

Cloud Computing Seminar

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Topic: Networking

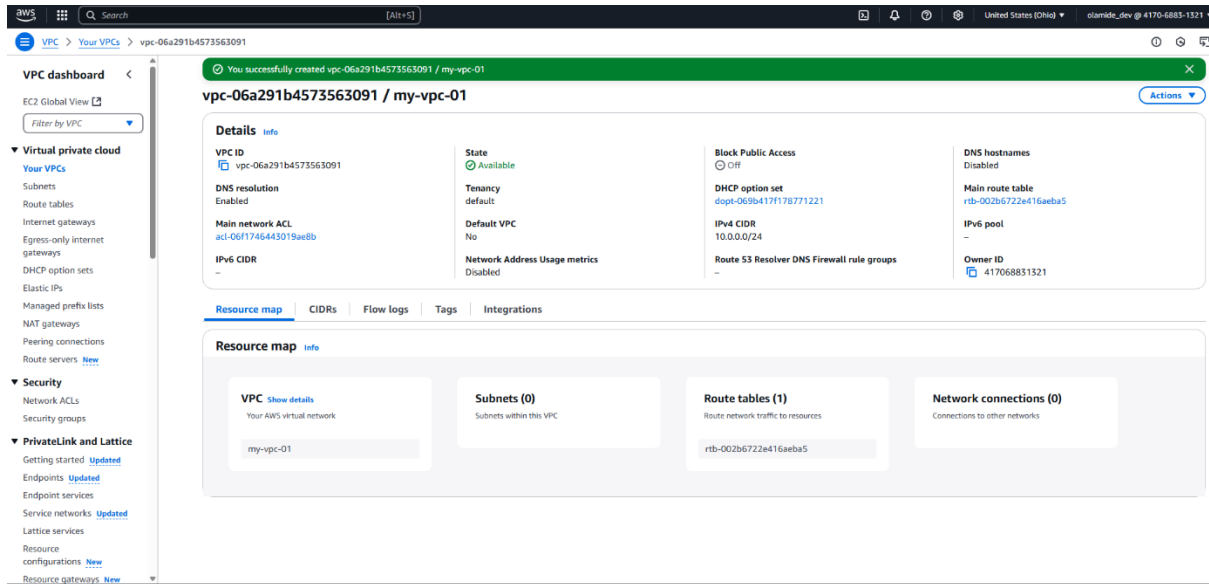


Fig 1.1 VPC Created

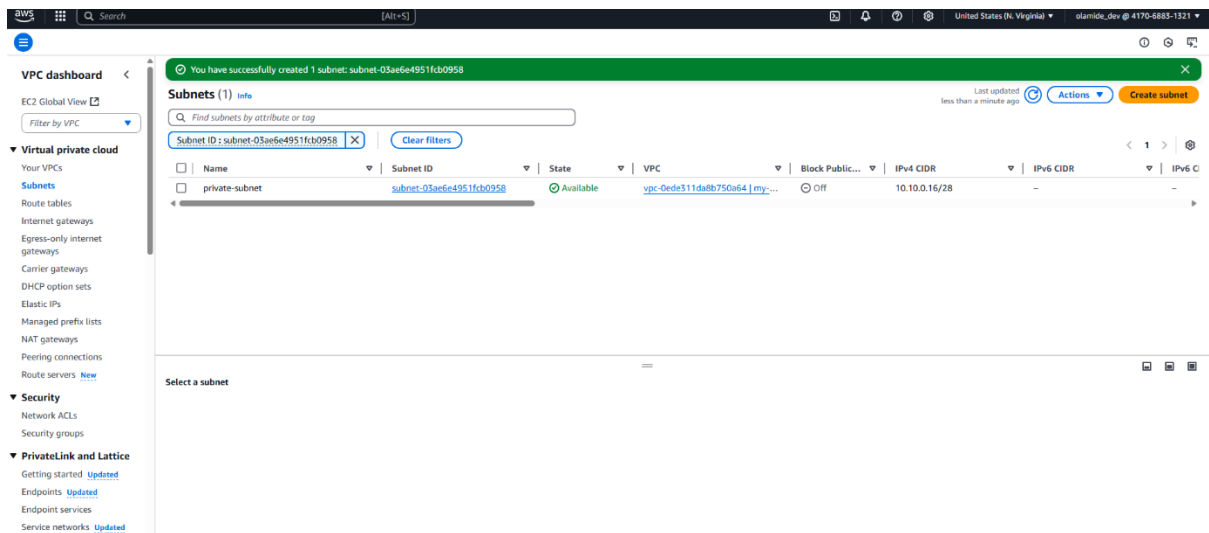


Fig 2.1 Private subnet created

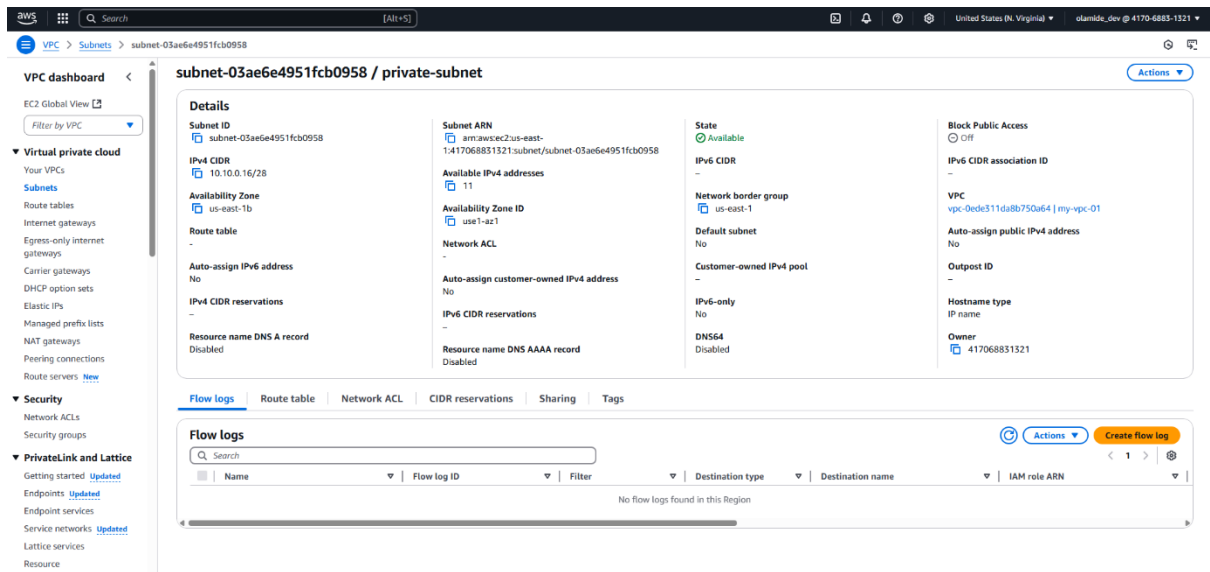


Fig 2.2 Private Subnet details

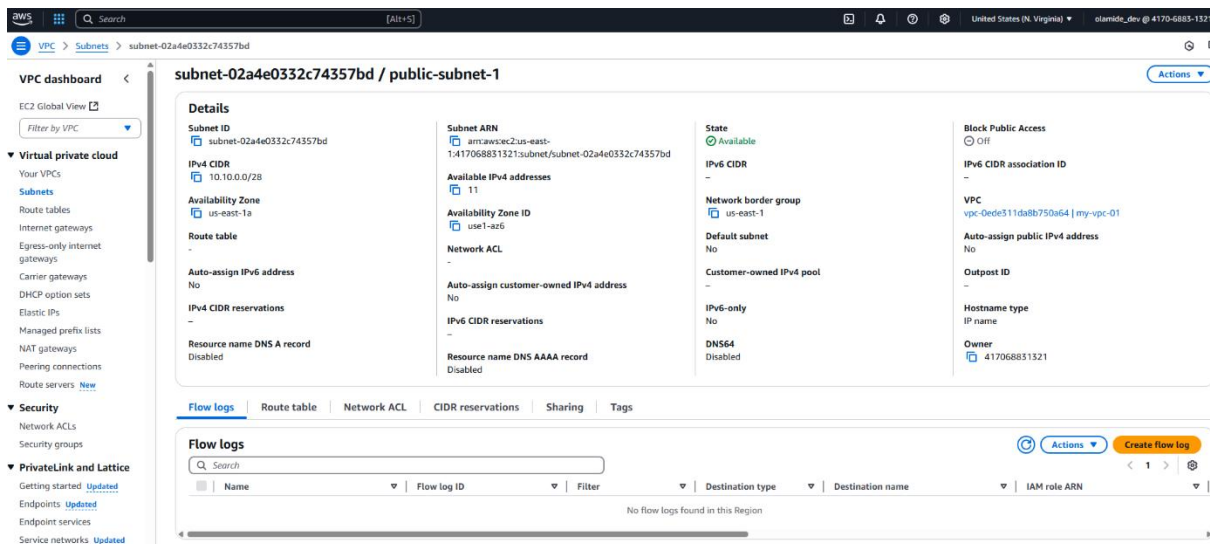


Fig 2.3 Public Subnet details

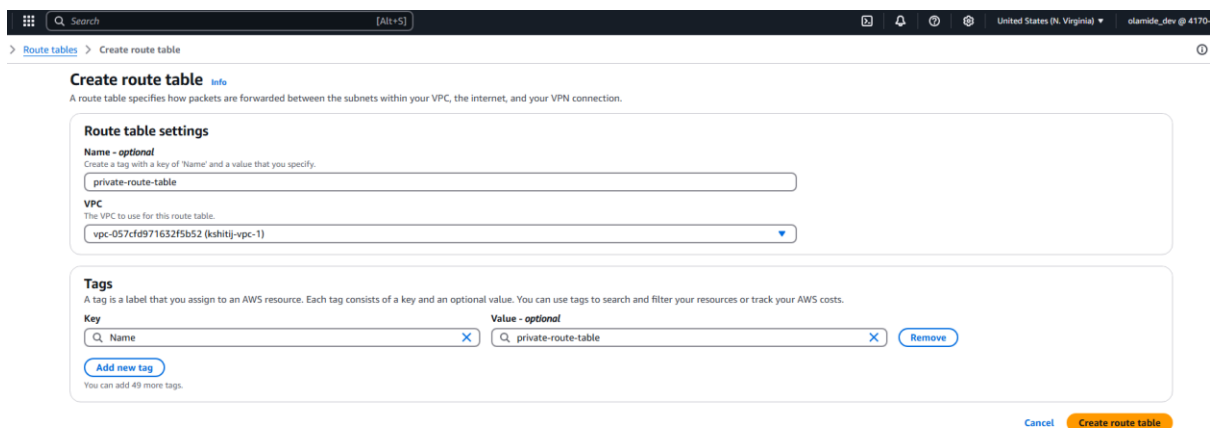


Fig 3.1 Route Table Creation

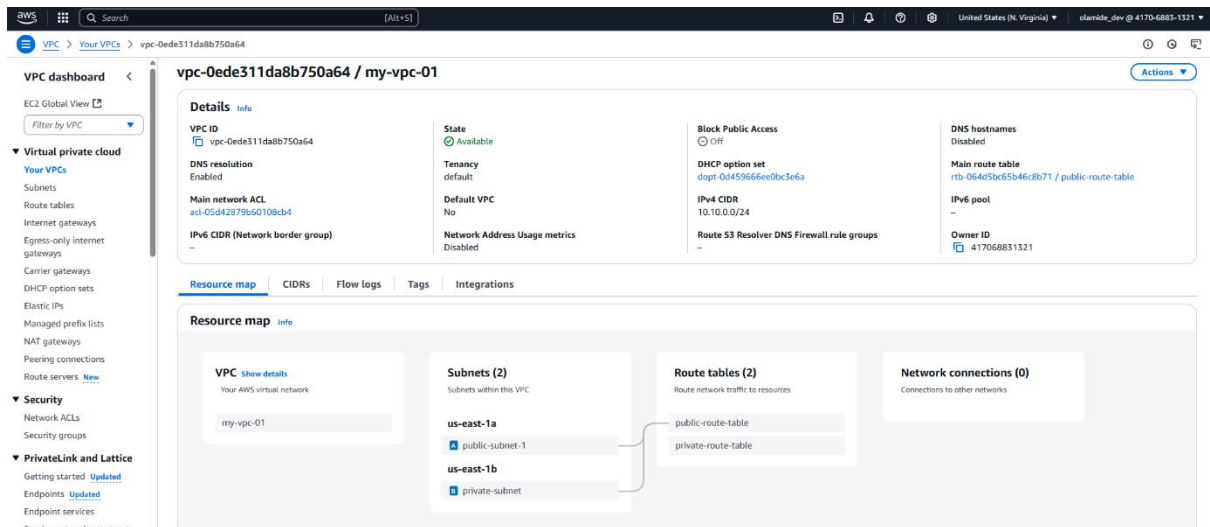


Fig 3.2 Route Table Created

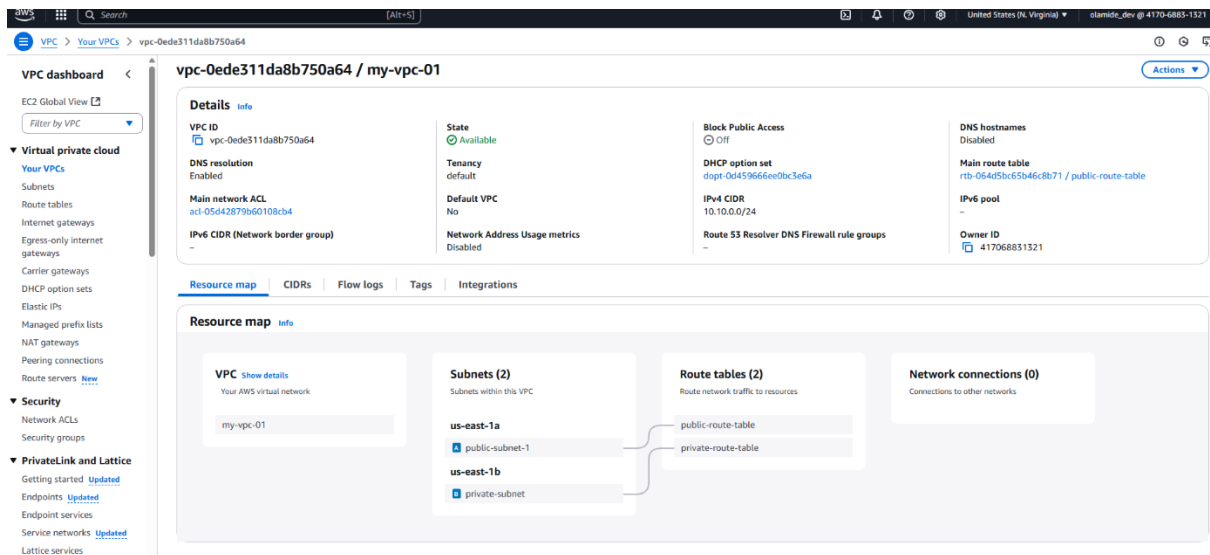


Fig 3.3 Connection Private Route Table To Private Subnet

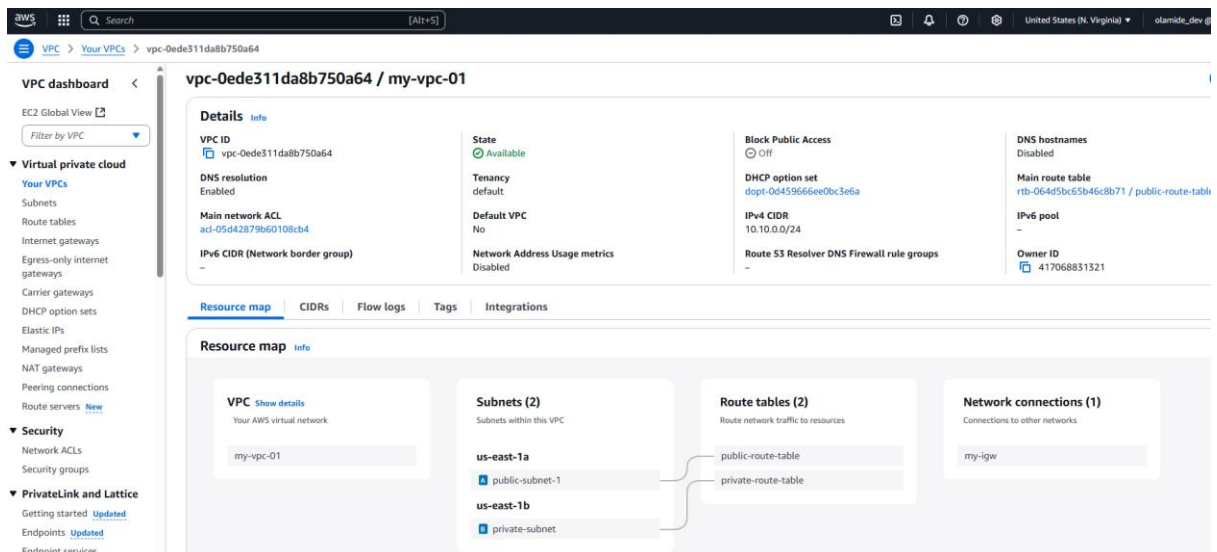


Fig 4.1 Internet Gateway Created

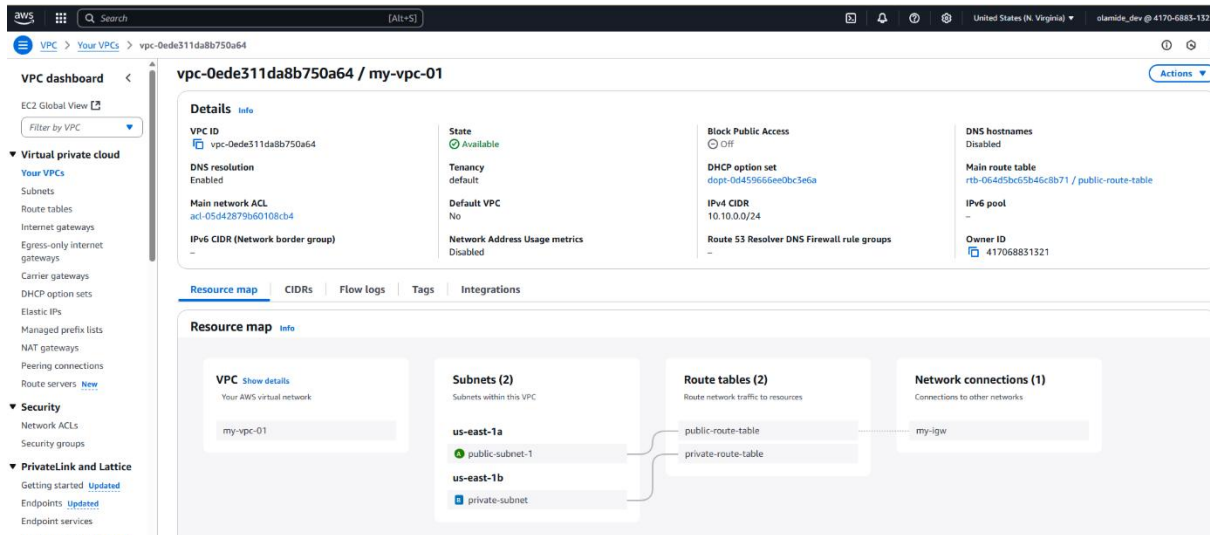


Fig 4.2 Internet Gateway attached to PVC

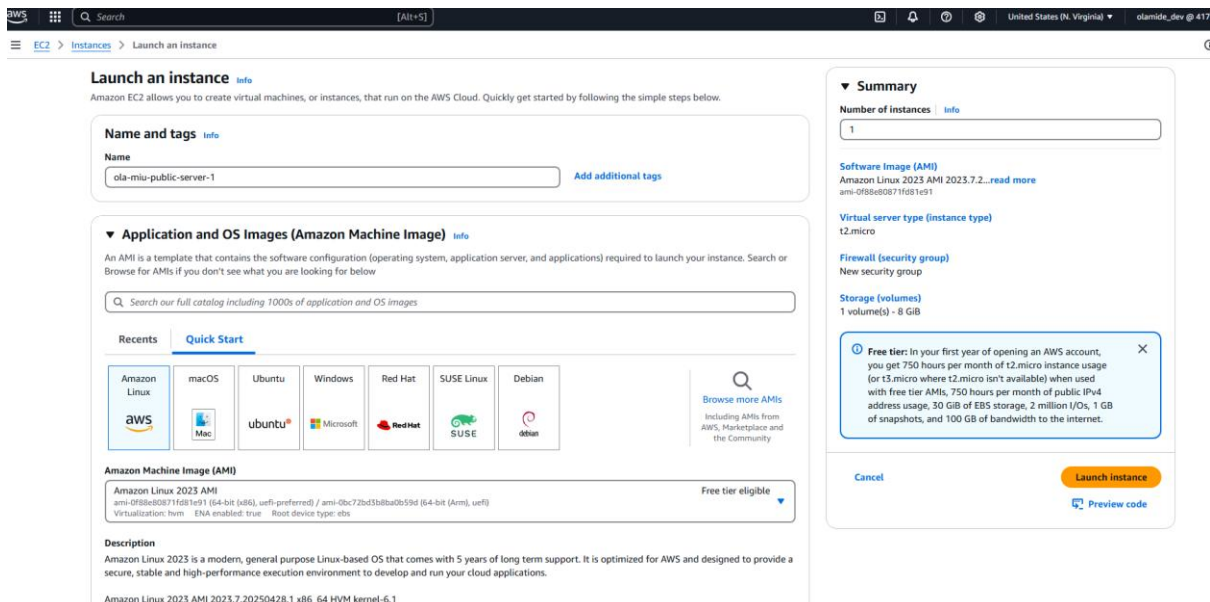


Fig 5.1 EC2 Public Instance Created

The screenshot shows the 'Launch instance' page in the AWS Management Console. The 'Network settings' section is expanded, showing the VPC 'vpc-Oede311da8b750a64 (my-vpc-01)' and Subnet 'subnet-03ae6e4951fcb0958' (private-subnet). The 'Auto-assign public IP' is set to 'Disable'. The 'Firewall (security groups)' section shows the selection of the 'ola-miu-sg' security group. The 'Configure storage' section shows a root volume of 8 GiB, gp3 type, and 3000 IOPS. The 'Summary' section on the right shows 1 instance, Amazon Linux 2023 AMI, t2.micro instance type, and 1 volume (8 GiB). A 'Free tier' notification is visible at the bottom of the summary.

Network settings

VPC - required [Info](#)

vpc-Oede311da8b750a64 (my-vpc-01)

Subnet [Info](#)

subnet-03ae6e4951fcb0958

VPC: vpc-Oede311da8b750a64 Owner: 417068831321 Availability Zone: us-east-1b Zone type: Availability Zone IP addresses available: 11 CIDR: 10.10.0.16/28

Auto-assign public IP [Info](#)

Disable

Firewall (security groups) [Info](#)

A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

☐ Create new security group ☒ Select existing security group

Common security groups [Info](#)

Select security groups

ola-miu-sg sg-0e79ca51558207521 [X](#)

VPC: vpc-Oede311da8b750a64

Security groups that you add or remove here will be added to or removed from all your network interfaces.

[Compare security group rules](#)

[Advanced network configuration](#)

Configure storage [Info](#) [Advanced](#)

1x 8 GiB gp3 Root volume, 3000 IOPS, Not encrypted

Summary

Number of instances [Info](#)

1

Software Image (AMI)

Amazon Linux 2023 AMI 2023.7.2...[read more](#)

ami-0f88e80871fd81e91

Virtual server type (instance type)

t2.micro

Firewall (security group)

ola-miu-sg

Storage (volumes)

1 volume(s) - 8 GiB

Free tier: In your first year of opening an AWS account, you get 750 hours per month of t2.micro instance usage (or t3.micro where t2.micro isn't available) when used with free tier AMIs, 750 hours per month of public IPv4 address usage, 30 GiB of EBS storage, 2 million I/Os, 1 GiB of snapshots, and 100 GB of bandwidth to the internet.

[Cancel](#) [Launch instance](#) [Preview code](#)

Fig 5.2 Private EC2 Instance Created

The screenshot shows the 'Instance details' page for the private EC2 instance 'i-Od13b4b09589d9c45 (ola-miu-private-server)'. The instance is in the 'Running' state. The 'Instance ID' is 'i-Od13b4b09589d9c45'. The 'IPV6 address' is not assigned. The 'Hostname type' is 'IP name: ip-10-10-0-21.ec2.internal'. The 'Answer private resource DNS name' is not assigned. The 'Auto-assigned IP address' is not assigned. The 'IAM Role' is 'Required'. The 'IMDSv2' is 'Required'. The 'Operator' is not assigned. The 'Monitoring' is 'disabled'. The 'Allowed image' is not assigned. The 'Launch time' is 'Sun May 04 2025 16:54:32 GMT-0500 (Central Daylight Time) (3 minutes)'. The 'Platform details' are 'Linux/UNIX'. The 'Termination protection' is 'Disabled'. The 'AMI location' is 'amazon/al2023-ami-2023.7.20250428.1-kernel-6.1-x86_64'.

Instance summary for i-Od13b4b09589d9c45 (ola-miu-private-server) [Info](#)

Updated less than a minute ago

[Connect](#) [Instance state](#) [Actions](#)

Instance ID

i-Od13b4b09589d9c45

IPV6 address

-

Hostname type

IP name: ip-10-10-0-21.ec2.internal

Answer private resource DNS name

-

Auto-assigned IP address

-

IAM Role

Required

IMDSv2

Required

Operator

-

Monitoring

disabled

Allowed image

-

Launch time

Sun May 04 2025 16:54:32 GMT-0500 (Central Daylight Time) (3 minutes)

Platform details

Linux/UNIX

Termination protection

Disabled

AMI location

amazon/al2023-ami-2023.7.20250428.1-kernel-6.1-x86_64

Details **Status and alarms** **Monitoring** **Security** **Networking** **Storage** **Tags**

Instance details [Info](#)

AMI ID

ami-0f88e80871fd81e91

AMI name

al2023-ami-2023.7.20250428.1-kernel-6.1-x86_64

Stop protection

Disabled

Fig 5.3 Private EV2 instance Launched

