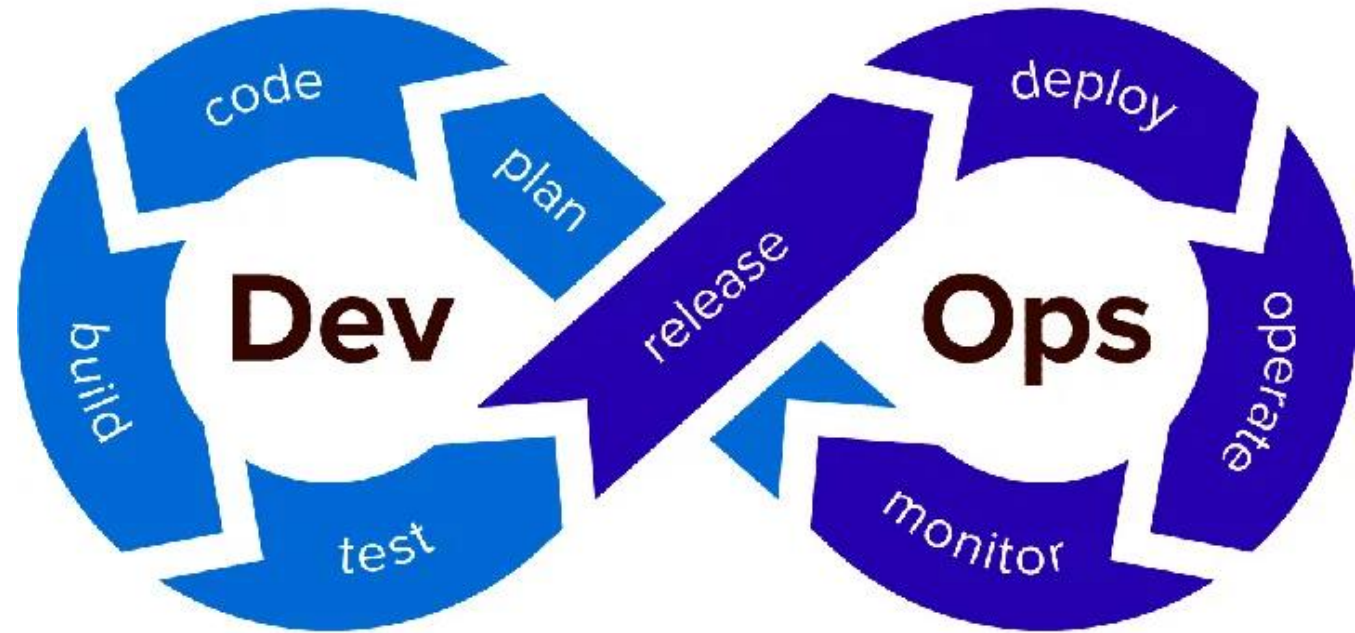


DevOps

From Dev to Ops to Dev

DevOps

Dev to Ops



Outline (6 modules)

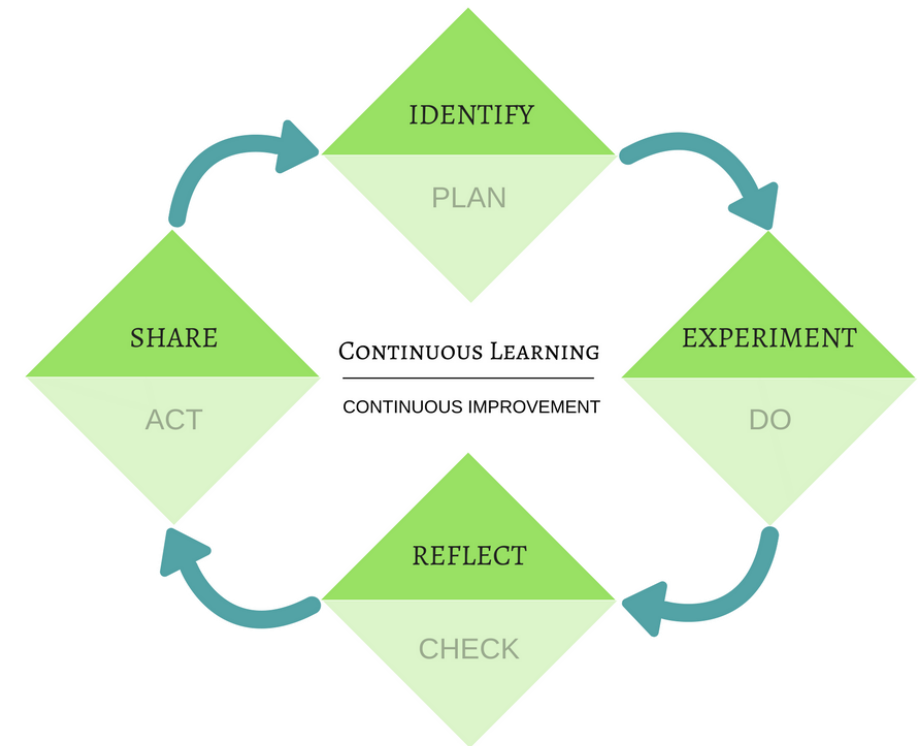
- *Industrialisation du déploiement logiciel (Pipelines de Continuous Delivery)*
- *Industrialisation de la construction et de la validation du logiciel*
- *Gestion de configurations (construction et déploiement) pour différents environnements d'exécution*
- *Stratégies de surveillance d'exécution*
- *Automatisation de la surveillance d'exécution*
- *Gestion de l'évolution*

Outline (2 Projects)

- DevOps
 - Git repository
 - Pipelines
 - Environments
 - Observability
 - ...
- Dialogue on Instagram
 - Photo Sharing and Communication App
 - Spring
 - ...

Outline (Methodology)

- Agile Learning
 - → Context
 - Me
 - Tooling (Introduction)
 - Roadmaps (DevOps/ Test Application)
 - → Trying out / Applying / Testing
 - You
 - → Retrospective
 - Us
 - → Improve/Share
 - Us



Outline (Planning)

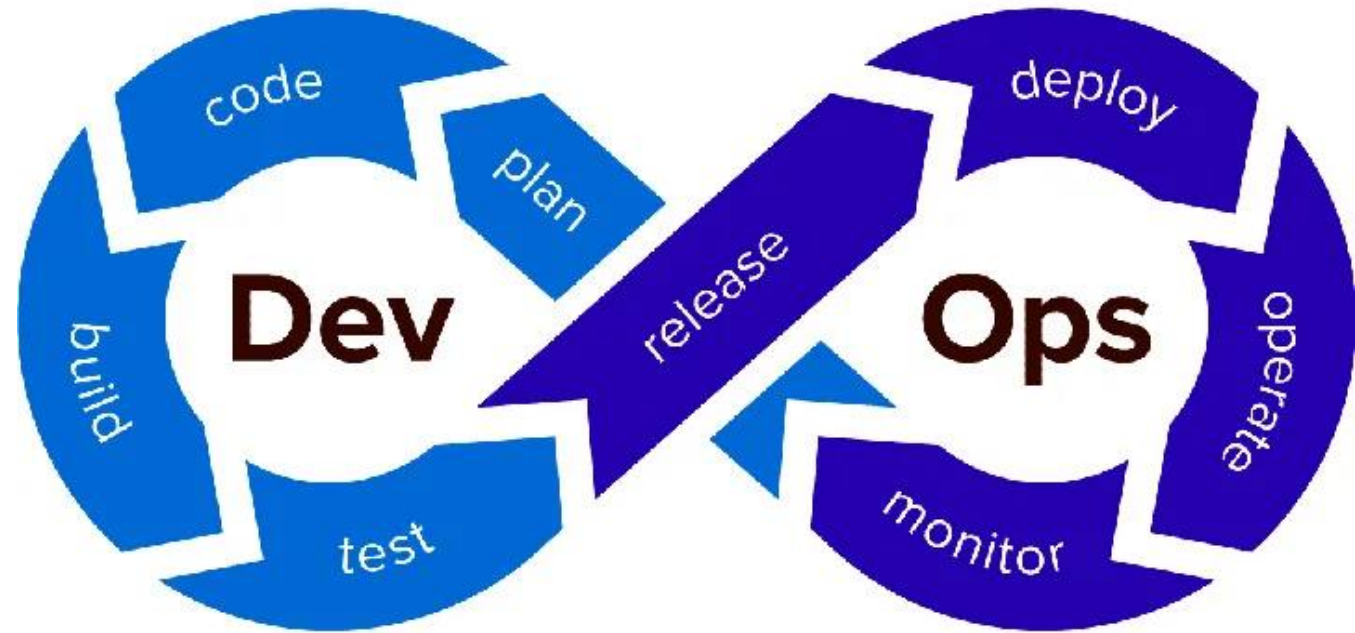
- P1
 - *Industrialisation du déploiement logiciel (Pipelines de Continuous Delivery)*
 - *Industrialisation de la construction et de la validation du logiciel*
 - 09/9 Intro 1 – CI/Init Demo Project
 - 12/9 Intro 2 – CD Demo Project
 - 19/9 CI/CD Project Transfer
 - 23/9 CI/CD Project Transfer
- P2/3
 - *Industrialisation de la construction et de la validation du logiciel*
 - *Gestion de configurations (construction et déploiement) pour différents environnements d'exécution*

DevOps

From Dev to Ops to Dev

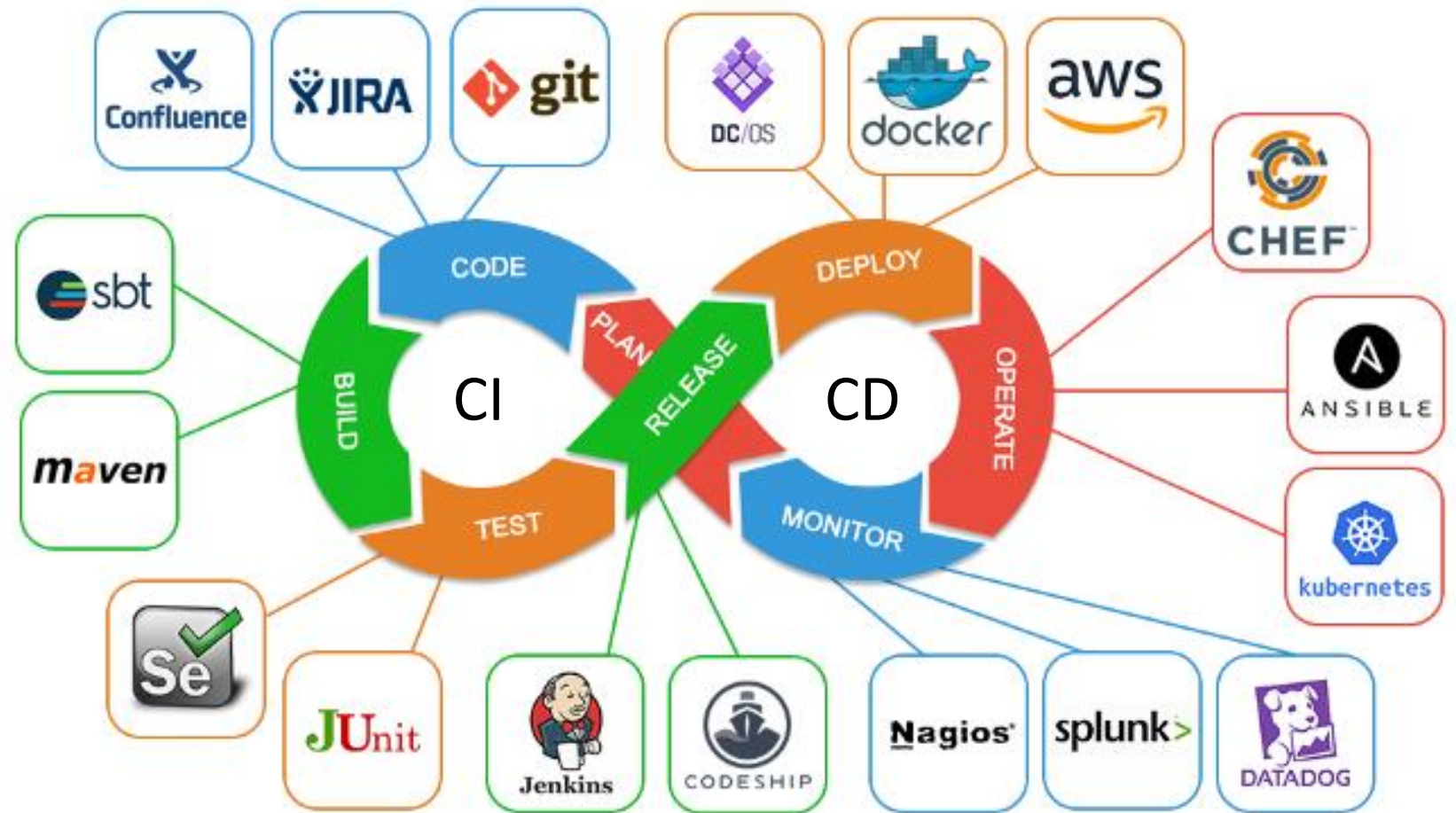
DevOps

Dev to Ops



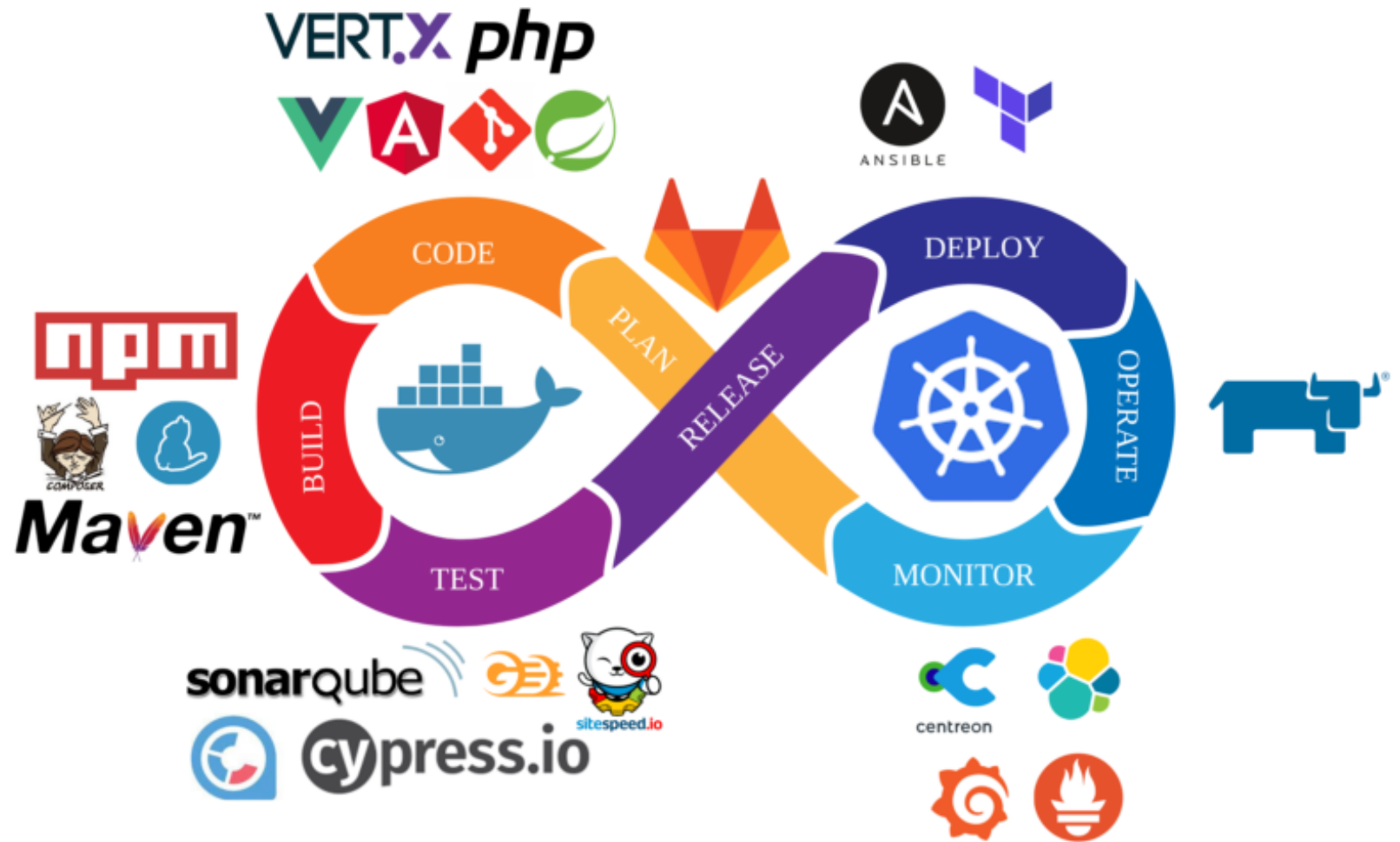
DevOps

Dev to Ops



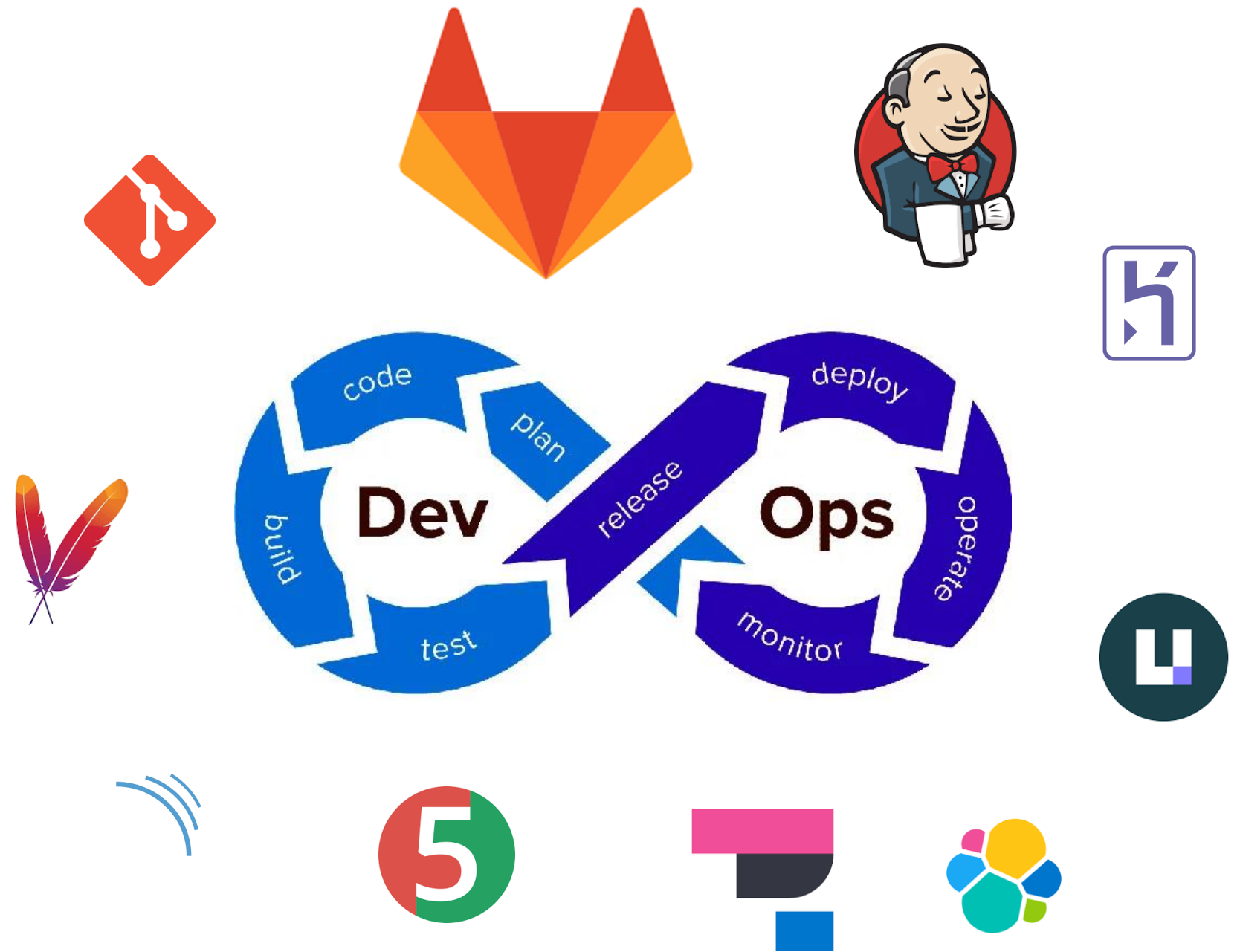
DevOps

Dev to Ops



DevOps

Dev to Ops



DevOps

Dev to Ops

DevOps – Why ?

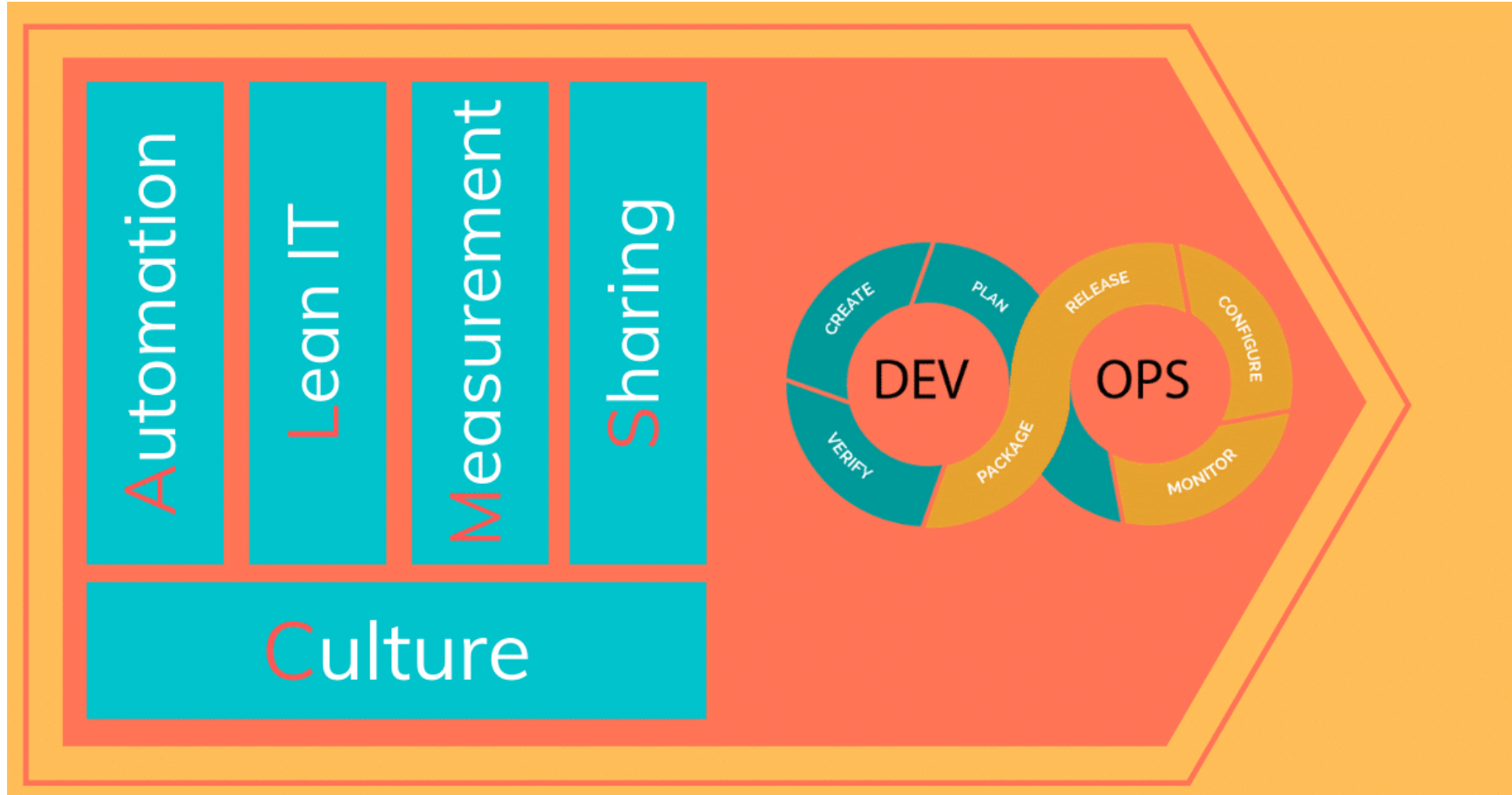
- Need for Collaboration Dev <-> Ops
- Simultaneous Releases across Platforms
- Quicker time to market
- Improve End User experience
- Development and Deployments of cloud-based apps
- Reduce IT costs

DevOps – Why ?

Cultural Differences

- Dev
 - Innovation
 - Features
 - New Technologies
 - Works for me
 - Configuration (ever heard of it?)
- Ops
 - Stability-oriented
 - Proven Technologies
 - ‘Never touch a running system’
 - Conservative
 - Configuration
 - Deployment
 - -> Reverting, Staging, Preprod, Integration,

DevOps – How ?



DevOps – How ?

- Culture

- Embrace Change
- Focus on People



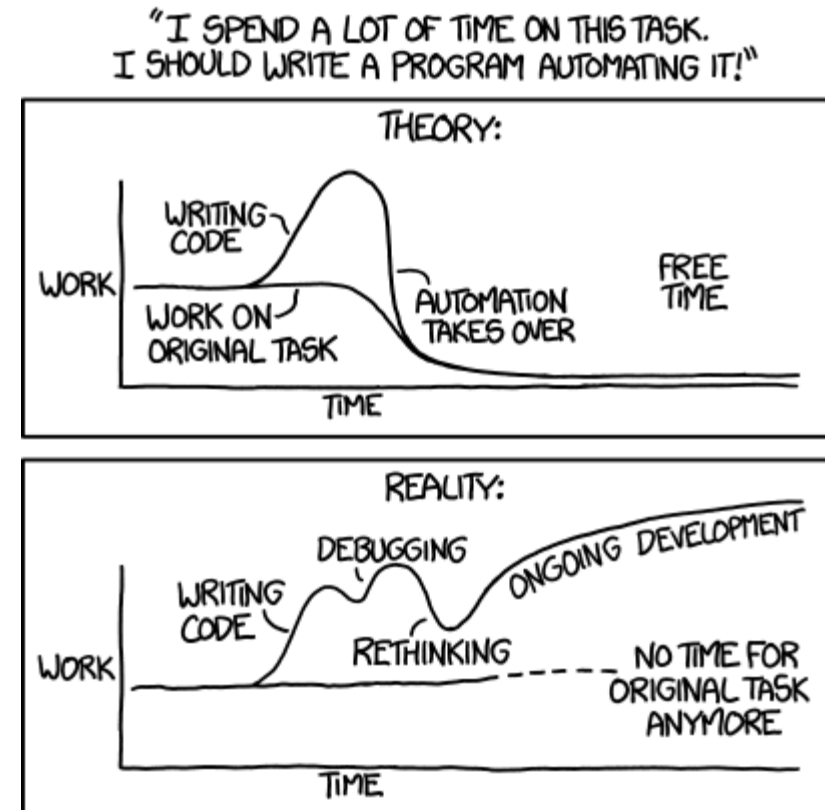
DevOps – How ?

- Automation

- Infrastructure as Code
- Continuous Delivery
- Reverting
- ...

“Anything that you do more than twice has to be automated.”

-Adam Stone, CEO, D-Tools



DevOps – How ?

- Lean

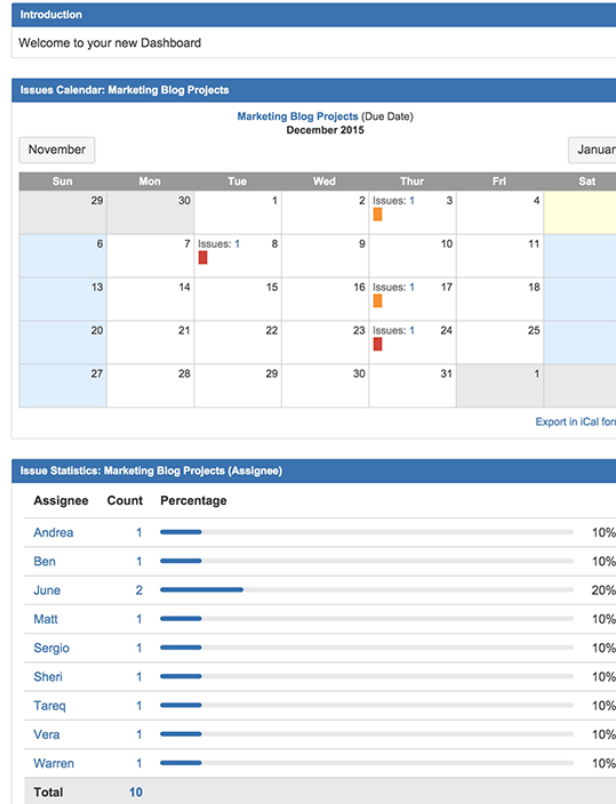
- Producing Value for the End User
- Small Batch Sizes



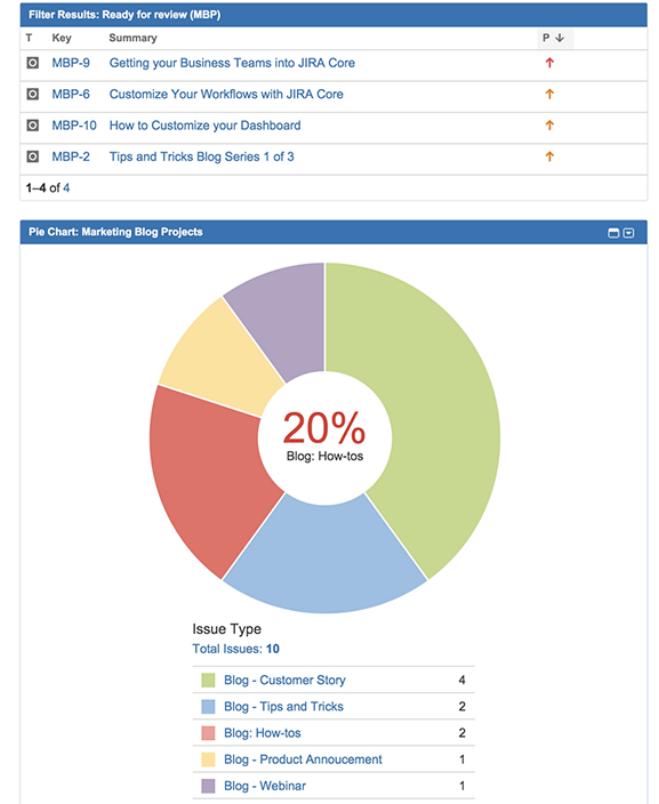
DevOps – How ?

- Measurement
- Measure Everything
- Show the Improvement

Dashboard



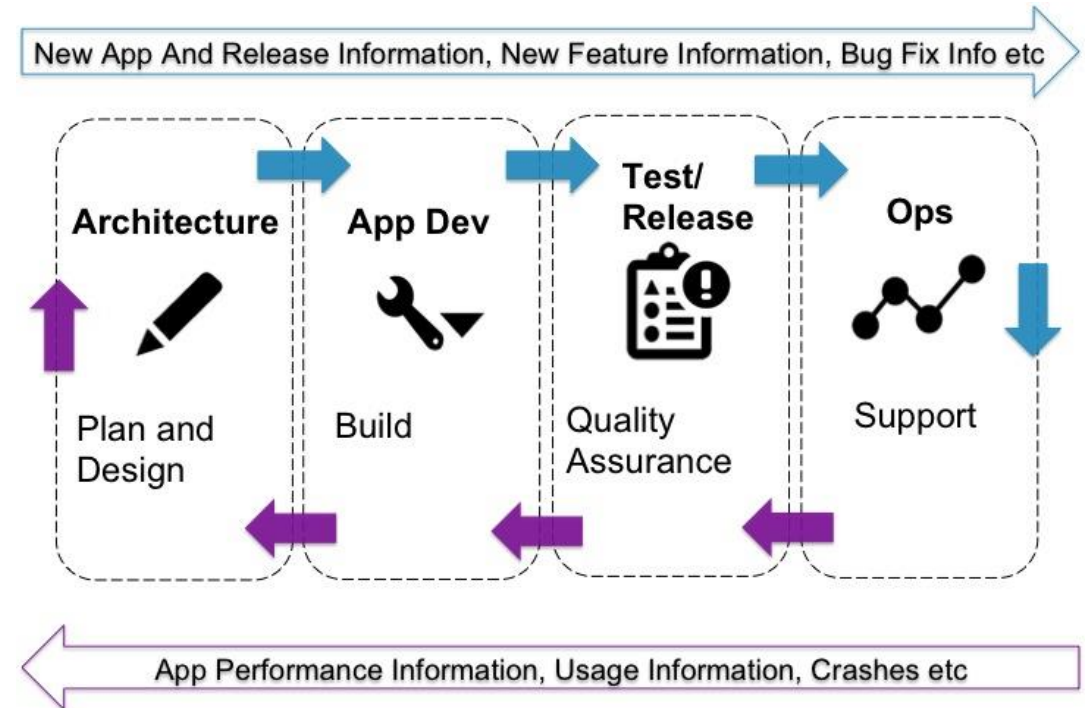
Tools



DevOps – How ?

- Sharing

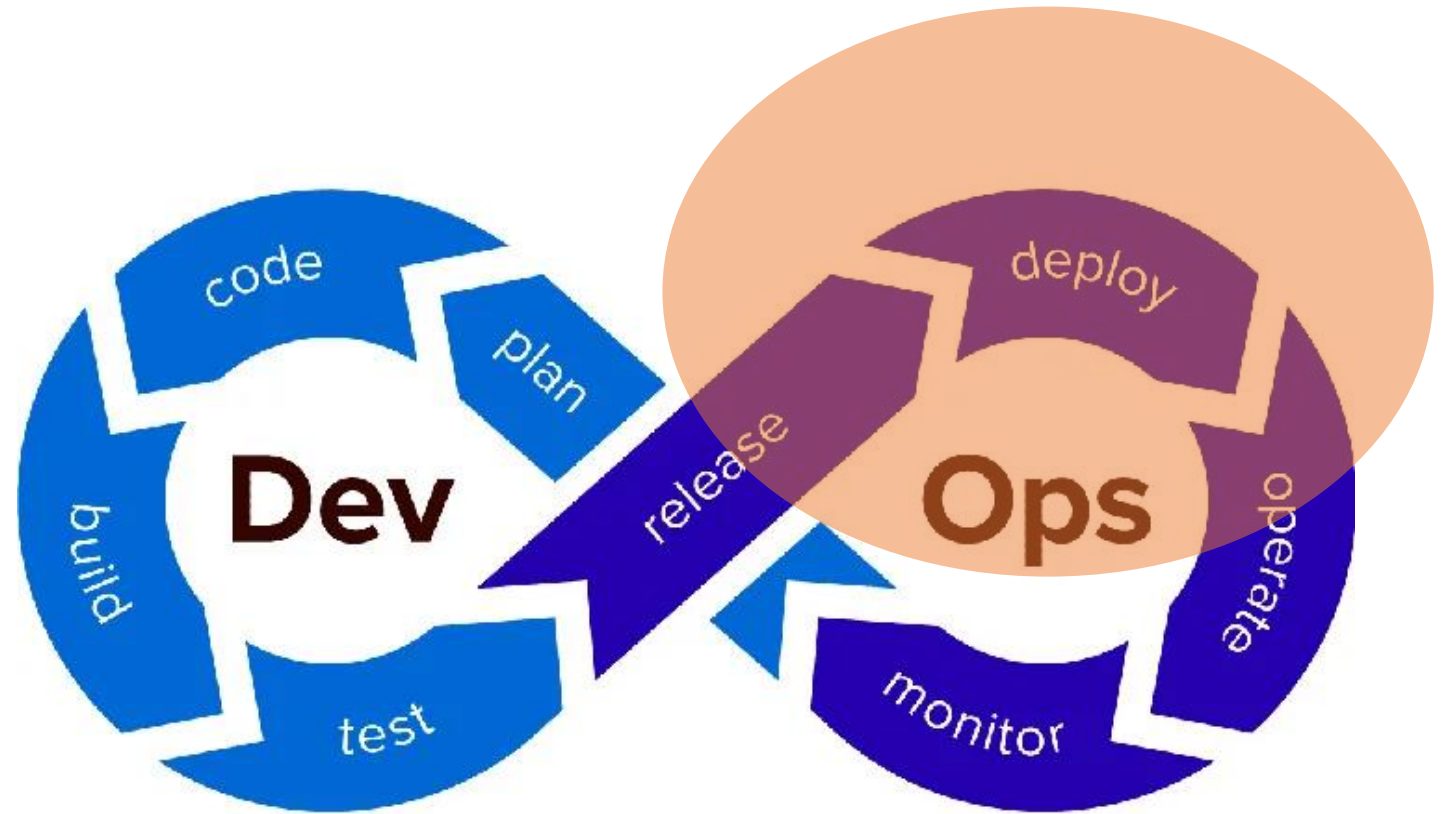
- Collaboration & Communication
- Open Information Sharing



1 - Automate deployments

DevOps

Dev to Ops



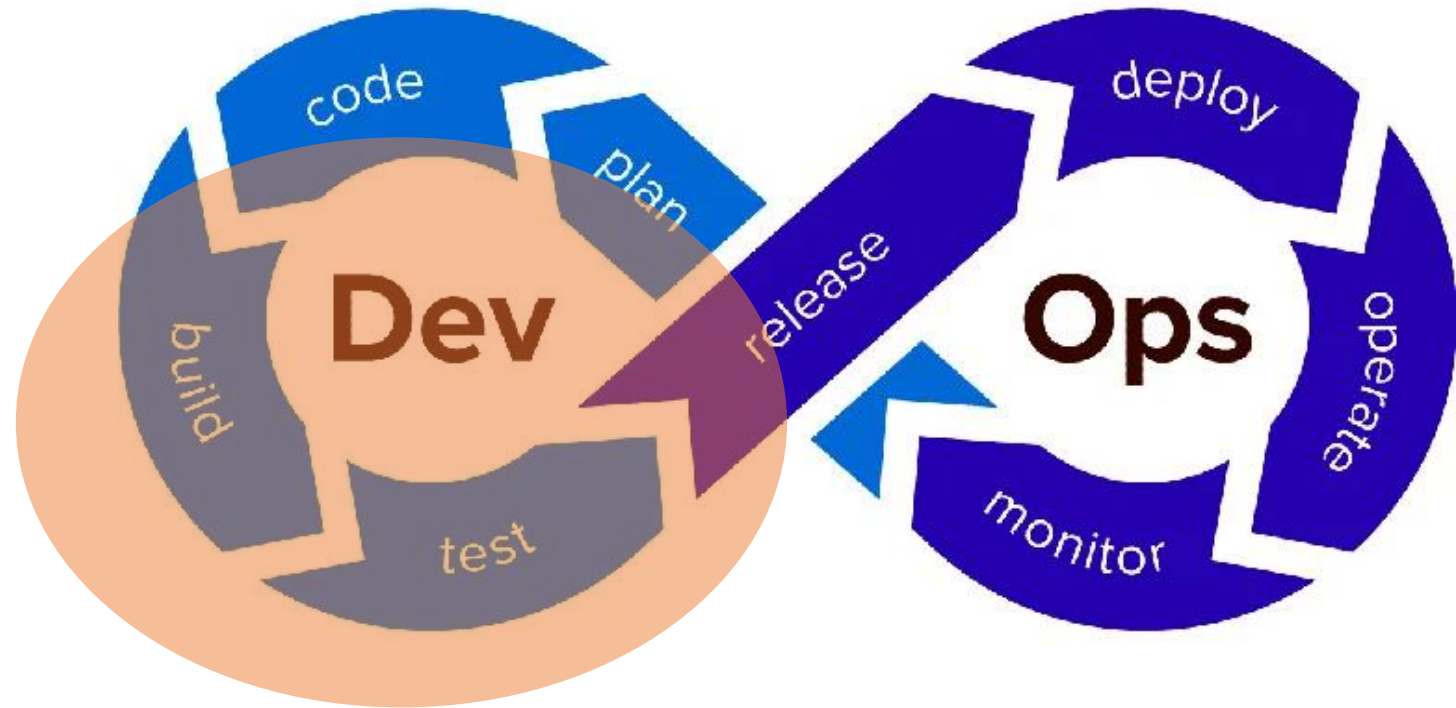
Deployments

- Heroku (dokku)
 - Staging
 - Production
- Kubernetes
 - Staging
 - Production
 - Review Apps

2 - Industrialization of the build

DevOps

Dev to Ops



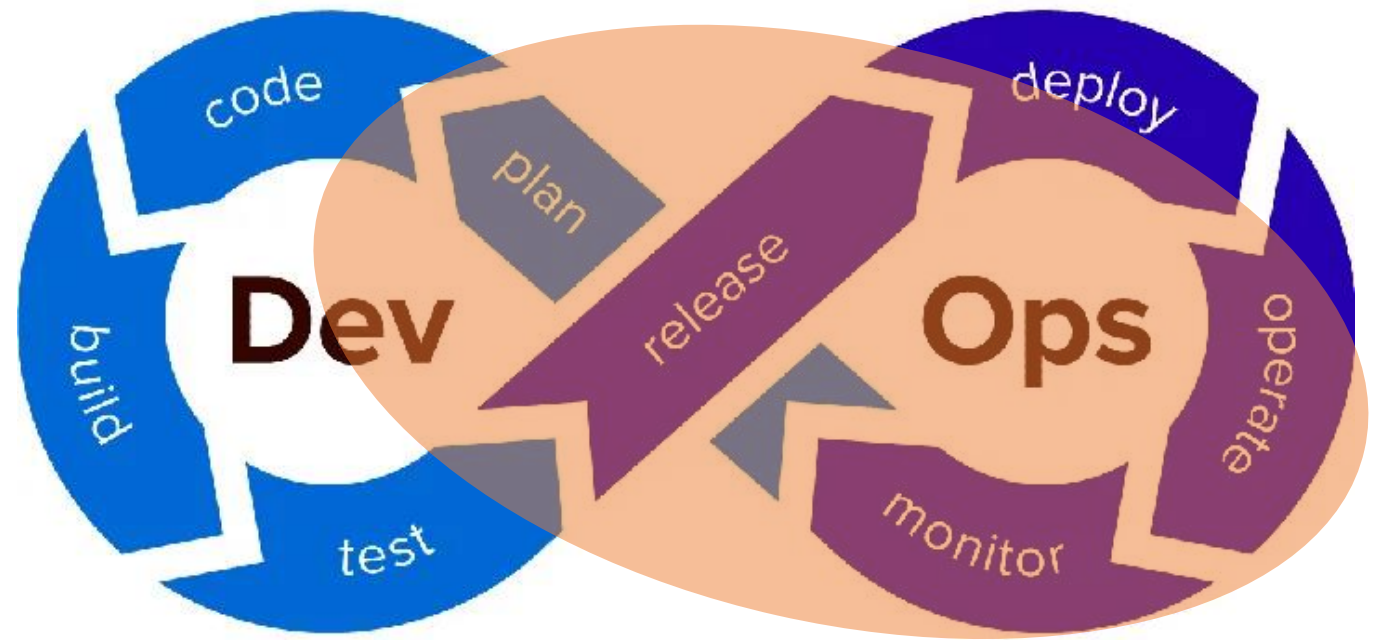
Industrialization

- Continuous Integration Platforms
 - Jenkins
 - Gitlab CI
- Pipelines
 - Phases/Stages
 - Conditional Executions
 - Quality Gates

3 - Configuration management for different environments

DevOps

Dev to Ops



Environments/Features

- Builds for environments
- Configs for environments
- Feature Flags
 - Unleash