

## \*\*\*\*\* Updated , Post testkitchen install. \*\*\*\*\*

Once you have testkitchen working, cd to your working directory, and do the following:-

```
git clone https://github.com/chef/dotscaleworkshop.git
cd ./dotscaleworkshop/analytics
rake converge
cd ../cdwithjenkins
rake converge
```

This should build x4 vm's in kitchen, which are all required for the class. Please do not destroy them, as they are required for the class. The idea is to build them before attending the class to save bandwidth in the classroom.

## Chef Fundamentals training. Requirements for class v1.0.6

Students should at least install chefdk 0.6.0 ( see Resources Section at end of document ), and be able to run "chef verify" from a command window, before they attend the class ( ideally )

Advanced students need the following tools ( git, vagrant, testkitchen, virtualbox/vmware fusion/vmware workstation ( choose one ), and testkitchen plugin to vagrant ) -all at the latest version, not old versions that they have already installed.

Bring your own Laptop required, no equipment will be provided

## Windows workstation setup with chefdk/testkitchen ( 15 minutes approx. )

At least 15Gb free space, needed for vm images.

install:-

chefdk, - <https://downloads.chef.io/chef-dk>

virutalbox - <https://www.virtualbox.org/wiki/Downloads>

vagrant - <https://www.vagrantup.com/downloads.html>

git - use github install <https://windows.github.com/>

Path problems - On Microsoft Windows, C:/opscode/chefdk/bin must be before C:/opscode/chefdk/embedded/bin in the PATH.

**Run the following commands to verify the install, if not working, fix.**

```
chef -v
chef verify
vagrant plugin install virtualbox
vagrant plugin install vagrant-winrm
cd c:\users\\
mkdir Source
cd Source
kitchen init
Edit ".kitchen.yml" file in current directory ( ensure you have the full
stop at the beginning of the file name ), and change the following :-
Change from this:-
platforms:
  - name: ubuntu-12.04
  - name: centos-6.4
```

```
To this:-
platforms:
-   name: centos-6.6
```

Now run the following:-

```
kitchen list
kitchen create
kitchen diagnose
kitchen destroy # this destroys the machine, you might want to do a
kitchen login to play around before destruction
```

nb ssh.exe is needed, and should use a git shell from the github install above.

Troubleshooting, ensure no spaces in the path on local directory

## Linux workstation setup with chefdk/testkitchen ( 15 minutes approx. )

At least 15Gb free space, needed for vm images.

install:-

chefdk, - <https://downloads.chef.io/chef-dk>

virtualbox - <https://www.virtualbox.org/wiki/Downloads>

vagrant - <https://www.vagrantup.com/downloads.html>

#Linux - Ubuntu - workarounds

```
echo 'export PATH="/opt/chefdk/embedded/bin:$PATH"' >>
```

```
~/.bash_profile && source ~/.bash_profile
```

had to go to ~/.bashrc and add the following entry towards the end of file

#Source bash\_profile to set JAVA\_HOME and add it to the PATH because for some reason is not being picked up  
.  
~/bash\_profile  
#To avoid ssl errors when downloading with man in the middle proxy for ssl.  
Create or modify a file called .gemrc in your home path, including the line  
:ssl\_verify\_mode: 0

**Run the following commands to verify the install, if not working, fix.**

```
chef -v
chef verify
vagrant plugin install virtualbox
vagrant plugin install vagrant-winrm
cd ~
mkdir Source
cd Source
kitchen init
Edit ".kitchen.yml" file in current directory ( ensure you have the full
stop at the beginning of the file name ), and change the following :-
Change from this:-
platforms:
  - name: ubuntu-12.04
  - name: centos-6.4
```

```
To this:-
platforms:
- name: centos-6.6
```

Now run the following:-  
kitchen list - if you installed testkitchen,  
kitchen create  
kitchen diagnose  
kitchen destroy # this destroys the machine, you might want to do a  
kitchen login to play around before destruction

**Recommended editors for text editing. Not mandatory, any text editor will do, but some are more efficient.**

**Sublime text**

**Sublime text links:-**

[http://www.bonusbits.com/main/HowTo:Install\\_Chef\\_Support\\_in\\_Sublime\\_Text](http://www.bonusbits.com/main/HowTo:Install_Chef_Support_in_Sublime_Text)

## sublimetext chef plugin helper.

[http://www.bonusbits.com/main/HowTo:Install\\_Chef\\_Support\\_in\\_Sublime\\_Text](http://www.bonusbits.com/main/HowTo:Install_Chef_Support_in_Sublime_Text)

## Sublime text plugin for a shell “sublimeREPL” and the fixes required to get it working

Here are the links, describing fix for PRY:

description:

<http://vikingcodingadventures.tumblr.com/post/97746105649/setting-up-sublimerepls-pry-ruby-cli-in-sublime>

fix:

<https://github.com/wuub/SublimeREPL/pull/372/files>

## Chef Fundamentals Checklist

- How many people will join the training and what's their background?  
eg, developer, sysadmin, manager etc.
- What operating systems are being used for workstations/laptops?  
Admin access required for windows, usb ports working ( please advise if this is against security policy ).
- What operating systems are planned to be managed by Chef?  
Primary OS, secondary OS etc...

Admin rights needed for laptops ( normally windows )

## Classroom requirements

Strong wifi, 2.4Ghz/5Ghz preferred, wifi username/password

If you are providing a classroom, it should be large enough to accommodate the entire class comfortably, with a table and chair for each person.

Internet access is required in the classroom, wifi is OK, but it has to work, as internet access is a mandatory part of the class.

Projector and screen with vga/hdmi/DVI cable

Power sockets for all students, near to their desks ( power bars are ok. )

Whiteboard, or flip chart with pens and eraser ( whiteboard )

Ready supply of bottled water/access to refreshments

Preferably place to obtain coffee/tea at break time.

On site lunch/snacks if possible

## Resources

<http://www.chef.io>

<http://learn.chef.io>

<http://docs.chef.io>

Email [info@chef.io](mailto:info@chef.io)

Twitter @Chef

Install Chef

<http://chef.io/chef/install>

Chef Cookbooks

<http://supermarket.chef.io>

Chefdk - Chef Development Kit

<https://downloads.chef.io/chef-dk/>

YouTube

<http://youtube.com/getchef>

Community Site

<http://supermarket.chef.io>

Freenode IRC  
#chef, #chef-hacking, #openstack-chef

Build your own windows boxes for vmware and virtualbox

<https://github.com/boxcutter/windows>

<https://packer.io>

Chef Bento images and packer

<https://github.com/chef/bento>

Testkitchen providers, good reference for connecting to clouds with kitchen

<http://misheska.com/blog/2014/09/21/survey-of-test-kitchen-providers/>

hyperV with Testkitchen

<http://www.hurryupandwait.io/blog/orchestrating-multi-server-tests-in-test-kitchen>

Create hyper-V windows VM

<http://www.hurryupandwait.io/blog/in-search-of-a-light-weight-windows-vagrant-box>

Chef-provisioning with Azure

<http://stuartpreston.net/2015/02/chef-provisioning-with-microsoft-azure-part-1/>

Audit mode of chef client – Security related?

<http://infra-talk.org/author/joshua-timberman>

Chef server default ports

[https://docs.chef.io/server\\_firewalls\\_and\\_ports.html](https://docs.chef.io/server_firewalls_and_ports.html)

# Security related

Chef Audit Mode: CIS Benchmarks

<https://www.chef.io/blog/2015/04/09/chef-audit-mode-cis-benchmarks>

Multinode test kitchen

<http://www.hurryupandwait.io/blog/orchestrating-multi-server-tests-in-test-kitchen>

Build images for azure

<https://github.com/MSSOpenTech/packer-azure>

# Need to fix this, probably not fit for consumption.

Not sure if you are venturing into kitchen + windows guests territory, but I managed to get that one working here:

<https://github.com/alexpope/myiis-cookbook/blob/master/.kitchen.yml>

The metadata trick is nice also to avoid downloading the client msi from the internet. 'windows\_v12.2.1.txt' is in my cookbook also.

Introduction to Testing with Chef

Videos

[https://www.youtube.com/playlist?list=PL11cZfNdwnyMp0BXY\\_nCOZ4odCqofq6oA](https://www.youtube.com/playlist?list=PL11cZfNdwnyMp0BXY_nCOZ4odCqofq6oA)

Code

[https://github.com/chef-training/introduction\\_to\\_testing](https://github.com/chef-training/introduction_to_testing)

Build a windows box for virtualbox

Packer and Boxcutter

Download packer

...

<https://www.packer.io/downloads.html>

...

Download boxcutter into your local directory where you did kitchen init.

...

`git clone https://github.com/boxcutter/windows.git`

...

`unzip packer`

Build a windows box for virtualbox, need to fix for virtualbox....

...

`packer build eval-win2012r2-standard.json nocm`

...

...

`packer build eval-win2012r2-standard.json nocm`

...