

## Appendix Z: Course-wide Instructor Notes

### 1. Training Lab System Setup

1. Open the AWS site from here: <https://aws.amazon.com/>
  - Login Credentials for Chef instructors: [training-aws@chef.io](mailto:training-aws@chef.io)
  - Password: Contact Chef Training Services if you don't know it or how to obtain it. [training@chef.io](mailto:training@chef.io)
  - Partner credentials should be provided by Chef directly to partners.
2. Click the first link in column **EC2 Virtual Servers in the Cloud**
3. From the navigation pane on the left, select **Images/AMIs**. The "Step 1" page displays with a list of available AMIs.
4. Select **Intermediate – CentOS 6.7 – 3.0.2** from the list of options.
5. Click **Launch**. The "Step 2" page displays.
6. Select the first **Micro Instance** from the list provided and click **Next: Configure Instance Details** at the bottom of the screen. The "Step 3" page displays.
7. Enter the **Number of Instances**.

*Note: You will need 1 instance for each student enrolled in the class - and 1 for yourself.*

8. Click **Next: Add Storage** at the bottom of the page. The "Step 4" page displays. Ensure that **'Delete on Termination'** is selected.

**Step 4: Add Storage**  
Your instance will be launched with the following storage device settings. You can attach additional EBS volumes and instance store volumes to your instance, or edit the settings of the root volume. You can also attach additional EBS volumes after launching an instance, but not instance store volumes. [Learn more](#) about storage options in Amazon EC2.

Volume Type	Device	Snapshot	Size (GiB)	Volume Type	IOPS	Throughput (MB/s)	Delete on Termination	Encrypted
Root	/dev/sda	snap-1ec5cf1e	8	General Purpose SSD (GP2)	100 / 3000	N/A	<input checked="" type="checkbox"/>	Not Encrypted

[Add New Volume](#)

Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage. [Learn more](#) about free usage tier eligibility and usage restrictions.

9. Click **Next: Tag Instance** at the bottom of the page. The "Step 5" page displays.
10. Enter a **Value**.

*Note: A recommended naming convention for the instances: [TRAINER'S INITIALS] - [CLASS NAME] - [CLASS DATE]*

11. Click **Next: Configure Security Group**. The "Step 6" page displays.
12. Click the **Select an existing security group** radio button. A list of security groups displays.


13. Select **all-open**.
14. Click **Review and Launch** at the bottom of the screen. The "Step 7" page displays.
15. After you review the instances, click **Launch**. The "Select a key pair" window displays.
16. Confirm that this is set to **Proceed without a key pair** and click the acknowledgement check box.
17. Click **Launch Instances**. The "Launch Status" page displays.
18. Click **View Instances**. The instances list displays.
19. From here, copy all of the instances and create a gist file to share with the class.
20. Use [goo.gl](#) to shorten the URL to the gist file.

**Note:** The login credentials and password for the AMIs used in class are chef/Cod3Can!. You'll need to tell the students that at the appropriate time.

## 2. How to Use Lab Slides

Regarding the "Lab" exercises (not the Group Exercises), you should encourage students to use the high-level hammer/wrench "Lab" slide steps first, and then resort to the subsequent detailed step slides if the students need the details to complete the lab. You can still use the subsequent detailed step slides as a vehicle to review each lab. For example:

This is a high-level hammer/wrench "Lab" instruction slide. Encourage students to complete the lab using this high level hammer/wrench "Lab" slide first.



The slide features a light gray background. In the top right corner, there is a black icon of a hammer and a wrench crossed. Below this, the title "Lab: Another Web Node" is written in orange. Underneath the title is a list of four steps, each preceded by a small square checkbox. The steps are: "Bootstrap a new node", "Update the run list of the new node to include the web server cookbook", "Login to that system and run chef-client", and "Verify that the node's web server is functional". At the bottom of the slide, there is a thin orange horizontal line. Below this line, on the left, is the text "©2015 Chef Software Inc.", in the center is "11- 4", and on the right is the Chef logo.

**Lab: Another Web Node**

- ☐ Bootstrap a new node
- ☐ Update the run list of the new node to include the web server cookbook
- ☐ Login to that system and run chef-client
- ☐ Verify that the node's web server is functional

©2015 Chef Software Inc. 11- 4 CHEF


If some students can't complete the lab based on the above slide, they are free to follow the subsequent detailed step slides, such as these:

### Lab: Bootstrap the New Node

```
$ knife bootstrap FQDN -x USER -P PWD --sudo -N node3
```

```
Connecting to ec2-54-210-86-164.compute-1.amazonaws.com
ec2-54-210-86-164.compute-1.amazonaws.com Starting first Chef Client run...
ec2-54-210-86-164.compute-1.amazonaws.com Starting Chef Client, version 12.3.0
ec2-54-210-86-164.compute-1.amazonaws.com resolving cookbooks for run list: []
ec2-54-210-86-164.compute-1.amazonaws.com Synchronizing Cookbooks:
ec2-54-210-86-164.compute-1.amazonaws.com Compiling Cookbooks...
ec2-54-210-86-164.compute-1.amazonaws.com [2015-09-16T17:36:14+00:00] WARN: Node node3 has an
empty run list.
ec2-54-210-86-164.compute-1.amazonaws.com Converging 0 resources
ec2-54-210-86-164.compute-1.amazonaws.com
ec2-54-210-86-164.compute-1.amazonaws.com Running handlers:
ec2-54-210-86-164.compute-1.amazonaws.com Running handlers complete
ec2-54-210-86-164.compute-1.amazonaws.com Chef Client finished. 0/0 resources updated in
```

©2015 Chef Software Inc. 11-5




### Lab: Verify the New Node

```
$ knife node show node3
```

```
Node Name: node3
Environment: _default
FQDN: ip-172-31-0-127.ec2.internal
IP: 54.210.86.164
Run List:
Roles:
Recipes:
Platform: centos 6.6
Tags:
```

©2015 Chef Software Inc. 11-6



You can also use the above detailed slides as a vehicle for reviewing the labs.