Continuous Delivery of Etl

from git to carte in a (couple off) sec(s)

Pentaho NL meetup March 2017

Rogier Wessel

" Business Intelligence developer @ReelMetrics
Keyboard Cowboy in Data land

FOSS first

Build Docker based, Mesos orchestrated, AWS supported infra to accelarate Pentaho based data products and Ruby on Rails frontend @ data centric startup "
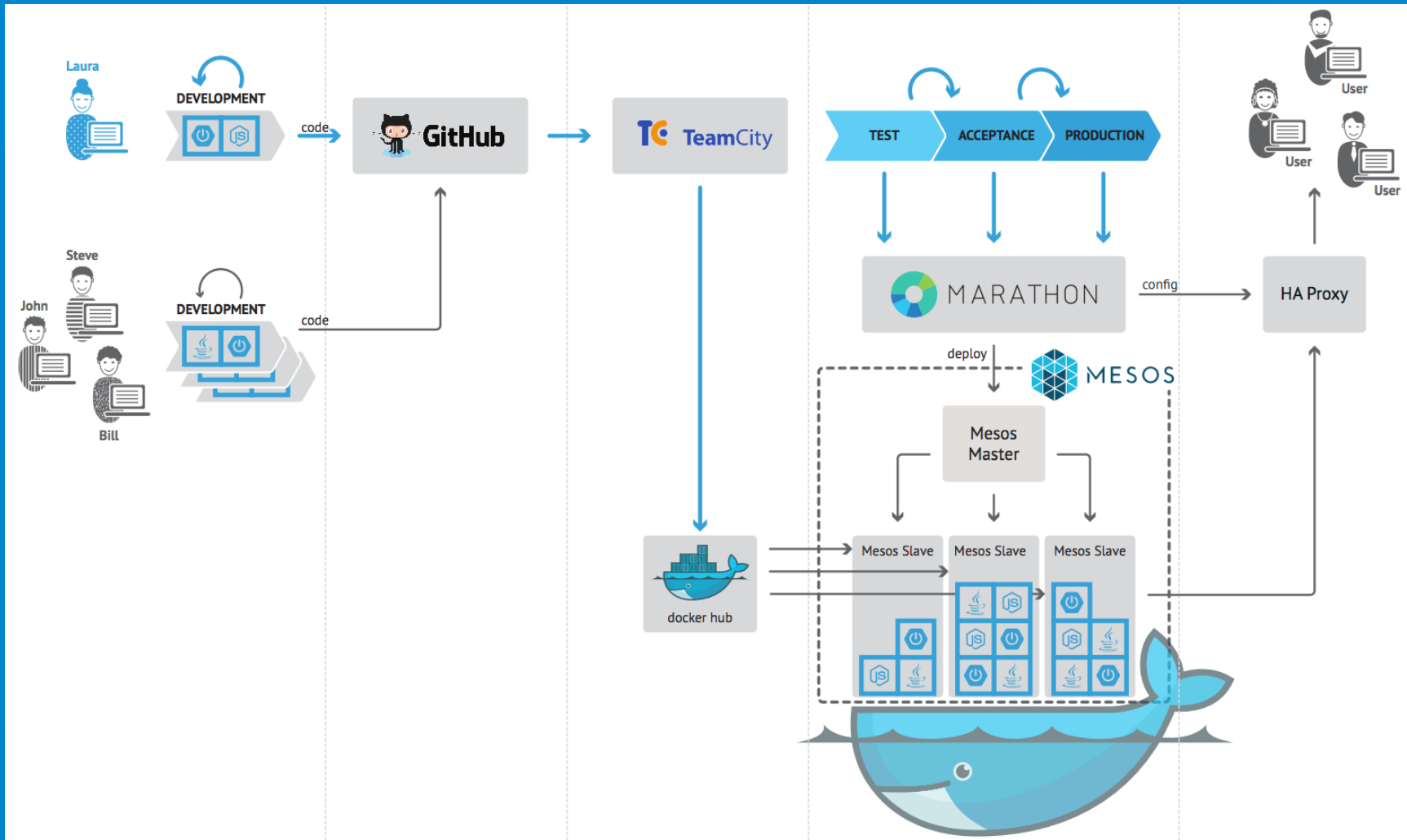
Outline

- Define Continuous Delivery

- Components at play

- Components detailed

- All hail to the `demo gods`

- Fin

Define Continuous Delivery

" Continuous delivery (CD) is a software engineering approach in which teams produce software in short cycles, ensuring that the software can be reliably released at any time. It aims at **building**, *testing*, and **releasing** software faster and more frequently. "

Define Continuous Delivery

Components at play

- github `sourcecode`

- teamcity (CI, CD) `testing` `building`

- docker registry `docker images`

- marathon, chronos `orchestrators`

- mesos `task excecutor`

- proxy `expose`

Components detailed: github

git repository with docker stuff

- (base) docker containers definitions
- `our` pdi / carte specific modifications

    ○ libs

    ○ plugins

    ○ carte repo definitions

- `slowly changing`

Components detailed: github

git repository with etl stuff

- docker container build

- etl files

- etl support files

- sql

- `fast moving`

Components detailed: teamcity

" TeamCity is a Java-based build management and continuous integration server from JetBrains. It was first released on October 2, 2006. TeamCity is commercial software and licensed under a proprietary license. A Freemium license for up to 20 build configurations and 3 free Build Agent licenses is available. "

Components detailed: teamcity

- **building**, *testing*, and **releasing**

Components detailed: teamcity

- build (base) docker containers against develop branch

`reelmetrics/carte:latest` / `reelmetrics/carte:x.y.z`
`reelmetrics/cartebase:23`

- on top of public containers

`blijblijblij/pentaho:pdi-ce-6.0.1.0-386`
`blijblijblij/base`
`debian:jessie`

Components detailed: teamcity

- build release tagged docker containers against master branch

```
reelmetrics/carte:release-latest /
reelmetrics/carte:release-x.y.z

reelmetrics/cartebase:23
...
```

Components detailed: teamcity

- rake build cartebase:xx

```ruby
require 'pathname'
require 'pry'
require Pathname(__dir__).join('..', 'lib', 'Rakefile.rb')

VERSION = ENV['VERSION'] || 'develop'
IMAGE_TAG = ENV['IMAGE_TAG'] || 'reelmetrics/cartebase'

task default: [:build, :tag, :push]
```

Components detailed: teamcity

- bash build carte:latest

- Create zip

- Build container

- Push

- Update marathon

- Update slack

Components detailed: marathon

```json
...
{
"image": ".../reelmetrics/carte-release:latest",
"network": "BRIDGE",
        "portMappings": [{
        "containerPort": 8181,
        "hostPort": 0,
        "servicePort": 8181,
...

        "forcePullImage": true
```
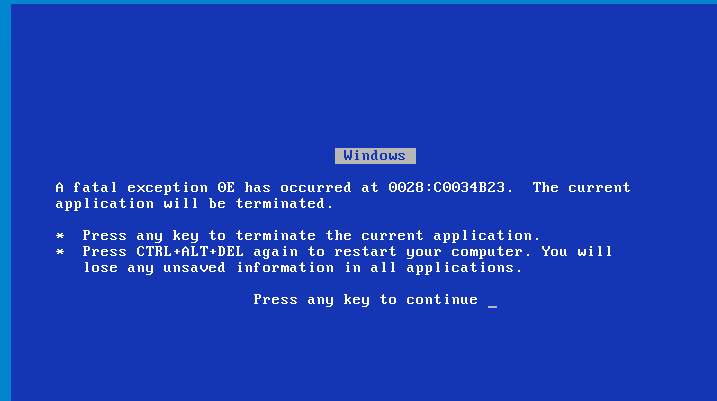
All hail to the `demo   gods`

Fin

- github github.com/blijblijblij

- blog blijblijblij.github.io/

- twitter @blijblijblij

I thank the motivator
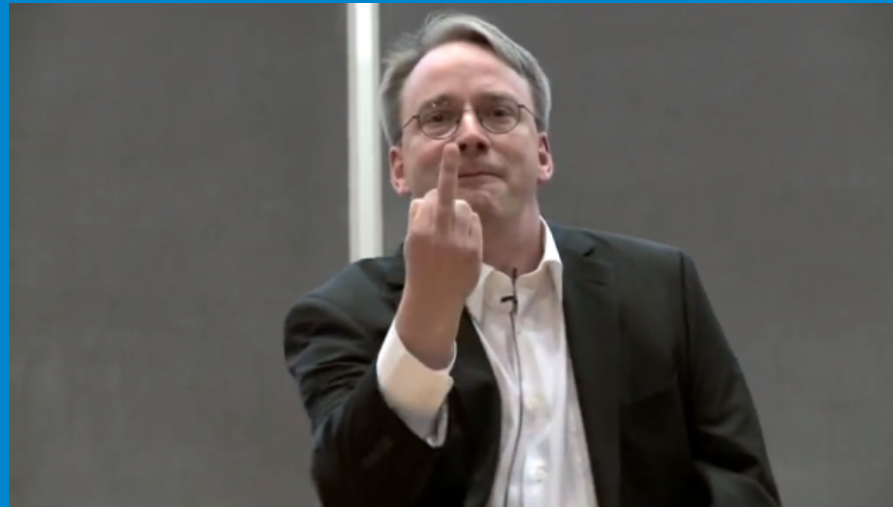
I thank the intellectual

" for advocating something else
The Cathedral and the bazaar
The Art of Unix Programming   "

I thank the benevolent dictator

" for `f^$%%$`-ing doing it! "