# Experiment 02 - Cloud Computing

December 7, 2022

## Aim

Creating an AMI of an EC2 instance and launching another EC2 instance in a different region using that image.

## Theory

*Amazon Machine Instance* (AMI) is a template to configure new EC2 instances. AMIs helps in keeping incremental changes in the OS, application code and system packages. Using system manager automation, we can routinely patch the AMIs with security updates. AMIs are used with LaunchConfigurations. When we want to roll out updates to multiple instances, we make a copy of Launch-Configuration with new AMI. So an AMI provides the information required to launch an instance. We can turn our EC2 instances to AMIs, so that we can create copies of our servers. AMIs are region specific.
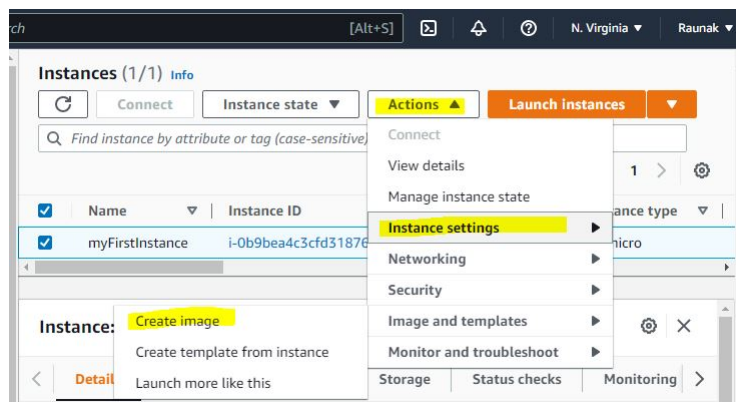
## Results



Figure 1: Creating image of existing instance from last experiment

Figure 2: Naming and creating the image of the same instance



Figure 3: Copying the AMI for creation of replicate instance in new region

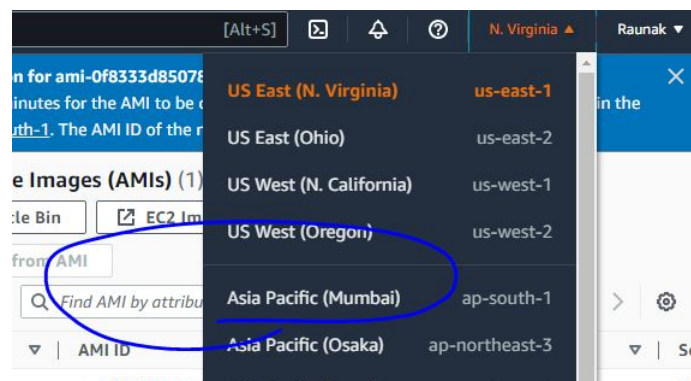Figure 4: Selecting new region as Mumbai from Asia Pacific



Figure 5: Selecting Mumbai region for checking the changes

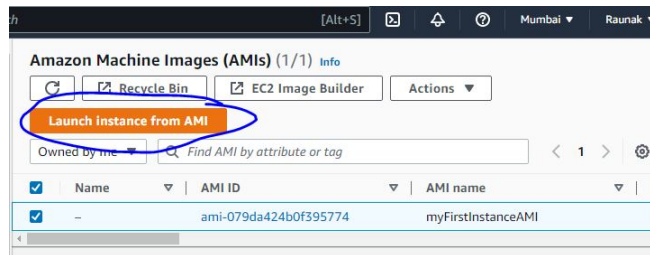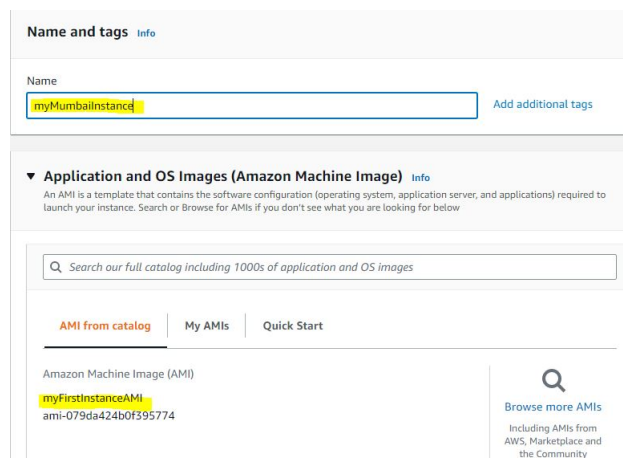Figure 6: Launching the instance from AMI



Figure 7: Naming the instance



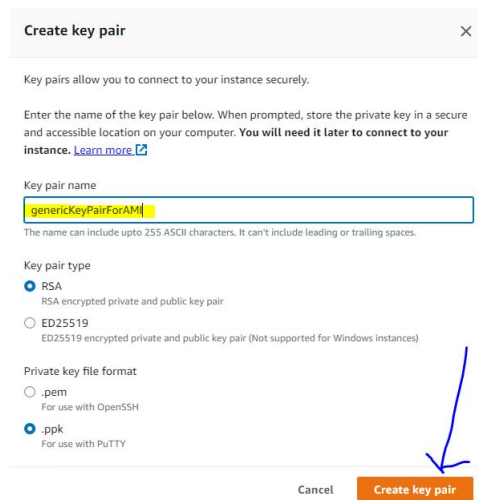Figure 8: Creating a new key pair

Figure 9: Enabling of HTTP services

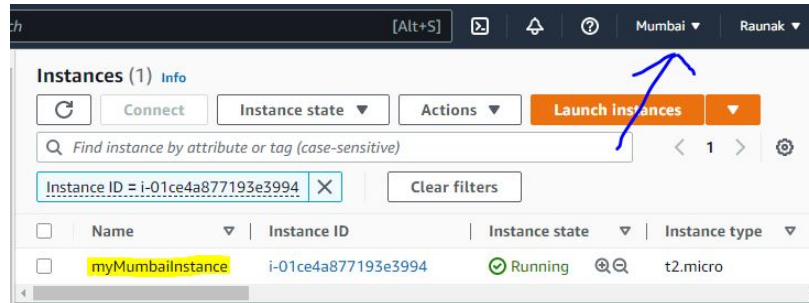

Figure 10: Launching the instance

Figure 11: Successful creation of instance in Mumbai region



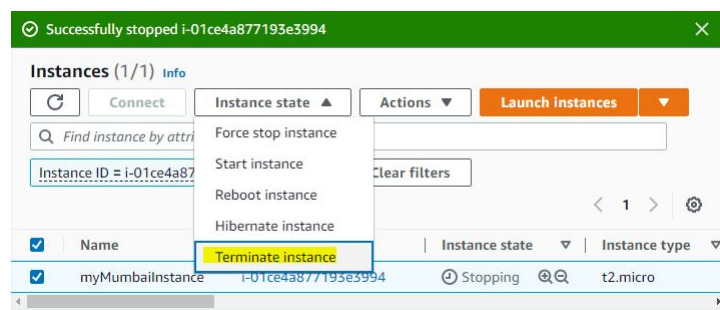Figure 12: Successful hosting of the static web-page from last instance



Figure 13: Stopping and Termination of instance. The stop process is already successful.
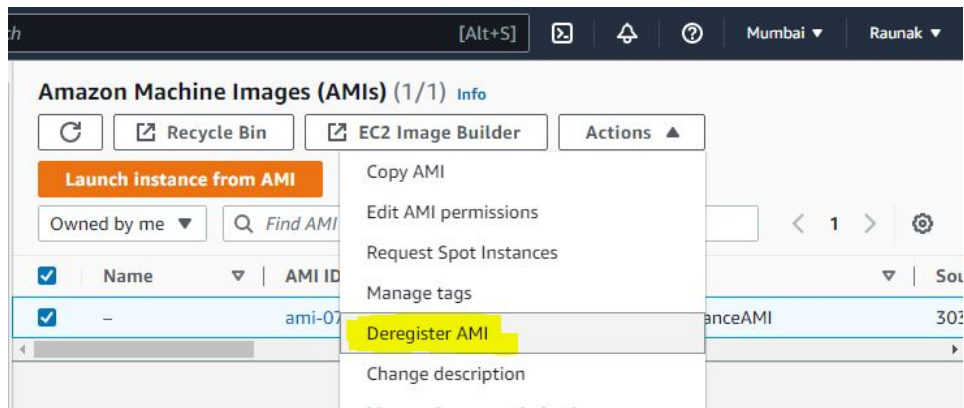
Figure 14: De-registering the AMI from AMI images
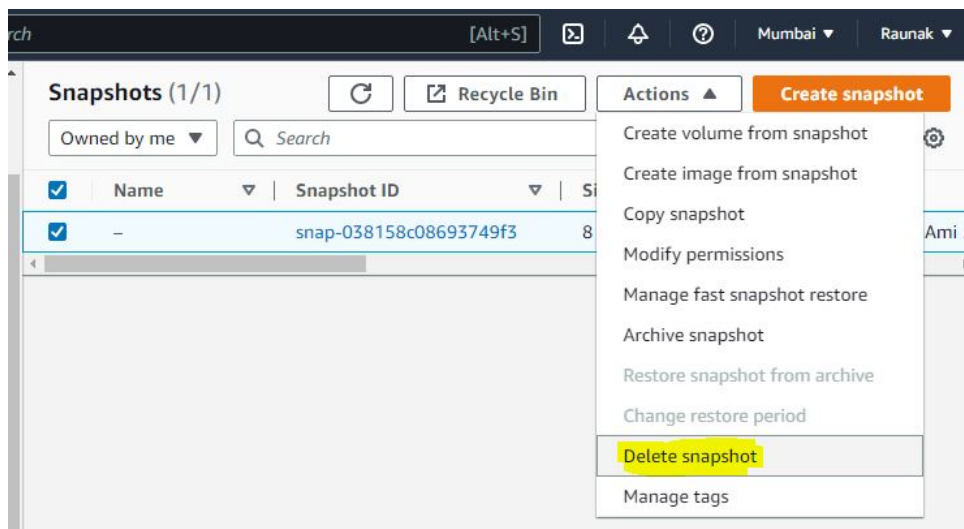


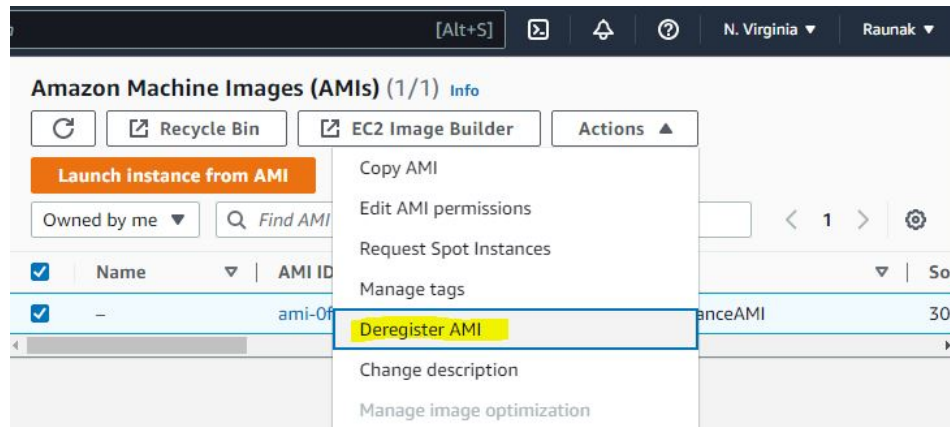Figure 15: Deleting the Snapshot from EBS section

Figure 16: De-registering the AMI from AMI images from N. Virginia location as well
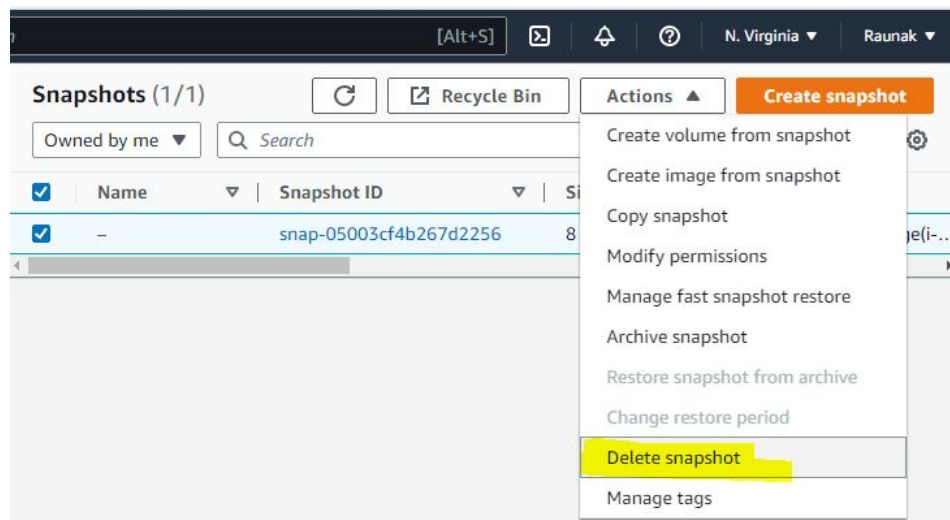


Figure 17: Deleting the Snapshot from EBS section from N. Virginia location as well

# Conclusion

In this experiment successful implementation of the Amazon Machine Image abbreviated as AMI is done. The process starts by creating AMI of existing instance in one location. Then the AMI is used for replication of instance in another location. The successful hosting of the static web-page from last experiment was also replicated the way it is without any additional installations. Finally de-registering of the AMI and deletion of snapshots is shown in a successful manner.