Exercise – Getting to grips with AWS

Objective

The objective of this exercise is to have a look at some of the services provided by AWS, start up a server, connect to it and then get apache up and running to say hello!

Overview

Much of this exercise is covered by the Quick Guides provided, so we won't repeat the information here. Step one of connecting to AWS for this course is to sign up for a Qwiklab account. Back in the real world you will sign up for your own account using AWS directly and a credit card, but for this week we'll use the Qwiklabs sandbox.

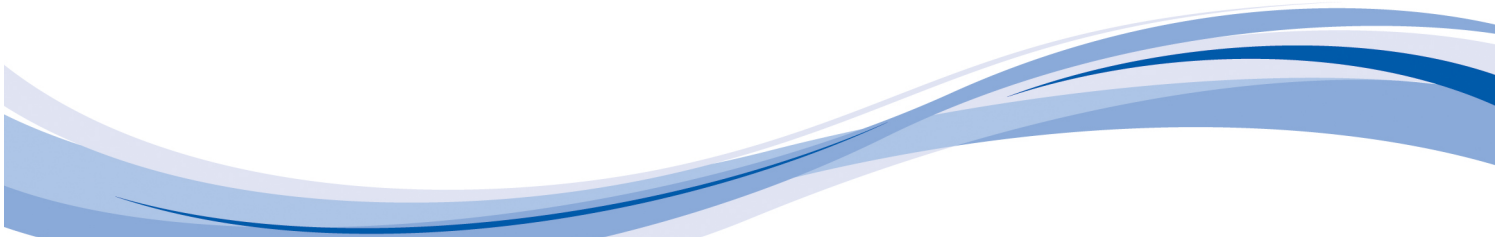
1. Sign up via: qa.qwiklab.com
2. Tell your instructor the email address you used
3. Your instructor will add you to the class and it will become available on your account
4. Click on the class name (usually it will be called "Development Course Environment")
5. Click on the lab that you want to run (Development Course Lab)
6. Now you should be greeted with your account credentials. Copy your password and then click the "Open Console" button to launch aws.
7. Enter your username: awsstudent and your password and you will be logged in and have access to the dashboard.

Part 1: Create an instance

Create a new instance using AWS. See "QG - Launching an EC2 instance" for the step by step guide to doing so. The setup should be as follows:

- AMI: Amazon Linux
- Size: t2.micro
- Disk Space: 8 gig
- Ports: Open port 80/tcp for access from anywhere

Ensure that you have downloaded your key from the qwiklabs interface. You will need it!



Step 2: Connect to your machine

See the quick guide: "QG - Use Putty to connect to EC2 instance over SSH" and connect to your machine. If you are on linux or using a mac, then we can connect via the command line with the following two lines:

```
$ chmod 400 keyname.pem          #change the key to read only
$ ssh -i keyname.pem username@ipaddress    # connect
```

Step 3: Lets do something fun

We're going to create an apache webserver (remember opening port 80 at the start). You should be connected to your machine via PuTTy or the terminal.

Fortunately, installing apache is quite simple, we can just pull it down using the package manager. First, as is good practice, update the operating system, then install apache.

```
$ sudo yum update            # update all
$ sudo yum install -y httpd      # install apache
$ sudo service httpd start       # start the service
```

Point your browser at your public IP address and you should see the apache start page.

Explore AWS

Have a play around with launching and connecting to some servers with aws. Windows servers require remote desktop rather than ssh access, so see if you can create a windows machine and connect to that using the remote desktop viewer.

Some people prefer to interact with systems like AWS entirely through the command line. There are a set of command line tools that you can use to launch and inspect instances described at: https://aws.amazon.com/cli/

Have a play around and get comfortable with the idea that we will be creating, using and destroying a lot of virtual machines over the course of this week!