Task 5

Create AWS EC2 Virtual Machine

Amazon Elastic Compute Cloud is the service you use to create and run virtual machines (VM), also known as instances
This task is on how to Launch an Amazon EC2 Instance; Connect to Amazon EC2 Instance via SSH; Terminate Amazon EC2 instances.

Virtual machines allow you to run an operating system in an app window on your desktop that behaves like a full, separate computer. You can use them to play around with different operating systems, run software your main operating system can't, and try out apps in a safe, sandboxed environment.

In the VM world, the operating system running on your computer is called the host and any operating systems running inside VMs are called guests. It helps keep things from getting too confusing

VMs offer several serious uses. They allow you to experiment with another OS without having to install it on your physical hardware. For example, they are a great way to mess around with Linux—or a new Linux distribution—and see if it feels right for you. When you're done playing with an OS, you can just delete the VM.VMs also provide a way to run another OS' software. For example, as a Linux or Mac user, you could install Windows in a VM to run Windows apps you might not otherwise have access to.

VirtualBox is very popular because it's open-source and completely free. There's no paid version of VirtualBox, so you don't have to deal with the usual "upgrade to get more features" upsells and nags. VirtualBox works very well, particularly on Windows and Linux where there's less competition, making it a good place to start with VMs.

As I didn't have an Amazon account to create a VM I used the virtual box to install ubuntu.

Setting up Ubuntu:

Download the iso file for Ubuntu.

https://imgur.com/a/nESpTBb

Open up your VM app and click the button to create a new virtual machine.

https://imgur.com/a/7odh4AF

You'll be guided through the process by a wizard that first asks which OS you'll be installing. If you type the name of the OS in the "Name" box, the app will most likely automatically select the type and version for the OS. If it doesn't—or it guesses wrong—select those items yourself from the dropdown menus. When you're done, click "Next."

https://imgur.com/a/qMNwerT

You'll be asked how much memory to allocate to the VM. If you want something other than the default, select it here. Otherwise, just click "Next."

https://imgur.com/a/0olzFmD

The wizard will also create the virtual hard disk file to be used by the VM. Unless you already have a virtual hard disk file you want to use, just select the option to create a new one.

https://imgur.com/a/7Vrw94O

You'll also be asked whether to create a dynamically allocated or fixed size disk. With a dynamically allocated disk, you'll set a maximum disk size, but the file will only grow to that size as it needs to.

https://imgur.com/a/Kp3AglB

You'll then be able to set the size of the virtual disk. You're free to go with the default setting or change the size to suit your needs. Once you click "Create," the virtual hard disk is created

https://imgur.com/a/6CXyu85

After that, you're dumped back into the main VM app window, where your new VM should show up. Make sure the installation media you need is available to the machine—usually this involves pointing to an ISO file or real disc through the VM's settings. You can run your new VM by selecting it and hitting "Start."

https://imgur.com/a/zSBvKKj

This task gave me a whole new idea about virtual machines and their uses. I also enjoyed setting up my first virtual machine. Ubuntu is the first virtual OS that I installed. Although there were some minor issues while setting up but I got my doubts clarified through videos on YouTube.