

AWS is sponsoring 50 vouchers to delegates who would like to attend AWS self-paced labs, this is on a first in best dressed scenario.

AWS Lab vouchers should be collected from AWS at The Lounge.

## **AWS Basics – Lab 1: Creating Amazon EC2 Instances (for Linux)**

### **Lab Description:**

This lab leads you through the steps to launch and configure your first virtual machine in the Amazon cloud. You will learn about using Amazon Machine Images to launch Amazon EC2 Instances, creating Key Pairs for SSH authentication, securing network access to Amazon EC2 Instances with Security Groups, automatically configuring Amazon EC2 Instances with bootstrapping scripts, and attaching Elastic IPs to Amazon EC2 Instances to provide static internet addresses. At the end of this lab you will have deployed a simple web server which includes an informational page to display details of your virtual web server instance. (Note: This lab will take you approximately 60 minutes to complete, and you will have a maximum of 120 minutes to complete the lab before the token expires. This lab may take up to 1 minute to setup and start.)

## **AWS Basics – Lab 2: Elastic Block Store (EBS)**

### **Lab Description:**

This lab focuses on Elastic Block Store (EBS), a key underlying storage mechanism for EC2 instances. In this lab, you will learn how to create a volume, attach it to an instance, apply a file system to the volume, and then take a snapshot backup. (Note: This lab will take you approximately 60 minutes to complete, and you will have a maximum of 120 minutes to complete the lab before the token expires. This lab may take up to 7 minute to setup and start.)

## **AWS Basics – Lab 3: Elastic Load Balancing**

### **Lab Description:**

This lab introduces the concept of Elastic Load Balancing (ELB). In this lab you will use ELB to load balance a set of web servers in an Availability Zone. First, you will launch a pair of instances, bootstrap them to install web servers and content, and then hit the instances independently using EC2 DNS records. Next, you will set up ELB, add your instances to the ELB, and then hit the ELB DNS record to watch your requests load balance between servers. Finally, you will look at ELB metrics in CloudWatch. (Note: This lab will take you approximately 75 minutes to complete, and you will have a maximum of 120 minutes to complete the lab before the token expires. This lab may take up to 1 minute to setup and start.)

## **AWS Basics – Lab 4: Auto Scaling (for Linux)**

### **Lab Description:**

Building on concepts from previous labs in the series, this lab introduces the basics of Auto Scaling AWS, highlighting multiple Auto Scaling use cases and the command-line tools used for Auto Scaling configuration. You will learn about configuring Auto Scaling to automatically launch web server instances, building an elastic web farm by integrating Auto Scaling with an Elastic Load Balancer, setting CloudWatch alarms to automatically adjust the size of the web farm based on CPU utilization, and utilizing Auto Scaling to ensure the availability of steady state resources. After completing this lab you will have configured and tested an elastic web farm which automatically scales capacity to accommodate load. In addition you will have explored a steady state use case in which Auto Scaling is used to maintain high availability of critical resources. (Note: This lab will take you approximately 75 minutes to complete, and you will have a maximum of 120 minutes to complete the lab before the token expires. This lab may take up to 8 minute to setup and start.)

## **Bundling EBS-Backed AMIs**

### **Lab Description:**

In this lab you will use the AWS Management Console and the EC2 Command Line Interface to bundle custom EBS-backed AMIs. Apply security best practices to create AMIs that are suitable for public sharing, and learn to map additional EBS and ephemeral volumes in your AMI. (Note: This lab will take you approximately 75 minutes to complete, and you will have a maximum of 120 minutes to complete the lab before the token expires. This lab may take up to 1 minute to setup and start.)

## **Creating an Amazon Virtual Private Cloud (VPC) with CloudFormation**

### **Lab Description:**

This lab, designed for experienced AWS users, allows you to create an Amazon VPC network using CloudFormation. At the end, you can email yourself the template to use as a starting point for your next project. (Note: This lab will take you approximately 75 minutes to complete, and you will have a maximum of 120 minutes to complete the lab before the token expires. This lab may take up to 1 minute to setup and start.)

## **Creating Your First Amazon Virtual Private Cloud (VPC)**

### **Lab Description:**

This lab, designed for experienced AWS users, takes you beyond the wizard and allows you to build an Amazon Virtual Private Cloud (VPC) that works for you. At the end, you will understand how to create private and public subnets, how to define routing tables and how to setup a NAT server to allow private subnets to access the Internet. (Note: This lab will take you approximately 90-120 minutes to complete, and you will