



Module 17 – Project 4

Project- On-Prem VM machine migration to AWS EC2 instance

In this Project we will be uploading centos .vmdk file to S3 bucket and then we will convert this .vmdk file into AWS AMI format.

Now let create the Role and update the policy in it.

Below is the policy that we need to create.

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Effect": "Allow",
      "Principal": { "Service": "vmie.amazonaws.com" },
      "Action": "sts:AssumeRole",
      "Condition": {
        "StringEquals": {
          "sts:Externalid": "vmimport"
        }
      }
    }
  ]
}
```

Run this command from CLI to create the policy

aws iam create-role --role-name vmimport --assume-role-policy-document <file://policy.json>

Now select this role and create the inline policy. We will name this policy as vmimport

```
{
  "Version": "2012-10-17",
  "Statement": [
    {

```

```
    "Effect": "Allow",
    "Action": [
        "s3:ListBucket",
        "s3:GetBucketLocation"
    ],
    "Resource": [
        "arn:aws:s3:::demovnware"
    ]
},
{
    "Effect": "Allow",
    "Action": [
        "s3:GetObject"
    ],
    "Resource": [
        "arn:aws:s3::: demovnware /*"
    ]
},
{
    "Effect": "Allow",
    "Action": [
        "ec2:ModifySnapshotAttribute",
        "ec2:CopySnapshot",
        "ec2:RegisterImage",
        "ec2:Describe*"
    ],
    "Resource": "*"
}
]
```

```
}
```

Now create another json file name as containers.json and add below parmater

Here if the format of the file is ova then we have to specify that

```
[
{
  "Description": "VM",
  "Format": "ova",
  "UserBucket": {
    "S3Bucket": "bucketname",
    "S3Key": "bucket-file-name"
  }
}]
```

Now below command to run this json file

aws ec2 import-image --description "Windows 2008 VHD" --disk-containers <file:///containers.json>

it will take almost 20-25 min

use below command to check the status of this command.

aws ec2 describe-import-image-tasks --import-task-ids=imageid

we have to wait until this status show as completed.

```
{
  "ImportImageTasks": [
    {
      "Architecture": "x86_64",
      "Description": "test1",
      "ImageId": "ami-027bf37865ee111e1",
      "ImportTaskId": "import-ami-0f3bebb326a2aae51",
      "LicenseType": "BYOL",
      "Platform": "Linux",
      "SnapshotDetails": [
        {
          "DeviceName": "/dev/sda1",
          "DiskImageSize": 826791424.0,
          "Format": "VMDK",
          "SnapshotId": "snap-0f6bbdbecba4d0ae7",
          "Status": "completed",
          "UserBucket": {
            "S3Bucket": "demovmwareimage",
            "S3Key": "centos.ova"
          }
        }
      ],
      "Status": "completed",
      "Tags": [],
      "BootMode": "legacy_bios"
    }
  ]
}
```

Now let go to the AMI selection and see if there is image present or not.

Amazon Machine Images (AMIs) (1) info

Owned by me ▾



Find AMI by attribute or tag

Recycle Bin

EC2 Image Builder

Actions ▾

Launch instance from AMI

<input type="checkbox"/>	Name ↗ ▾	AMI name ▾	AMI ID ▾	Source ▾	Owner ▾	Visibility ▾	Status ▾	Creation
<input type="checkbox"/>		import-ami-0f3bebb326a2aae51	ami-027bf37865ee111e1	550387307646/import-ami-0f3bebb32...	550387307646	Private	Available  	2023/12/...

Now let's try to launch the instance using this AMI.

We have successfully able to migrate the on-prem VM to AWS EC2.

Username is root

Pass – piyush@321