Continuously deliver your puppet code with jenkins, r10k and git

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September 5, 2014

whoami

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Agenda

- A short story about configuration managment
- What is continous delivery
- How do we develop our Puppet code
- And what about deploying the code?
- Jenkins, GIT and r10k!
- Where do we go from here

A short story about configuration management (CM)

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- ▶ Before CM we had **strict** standards on how to manage these systems
- ▶ The problem:
  count(teammembers) == count(standards)
- ▶ So configuration management is the solution to all our problems

The solution to all our problems

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- Broke our systems

WHY????

Problems with our old CM system

- Systems installed without CM are hard to bring under CM control
- Every system is a special case
- In the beginning every problem was a CM problem
- CFEngine 2 based, no unit tests
- Deployment in stages, but we always had to cross our fingers
- Deployment via manual tagging and checkout, so mistakes happened
- We fixed the same mistakes more than once

So whats our solution?

or: why should i care?

Continuous delivery

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[1] Continuous Delivery: Jez Humble, David Farley

Continuous delivery

- is a pattern for getting software from development to release
- this pattern is called **the deployment pipeline**

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[1] Continuous Delivery: Jez Humble, David Farley

The deployment pipeline

Commit Stage → Automated unit testing → Automated acceptance testing → Deployment

The deployment pipeline

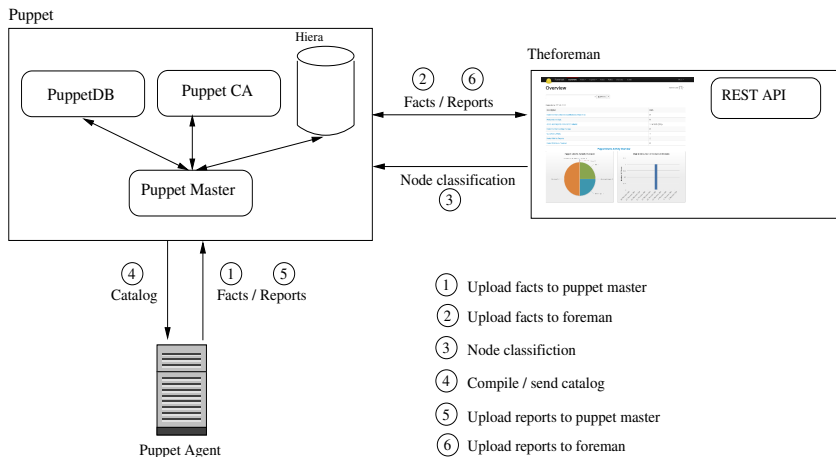| Commit Stage | → | Automated unit testing | → | Automated acceptance testing | → | Deployment |

but the automated acceptance tests are currently missing in our setup, we will fix this with beaker (thanks puppetlabs)

Puppet run

Puppet

PuppetDB

Puppet CA

Hiera

Puppet Master

Theforeman

REST API

(2) (6)
Facts / Reports

Node classification
(3)

(4)
Catalog

(1) (5)
Facts / Reports

Puppet Agent

(1) Upload facts to puppet master

(2) Upload facts to foreman

(3) Node classifiction

(4) Compile / send catalog

(5) Upload reports to puppet master

(6) Upload reports to foreman

Was ist Foreman?