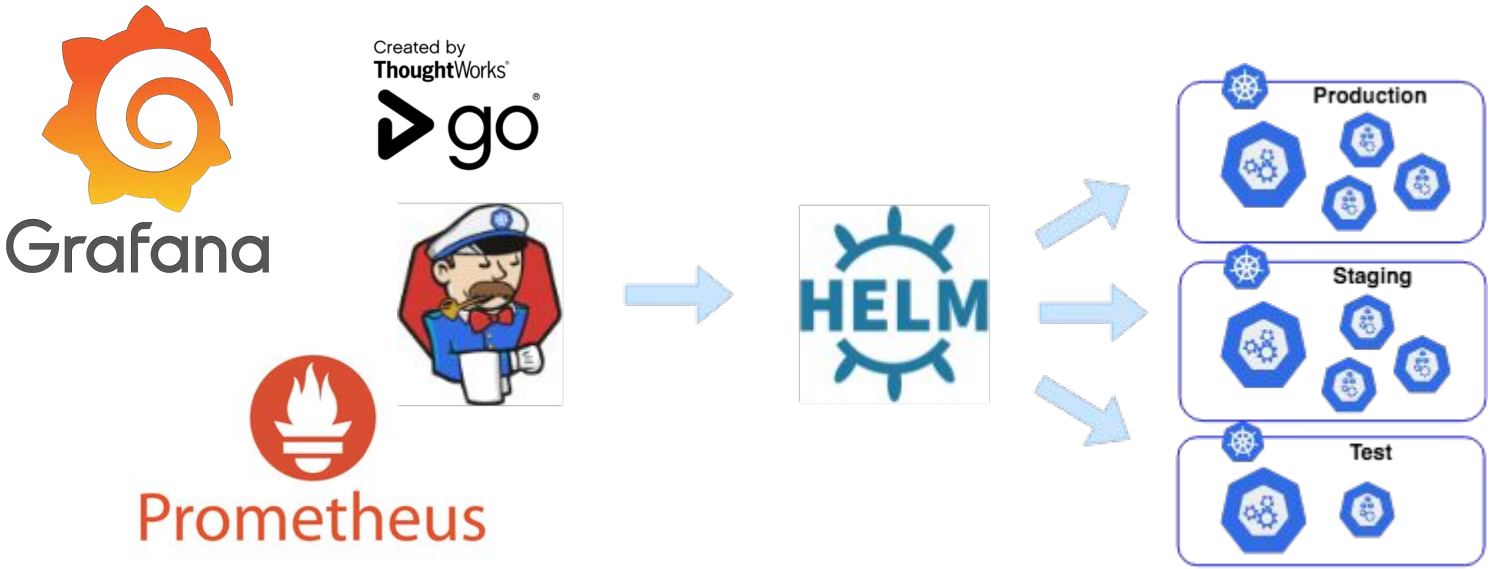

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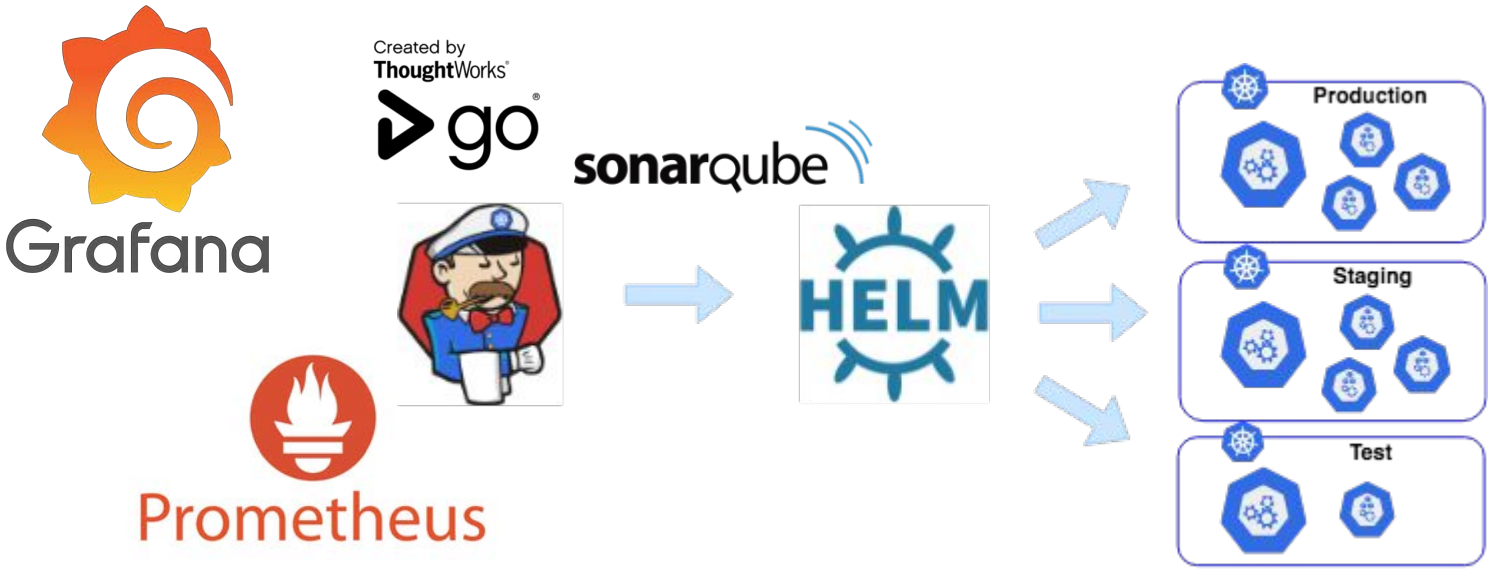

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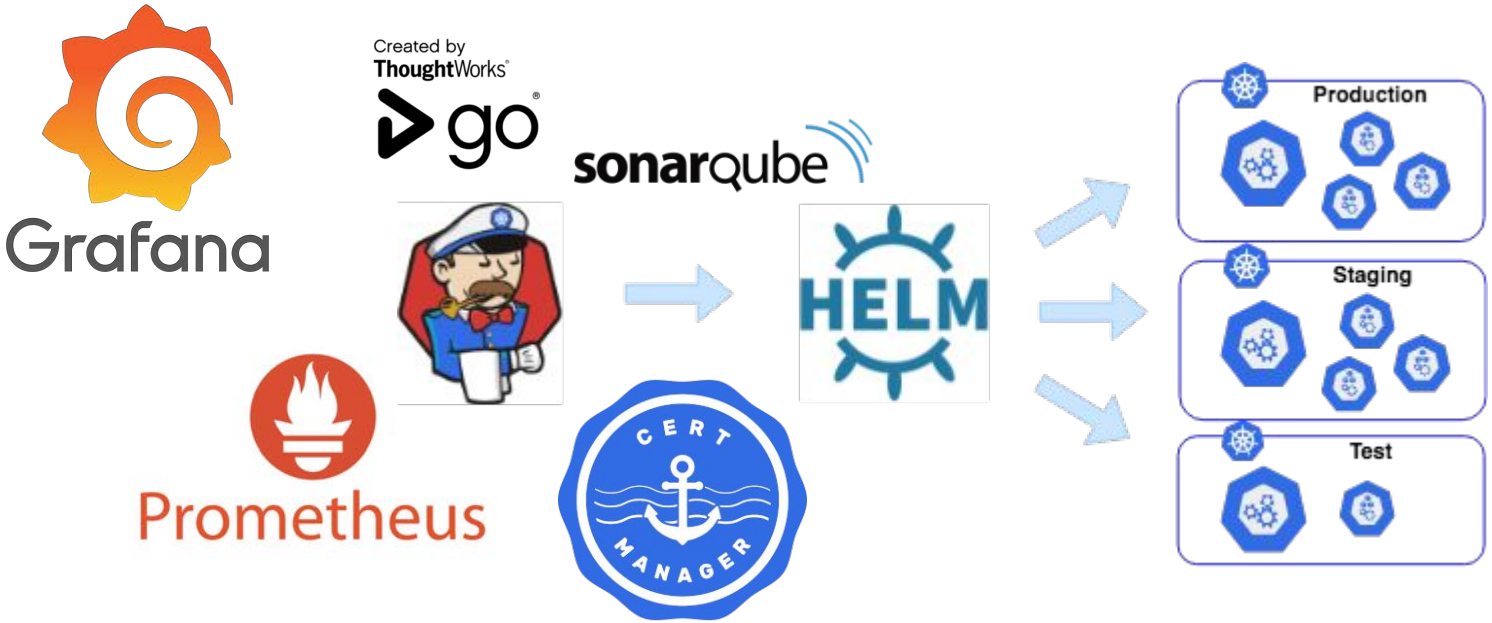
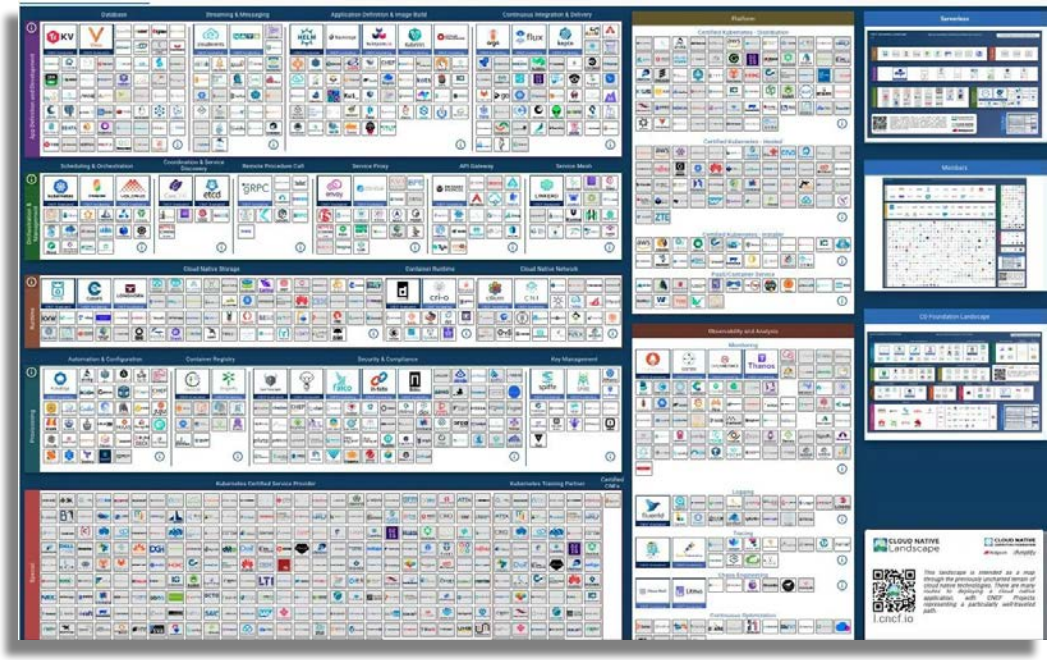


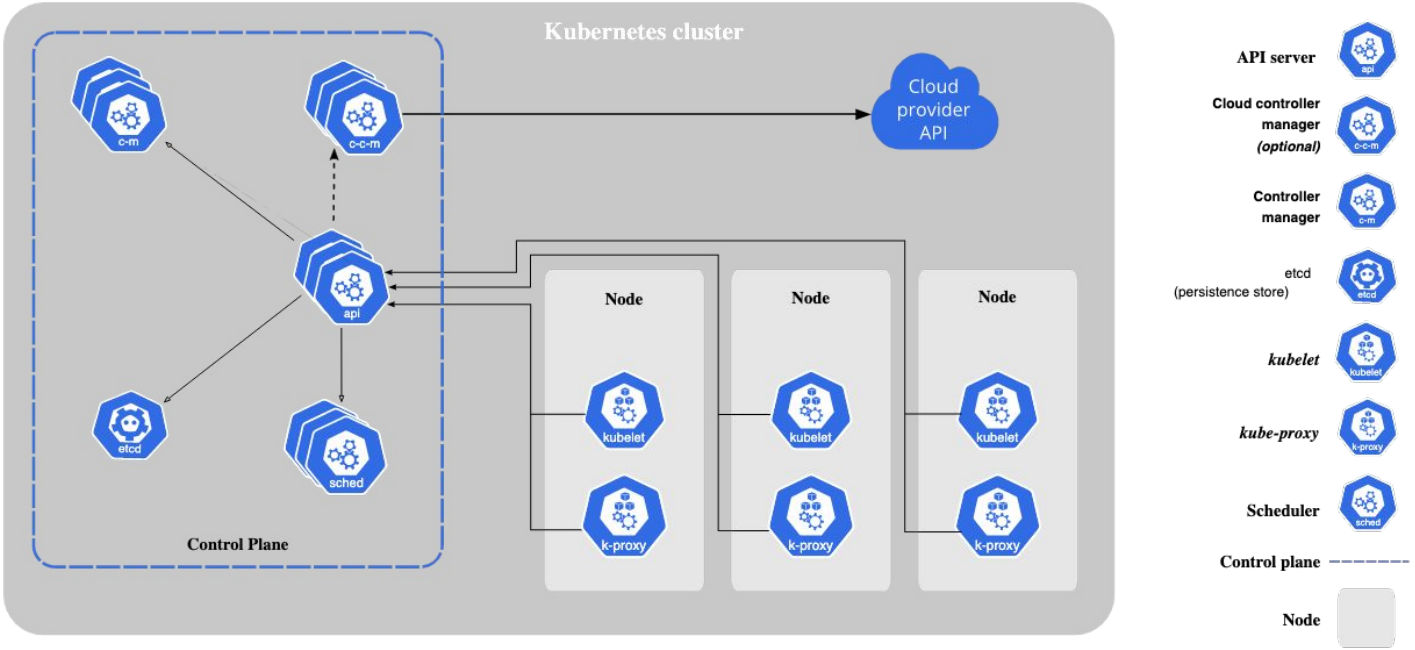
SYNTASSO

The complexity of the Kubernetes ecosystem has become a bit of a joke



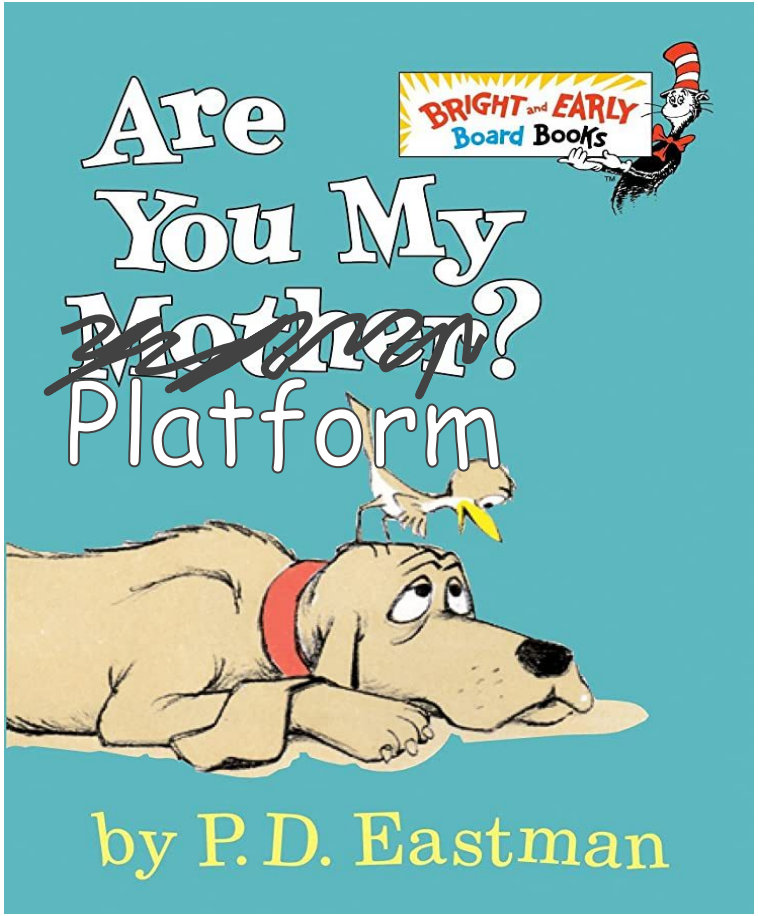
SYNTASSO

The is on top of the complexity of the base components



SYNTASSO

Full of hope, we ask ourselves again…



SYNTASSO

And here we are, required to discuss nuance

Platform engineering improves developer experience and productivity by providing self-service capabilities with automated infrastructure operations

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Platform engineering improves
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And here we are, required to discuss nuance

A high level
what

Platform engineering improves developer experience and productivity by **providing self-service capabilities** with **automated infrastructure operations**

A version of
how

SYNTASSO

A commonly quoted (and more detailed) what

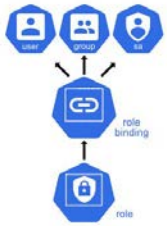
Evan Bottcher

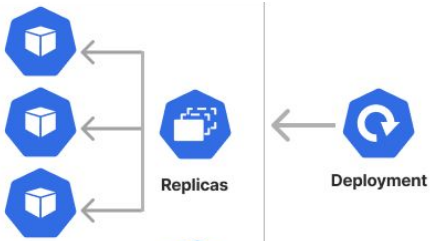
A **digital platform** is a foundation of self-service APIs, tools, services, knowledge and support which are arranged as a compelling internal product. Autonomous delivery teams can make use of the platform to deliver product features at a higher pace, with reduced co-ordination.

Kubernetes as a base API

SYNTASSO

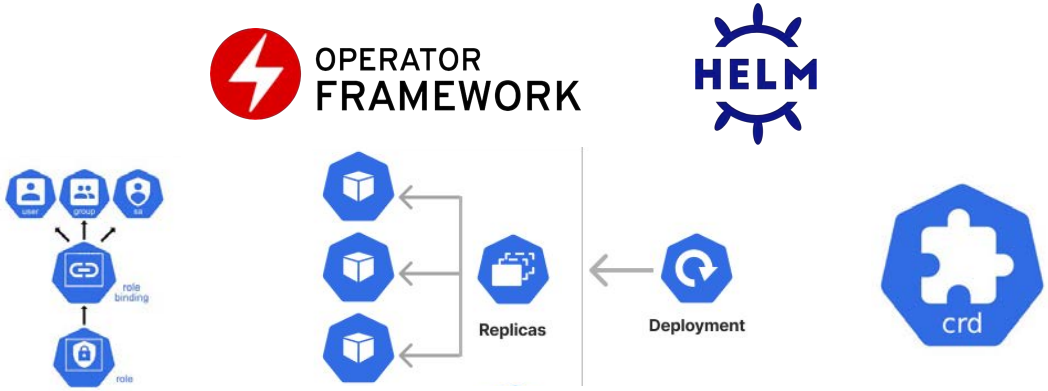
Kubernetes as the platform primitives





SYNTASSO

Kubernetes as a way to manage complex apps



SYNTASSO

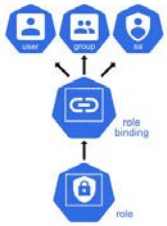
kubernetes

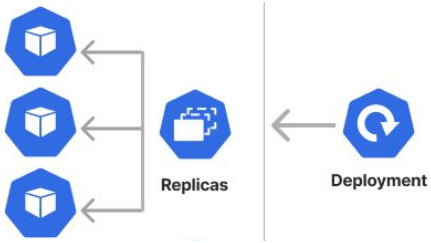
Kubernetes as a dashboard host

Backstage

OPERATOR FRAMEWORK

HELM





SYNTASSO

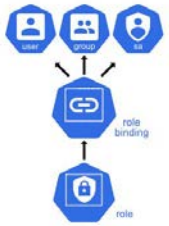
kubernetes

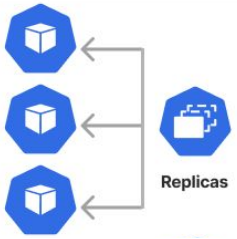
Kubernetes as a scaling solution

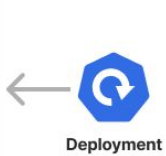
Backstage

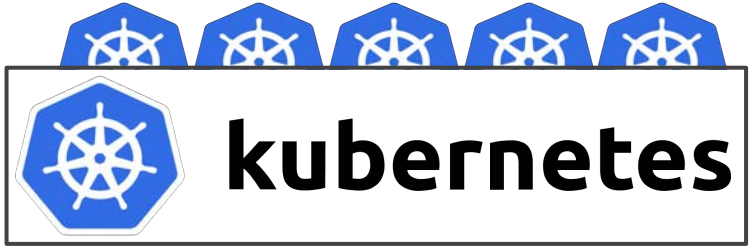
OPERATOR FRAMEWORK

HELM









SYNTASSO

That requires engineering…

Platform Engineering

If you are truly platform engineering, you deserve better support

Kratix is an Open Source framework for designing as-a-Service offerings across diverse infrastructure including multi-cluster Kubernetes, SaaS products, on prem hardware and more.

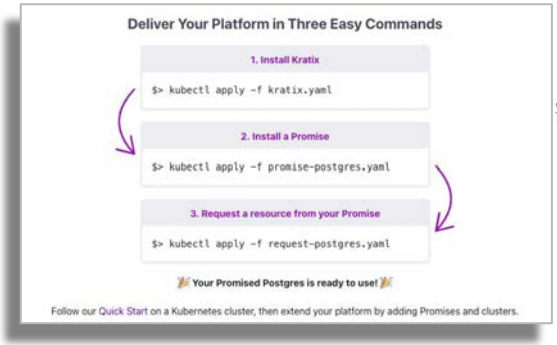
SYNTASSO

You define *your* platform services

```yaml
apiVersion: platform.kratix.io/v1alpha1
kind: Promise
metadata:
  # Name of the Promise; what user will see in the Platform Cluster
  name: promise-name
spec:
  # Arbitrary key/value pairs that will be used for scheduling
  # Check the Scheduling docs for details
  clusterSelectors:
    key: value

  # Array of Kubernetes resources to be installed in the Worker Clusters
  workerClusterResources:
    - apiVersion: apps/v1
      kind: Deployment
      metadata:
        name: service-operator
    -  #...
    -  #...

  # CRD that a Platform User uses to request an instance of this Promise
  xaasCrd:
    apiVersion: apiextensions.k8s.io/v1
    kind: CustomResourceDefinition
    # ...

  # Ordered list of Docker containers
  # Executed in response to a Resource Request
  xaasRequestPipeline:
    - myorg/pipeline-image-1
    - myorg/pipeline-image-2
    -  #...
```

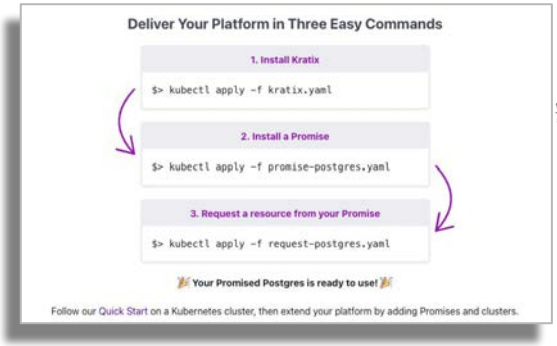
SYNTASSO

Want to learn more?



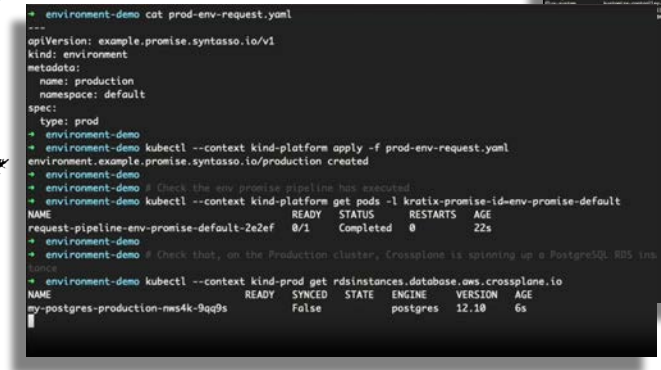
https://kratix.io

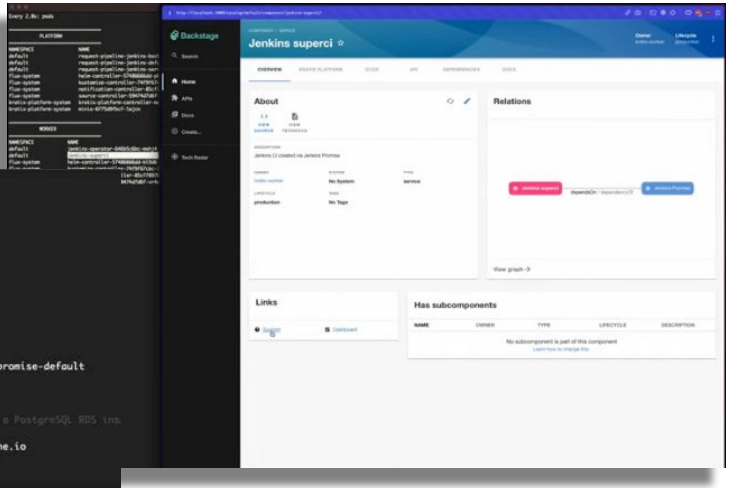
Want to learn more?



https://kratix.io

https://syntasso.io/blog





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Thank you!

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