Project 1

Following are the steps for implementing this project:

Action Points:

1. Create an EC2 instance with the following specifications:

o AMI: Amazon Linux

o Instance Type: T2.nano

o Volume Type: 8GB Magnetic

To create an instance, you need to complete the following steps:

1. From the EC2 dashboard select "Launch Instance".

2. Select "Amazon Linux AMI".

3. Select "T2.nano" instance type and click "Next".

4. Launch the instance into your default VPC and enable the "Auto-assign Public IP" option, then click "Next".

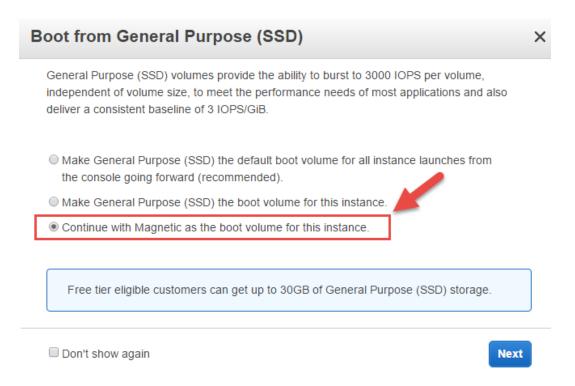
5. Set the root volume to 8GB in size and the volume type to "Magnetic", then click "Next".

6. Tag the instance with a name so you can easily locate it.

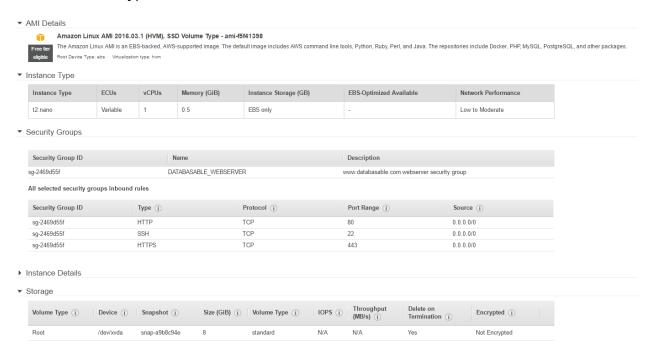
7. Choose a security group that allows SSH access to port 22. If you don't have a security group with this configuration, just accept the default and AWS will create one for you.

8. Click "Review and Launch".

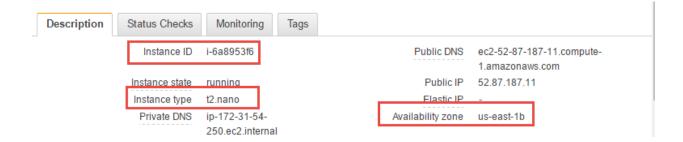
9. You will see a warning message about using a magnetic drive as a root volume. Select "Continue with Magnetic as the boot volume for this instance" and click "Next".



10. Review the instance specifications to ensure they are correct, click "Launch", select a known keypair and then click "Launch Instances".



11. On the EC2 dashboard, under the description tag, verify that the Instance Type is T2.nano and make note of the Instance ID and Availability Zone.



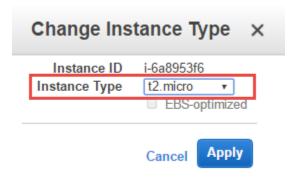
2. Reconfigure the instance to achieve the following specification:

Instance Type: Scale to a T2.small

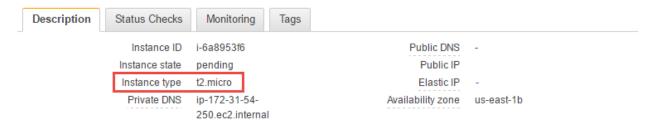
Volume Type: Increase to 12GB General Purpose SSD

To reconfigure the instance, you need to complete the following steps:

- 1. To resize the instance, first shut it down by selecting Actions > Instance State > Stop.
- When the instance has shutdown, click Actions > Instance Settings > Change Instance Type.
- 3. Change the Instance Type to "T2.micro" and click "Apply".

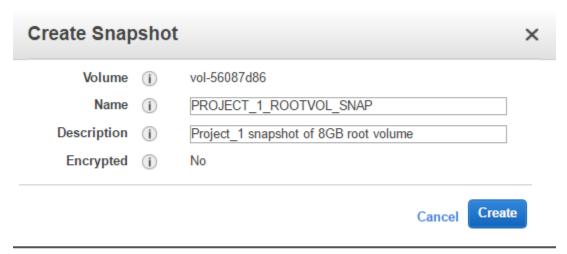


4. Restart the instance and then under the description tag verify that the Instance Type is "T2.micro"

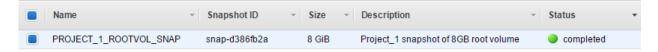


5. To change the size of the root volume you need to shut down the instance again.

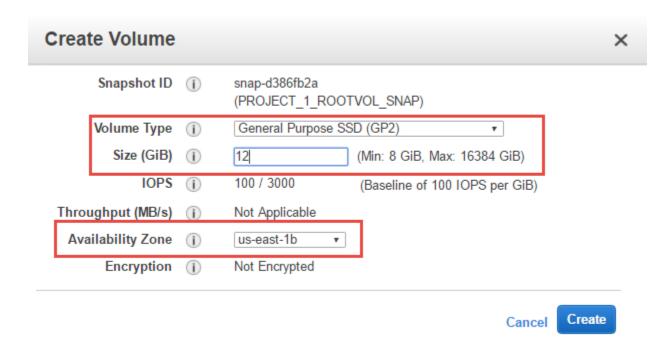
- 6. When the instance has been stopped, go to the Volumes dashboard and locate the root volume for your instance. To make it easier to locate, enter the Instance ID, which you recorded earlier, into the search box.
- 7. Highlight the root volume and click Actions > Create Snapshot.
- 8. Give the snapshot a "Name" and "Description" and click "Create"



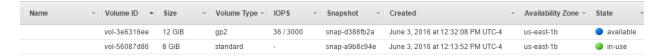
- 9. Go to the "Snapshots" dashboard and wait for the snapshot creation to complete.
- 10. When the snapshot is in a completed state, highlight it and select Actions > Create Volume.



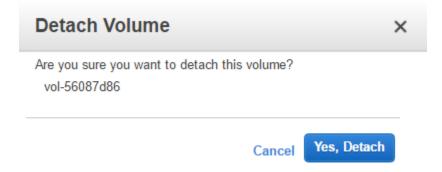
11. In the "Create Volume" box, change the "Volume Type" to "General Purpose SSD", the "Size" to 12GB and make sure that the "Availability Zone" is the same as you recorded in Step 11. Then click "Create".



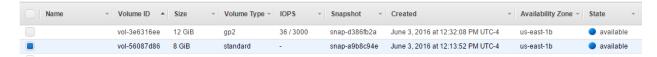
12. Go to the "Volumes" dashboard and you should be able to see your existing volume (with a "State" of "in-use" and the new volume (with a "State" of "available").



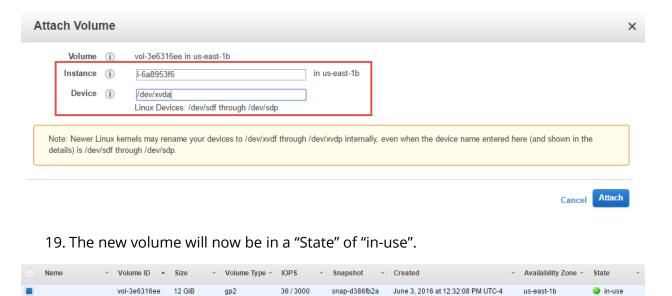
- 13. Make a note of the new and old Volume IDs.
- 14. Highlight the old volume and select Actions > Detach Volume.
- 15. When prompted, select "Yes, Detach".



16. Both volumes will now have a "State" of "Available"

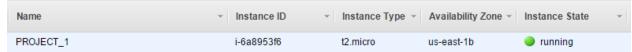


- 17. Highlight the new volume and click Actions > Attach Volume.
- 18. In the "Instance" box, enter the Instance ID you recorded in Step 11 or simply select the correct instance from the dropdown list. Change the "Device" to be "/dev/xvda". Click "Attach"



20. Restart the instance from the EC2 dashboard and verify whether it has started.

vol-56087d86 8 GiB

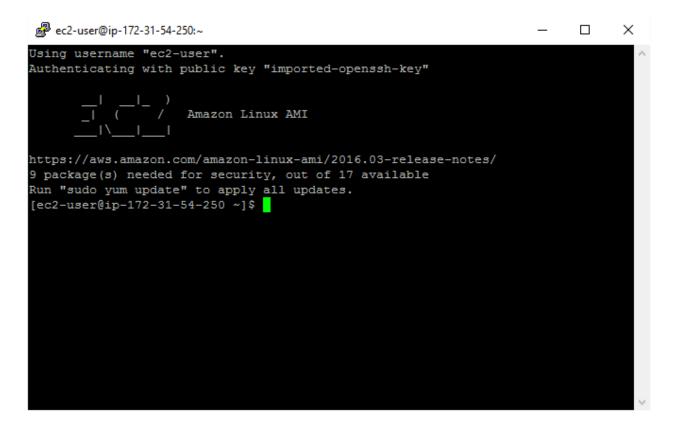


snap-a9b8c94e June 3, 2016 at 12:13:52 PM UTC-4

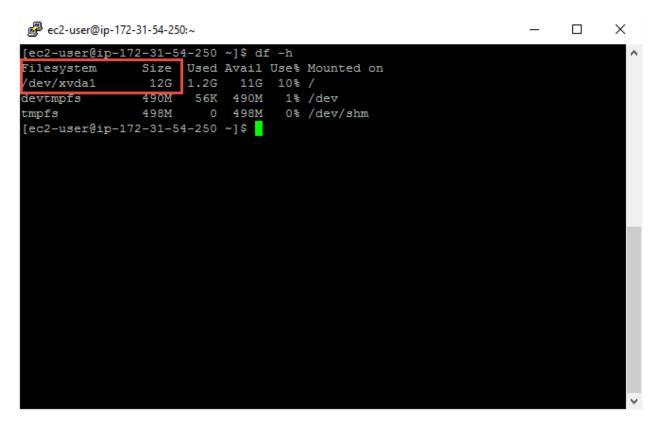
3. Verify that the root volume on the EC2 instance is displaying the correct size

To verify the root volume of the EC2 instance, complete the following steps:

1. Login to the EC2 instance using an SSH client. You can review Lesson 5 Demo 1 for details on how to connect to a Linux instance.



2. Run "df –h" to confirm that the root volume is 12GB in size.



- 3. Return to the Volumes dashboard and delete the old volume by clicking on Actions > Delete Volume.
- 4. Go to the Snapshots dashboard and delete the snapshot of the old root volume by clicking on Actions > Delete.

When you have finished, be sure to shut down and terminate any instances used during this project.