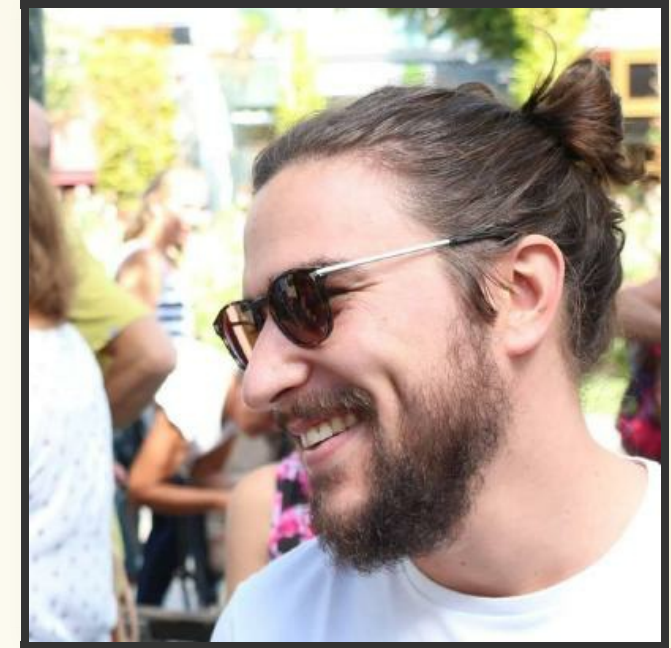


WAJUG DEVOPS TALK

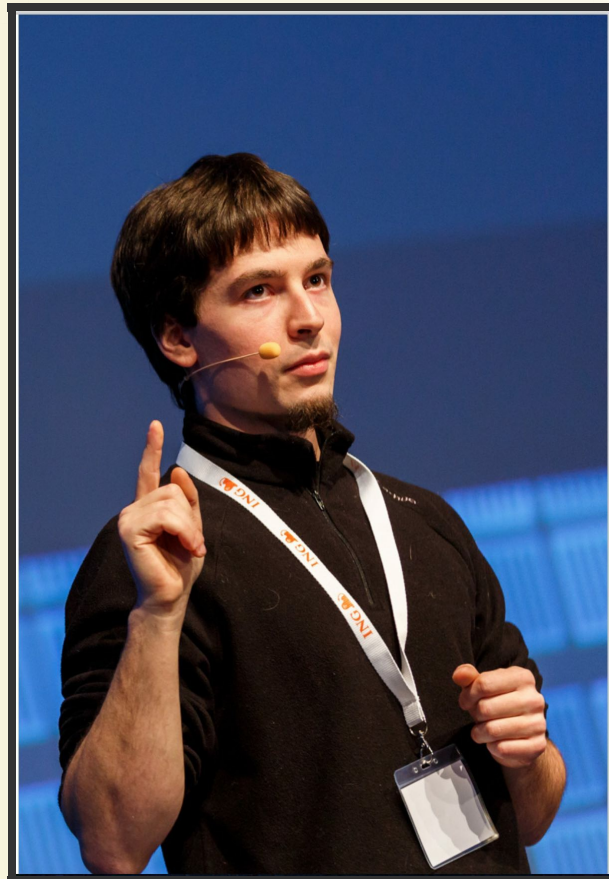
SPEAKERS

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



DAMIEN DUPORTAL

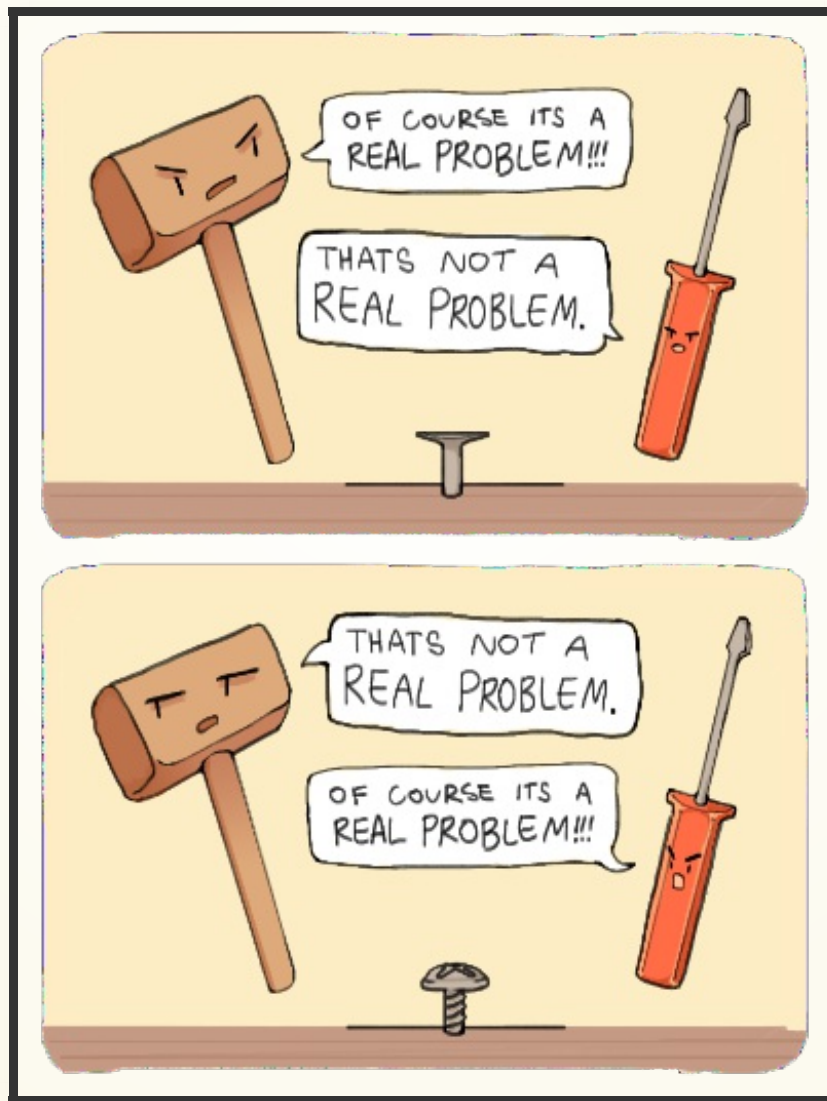


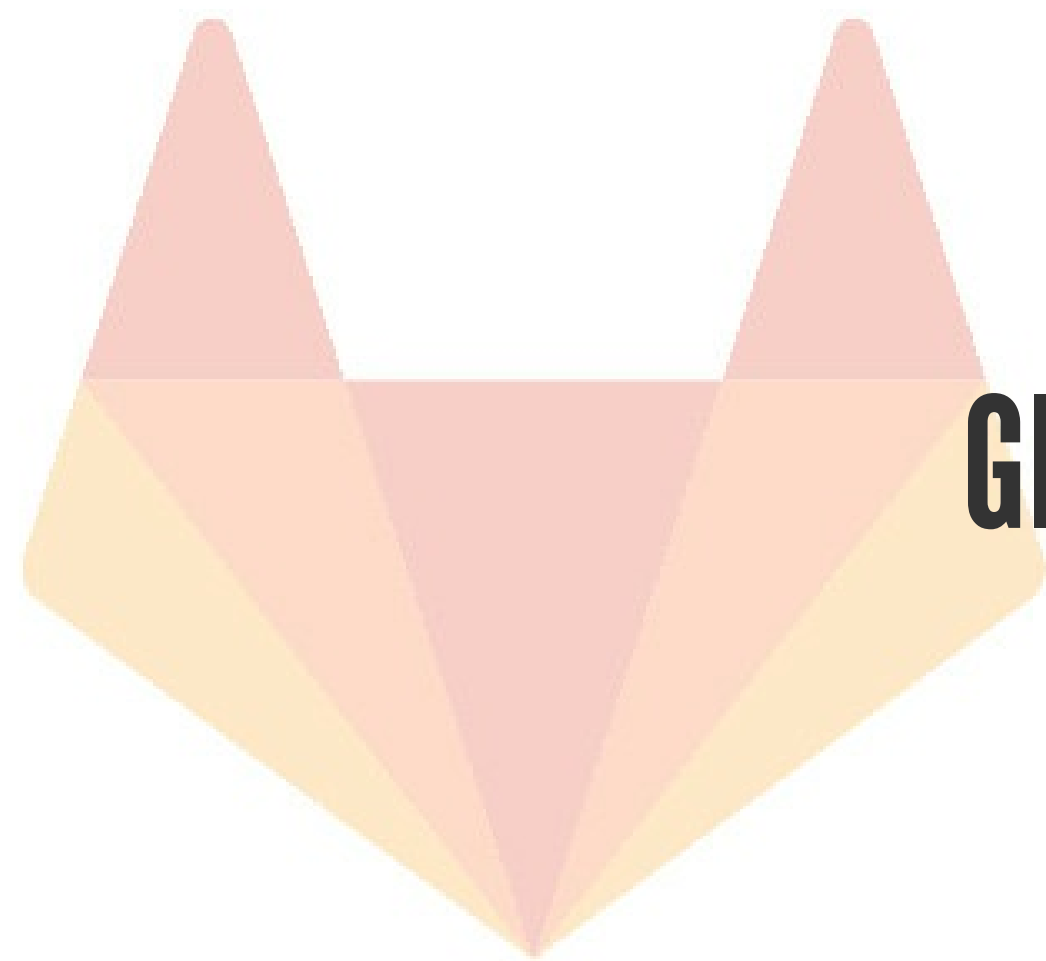
- Training Engineer @ CloudBees
 - Docker & Apple fanboy. Sorry
 - Human stack focused
 - Rock climber
- Contact:
 - Twitter: [@DamienDuportal](#)
 - Github: [dduportal](#)
 - Google: damien.duportal@gmail.com

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

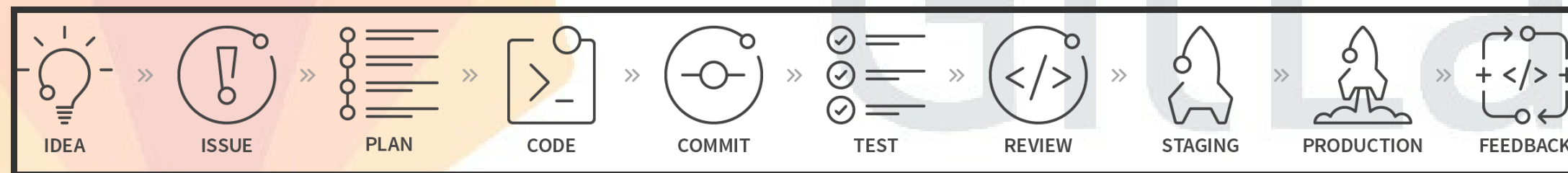
GitLab

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

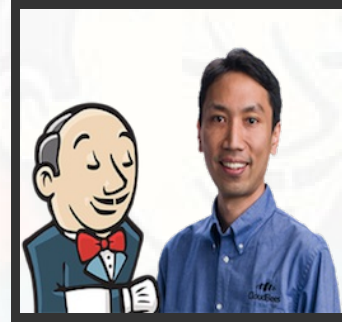
GitLab



JENKINS PROJECT

Jenkins

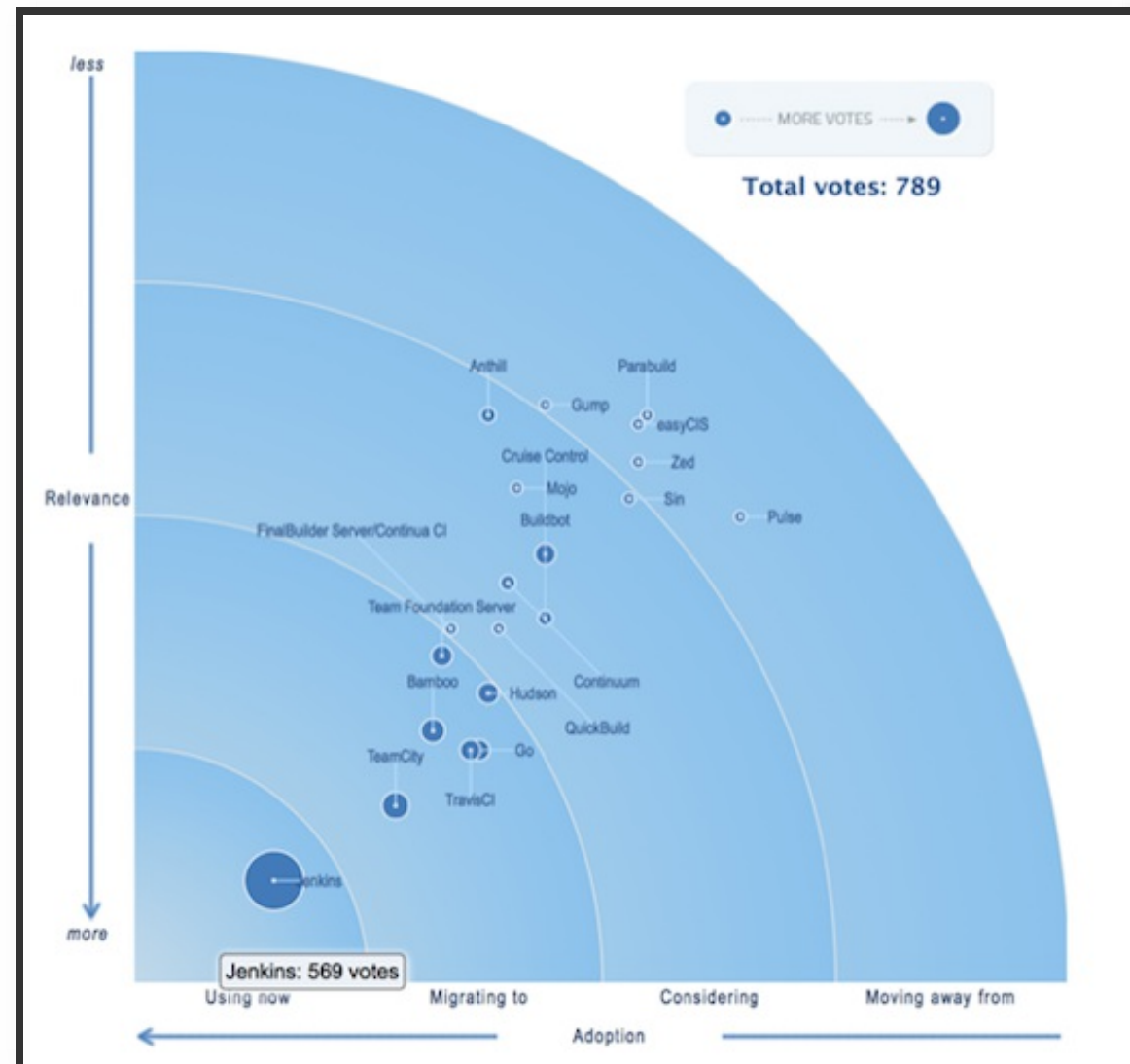
MEET JENKINS



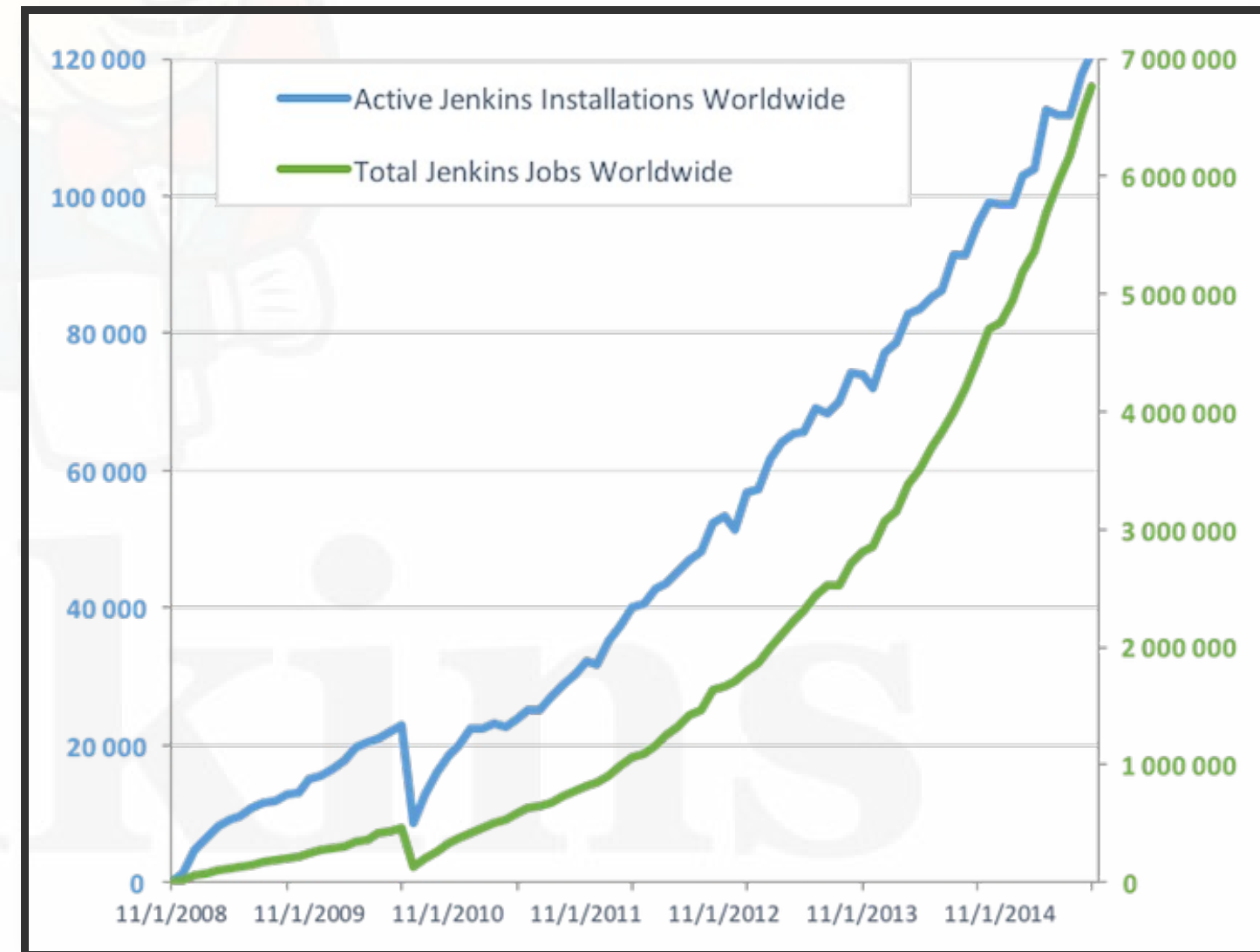
- #1 Continuous Integration and Delivery server
- Created by Kohsuke Kawaguchi 12 years ago (Hudson)
- An independent and active community (<https://jenkins.io>)
- 100,000 active installations
- 300,000 Jenkins servers
- 1,200+ plugins

JENKINS POPULARITY

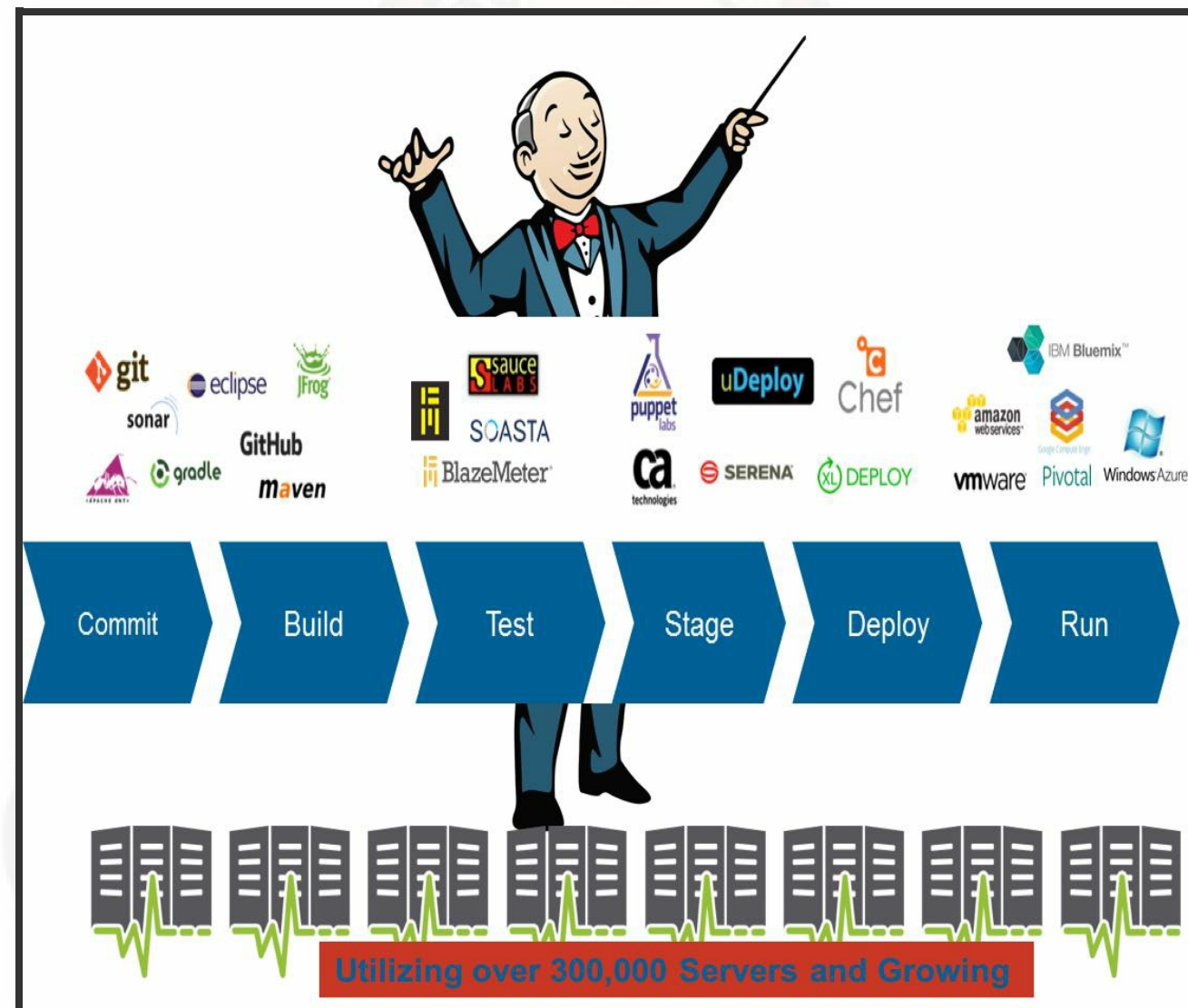
<http://www.infoq.com/research/ci-server>



<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 !?
- 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"

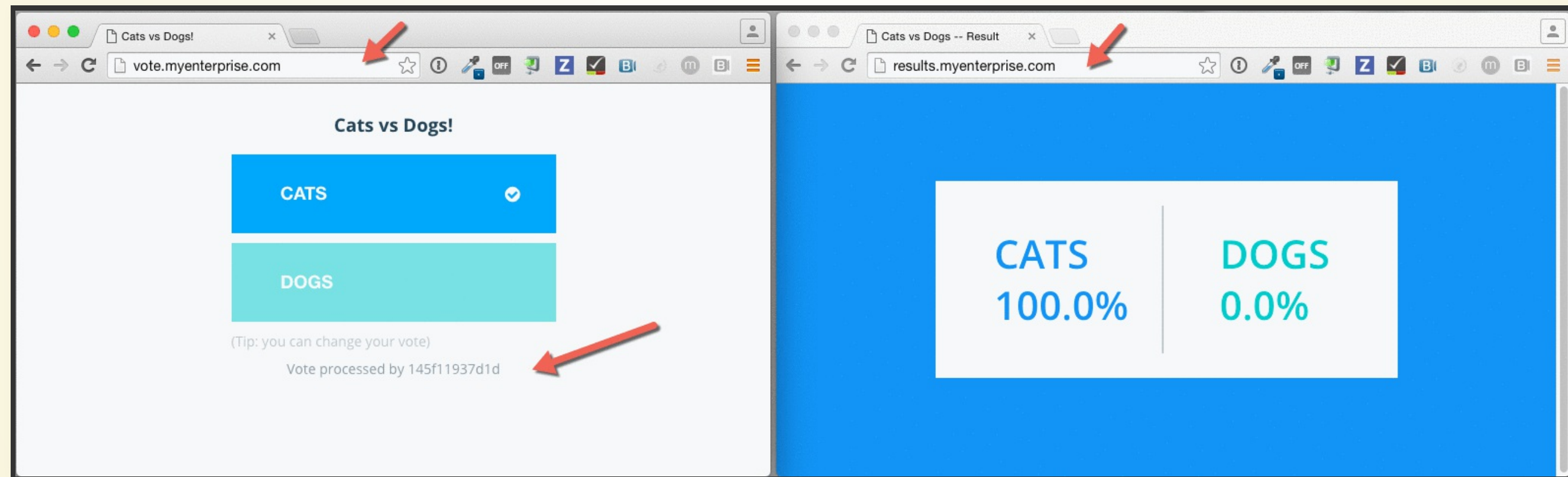
JENKINS IN 2017

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

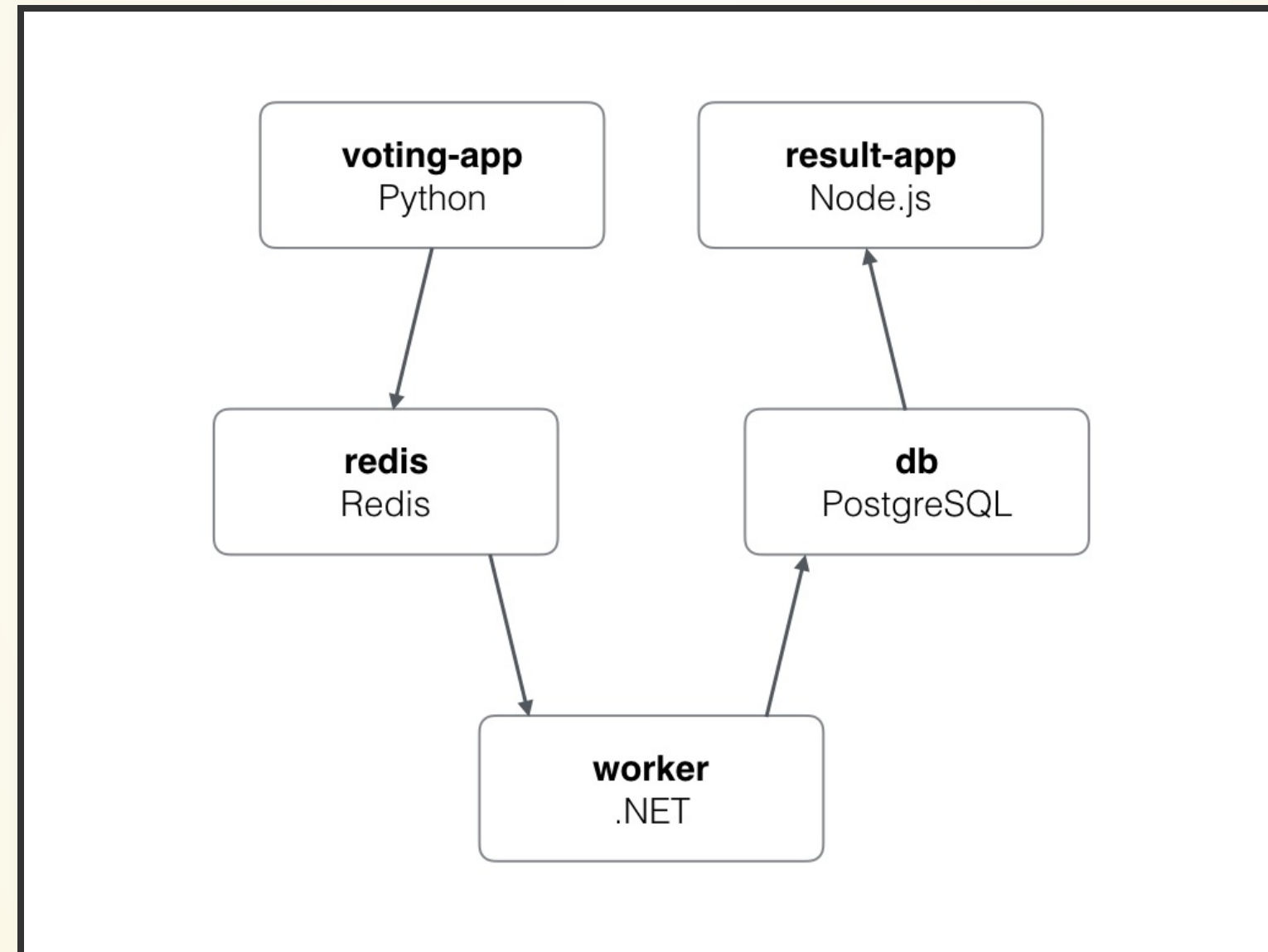
CONTEXT

CONTEXT: EXAMPLE APPLICATION

- Docker Demo Application



CONTEXT: ARCHITECTURE

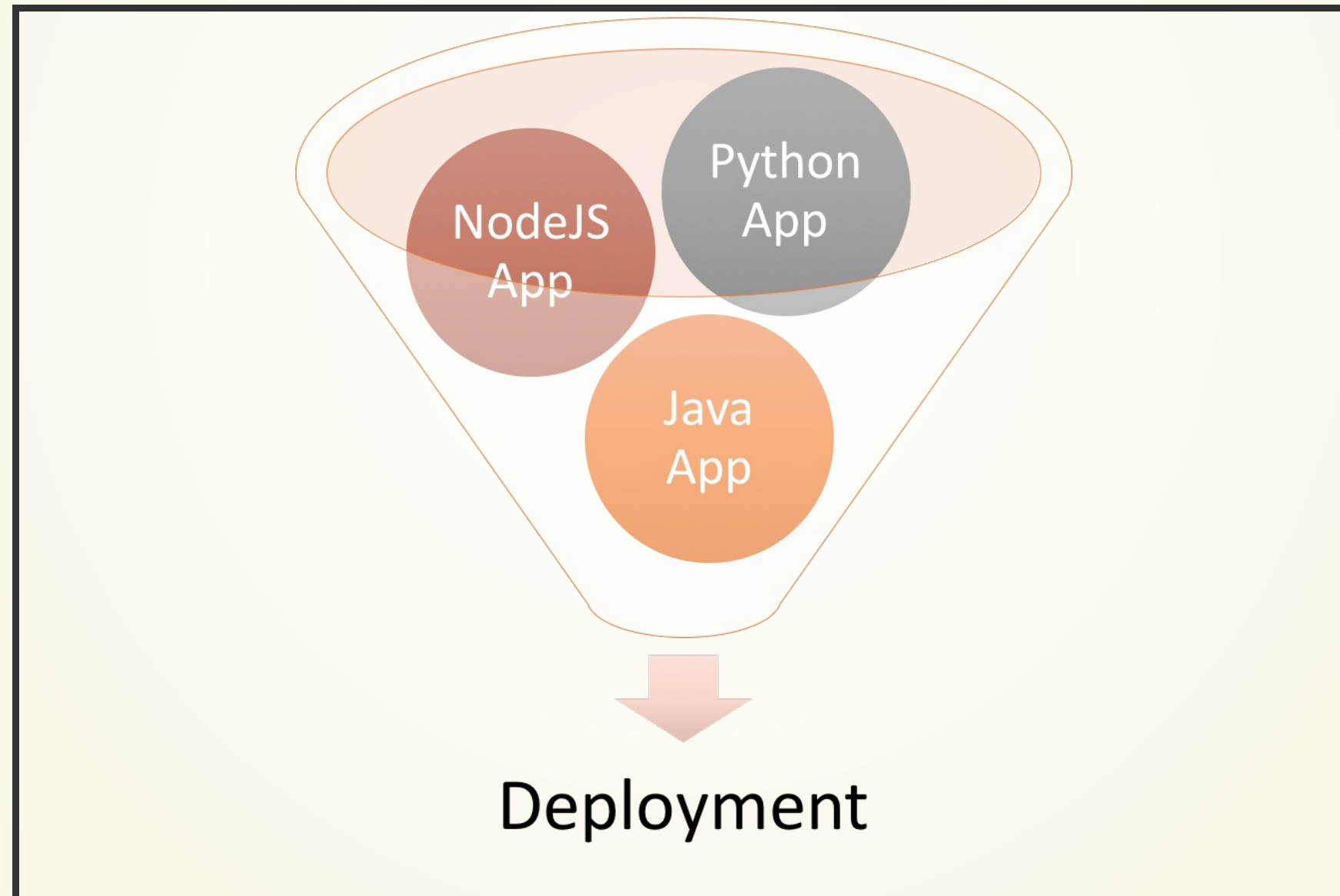


CONTEXT: GLOBAL ORGANIZATION

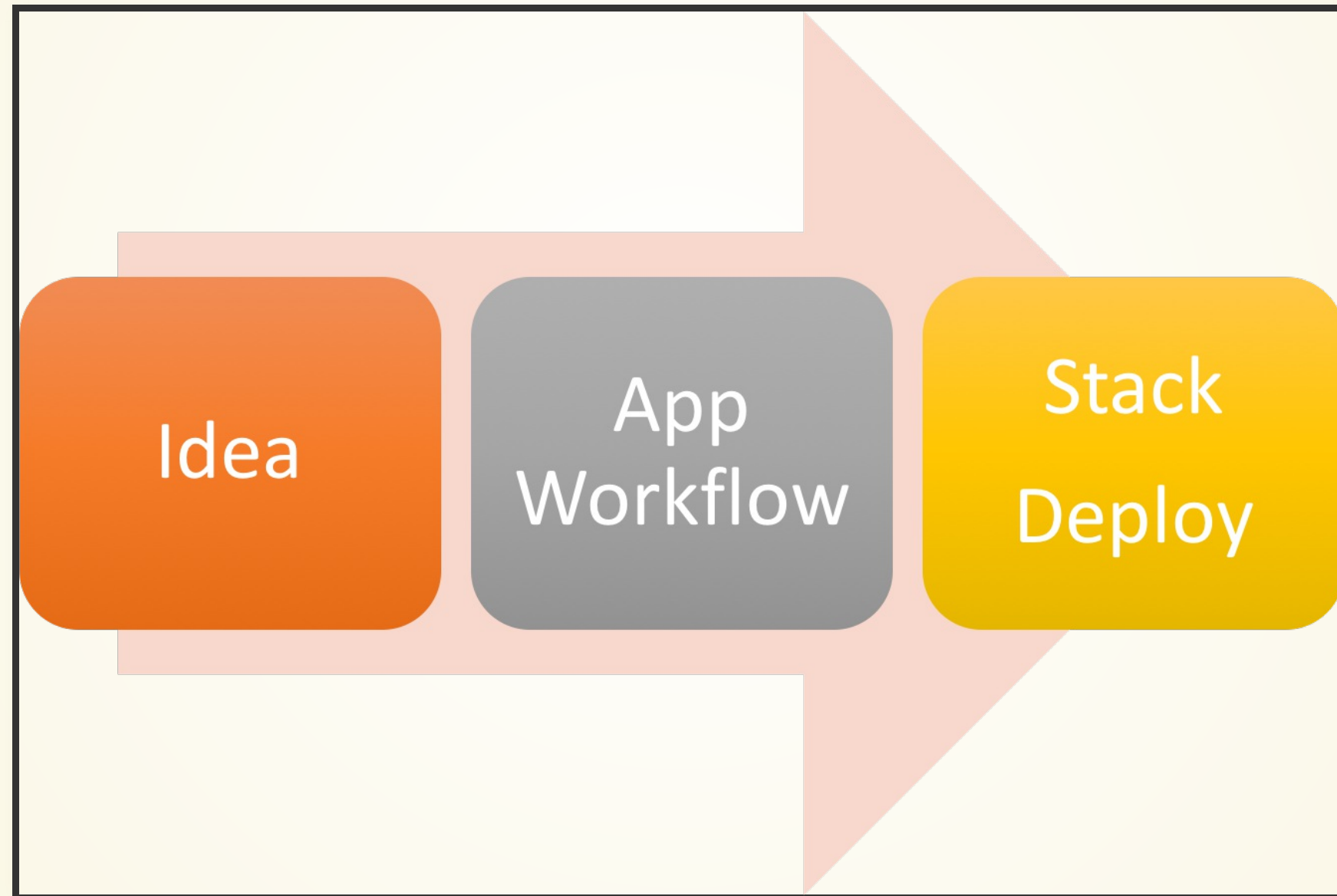
- Each application is owned by 1 team:
 - Python team
 - NodeJS team
 - Java Team
- Database and infrastructure are owned by the Ops team

CONTEXT: GLOBAL WORKFLOW

- "Software Supply Chain"



CONTEXT: SINGLE TEAM WORKFLOW



WORKER APPLICATION

Start with a simple application

WORKER APPLICATION: VALUE

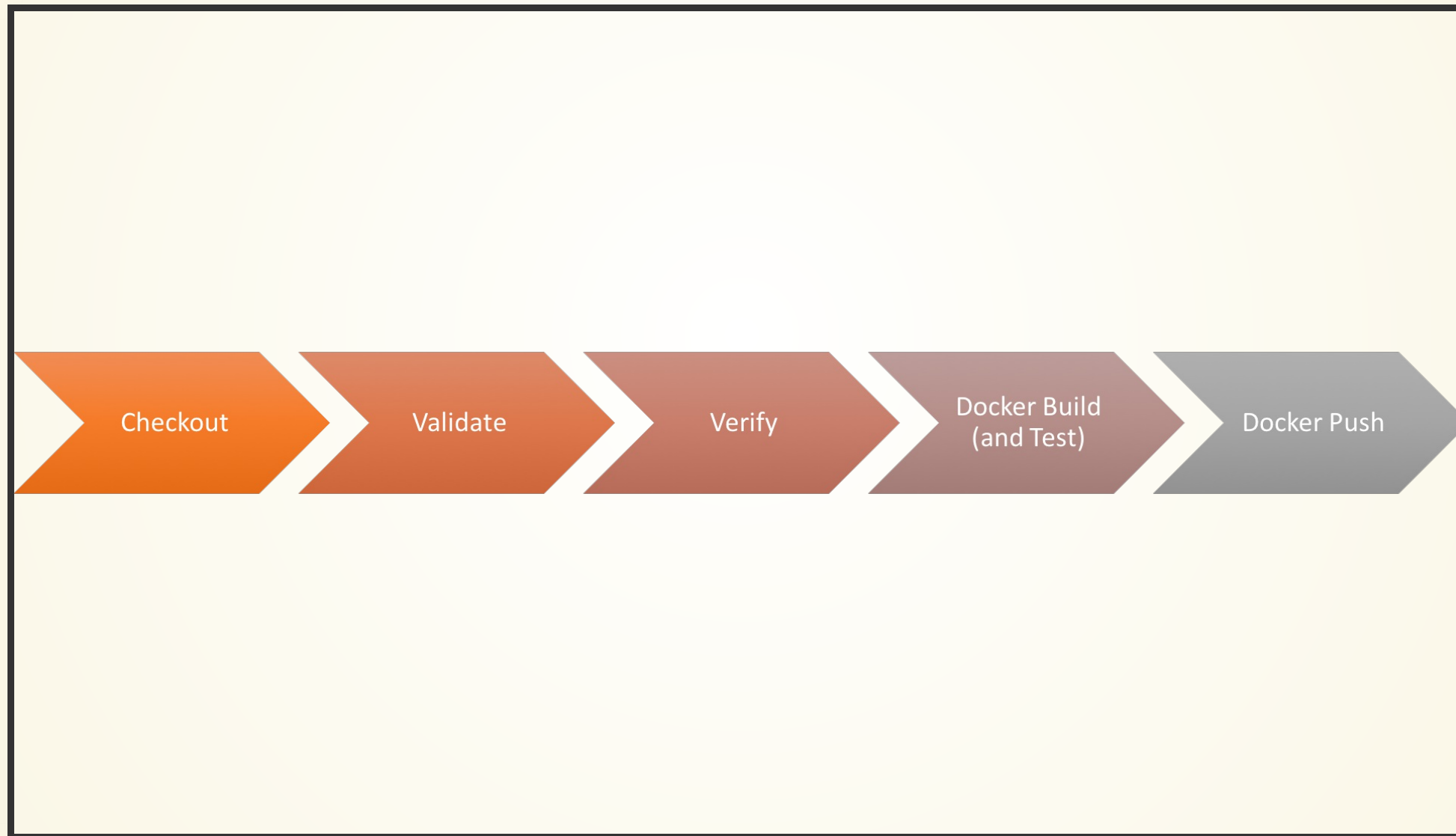
Persist the votes

- 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



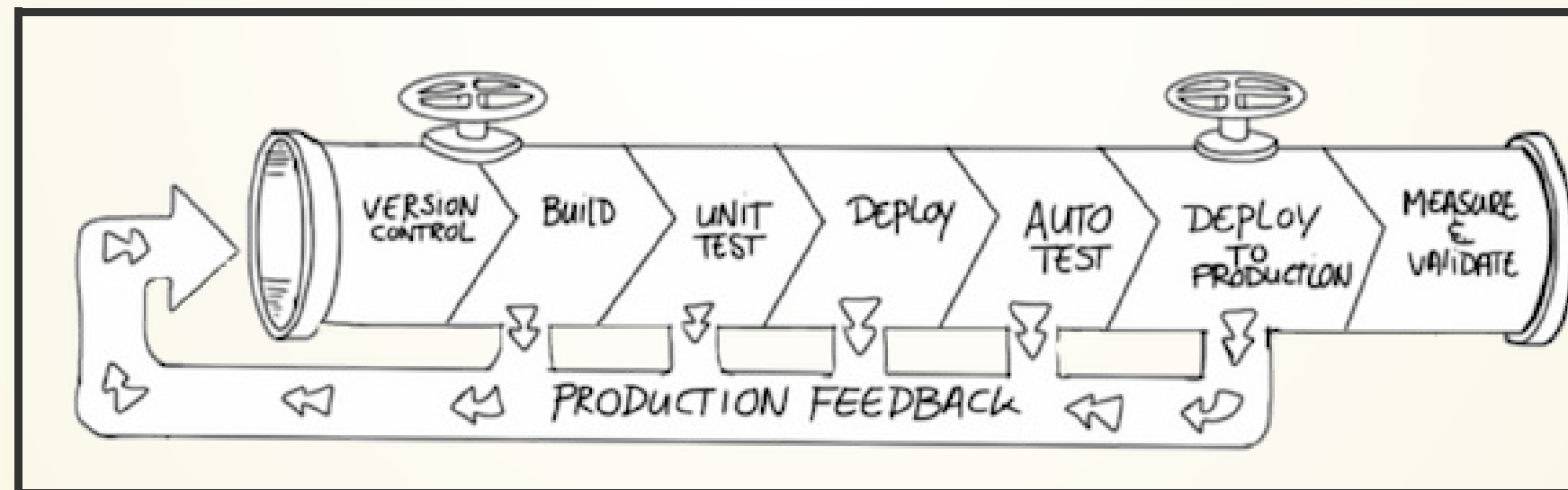
IMPROVING OUR PIPELINE

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)

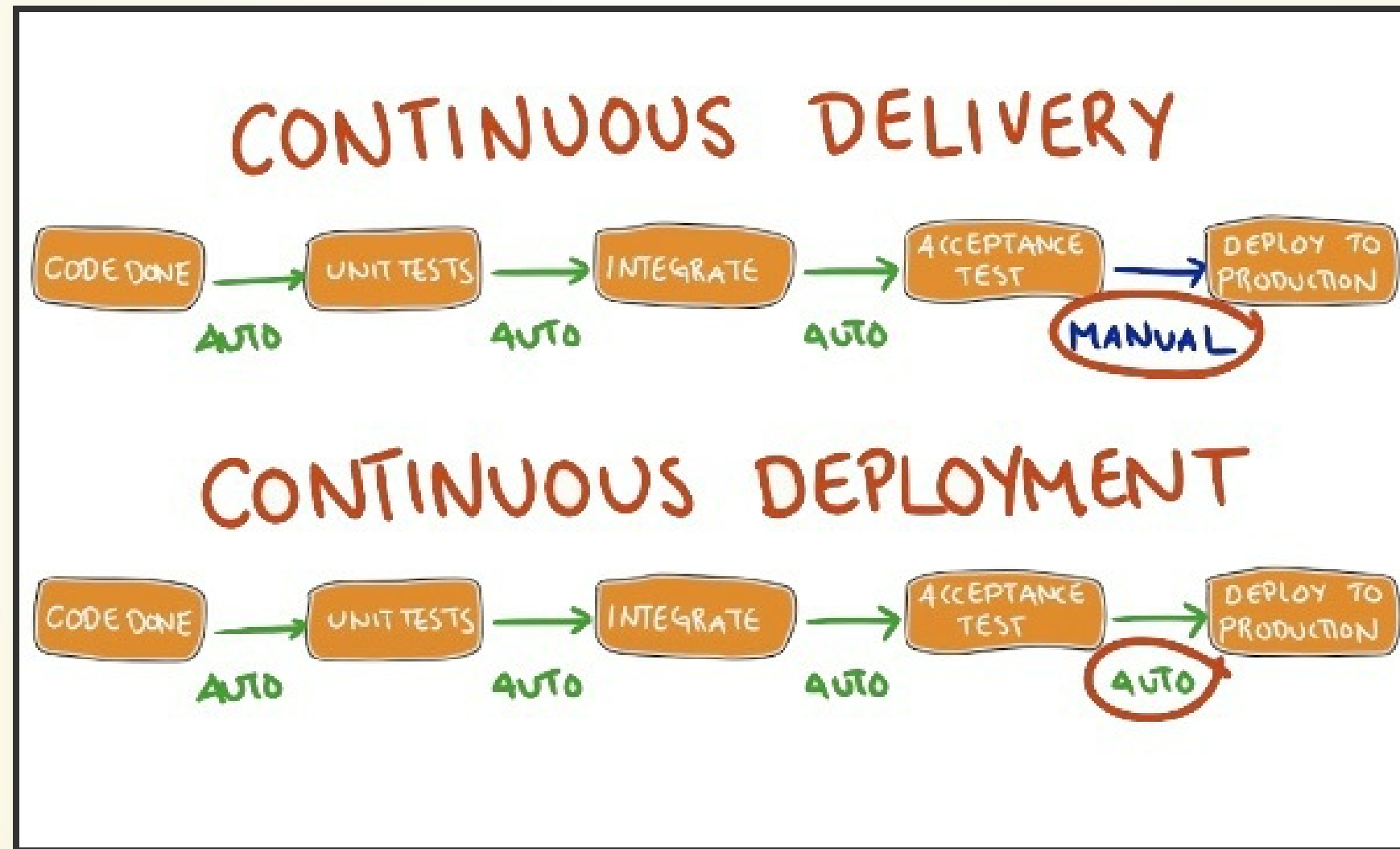
FROM CI TO CD

- CI: Continuous Integration
- CD: Continuous Delivery



CONTINUOUS DEPLOYMENT ?

- When the Dev meet the Ops

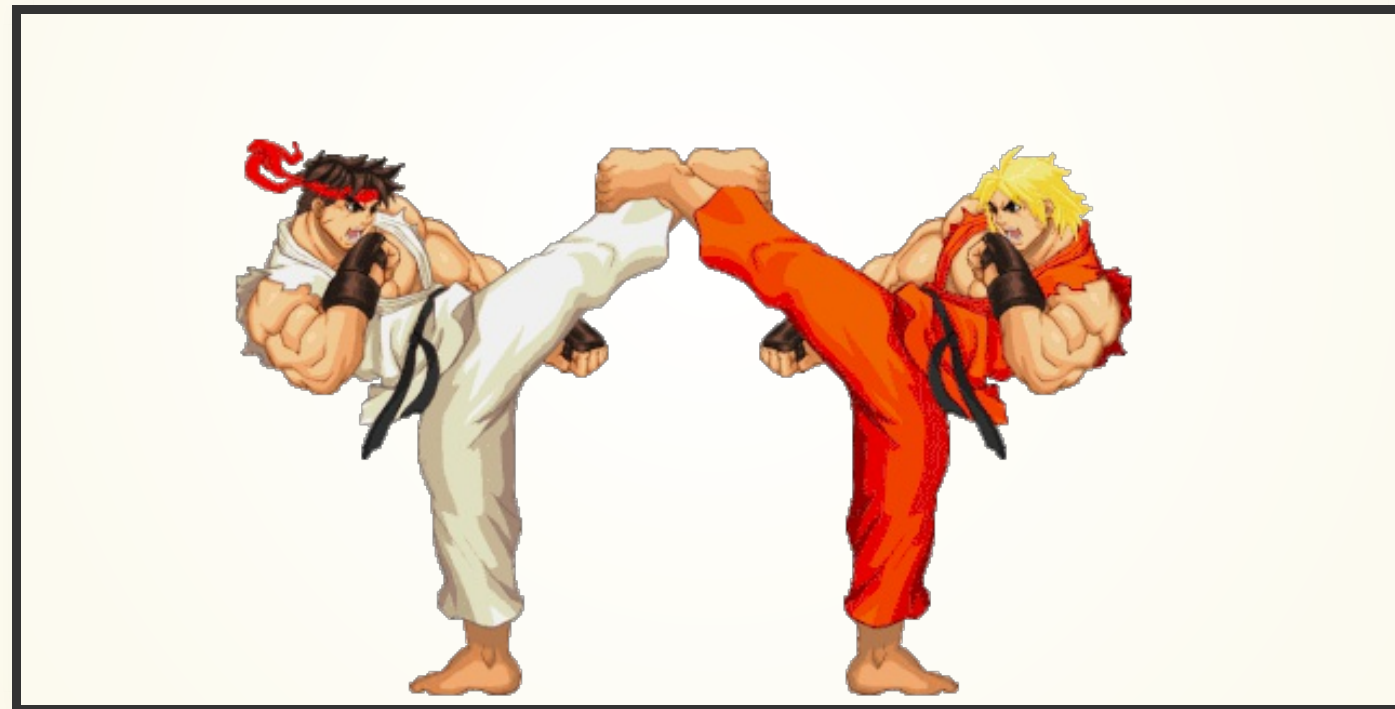


DEMO

JENKINS DEMO

Instructions available at: <https://github.com/WAJUG/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