

let's move  
the **java** world

# Continuous Delivery Antipatterns

Andrzej Grzesik, Marcin Sawicki



let's move  
the **java** world

# **cd antipatterns; ls -al**

Andrzej Grzesik, Marcin Sawicki



**START**

# CONTINUOUS DELIVERY

## ANTIPATTERNS





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MY OPINIONS ARE MY OWN

disclaimer



# ABOUT:ME



# I HATE COMPUTERS

disclaimer





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# ABOUT: MARCIN

Recently



Past

HADAPT



TWITTERS/GITHUBS: ODCINEK



# I HATE COMPUTERS

disclaimer



COINCIDENCE?

#GEECON

keep on tweeting!

QUESTIONS?



NO!

42

IT DEPENDS

answers

# QUESTIONS?

ask them right away!

TL; DR:  
RELEASE MORE OFTEN!

and don't listen to 'no-can-do's



# SOFTWARE

is a **people** problem

IN THE BEGINNING

*Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.*



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agile manifesto, 2001

DELIVERY IS  
ORGANIZATION-SPECIFIC



PRIORITIZE PROBLEMS

FIX FIRST

REDO THE LIST



A LONG TIME AGO  
IN A GALAXY FAR, FAR  
AWAY...

SYSTEM (TM)

DEVELOPERS





PUSH THEIR CODE



# SITE BREAKS



# SITE BREAKS

for two days

DURING HOT SEASON

ALL ROLL-BACK!



TO WHERE?

FROM WHERE?

# GIT PUSH --FORCE PROD

#randomhashisbetterthannone



DO: --VERSION

DO: KNOW WHAT IS WHERE

# MULTIPLE REPO IS OK

one for dev, one for releases



# GLU

<https://github.com/pongasoft/glu>

Dashboard

Agents

Deployments

Model

Admin

admin

Help

glu-dev-1

All [product]

c1 cluster ▾

Plans

Customize

change dashboard

remove all filters

remove a filter

Model

5bfdf87cb1 [Tutorial System Model]

Summary

☐ Errors Only

☐ Filter [x]

metadata.cluster='c1'[x]

add a filter

group by

cluster	I:2	E:0	mountPoint:2	agent:1	tags:3	container:1	version:1	product:1	status:1
c1	2	0	/sample/i001	agent-1	frontendosxwebapp	sample	1.0.0	product1	running
			/sample/i002	agent-1	frontendosxwebapp	sample	1.0.0	product1	running



CONCLUSION:





RELEASES == RISK

let's avoid them!



WHAT DO YOU GET?



STAGNATION CREEPS IN

# QUIET PERIODS

RELEASE 'TRAINS'



RC, BETA, GOLD

WHAT TO DO?

DO: INVOLVE BUSINESS

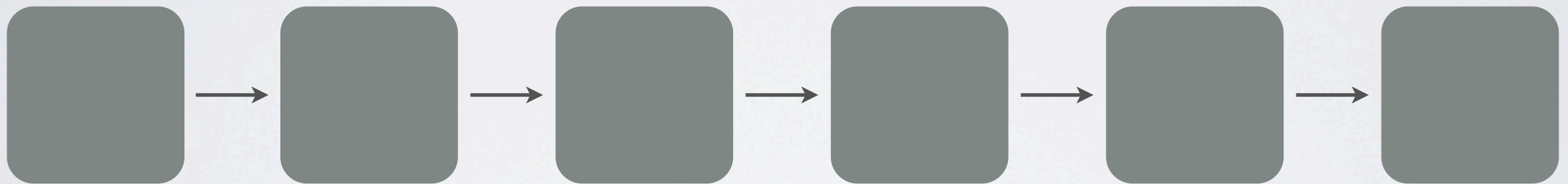
a.k.a. 'manage stakeholders'



SMALL CHANGES  
SHOULD HAPPEN QUICKLY

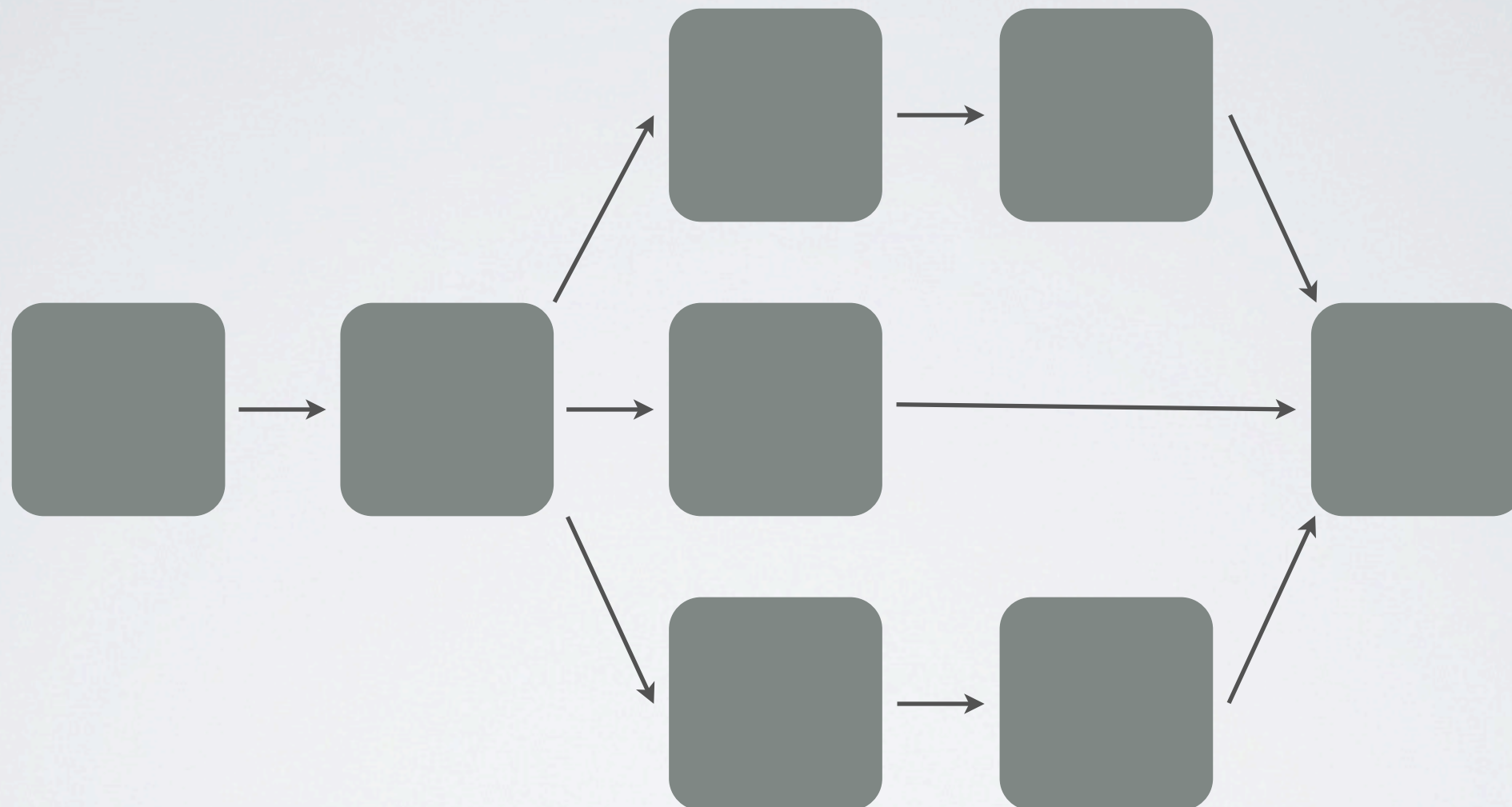
good selling point

OK, LET'S HAVE A PIPELINE



IT'S SLOW





PARALLELIZE

WHICH PART?



BAD THING:  
COMPILING 'RELEASE' (AGAIN)

USES SCP TO DEPLOY

HOW DO I REPLICATE  
PRODUCTION?



AFFECTS COMPILED  
ARTIFACTS MORE

# RELEASE TEAM

dealing with 'danger'

# LIKES TO BE MANUAL

‘job security’



# US VS THEM

'leave my alone, I'm important'

# RELEASE PROCESSES

# CURIOUS RELEASE PROCESSES



WORK EXPANDS SO AS TO  
FILL THE TIME AVAILABLE FOR  
ITS COMPLETION

Parkinson's Law

LEAD TO

UNOFFICIAL RELEASES



# UNOFFICIAL RELEASES

(don't do them)

BUNKERS







WHAT TO DO?

BREAK && INTEGRATE

GAMES ARE AWESOME!



# INFRASTRUCTURE

WE USE CHEF, WE'RE SAFE

^^



# AUTOMATE EVERYTHING!



**DevOps Borat**  
@DEVOPS\_BORAT

Following



To make error is human. To propagate error to all server in automatic way is [#devops](#).

Reply Retweet Favorite

729

RETWEETS

131

FAVORITES



4:55 PM - 26 Feb 11 via Mobile Web · [Embed this Tweet](#)



DID YOU TEST?

*Bring Behavior-Driven Development to Infrastructure as Code*



# Test-Driven Infrastructure with Chef

O'REILLY®

*Stephen Nelson-Smith*



# FOOD CRITIC

lint for chef



PUPPET VS CHEF VS ?





BUILD YOUR ENVIRONMENT



SLOW?

SLOW?

yes!

YES



PARALLELIZE

MAKE YOUR

# RUNTIME UPGRADE



**RUNS RUBYGEMS SITE**

**NEVER UPGRADES RAILS**

Did Rails have a major security flaw today?

**Yeap.**

[See why](#)

**Recent history**

RUBY



RVM



**Page did not respond in a timely fashion.**

[Check Twitter for status alerts.](#)

Either you found a page that took too long to render or we're getting more requests right now than we can handle.

You can try [refreshing the page](#), the problem may be temporary.  
[Learn how to deal with Github outages and other access problems.](#)



Release	Release Date
Java SE 7 <sup>[98]</sup>	2011-07-28
Java SE 7 Update 1 <sup>[99]</sup>	2011-10-18
Java SE 7 Update 2 <sup>[100]</sup>	2011-12-12
Java SE 7 Update 3 <sup>[101]</sup>	2012-02-14
Java SE 7 Update 4 <sup>[103]</sup>	2012-04-26
Java SE 7 Update 5 <sup>[104]</sup>	2012-06-12
Java SE 7 Update 6 <sup>[106]</sup>	2012-08-14
Java SE 7 Update 7 <sup>[108]</sup>	2012-08-30
Java SE 7 Update 9 <sup>[109]</sup>	2012-10-16
Java SE 7 Update 10 <sup>[111]</sup>	2012-12-11
Java SE 7 Update 11 <sup>[112]</sup>	2013-01-13
Java SE 7 Update 13 <sup>[114]</sup>	2013-02-01
Java SE 7 Update 15 <sup>[115]</sup>	2013-02-19
Java SE 7 Update 17 <sup>[116]</sup>	2013-03-04
Java SE 7 Update 21 <sup>[117]</sup>	2013-04-16



INTERNET

NEED INTERNET TO BUILD?

OF COURSE!





© RLY?

RUBYGEMS.ORG

CPAN.ORG

MAVEN.ORG

go down!



NO



CAN YOU?

# PROXY

anyone?

MAKE YOUR BUILD RUN  
WITHOUT INTERNET



# APPLICATION AND ENVIRONMENT

SAVE TIME AND NERVES

DESKTOPS





# FIREFOX IS UPDATING

and you can not use it



# MOBILE APPS



WEBVIEW IS NICE

# FREQUENT RELEASES

make your user curious

MAKE USERS SAY **BYE**



CHANGE BACKEND  
YOU CAN

ASK IF NEW  
FEATURES THEY WANT

FORCING DOESN'T WORK



# RELEASES

give us

FEEDBACK!

OPS







# DEPLOYMENTS



idea from: [paulklipp.com/blog](http://paulklipp.com/blog)



# DEPLOYMENTS

DO YOU TRACK THEM?

WHO AM I?

# FAILED DEPLOYMENT PROCEDURE

ROLLBACK? OR DOWNTIME?



# GLU

<https://github.com/pongasoft/glu>

DashboardAgentsDeploymentsModelAdminadminHelpglu-dev-1All [product]

c1 cluster ▾

PlansCustomize

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Model5bfdf87cb1 [Tutorial System Model]

Summary☐

Errors Only☐

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			/sample/i002	agent-1	frontend	osx	webapp	sample	1.0.0	product1	running



DO:TEST YOUR ROLLBACK



AS YOU TEST YOUR BACKUPS

# DATABASE CHANGES

EASY TO DEPLOY?

STATE



LONG RUNNING .....

# SAGAS?

<http://www.cs.cornell.edu/andru/cs711/2002fa/reading/sagas.pdf>

# ENVIRONMENTS



DO: APP IS ENV AWARE

LOVE PARTIAL FAILURES

DO: BUILD IN SWITCHES



DEVENV

AUTOMATE IT!

RELEASE!



RELEASE

...the Kraken





KTIXBYE





# RESOURCES

<http://imgtfy.com/?q=continuous+delivery>

<http://continuousdelivery.com>

<http://acrmp.github.io/foodcritic/>