AWS Lab 20

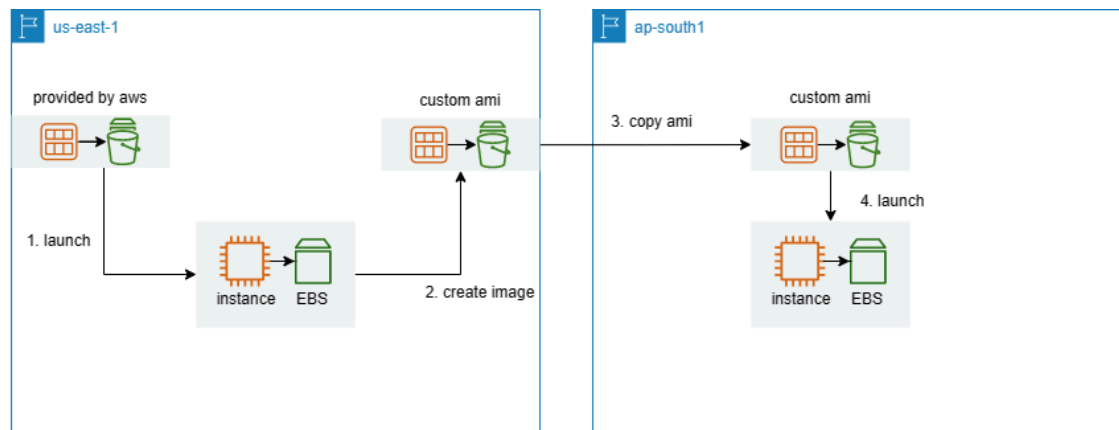Creating Custom AMI and Cross Region Copy.

Overview of the lab

In this lab you will learn to how to create custom AMI and copy AMI to different region

AMI Sources

- aws provided ami
- aws marketplace
- custom AMI (generated from existing instance)
- uploaded images

Architecture

Step by Step Lab

Launching linux instance with apache web server via userdata (us-east-1 region)

1. Search for EC2 and in EC2 management console, launch instance

    1.1. Name and tag – linux-webserver1

    1.2. Application and OS Images – Amazon

    1.3. Instance type - t2.micro

    1.4. Key pair – select the existing keypair

    1.5. Edit Network settings

        a. Subnet – subnet in us-east-1a (even no preference is fine)
        b. Firewall – select existing security group

2. In Advanced Details(scroll down to bottom), copy the below bash script in userdata section

#!/bin/bash

dnf install httpd git -y

systemctl start httpd

systemctl enable httpd

git clone https://github.com/jerrish/site_particles.git /var/www/html

3. Number of instances - 1

    (Leave all other settings as default and launch instance)

4. Once the instance is launched

    4.1 Wait for instance state – running

    4.2 Try accessing the website

Create AMI from instance

1. Select the instance - go to actions - Images and template and click on create image
2. Image name - custom-apache-image
3. Click on create image

(creating image will automatically create snapshot)

Copy AMI to different region

1. Click on AMI's and select the ami, go to actions and click on copy AMI
2. Select the destination region as Asia Pacific (Mumbai) and click on copy AMI

(copying ami will automatically copy snapshot)

Launching linux instance from the copied ami (ap-south-1 region)

1. Search for EC2 and in EC2 management console, launch instance
   a. Name and tag – linux-webserver2
   b. Application and OS Images – click on My AMIs and click on Owned by me
   c. Select the custom-apache-ami
   d. Instance type - t2.micro
   e. Key pair – create keypair (if you use this region for the first time)
   f. Edit Network settings

      i.   Subnet – subnet in ap-south-1a (even no preference is fine)

     ii.   Firewall – create security group and click on add security group rule - add type - http - source - 0.0.0.0/0

g. Launch instance

h. Once the instance is launched

      i.   Wait for instance state – running

     ii.   Try accessing the website

Clean Up Step

us-east-1 and in ap-south-1 (do it on both regions)

1. Select the instance and terminate
2. Select the ami and deregister
3. Select the snapshot and delete