

Automate your Drupal development environment

Markus Heurung



Markus Heurung

@muhh

Drupal Developer, Linux Sysadmin, Trainer,
IT Manager

Co-Founder of freistil IT

freistil IT

<http://freistil.it>

@freistil

“Ops for Devs”

freistilbox: PaaS for Drupal and WordPress

Challenge...

“Snowflake” dev environments

Manual configuration efforts

Mismatched software versions

Long on-boarding times

... **accepted**

Minimise setup time

Make development \approx production

Reproduce setup consistently on demand



Vagrant

**“Create and configure
lightweight,
reproducible, and
portable development
environments.”**

<http://vagrantup.com>

```
$ vagrant init hashicorp/precise64  
$ vagrant up
```



CHEEF™

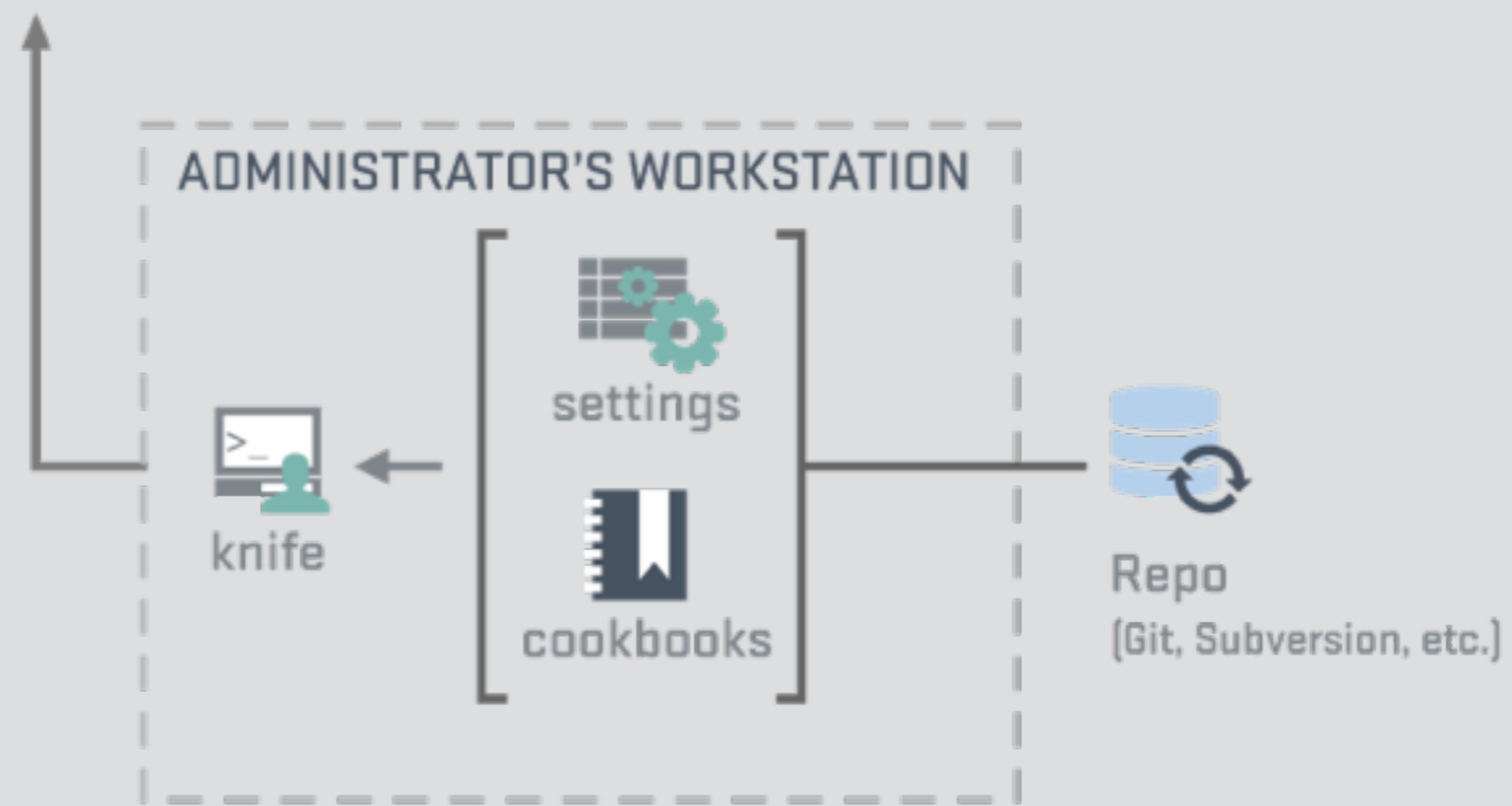
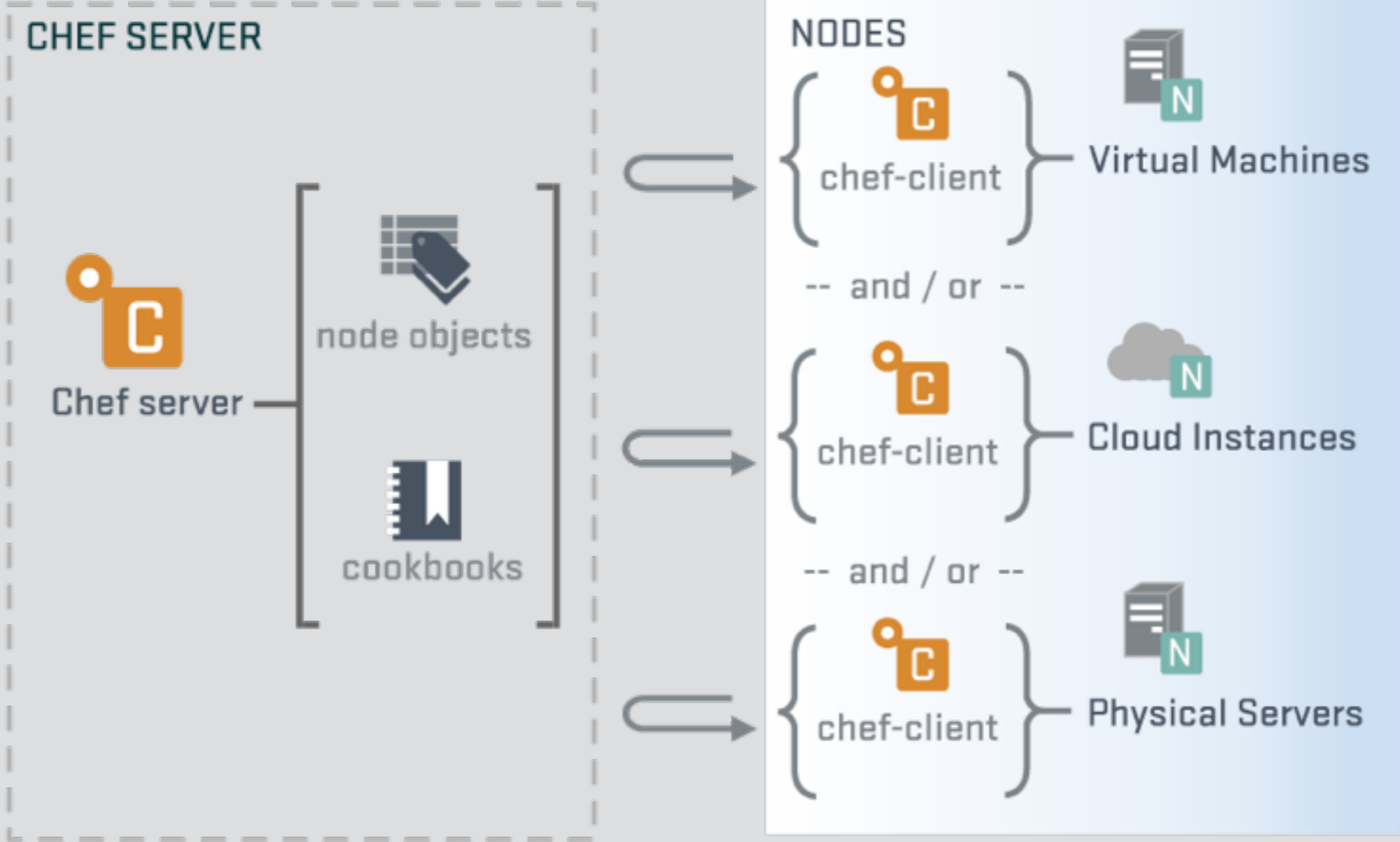
Configuration Management with Chef

Ruby DSL for *system administration tasks*

Idempotency

only changes the necessary

Infrastructure as Code



Infrastructur as code

Cookbook

Node

Recipe

Role

Resource

Run List

Attribute

Search

Nodes

chef-client runs on every node.

Nodes have a runlist.

Nodes have attributes.

Cookbooks

Bundels all the instructions for a certain service or system component.

- Apache cookbook**
- MySQL cookbook**
- PHP cookbook**

Recipe

**Defines what resources Chef needs to manage
to reach a desired system state.**

Attribute

A value used in resource definitions
that can differ from node to node.

→ PHP memory limit

→ Number of CPU's

Resource

Package

Command, Script

Service

Cron

File, Directory

Git

Template

...

Package, Service

```
package "apache2" do
  action :install
end
```

```
service "apache2" do
  action [:enable, :start]
end
```

Directory

```
# Create webapp directory
directory "/var/www/docroot" do
  action :create
  owner "www-data"
  group "www-data"
  mode 00755
  recursive true
end
```

Template

```
template "/etc/apache2/apache2.conf" do
  source "apache2.conf.erb"
  owner "root"
  group "root"
  mode 00644
  notifies "reload", "service[apache2]"
end
```


Role

Defines

- a runlist of recipes / roles
- a set of default attributes



CHEF™

Preparations

Install Virtualbox

<http://www.virtualbox.org>

Install Vagrant

<http://www.vagrantup.com>

Preparations

```
$ vagrant plugin install vagrant-cachier  
$ vagrant plugin install vagrant-omnibus
```

get the code

```
$ git clone
```

```
https://github.com/muhh/vagrant-drupal.git
```

Prepare chef

```
$ cd vagrant-drupal
```

```
$ gem install librarian-chef
```

```
site 'http://community.opscode.com/api/v1'
```

```
cookbook 'apt'
```

```
cookbook 'apache2'
```

```
cookbook 'database'
```

```
cookbook 'php'
```

```
cookbook 'mysql'
```

```
$ librarian-chef install
```

Role

```
name "drupal"  
description "Drupal dev VM"  
  
run_list(  
  "recipe[apt]",  
  "recipe[drupal]",  
  "recipe[drupal::apache2]",  
  "recipe[drupal::php]",  
  "recipe[drupal::mysql]"  
)
```

Provisioning

In Vagrantfile:

```
config.vm.provision "chef_solo" do |chef|  
  chef.node_name = "drupal"  
  chef.cookbooks_path = [  
    "cookbooks", "vendor/cookbooks" ]  
  chef.roles_path = "roles"  
  chef.add_role("drupal")  
  
end
```


\$ vagrant up

Links

<http://getchef.com>

<https://learnchef.opscode.com>

<http://community.opscode.com>

<http://github.com/opscode-cookbooks>

<https://www.virtualbox.org/>

<http://vagrantup.com>

<https://github.com/schisamo/vagrant-omnibus>

<https://github.com/fgrehm/vagrant-cachier>

<https://github.com/applicationsonline/librarian-chef>

<https://github.com/muhh/vagrant-drupal>

<https://speakerdeck.com/muhh/>

Thanks!
Questions?

markus@freistil.it
@muhh