With One Click

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Can you make a build with ONE step?

Starting from square one

- Contract ✔
- Business analysis ✔
- Design and wireframes ✔
- Ready to start coding – right?

Where do you start?

- Linux VM/WAMP/MAMP/XAMPP/manual install of apache, MySQL, PHP…?
- Create an empty repository
- Download latest Drupal to your checkout
- Start coding?
  - Downloading contrib modules
  - Click + configure
  - Custom modules and themes?

Stop!

Have you thought about…

- Environmental consistency?
- Deploying to live?
- Testing?

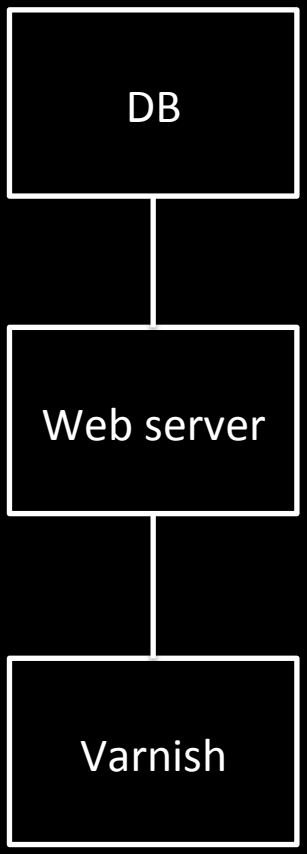
Two phases

- Cold start: installing from scratch
- Updating a live site

Cold start considerations

- Script **everything**.
- Tools include:
  - drush
  - drush make
  - install profiles
  - distributions (which typically use a complex install profile)

Start simple



Deployment – what's in a name?

- At its simplest, it's:
  Move code from repo to server
- But there's more…
  - Switching symlinks
  - Linking up file paths?
  - Clearing caches
  - Running update.php
  - Post-deploy tasks:
    - DB changes?
    - Drush commands?
    - Notify external systems?

Pushing code

It’s all been done before

- FTP
- Manual deployment – SSH/rsync
- Bash script
- Rube goldberg machine
- Capistrano/Webistrano
- Ant/Phing
- Jenkins
- Aegir
- Drush
- Git commands
- RPM packages

Simple tools for simple problems

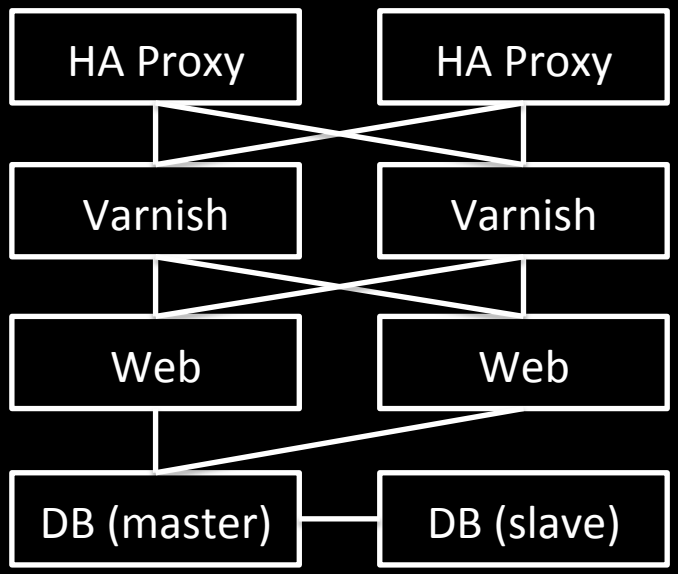
- With a simple setup – a single host, or a separate db and web server – a simple deployment tool may be enough.

A simple deployment script

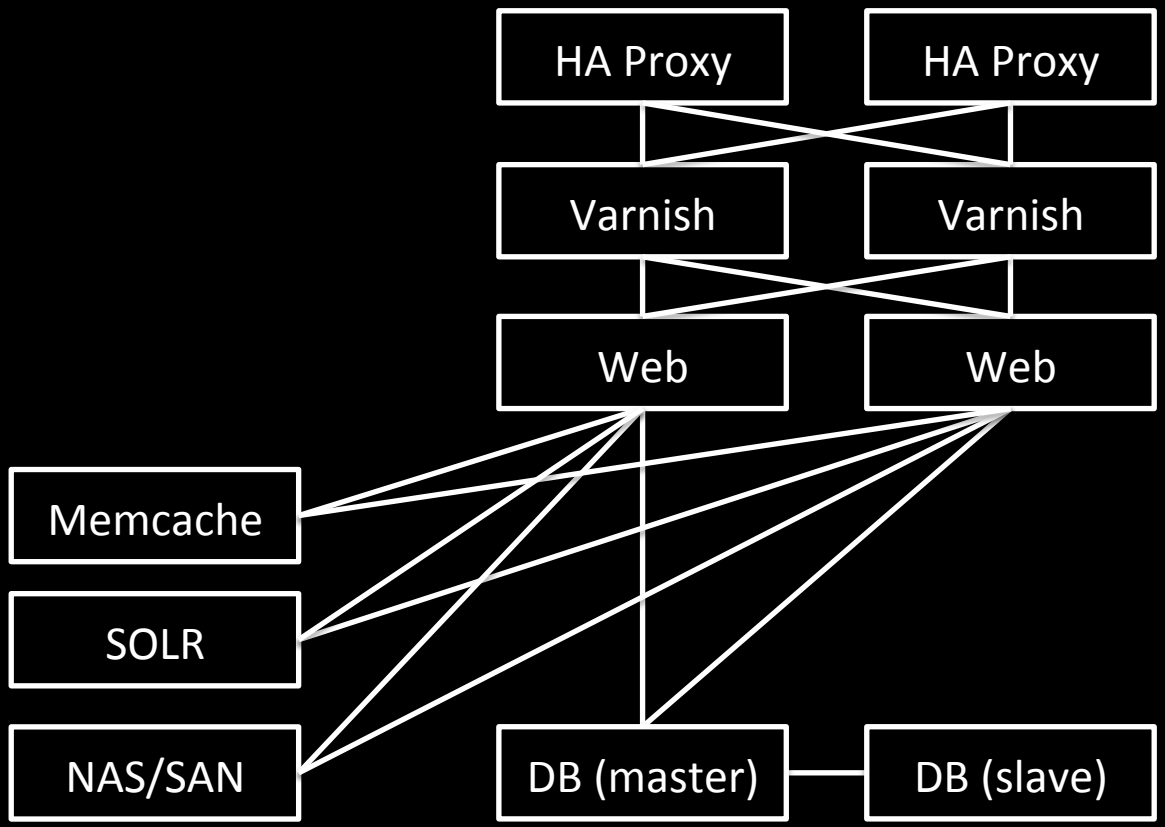
```
#!/bin/bash

# Version to deploy
version=release-1.0

# SVN source of tags. Presume that credentials are already cached.
svn=https://svn.example.com/my_web_site/tags

# Docroot is a symlink to the current checkout.
docroot=/var/www/current

# Folder which contains each checkout.
destination_folder=/var/www/
# Checkout to a timestamped folder (format: YYYYMMDD-HHMM)
timestamp=`date +%Y%m%d-%H%M`
destination=$destination_folder/$timestamp

svntag=$svn/$version
svn co $svntag $destination

# Switch symlink.
rm -f $docroot
ln -s $destination $docroot

# Clear caches with Drush.
drush -l $docroot cc all
```

Slides will be on slideshare.

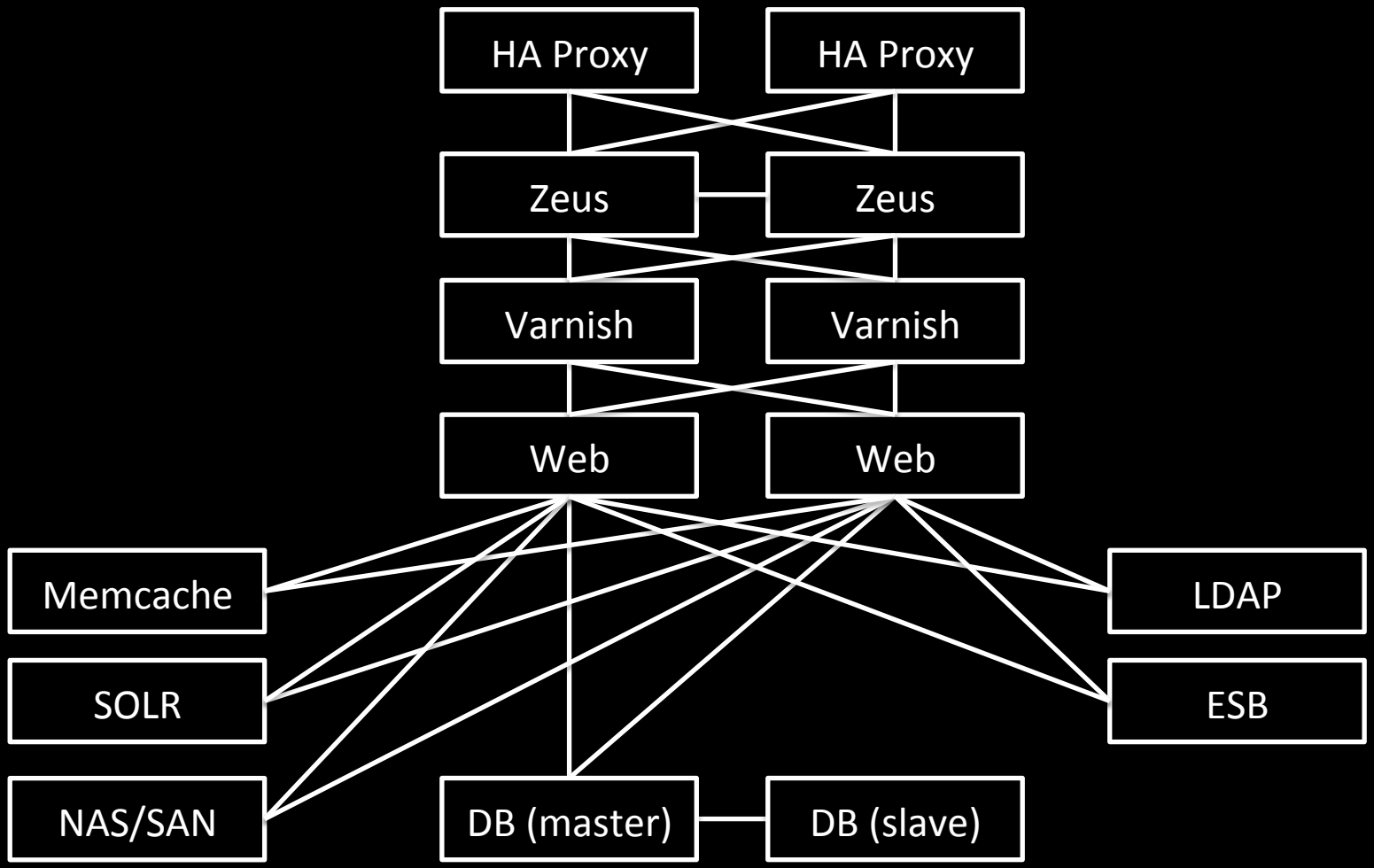
Enterprise sites: simple



Enterprise sites: complex+



Enterprise sites: complex++



Why is this complex to deploy?

- Multiple hosts
- Multiple roles
- Different actions for different roles

Managing this with a bash script will drive you insane

Deployment concepts

Hosts

- 192.168.20.4
- web1.example.com

Tasks

- Clear data cache
- Checkout code

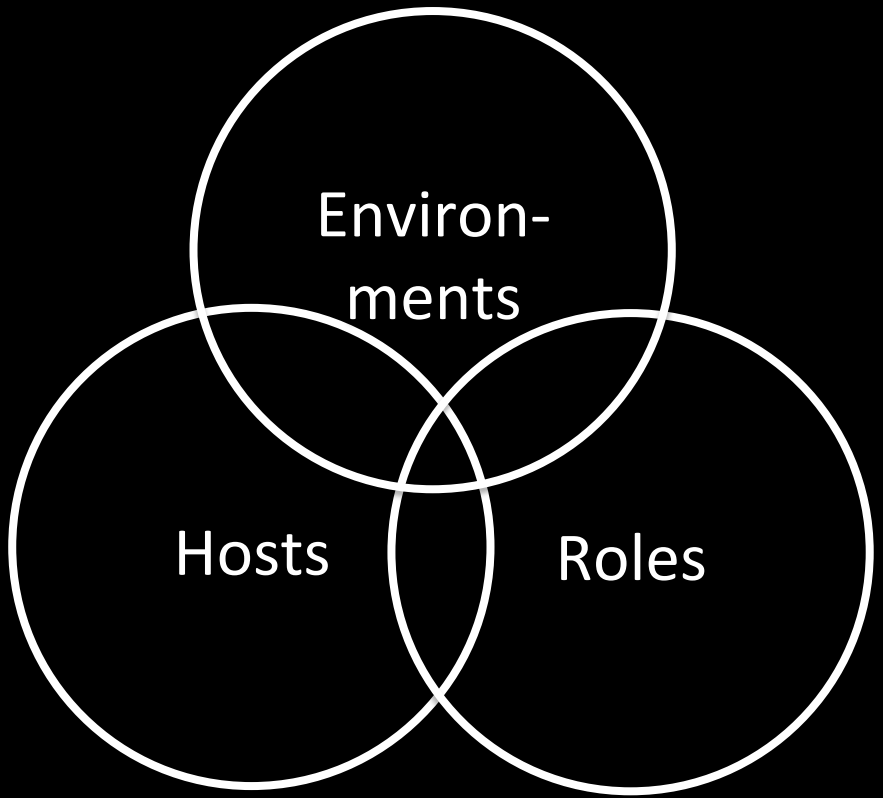
Actions

- Deploy to stage
- Close site for maintenance

Roles

- Webserver
- Reverse proxy
- Network management
- Data cache
- Database
- Authentication host

Environments, hosts, roles



Demo

172.16.25.10 = web, cache, db, proxy

Live

192.168.20.30 = web, cache

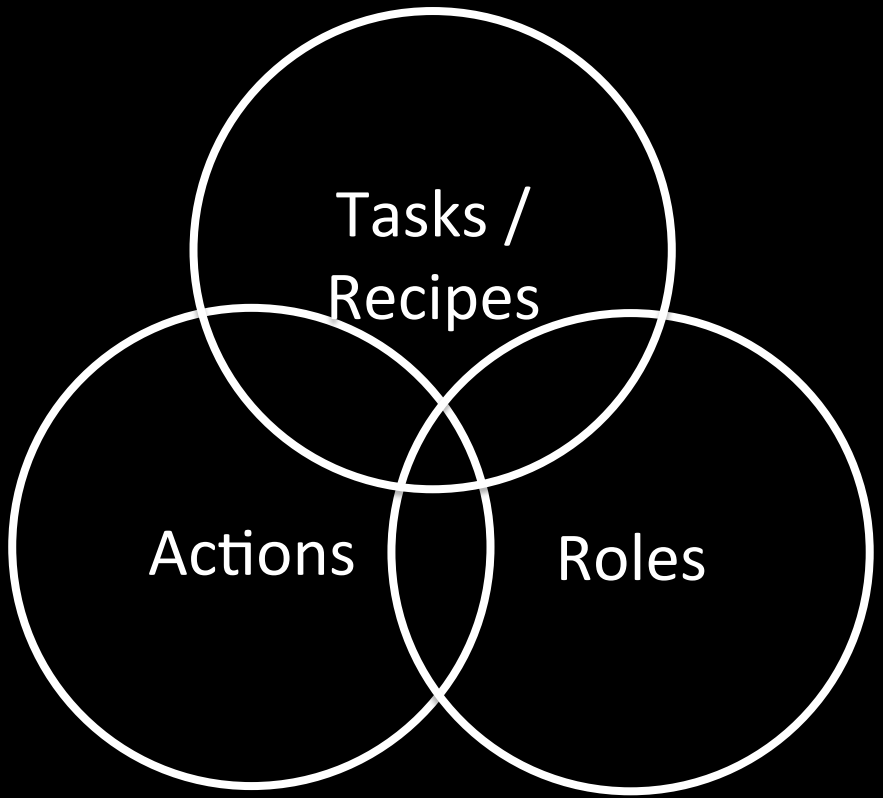
192.168.20.31 = web, cache

192.168.20.32 = web, cache

192.168.20.40 = db

192.168.20.50 = proxy

Tasks, actions, targets



Recipe

- Deploy code
- Restart memcache

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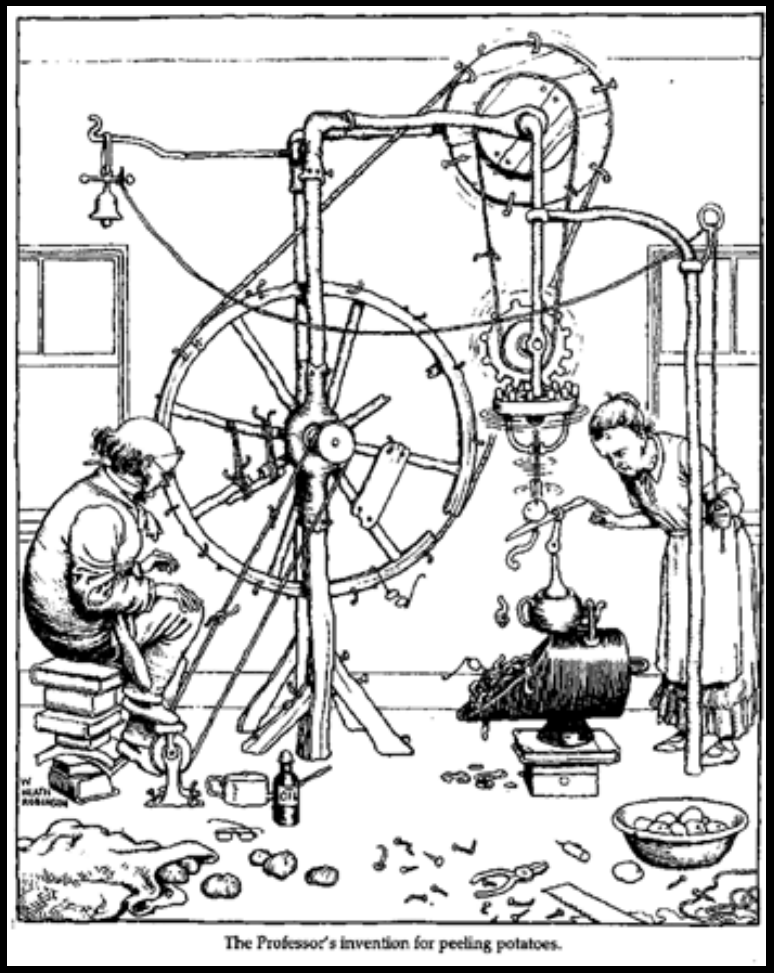
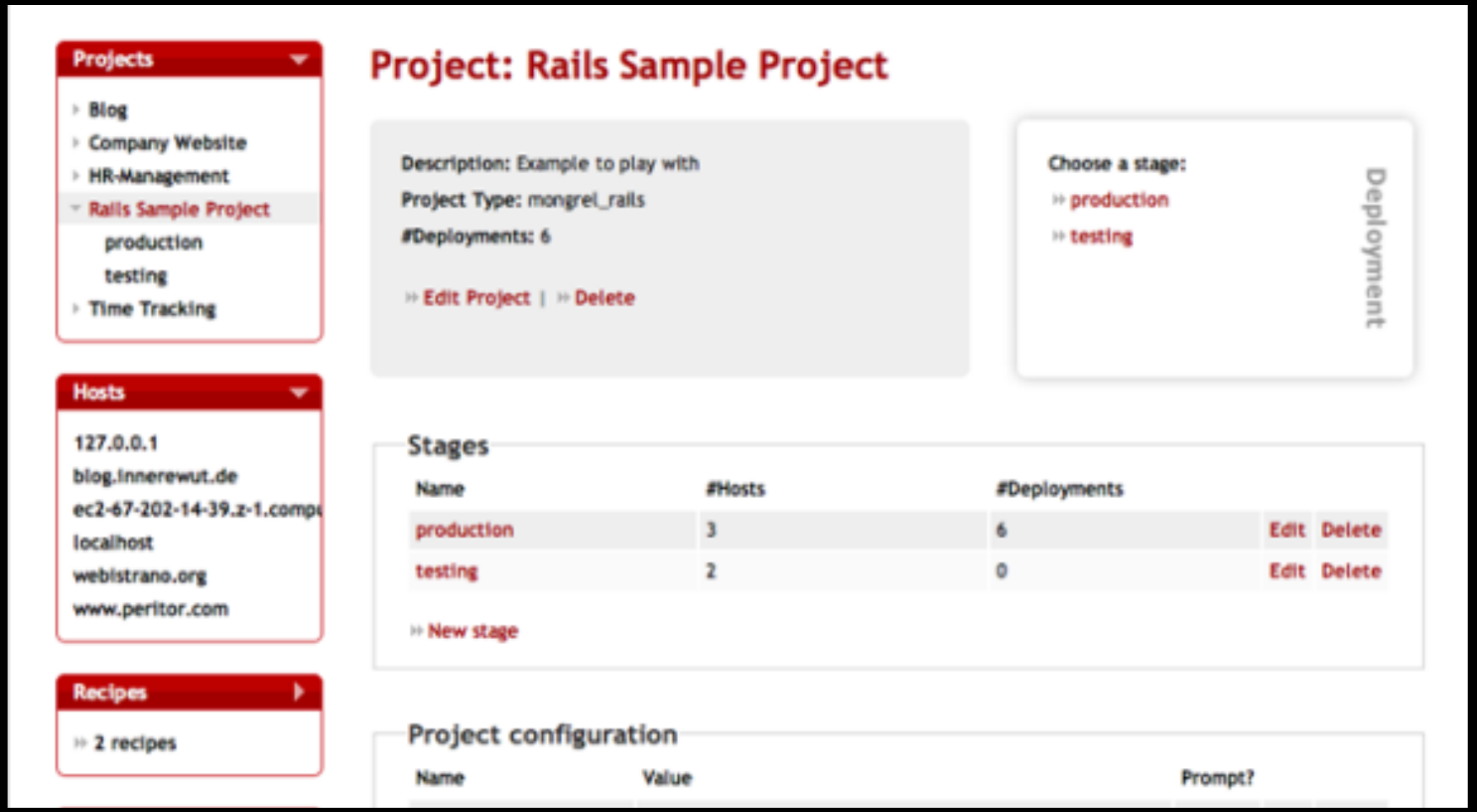
Rube Goldberg deployment



The Professor's invention for peeling potatoes.

Webistrano


Projects
Blog
Company Website
HR-Management
Rails Sample Project
production
testing
Time Tracking
Hosts
127.0.0.1
blog.innerewut.de
ec2-67-202-14-39.z-1.compu
localhost
webistrano.org
www.peritor.com
Recipes
2 recipes
Project: Rails Sample Project
Description: Example to play with
Project Type: mongrel_rails
#Deployments: 6
Edit Project | Delete
Choose a stage:
production
testing
Deployment
Stages
Name
#Hosts
#Deployments
production
3
6
Edit
Delete
testing
2
0
Edit
Delete
New stage
Project configuration
Name
Value
Prompt?

Webistrano: under the hood

(live demo)

Alternatives

Alternatives to Webistrano

- Wednesday 12:30
  "Aegir: One Drupal to Rule Them All!"
- Wednesday 15:00
  "dog: A New Era for Drupal Sitebuilding"
- Thursday 14:45
  "Drush Deploy"
- Jenkins (hudson)

Conference sessions
Drupalcon London: August 2011

Beyond deployment

Other tools

- Environment automation:
  - Puppet
  - Chef
  - Vagrant
  - Fabric
  - Quickstart
- CI & test tools
  - Jenkins/Hudson
  - Codesniffer
  - Selenium

Questions?

Twitter: @manarth

Blog: http://deglos.com/

Slides: *http://www.slideshare.net/manarth*