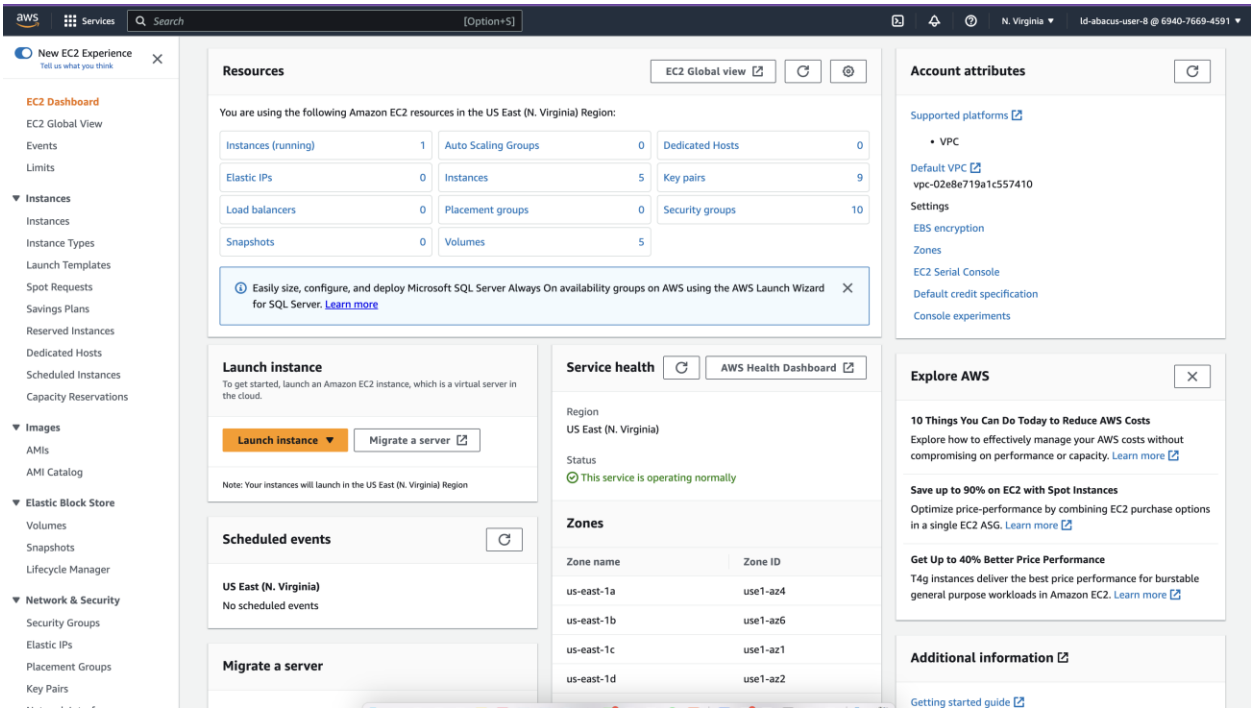
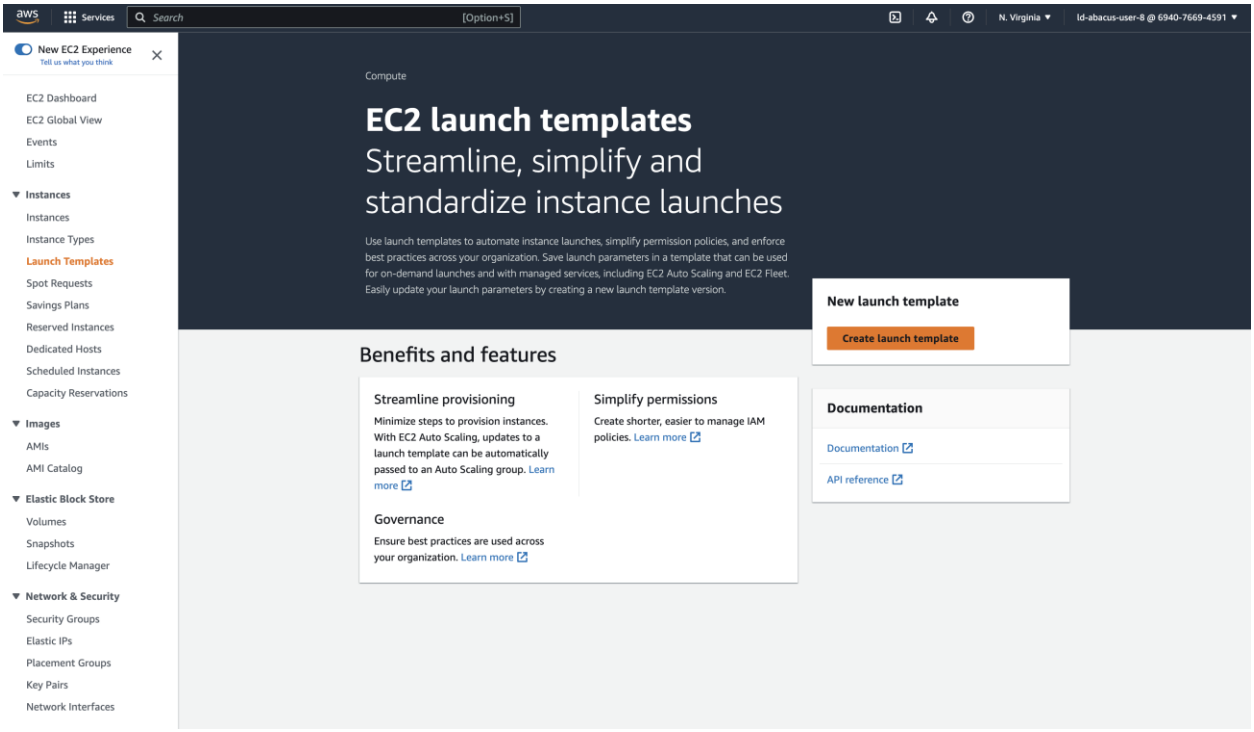
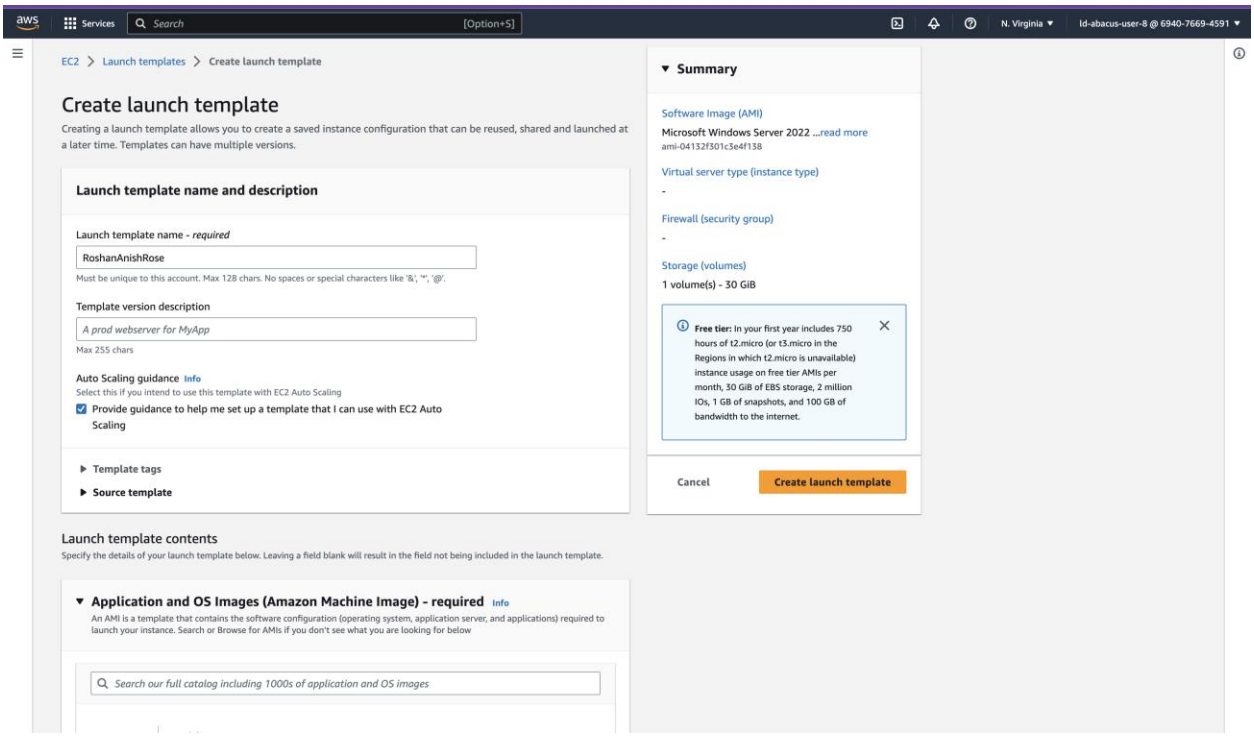
Name: Anish Kumar Shrestha, Roshan Karki and Rose Shakya

Here, we are cretaing ec2 launch instance.

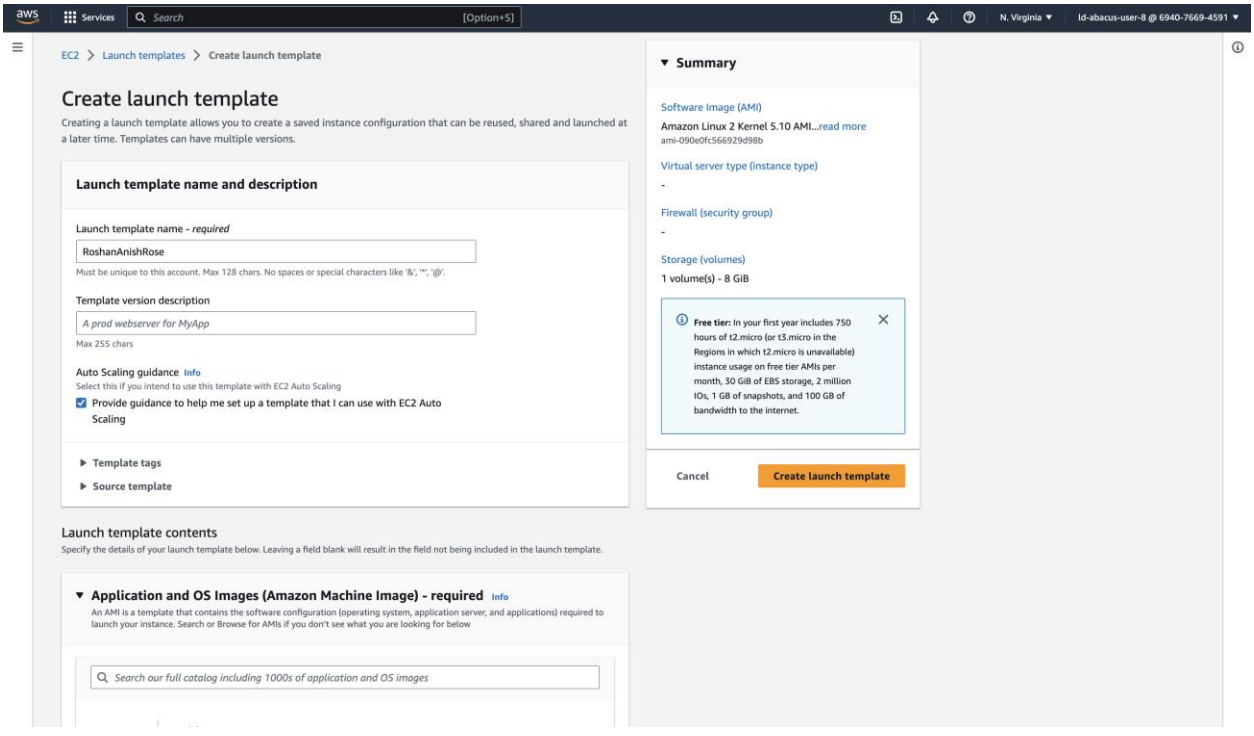


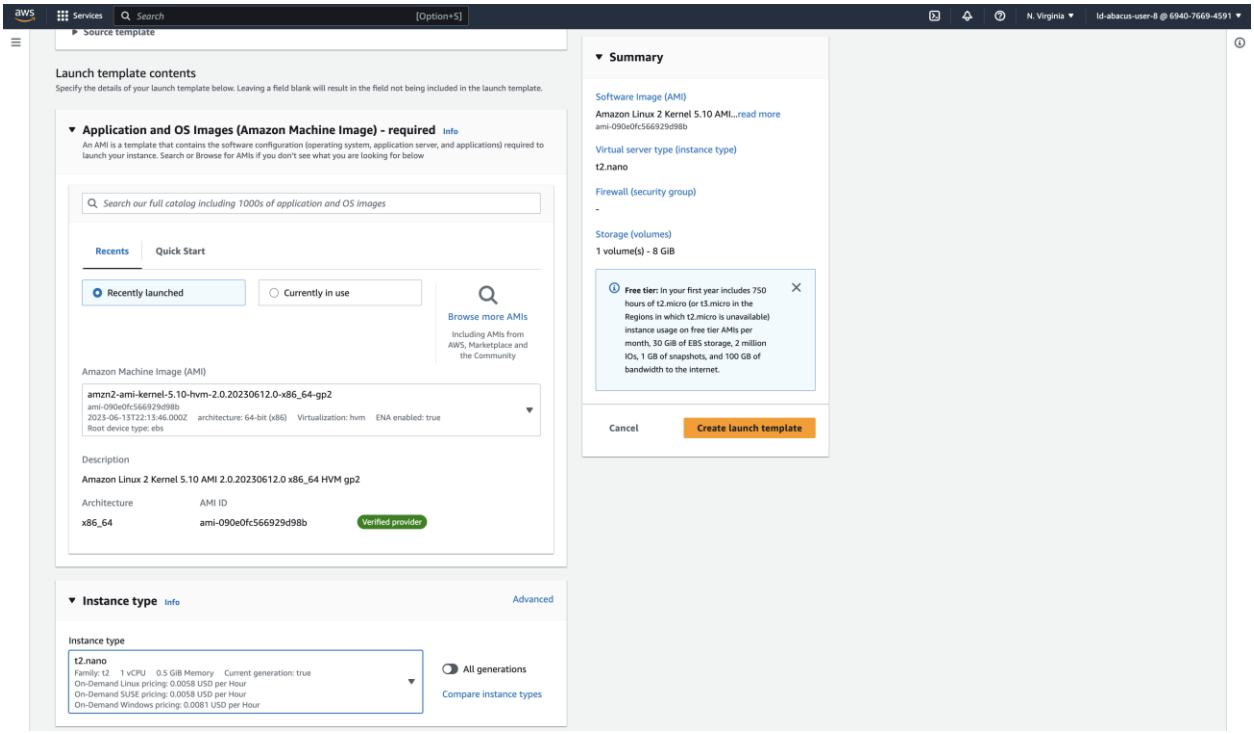
Now, creating the instance.

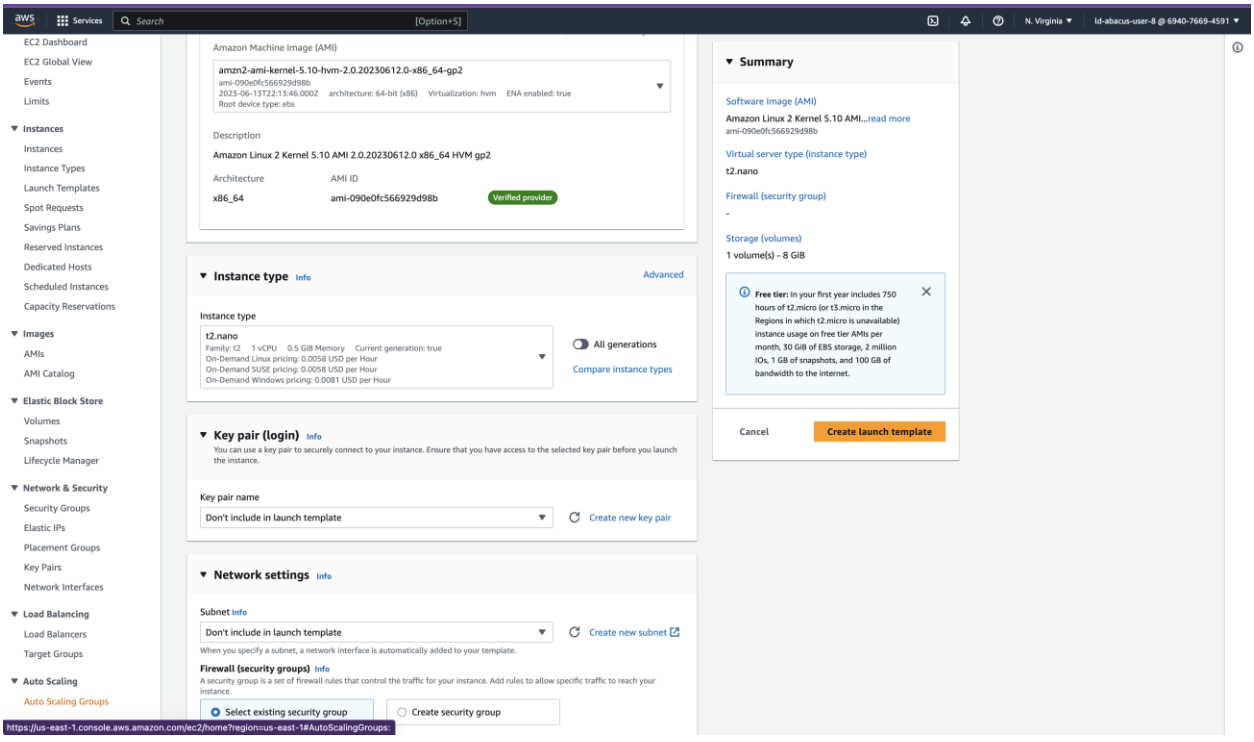

aws
Services
Search
[Option+S]
N. Virginia
ld-abacus-user-8 @ 6940-7669-4591
New EC2 Experience
Tell us what you think
EC2 Dashboard
EC2 Global View
Events
Limits
Instances
Instances
Instance Types
Launch Templates
Spot Requests
Savings Plans
Reserved Instances
Dedicated Hosts
Scheduled Instances
Capacity Reservations
Images
AMIs
AMI Catalog
Elastic Block Store
Volumes
Snapshots
Lifecycle Manager
Network & Security
Security Groups
Elastic IPs
Placement Groups
Key Pairs
Network Interfaces
Compute
EC2 launch templates
Streamline, simplify and standardize instance launches
Use launch templates to automate instance launches, simplify permission policies, and enforce best practices across your organization. Save launch parameters in a template that can be used for on-demand launches and with managed services, including EC2 Auto Scaling and EC2 Fleet. Easily update your launch parameters by creating a new launch template version.
New launch template
Create launch template
Benefits and features
Streamline provisioning
Minimize steps to provision instances. With EC2 Auto Scaling, updates to a launch template can be automatically passed to an Auto Scaling group. Learn more
Simplify permissions
Create shorter, easier to manage IAM policies. Learn more
Governance
Ensure best practices are used across your organization. Learn more
Documentation
Documentation
API reference

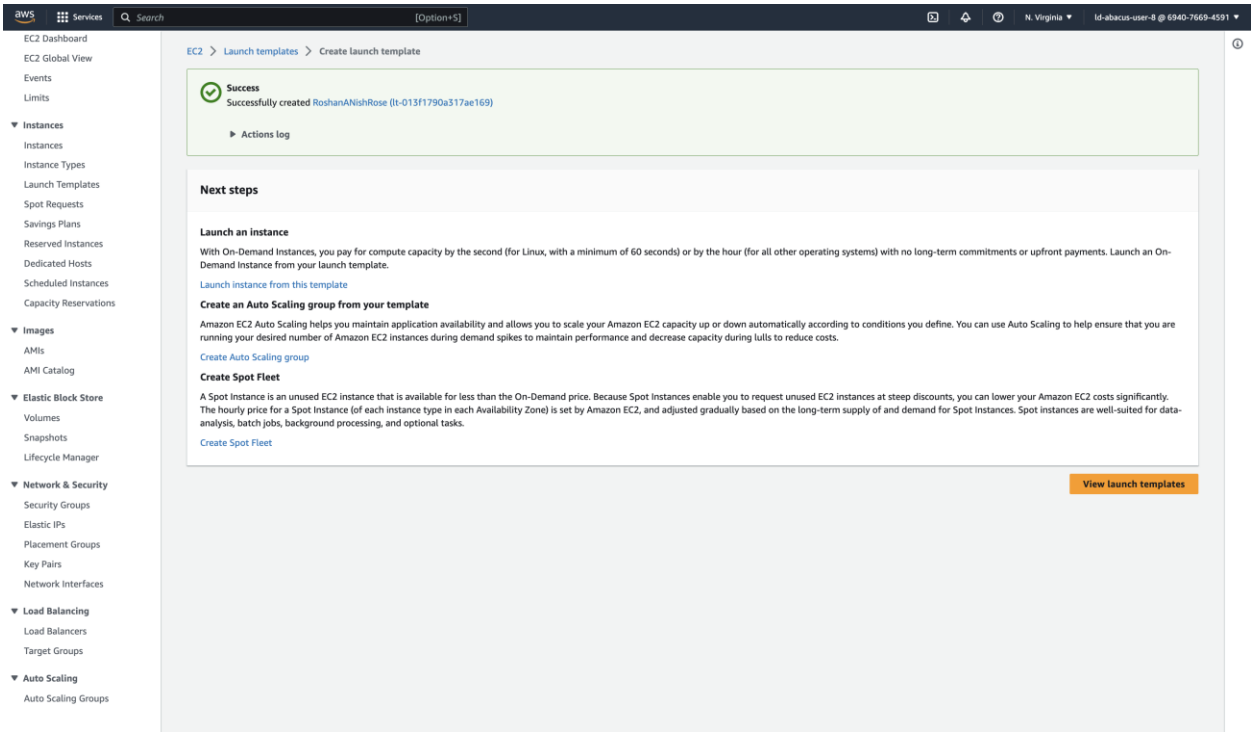


Then, adding template name is required with ticking the EC2 Auto.

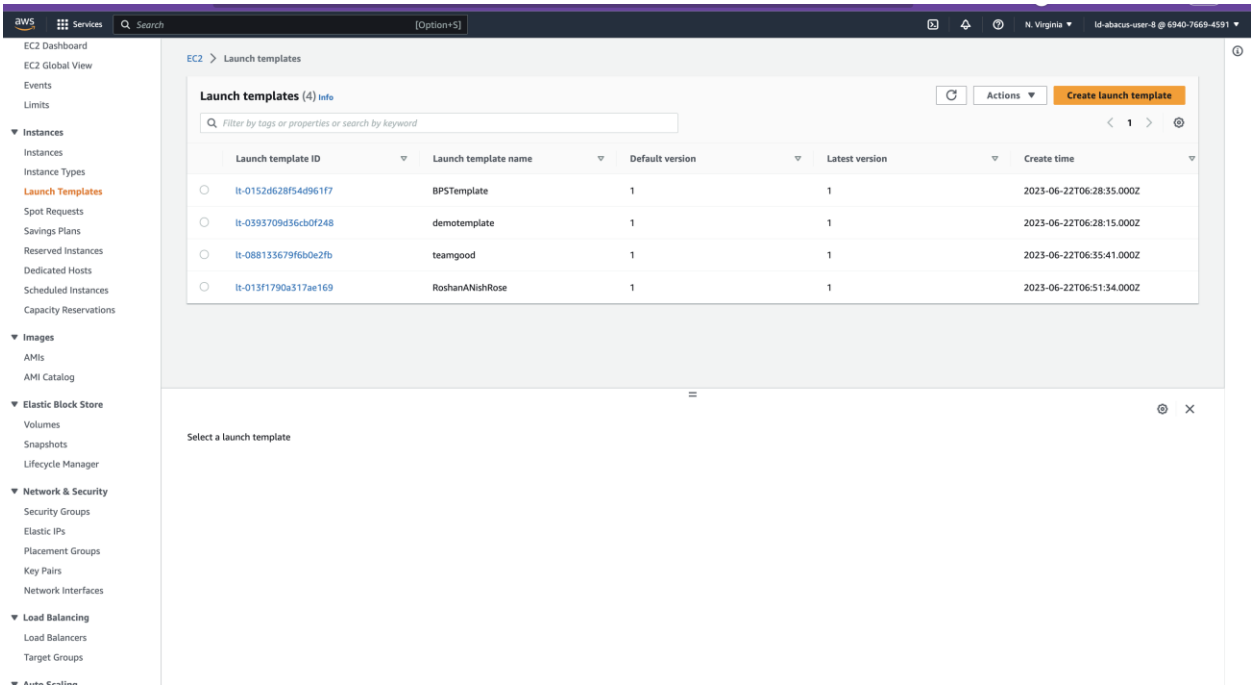



aws
Services
Search
[Option+5]
N. Virginia
Id-abacus-user-8 @ 6940-7669-4591
Source template
Launch template contents
Specify the details of your launch template below. Leaving a field blank will result in the field not being included in the launch template.
Application and OS Images (Amazon Machine Image) - required Info
An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below
Search our full catalog including 1000s of application and OS images
Recents
Quick Start
Recently launched
Currently in use
Browse more AMIs
Including AMIs from AWS, Marketplace and the Community
Amazon Machine Image (AMI)
amzn2-ami-kernel-5.10-hvm-2.0.20230612.0-x86_64-gp2
ami-090e0fc566929d98b
2023-06-13T22:13:46.000Z architecture: 64-bit (x86) Virtualization: hvm ENA enabled: true
Root device type: ebs
Description
Amazon Linux 2 Kernel 5.10 AMI 2.0.20230612.0 x86_64 HVM gp2
Architecture
AMI ID
x86_64
ami-090e0fc566929d98b
Verified provider
Instance type Info
Advanced
Instance type
t2.nano
Family: t2 1 vCPU 0.5 GiB Memory Current generation: true
On-Demand Linux pricing: 0.0058 USD per Hour
On-Demand SUSE pricing: 0.0058 USD per Hour
On-Demand Windows pricing: 0.0081 USD per Hour
All generations
Compare instance types
Summary
Software Image (AMI)
Amazon Linux 2 Kernel 5.10 AMI...read more
ami-090e0fc566929d98b
Virtual server type (instance type)
t2.nano
Firewall (security group)
-
Storage (volumes)
1 volume(s) - 8 GiB
Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 30 GiB of EBS storage, 2 million IOs, 1 GB of snapshots, and 100 GB of bandwidth to the internet.
Cancel
Create launch template

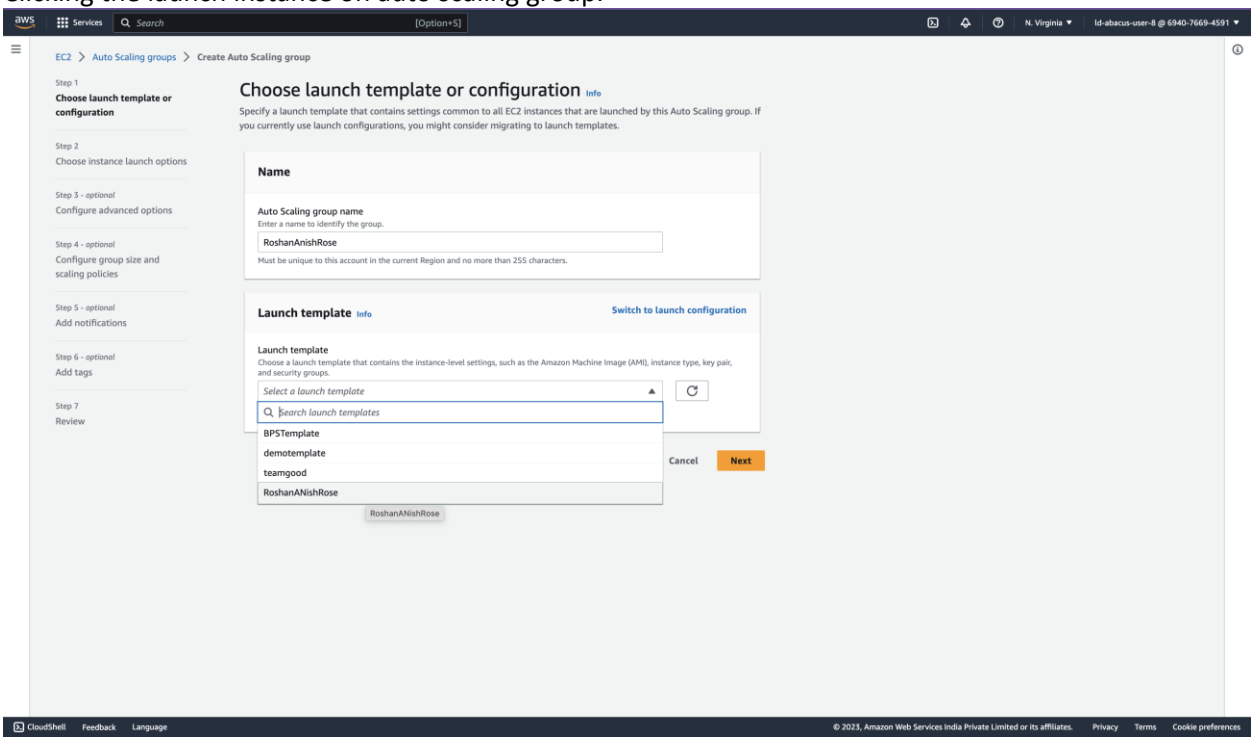

aws
Services
Search
[Option+5]
N. Virginia
Id-abacus-user-8 @ 6940-7669-4591
EC2 Dashboard
EC2 Global View
Events
Limits
Instances
Instances
Instance Types
Launch Templates
Spot Requests
Savings Plans
Reserved Instances
Dedicated Hosts
Scheduled Instances
Capacity Reservations
Images
AMIs
AMI Catalog
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
Auto Scaling
Auto Scaling Groups
Amazon Machine Image (AMI)
amzn2-ami-kernel-5.10-hvm-2.0.20230612.0-x86_64-gp2
ami-090e0fc566929d98b
2023-06-13T22:13:46.000Z architecture: 64-bit (x86) Virtualization: hvm ENA enabled: true
Root device type: ebs
Description
Amazon Linux 2 Kernel 5.10 AMI 2.0.20230612.0 x86_64 HVM gp2
Architecture
AMI ID
x86_64
ami-090e0fc566929d98b
Verified provider
Instance type Info
Advanced
Instance type
t2.nano
Family: t2 1 vCPU 0.5 GiB Memory Current generation: true
On-Demand Linux pricing: 0.0058 USD per Hour
On-Demand SUSE pricing: 0.0058 USD per Hour
On-Demand Windows pricing: 0.0081 USD per Hour
All generations
Compare instance types
Key pair (login) Info
You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.
Key pair name
Don't include in launch template
Create new key pair
Network settings Info
Subnet Info
Don't include in launch template
Create new subnet
When you specify a subnet, a network interface is automatically added to your template.
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.
Select existing security group
Create security group
https://us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#AutoScalingGroups:
Summary
Software Image (AMI)
Amazon Linux 2 Kernel 5.10 AMI...read more
ami-090e0fc566929d98b
Virtual server type (instance type)
t2.nano
Firewall (security group)
-
Storage (volumes)
1 volume(s) - 8 GiB
Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 30 GiB of EBS storage, 2 million IOs, 1 GB of snapshots, and 100 GB of bandwidth to the internet.
Cancel
Create launch template

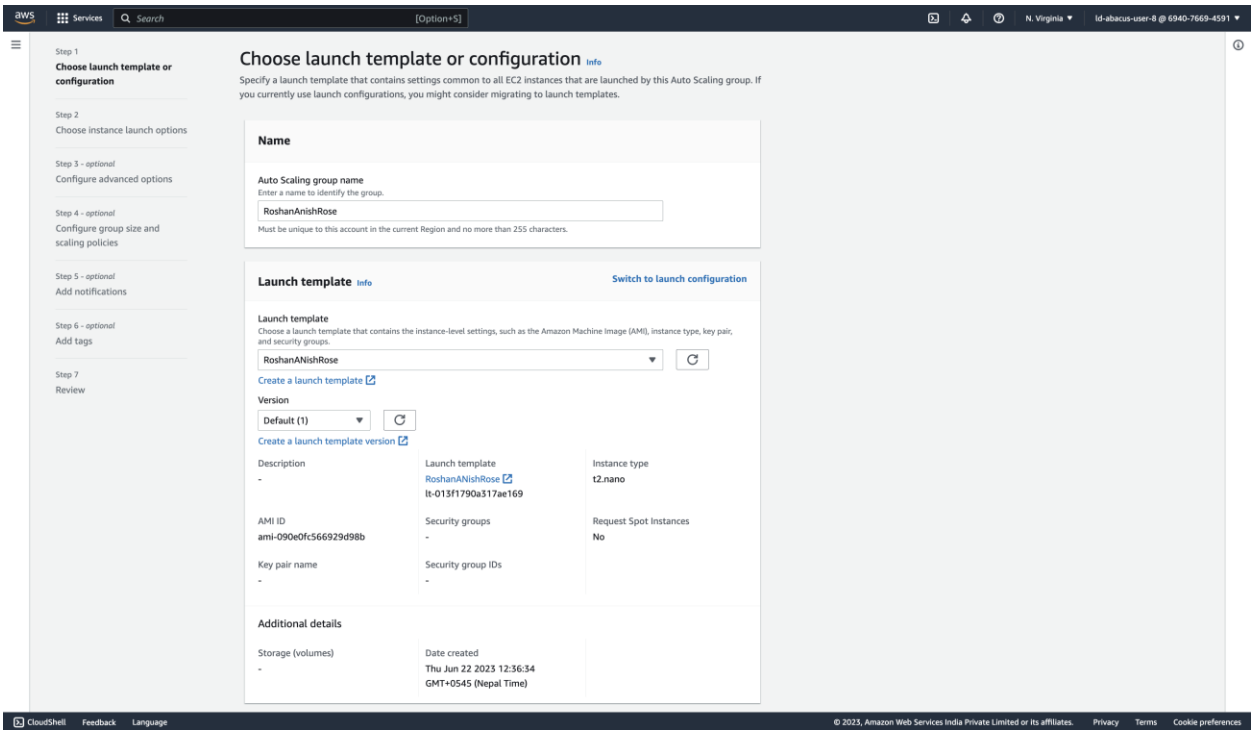


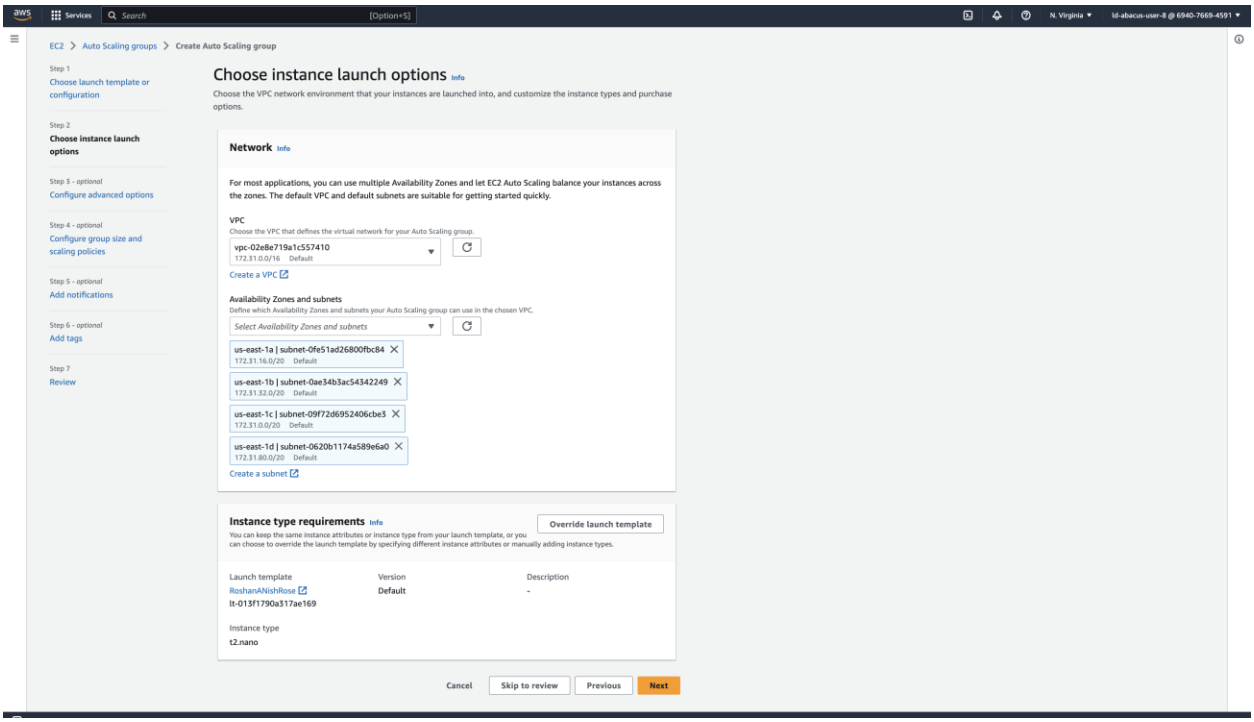
This is the success message from the launch templates.



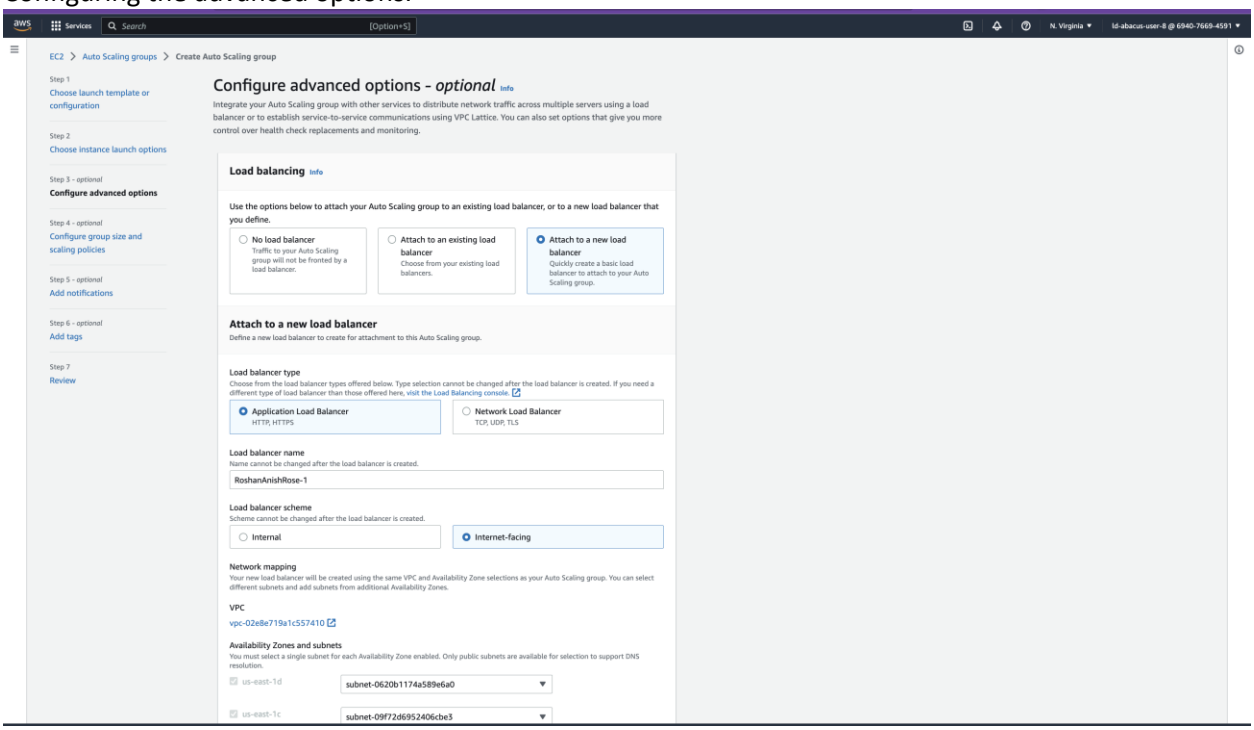
Clicking the launch instance on auto scaling group.

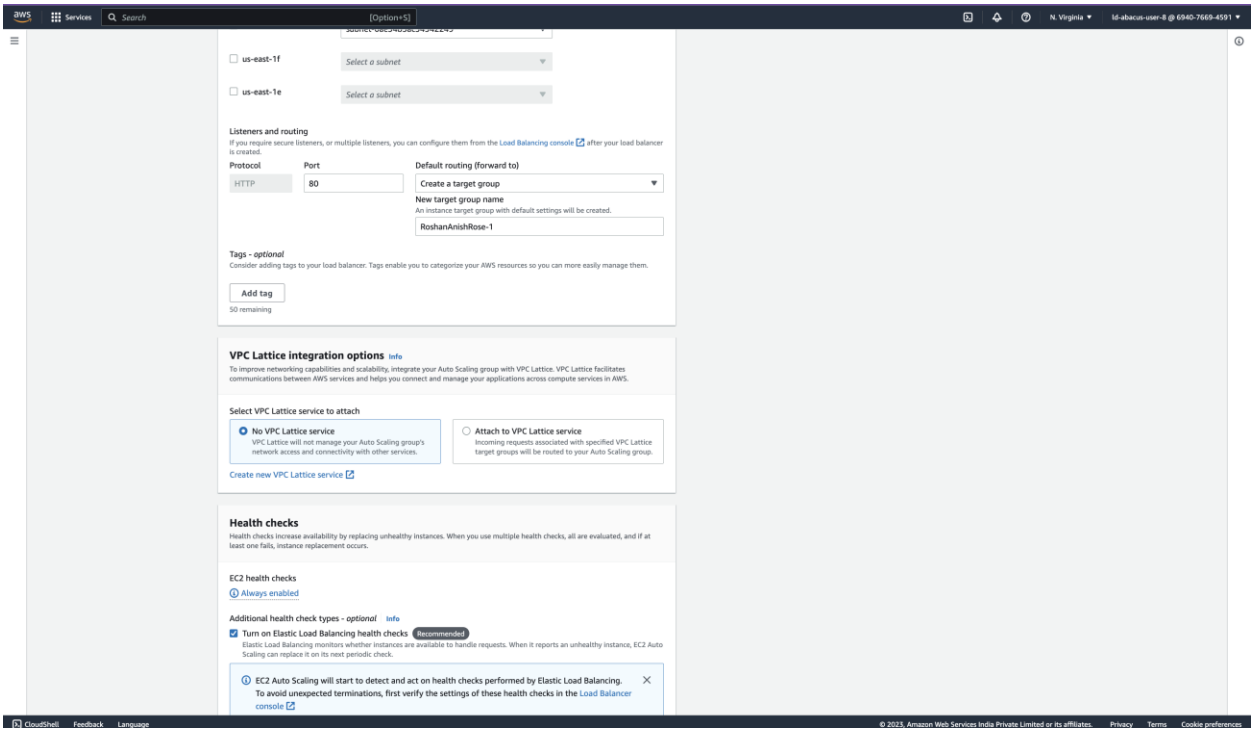


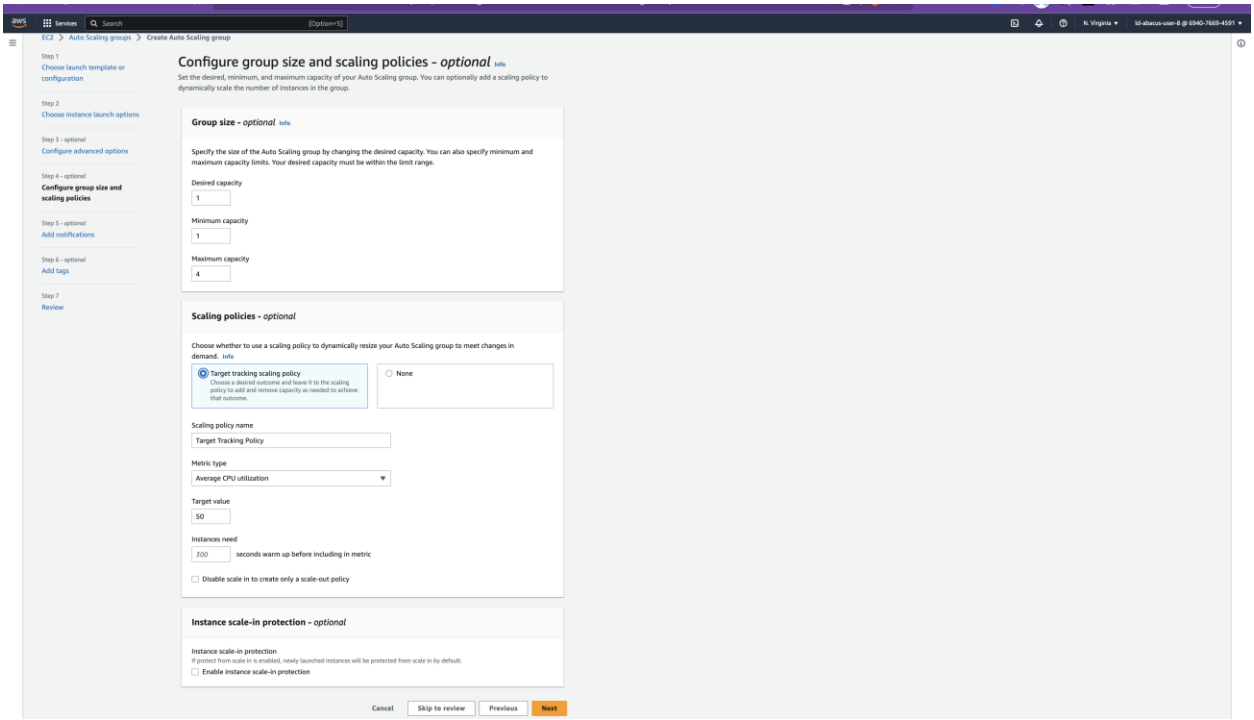


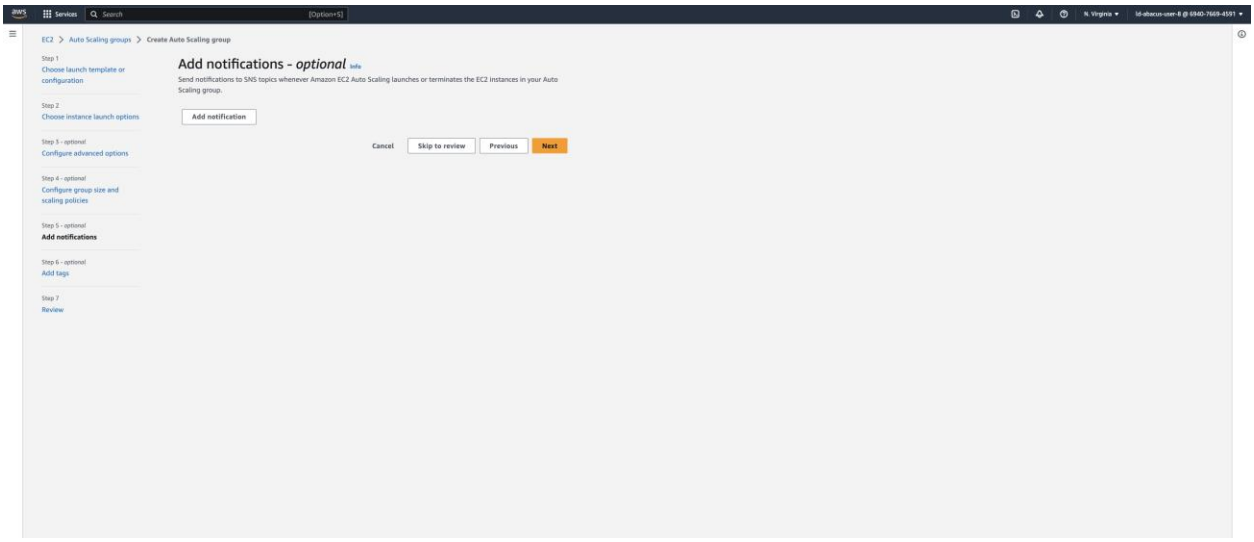


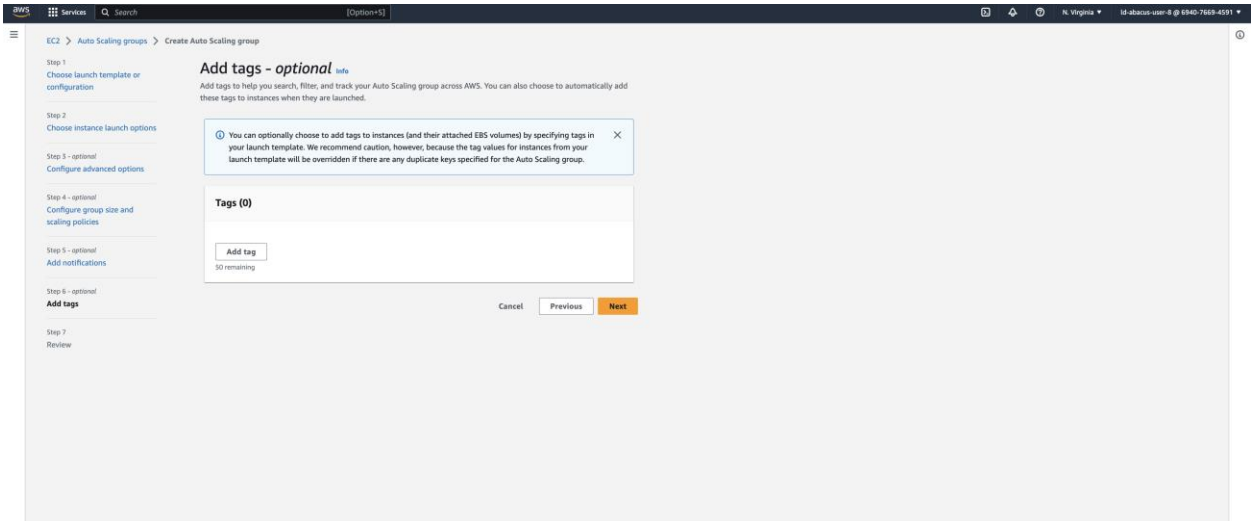
Configuring the advanced options.

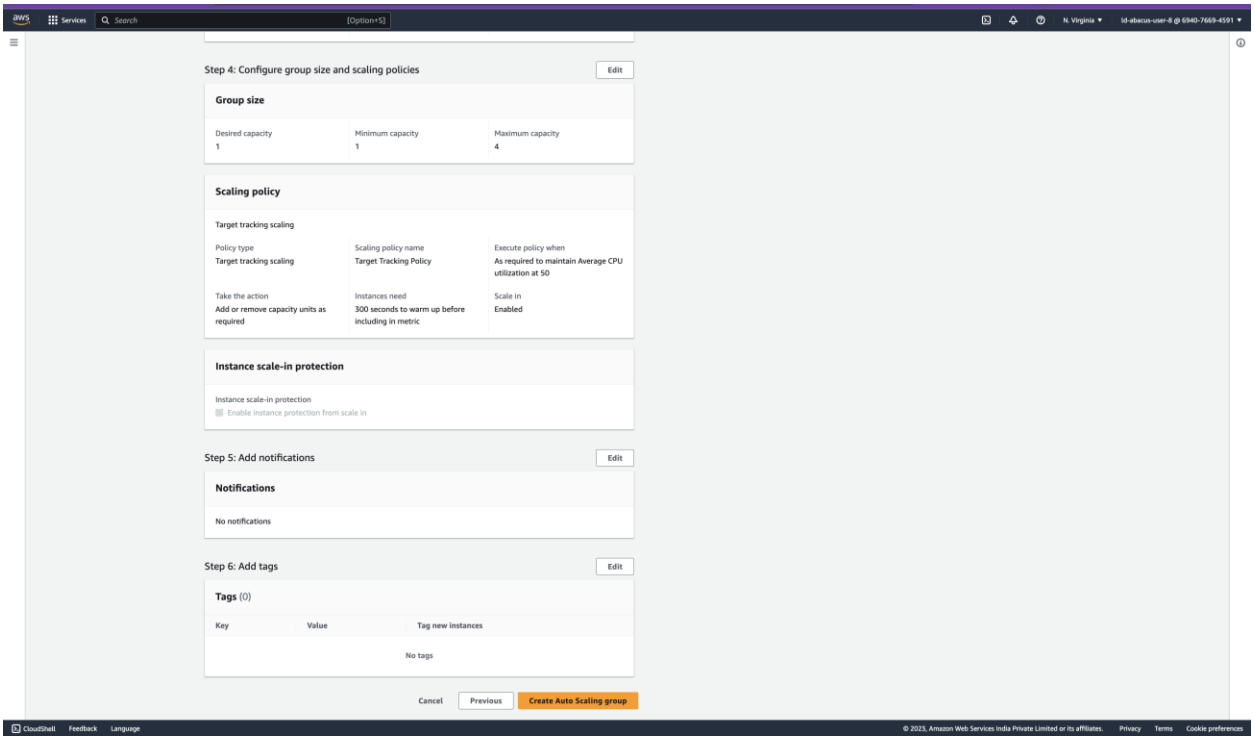


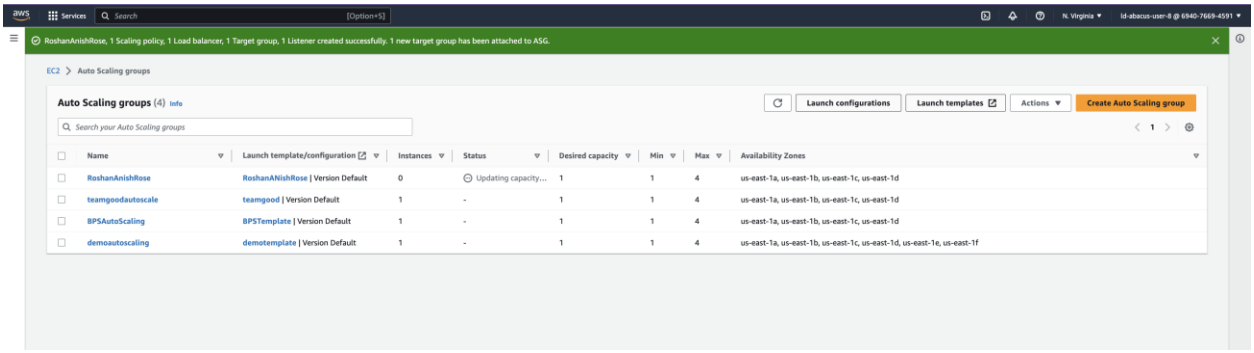

Services
Search
[Option+S]
N. Virginia
us-east-1f
Select a subnet
us-east-1e
Select a subnet
Listeners and routing
Protocol
Port
Default routing (forward to)
HTTP
80
Create a target group
New target group name
RoshanAnishRose-1
Tags - optional
Add tag
50 remaining
VPC Lattice integration options
Select VPC Lattice service to attach
No VPC Lattice service
Attach to VPC Lattice service
Create new VPC Lattice service
Health checks
EC2 health checks
Always enabled
Additional health check types - optional
Turn on Elastic Load Balancing health checks
Recommended
CloudShell
Feedback
Language
© 2023, Amazon Web Services India Private Limited or its affiliates.
Privacy
Terms
Cookie preferences

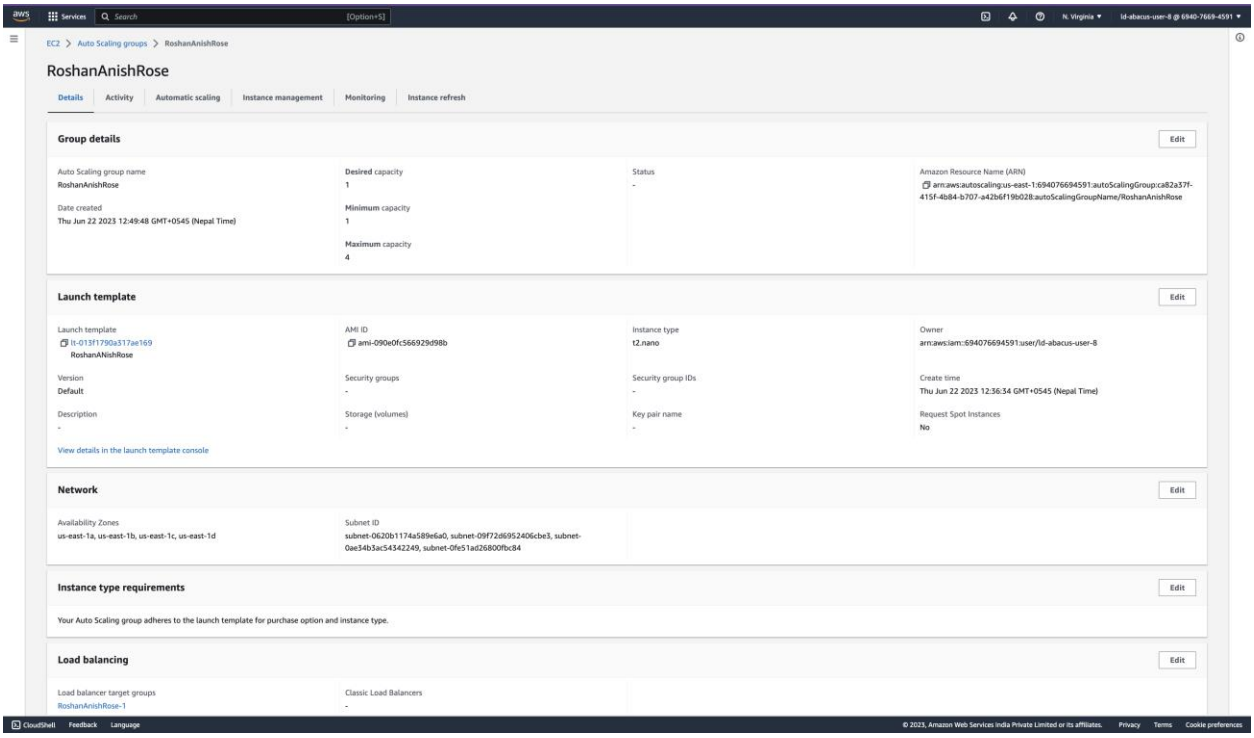

Services
Search
[Option+S]
N. Virginia
EC2 > Auto Scaling groups > Create Auto Scaling group
Step 1
Choose launch template or configuration
Step 2
Choose instance launch options
Step 3 - optional
Configure advanced options
Step 4 - optional
Configure group size and scaling policies
Step 5 - optional
Add notifications
Step 6 - optional
Add tags
Step 7
Review
Configure group size and scaling policies - optional
Group size - optional
Desired capacity
1
Minimum capacity
1
Maximum capacity
4
Scaling policies - optional
Target tracking scaling policy
None
Scaling policy name
Target Tracking Policy
Metric type
Average CPU utilization
Target value
50
Instances need
300
seconds warm up before including in metric
Disable scale in to create only a scale-out policy
Instance scale-in protection - optional
Instance scale-in protection
Enable instance scale-in protection
Cancel
Skip to review
Previous
Next

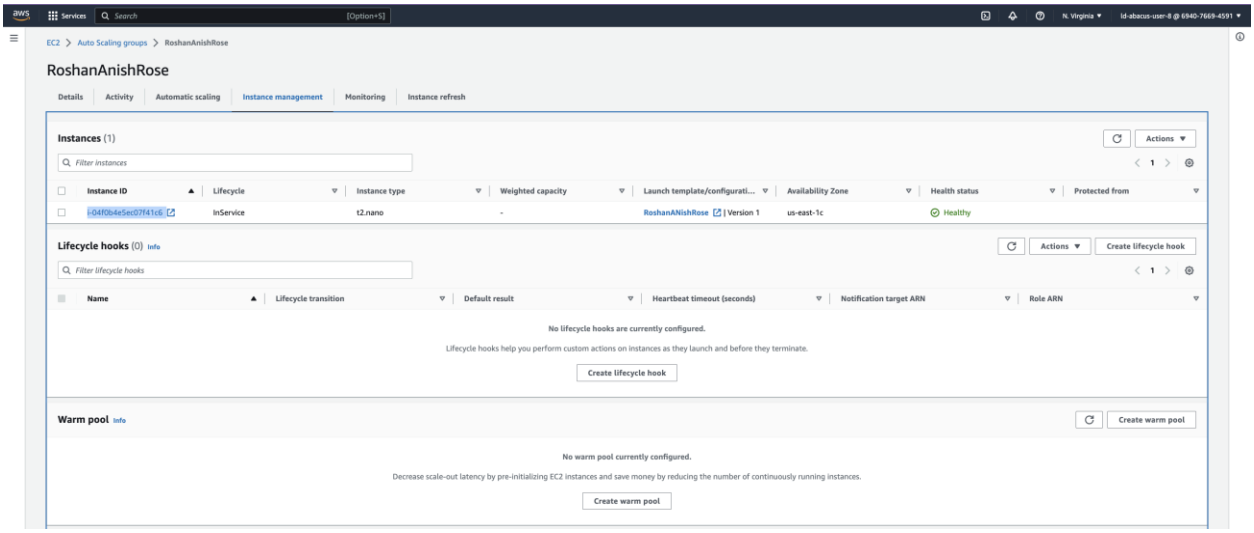

Services
Search
[Option+S]
N. Virginia
EC2 > Auto Scaling groups > Create Auto Scaling group
Step 1
Choose launch template or configuration
Step 2
Choose instance launch options
Step 3 - optional
Configure advanced options
Step 4 - optional
Configure group size and scaling policies
Step 5 - optional
Add notifications
Step 6 - optional
Add tags
Step 7
Review
Add notifications - optional
Info
Send notifications to SNS topics whenever Amazon EC2 Auto Scaling launches or terminates the EC2 instances in your Auto Scaling group.
Add notification
Cancel
Skip to review
Previous
Next


Services
Search
[Option+S]
N. Virginia
EC2 > Auto Scaling groups > Create Auto Scaling group
Step 1
Choose launch template or configuration
Step 2
Choose instance launch options
Step 3 - optional
Configure advanced options
Step 4 - optional
Configure group size and scaling policies
Step 5 - optional
Add notifications
Step 6 - optional
Add tags
Step 7
Review
Add tags - optional
Info
Add tags to help you search, filter, and track your Auto Scaling group across AWS. You can also choose to automatically add these tags to instances when they are launched.
You can optionally choose to add tags to instances (and their attached EBS volumes) by specifying tags in your launch template. We recommend caution, however, because the tag values for instances from your launch template will be overridden if there are any duplicate keys specified for the Auto Scaling group.
Tags (0)
Add tag
50 remaining
Cancel
Previous
Next

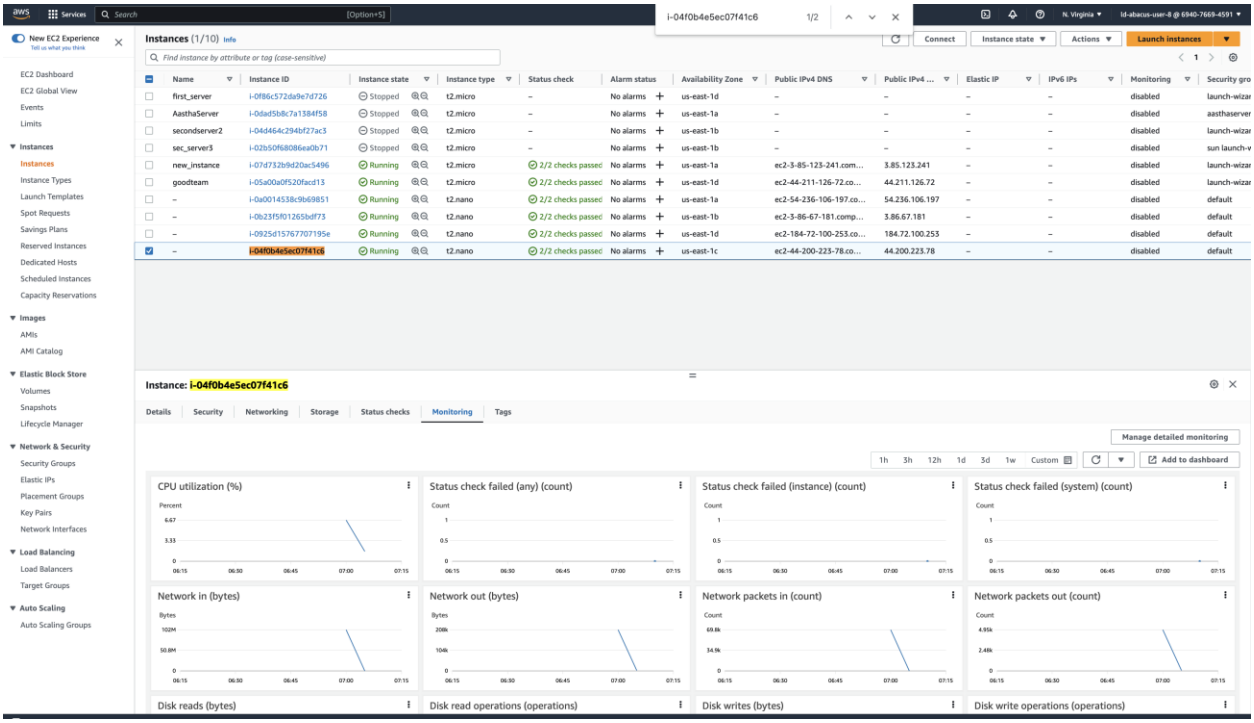

Services
Search
[Option+S]
N. Virginia
Step 4: Configure group size and scaling policies
Edit
Group size
Desired capacity
1
Minimum capacity
1
Maximum capacity
4
Scaling policy
Target tracking scaling
Policy type
Target tracking scaling
Scaling policy name
Target Tracking Policy
Execute policy when
As required to maintain Average CPU utilization at 50
Take the action
Add or remove capacity units as required
Instances need
300 seconds to warm up before including in metric
Scale in
Enabled
Instance scale-in protection
Instance scale-in protection
Enable instance protection from scale in
Step 5: Add notifications
Edit
Notifications
No notifications
Step 6: Add tags
Edit
Tags (0)
Key
Value
Tag new instances
No tags
Cancel
Previous
Create Auto Scaling group
CloudShell
Feedback
Language
© 2023, Amazon Web Services India Private Limited or its affiliates.
Privacy
Terms
Cookie preferences

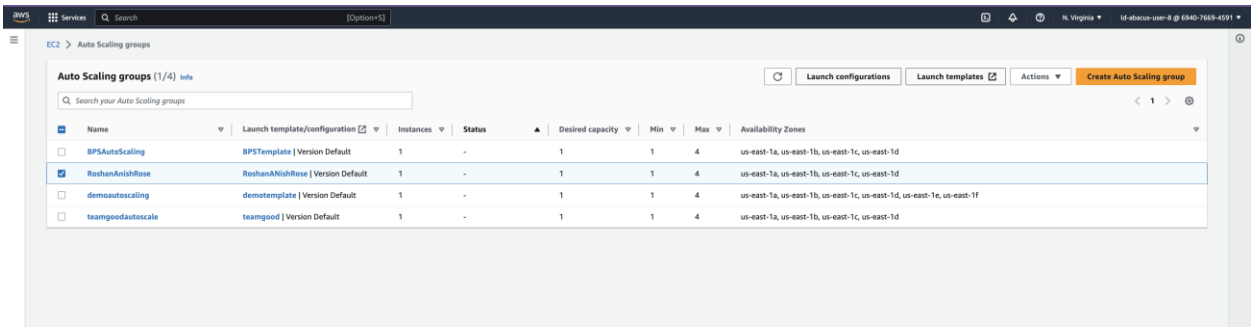

Services
Search
[Option+S]
N. Virginia
RoshanAnishRose, 1 Scaling policy, 1 Load balancer, 1 Target group, 1 Listener created successfully. 1 new target group has been attached to ASG.
EC2
Auto Scaling groups
Auto Scaling groups (4) Info
Launch configurations
Launch templates
Actions
Create Auto Scaling group
Search your Auto Scaling groups
Name
Launch template/configuration
Instances
Status
Desired capacity
Min
Max
Availability Zones
RoshanAnishRose
RoshanANishRose | Version Default
0
Updating capacity...
1
1
4
us-east-1a, us-east-1b, us-east-1c, us-east-1d
teamgoodautoscale
teamgood | Version Default
1
-
1
1
4
us-east-1a, us-east-1b, us-east-1c, us-east-1d
BPSAutoScaling
BPSTemplate | Version Default
1
-
1
1
4
us-east-1a, us-east-1b, us-east-1c, us-east-1d
demoautoscaling
demotemplate | Version Default
1
-
1
1
4
us-east-1a, us-east-1b, us-east-1c, us-east-1d, us-east-1e, us-east-1f

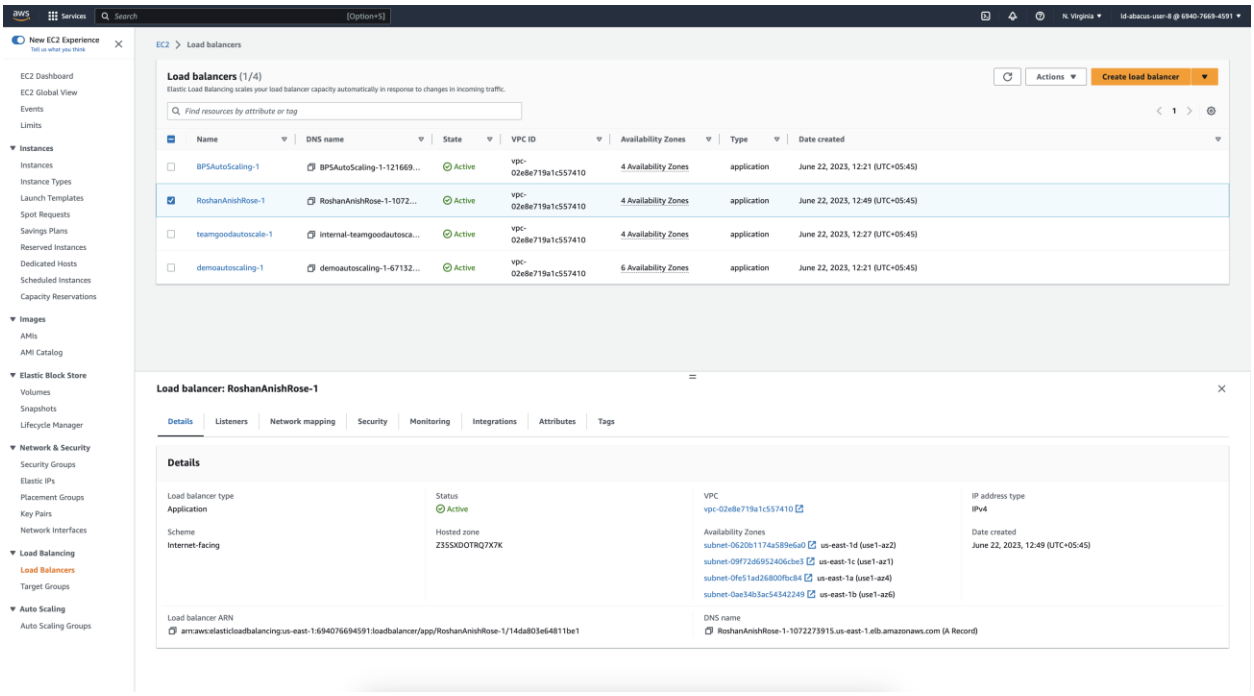

Services
Search
[Option+S]
N. Virginia
ld-abacus-user-8 @ 6940-7669-4591
EC2 > Auto Scaling groups > RoshanAnishRose
RoshanAnishRose
Details
Activity
Automatic scaling
Instance management
Monitoring
Instance refresh
Group details
Edit
Auto Scaling group name
RoshanAnishRose
Desired capacity
1
Minimum capacity
1
Maximum capacity
4
Status
-
Amazon Resource Name (ARN)
arn:aws:autoscaling:us-east-1:694076694591:autoScalingGroup:ca82a37f-415f-4b84-b707-a42b6f19b028:autoScalingGroupName/RoshanAnishRose
Date created
Thu Jun 22 2023 12:49:48 GMT+0545 (Nepal Time)
Launch template
Edit
Launch template
lt-013f1790a317ae169
RoshanANishRose
AMI ID
ami-090e0fc566929d98b
Instance type
t2.nano
Owner
arn:aws:iam::694076694591:user/ld-abacus-user-8
Version
Default
Security groups
-
Security group IDs
-
Create time
Thu Jun 22 2023 12:36:34 GMT+0545 (Nepal Time)
Description
-
Storage (volumes)
-
Key pair name
-
Request Spot Instances
No
View details in the launch template console
Network
Edit
Availability Zones
us-east-1a, us-east-1b, us-east-1c, us-east-1d
Subnet ID
subnet-0620b1174a589e6a0, subnet-09f72d6952406cbe3, subnet-0ae34b3ac54342249, subnet-0fe51ad26800fbc84
Instance type requirements
Edit
Your Auto Scaling group adheres to the launch template for purchase option and instance type.
Load balancing
Edit
Load balancer target groups
RoshanAnishRose-1
Classic Load Balancers
-
CloudShell
Feedback
Language
© 2023, Amazon Web Services India Private Limited or its affiliates.
Privacy
Terms
Cookie preferences

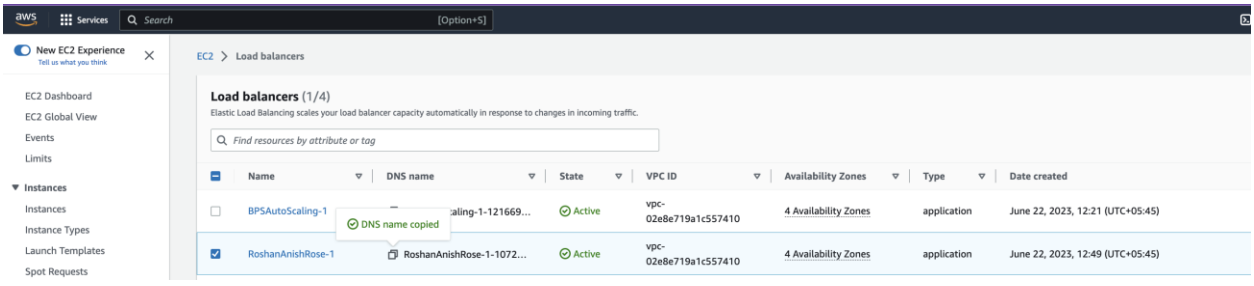

Services
Search
[Option+S]
N. Virginia
ld-abacus-user-8 @ 6940-7669-4591
EC2 > Auto Scaling groups > RoshanAnishRose
RoshanAnishRose
Details
Activity
Automatic scaling
Instance management
Monitoring
Instance refresh
Instances (1)
Actions
Filter instances
Instance ID
Lifecycle
Instance type
Weighted capacity
Launch template/configurati...
Availability Zone
Health status
Protected from
i-04f0b4e5ec07f41c6
InService
t2.nano
-
RoshanANishRose | Version 1
us-east-1c
Healthy
Lifecycle hooks (0) Info
Actions
Create lifecycle hook
Filter lifecycle hooks
Name
Lifecycle transition
Default result
Heartbeat timeout (seconds)
Notification target ARN
Role ARN
No lifecycle hooks are currently configured.
Lifecycle hooks help you perform custom actions on instances as they launch and before they terminate.
Create lifecycle hook
Warm pool Info
Create warm pool
No warm pool currently configured.
Decrease scale-out latency by pre-initializing EC2 instances and save money by reducing the number of continuously running instances.
Create warm pool

We are monitoring now.






Load balancers (1/4)
Elastic Load Balancing scales your load balancer capacity automatically in response to changes in incoming traffic.
Actions
Create load balancer
Name
DNS name
State
VPC ID
Availability Zones
Type
Date created
BPSAutoScaling-1
RoshanAnishRose-1
teamgoodautoscale-1
demoautoscaling-1
Active
application
June 22, 2023, 12:21 (UTC+05:45)
June 22, 2023, 12:49 (UTC+05:45)
June 22, 2023, 12:27 (UTC+05:45)
4 Availability Zones
6 Availability Zones
Load balancer: RoshanAnishRose-1
Details
Listeners
Network mapping
Security
Monitoring
Integrations
Attributes
Tags
Load balancer type
Application
Status
Active
VPC
Scheme
Internet-facing
Hosted zone
Z35SXDOTRQ7X7K
Availability Zones
IP address type
IPv4
Date created
June 22, 2023, 12:49 (UTC+05:45)
Load balancer ARN
DNS name


New EC2 Experience
EC2 Dashboard
EC2 Global View
Events
Limits
Instances
Instances
Instance Types
Launch Templates
Spot Requests
EC2 > Load balancers
Load balancers (1/4)
Elastic Load Balancing scales your load balancer capacity automatically in response to changes in incoming traffic.
Find resources by attribute or tag
Name
DNS name
State
VPC ID
Availability Zones
Type
Date created
BPSAutoScaling-1
RoshanAnishRose-1
DNS name copied
Active
application
June 22, 2023, 12:21 (UTC+05:45)
June 22, 2023, 12:49 (UTC+05:45)
4 Availability Zones

Now, creating a python file with creating DNS Name.