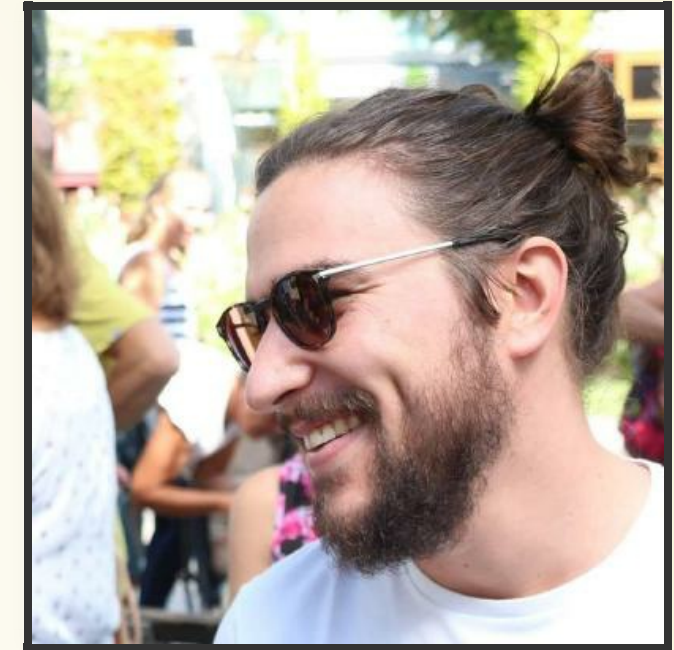


# WAJUG DEVOPS TALK

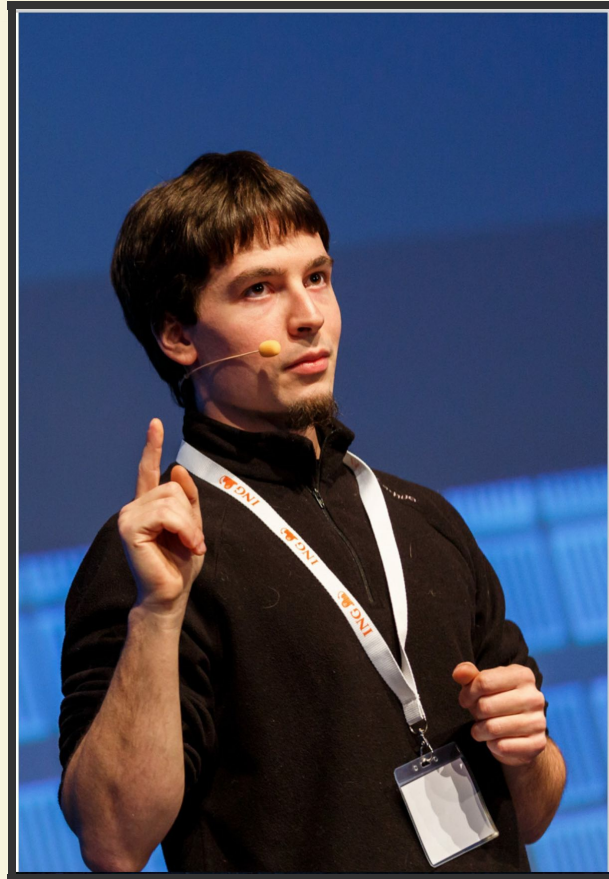
# **SPEAKERS**

# JULIEN GARCIA-GONZALEZ

- DevOps Facilitator @ Wemanity
  - Helping on DevOps mindset adoption @ Lampiris
  - Frictionless mindset
  - Open-source lover
  - Come by to discuss the new trendies tech!
- Contact:
  - Twitter: [@jgsqware](#)
  - Github: [jgsqware](#)
  - Google: [garciagonzalez.julien@gmail.com](mailto:garciagonzalez.julien@gmail.com)



# DAMIEN DUPORTAL



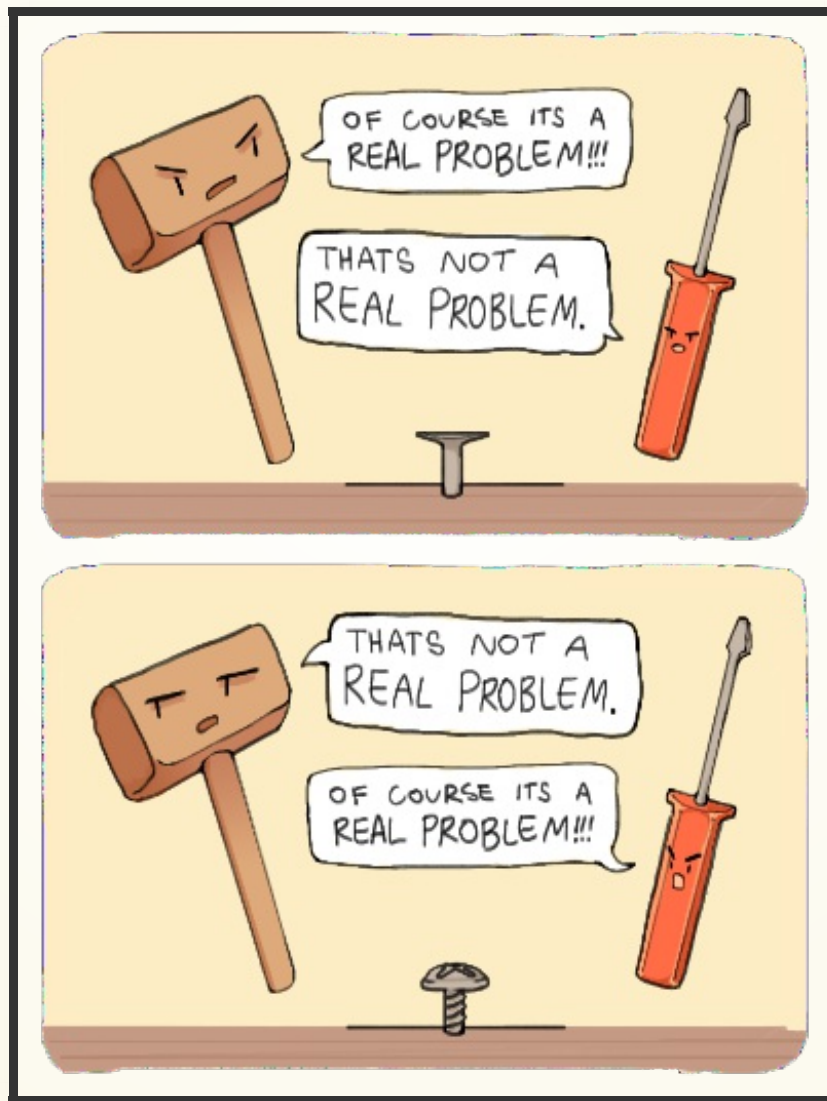
- Training Engineer @ CloudBees
  - Docker & Apple fanboy. Sorry
  - Human stack focused
  - Rock climber
- Contact:
  - Twitter: [@DamienDuportal](#)
  - Github: [dduportal](#)
  - Google: [damien.duportal@gmail.com](mailto:damien.duportal@gmail.com)

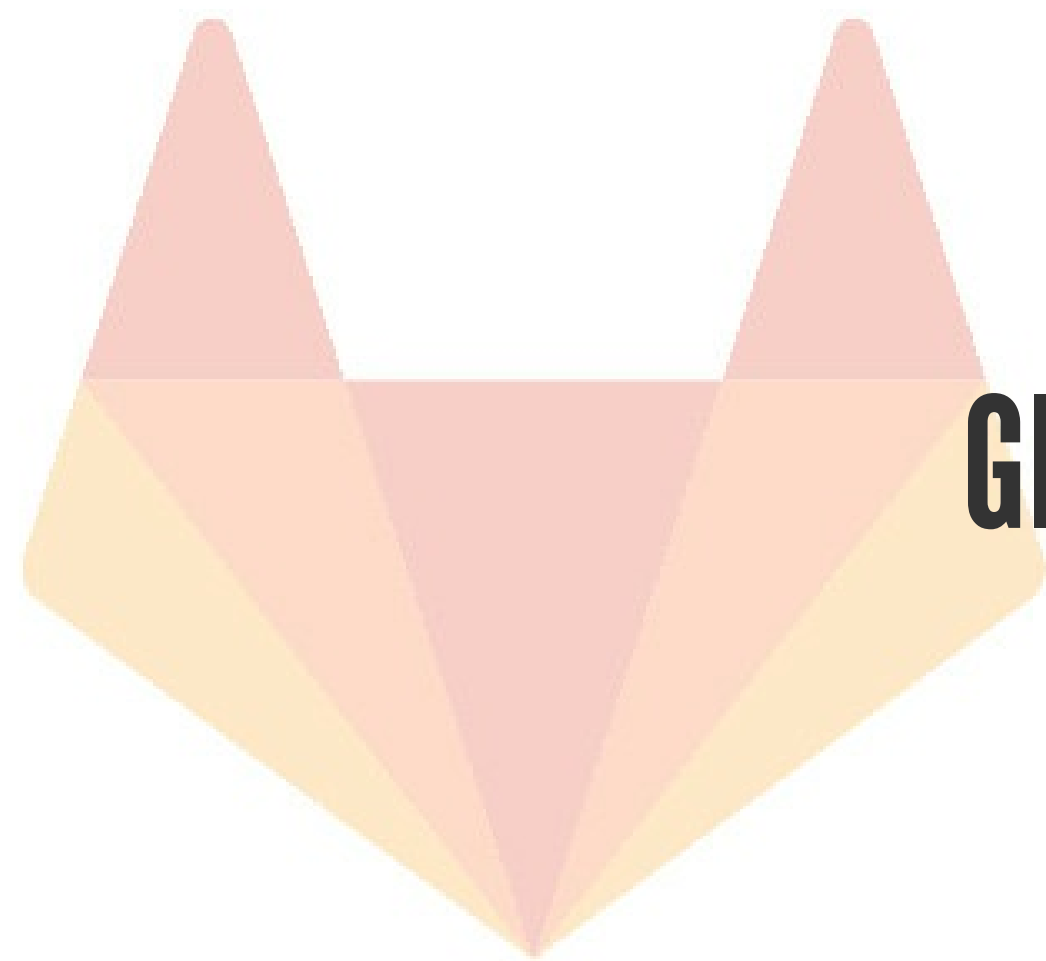
# **MOTIVATIONS OF THIS TALK**

Arguing with an Engineer is  
a lot like wrestling in the  
mud with a pig. After a  
couple of hours, you realize  
the pig likes it.



*When you only have a hammer in your toolbox,  
everything looks like a nail.*





**GITLAB PROJECT**

GitLab

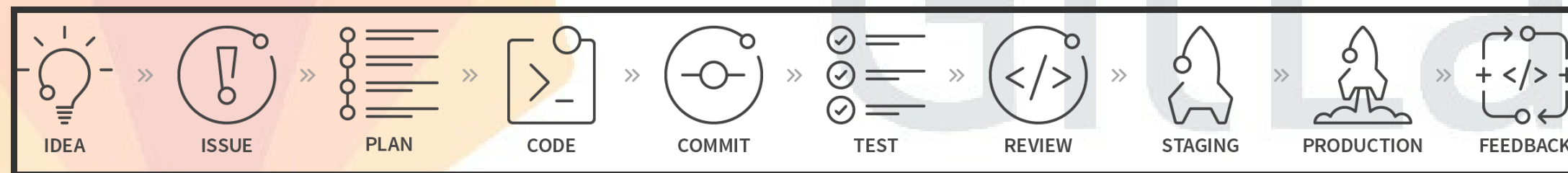


# MEET GITLAB



- Started in 2011
- Built with and for Open Source world
- Remote Community driven
- GitLab is unique:
  - We go from idea to production using one single interface that integrates all the tools we need!

# FROM IDEA TO PRODUCTION





# WHY GITLAB-CI

- Opiniated
- Integrated with your code
- Auto-scaled runners
- Provide a direct overview of your CI/CD pipeline

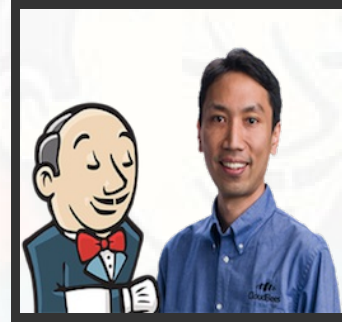
GitLab



# **JENKINS PROJECT**

# Jenkins

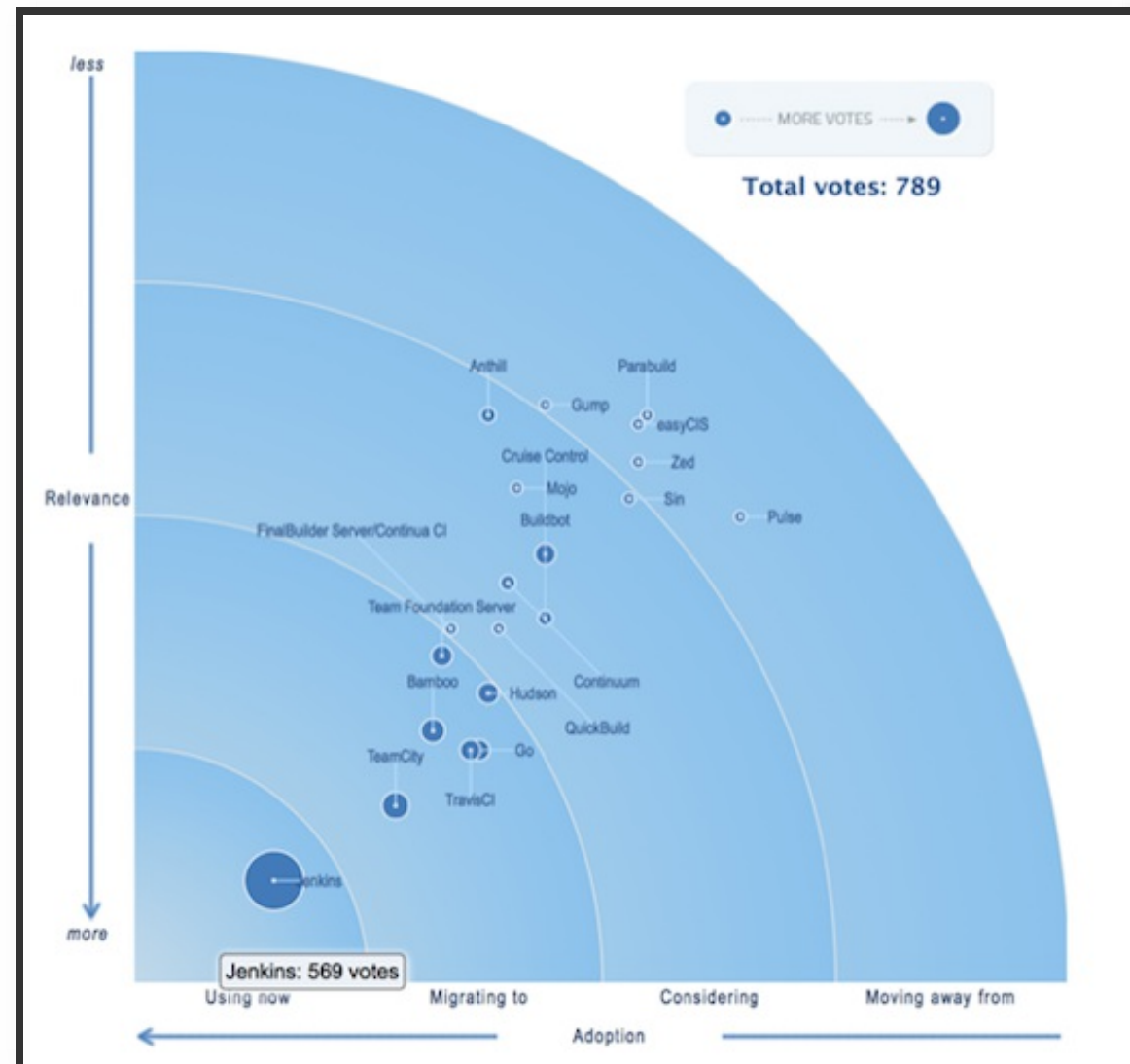
# MEET JENKINS



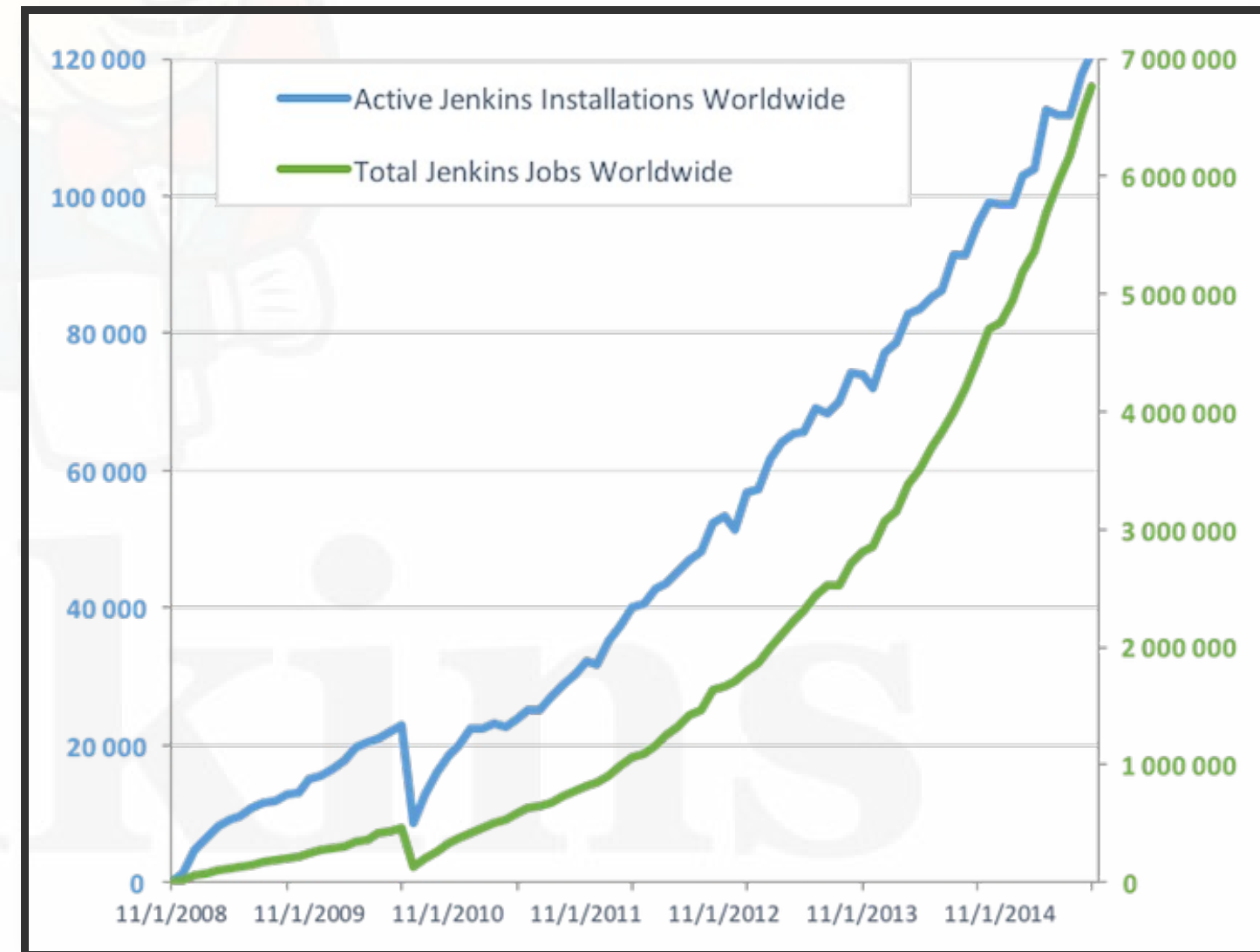
- #1 Continuous Integration and Delivery server
- Created by Kohsuke Kawaguchi 12 years ago (Hudson)
- An independent and active community (<https://jenkins.io>)
- 100,000 active installations
- 300,000 Jenkins servers
- 1,200+ plugins

# JENKINS POPULARITY

<http://www.infoq.com/research/ci-server>

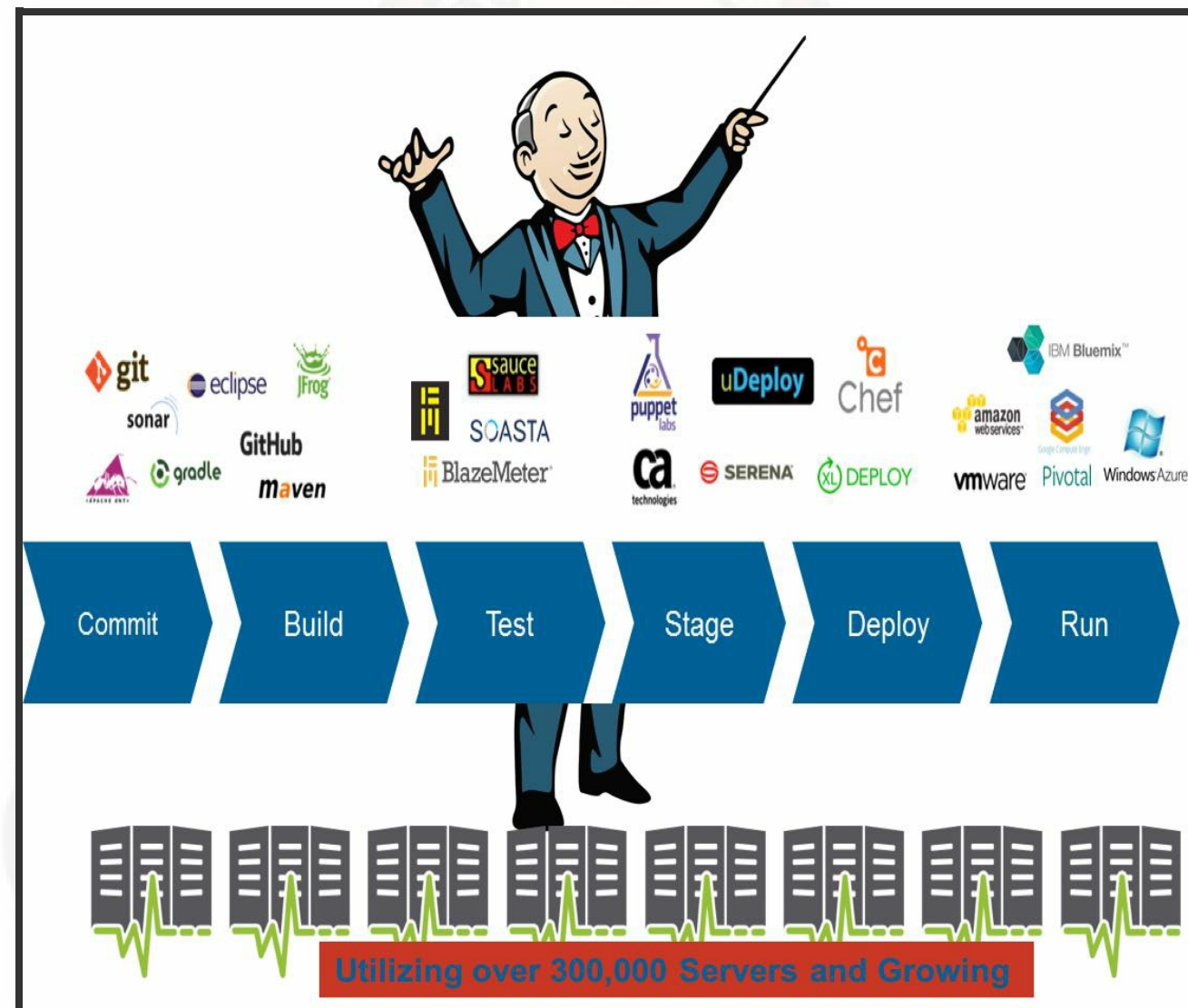


<http://stats.jenkins.io/>





# JENKINS IS THE CD ORCHESTRATOR



# WHY JENKINS 2

- Jenkins 1 is more than 12 years old
- Because Continuous Integration have changed...
  - [jenkins-ci.org](https://jenkins-ci.org) !?
- slave → agent
- "Fire and forget"
- "Modern Web":
  - <https://jenkins.io>
  - <https://jenkins.io/docs>
  - <https://plugins.jenkins.io>

# JENKINS 2 GOALS

- **Target: CI → CD**
- No breaking changes from Jenkins 1
  - Smooth upgrade
  - Plugins compatibility
- First time experience improvement
  - Brand new Wizard
- **Pipeline-as-Code:**
  - Jenkinsfile stored in SCM
  - Groovy DSL: "Code your Pipeline"

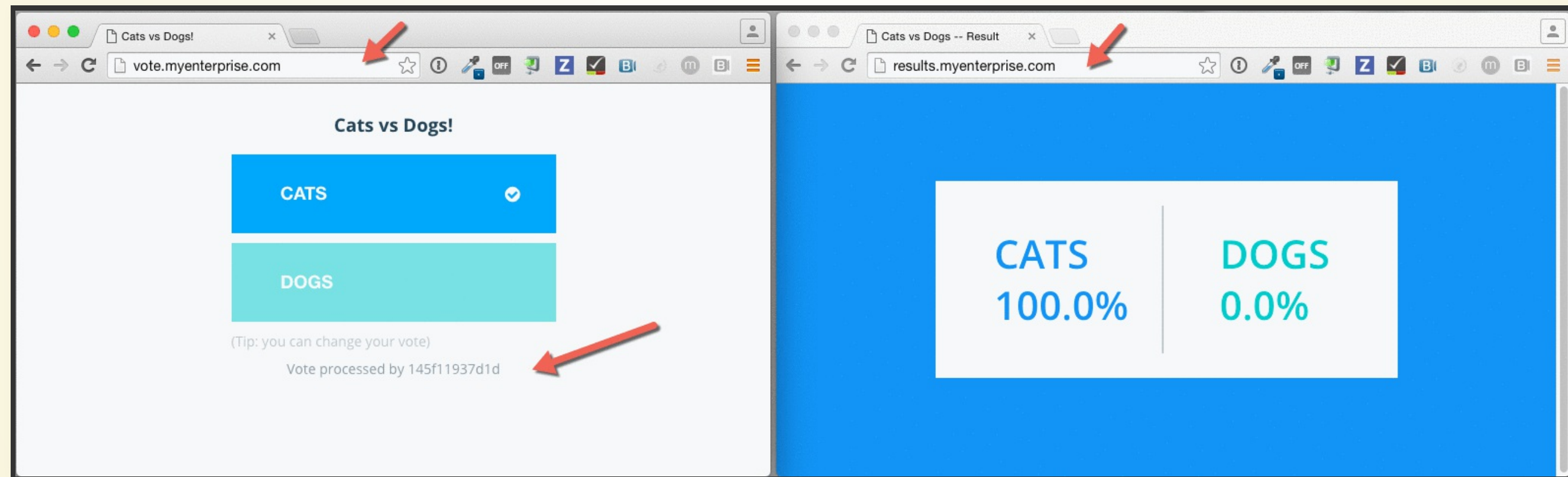
# JENKINS IN 2017

- Declarative Pipeline
  - Still Jenkinsfile
  - Easier
  - Compatible with **Scripted Pipeline**
- BlueOcean
  - Brand new GUI
  - Written in ReactJS
  - Opiniated

# CONTEXT

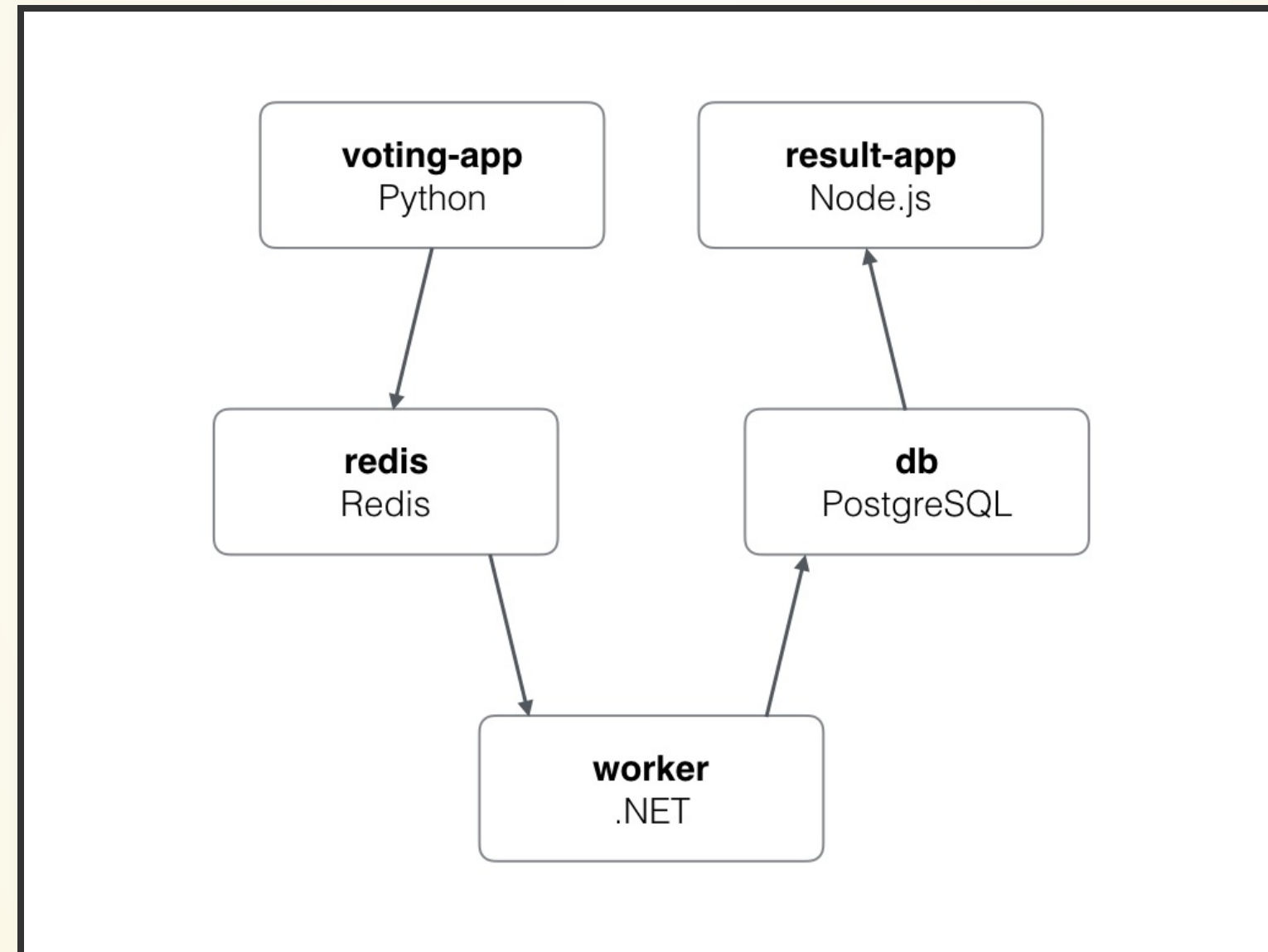
# CONTEXT: EXAMPLE APPLICATION

- Docker Demo Application





# CONTEXT: ARCHITECTURE

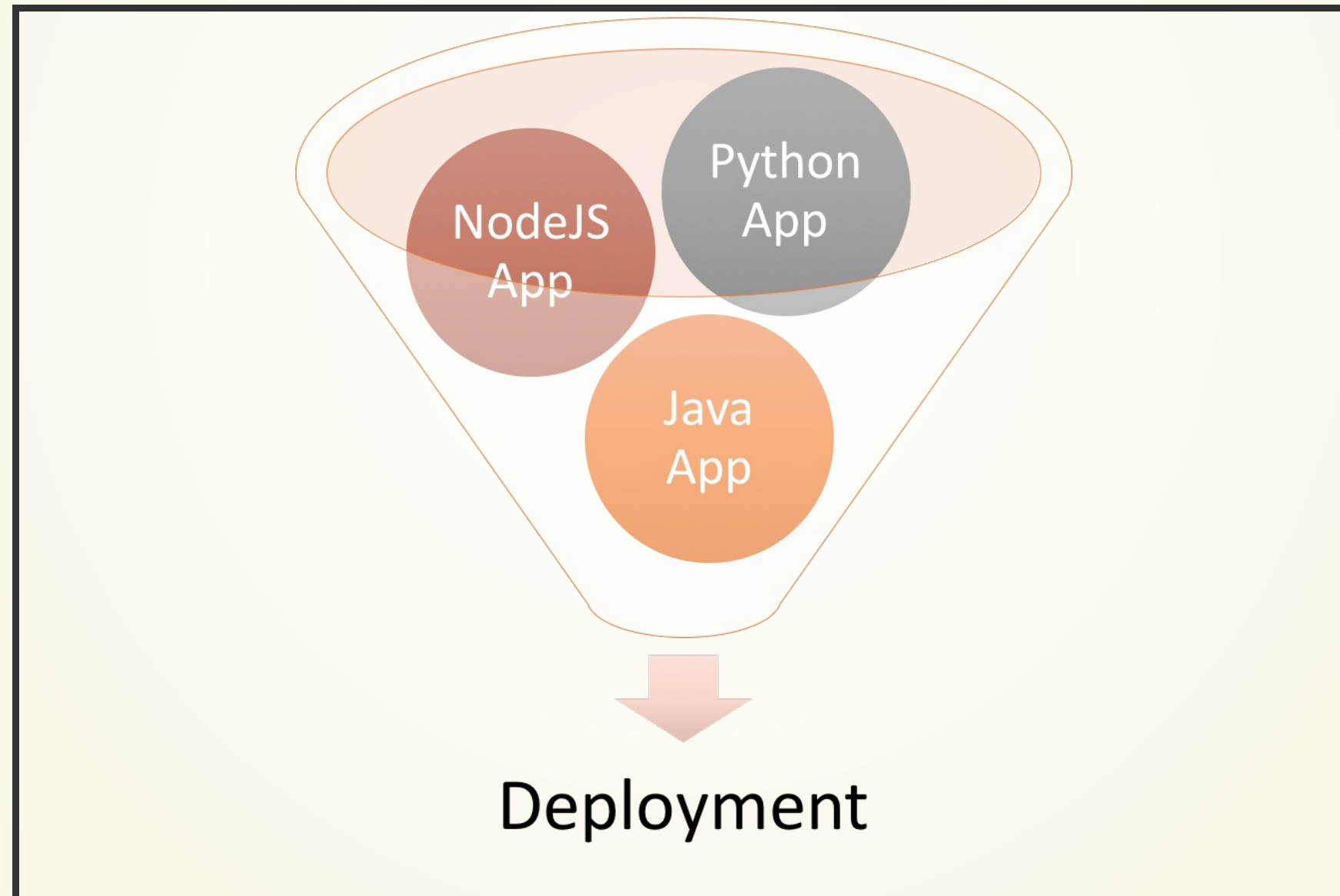


# CONTEXT: GLOBAL ORGANIZATION

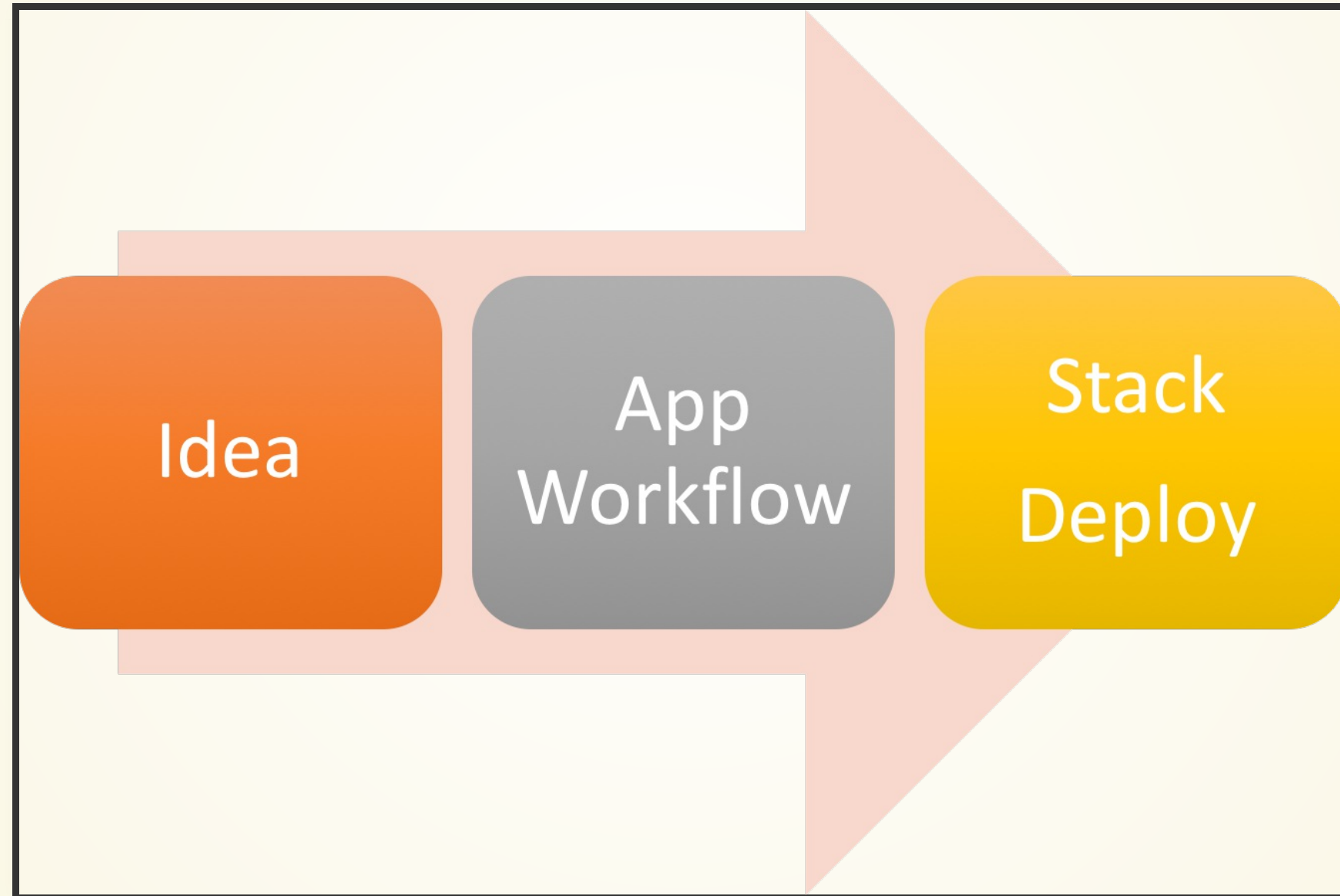
- Each application is owned by 1 team:
  - Python team
  - NodeJS team
  - Java Team
- Database and infrastructure are owned by the Ops team

# CONTEXT: GLOBAL WORKFLOW

- "Software Supply Chain"



# CONTEXT: SINGLE TEAM WORKFLOW



# WORKER APPLICATION

Start with a simple application

# WORKER APPLICATION: VALUE

*Persist the votes*

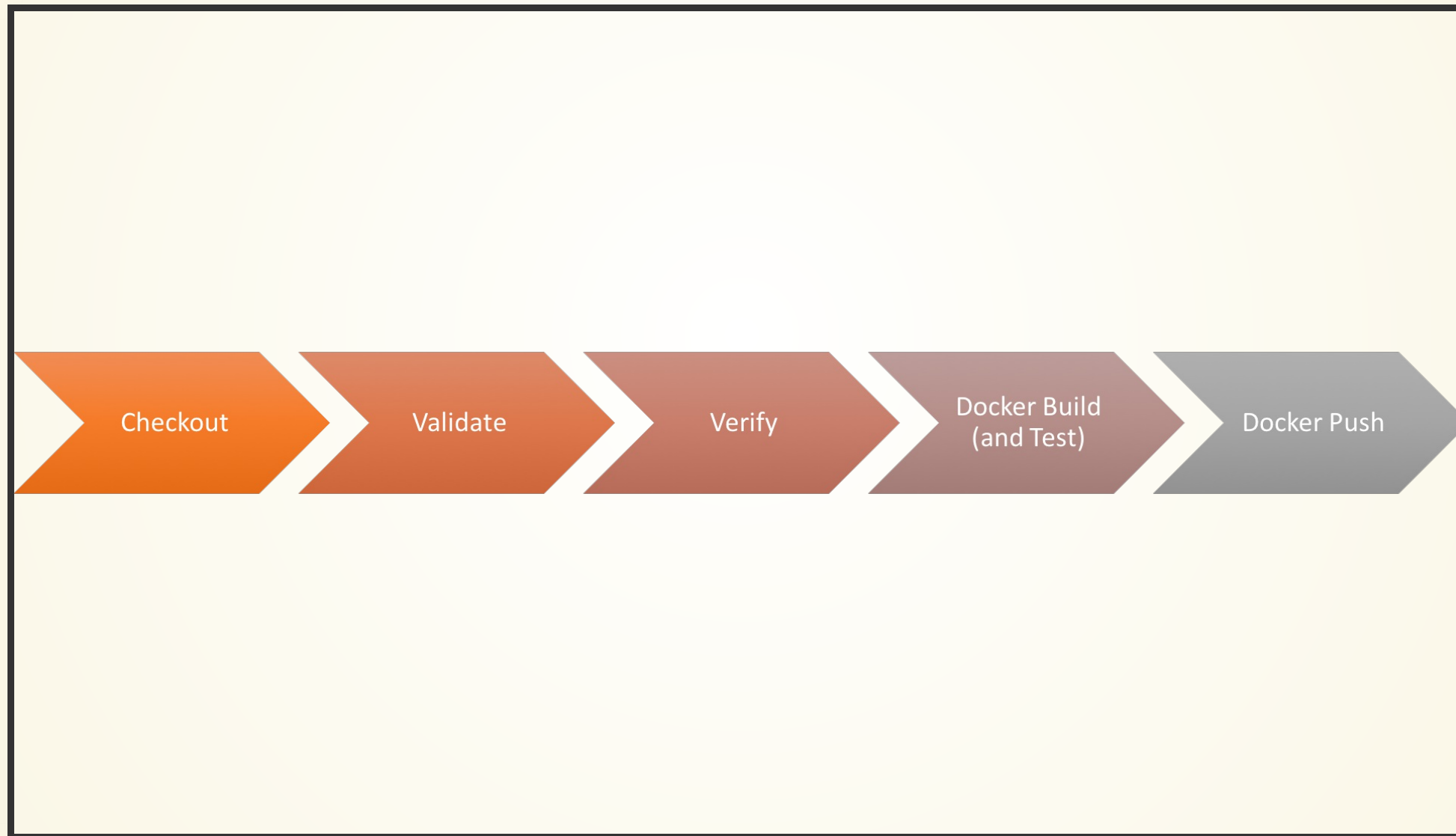
- Unstack votes from the In-Memory Queue (Redis)
- For each vote found, write it in the RDBMS (PostgreSQL)
- No GUI, no user facing, runs in the backend network
- Critical for metrics, but no need for High Availability



# WORKER APPLICATION: TECHNICAL STACK

- Written in Java
  - Needs Java 8
- Maven Build Chain
  - mvn clean install
- Runtime with Docker
  - "Uber-JAR"
  - Stateless
  - No crappy Application Server

# WORKER APPLICATION: WORKFLOW



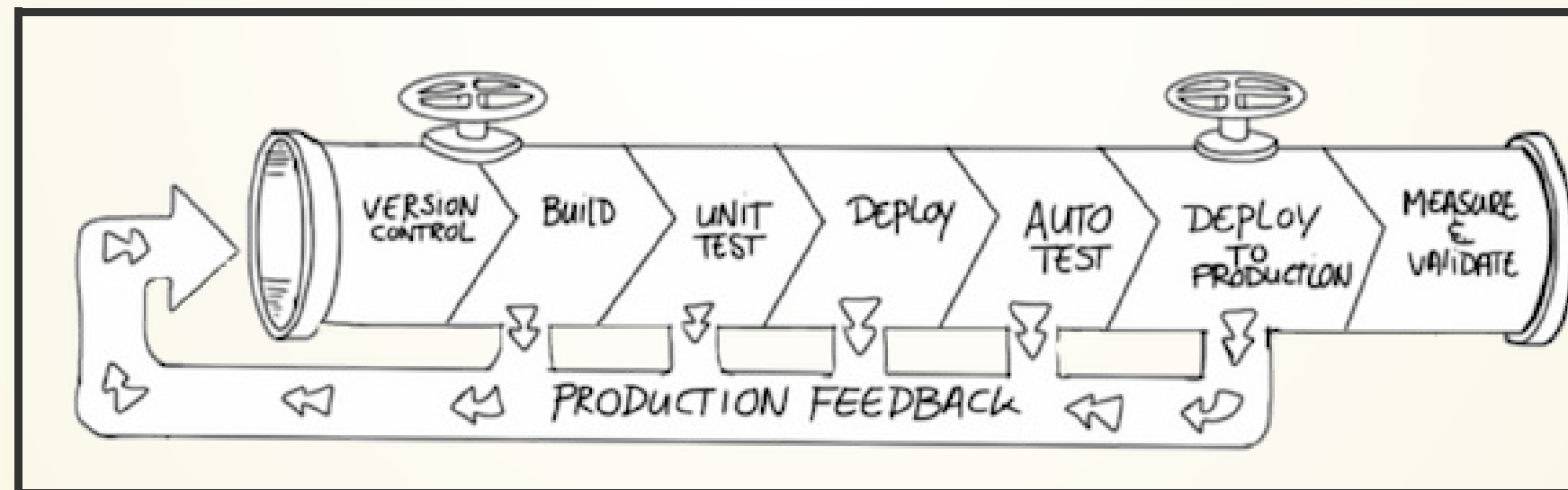
# IMPROVING OUR PIPELINE

# PARALLELIZATION

- Integration Tests and Docker "Bats" Harness
  - Integration Tests are slow
  - No need to run them sequentially
- Improvements examples:
  - More **branches** for JDK compliancy (7-8-9 / Oracle/JDK/IBM)

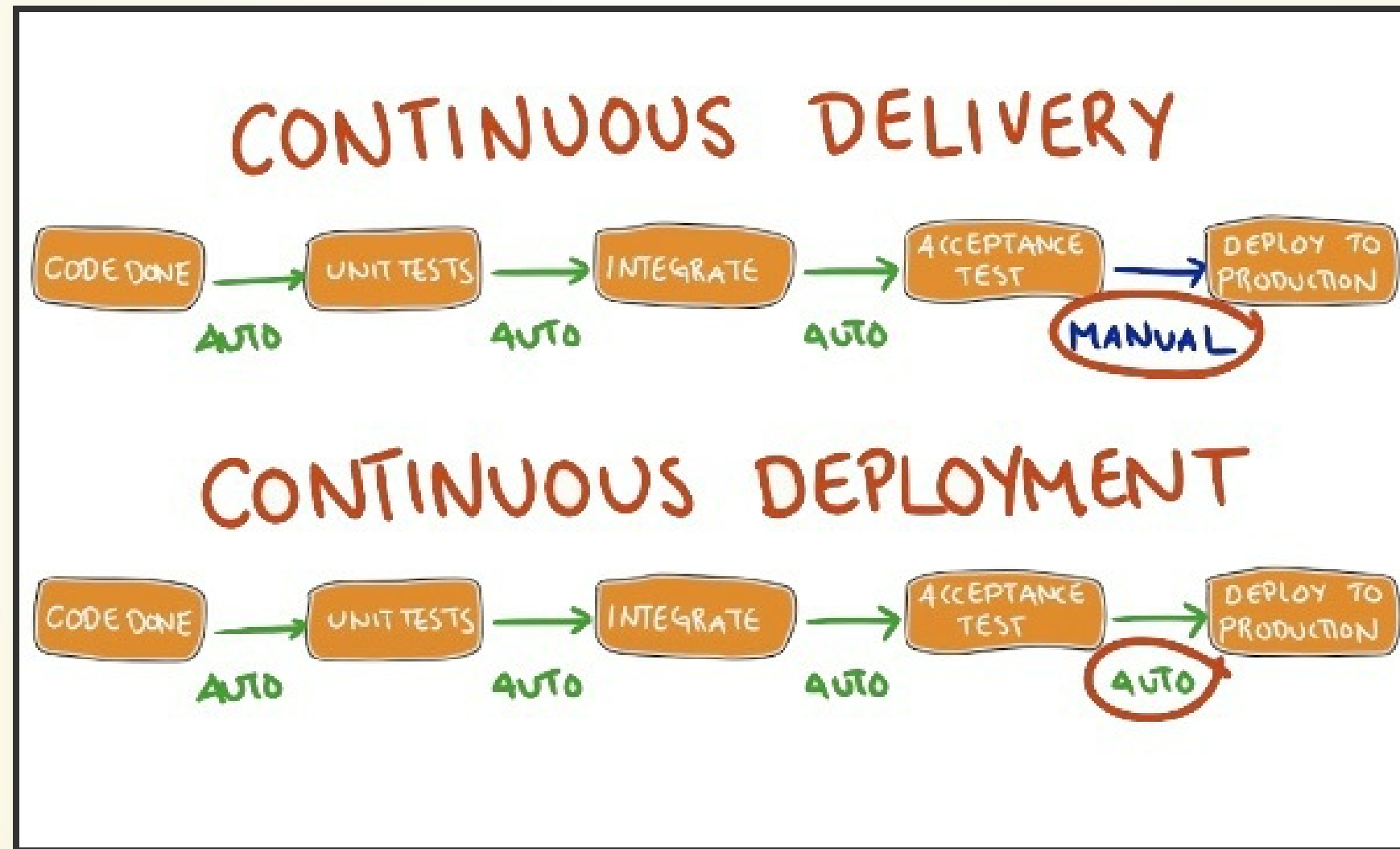
# FROM CI TO CD

- CI: Continuous Integration
- CD: Continuous Delivery



# CONTINUOUS DEPLOYMENT ?

- When the Dev meet the Ops



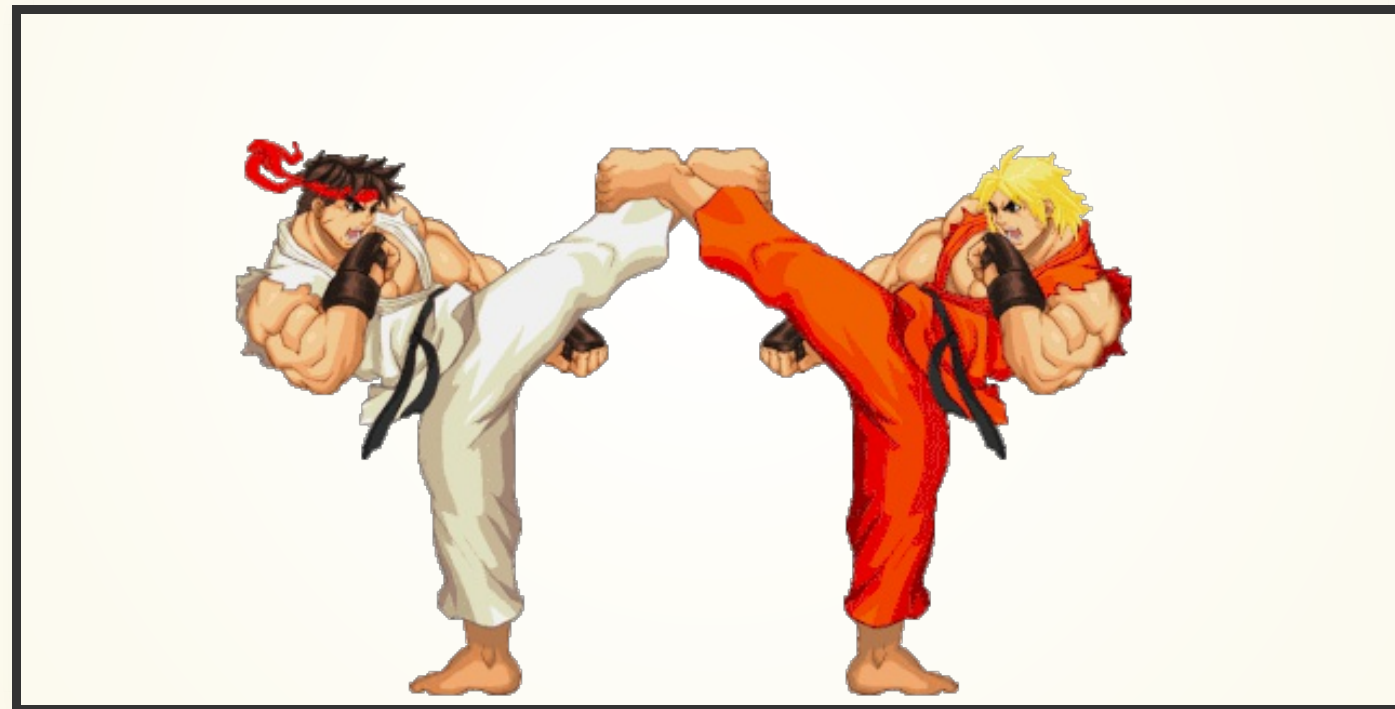


**DEMO**

# JENKINS DEMO

Instructions available at: <https://github.com/oufti-playground/wajug-talk-devops/blob/master/jenkins-demo.md>

# GITLAB CI VS JENKINS



# WHO WINS ?

Vote for you best candidate !

`http - damienduportal.org - port 5000`

# THANK YOU

- WaJUG
- Gitlab
- CloudBees and Jenkins Project
- La Forge
- YOU