



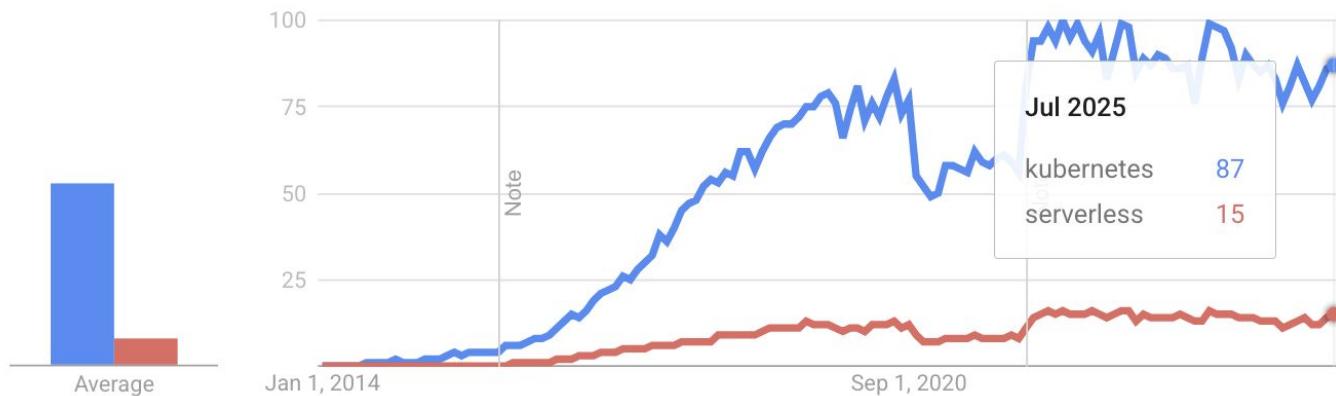
# The lightweight approach to building internal developer platforms

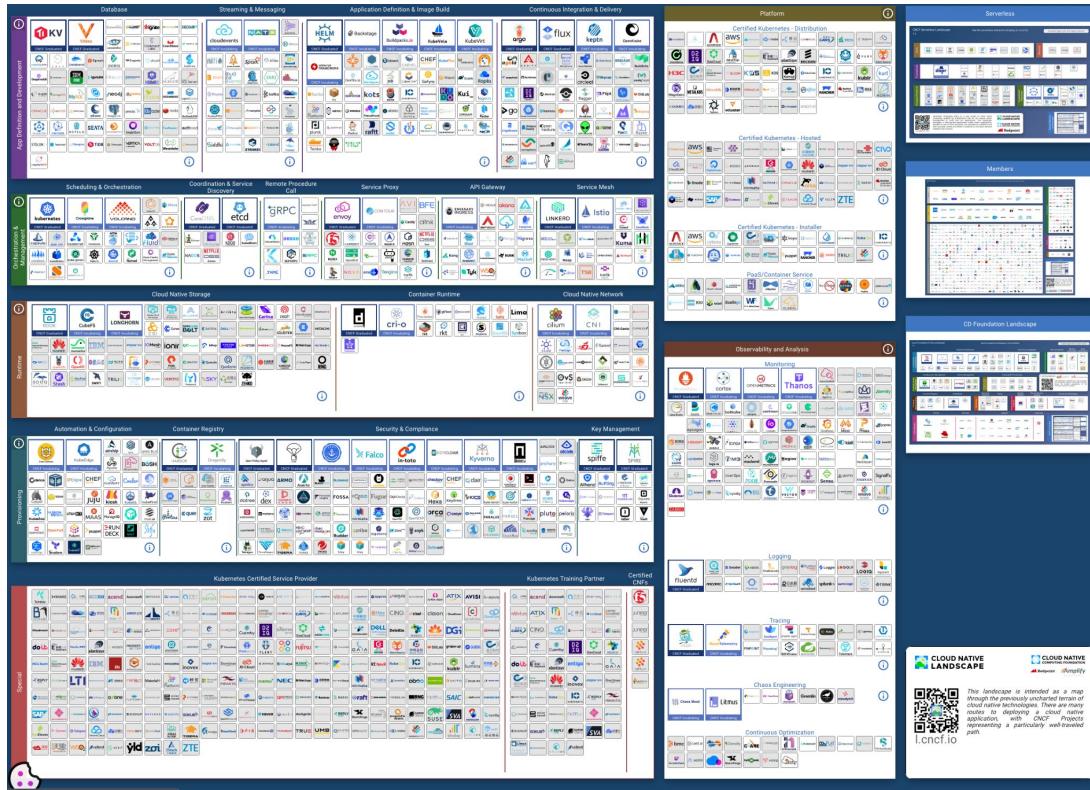


**Erlend Ekern**  
AWS Community Builder  
Cloud Architect

82%

## Interest over time ?



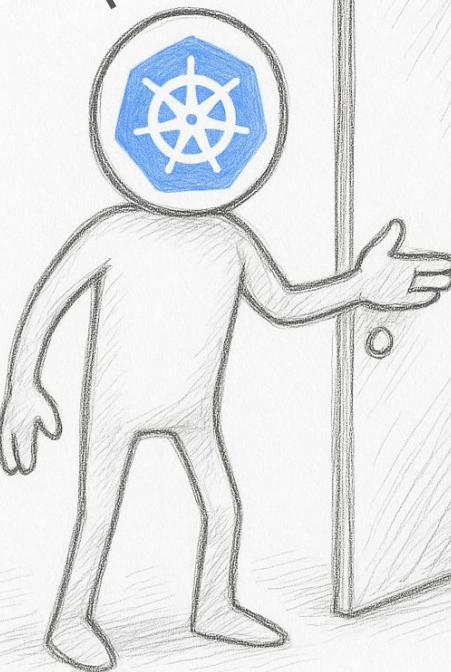


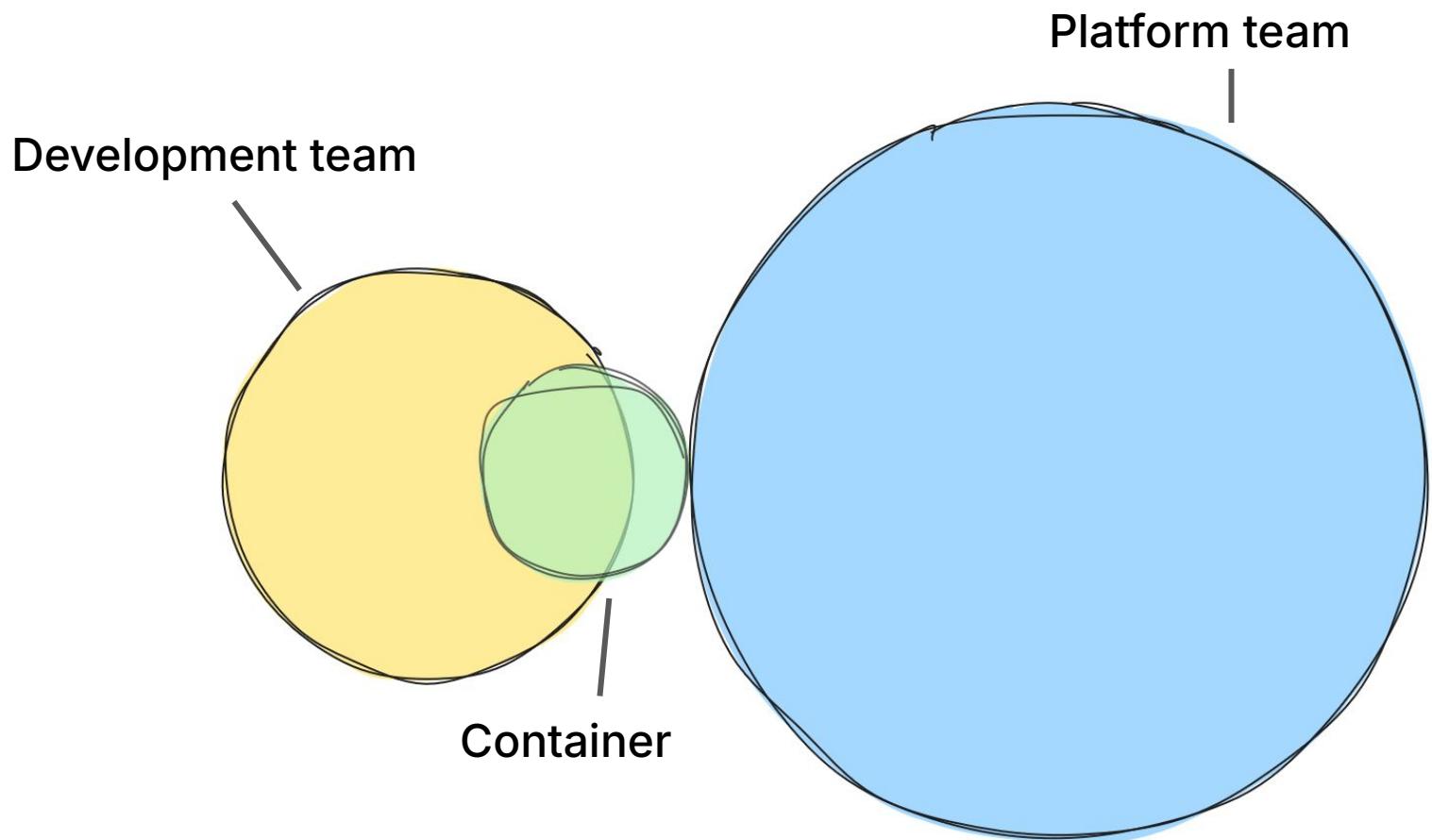
<https://landscape.cncf.io>

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Come in!





*Inspired by [devopstopologies.com](http://devopstopologies.com)*

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 Capra



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Dev  Ops

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# Serverless is a State of Mind

The point is focus — that is the why of serverless



Ben Kehoe

Following ▾

12 min read · Mar 17, 2019

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 Capra

The Capra logo consists of a stylized, green and blue circular emblem followed by the word "Capra" in a black, sans-serif font.

# “Thinnest Viable Platform”

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Real-world examples  
The blueprint  
Concluding thoughts



**Liflig**

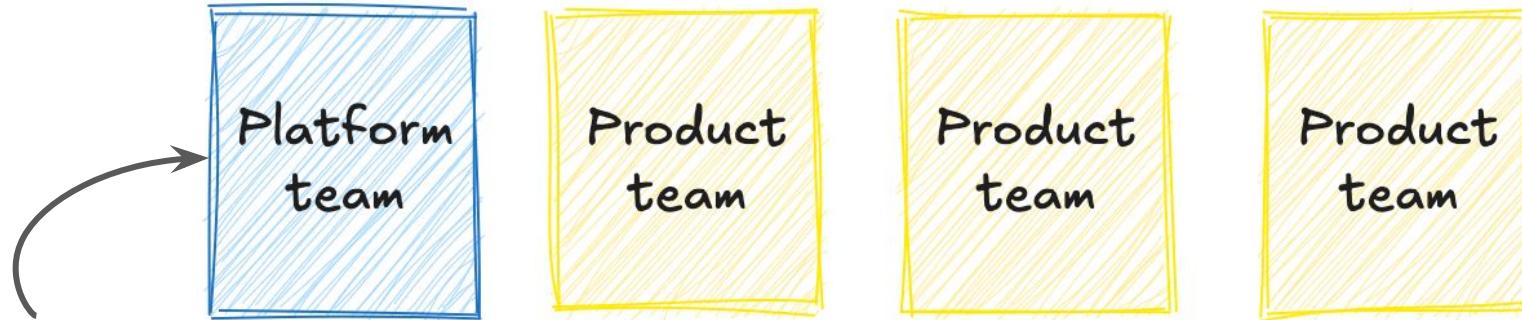
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 **Capra**

End-to-end responsible



Amazon Web Services



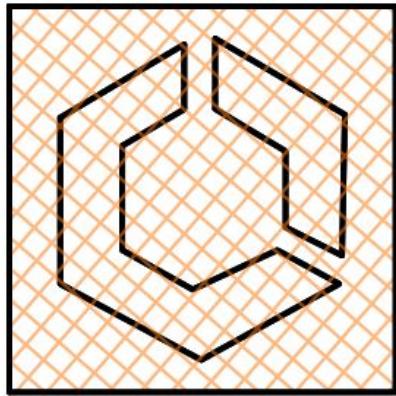
Platform

Amazon Web Services

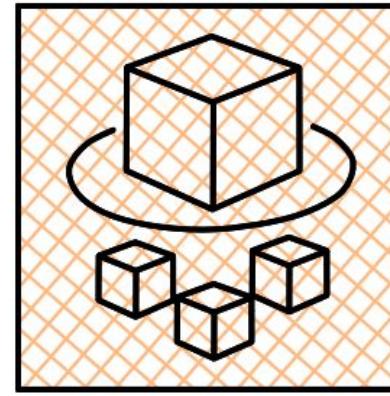
Hmm.. There's probably a managed service for this!

Applying a serverless mindset





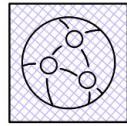
ECS



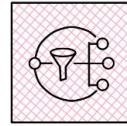
Fargate



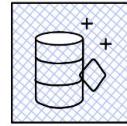
ECS



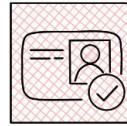
CloudFront



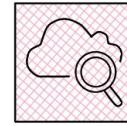
SNS



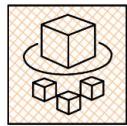
Aurora



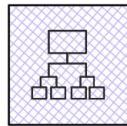
Cognito



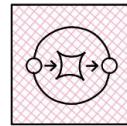
CloudWatch



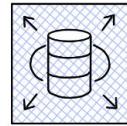
Fargate



ALB



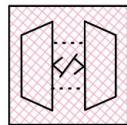
SQS



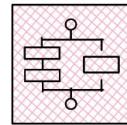
RDS



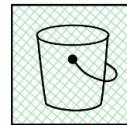
Lambda



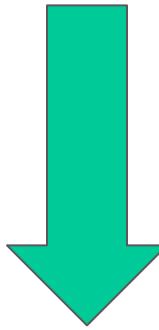
API Gateway



Step Functions



S3



- ⚡ Onboarding to a production-ready foundation in 1 hour
- 💪 Empowered teams that deployed daily
- 🧩 Lean platforms maintained by 2-3 people

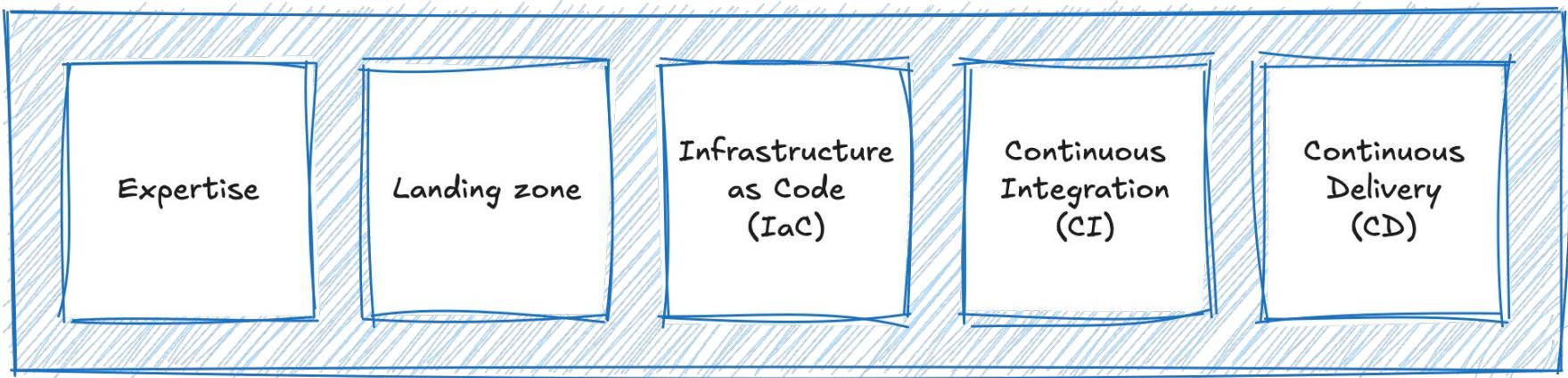
# The blueprint

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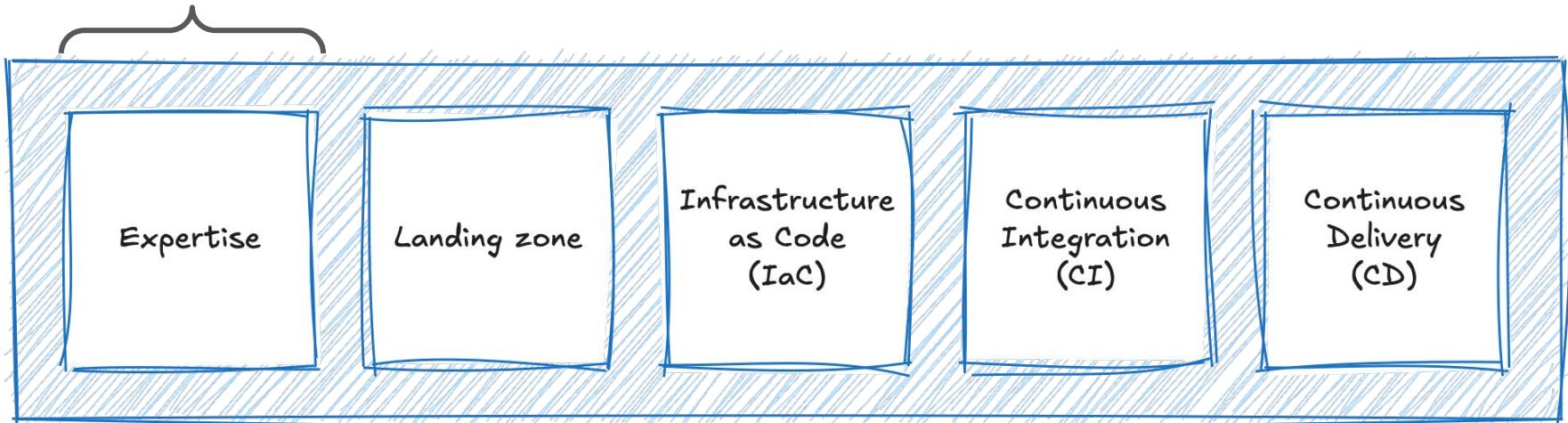


**you build it, you run it!**

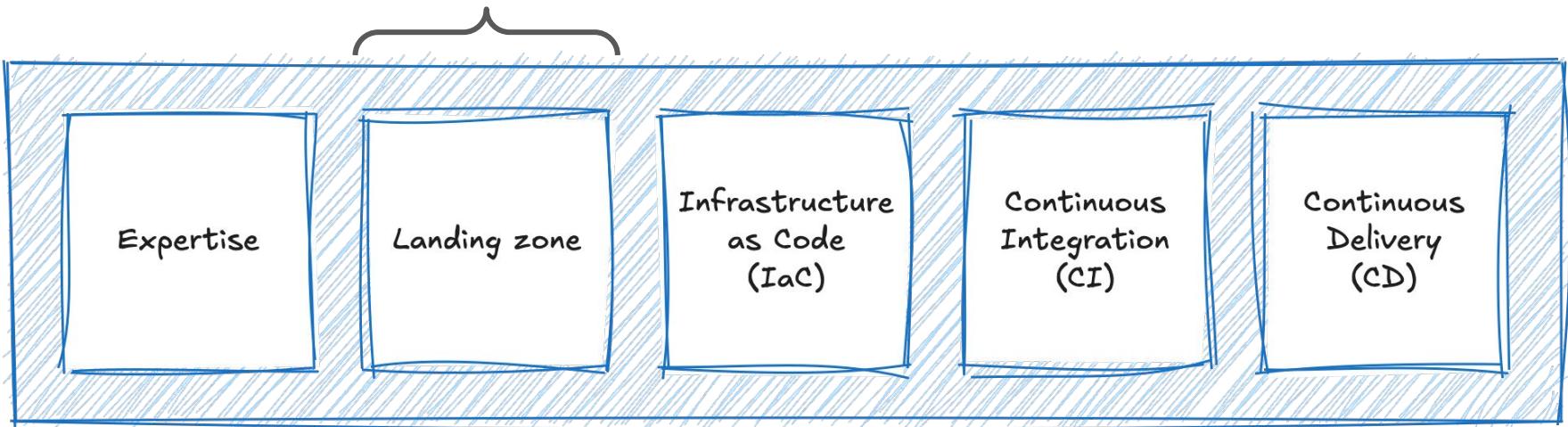
*You build it, you run it!*



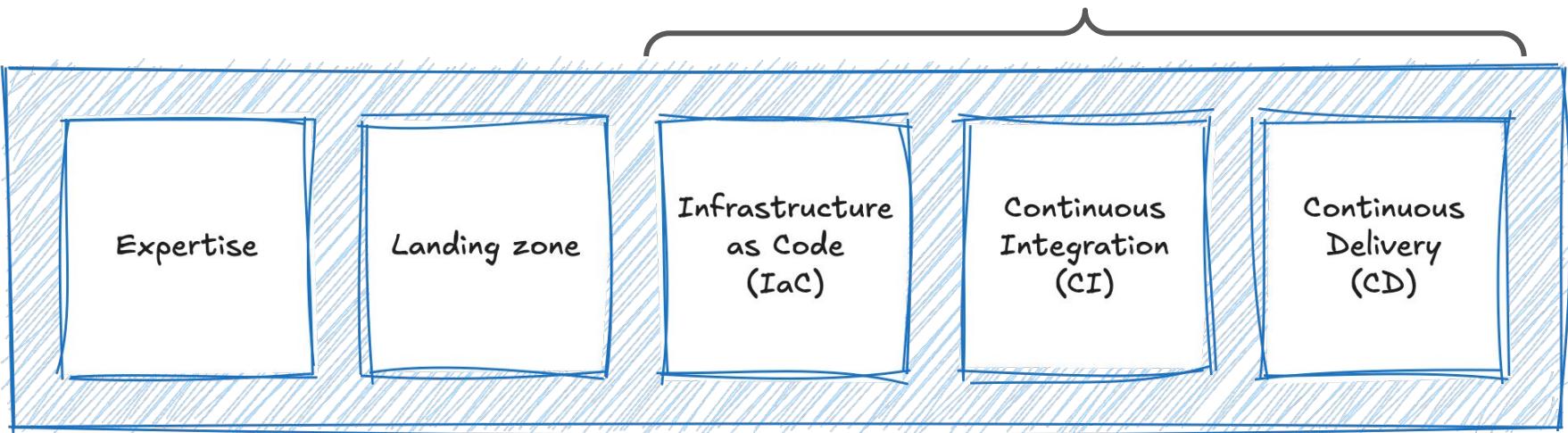
## Support and documentation



# Production-ready cloud environments



## Tools and code libraries





Expertise



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Expertise



<https://www.lastweekinaws.com/blog/the-17-ways-to-run-containers-on-aws>

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 Capra



Landing zone

management

governance

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Landing zone



*"We might've overdone it with the negations..."*

```
{  
  "Effect": "Deny",  
  "NotAction": [ /* ... */ ],  
  "Condition": {  
    "StringNotEquals": { /* ... */ },  
    "ArnNotLike": { /* ... */ }  
  },  
  "Resource": "*"  
}
```

management

governance

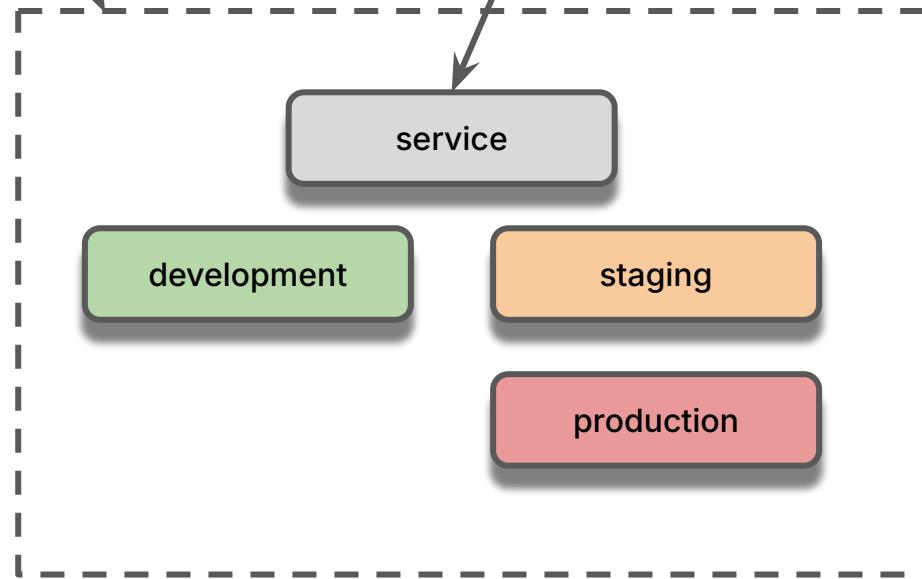
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Bounded context

“Facilitating” account





Landing zone

*“AWS Control Tower offers a straightforward way to set up and govern an AWS multi-account environment”*

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Landing zone

AWS Control Tower supports  
automatic enrollment of accounts

Posted on: Nov 10, 2025

AWS Control Tower introduces a  
controls-dedicated experience

Posted on: Nov 21, 2025

*“AWS Control Tower offers a ~~straightforward~~ way to set up and govern an  
AWS multi-account environment”*

Landing zone

AWS Landing Zone  
AWS Control Tower  
AWS Account Factory for Terraform  
AWS Landing Zone Accelerator  
org-formation  
superworker  
++

HOW STANDARDS PROLIFERATE:  
(SEE: A/C CHARGERS, CHARACTER ENCODINGS, INSTANT MESSAGING, ETC)

SITUATION:  
THERE ARE  
14 COMPETING  
STANDARDS.

14?! RIDICULOUS!  
WE NEED TO DEVELOP  
ONE UNIVERSAL STANDARD  
THAT COVERS EVERYONE'S  
USE CASES.



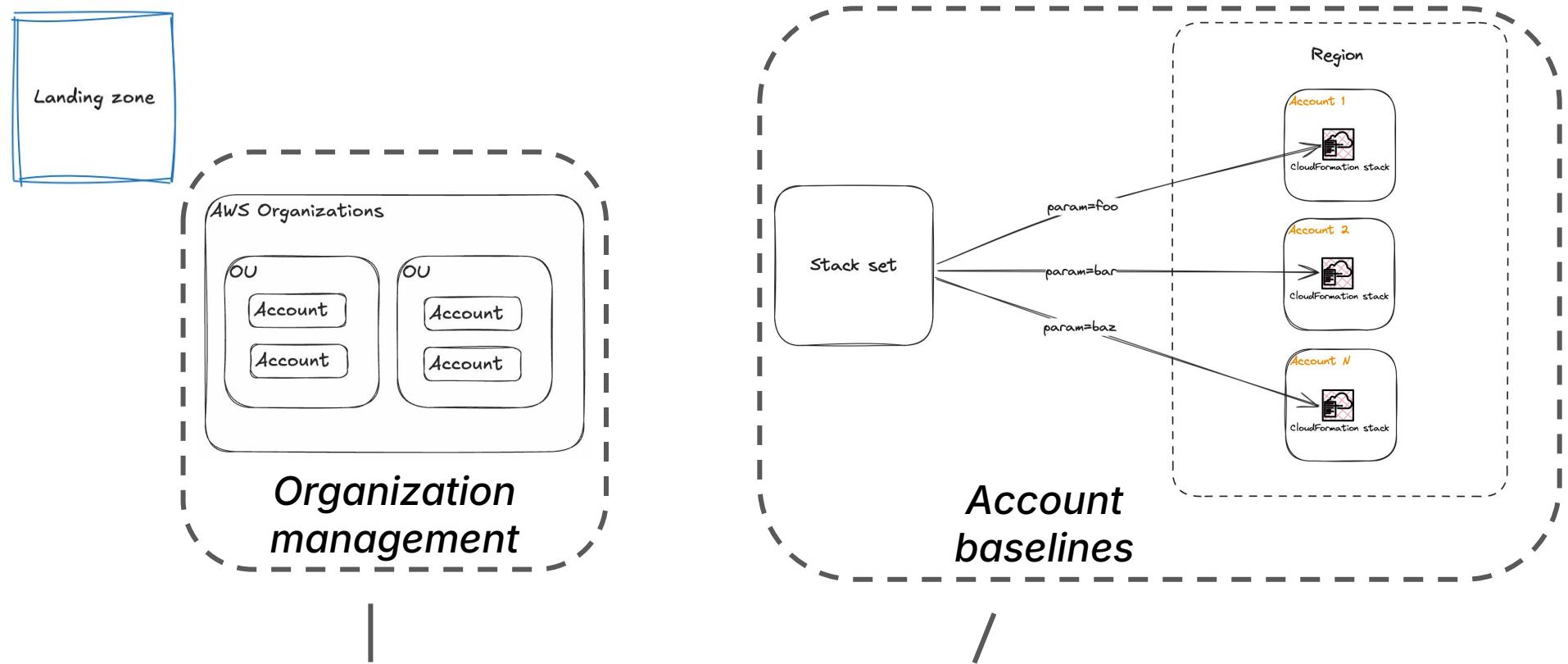
SOON:

SITUATION:  
THERE ARE  
15 COMPETING  
STANDARDS.

<https://xkcd.com/927>

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 Capra



# Terraform + CloudFormation StackSets?

Landing zone

```
import { /* ... */ }  
  
moved { /* ... */ }
```



**No changes. Your infrastructure matches the configuration.**



[blog.ekern.me](http://blog.ekern.me)

Feb 27, 2025

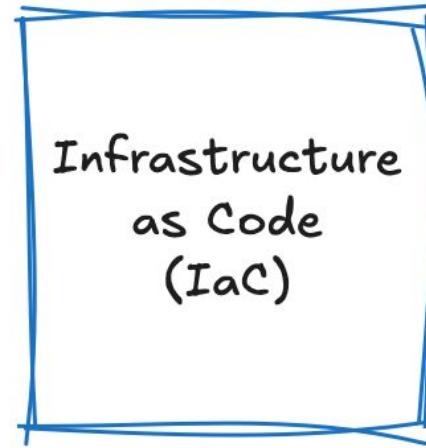
What's the deal with AWS CloudFormation StackSets?



primeharbor / **org-kickstart**

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 Capra



Infrastructure  
as Code  
(IaC)

AWS CloudFormation

Terraform

Serverless Framework

AWS SAM

????

Pulumi

AWS CDK

cdktf / cdktn

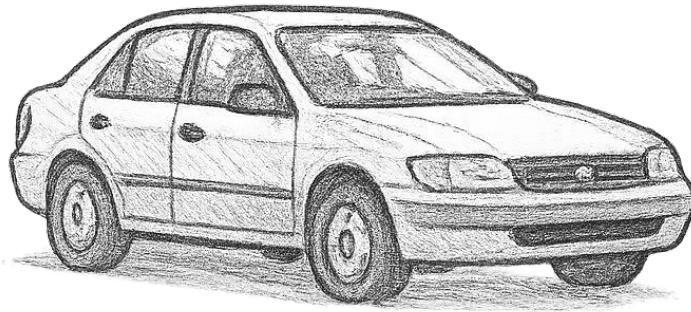
SST

Alchemy

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 Capra

Infrastructure  
as Code  
(IaC)



Terraform



AWS CDK

Infrastructure  
as Code  
(IaC)

# Keep It Simple™

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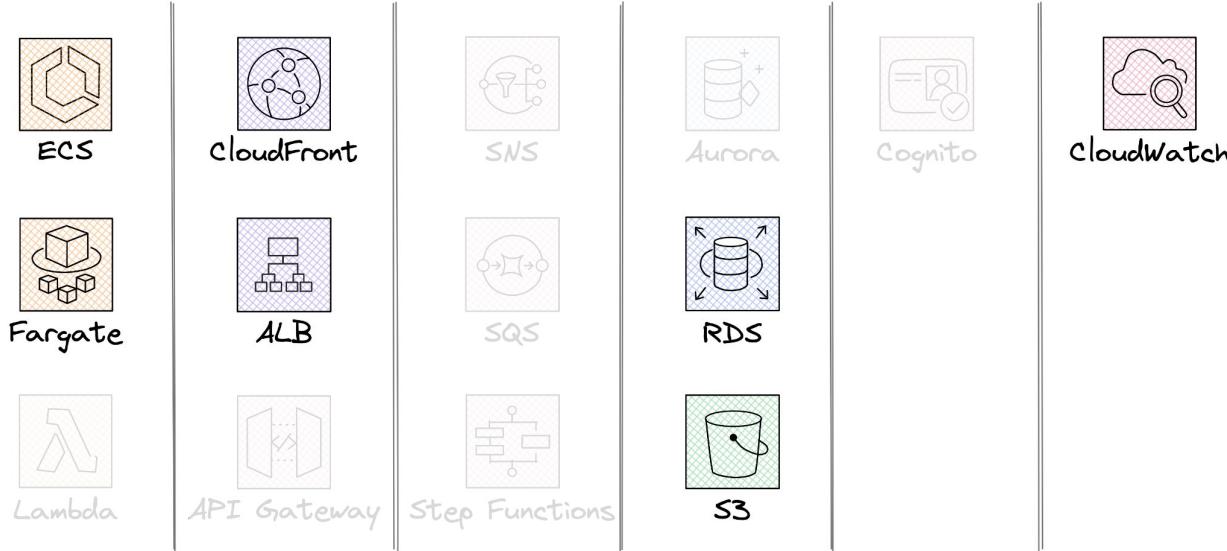
Infrastructure  
as Code  
(IaC)

**Thin library on top of AWS primitives**

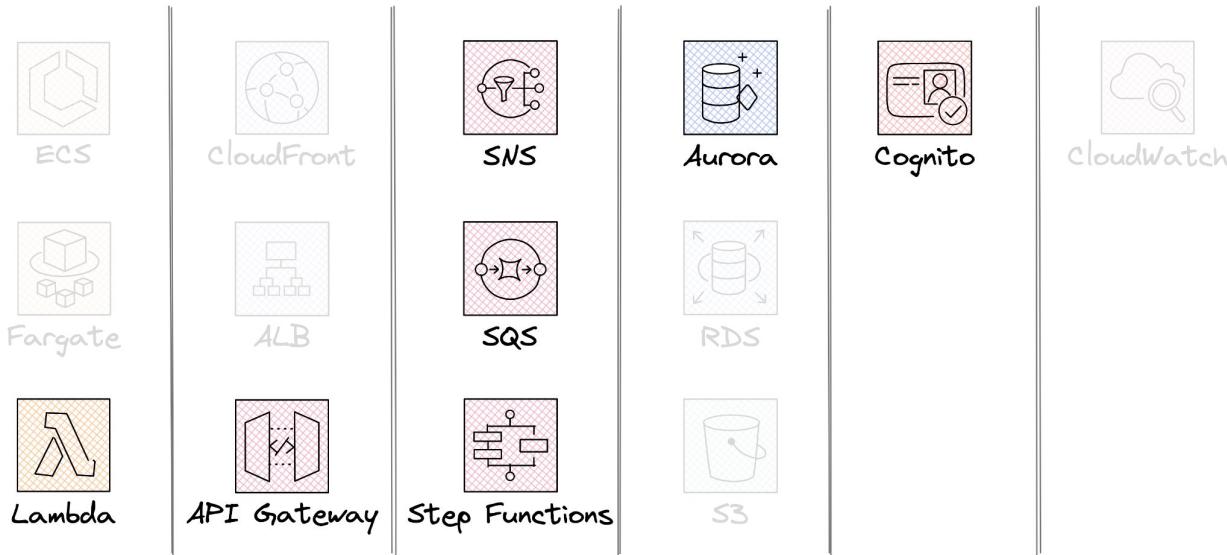
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# Infrastructure as Code (IaC)

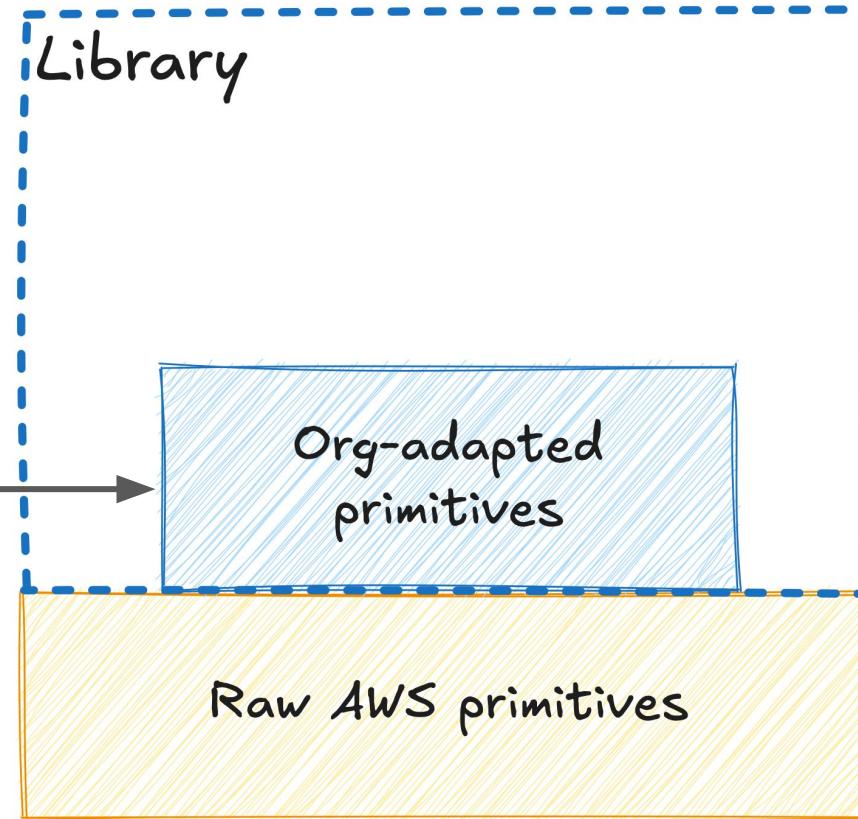


# Infrastructure as Code (IaC)



Infrastructure  
as Code  
(IaC)

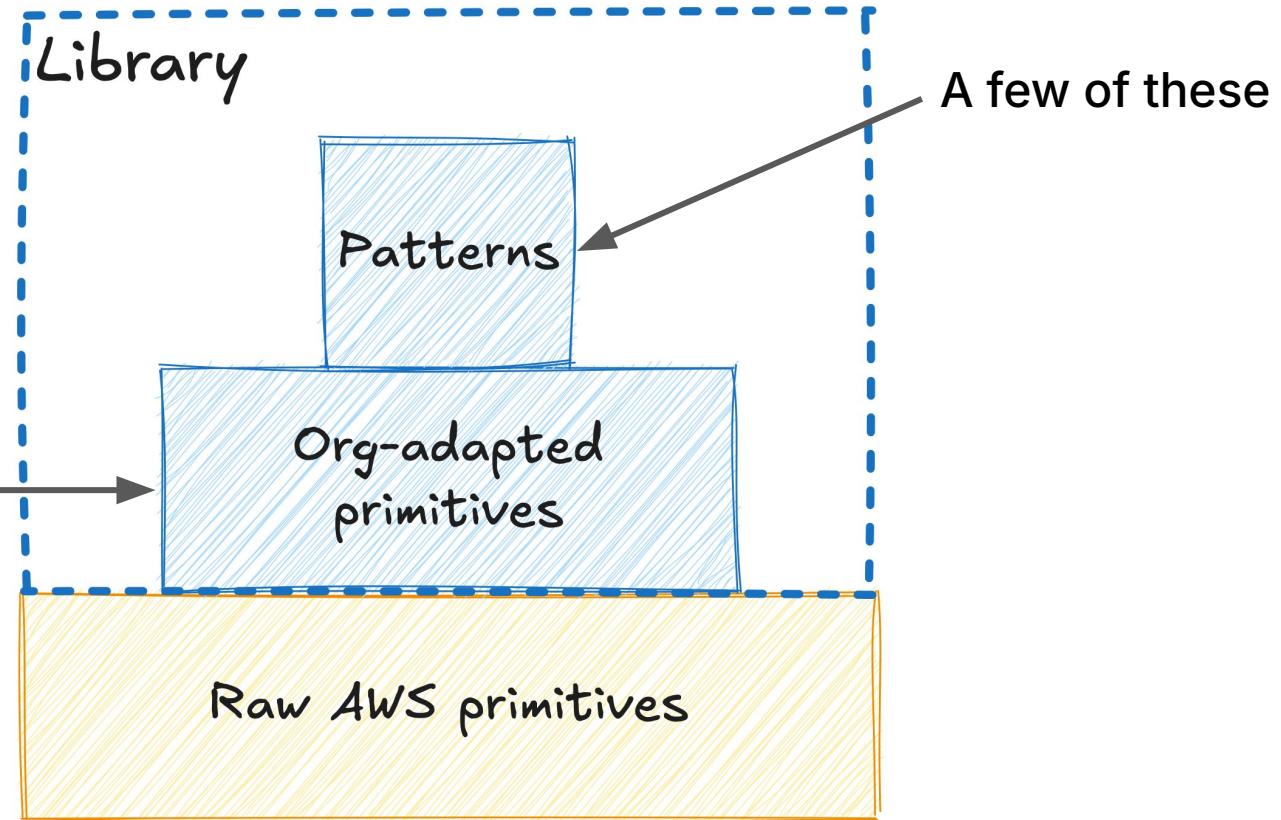
Focus on these



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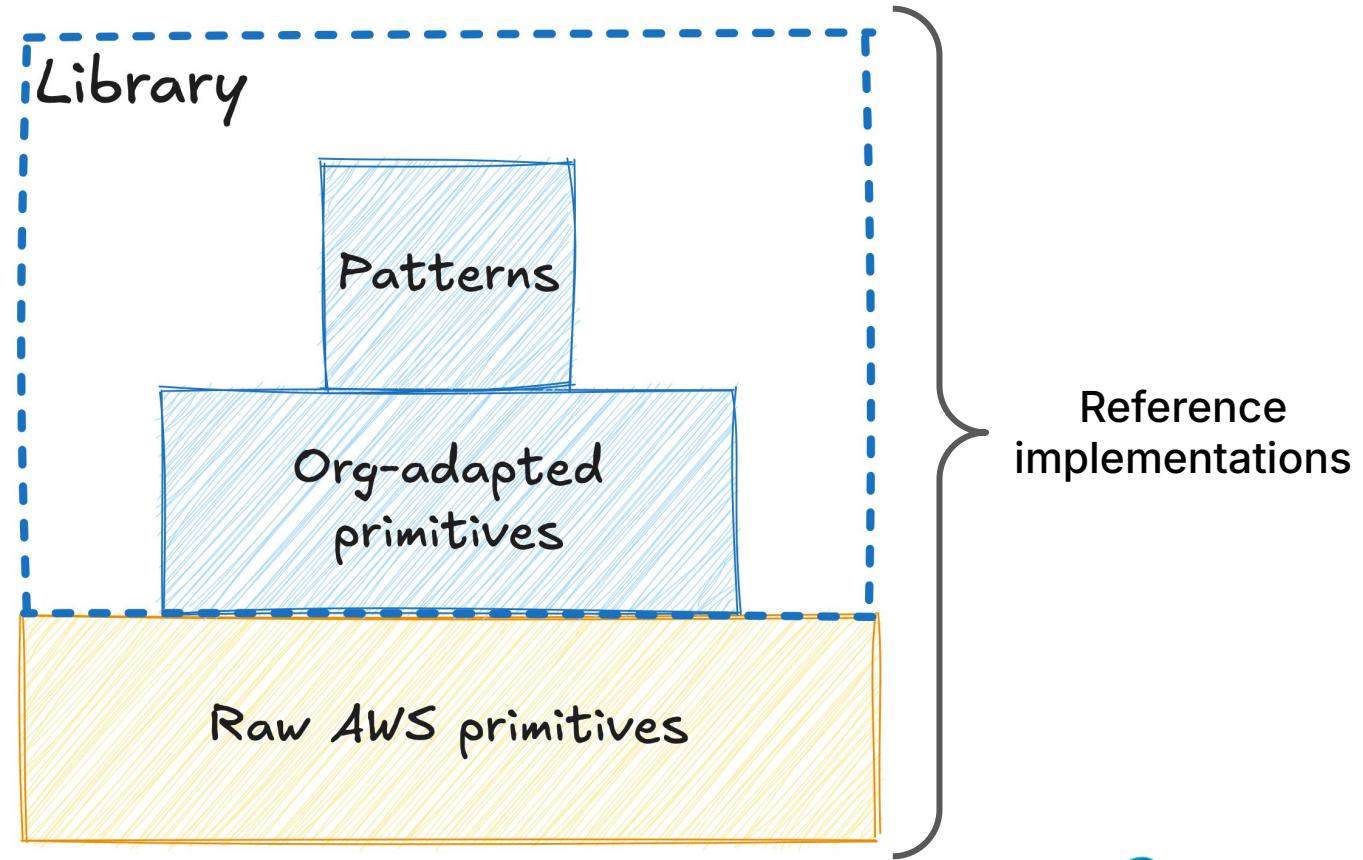
Infrastructure  
as Code  
(IaC)

Focus on these

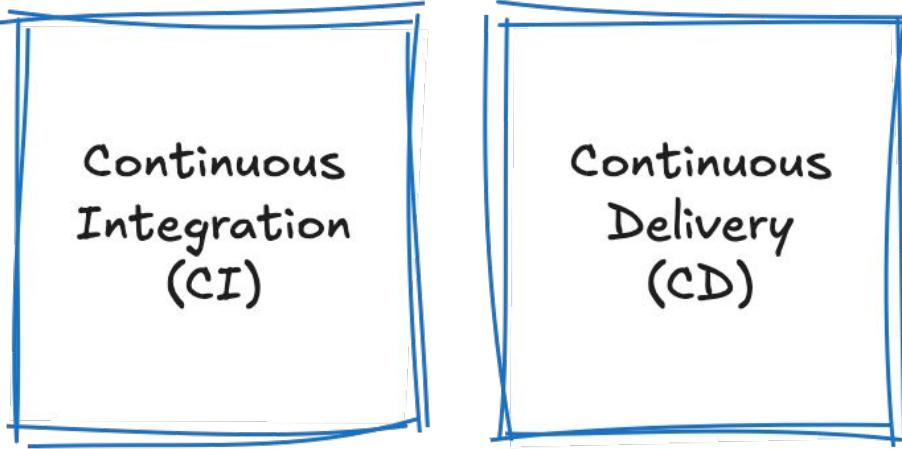


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Infrastructure  
as Code  
(IaC)



# A forcing function for expertise?

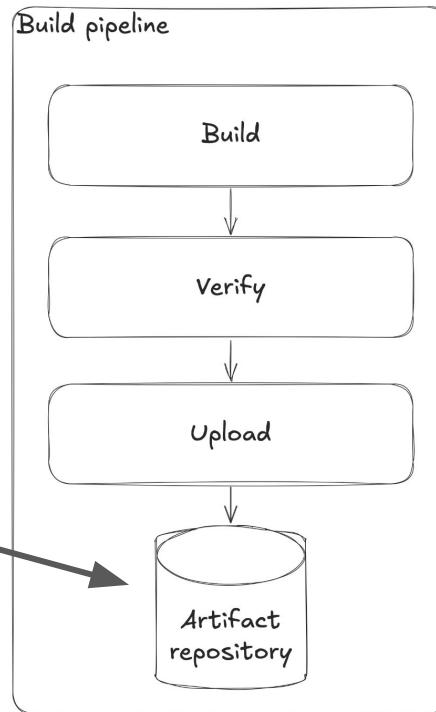


Continuous  
Integration  
(CI)

Continuous  
Delivery  
(CD)

Continuous  
Integration  
(CI)

Continuous  
Delivery  
(CD)

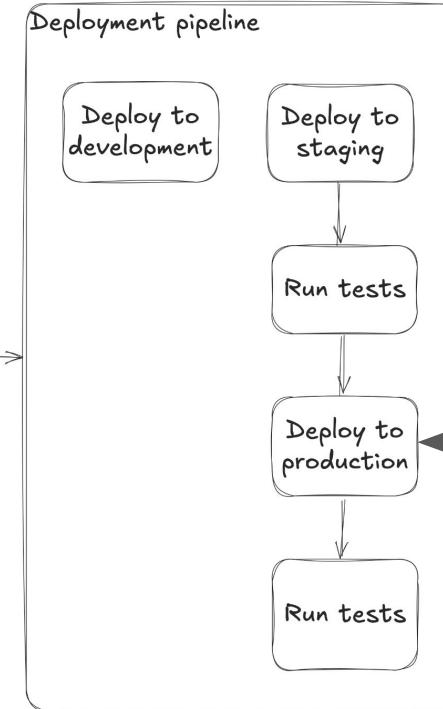
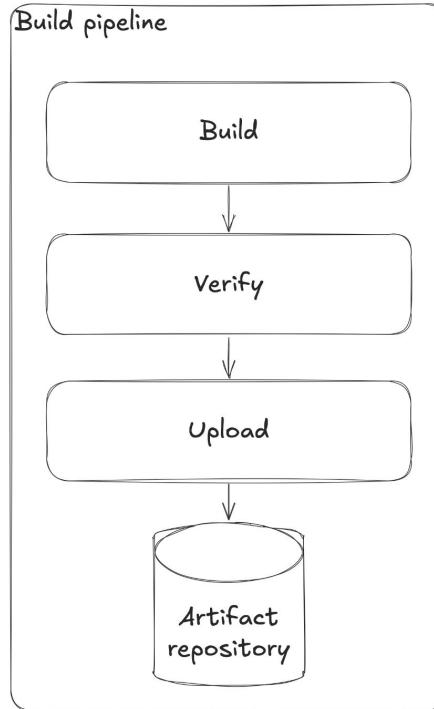


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 Capra

Continuous  
Integration  
(CI)

Continuous  
Delivery  
(CD)



\$ `terraform apply`  
\$ `pulumi up`  
\$ `cdk deploy`

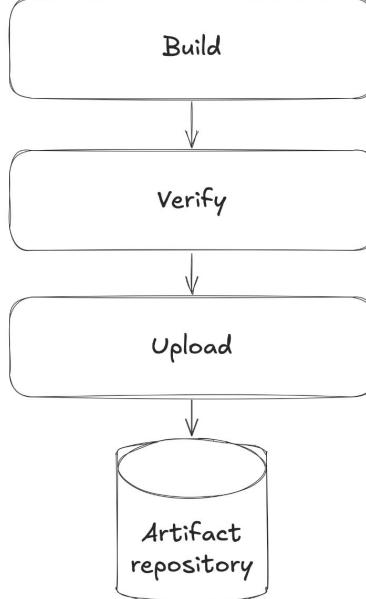
App deploy through infra

Continuous  
Integration  
(CI)

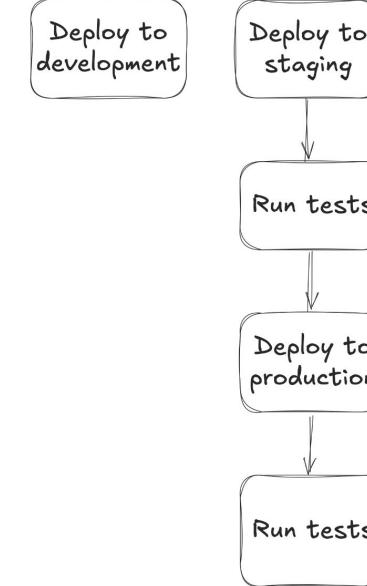
Continuous  
Delivery  
(CD)

## Decoupled pipeline

Build pipeline



Deployment pipeline



Trigger

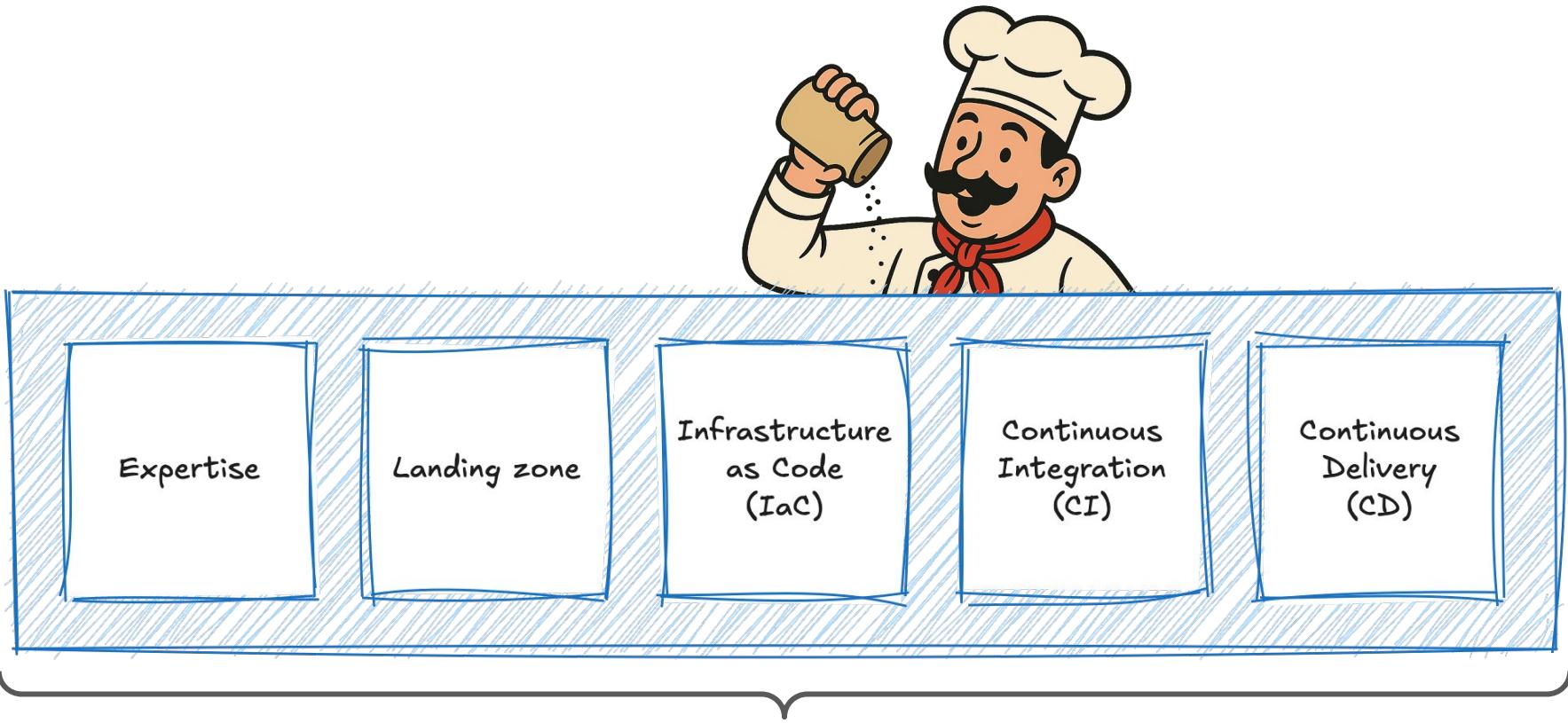
Continuous  
Integration  
(CI)

Continuous  
Delivery  
(CD)



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 Capra



Hey, could you help us out with cloud environments for *foobar*?



Sure can do!



Hi 

The AWS account set for bounded context **foobar** has been created, and the accounts are ready to use:

- *foobar-service*  123456789012
- *foobar-dev*  234567890123
- *foobar-staging*  345678901234
- *foobar-prod*  456789012345

Each account has its own DNS zone under  [foobar.example.com](https://foobar.example.com) (e.g.,  [prod.foobar.example.com](https://prod.foobar.example.com)).

Check out our [Getting started](#) guide to configure access to AWS and get started with your very own Infrastructure as Code (IaC) repository.

You'll be up and running on a production-ready, multi-account foundation in no time 

---

*If you have any questions at all, don't hesitate to reach out in [#platform-support](#)!*

[main](#)[2 Branches](#)

0

[Tags](#)[Go to file](#)[Code](#)[About](#)

stekern initial commit



3e80cc1 · 2 minutes ago

[1 Commit](#)[.github/workflows](#)

initial commit

2 minutes ago

[examples](#)

initial commit

2 minutes ago

[src](#)

initial commit

2 minutes ago

[.gitignore](#)

initial commit

2 minutes ago

[README.md](#)

initial commit

2 minutes ago

[apply-template.sh](#)

initial commit

2 minutes ago

[cdk.json](#)

initial commit

2 minutes ago

[package-lock.json](#)

initial commit

2 minutes ago

[package.json](#)

initial commit

2 minutes ago

[tsconfig.json](#)

initial commit

2 minutes ago

Get started with a production-ready, multi-account foundation in AWS in no time 

[Readme](#)[Activity](#)[0 stars](#)[0 watching](#)[0 forks](#)

## Languages

 [TypeScript](#) 100.0%

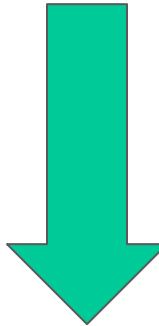
## Usage

1. Create a new repository using this template by clicking here: [✨ Use template ✨](#)
2. Name the repository using the following convention `<bounded-context>-infra` (e.g., `example-infra`).
3. Click **Create repository**, clone the repository to your local machine, and follow the steps below 
4. Install the npm packages: `$ npm ci`
5. Log in to the `service` account of the AWS account set: `$ assume <bounded-context>-service-admin`
6. Replace placeholders and create the deployment pipeline by running the `apply-template.sh` script:

► **Show option details and example values**

```
$ ./apply-template.sh
  --bounded-context      "<bounded-context>"      \
  --dns-zone            "<dns-zone>"            \
  --default-aws-region  "<default-aws-region>"  \
  --service-account-id  "<service-account-id>" \
  --dev-account-id      "<dev-account-id>"      \
  --staging-account-id  "<staging-account-id>" \
  --prod-account-id     "<prod-account-id>"
```

7. Commit your changes and push them to trunk
8. Let the CI/CD pipeline take care of the rest 😎



- ★ Their own IaC codebase covering all environments
- ★ Their own deployment pipelines, ready-to-go
- ★ Full access to their AWS accounts
- ★ DNS zones and TLS certificates
- ★ A demo application in each environment
- ★ Documentation on where to go next

# The perfect platform?

# No, but an effective one



# Challenges

Skills and maturity

Ownership boundaries

Variation and consistency

Shadow platforms

# tl;dr

@erlendekern



**Enablement > restriction**

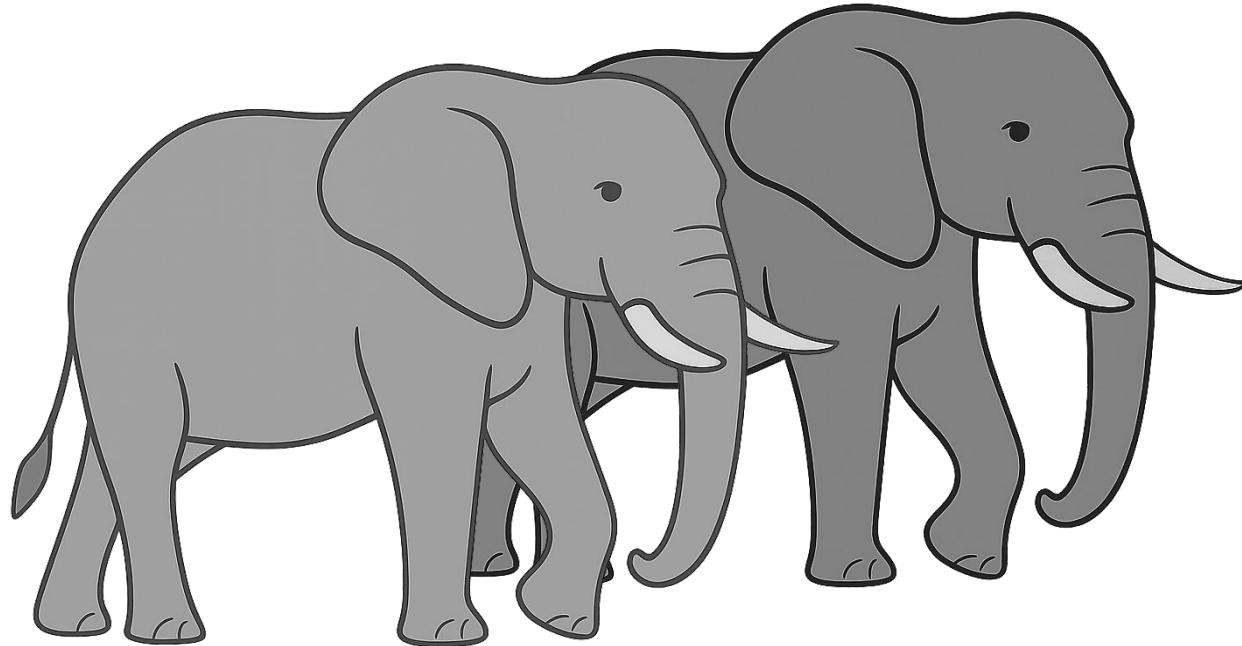
**Outcome > technology**

# **Constraints > flexibility**

# **Composition > abstraction**

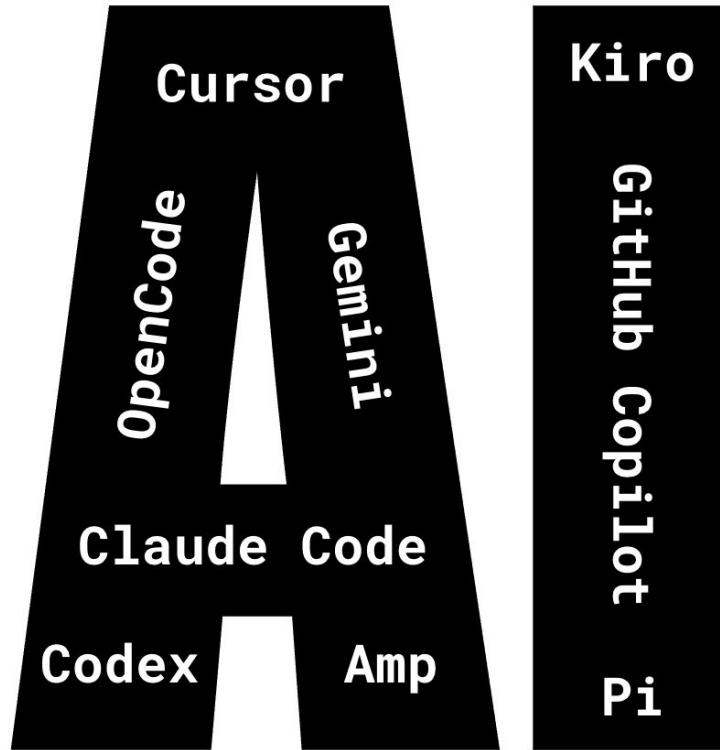
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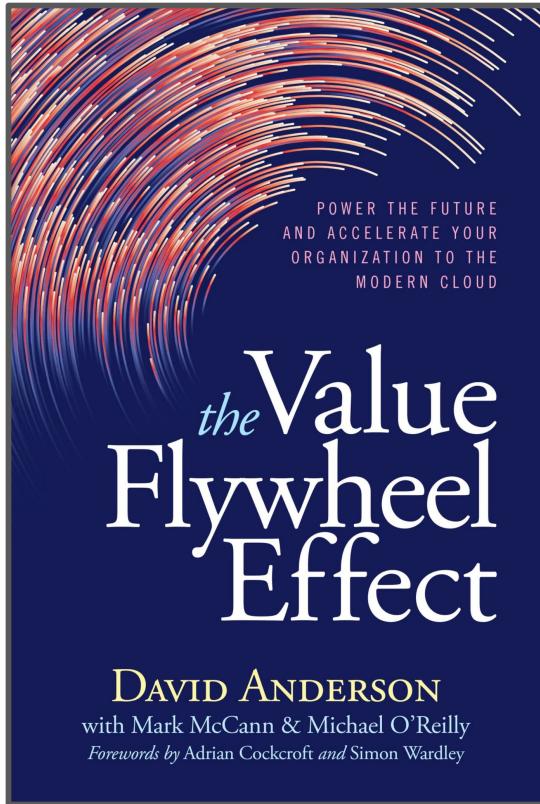
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# Thank you!



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