DEVELOPING FOR MULTI-COMPONENT ENVIRONMENT

WHILE KEEPING YOUR SANITY

Who's talking?

github.com/jbaruch

@jbaruch

linkd.in/jbaruch

Developer who?

Developer who?

Agenda

- Mostly, Boromir memes.

Agenda

- Mostly, Boromir memes.

distribution

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The Vert.x binary distribution

Set me up!

Feedback

General | Readme | Release Notes | Reviews (0) | Statistics

About This Package

Version Notification Links

Website	None
Issue Tracker	None
VCS	None
Licenses	Apache-2.0

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vert.x-2.1M5.tar.gz
sha1: 29695bdce55908823423596aeca344bc142c31cb

vert.x-2.1M5.zip
sha1: 129aeb808d76e4a2c10371dfcc2df44cca77c52e

Versions

Latest Version Download Badge

2.1M5

2.1M3

2.1M2

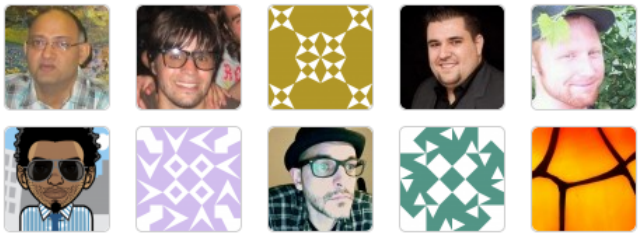
2.1M1

2.0.2-final

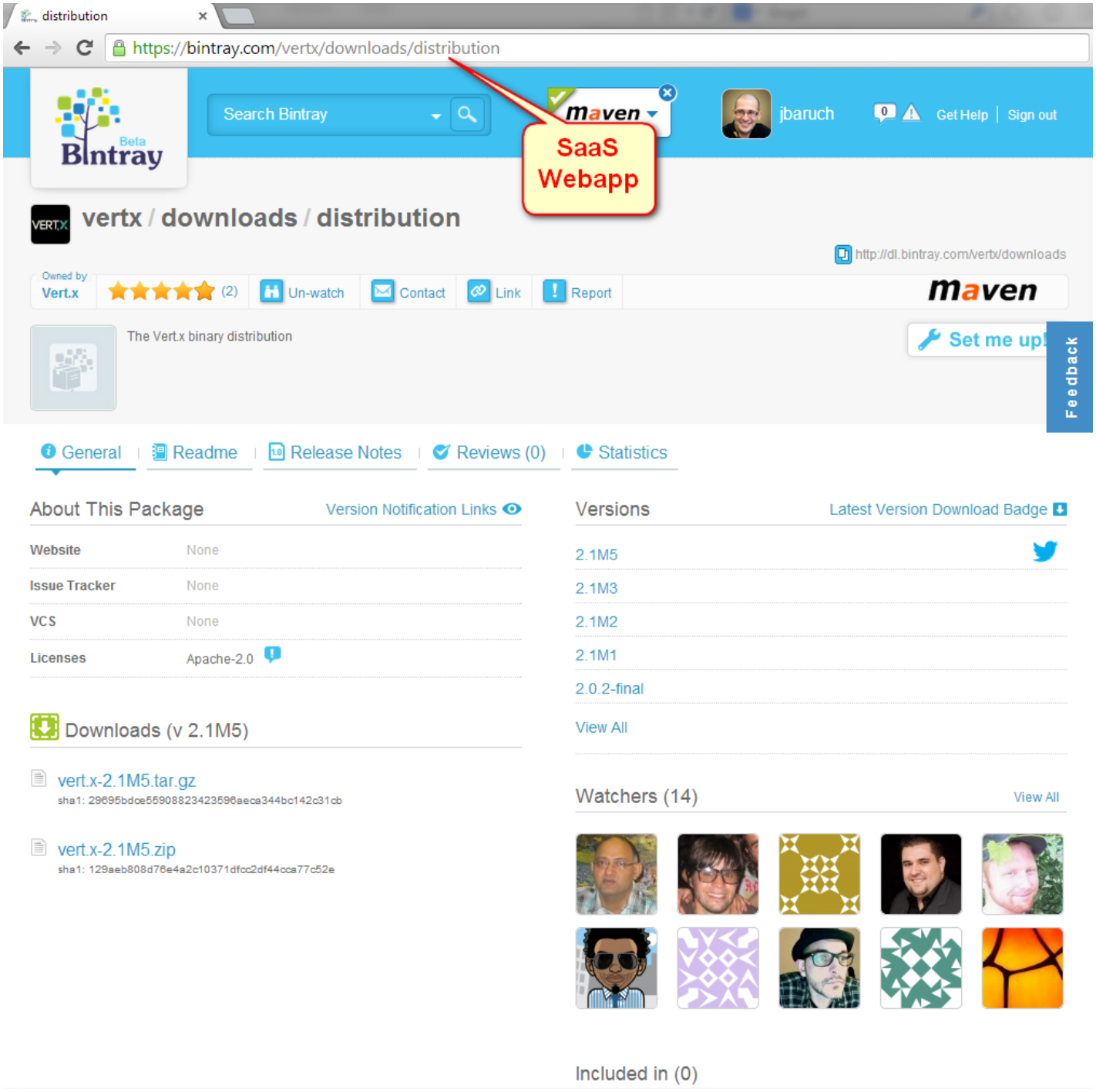
View All

Watchers (14)

View All



Included in (0)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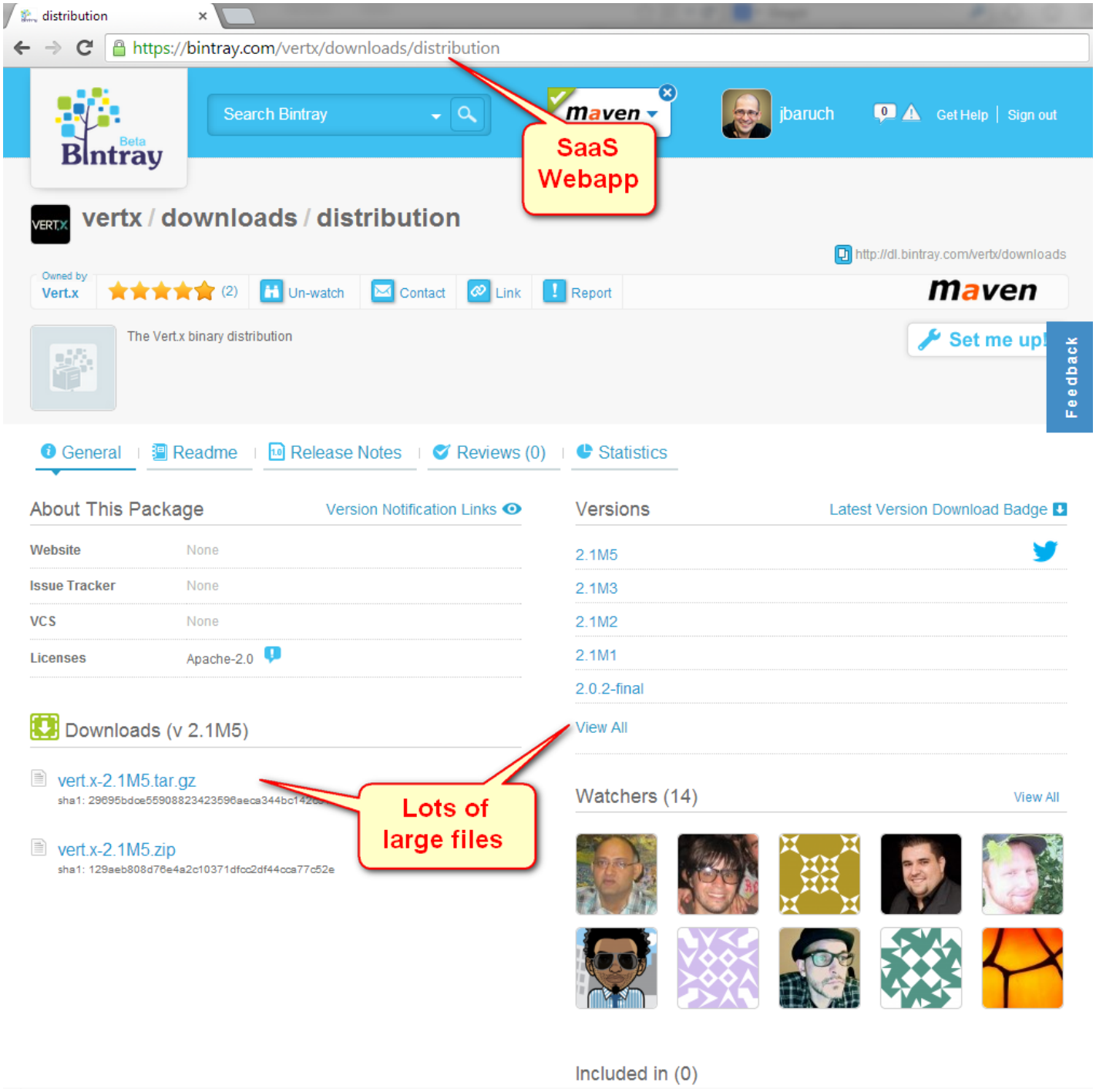
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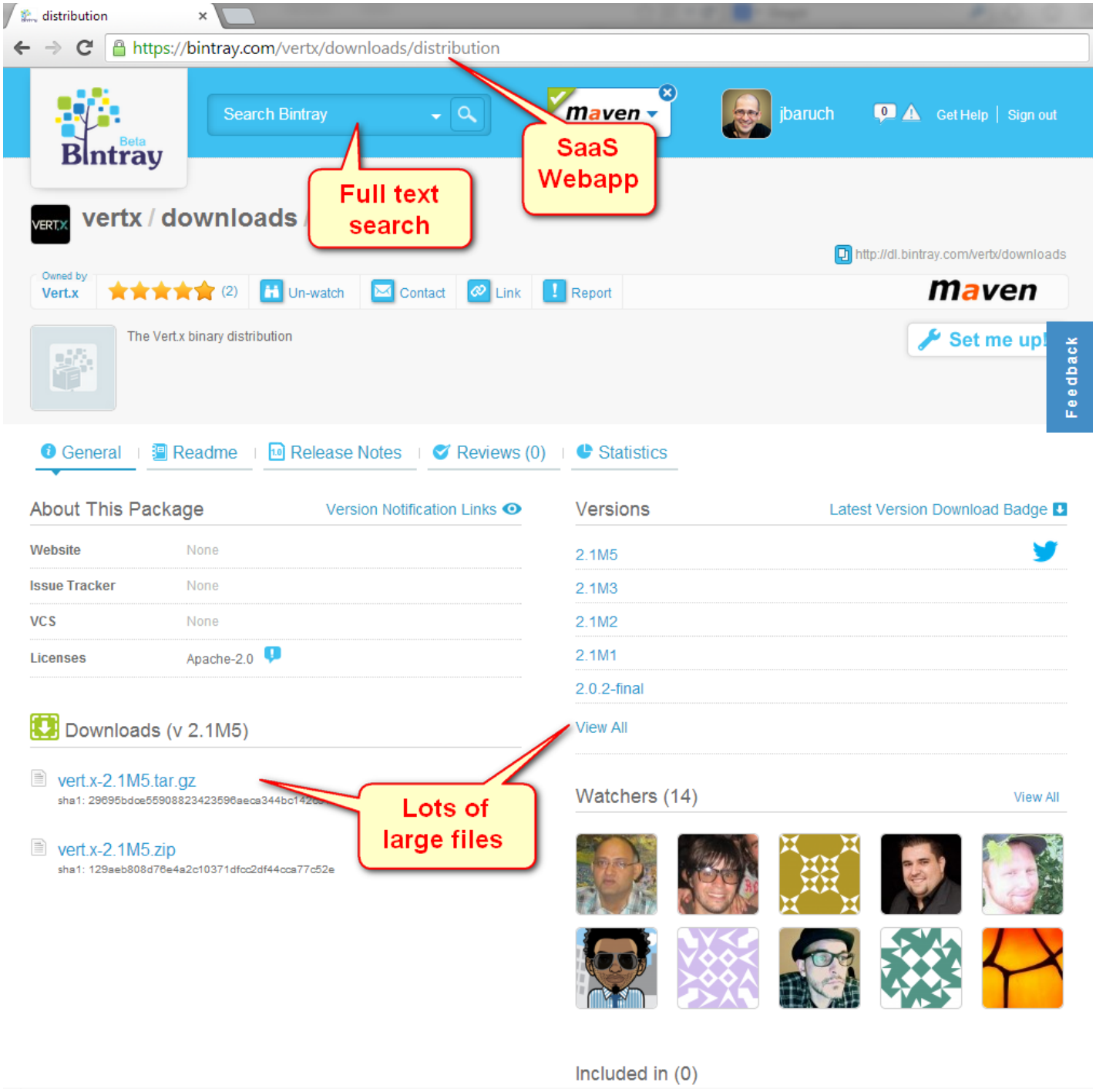
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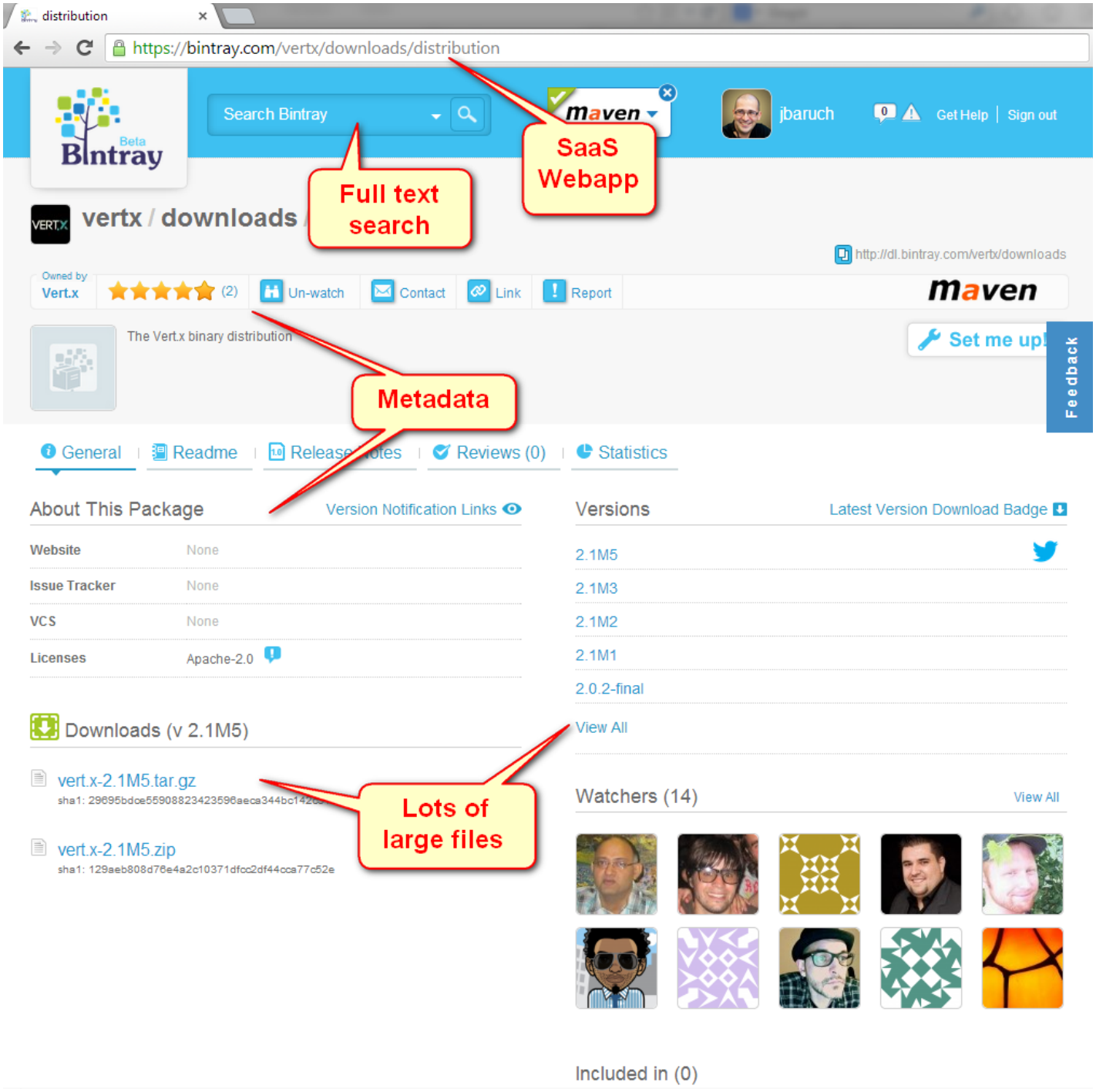
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We love our tools (and frameworks)

mongoDB

mongoDB

mongoDB

EHCACHE

mongoDB

EHCACHE

Sphinx

mongoDB

EHCACHE

mongoDB

EHCACHE

mongoDB

EHCACHE

Apache

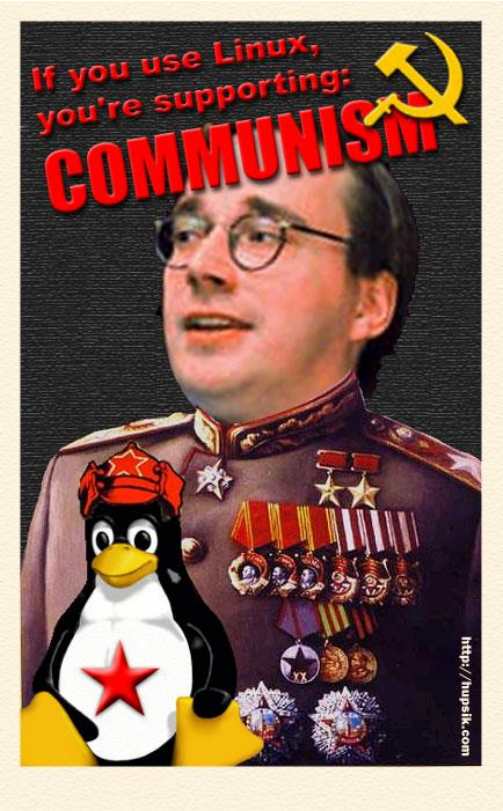
mongoDB

EHCACHE

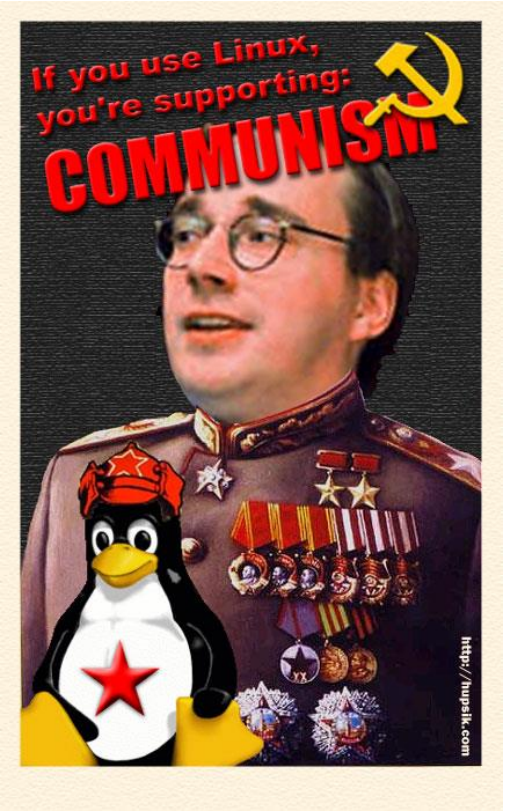
NGINX

We are liberal

We are liberal



We are liberal



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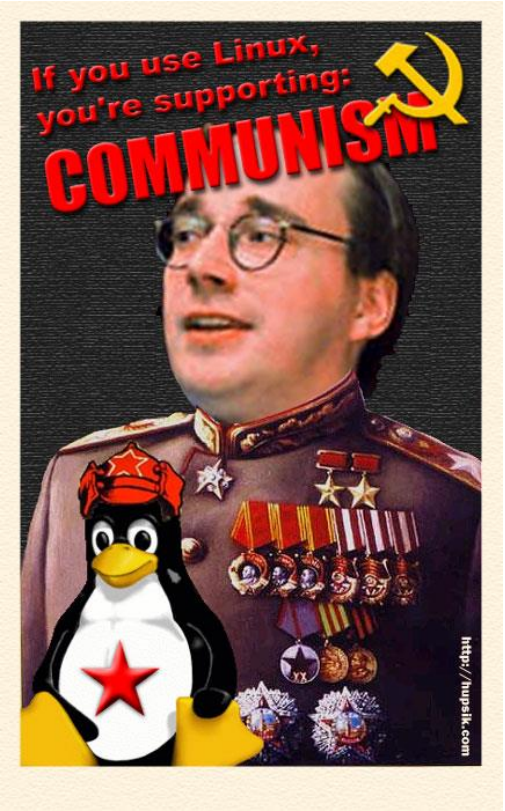


ONE DOES NOT SIMPLY
SETUP ALL THAT ON ALL THIS
quickmeme.com

The Solution

The Solution

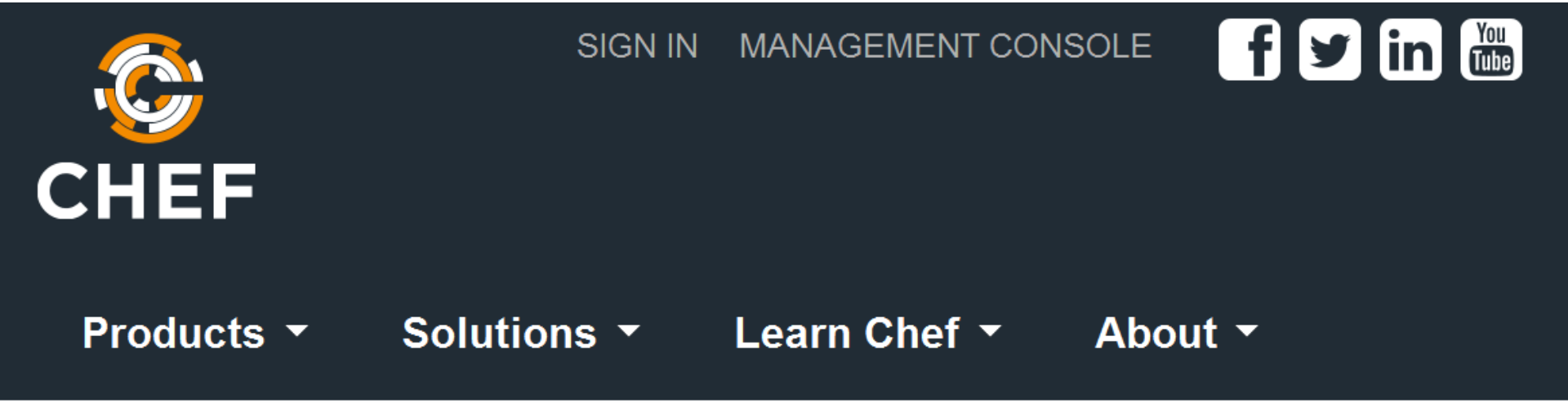
The Solution

The Solution

The Solution

Chef what?

Opscode Chef



Chef works with cookbooks

Cookbooks

A cookbook is the fundamental unit of configuration and policy distribution. Each cookbook defines a scenario, such as everything needed to install and configure MySQL, and then it contains all of the components that are required to support that scenario, including:

- Attribute values that are set on nodes
- Definitions that allow the creation of reusable collections of resources
- File distributions

Chef works with cookbooks

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- Definitions that allow the creation of reusable collections of resources
- File distributions

Install MySQL in Ruby

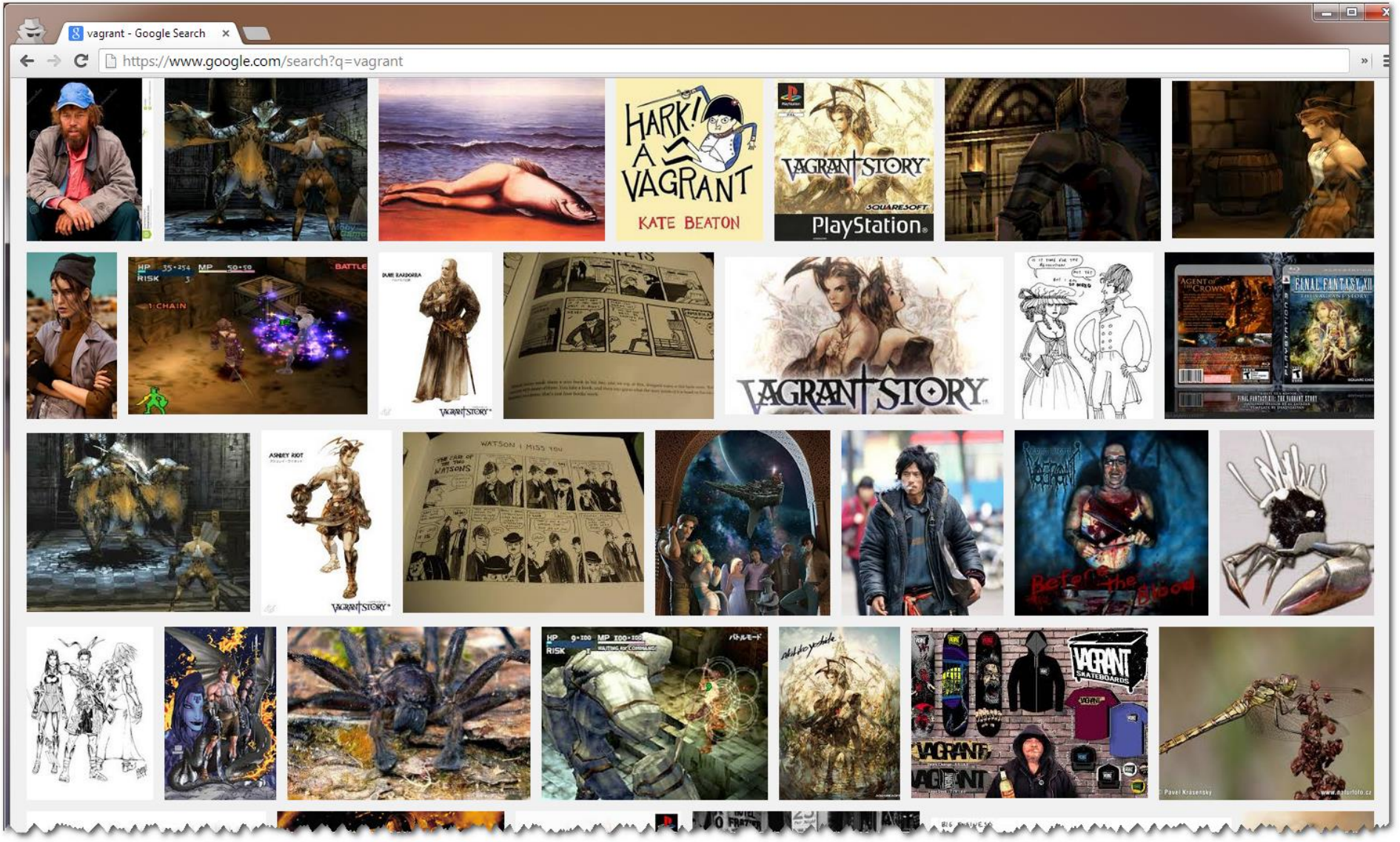
```
115
116   if platform_family? 'windows'
117     require 'win32/service'
118
119     windows_path node['mysql']['bin_dir'] do
120       action :add
121     end
122
123     windows_batch "install mysql service" do
124       command "\"#{node['mysql']['bin_dir']}\\mysqld.exe\" --install #{node['mysql']['service_name']}"
125       not_if { Win32::Service.exists?(node['mysql']['service_name']) }
126     end
127   end
128
```

Why not Puppet?

The Solution

The Solution

Vagrant what?



Vagrant

DOCS
VAGRANT
HOW VAGRANT BENEFITS YOU
If you're a developer, Vagrant will isolate dependencies and their configuration within a single disposable, consistent environment, without sacrificing any of the tools you're used to working with (editors, browsers, debuggers, etc.). Once you or someone else creates a single Vagrantfile, you just need to vagrant up and everything is installed

Setup Vagrant with Chef

CHEF SOLO PROVISIONER

Provisioner name: `chef_solo`

The chef solo provisioner allows you to provision the guest using Chef specifically with Chef Solo.

Setup Vagrant with Chef

```
  config.vm.box = "centos-6"

  # Enable and configure the chef solo provisioner
  config.vm.provision :chef_solo do |chef|
    chef.cookbooks_path = "#{checkout}"
    #chef.data_bags_path = "install/chef/data_bags"
    chef.roles_path = "install/chef/roles"

    chef.add_role("bintray_common_vagrant_server")
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  end
end
```

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Development

Development

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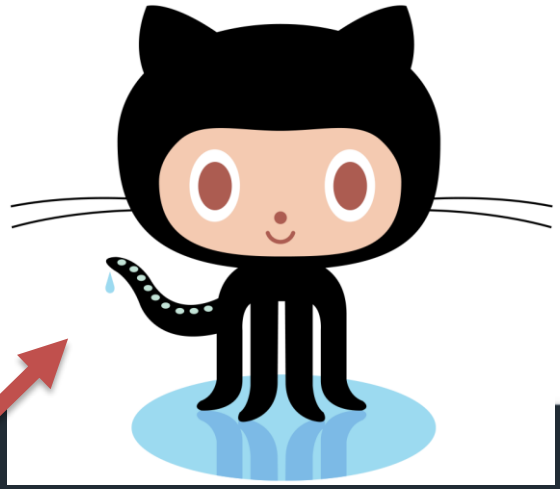
Development



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Development

```
Directory of D:\Users\jbaruch\projects\cookbooks\cookbooks

29/01/2014  16:27    <DIR>          .
29/01/2014  16:27    <DIR>          ..
29/01/2014  16:27    <DIR>          apache2
29/01/2014  16:27    <DIR>          apt
29/01/2014  16:27    <DIR>          ark
29/01/2014  16:27    <DIR>          artifactory
29/01/2014  16:27    <DIR>          aws
29/01/2014  16:27    <DIR>          basic-pack
29/01/2014  16:27    <DIR>          bluepill
29/01/2014  16:27    <DIR>          bt_install
29/01/2014  16:27    <DIR>          build-essential
29/01/2014  16:27    <DIR>          chef_handler
29/01/2014  16:27    <DIR>          couchdb
29/01/2014  16:27    <DIR>          deploy
29/01/2014  16:27    <DIR>          devnullsmtp
29/01/2014  16:27    <DIR>          elasticsearch
29/01/2014  16:27    <DIR>          erlang
29/01/2014  16:27    <DIR>          haproxy
29/01/2014  16:27    <DIR>          incapsula
29/01/2014  16:27    <DIR>          install_from
29/01/2014  16:27    <DIR>          java
29/01/2014  16:27    <DIR>          jfrog
29/01/2014  16:27    <DIR>          libs
29/01/2014  16:27    <DIR>          logentries
29/01/2014  16:27    <DIR>          loggly
29/01/2014  16:27    <DIR>          logicmonitor
29/01/2014  16:27    <DIR>          logrotate
29/01/2014  16:27    <DIR>          memcached
29/01/2014  16:27    <DIR>          metachef
29/01/2014  16:27    <DIR>          mongodb
29/01/2014  16:27    <DIR>          mount
29/01/2014  16:27    <DIR>          mysql
29/01/2014  16:27    <DIR>          nagios
29/01/2014  16:27    <DIR>          network-host
29/01/2014  16:27    <DIR>          network-keys
29/01/2014  16:27    <DIR>          nginx
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chef-s

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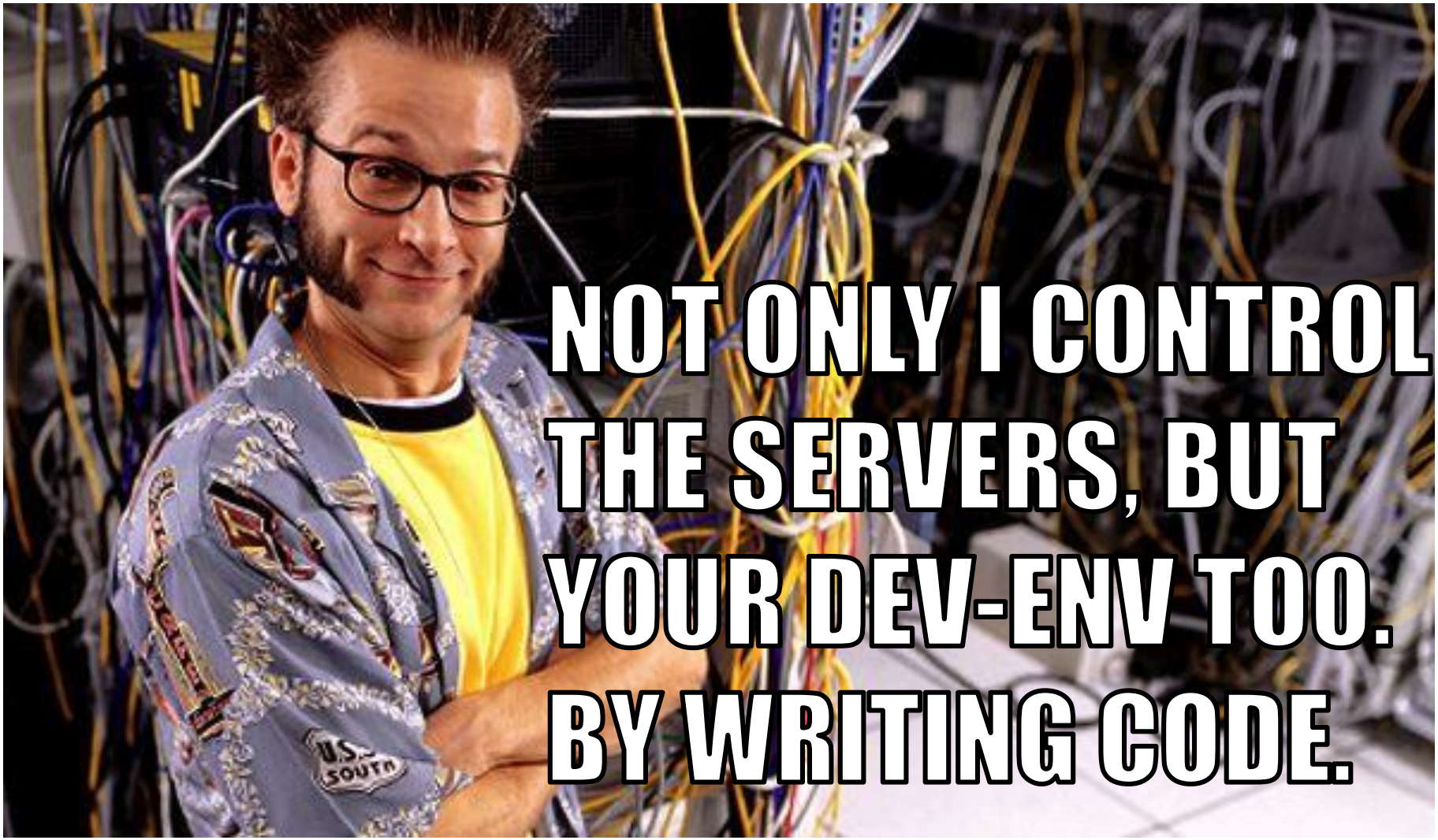
DevOps in Dev Env



1. Vagrant boots CentOS on VirtualBox

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2. Chef installs all DB and service RPMs from private yum repo

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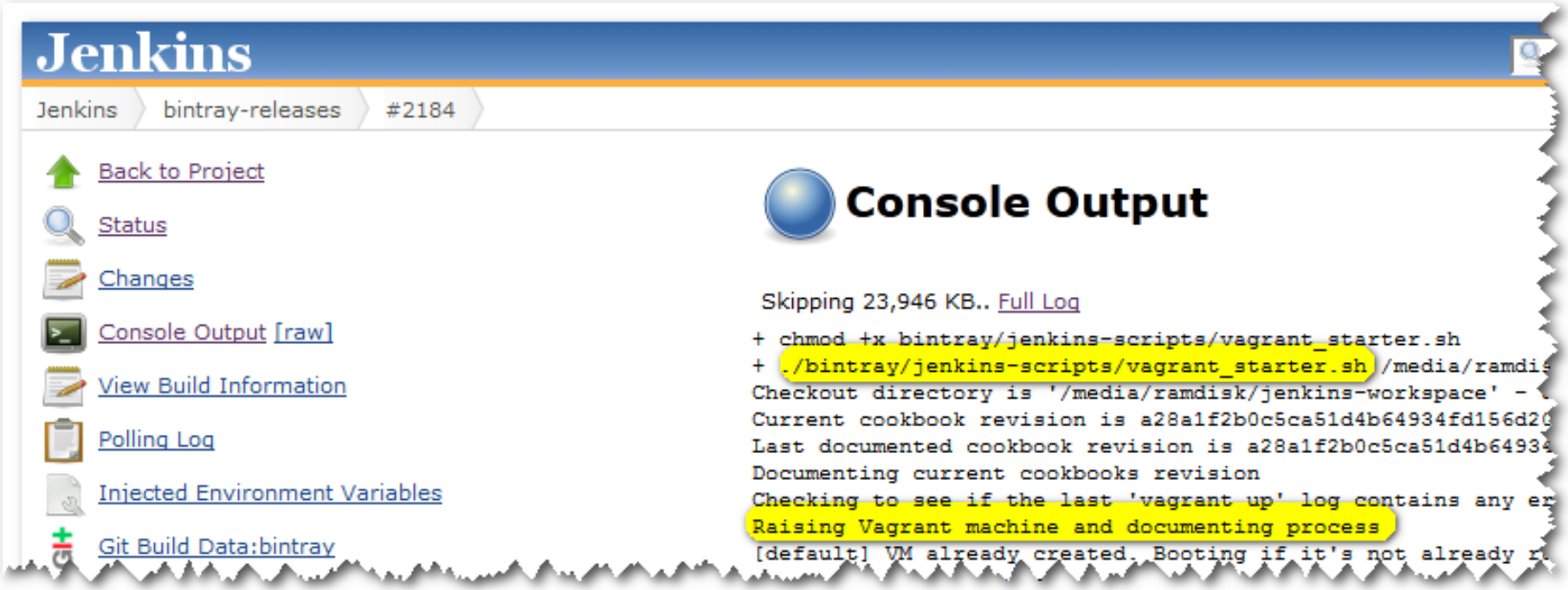
2. Chef installs all DB and service RPMs from private yum repo
3. Profit!

Going to Production...

The Solution

The Solution

As easy as...


Jenkins
Jenkins
bintray-releases
#2184
Back to Project
Status
Changes
Console Output [raw]
View Build Information
Polling Log
Injected Environment Variables
Git Build Data:bintray
Console Output
Skipping 23,946 KB.. Full Log
+ chmod +x bintray/jenkins-scripts/vagrant_starter.sh
+ ./bintray/jenkins-scripts/vagrant_starter.sh /media/ramdi
Checkout directory is '/media/ramdisk/jenkins-workspace' -
Current cookbook revision is a28a1f2b0c5ca51d4b64934fd156d2
Last documented cookbook revision is a28a1f2b0c5ca51d4b6493
Documenting current cookbooks revision
Checking to see if the last 'vagrant up' log contains any er
Raising Vagrant machine and documenting process
[default] VM already created. Booting if it's not already r

CLOUD
CLOUD EVERYWHERE
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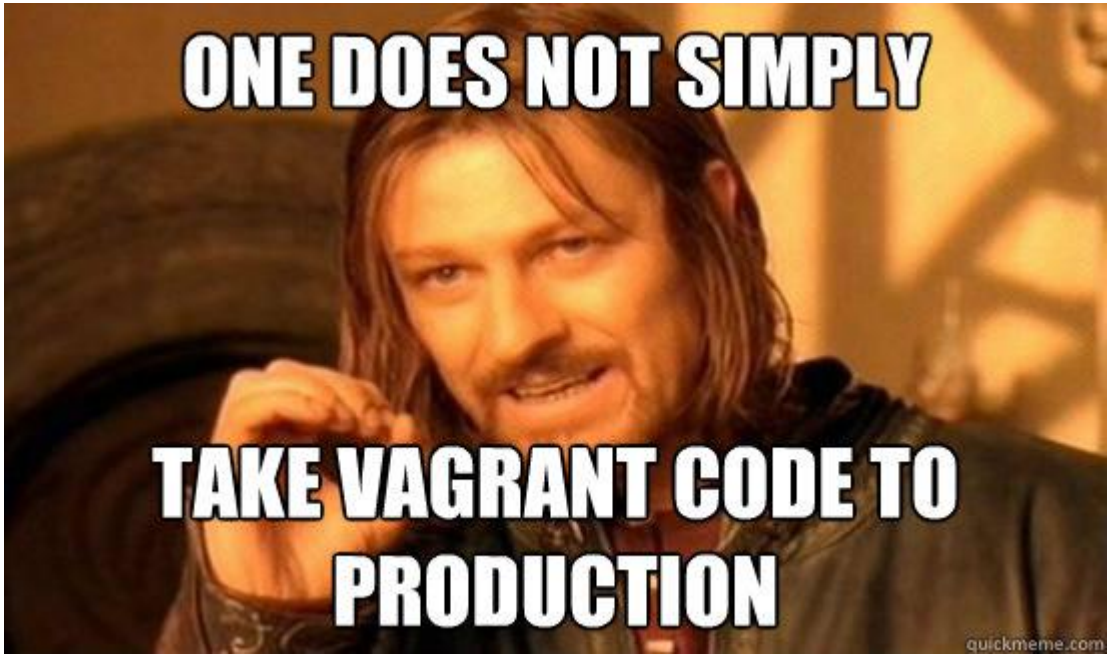
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Production – cloud all the way

CHEF DOCUMENTS

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Production – cloud all the way

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THE GOOD

THE GOOD

1. EASY SETUP

THE GOOD

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2. SAME SETUP (INC. CI)

THE GOOD

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3. CHANGES PROVISIONING

THE GOOD

1. EASY SETUP

2. SAME SETUP (INC. CI)

3. CHANGES PROVISIONING

4. KILL INSTEAD OF FIX

THE BAD

THE BAD

1. CHEF SOLO != CHEF SERVER

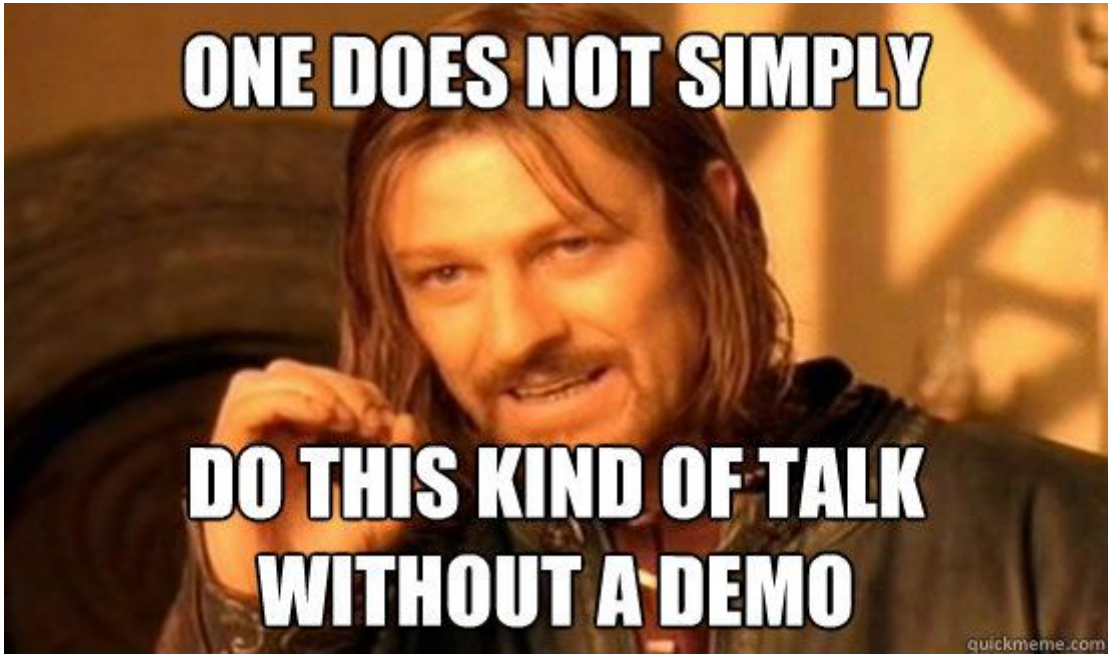
THE BAD

1. CHEF SOLO != CHEF SERVER

2. BLACK ~~BOX~~ MAGIC FOR DEVELOPERS

THE UGLY

THE UGLY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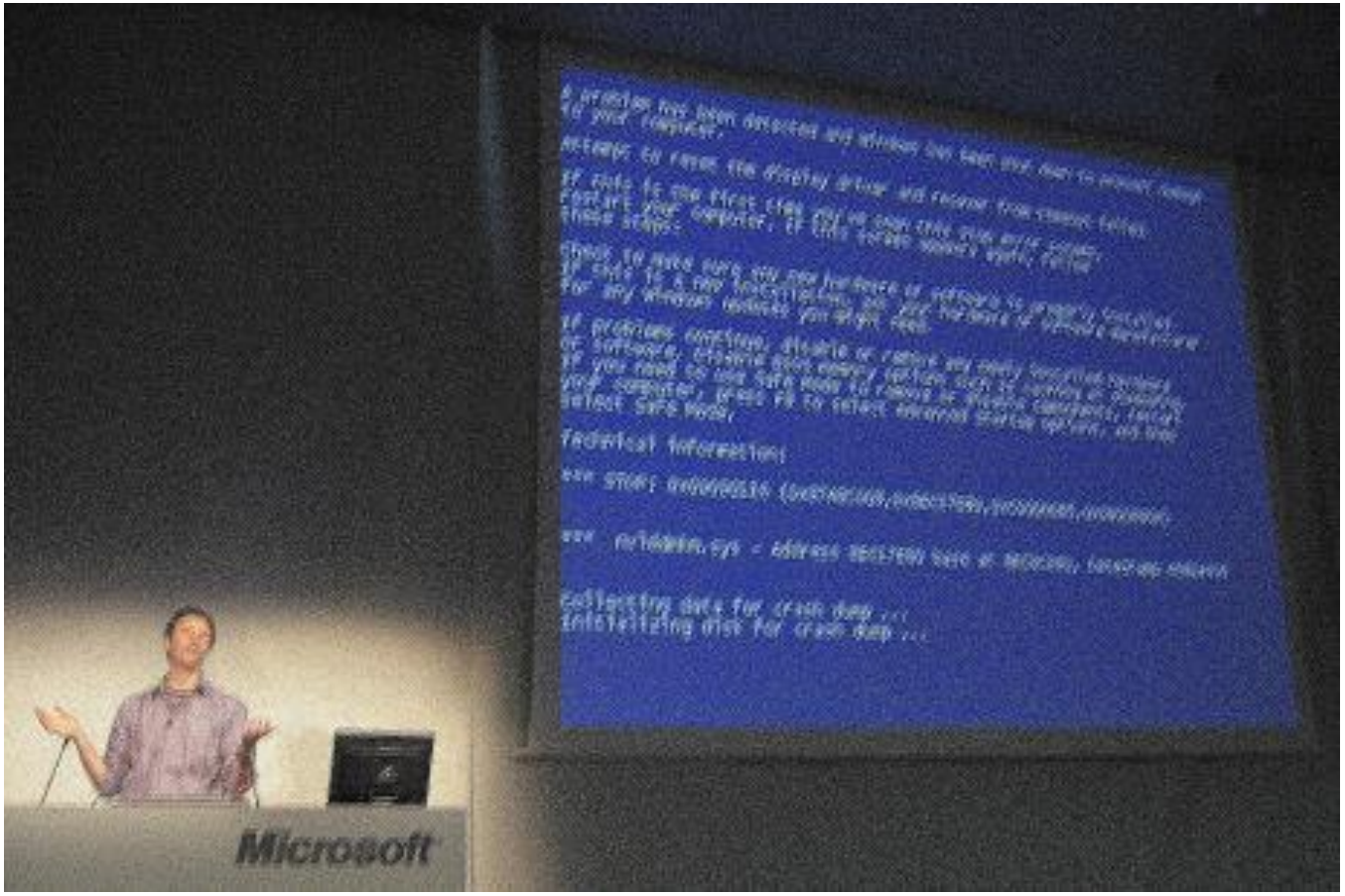
Demo Time!



mongoDB

EHCACHE

NGINX

ORACLE
VirtualBox

mongoDB

EHCACHE

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ORACLE
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No, thank you!