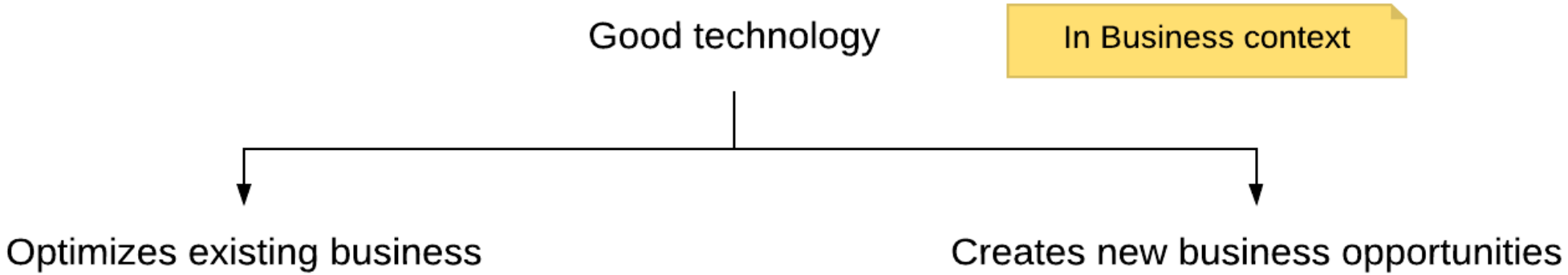
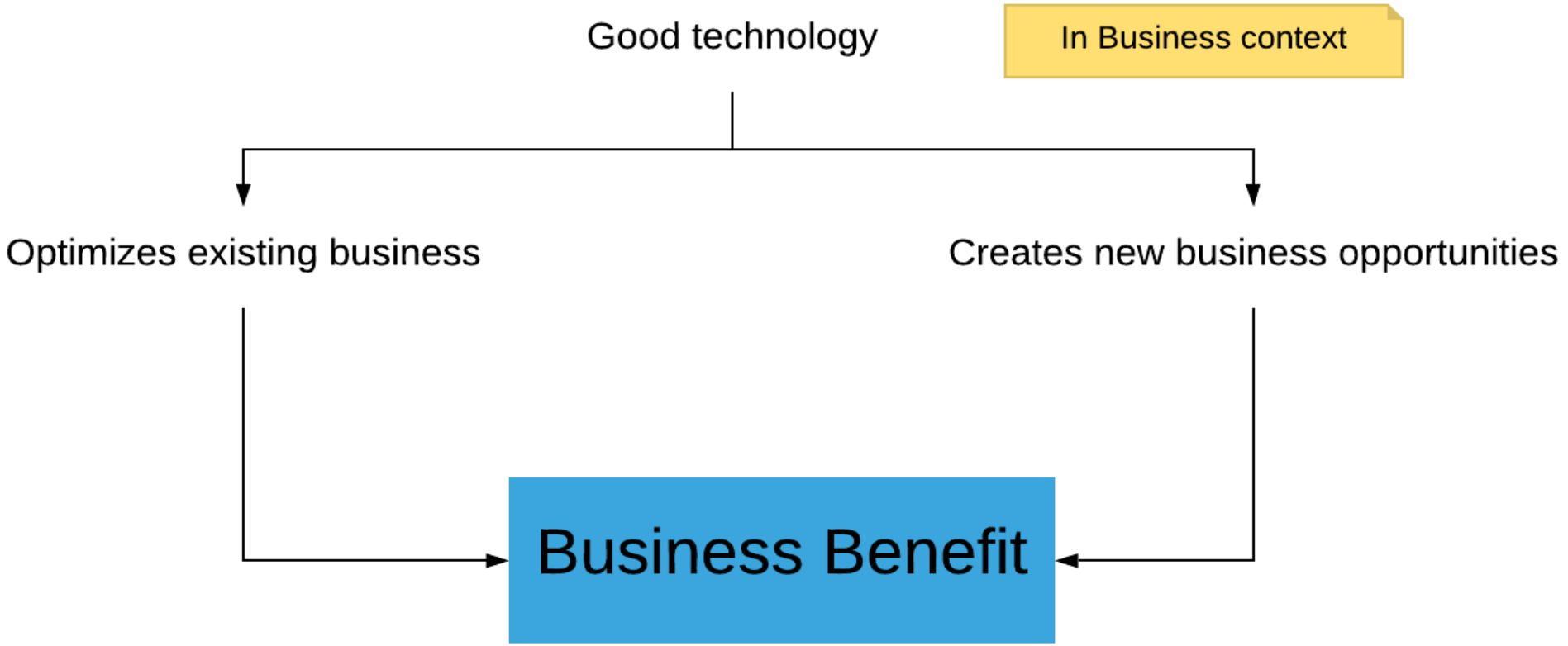
Giri Reddy

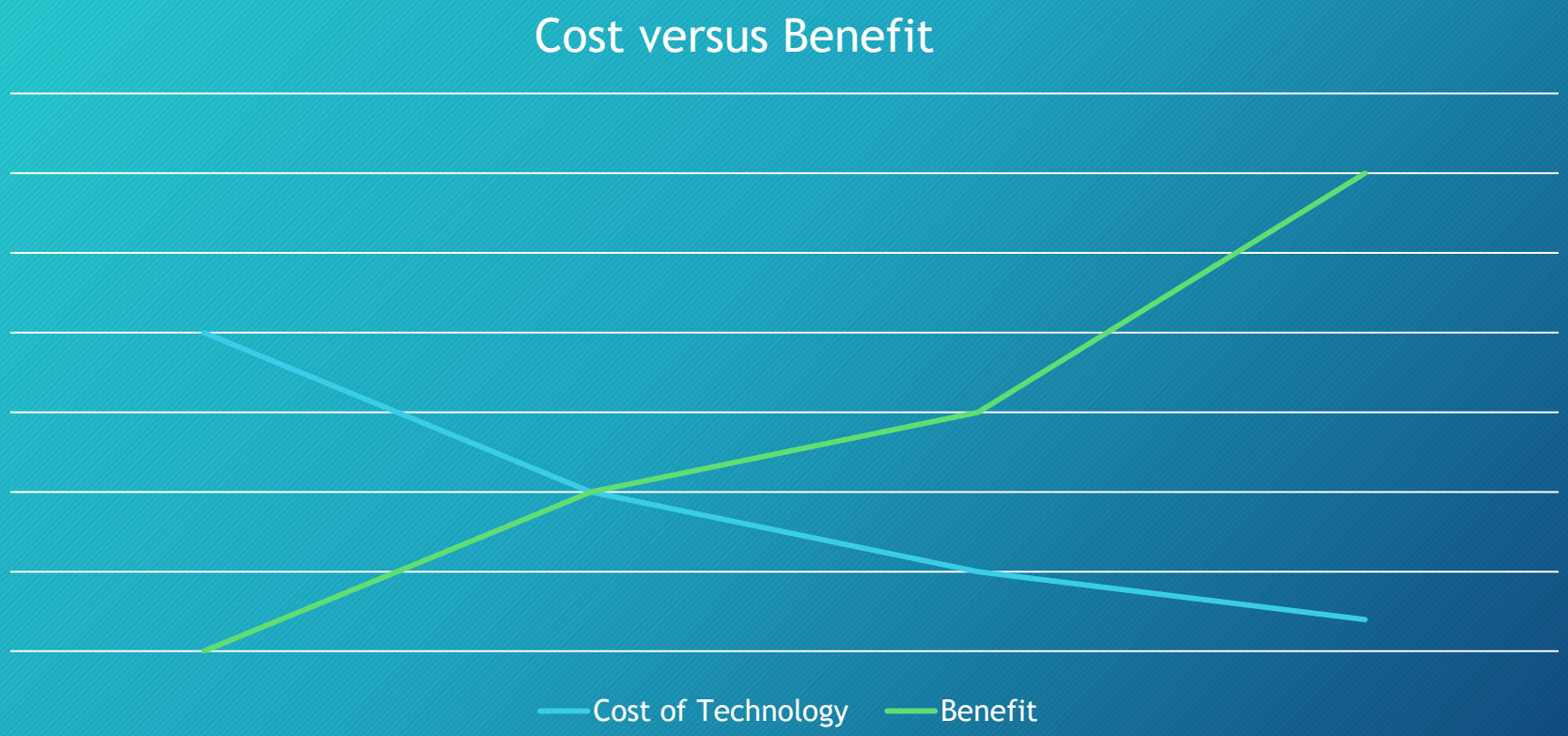
Agility, Autonomy and Speed to Market with Spring Cloud Config Server

What is a good technology for Business?


Good technology
In Business context
Optimizes existing business
Creates new business opportunities


Good technology
In Business context
Optimizes existing business
Creates new business opportunities
Business Benefit

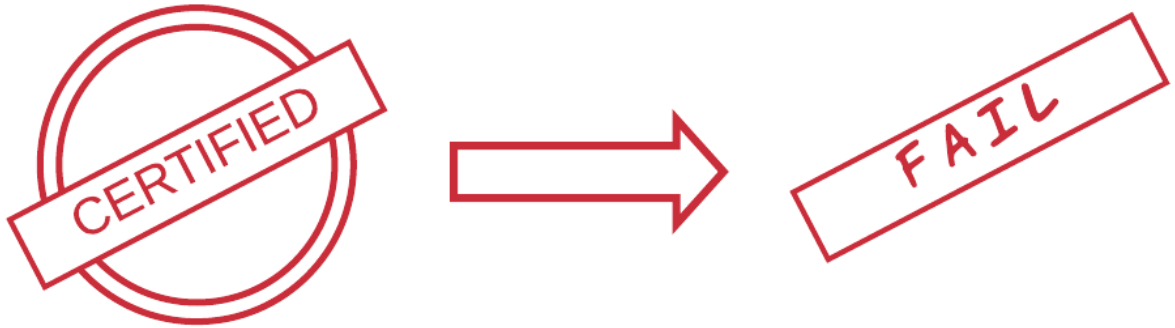
Business benefit

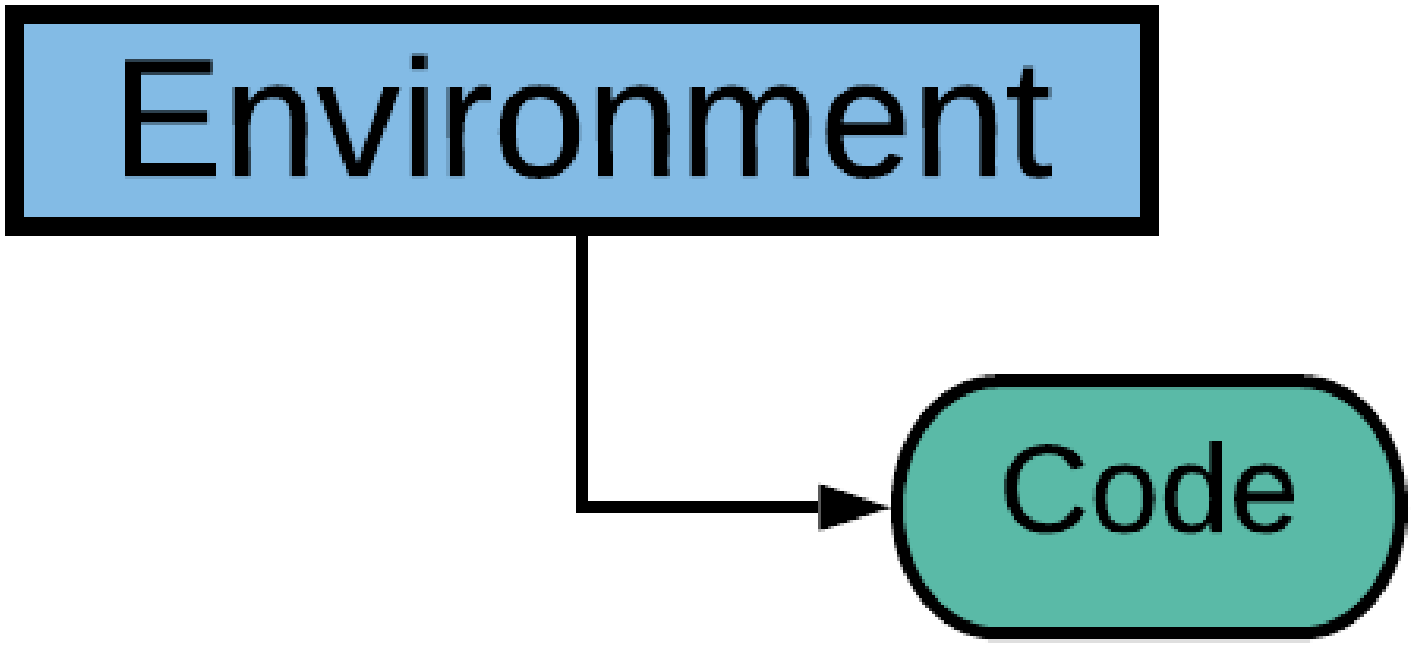


Business benefit

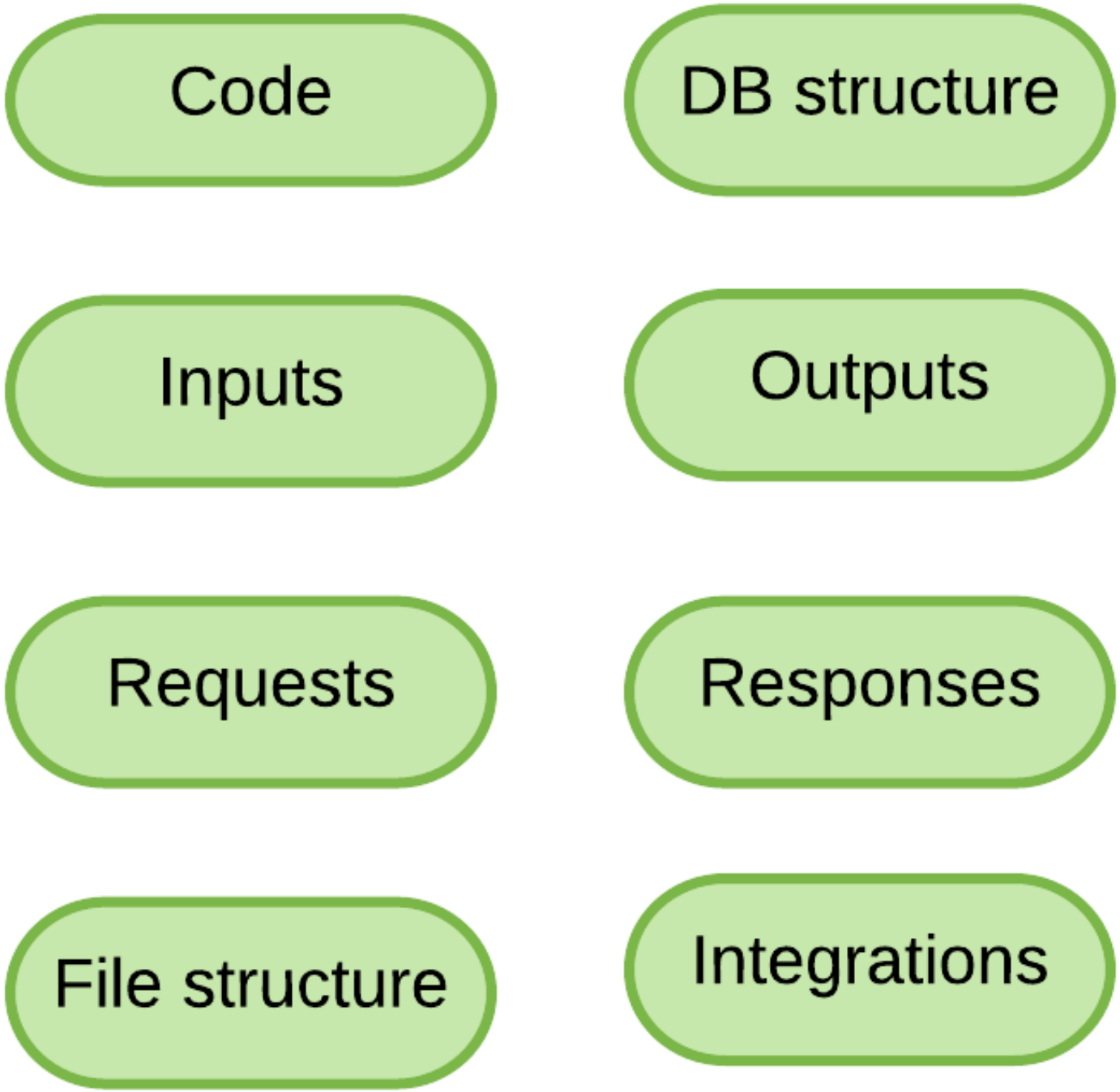
Why software fails when released to production?

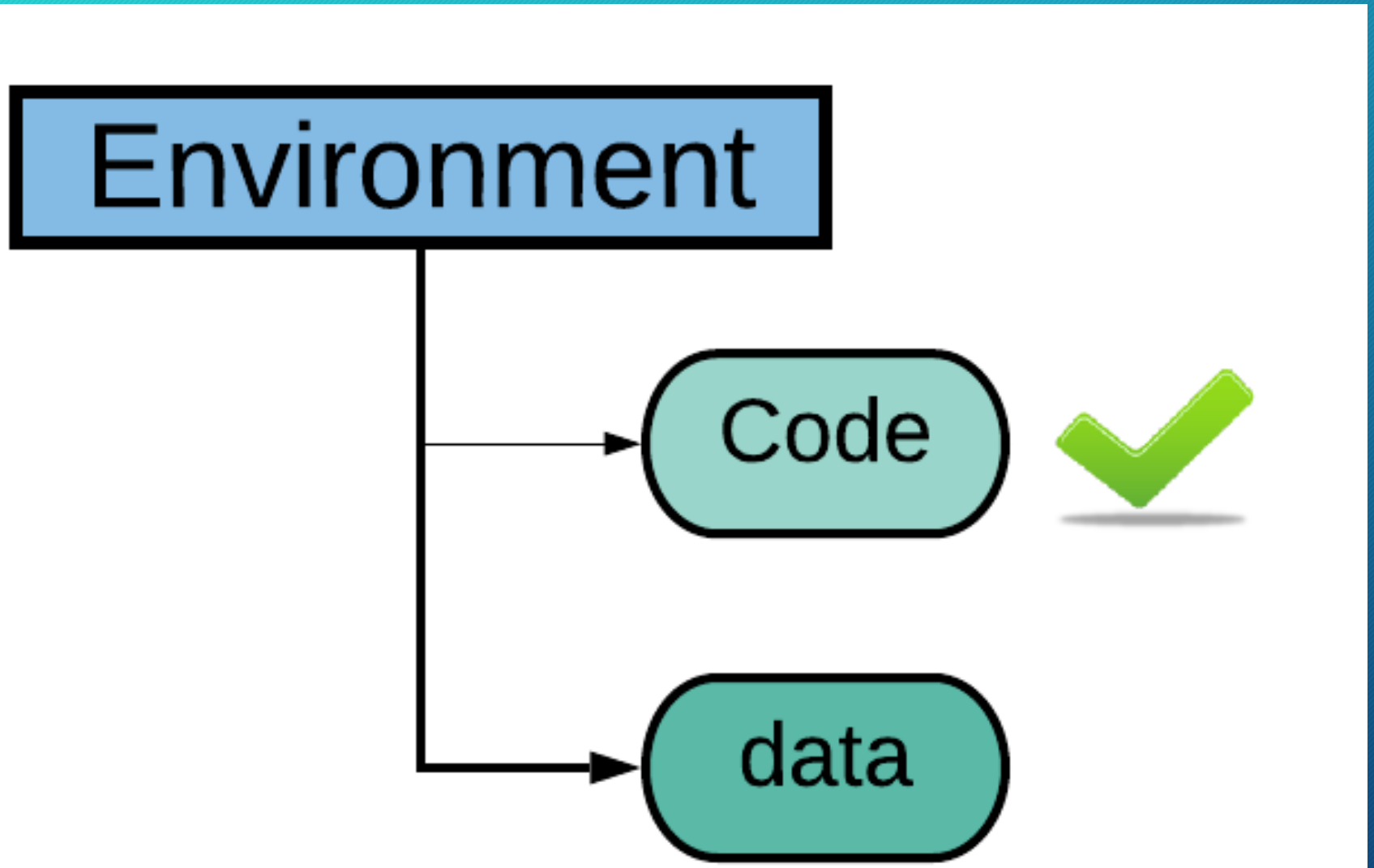
Why?

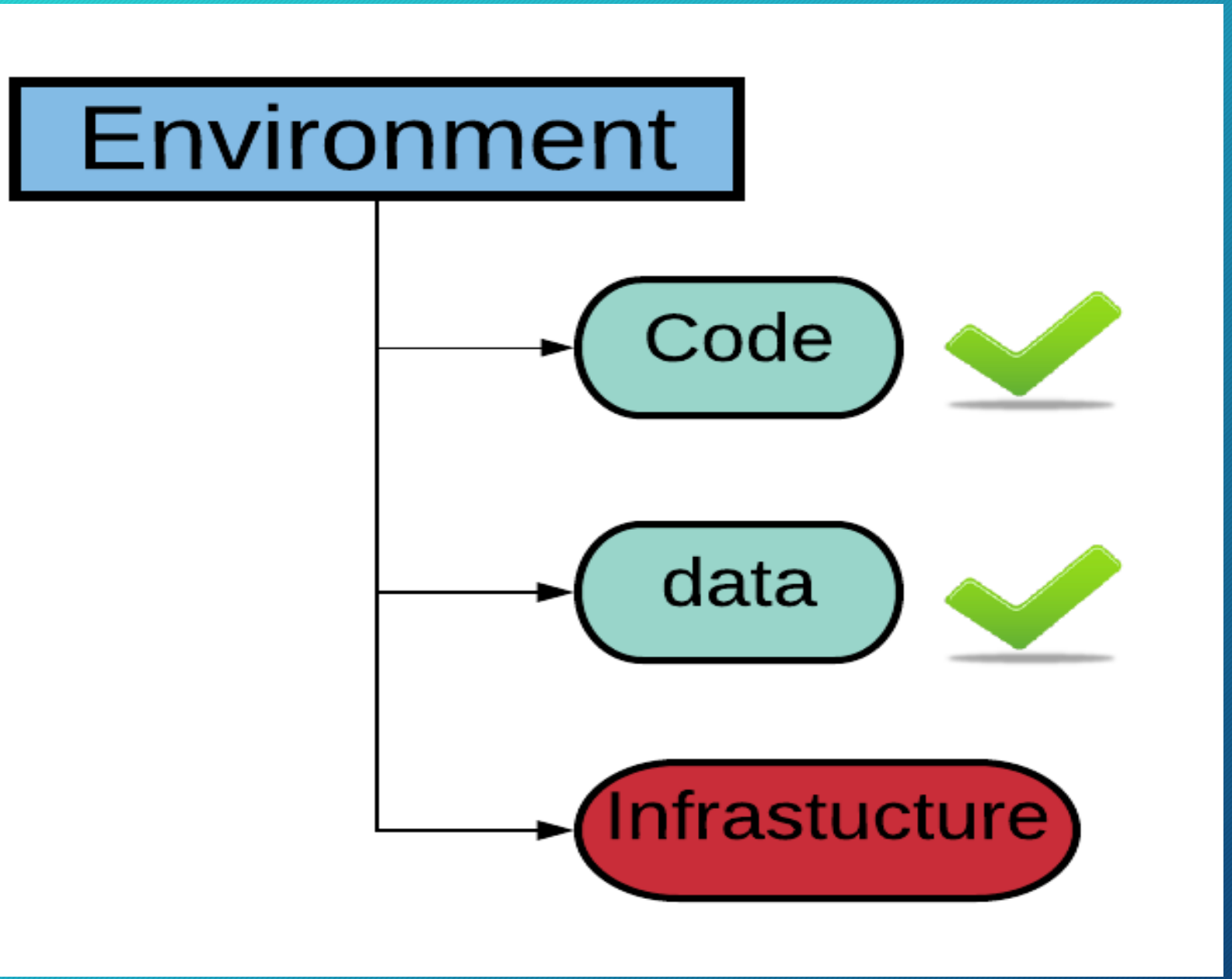


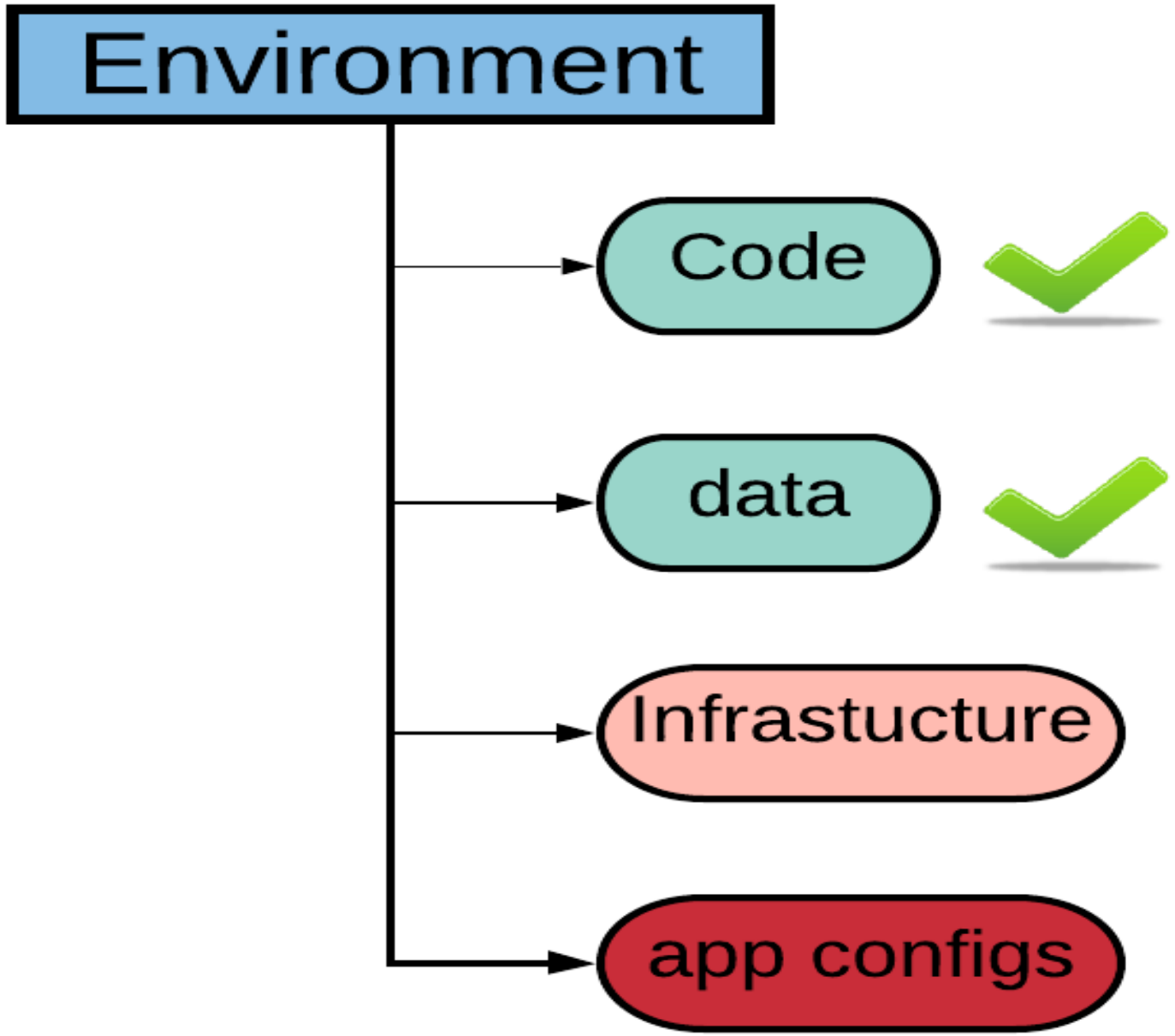

Environment
Code

Code

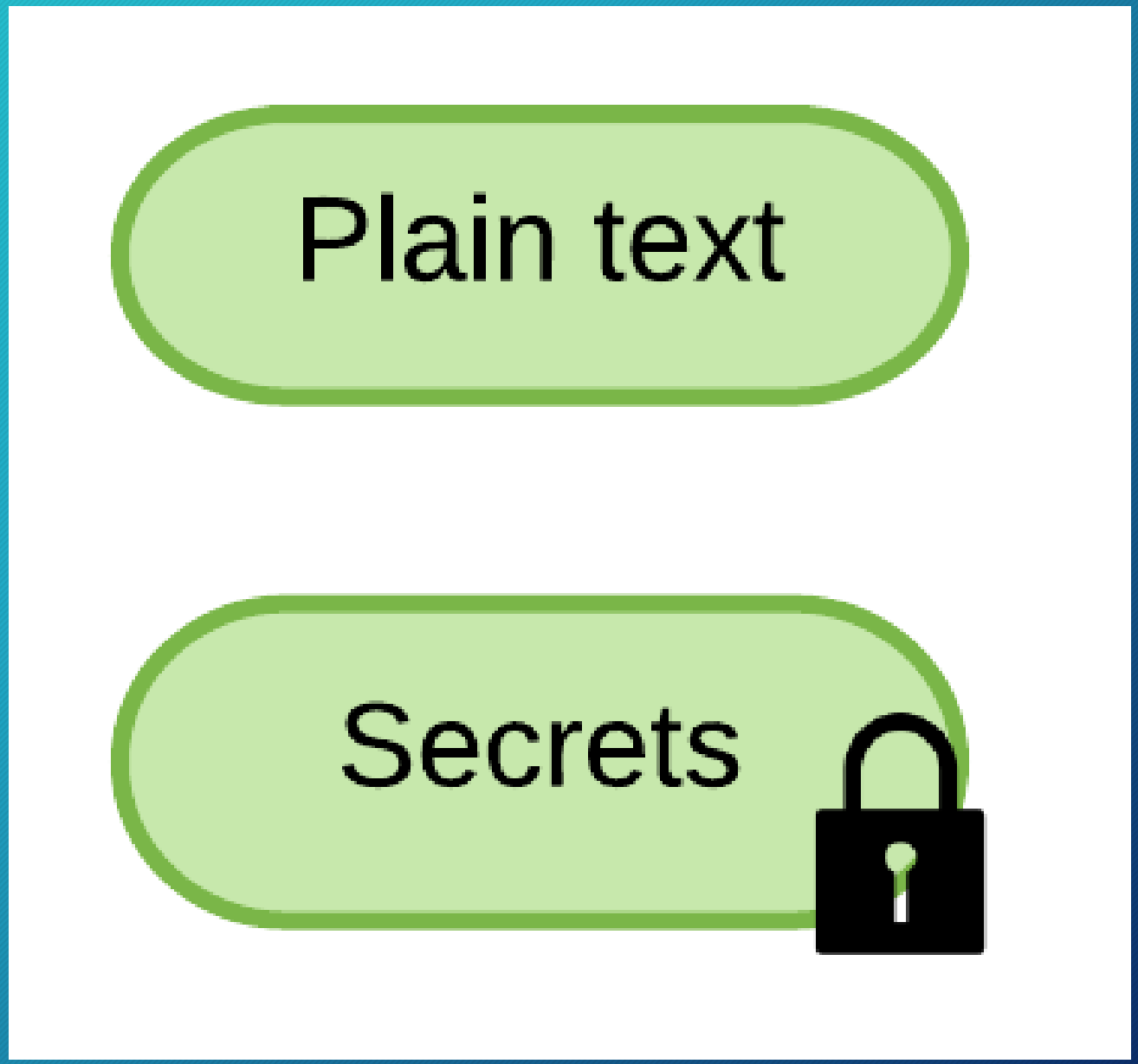

Code
DB structure
Inputs
Outputs
Requests
Responses
File structure
Integrations


Environment
Code
data

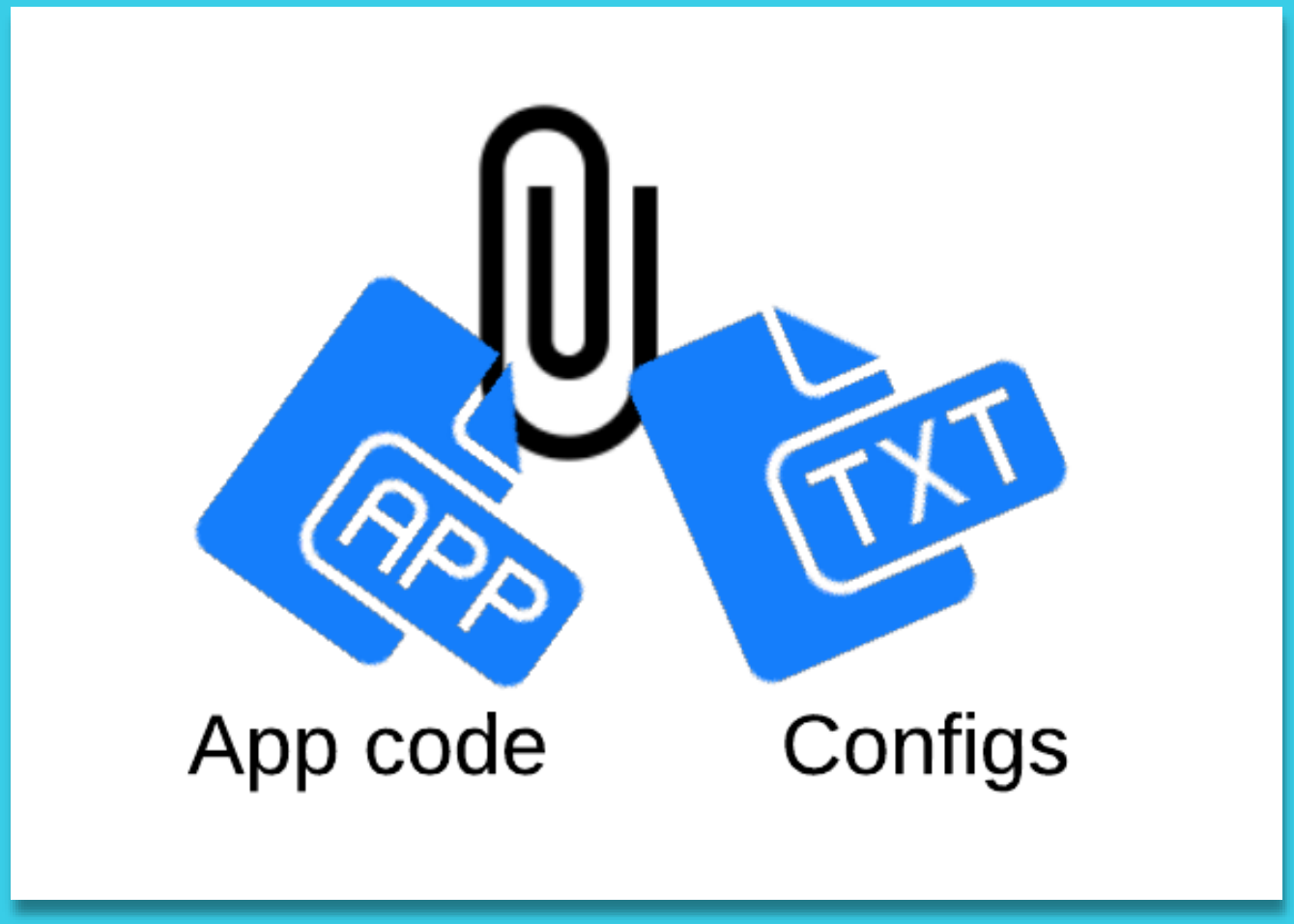

Environment
Code
data
Infrastucture


Environment
Code
data
Infrastucture
app configs

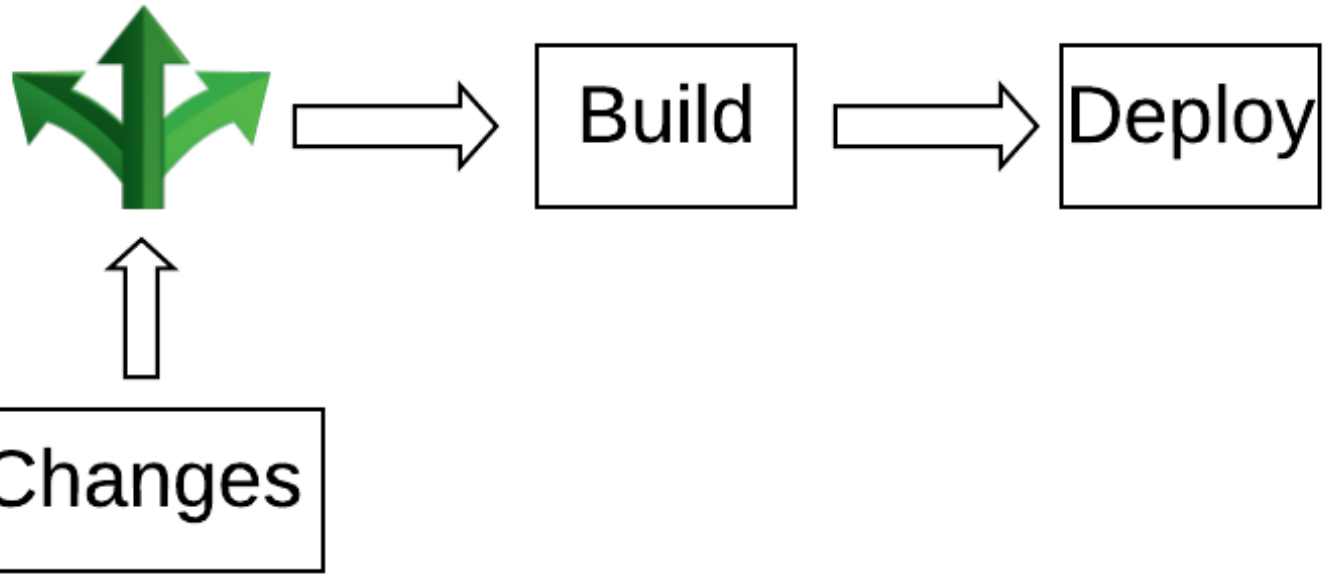
Configs



Bundled in to code



Bundled in to code



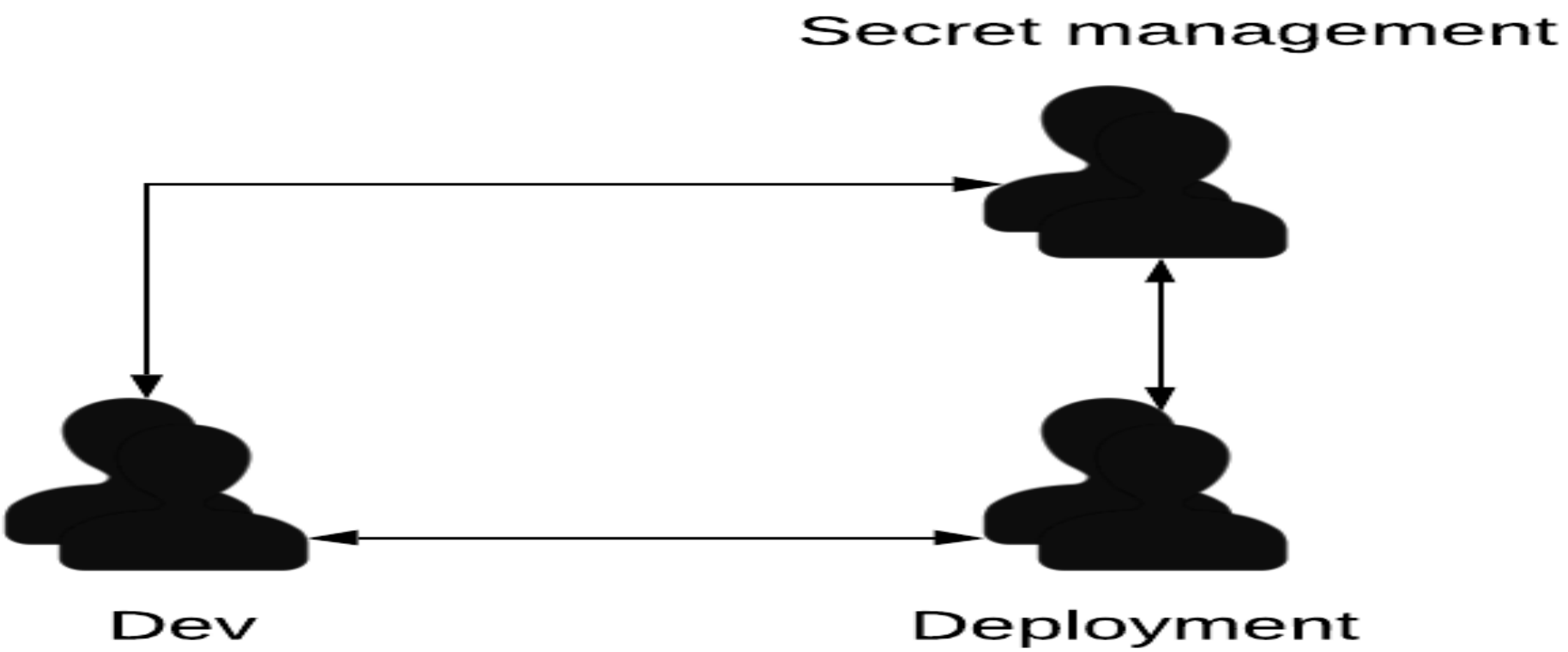
Auditability ✓

Agility ?

Autonomy ?

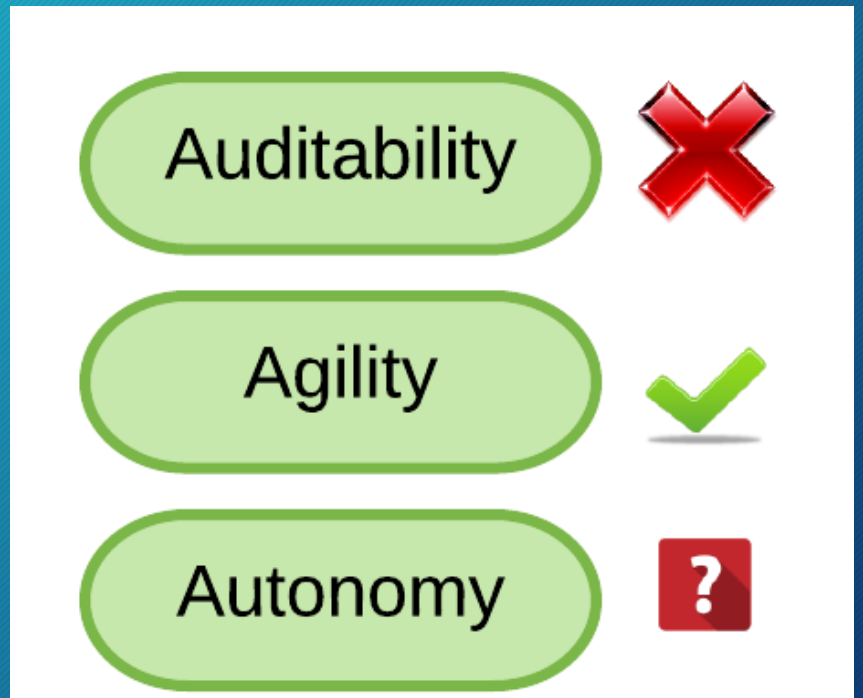
Bundled in to code – team dependencies

Bundled in to code – team dependencies



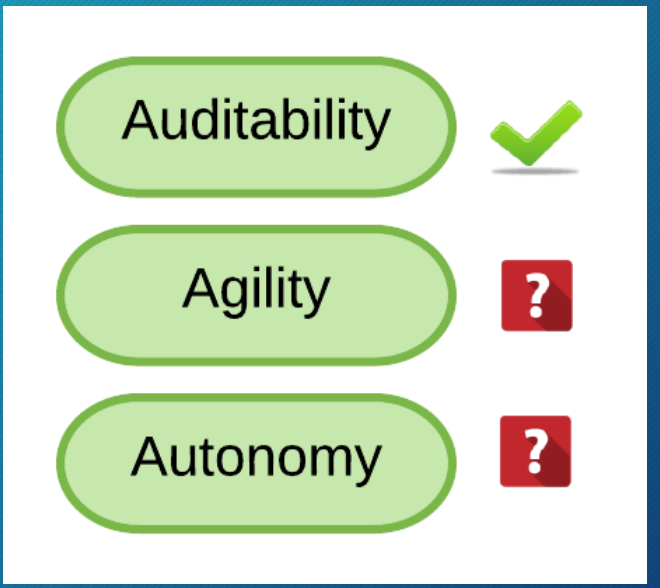
File system

Configs in file system

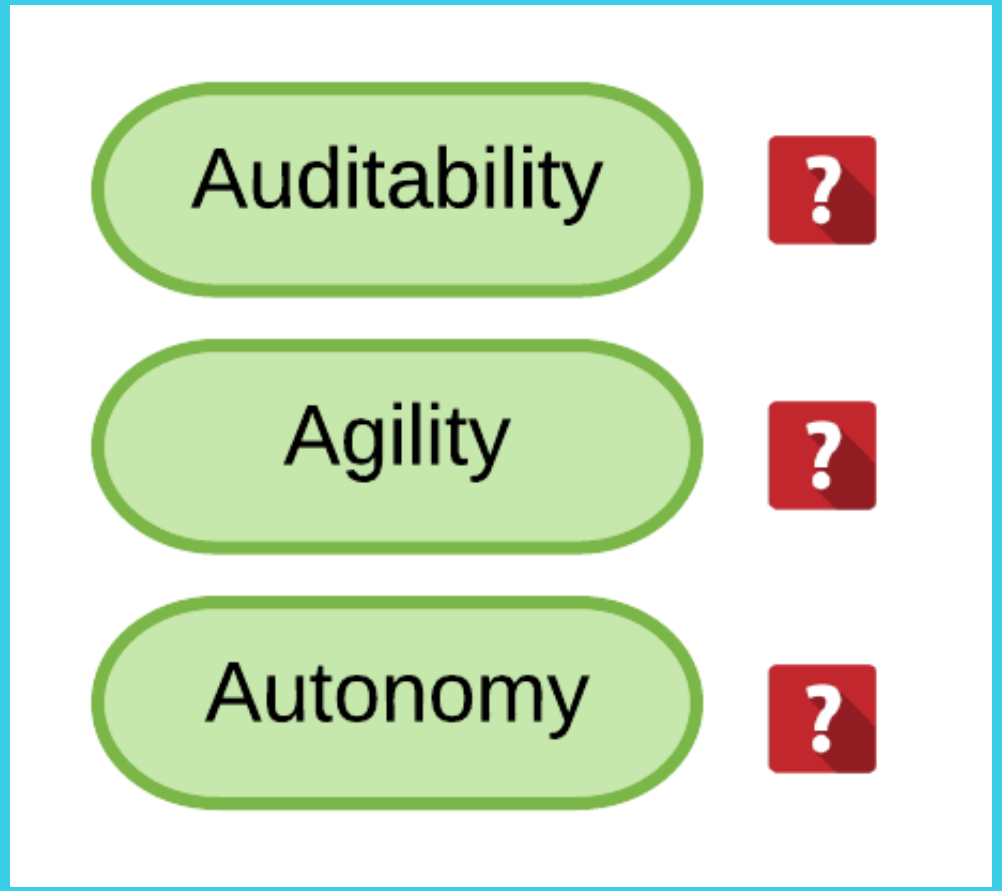


DB, Vaults, application containers

Configs in DB, Vaults, application containers

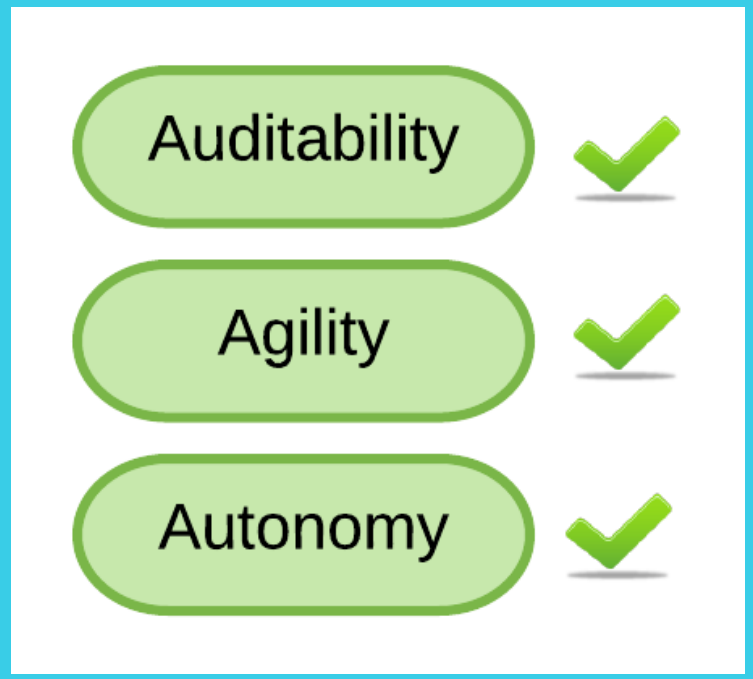


Environment variables, JVM properties

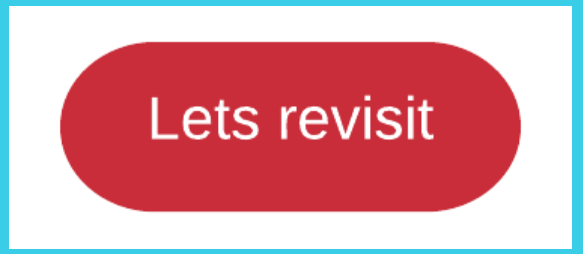


Helm

HELM

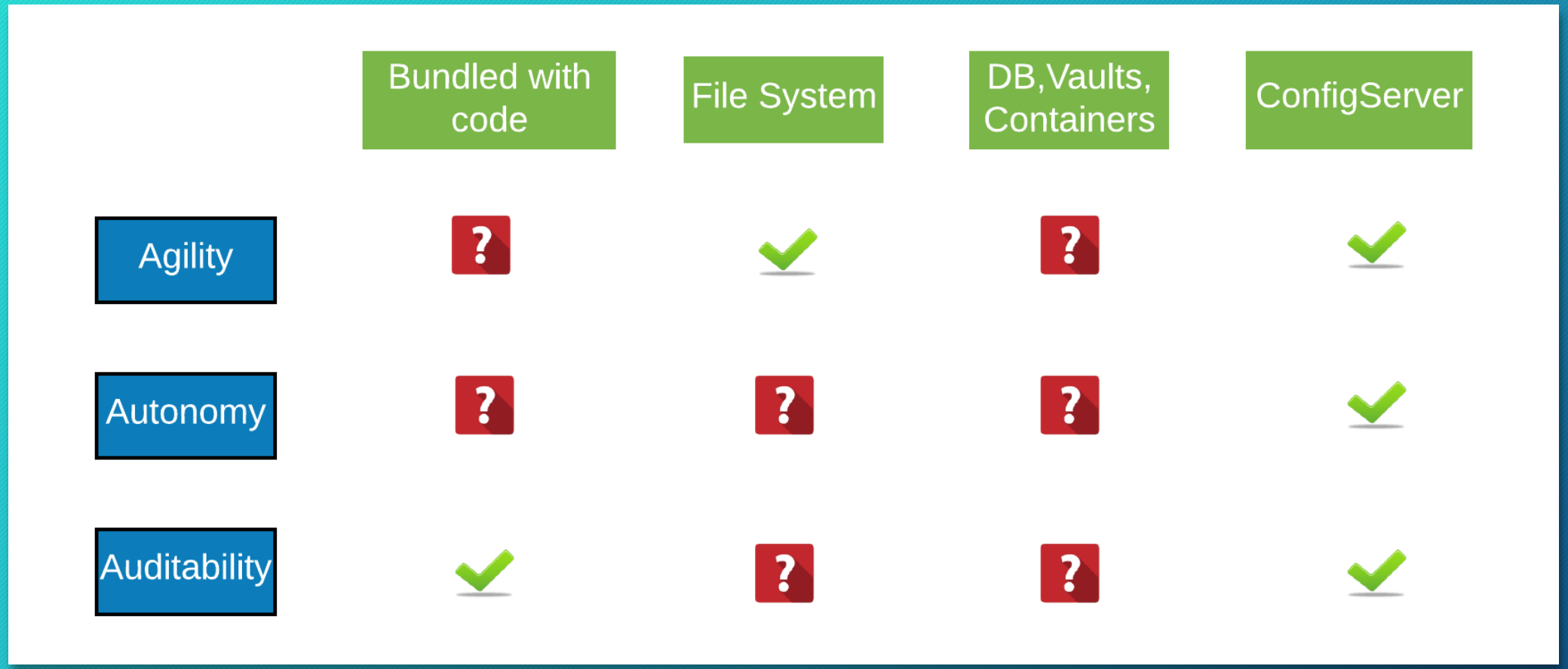

Auditability
Agility
Autonomy

Kubernetes


Lets revisit

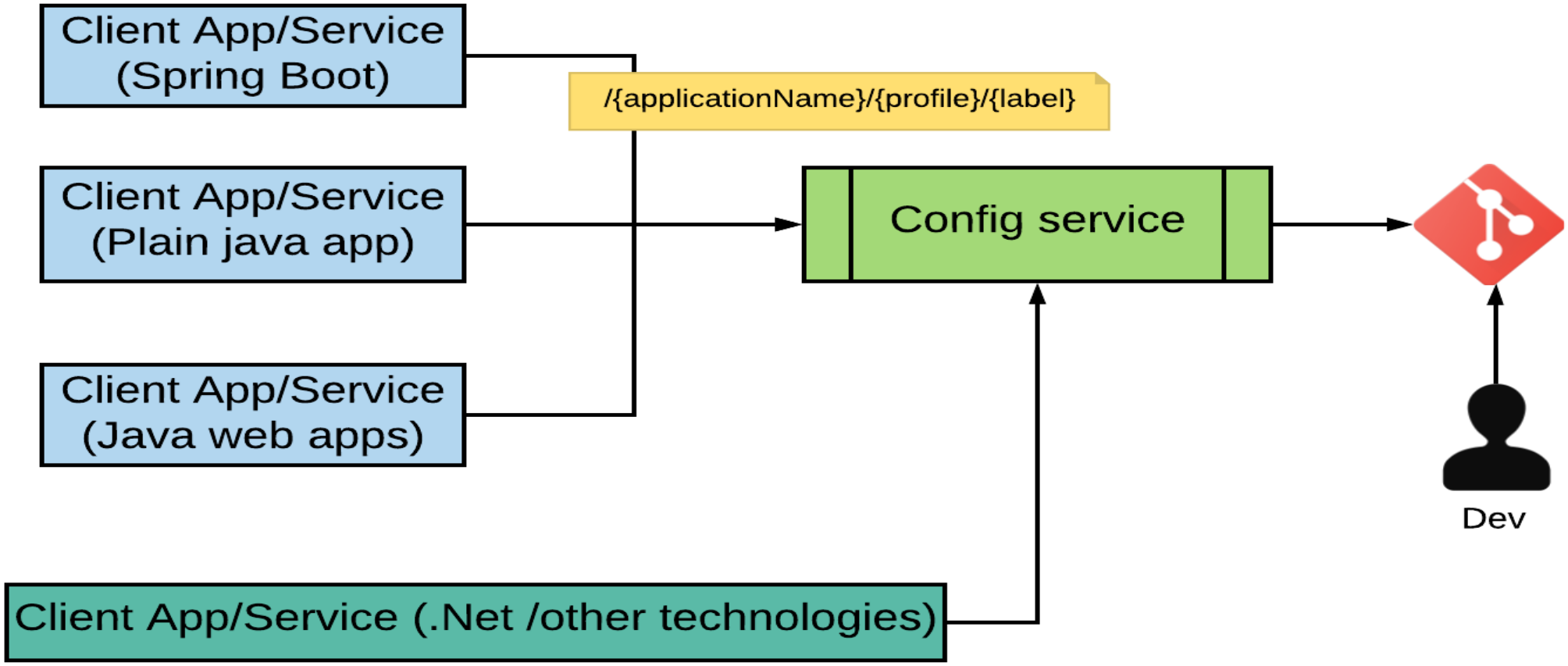
Spring Cloud Config Server

Demo



Config server

Config server – High level



https://configserver.giri.com/foo/production/master

Live Demo

@EnableConfigServer

-Dspring.config.name=configserver

@RefreshScope

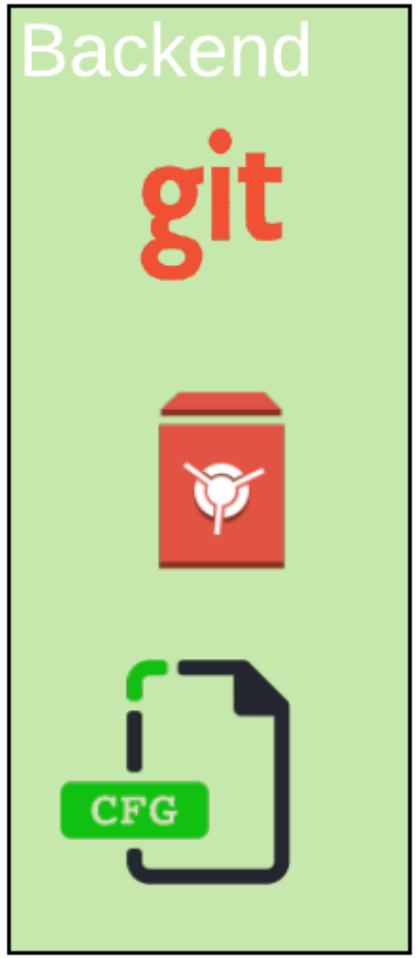
Config server

REST Service

Centralized

Client side support

Secret management



Config server

App code Configs

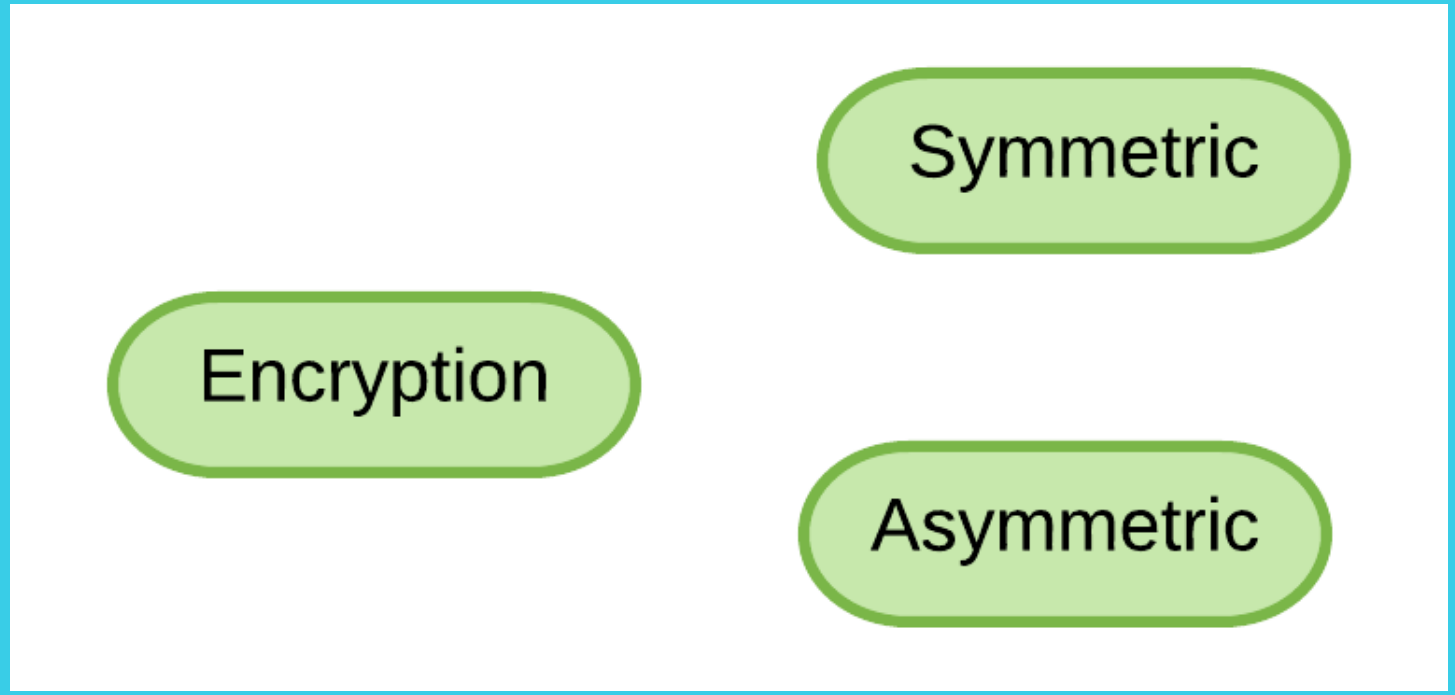
Secrets?

Auditability

Agility

Autonomy

Config server - Secrets



Config server – Secrets (Symmetric encryption)

e488d768de8957f5210ce030d6f74df3de
9c016b5c54c4c5214b2ccc1331b595cf6d
dd205453fb30bbaec9b2ee05c06685378
7961c1fb662f3cd7a32cfc00eee

Config server – Secrets (Asymmetric encryption)

AQBMFbA+9aRKzjE9I4UR53RhfndD90tP
UNjcSPj4jLe1Z6C6OUIj9BtVQbfXAbOMT
QqR38E//uvTm92cEb122DW3p3Ui0pF6
Bflpy4vdQRfOqbWTvA2B0WyFBulCdNoi
6f3yDBWCIyMUwRXelzJBkfYHODpVMtsR
TfT3aINDdxfEF/MBTWfPc6pN51gppPsX2
+ZDJfEKNcIagH5I65WeXQaDYx+IlQrDygn
NJNkCmEcApf4cUP/0MIjfulbq1JLSYRwV
2Jk0OqIdyFT7ENXEFAPf9NEoNEFOmxKk
9y/IN4Bj1ryHIzCxaiELiBx84I6RU+55pAfz
YvOu3ARZItkc8I18Y6HA8t93MIdSh6fNU+
2Ffj7rol2bOKfPluwIdhftMP+GFHO64im5
ugvHU8lTYdxRcRhtcjxYt3B1bVUu7nvtD
w==

Config server

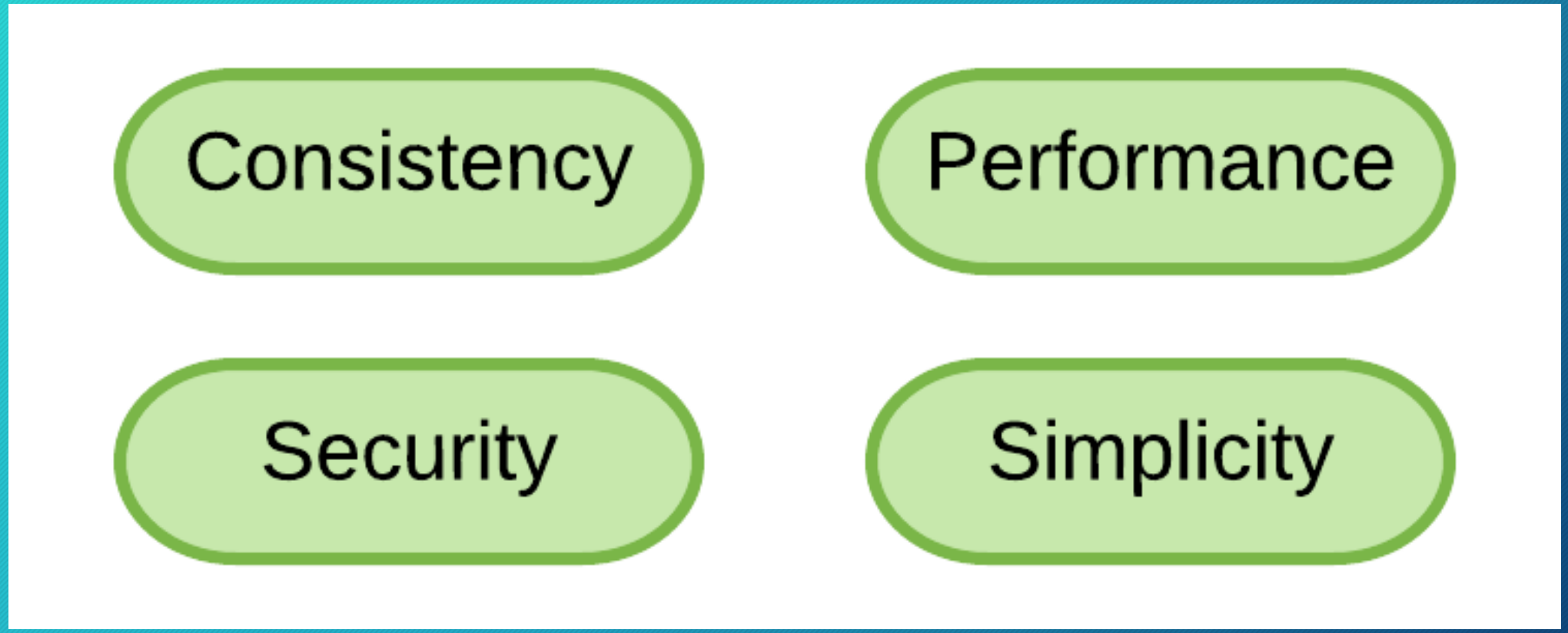
App code Configs

- Auditability
- Agility
- Autonomy

Config server vs Helm

	Config Server	Helm
Technology agnostic		
Refresh at runtime		

Few more



Business Value

Non critical apps

configs don't change much

Simple apps

Not many configs

Business Value

Critical apps

Configs change often

Complex apps

Many configs

Questions