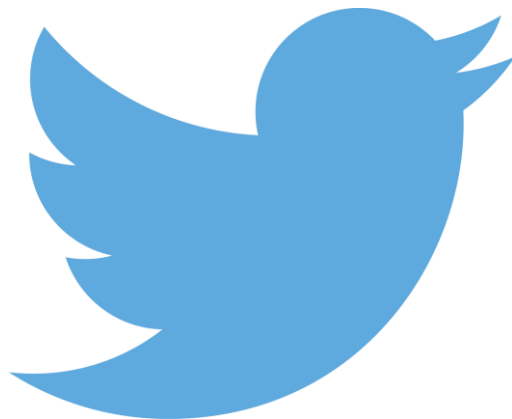




Please let people know what's going on at the conference using the **#jenkinsconf** hashtag

“What are you doing at work when you could have been at the #jenkinsconf!?”





Jenkins State of Union

Kohsuke Kawaguchi

Creator of Jenkins / CTO, CloudBees

@kohsukekawa / kk@kohsuke.org

#jenkinsconf

**Thank you for
being here today**

Thank You To Our Sponsors

Platinum



Gold



Silver



Corporate



Installation



+37%

Last 12 months

Slaves



+54%

Last 12 months

Jobs



+76%

Last 12 months

THE 2014 LEADERBOARD

OF JAVA TOOLS & TECHNOLOGIES



82.5%
JUnit*

TOP TESTING
FRAMEWORK
USED BY
DEVELOPERS



70%
Jenkins°

MOST USED CI SERVER
IN THE INDUSTRY

64%
Maven

MOST USED
BUILD TOOL
IN JAVA

64%
Nexus°

THE MAIN
REPOSITORY
USED BY
DEVELOPERS

67.5%
Hibernate*°

THE TOP
ORM
FRAMEWORK
USED

65% Java 7
THE INDUSTRY LEADER FOR
SE DEVELOPMENT

56%
MongoDB°
THE NOSQL
TECHNOLOGY OF CHOICE

69% Git*
#1 VERSION CONTROL
TECHNOLOGY OUT THERE

55%
FindBugs*°
MOST-USED STATIC
CODE ANALYSIS TOOL

50%
Tomcat°
THE MOST POPULAR
APPLICATION SERVER

49%
Java EE 6°
FOUND IN THE MOST
ENTERPRISES

48%
Eclipse
THE IDE USED MORE
THAN ANY OTHER

40% **Spring MVC*°**
MOST COMMONLY USED WEB FRAMEWORK

32% **MySQL°**
THE MOST POPULAR SQL TECHNOLOGY

* Multiple selections possible

° Normalized to exclude non-user base

Sample population of 2164 Java professionals, sample error 2.1%

AWS re:Invent

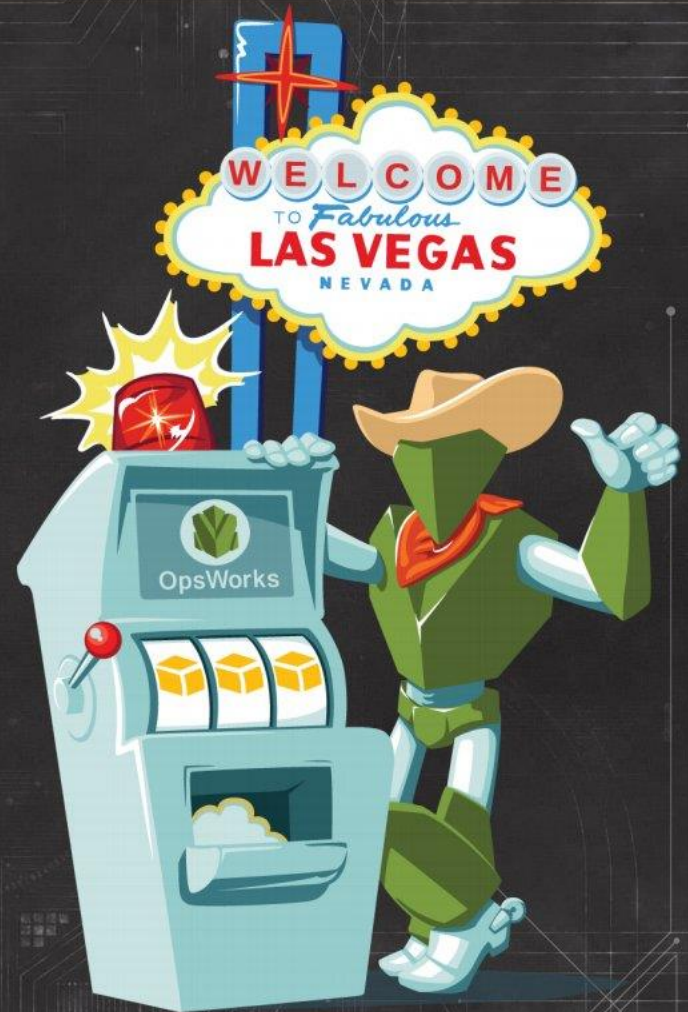
DMG202 - Zero to Sixty: AWS OpsWorks

Thomas Metschke, Amazon

November 13th, 2013



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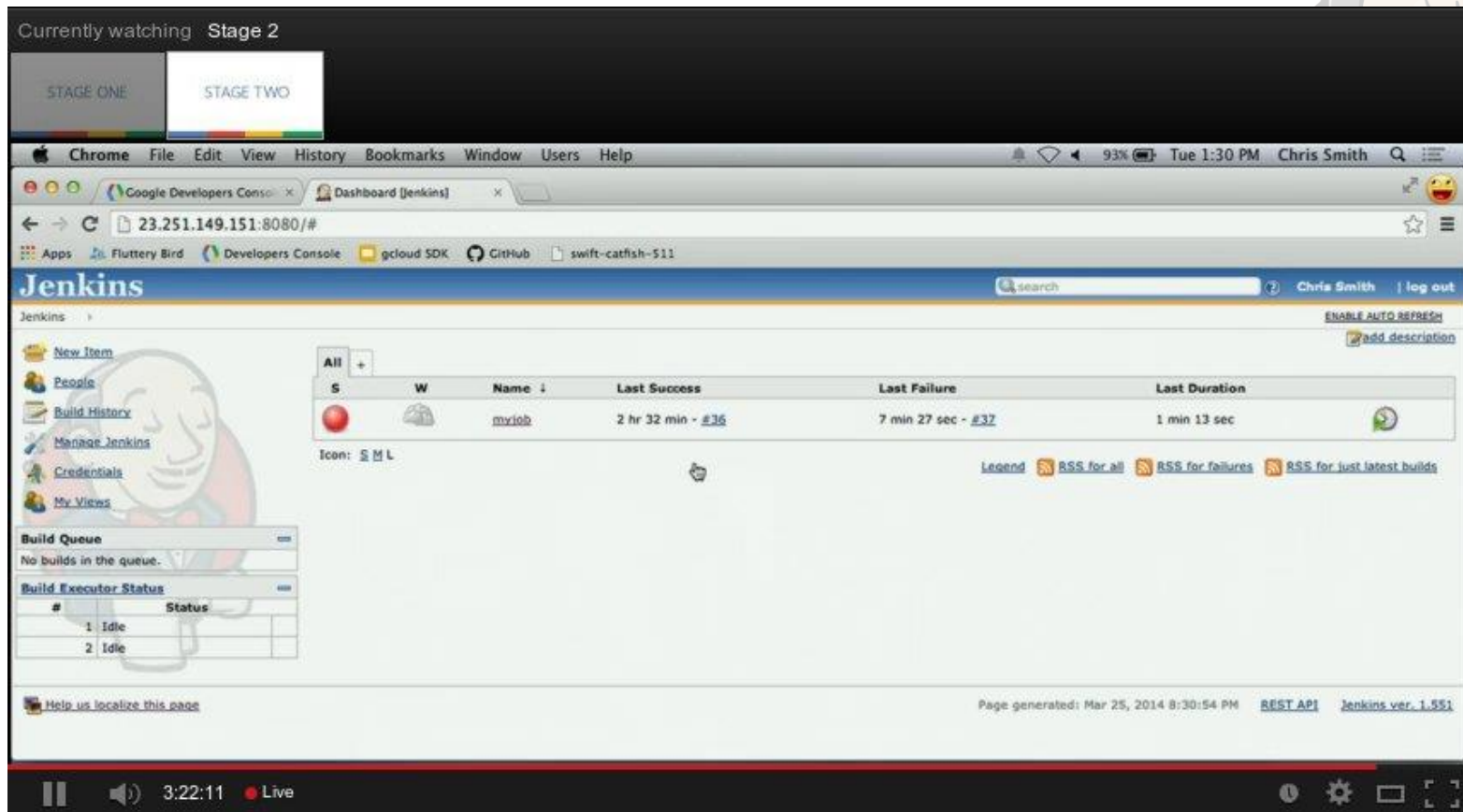
Jenkins & AWS OpsWorks to the Rescue



OpsWorks



Jenkins



Currently watching Stage 2

STAGE ONE STAGE TWO

Chrome File Edit View History Bookmarks Window Users Help

Google Developers Console Dashboard [Jenkins]

23.251.149.151:8080/#

Apps Flutter Bird Developers Console gcloud SDK GitHub swift-catfish-511

Jenkins

search Chris Smith log out

ENABLE AUTO REFRESH

add description

New Item

People

Build History

Manage Jenkins

Credentials

My Views

Build Queue

No builds in the queue.

Build Executor Status

#	Status
1	Idle
2	Idle

S	W	Name ↓	Last Success	Last Failure	Last Duration
		myjob	2 hr 32 min - #36	7 min 27 sec - #37	1 min 13 sec

Icon: L

Legend RSS for all RSS for failures RSS for just latest builds

Page generated: Mar 25, 2014 8:30:54 PM REST API Jenkins ver. 1.551

3:22:11 Live

Google Cloud Platform Live



Google Developers · 2,713 videos

Subscribe

476,511

1,411 watching now

124 38

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About

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provider



Logan Nedo this is why you're supposed to do a dry run before a presentation



Rudy Marca audio

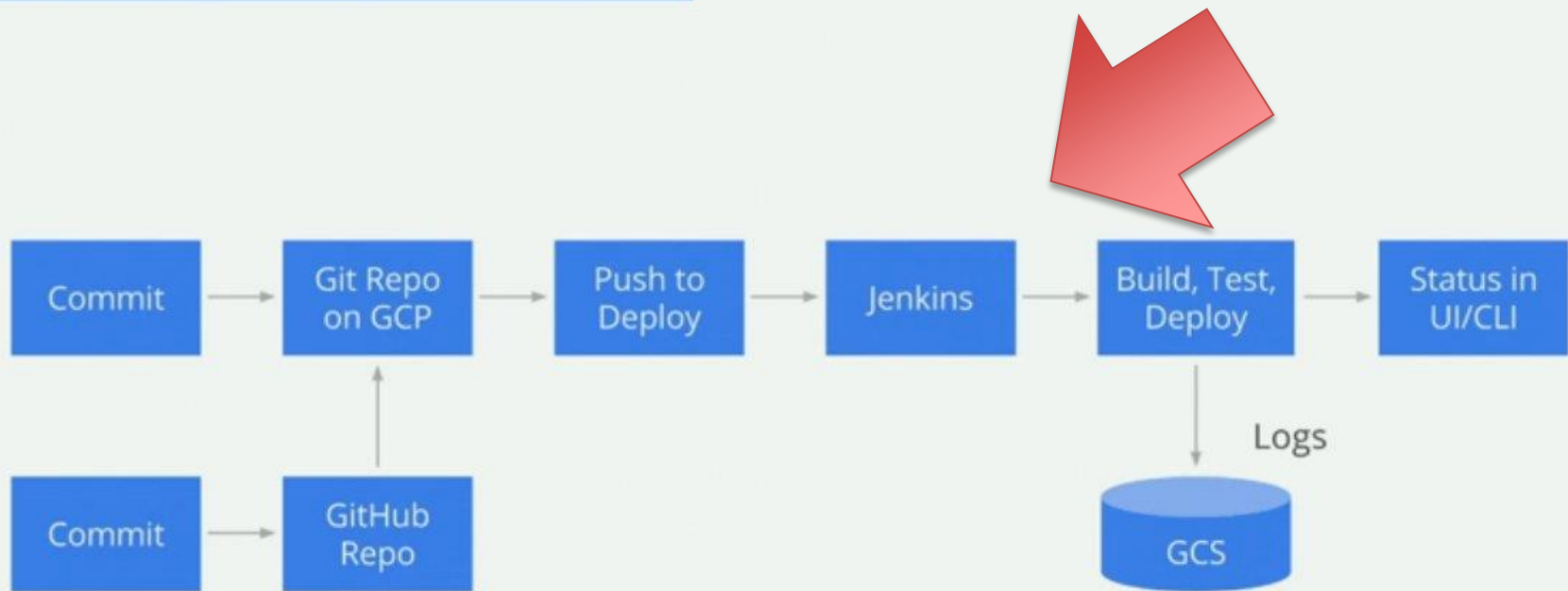


TvDnbDrive Good Jobs :) Dj Borys .. Szczecin Poland



John Paul Sandall oi

Deploy Your App: Demo



Integration Tests



Docker Hub



Revision Control



Deployment Platforms



Google Cloud Platform

Dockercon keynote

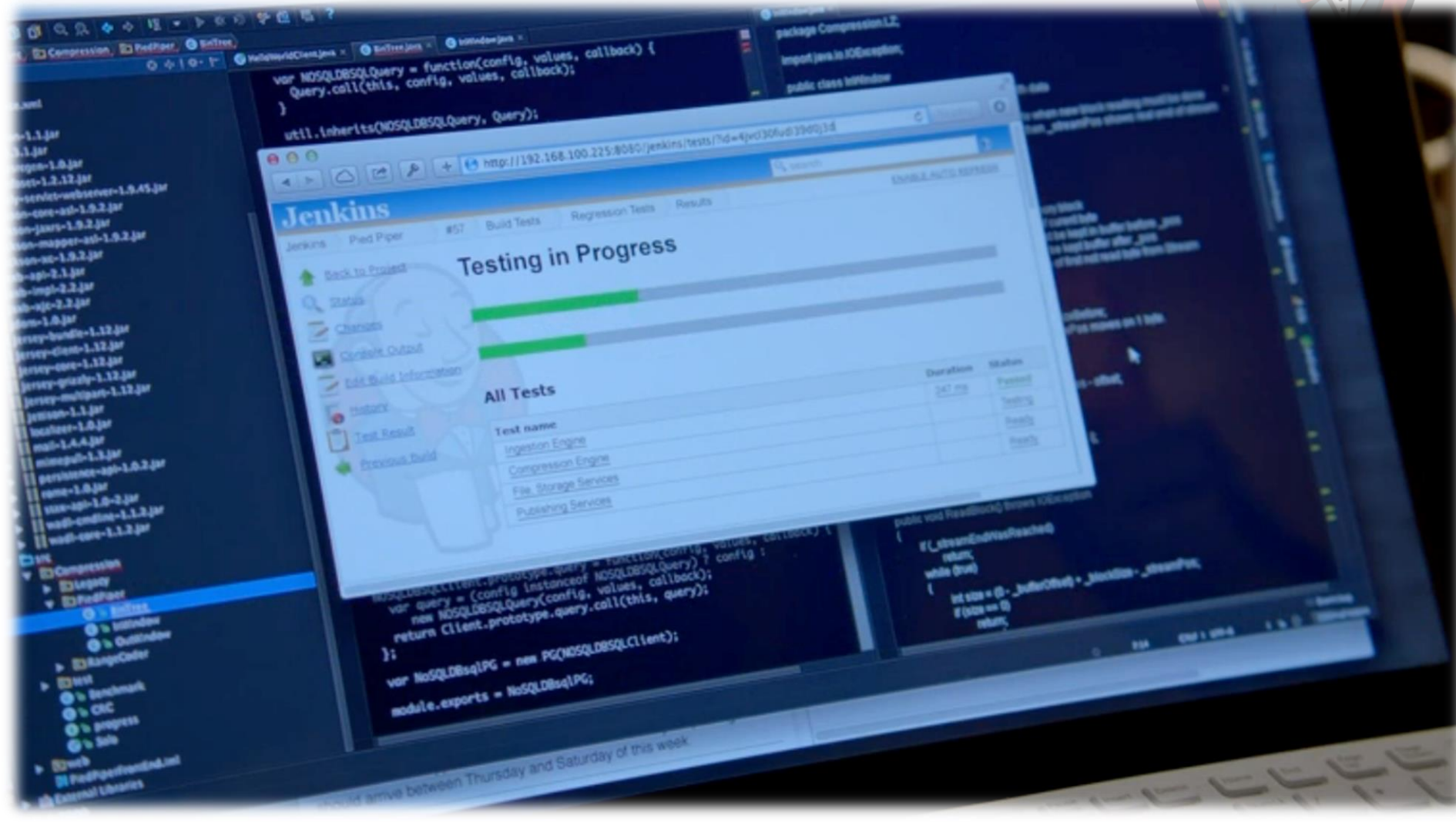


#dockercon

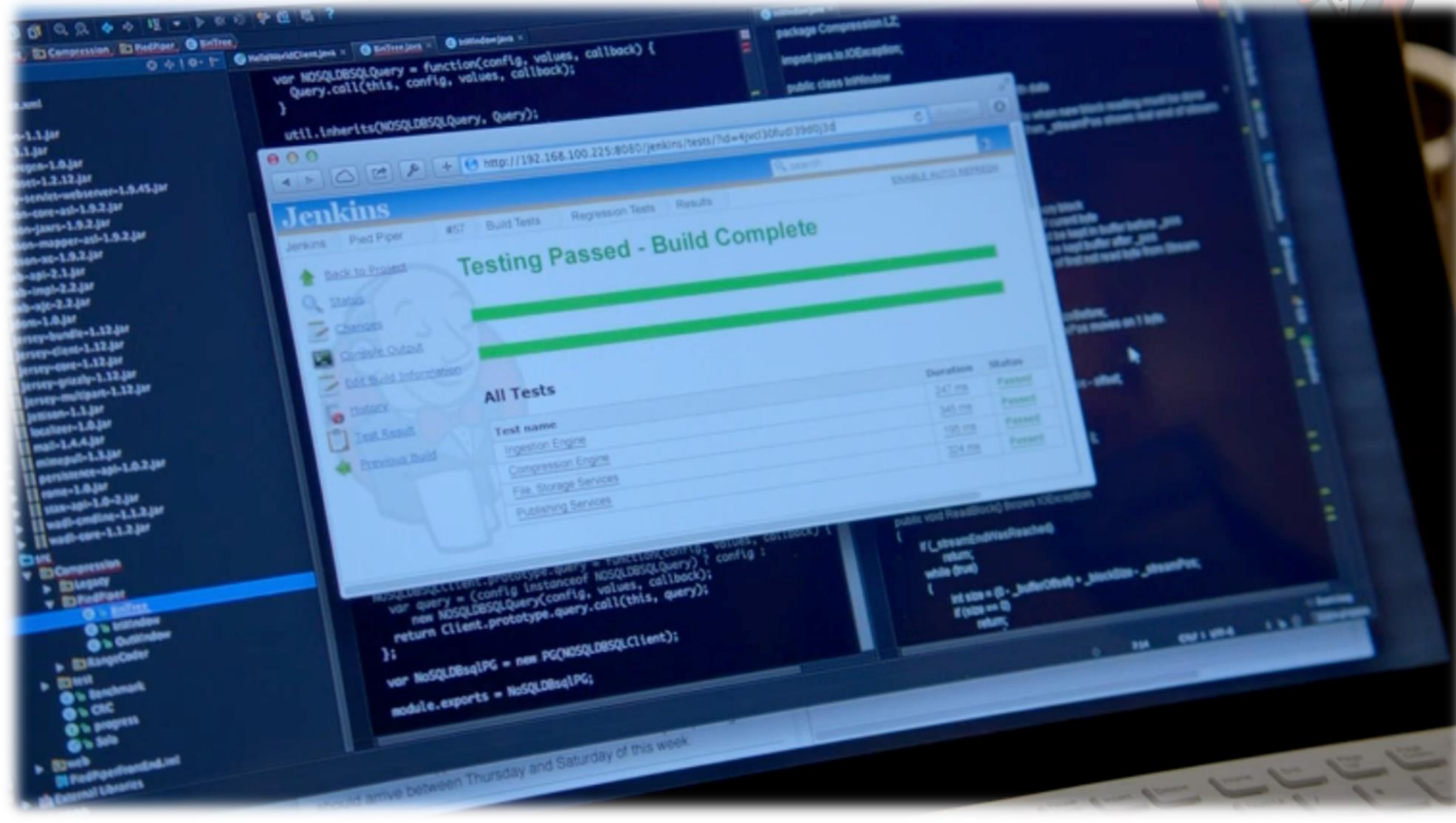
dockercon
San Francisco



Even on a TV show



Even on a TV show





Kohsuke Kawaguchi @kohsukekawa · Oct 13

Aaand [#JenkinsCI](#) now has 1000 plugins.
That was quick. Still working on finding out
which plugin was the 1000th.



28



9



[View more photos and videos](#)





DotCi



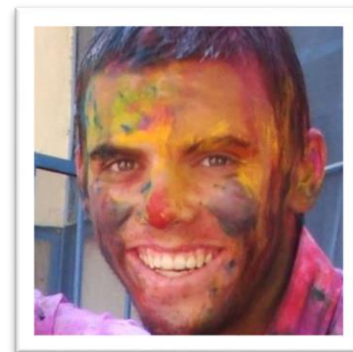
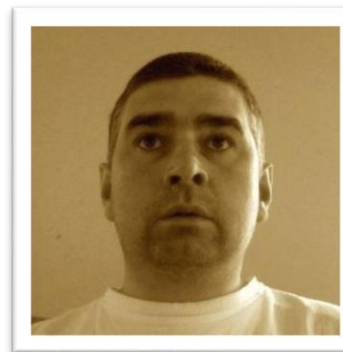
DotCi Highlights



- GitHub specific opinionated flavor of Jenkins
- 1 repository = 1 build
- Configuration via source file: `.ci.yaml`
- Docker
- MongoDB backend for storage

User Interface Refresh

- New look
 - Responsive design
 - Bigger UI controls & form elements
 - Curves
-
- Pay respect to compatibility





Demo



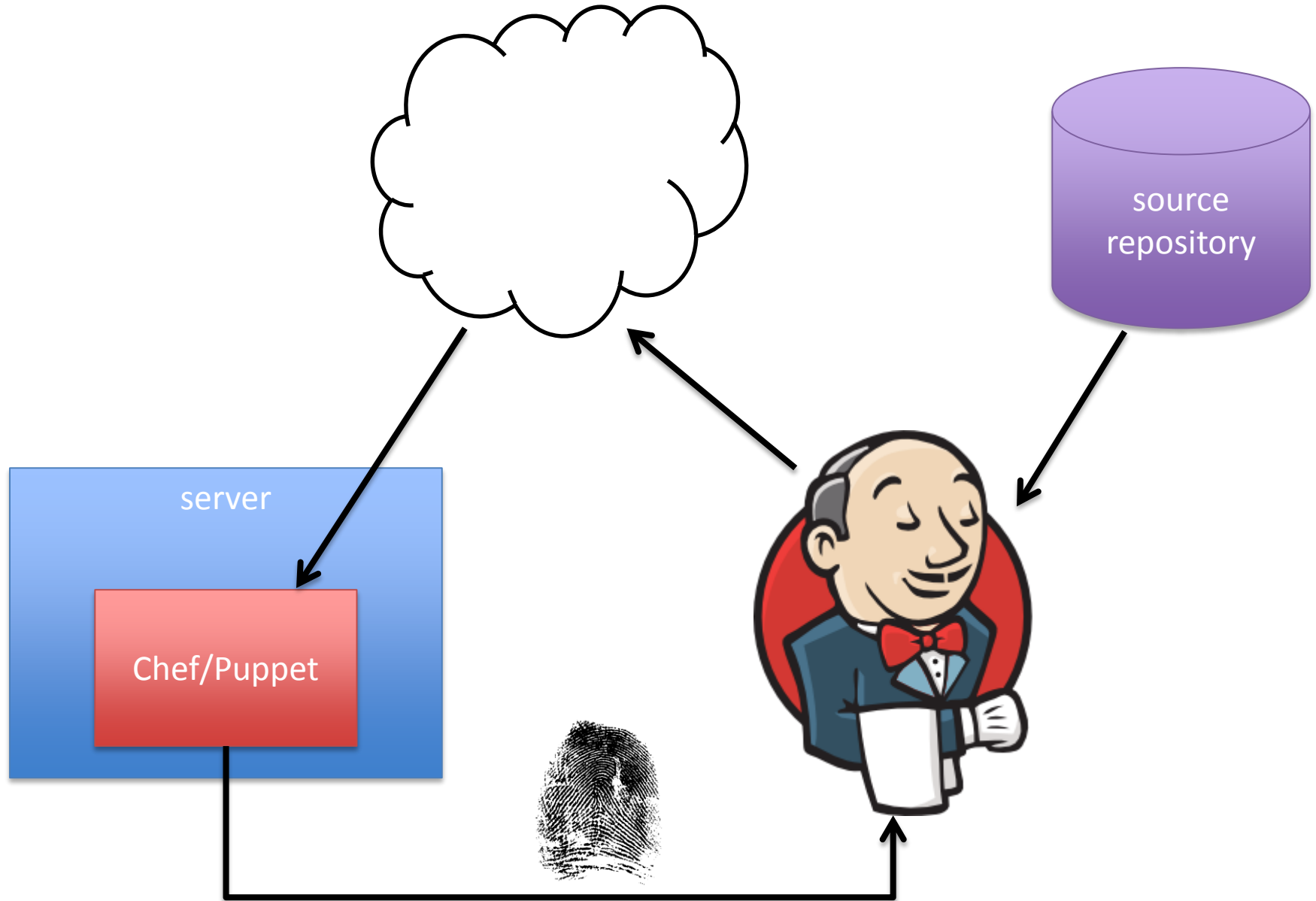
More UI/UX improvements

- Dynamic content update
 - Left-over from FOSDEM UI Discussion
- A lot under discussion
 - Create jobs from repos (like GitHub)
 - Plugin pack
 - ...

Servlet 3.0?

End-to-end tracking with







Tracking for Continuous Delivery

- Track what was deployed when/where?
- Use that to automate even more
 - Smoke test
 - Show the status in the build job
- Extensible
 - Integration to specific tool can be written as plugins

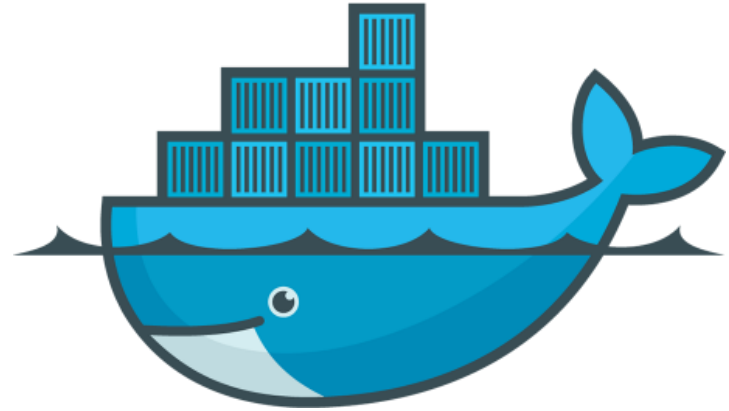
Changes needed in Ops is minimal

- Chef
 - Custom report handler
- Puppet
 - Just POST a standard report to Jenkins
- Request for feedback
 - How should the data come back to Jenkins?

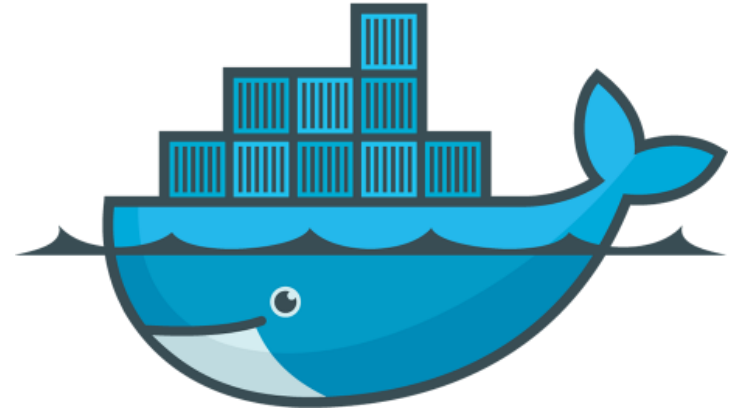


Jenkins and Docker

- DotCI
- Docker plugin for Jenkins
 - Runs one-off slaves in Docker container
- Docker build publish plugin
 - Build & push docker images

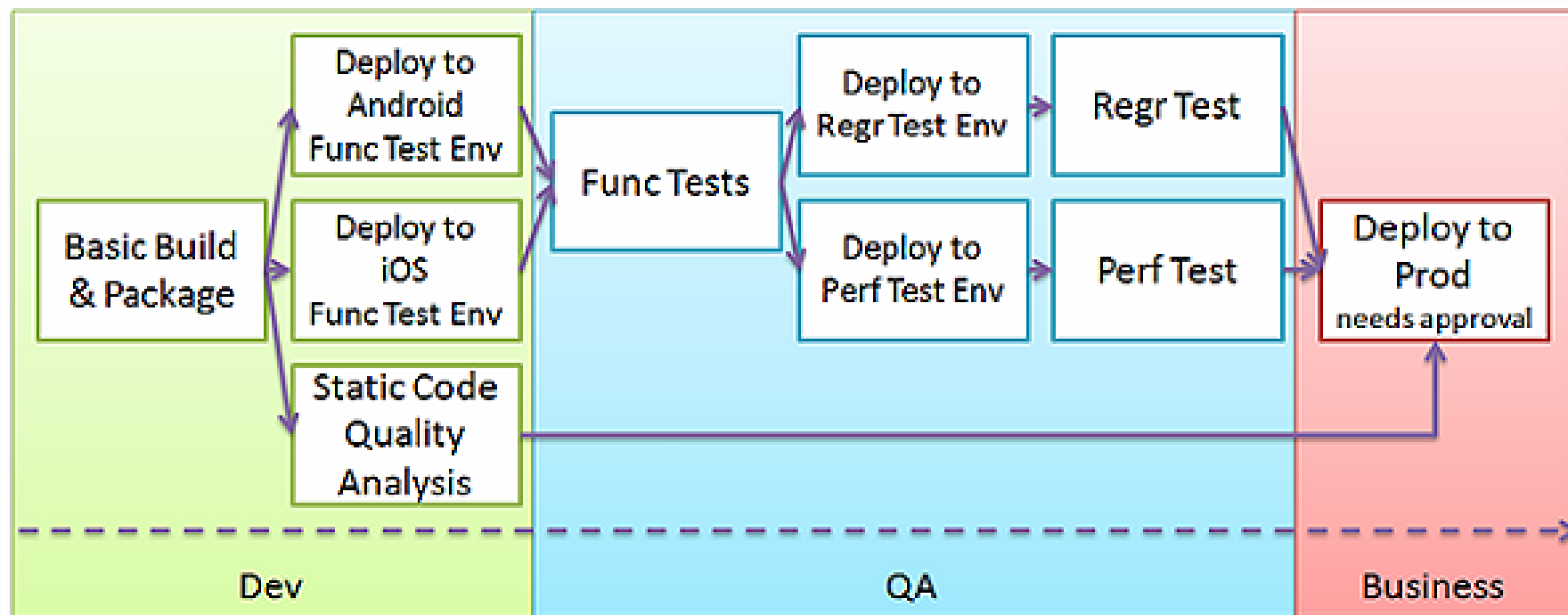






















Official Docker Image!

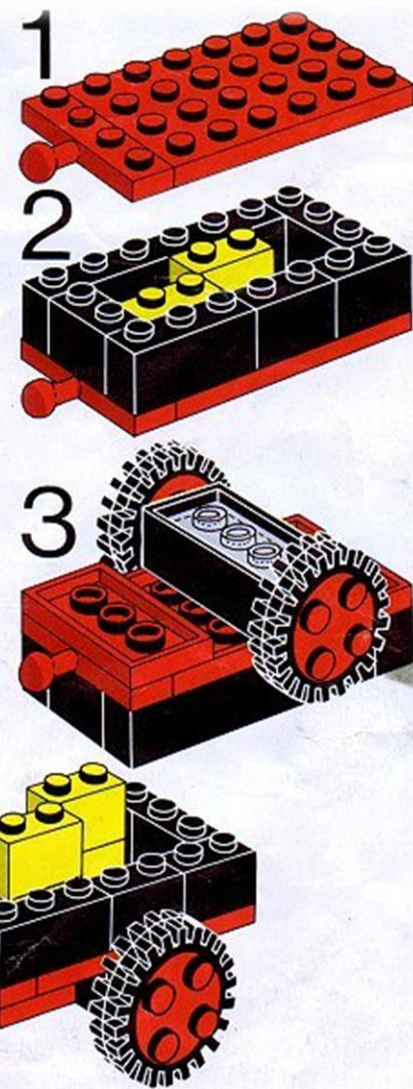
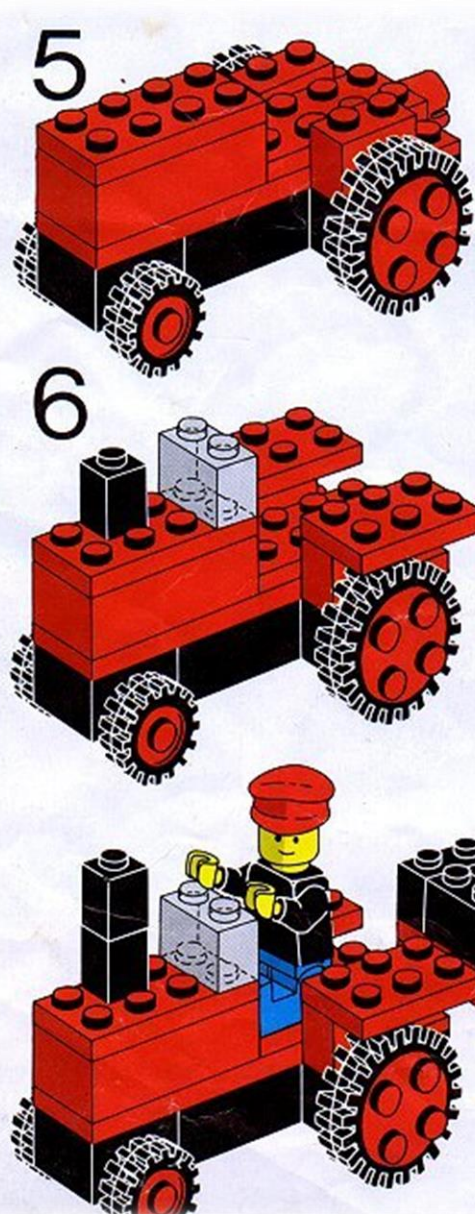
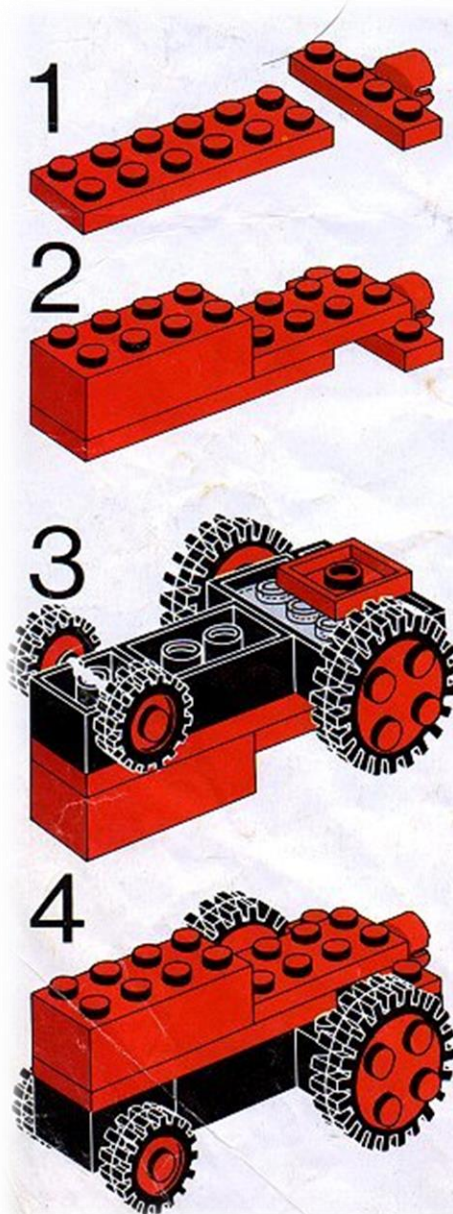


```
docker run -p 8080:8080 jenkins
```




Workflow



All	MyProject Build Pipeline	MyProject Delivery Pipeline	MyProject Jobs	Sample	+	
S	W	Name ↓	Last Success			
		MyProject » 1 - Developer Jobs » Basic Build and Package	21 sec - #16			
		MyProject » 1 - Developer Jobs » Deploy to Android Func Test Env	52 sec - #17			
		MyProject » 1 - Developer Jobs » Deploy to iOS Func Test Env	41 sec - #12			
		MyProject » 1 - Developer Jobs » Static Code Quality Analysis	1 min 2 sec			
		MyProject » 1 - Developer Jobs » Trigger Deploy to Func Test Envs	1.4 sec - #1			
		MyProject » 2 - QA Jobs » Deploy to Perf Test Env	32 sec - #11			
		MyProject » 2 - QA Jobs » Deploy to Regr Test Env	31 sec - #11			
		MyProject » 2 - QA Jobs » Func Tests	25 sec - #12			
		MyProject » 2 - QA Jobs » Perf Tests	11 sec - #11			
		MyProject » 2 - QA Jobs » Regr Tests	6 hr 18 min			

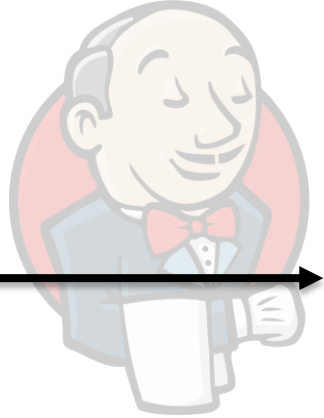




S	W	Name ↓	Last Success	Last Failure
		MyProject	22 sec - #4	N/A 

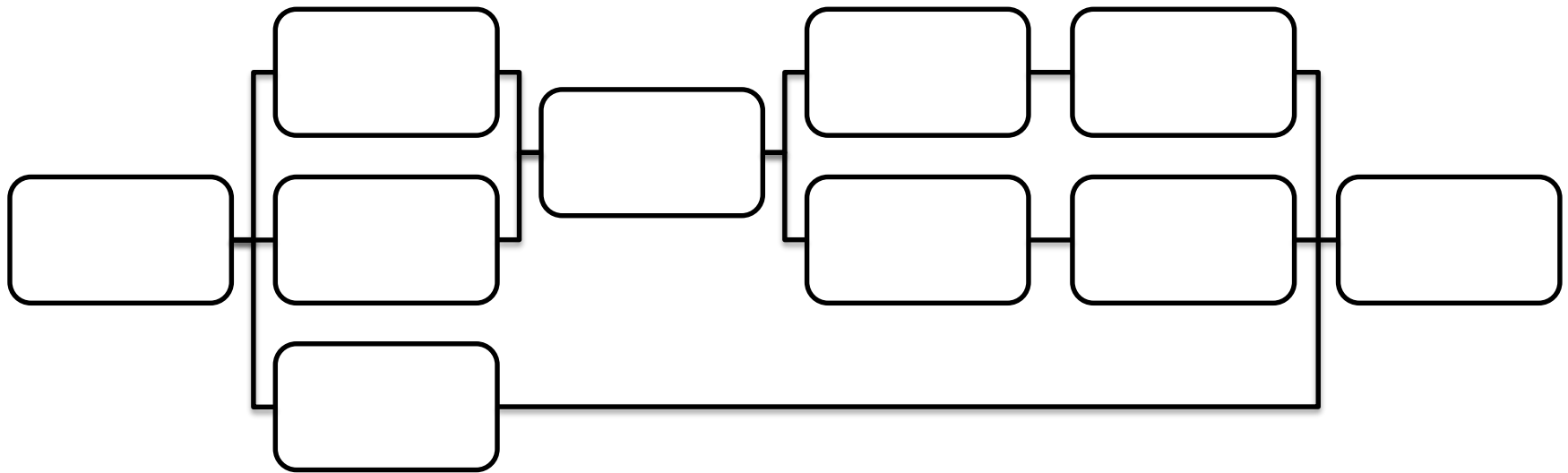
```
with.node("linux") {  
    steps.git ...  
    sh "mvn install"  
    parallel(  
        { sh "./regression-test.sh" },  
        { sh "./performance-test.sh" }  
    )  
    ...  
}
```

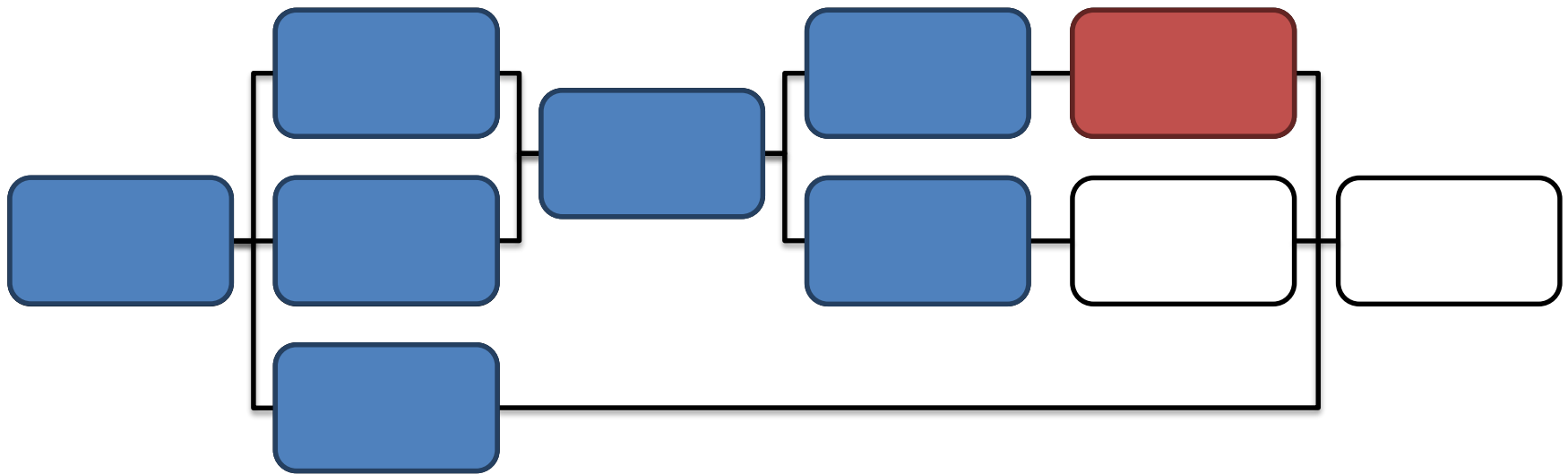


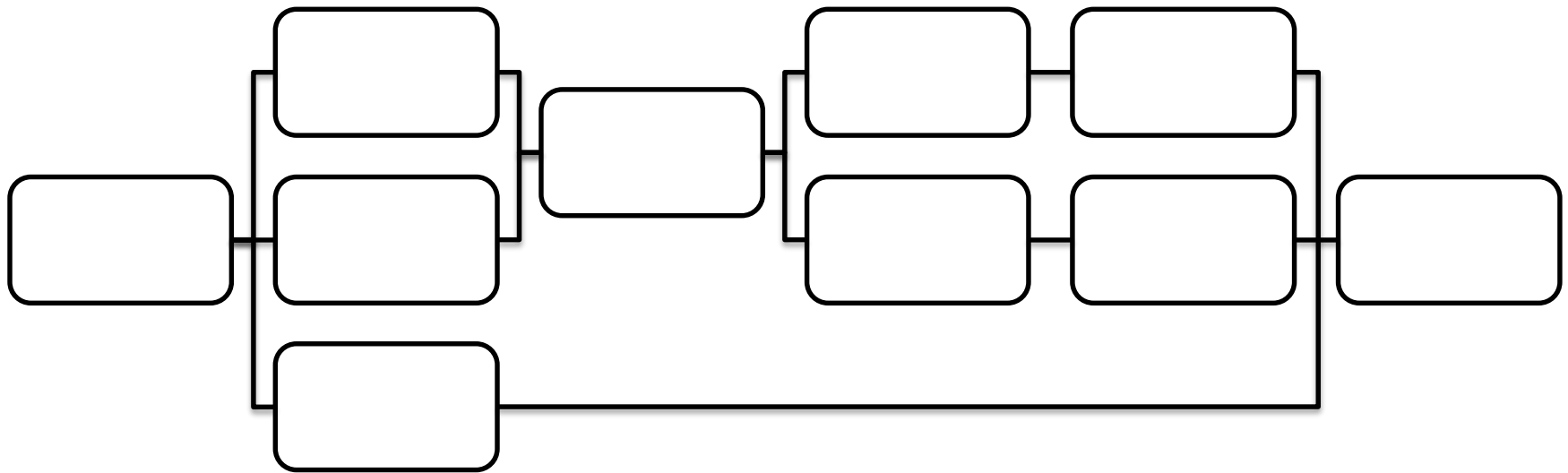


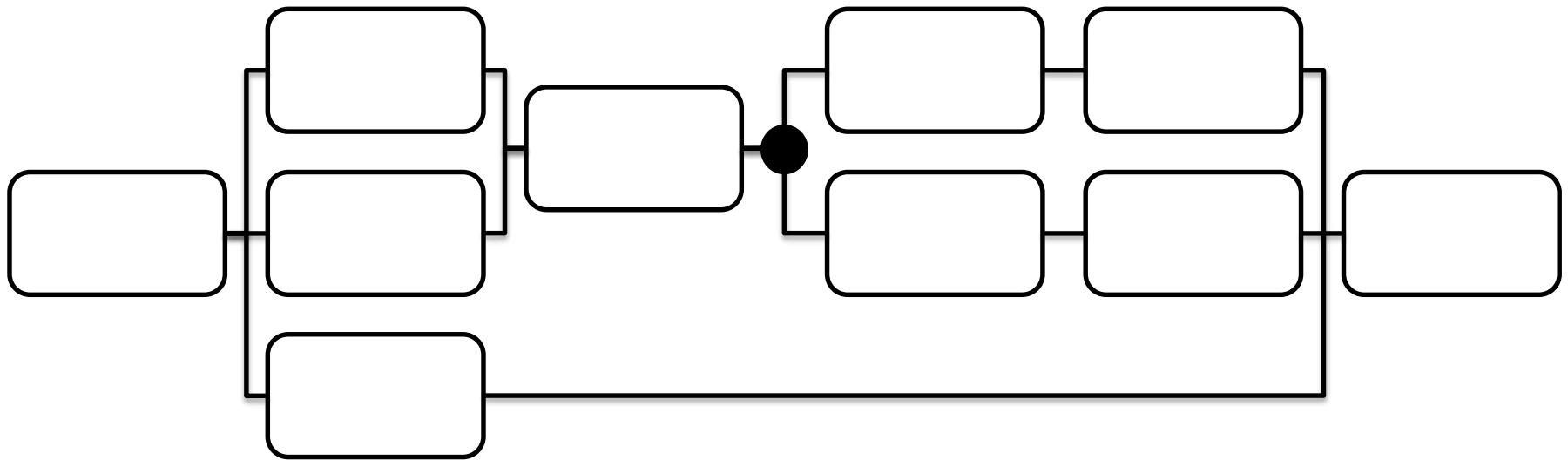
Build #153

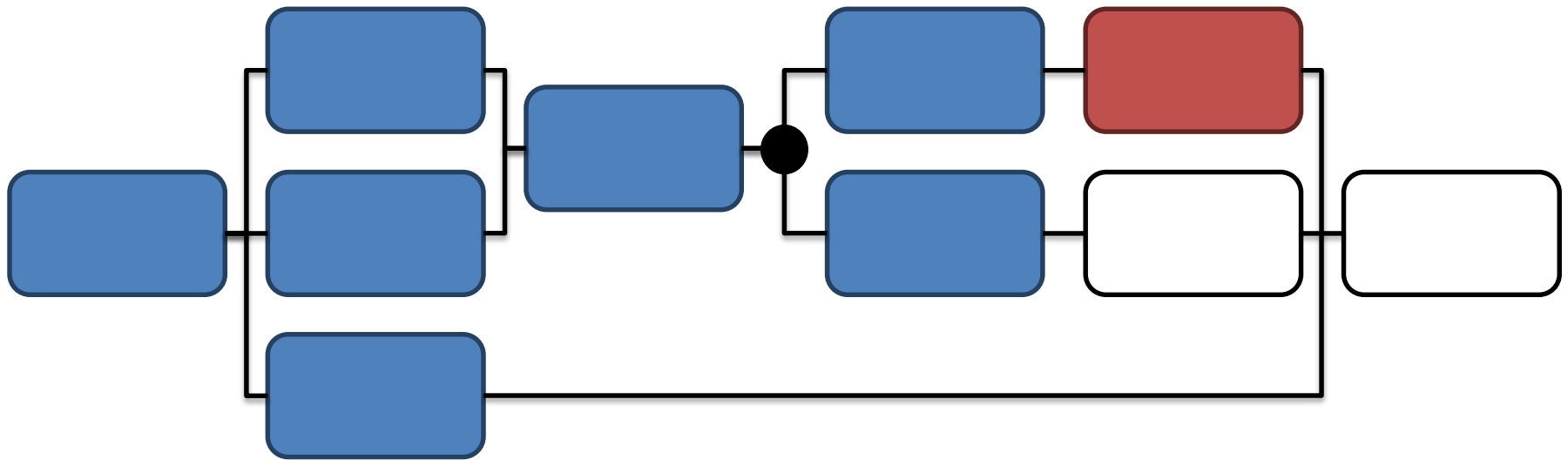


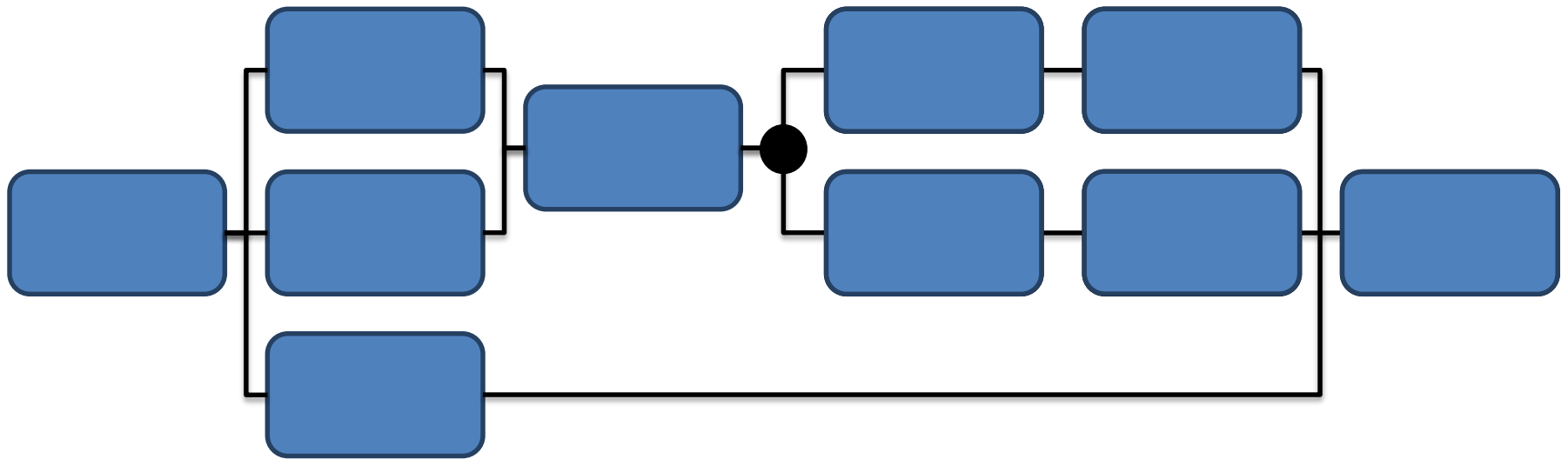














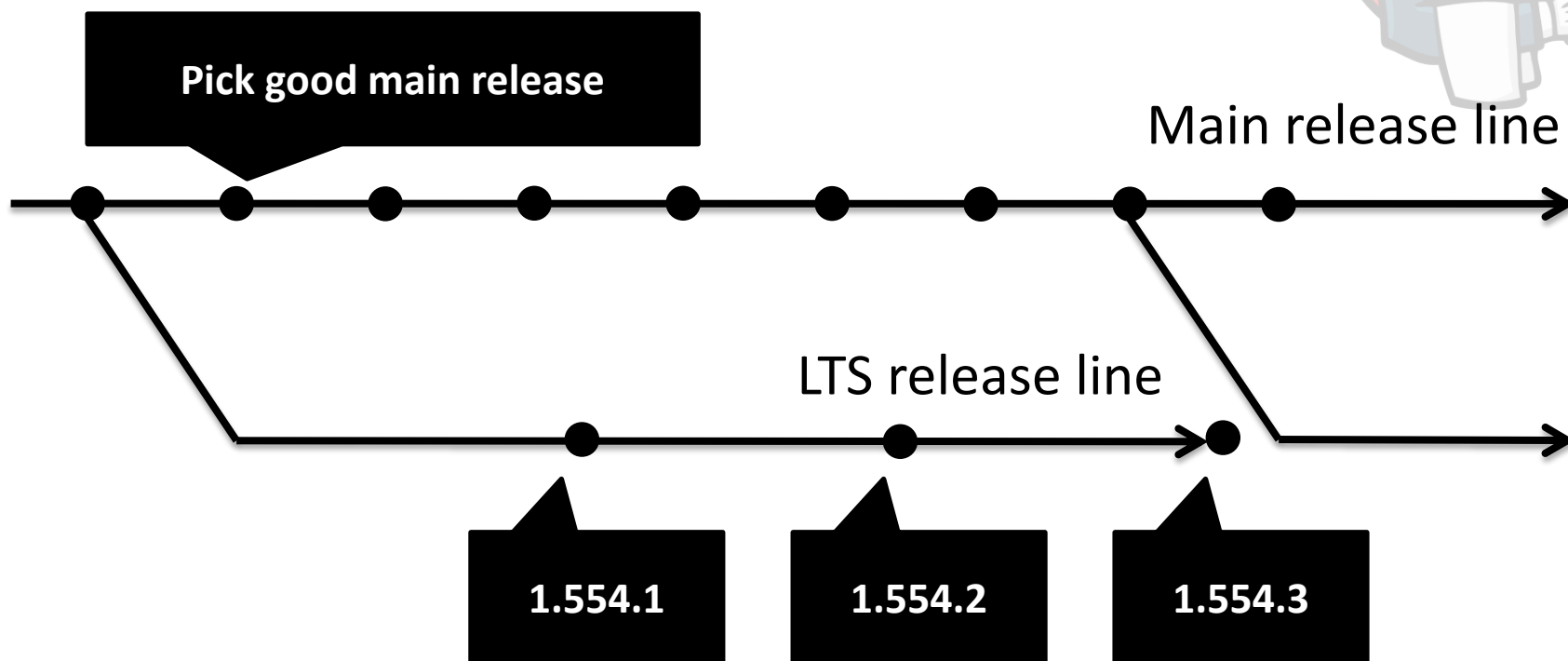
Workflow



- github.com/jenkinsci/workflow-plugin
- Bunch of new extension points
- Expect some value-adds in Jenkins Enterprise by CloudBees
- More about this later today

Quality

Train Model for LTS Releases



New LTS release every four weeks

LTS Release Model Changes

- You can plan ahead for upgrades
- Participate in LTS qualification process

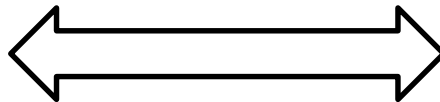




Acceptance Test & Harness

- Old project, renewed
- Lots of activity
 - 50+ commits/week by 22 people
 - 365 tests
 - 50-ish plugins

Acceptance Test & Harness

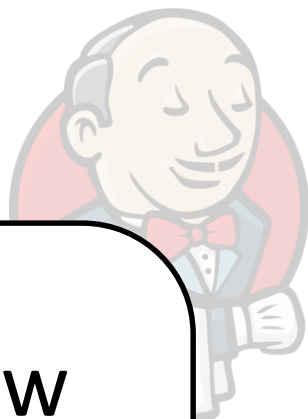


Class of problems we hope to catch

- Browser-specific issues
- Container-specific issues
- OS-specific issues
- Packaging-specific issues
- Problematic plugin combinations
- Plugin with newer versions of cores



This is for you, too



I want to make sure a new version of Jenkins works in **my** environment with **my** set of plugins.



Reusability

- Make your tests our tests
- Amass a bigger pool of tests



Separately reusable pieces



Jenkins
Controller

Page Objects

JENKINS
HOME seeder

Machine
Provisioner

Docker
fixtures

Cucumber
integration

Geb + Spock

Vagrant

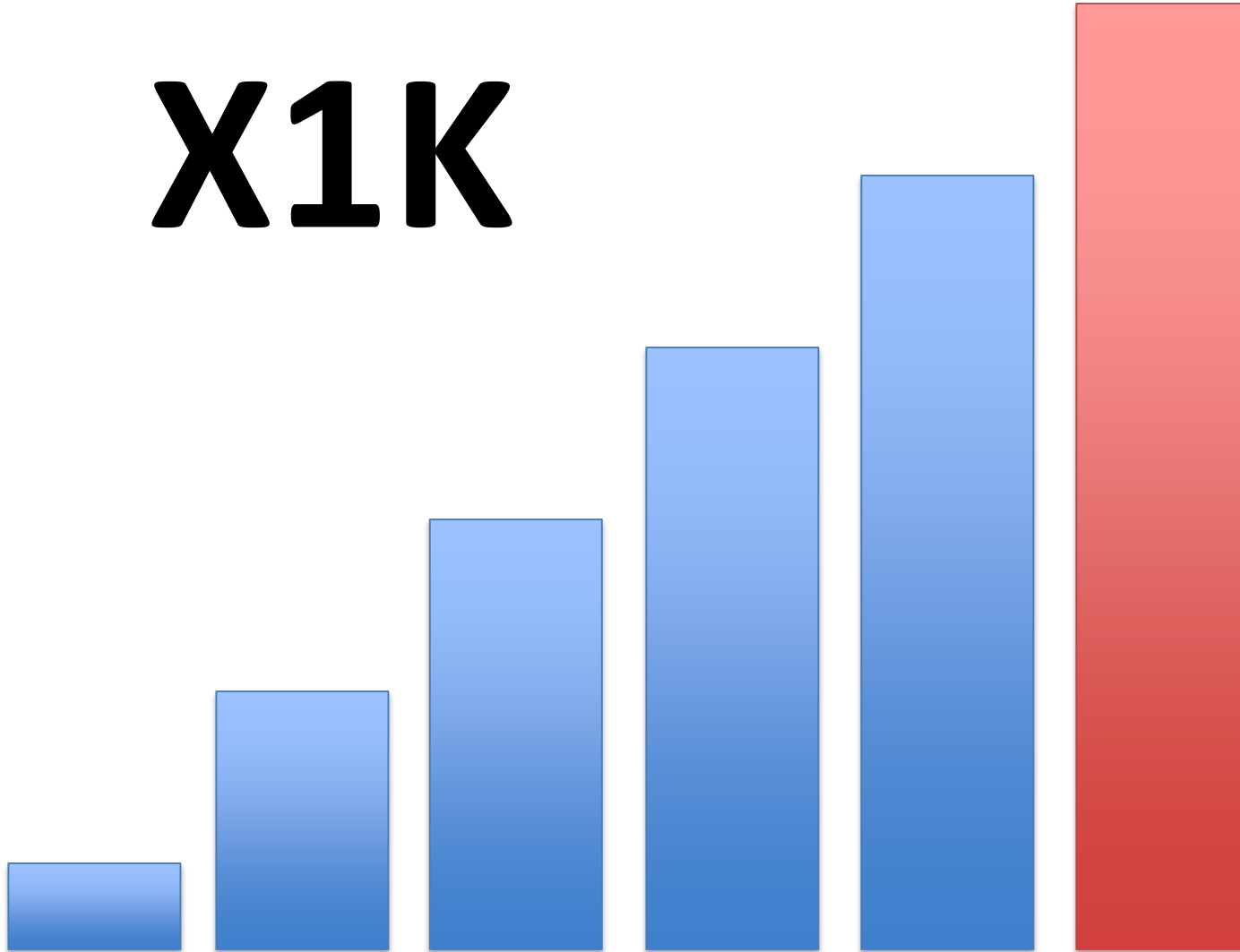
JUT Process
pool

More work ahead

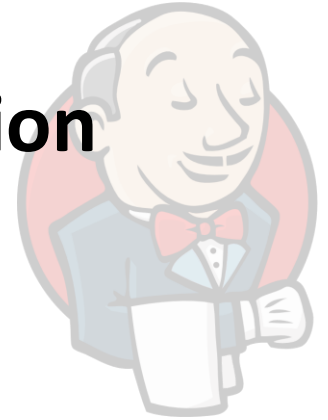
- More regular executions
 - More target platforms
 - More browsers
- Test stability improvements
- Expand to non-functional tests



X1K

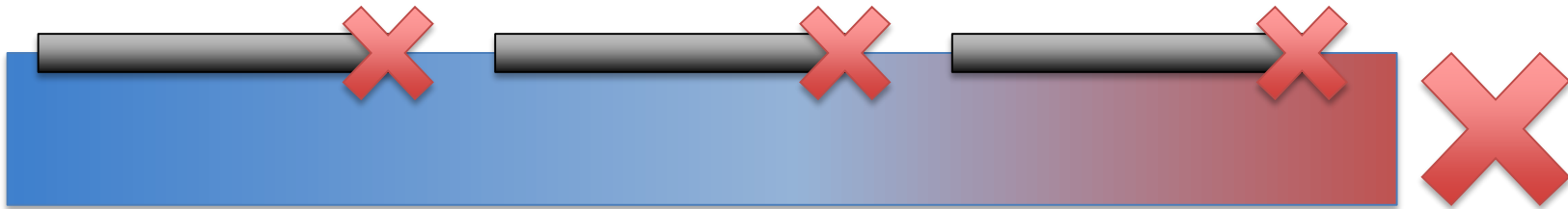


More efficient master/slave communication

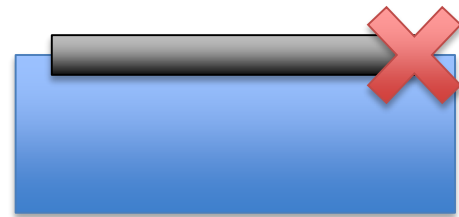
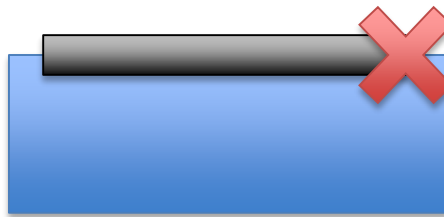
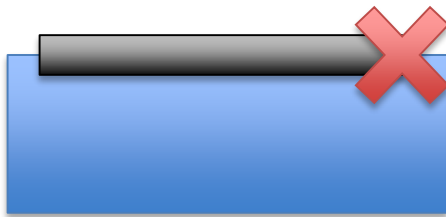


- NIO in remoting
 - use a few threads to manage 100s of slaves
- JNLP today, coming to CLI soon
- Maven2 jobs are a lot faster

Speaking of JNLP slaves...



Speaking of JNLP slaves...

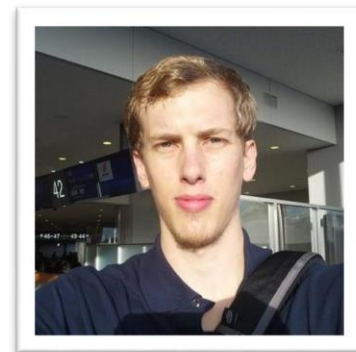


Infrastructures

A nighttime photograph of a city skyline, likely New York City, featuring the Manhattan skyline with the Empire State Building and other skyscrapers. In the foreground, the Manhattan Bridge is illuminated with green lights, and the East River is visible. The city lights are reflected in the water.

“Eat our own dogfood” approach

- Continuous delivery pipeline for our own infra
- Shout out to Puppet Labs for their help



Infra Summary



- It's all out there
 - github.com/jenkins-infra/jenkins-infra
- Come join the infra team
 - Work on cutting-edge stuff & brag about it elsewhere





Conclusion

- So many exciting things going on in the project
- Let's build this together