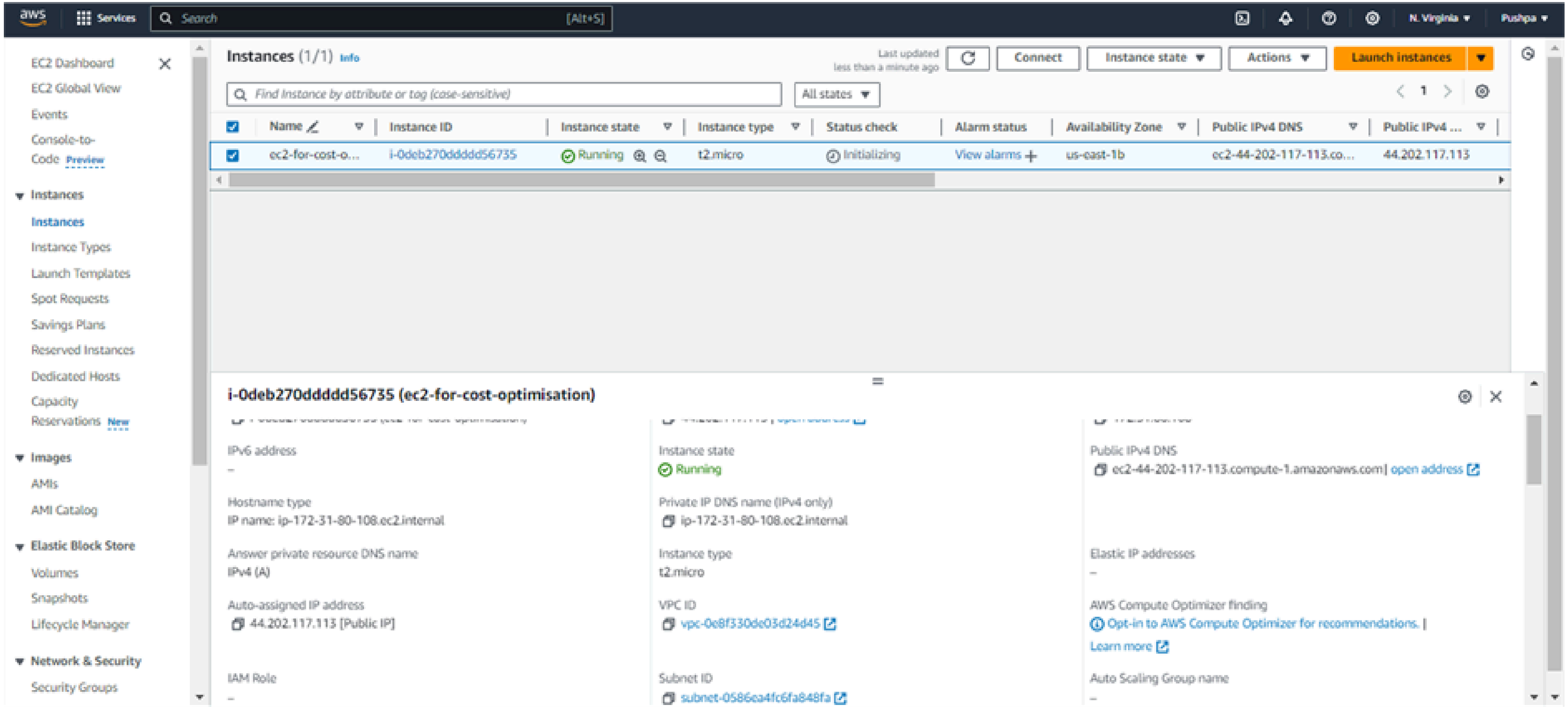
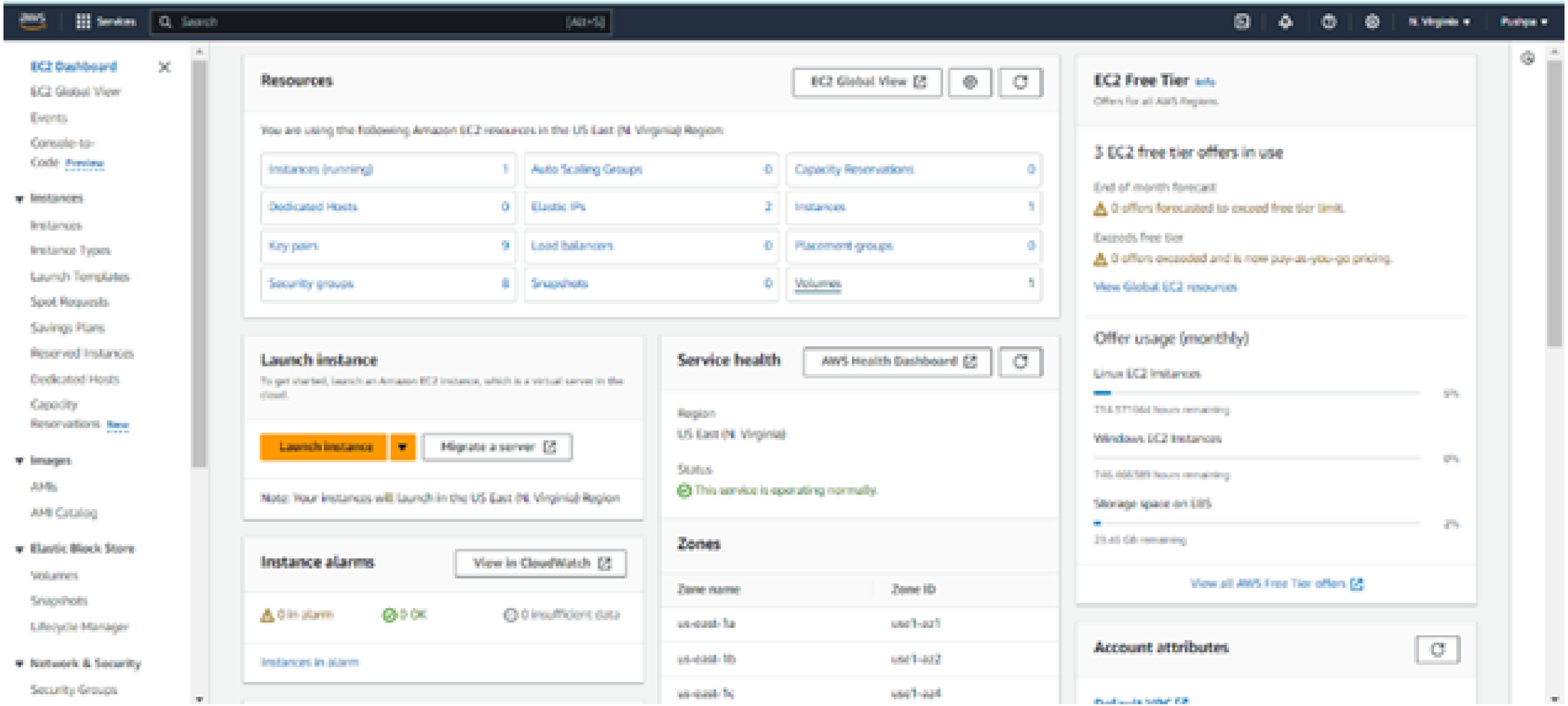
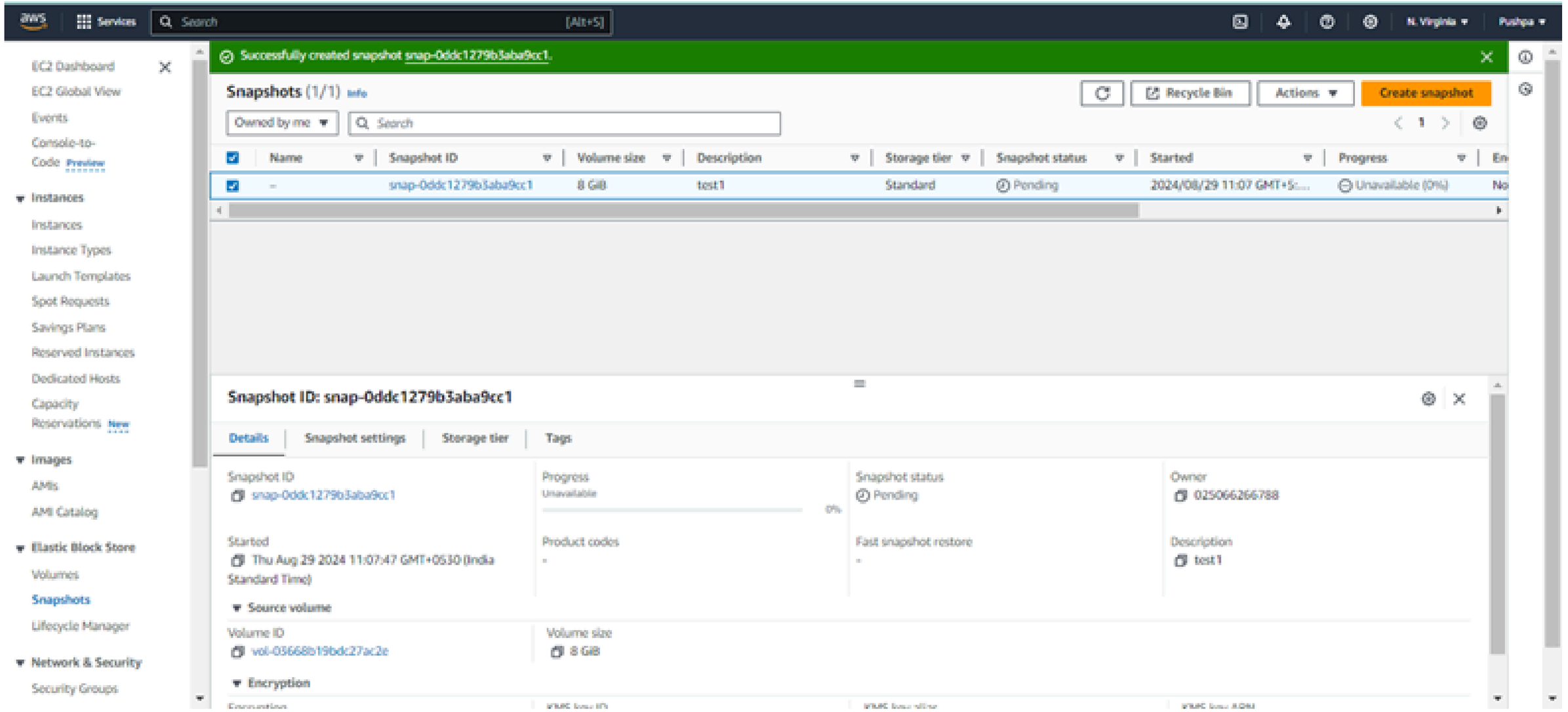
1.create an ec2 instance

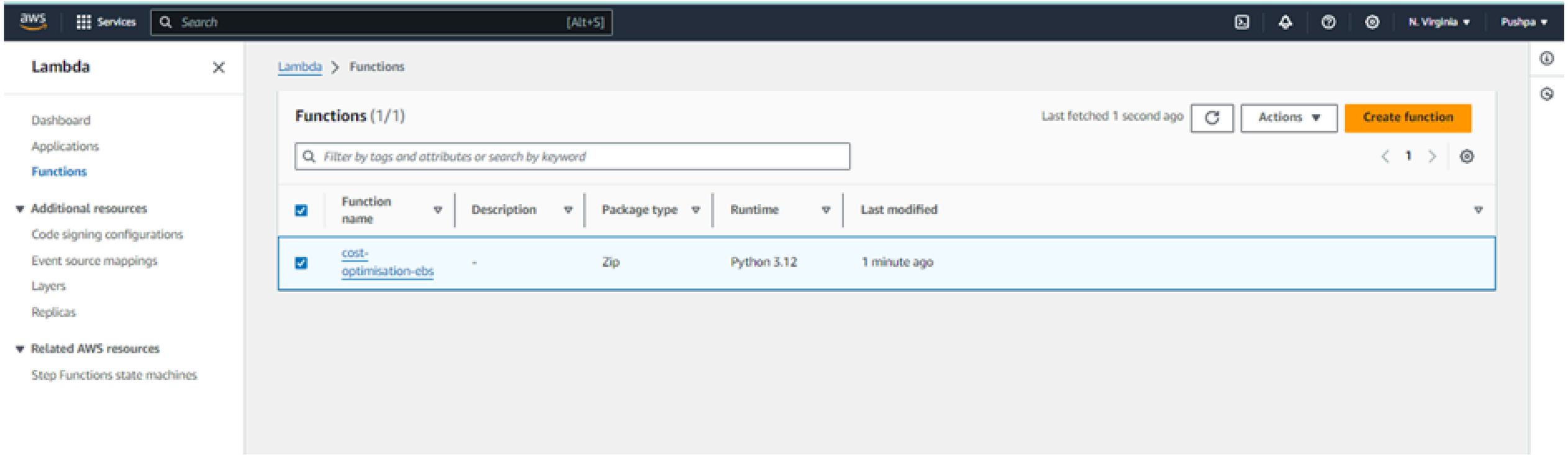


2. No snapshots are there so,create one snapshot to that instance



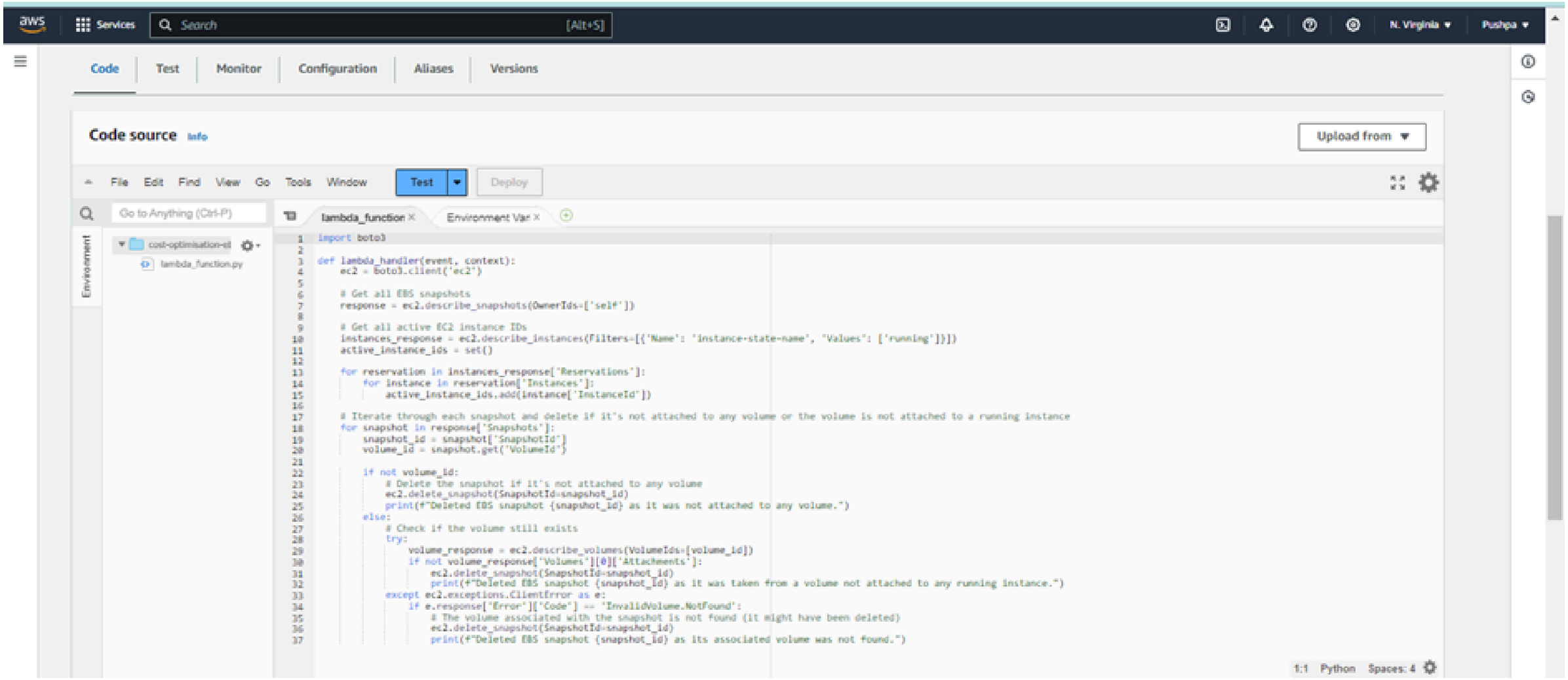

Services
Search
[Alt+S]
N. Virginia
Pushpa
EC2 Dashboard
EC2 Global View
Events
Console-to-Code Preview
Instances
Instances
Instance Types
Launch Templates
Spot Requests
Savings Plans
Reserved Instances
Dedicated Hosts
Capacity Reservations New
Images
AMIs
AMI Catalog
Elastic Block Store
Volumes
Snapshots
Lifecycle Manager
Network & Security
Security Groups
Successfully created snapshot snap-0ddc1279b3aba9cc1.
Snapshots (1/1) Info
Recycle Bin
Actions
Create snapshot
Owned by me
Search
1
Name
Snapshot ID
Volume size
Description
Storage tier
Snapshot status
Started
Progress
snap-0ddc1279b3aba9cc1
8 GiB
test1
Standard
Pending
2024/08/29 11:07 GMT+5:...
Unavailable (0%)
Snapshot ID: snap-0ddc1279b3aba9cc1
Details
Snapshot settings
Storage tier
Tags
Snapshot ID
snap-0ddc1279b3aba9cc1
Progress
Unavailable
0%
Snapshot status
Pending
Owner
025066266788
Started
Thu Aug 29 2024 11:07:47 GMT+0530 (India Standard Time)
Product codes
-
Fast snapshot restore
-
Description
test1
Source volume
Volume ID
vol-05668b19bdc27ac2e
Volume size
8 GiB
Encryption

3. Create a lambda function using python script deploy it and test it

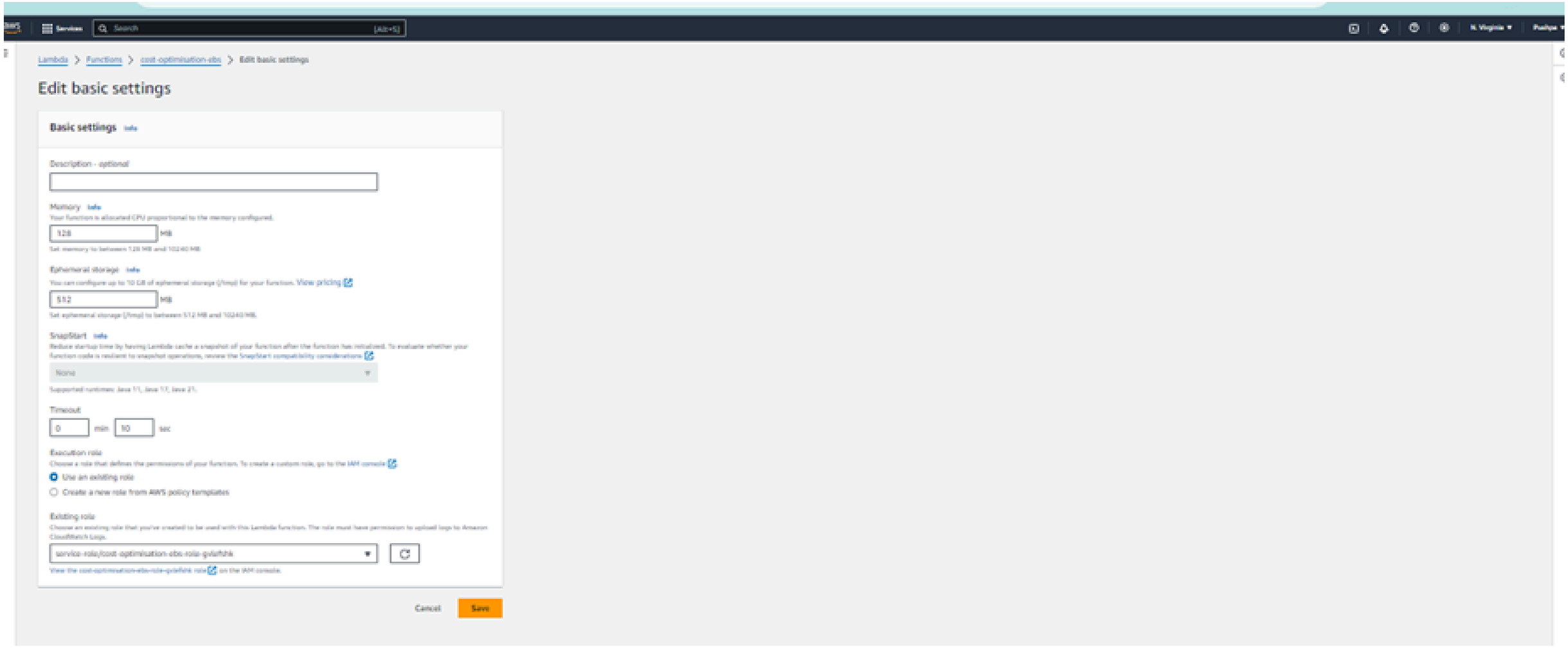


-Default execution time for lambda is “3 seconds “

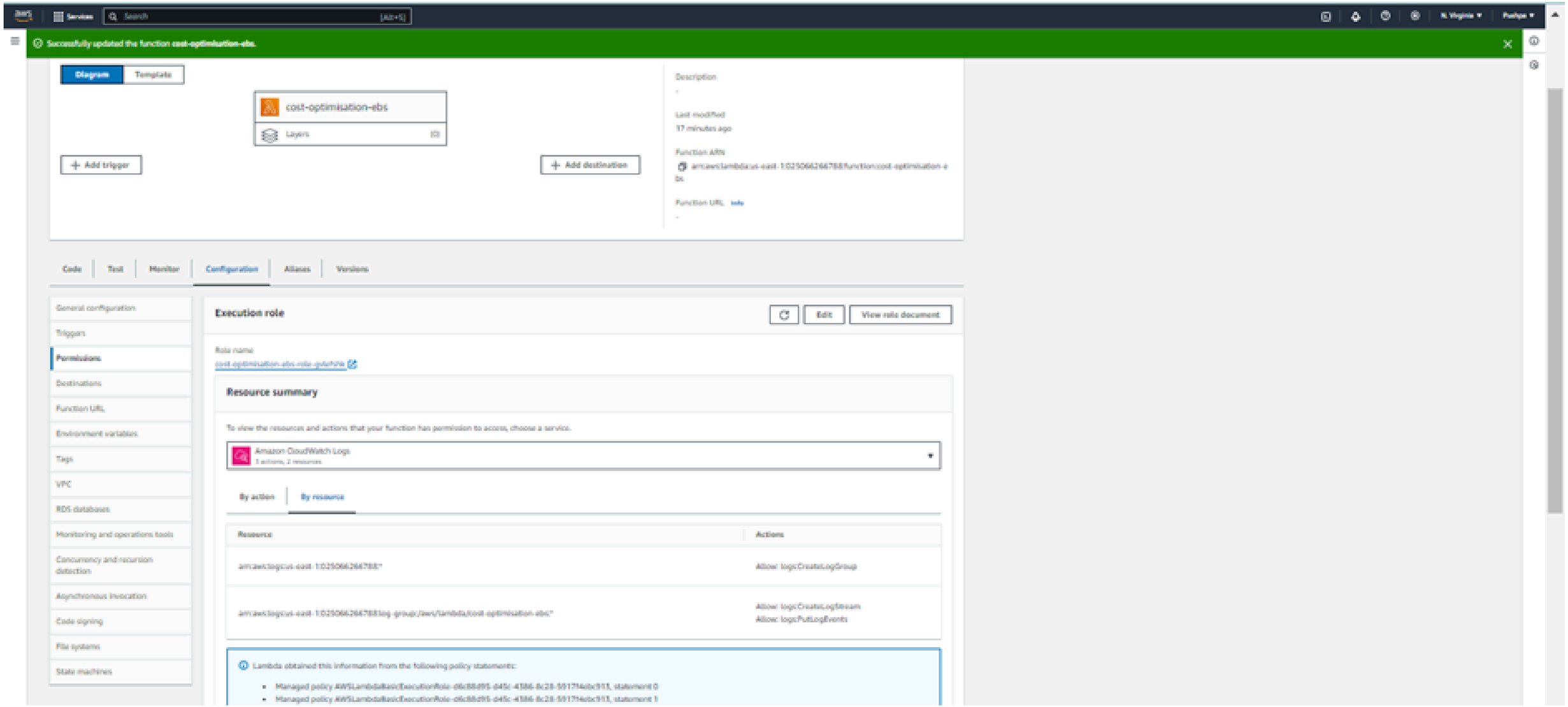
-So it will fail asking describe snapshots



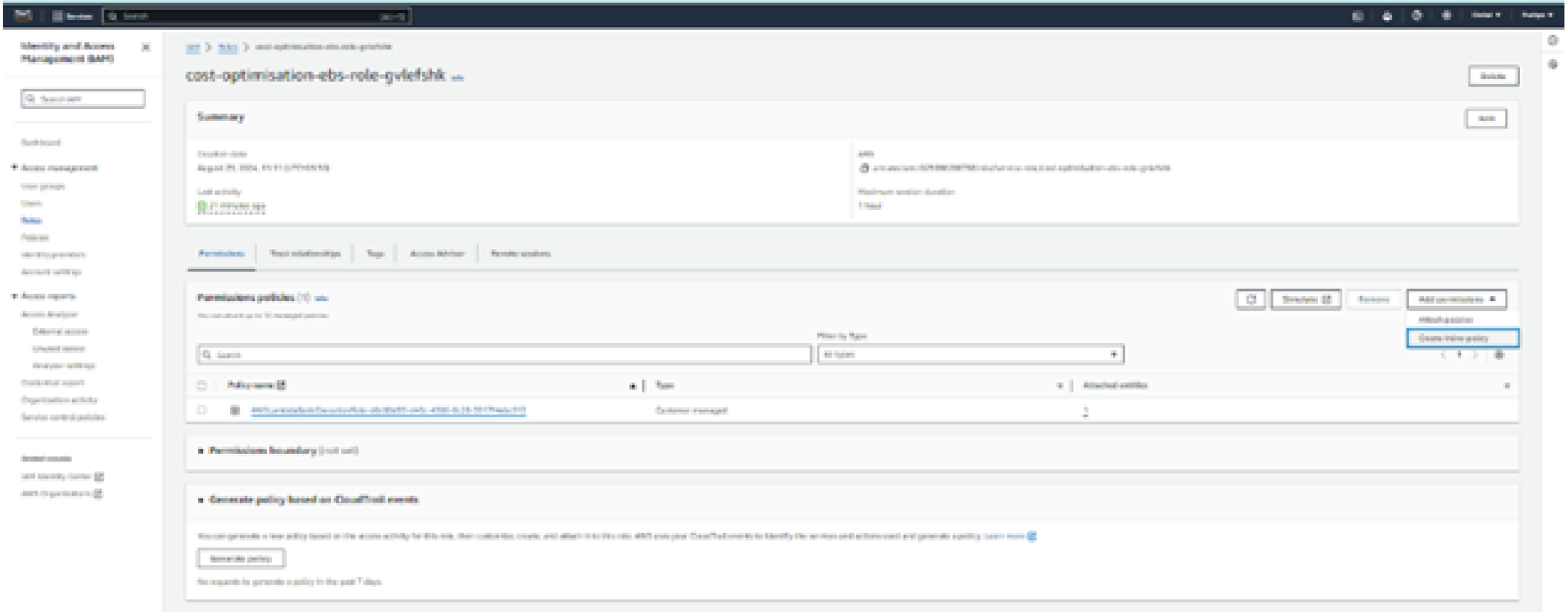
4. go to configuration > edit > increase timeout = 10 sec > save



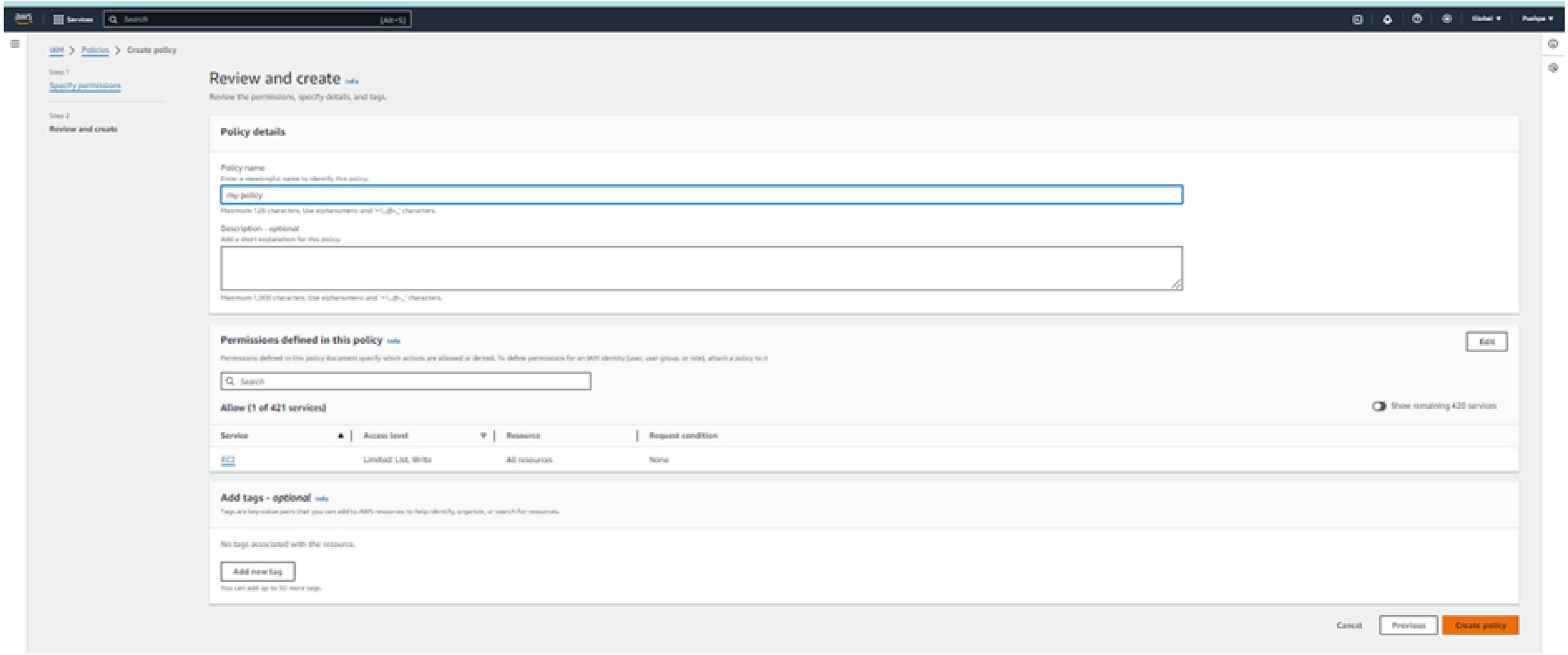
5.Now we have to give permissions to it for that goto configuration > permissions > role name > Now add permissions

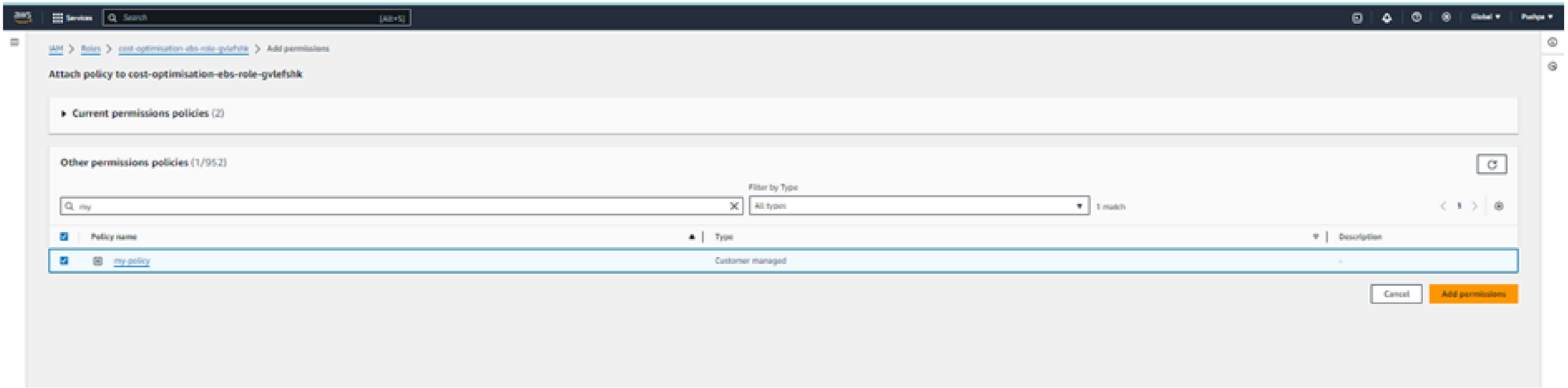


6 In permissions > add permissions > create inline policy

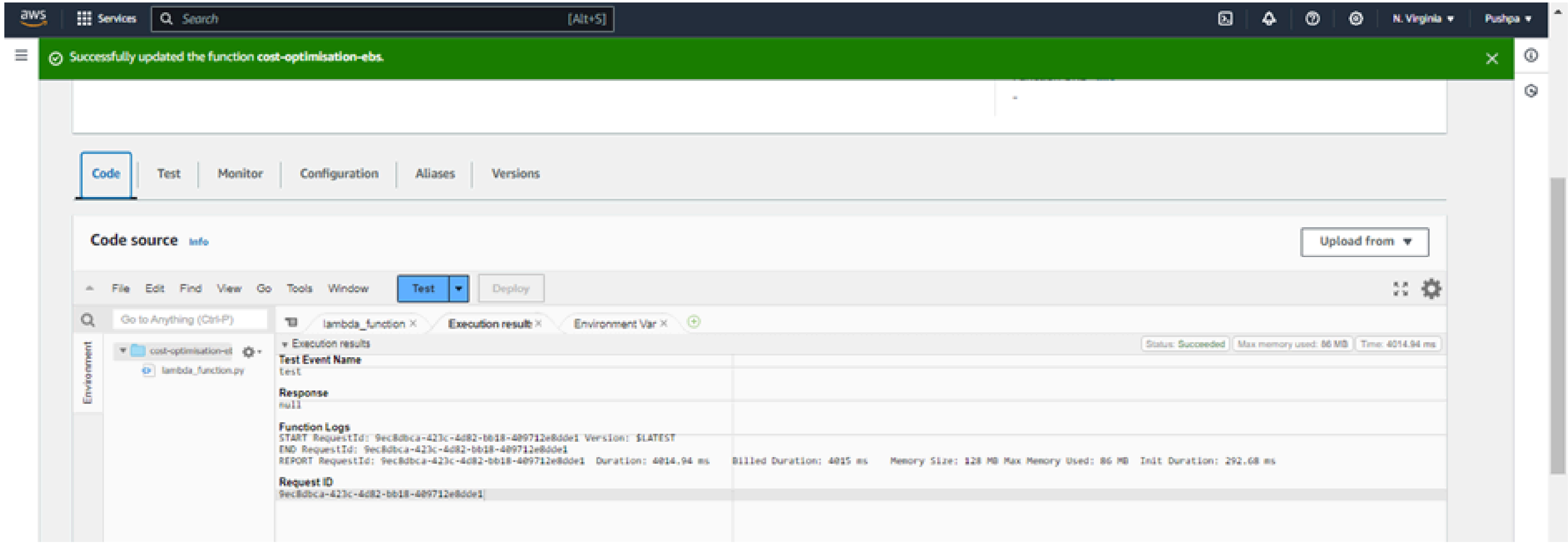


-policies to be attached : Describe snapshots, Delete snapshots, Describe instances , Describe volumes ,we can also give “all ec2 actions”

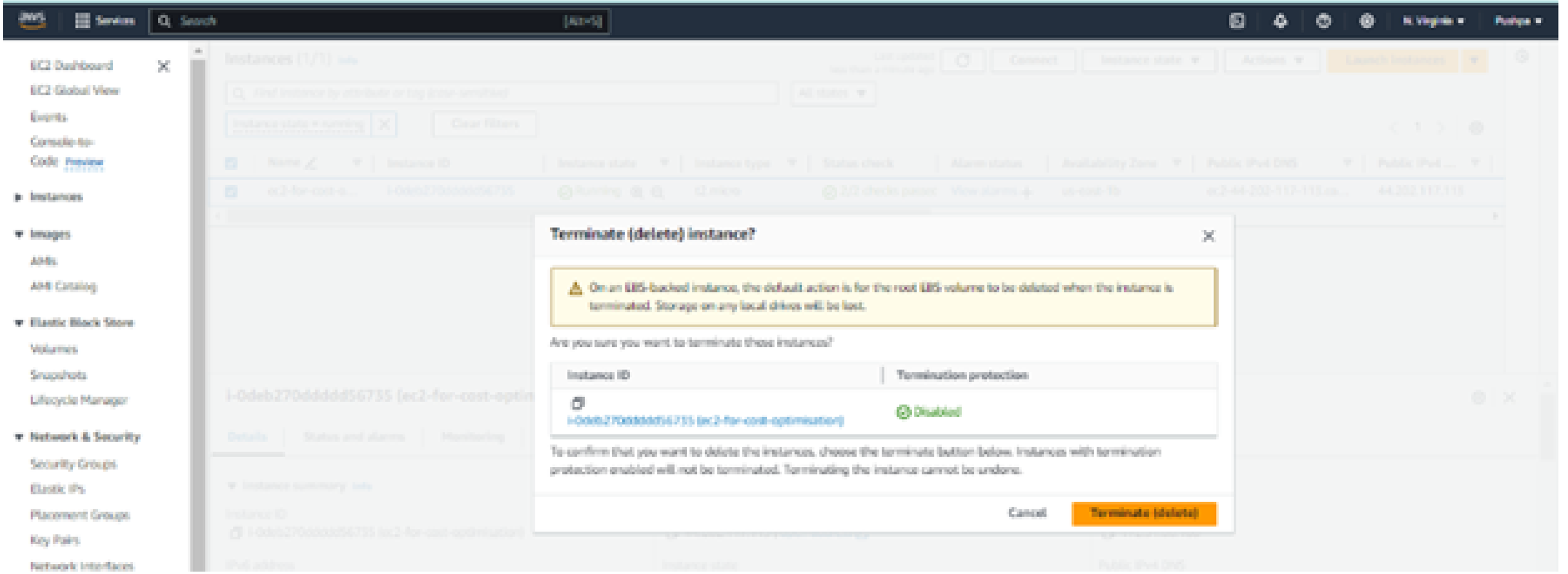

Services
Search
[Alt+S]
IAM > Policies > Create policy
Step 1
Specify permissions
Step 2
Review and create
Review and create info
Review the permissions, specify details, and tags.
Policy details
Policy name
Enter a meaningful name to identify this policy.
my-policy
Maximum 128 characters. Use alphanumeric and '+=,.@-_' characters.
Description - optional
Add a short explanation for this policy.
Maximum 1,000 characters. Use alphanumeric and '+=,.@-_' characters.
Permissions defined in this policy info
Edit
Permissions defined in this policy document specify which actions are allowed or denied. To define permissions for an IAM identity (user, user group, or role), attach a policy to it
Search
Allow (1 of 421 services)
Show remaining 420 services
Service
Access level
Resource
Request condition
EC2
Limited: List, Write
All resources
None
Add tags - optional info
Tags are key-value pairs that you can add to AWS resources to help identify, organize, or search for resources.
No tags associated with the resource.
Add new tag
You can add up to 50 more tags.
Cancel
Previous
Create policy

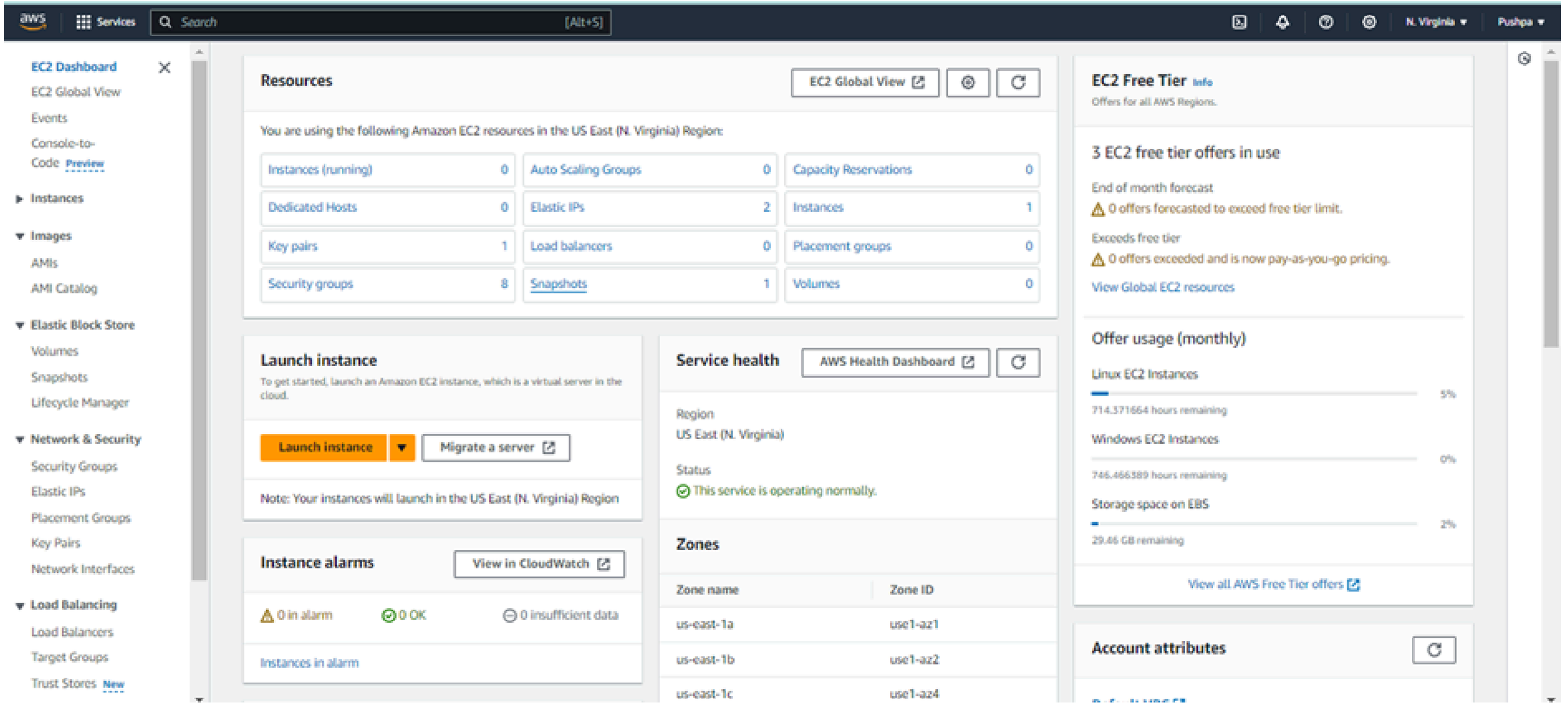

Services
Search
[Alt+S]
Global
Pushpa
IAM > Roles > cost-optimisation-ebs-role-gvlefshk > Add permissions
Attach policy to cost-optimisation-ebs-role-gvlefshk
Current permissions policies (2)
Other permissions policies (1/955)
Filter by Type
my
All types
1 match
Policy name
Type
Description
my-policy
Customer managed
Cancel
Add permissions

8 Now attach this policy to the role,no go to lambda and run it again

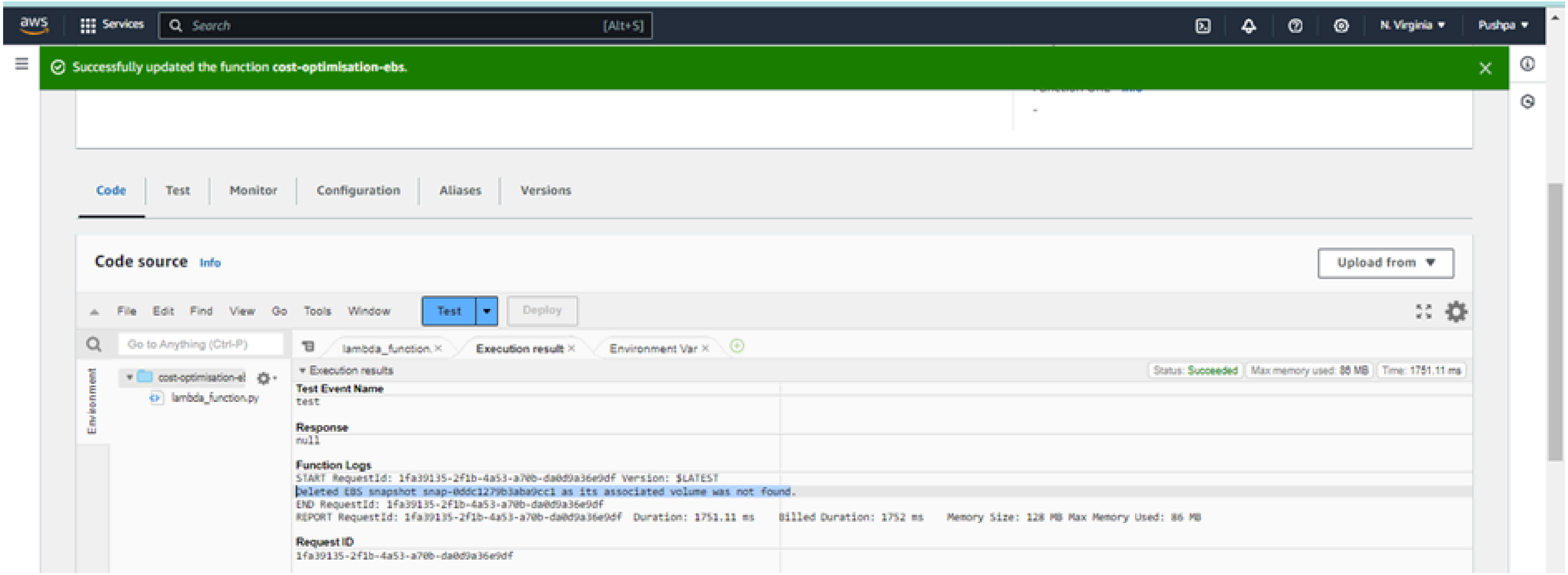


9 Now delete ec2 instance which will also delete volume as well ,but snapshot is still available

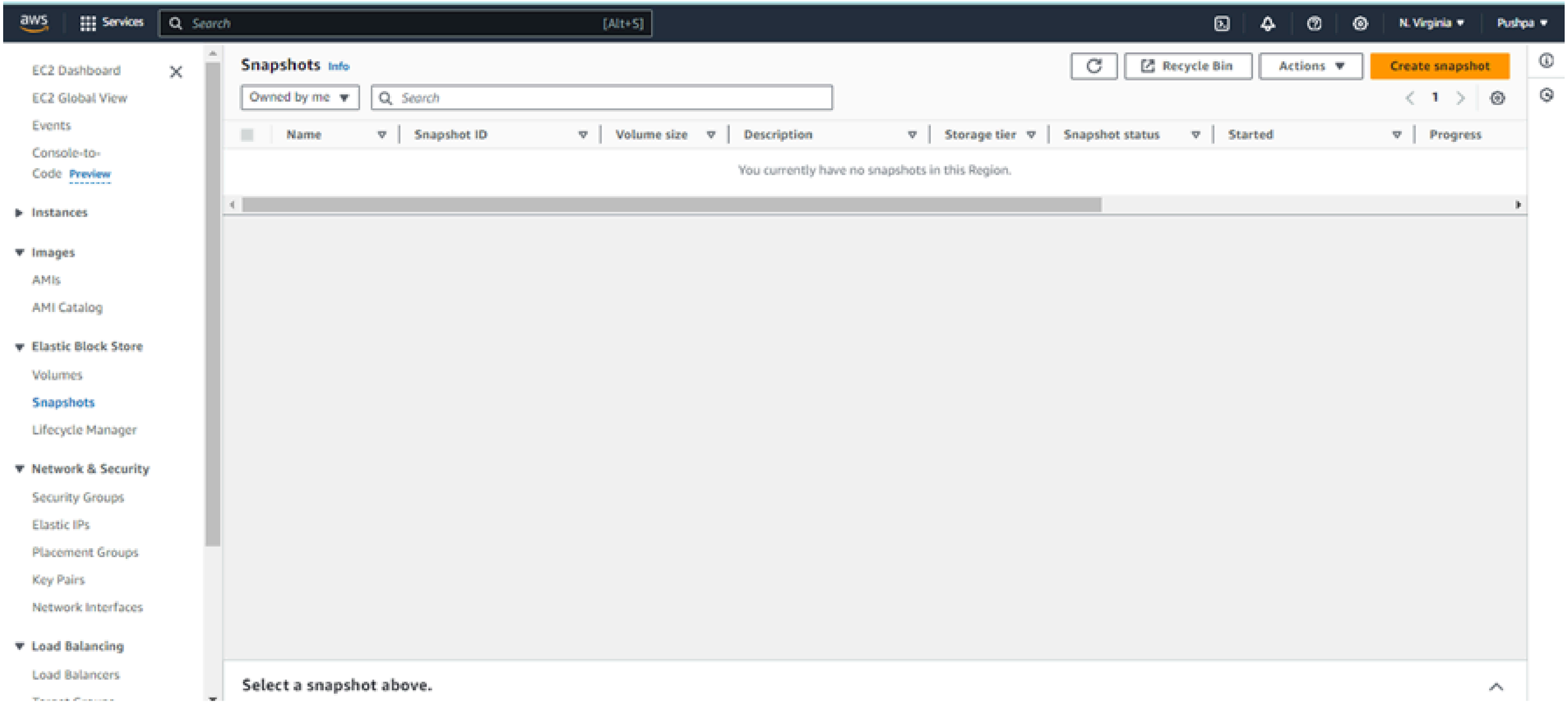



aws
Services
Search
[Alt+S]
N. Virginia
Pushpa
EC2 Dashboard
EC2 Global View
Events
Console-to-Code Preview
Instances
Images
AMIs
AMI Catalog
Elastic Block Store
Volumes
Snapshots
Lifecycle Manager
Network & Security
Security Groups
Elastic IPs
Placement Groups
Key Pairs
Network Interfaces
Load Balancing
Load Balancers
Target Groups
Trust Stores New
Resources
EC2 Global View
You are using the following Amazon EC2 resources in the US East (N. Virginia) Region:
Instances (running) 0
Auto Scaling Groups 0
Capacity Reservations 0
Dedicated Hosts 0
Elastic IPs 2
Instances 1
Key pairs 1
Load balancers 0
Placement groups 0
Security groups 8
Snapshots 1
Volumes 0
Launch instance
To get started, launch an Amazon EC2 instance, which is a virtual server in the cloud.
Launch instance
Migrate a server
Note: Your instances will launch in the US East (N. Virginia) Region
Instance alarms
View in CloudWatch
0 in alarm
0 OK
0 insufficient data
Instances in alarm
Service health
AWS Health Dashboard
Region
US East (N. Virginia)
Status
This service is operating normally.
Zones
Zone name
Zone ID
us-east-1a
use1-az1
us-east-1b
use1-az2
us-east-1c
use1-az4
EC2 Free Tier Info
Offers for all AWS Regions.
3 EC2 free tier offers in use
End of month forecast
0 offers forecasted to exceed free tier limit.
Exceeds free tier
0 offers exceeded and is now pay-as-you-go pricing.
View Global EC2 resources
Offer usage (monthly)
Linux EC2 Instances
5%
714.371664 hours remaining
Windows EC2 Instances
0%
746.466589 hours remaining
Storage space on EBS
2%
29.46 GB remaining
View all AWS Free Tier offers
Account attributes

10 now go to code and run again



-it says that the snapshot is deleted,as the associated snapshot is not found



In this way we optimize the cost in aws