AWS Project

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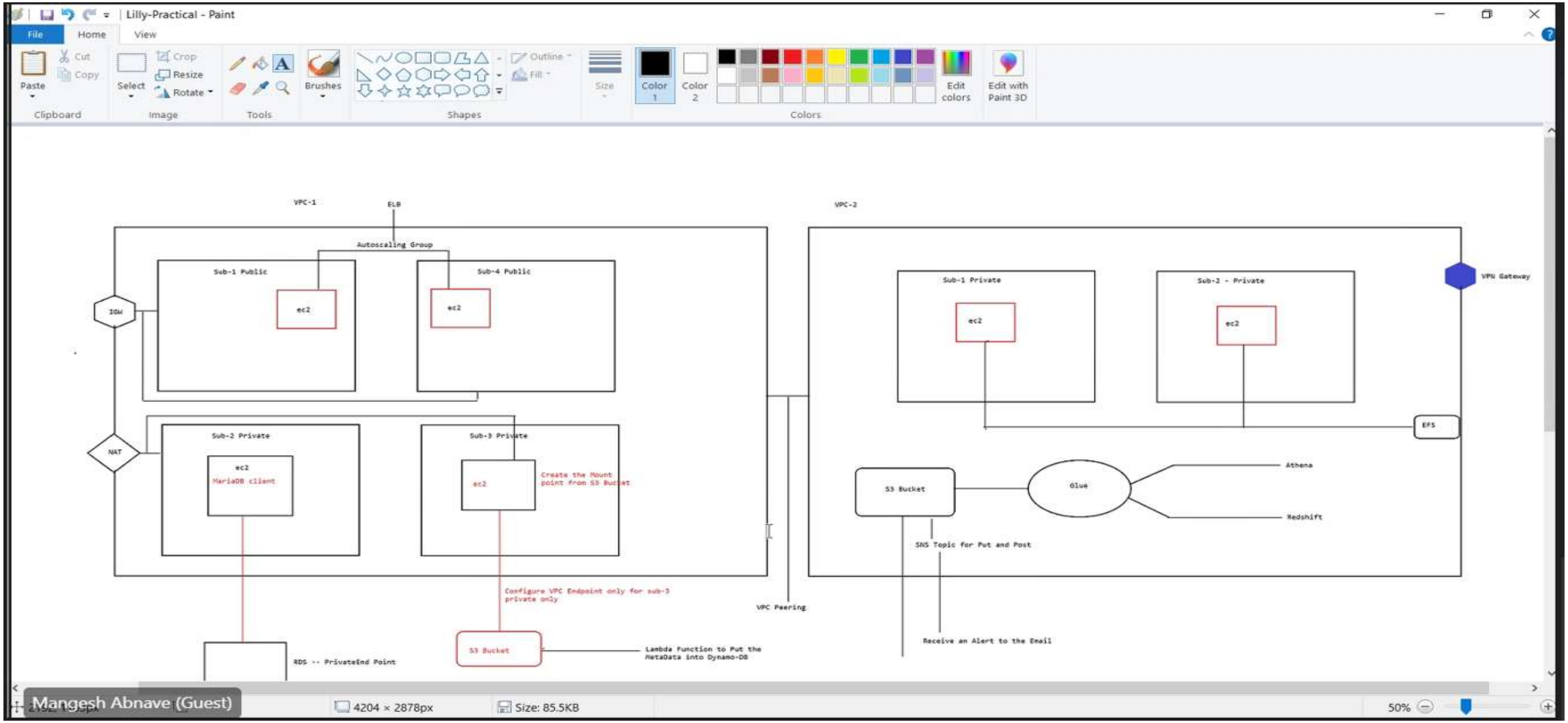
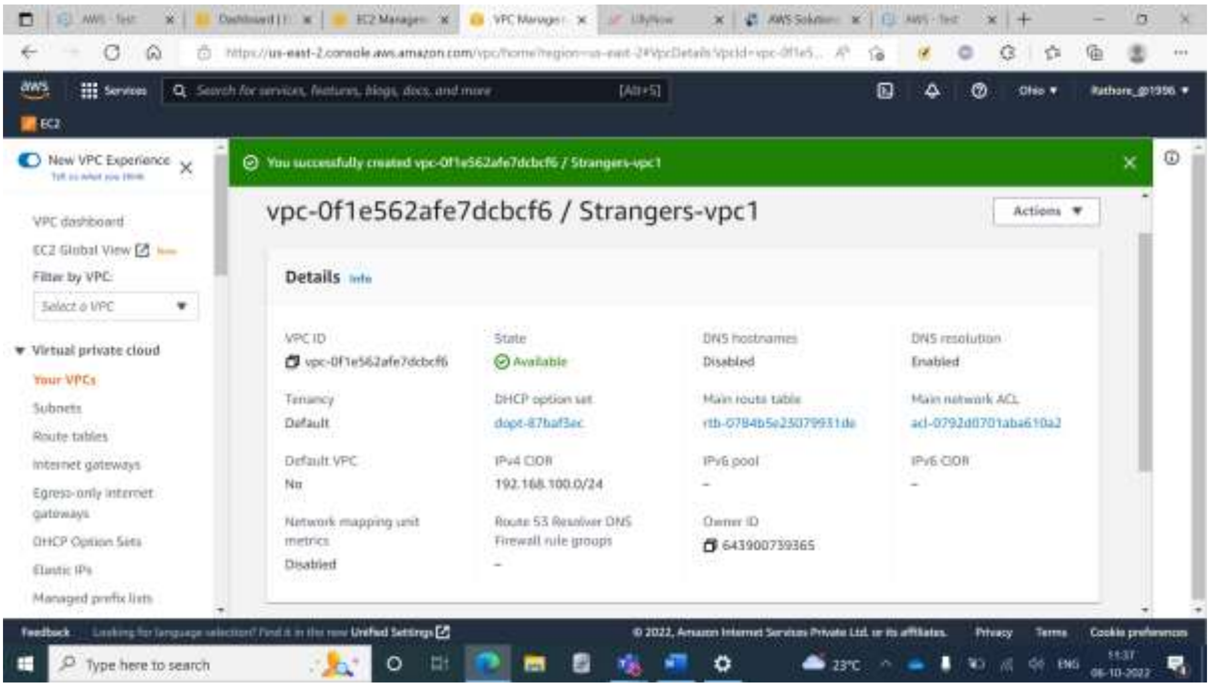
Group Name: Strangers

Problem Statement shown in the diagram:



Step 1: Created a public VPC. VPC Name: Stranger-vpc1



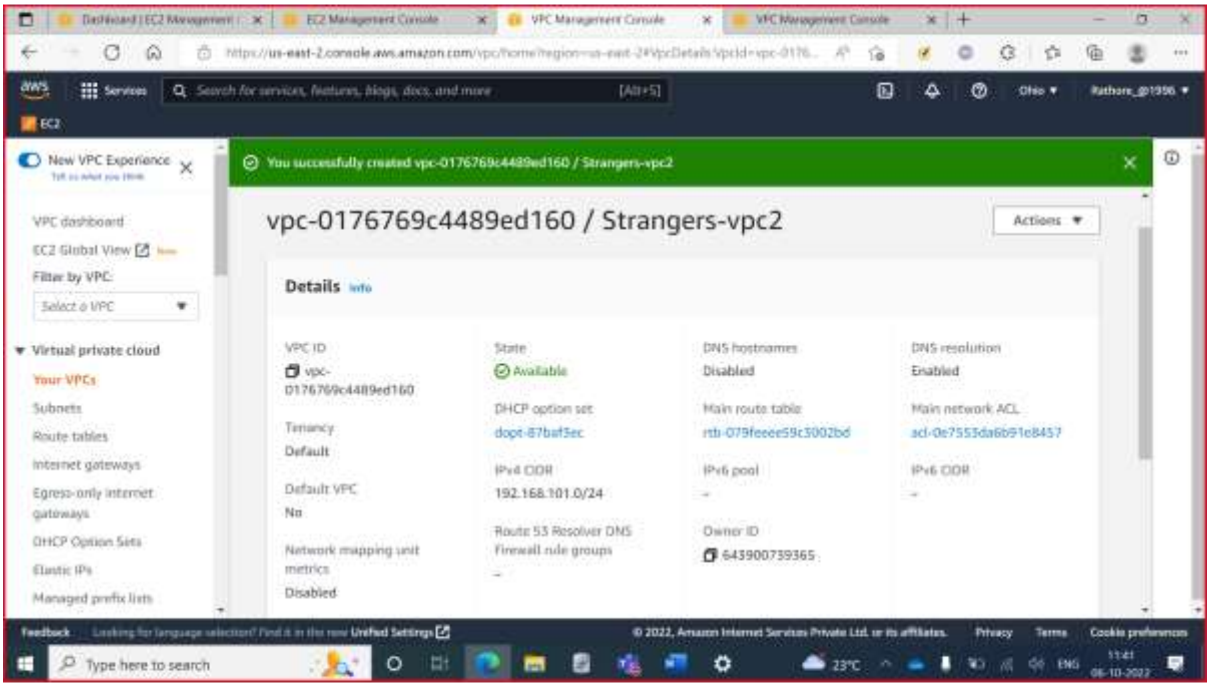
You successfully created vpc-0f1e562afe7dcbcf6 / Strangers-vpc1

vpc-0f1e562afe7dcbcf6 / Strangers-vpc1

Details

VPC ID vpc-0f1e562afe7dcbcf6	State Available	DNS hostnames Disabled	DNS resolution Enabled
Tenancy Default	DHCP option set dopt-87baf3ec	Main route table rtb-0784b5e23079931de	Main network ACL acl-0792d0701aba610a2
Default VPC No	IPv4 CIDR 192.168.100.0/24	IPv6 pool –	IPv6 CIDR –
Network mapping unit metrics Disabled	Route 53 Resolver DNS Firewall rule groups –	Owner ID 643900739365	

Step 2: Created a public VPC. VPC Name: Strangers-vpc2



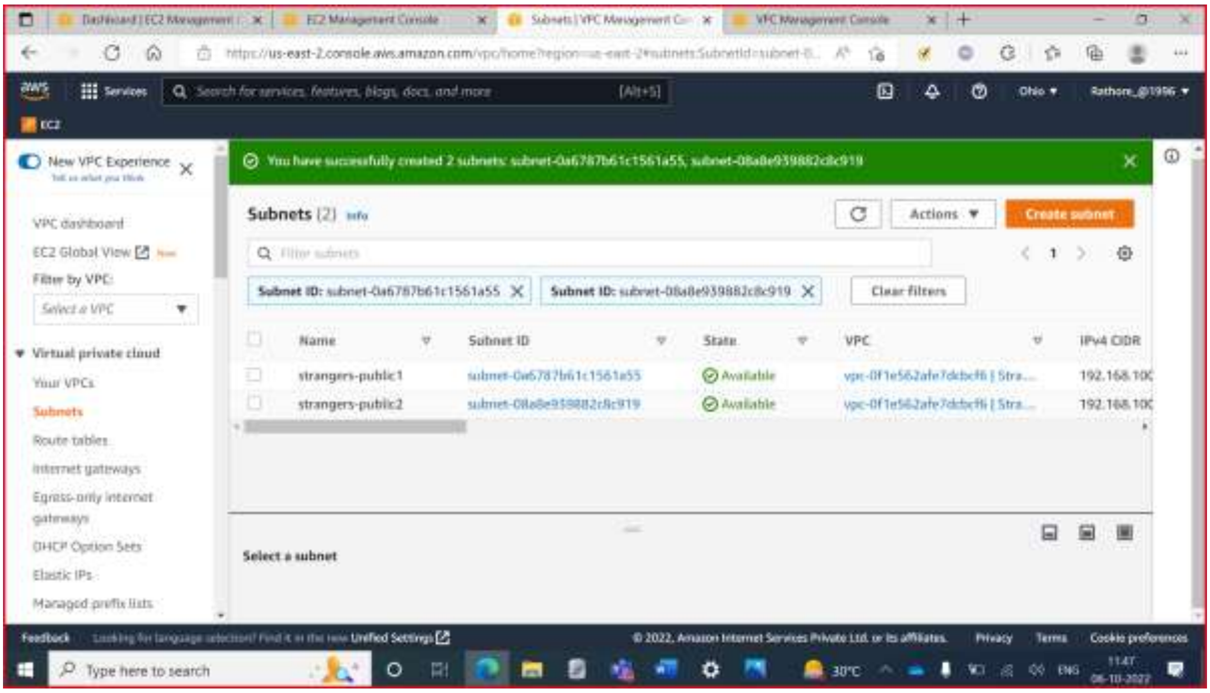
You successfully created vpc-0176769c4489ed160 / Strangers-vpc2

vpc-0176769c4489ed160 / Strangers-vpc2

Details

VPC ID vpc-0176769c4489ed160	State Available	DNS hostnames Disabled	DNS resolution Enabled
Tenancy Default	DHCP option set dopt-87baf3ec	Main route table rtb-079feeee59c3002bd	Main network ACL acl-0e7553da6b91e8457
Default VPC No	IPv4 CIDR 192.168.101.0/24	IPv6 pool –	IPv6 CIDR –
Network mapping unit metrics Disabled	Route 53 Resolver DNS Firewall rule groups –	Owner ID 643900739365	

Step 3: Created two public subnets. Subnet Name: strangers-public1 and strangers-public2



You have successfully created 2 subnets: subnet-0a6787b61c1561a55, subnet-08a8e939882c8c919

Subnets (2)

Subnet ID: subnet-0a6787b61c1561a55

Subnet ID: subnet-08a8e939882c8c919

Name	Subnet ID	State	VPC	IPv4 CIDR
strangers-public1	subnet-0a6787b61c1561a55	Available	vpc-0f1e562afe7dcbcf6 | Stra...	192.168.10(
strangers-public2	subnet-08a8e939882c8c919	Available	vpc-0f1e562afe7dcbcf6 | Stra...	192.168.10(

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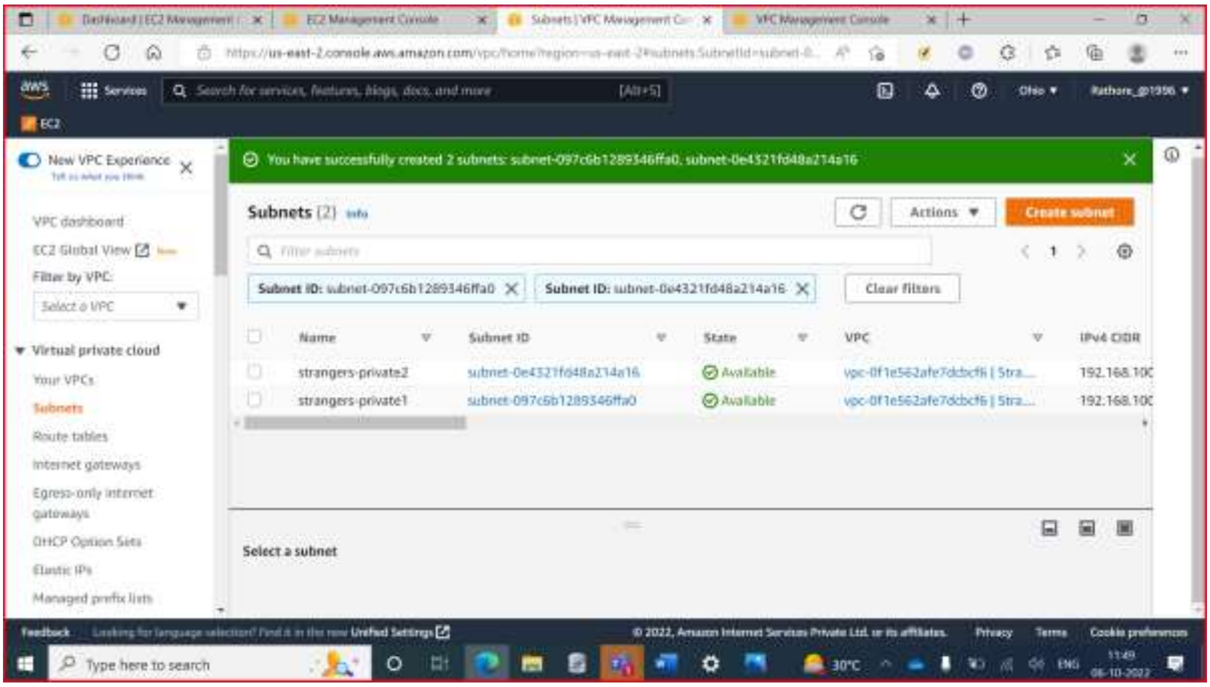
Step 4: Created two private subnets. Subnet Name: strangers-private1 and strangers-private2



You have successfully created 2 subnets: subnet-097c6b1289346ffa0, subnet-0e4321fd48a214a16

Subnets (2)

Subnet ID: subnet-097c6b1289346ffa0

Subnet ID: subnet-0e4321fd48a214a16

Name	Subnet ID	State	VPC	IPv4 CIDR
strangers-private2	subnet-0e4321fd48a214a16	Available	vpc-0f1e562afe7dcbcf6 | Stra...	192.168.10(
strangers-private1	subnet-097c6b1289346ffa0	Available	vpc-0f1e562afe7dcbcf6 | Stra...	192.168.10(

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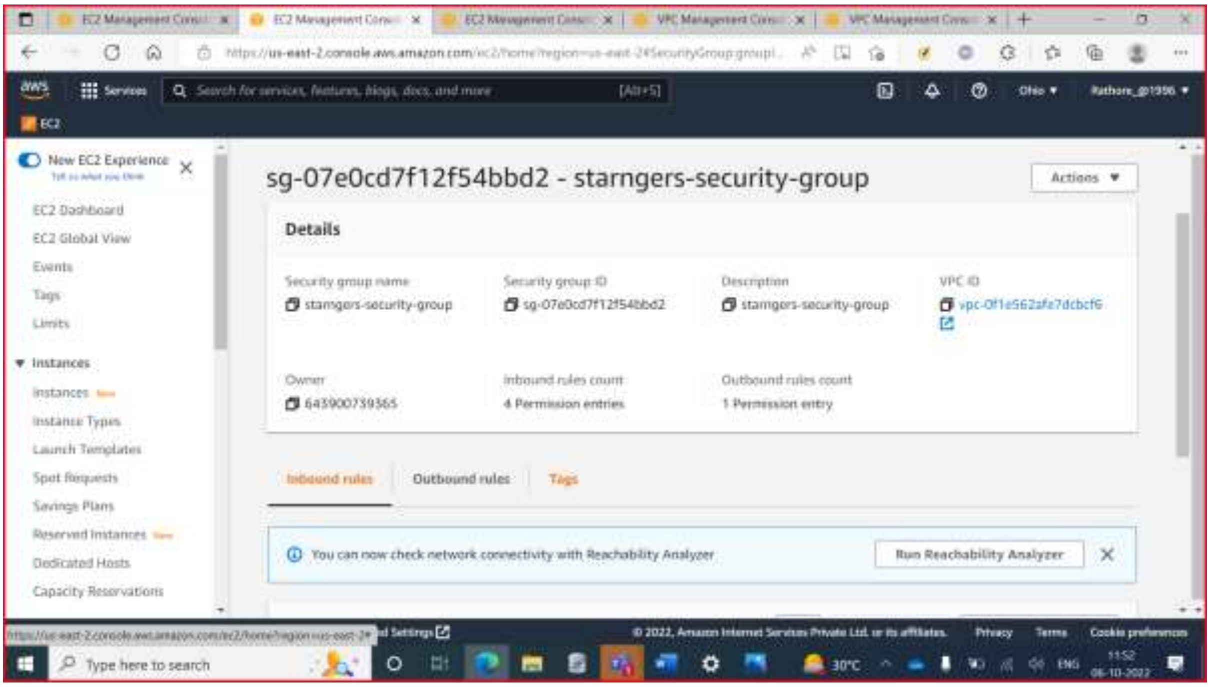
Step 5: Created security group. Security group name: strangers-security-group



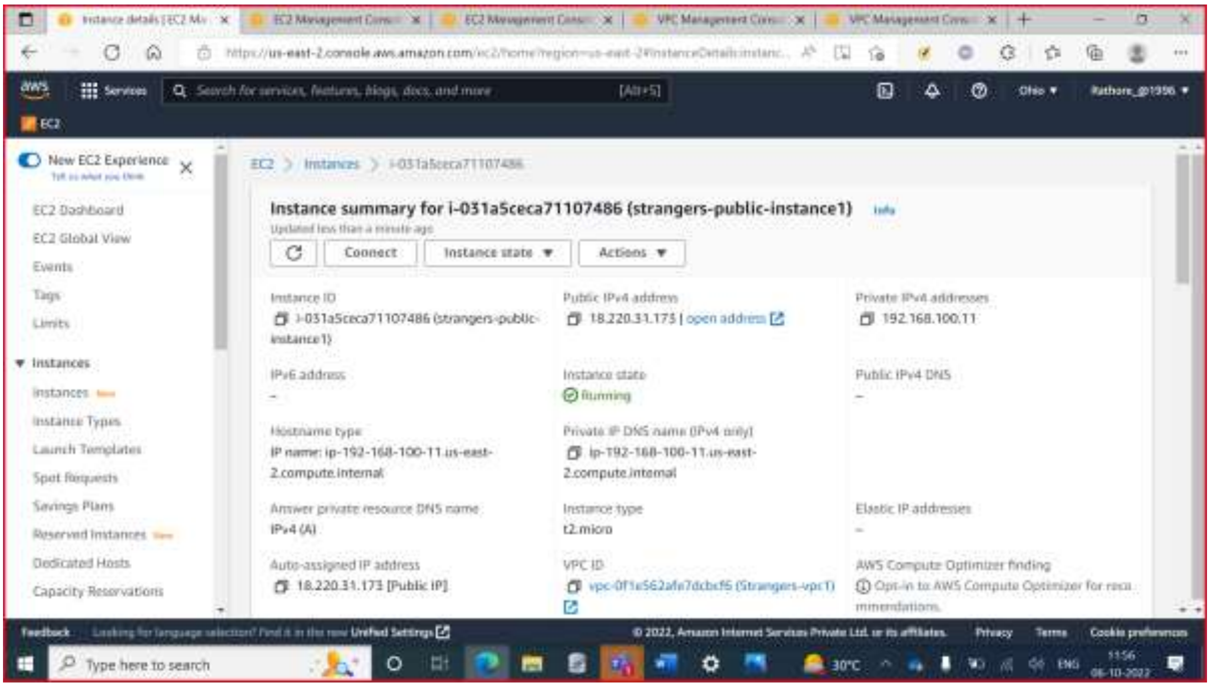
sg-07e0cd7f12f54bbd2 - starngers-security-group

Details

Security group name	Security group ID	Description	VPC ID
starngers-security-group	sg-07e0cd7f12f54bbd2	starngers-security-group	vpc-0f1e562afe7dcbcf6
Owner	Inbound rules count	Outbound rules count	
643900739365	4 Permission entries	1 Permission entry	

You can now check network connectivity with Reachability Analyzer

Step 6: Public Instance1

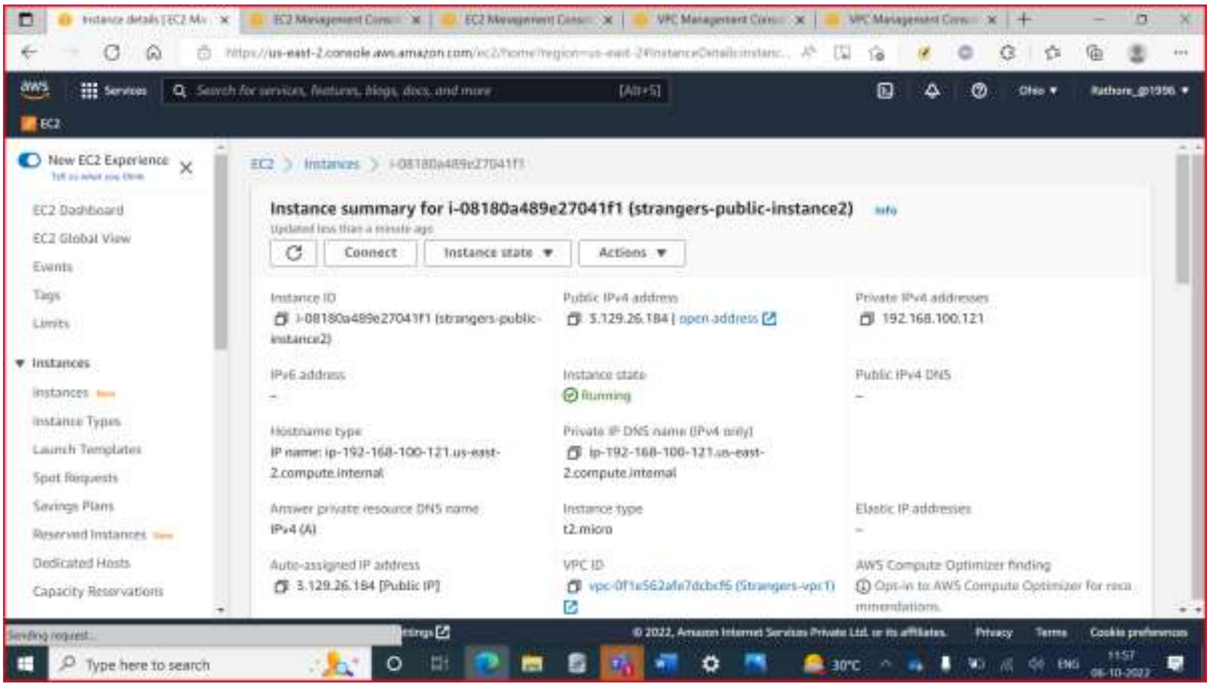


Instance summary for i-031a5ceca71107486 (strangers-public-instance1)

Updated less than a minute ago

Instance ID	Public IPv4 address	Private IPv4 addresses
i-031a5ceca71107486 (strangers-public-instance1)	18.220.31.173 | open address	192.168.100.11
IPv6 address	Instance state	Public IPv4 DNS
–	Running	–
Hostname type	Private IP DNS name (IPv4 only)	
IP name: ip-192-168-100-11.us-east-2.compute.internal	ip-192-168-100-11.us-east-2.compute.internal	
Answer private resource DNS name	Instance type	Elastic IP addresses
IPv4 (A)	t2.micro	–
Auto-assigned IP address	VPC ID	AWS Compute Optimizer finding
18.220.31.173 [Public IP]	vpc-0f1e562afe7dcbcf6 (Strangers-vpc1)	Opt-in to AWS Compute Optimizer for recommendations.

Step 6: Public Instance2



Instance summary for i-08180a489e27041f1 (strangers-public-instance2)

Updated less than a minute ago

Instance ID: i-08180a489e27041f1 (strangers-public-instance2)

Public IPv4 address: 3.129.26.184 | open address

Private IPv4 addresses: 192.168.100.121

IPv6 address: –

Instance state: Running

Public IPv4 DNS: –

Hostname type: IP name: ip-192-168-100-121.us-east-2.compute.internal

Private IP DNS name (IPv4 only): ip-192-168-100-121.us-east-2.compute.internal

Answer private resource DNS name: IPv4 (A)

Instance type: t2.micro

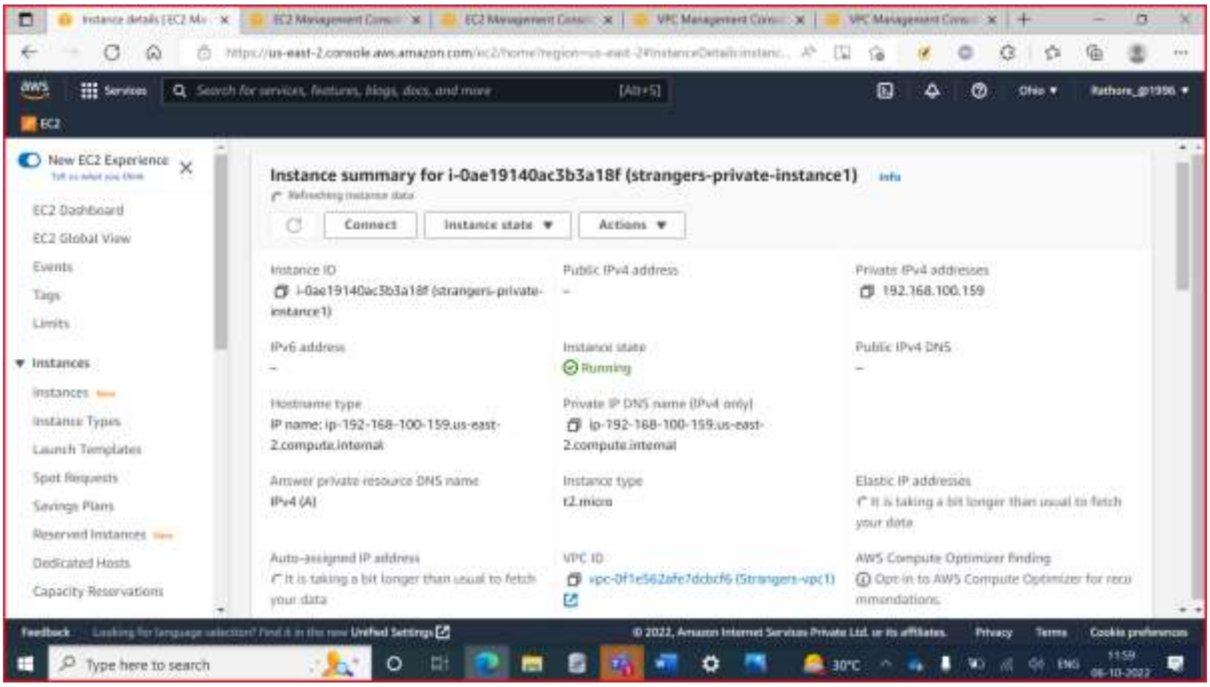
Elastic IP addresses: –

Auto-assigned IP address: 3.129.26.184 [Public IP]

VPC ID: vpc-0f1e562afe7dcbcf6 (Strangers-vpc1)

AWS Compute Optimizer finding: Opt-in to AWS Compute Optimizer for recommendations.

Step 7: Private Instance1



Instance summary for i-0ae19140ac3b3a18f (strangers-private-instance1)

Refreshing instance data

Instance ID: i-0ae19140ac3b3a18f (strangers-private-instance1)

Public IPv4 address: –

Private IPv4 addresses: 192.168.100.159

IPv6 address: –

Instance state: Running

Public IPv4 DNS: –

Hostname type: IP name: ip-192-168-100-159.us-east-2.compute.internal

Private IP DNS name (IPv4 only): ip-192-168-100-159.us-east-2.compute.internal

Answer private resource DNS name: IPv4 (A)

Instance type: t2.micro

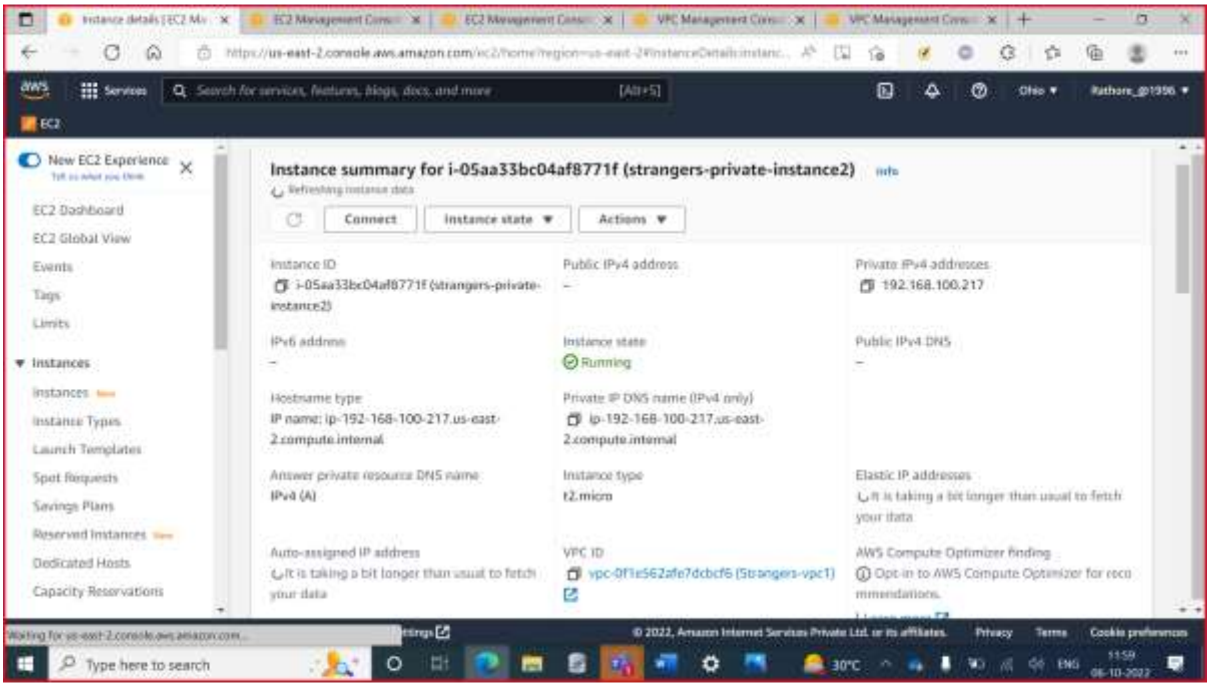
Elastic IP addresses: It is taking a bit longer than usual to fetch your data

Auto-assigned IP address: It is taking a bit longer than usual to fetch your data

VPC ID: vpc-0f1e562afe7dcbcf6 (Strangers-vpc1)

AWS Compute Optimizer finding: Opt-in to AWS Compute Optimizer for recommendations.

Step 8: Private Instance2



Instance summary for i-05aa33bc04af8771f (strangers-private-instance2)

Instance ID: i-05aa33bc04af8771f (strangers-private-instance2)

Public IPv4 address: –

Private IPv4 addresses: 192.168.100.217

IPv6 address: –

Instance state: Running

Public IPv4 DNS: –

Hostname type: IP name: ip-192-168-100-217.us-east-2.compute.internal

Private IP DNS name (IPv4 only): ip-192-168-100-217.us-east-2.compute.internal

Answer private resource DNS name: IPv4 (A)

Instance type: t2.micro

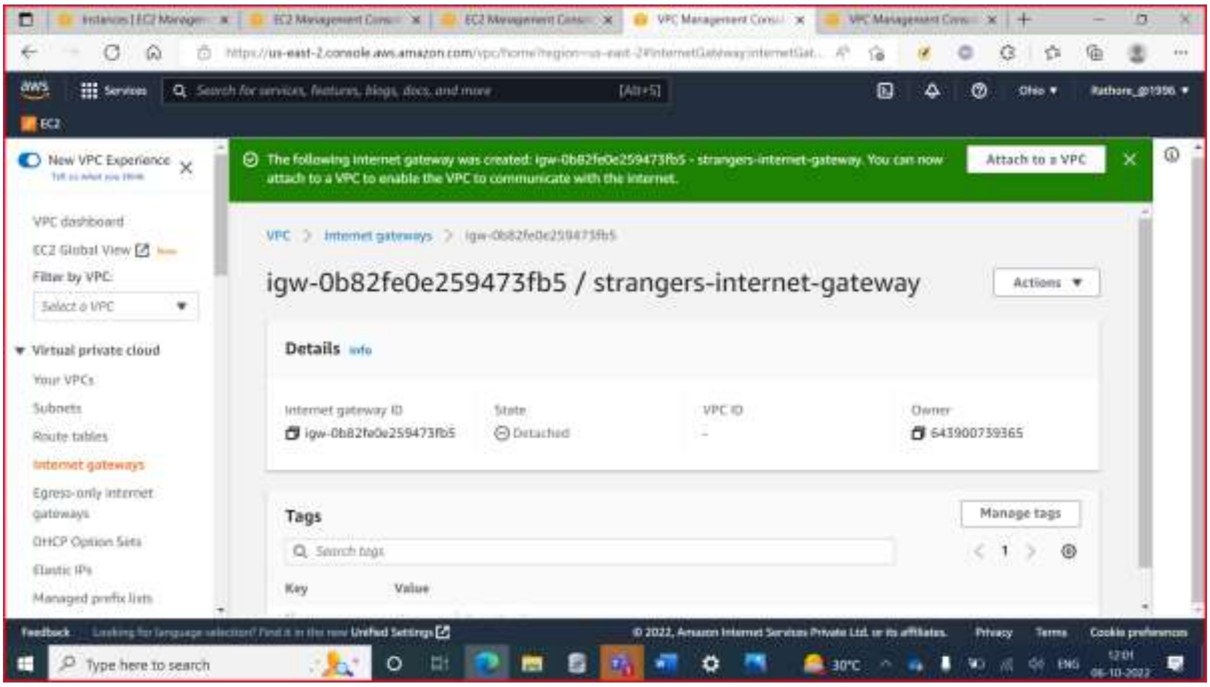
Elastic IP addresses: It is taking a bit longer than usual to fetch your data

Auto-assigned IP address: It is taking a bit longer than usual to fetch your data

VPC ID: vpc-0f1e562afe7dcbcf6 (Strangers-vpc1)

AWS Compute Optimizer finding: Opt-in to AWS Compute Optimizer for recommendations.

Step 9: Private Instance2



The following internet gateway was created: igw-0b82fe0e259473fb5 - strangers-internet-gateway. You can now attach to a VPC to enable the VPC to communicate with the internet.

igw-0b82fe0e259473fb5 / strangers-internet-gateway

Details

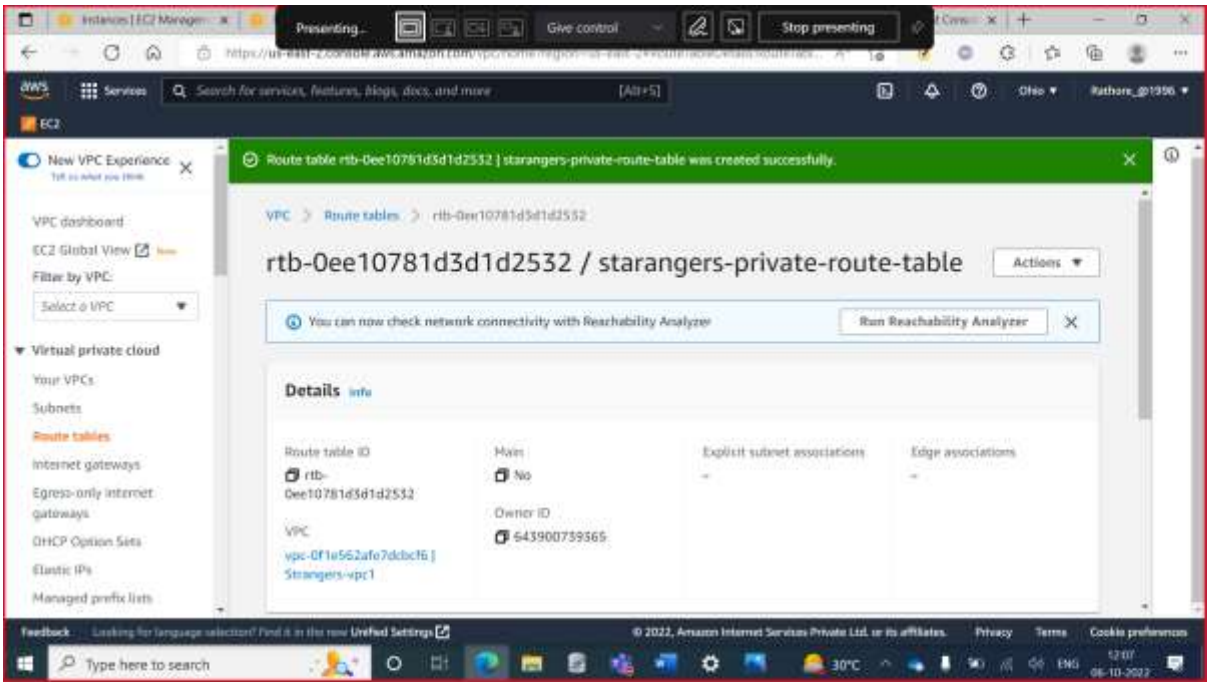
Internet gateway ID: igw-0b82fe0e259473fb5

State: Detached

VPC ID: –

Owner: 643900739365

Step 9: Route table for private subnets



Route table rtb-0ee10781d3d1d2532 | starangers-private-route-table was created successfully.

VPC > Route tables > rtb-0ee10781d3d1d2532

rtb-0ee10781d3d1d2532 / starangers-private-route-table

You can now check network connectivity with Reachability Analyzer

Details Info

Route table ID: rtb-0ee10781d3d1d2532

Main: No

Explicit subnet associations: -

Edge associations: -

VPC: vpc-0f1e562afe7dcbcf6 | Strangers-vpc1

Owner ID: 643900739365

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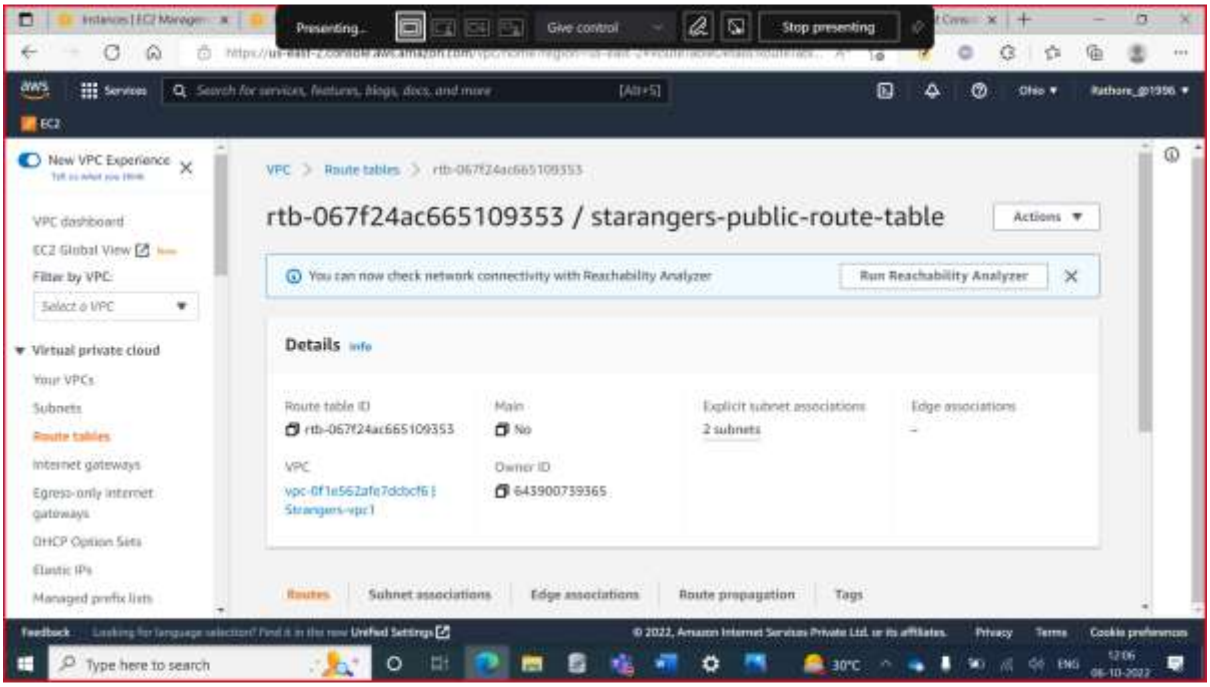
30°C 12:07 06-10-2022

Step 10: Route table for public subnets



VPC > Route tables > rtb-067f24ac665109353

rtb-067f24ac665109353 / starangers-public-route-table

You can now check network connectivity with Reachability Analyzer

Details Info

Route table ID: rtb-067f24ac665109353

Main: No

Explicit subnet associations: 2 subnets

Edge associations: -

VPC: vpc-0f1e562afe7dcbcf6 | Strangers-vpc1

Owner ID: 643900739365

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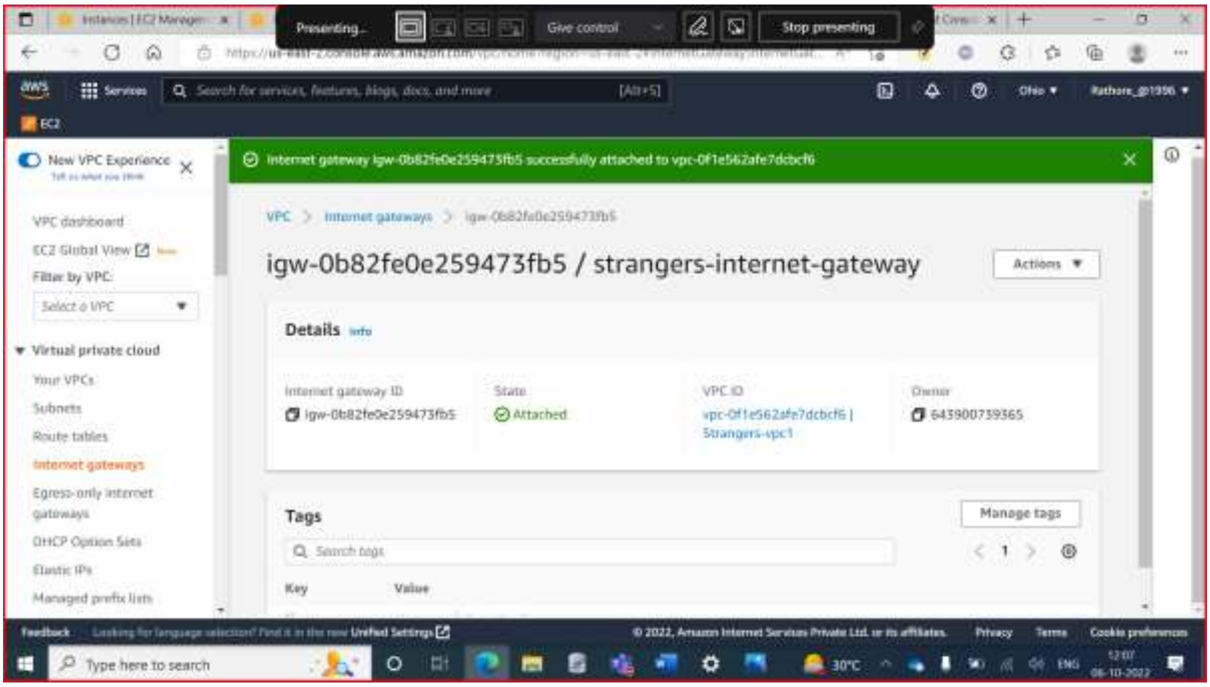
30°C 12:06 06-10-2022

Step 11: Internet gateway for public route table



Internet gateway igw-0b82fe0e259473fb5 successfully attached to vpc-0f1e562afe7dcbcf6

VPC > Internet gateways > igw-0b82fe0e259473fb5

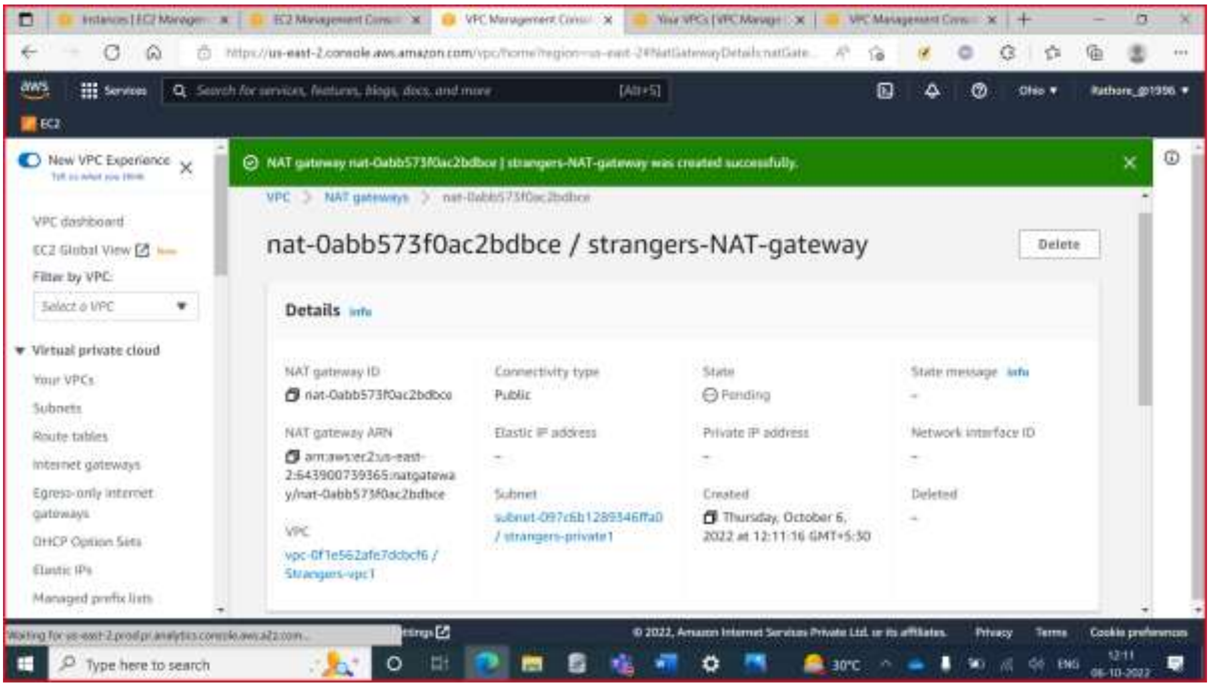
igw-0b82fe0e259473fb5 / strangers-internet-gateway

Details

Internet gateway ID	State	VPC ID	Owner
igw-0b82fe0e259473fb5	Attached	vpc-0f1e562afe7dcbcf6 | Strangers-vpc1	643900739365

Tags

Step 11: NAT gateway for private route table



NAT gateway nat-0abb573f0ac2bdbce | strangers-NAT-gateway was created successfully.

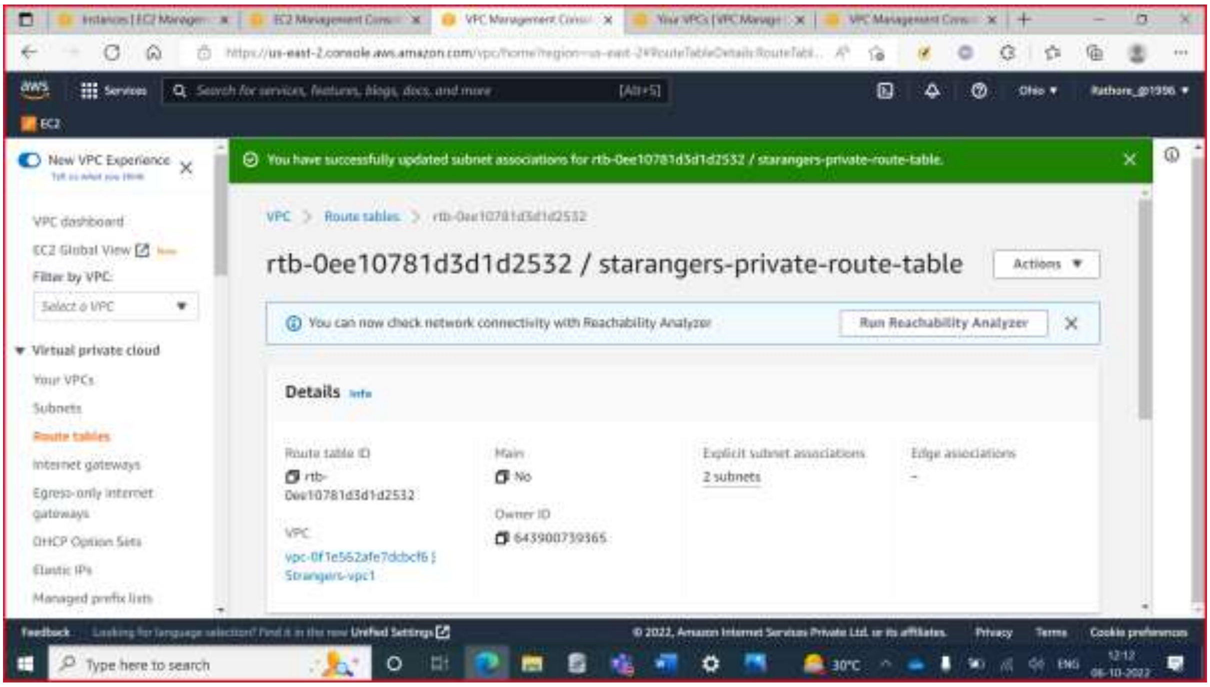
VPC > NAT gateways > nat-0abb573f0ac2bdbce

nat-0abb573f0ac2bdbce / strangers-NAT-gateway

Details

NAT gateway ID	Connectivity type	State	State message
nat-0abb573f0ac2bdbce	Public	Pending	-
NAT gateway ARN	**Elastic IP address**	**Private IP address**	**Network interface ID**
arn:aws:ec2:us-east-2:643900739365:natgateway/nat-0abb573f0ac2bdbce	-	-	-
VPC	**Subnet**	**Created**	**Deleted**
vpc-0f1e562afe7ddbcf6 / Strangers-vpc1	subnet-097c6b1289346ffa0 / strangers-private1	Thursday, October 6, 2022 at 12:11:16 GMT+5:30	-

Step 12: Subnets associations for private route table



You have successfully updated subnet associations for rtb-0ee10781d3d1d2532 / starangers-private-route-table.

VPC > Route tables > rtb-0ee10781d3d1d2532

rtb-0ee10781d3d1d2532 / starangers-private-route-table

You can now check network connectivity with Reachability Analyzer

Details

Route table ID: rtb-0ee10781d3d1d2532

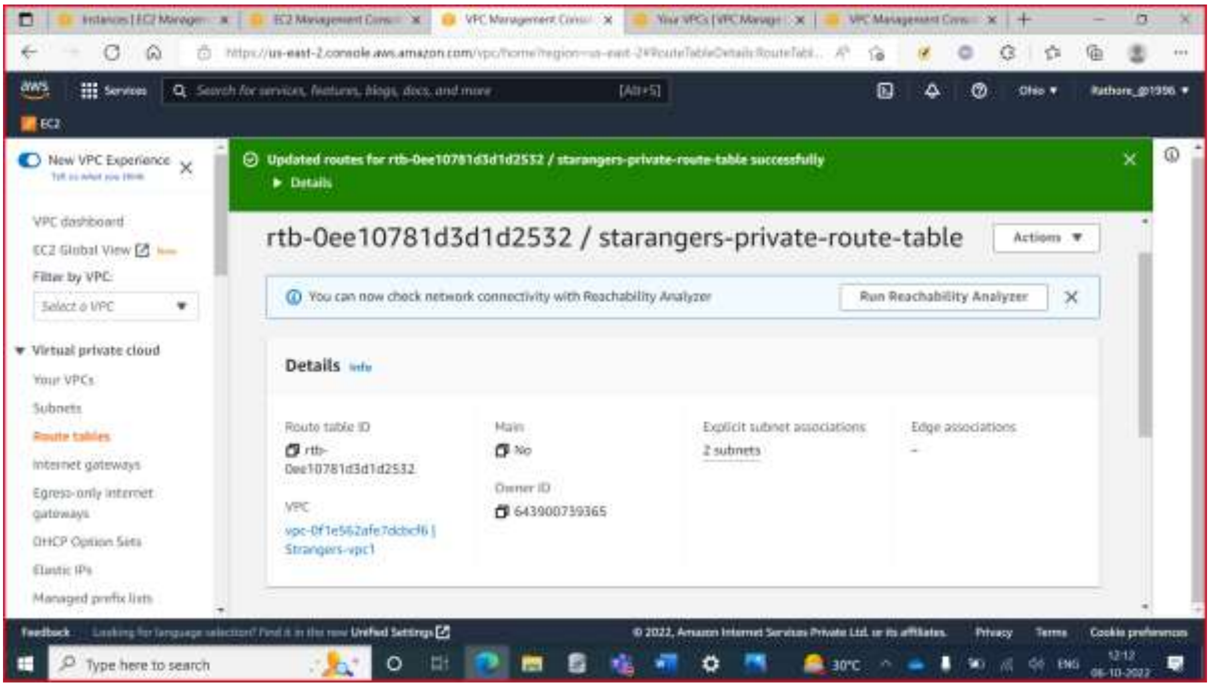
Main: No

Explicit subnet associations: 2 subnets

Edge associations: -

VPC: vpc-0f1e562afe7dcbcf6 | Strangers-vpc1

Owner ID: 643900739365



Updated routes for rtb-0ee10781d3d1d2532 / starangers-private-route-table successfully

rtb-0ee10781d3d1d2532 / starangers-private-route-table

You can now check network connectivity with Reachability Analyzer

Details

Route table ID: rtb-0ee10781d3d1d2532

Main: No

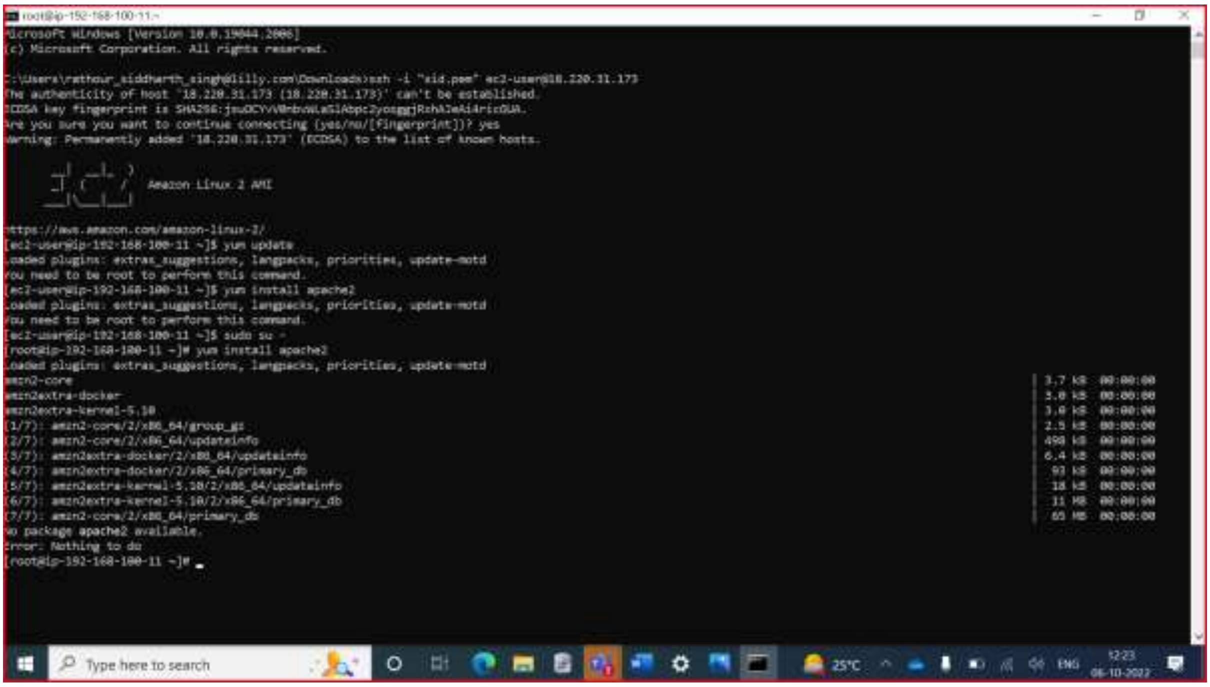
Explicit subnet associations: 2 subnets

Edge associations: -

VPC: vpc-0f1e562afe7dcbcf6 | Strangers-vpc1

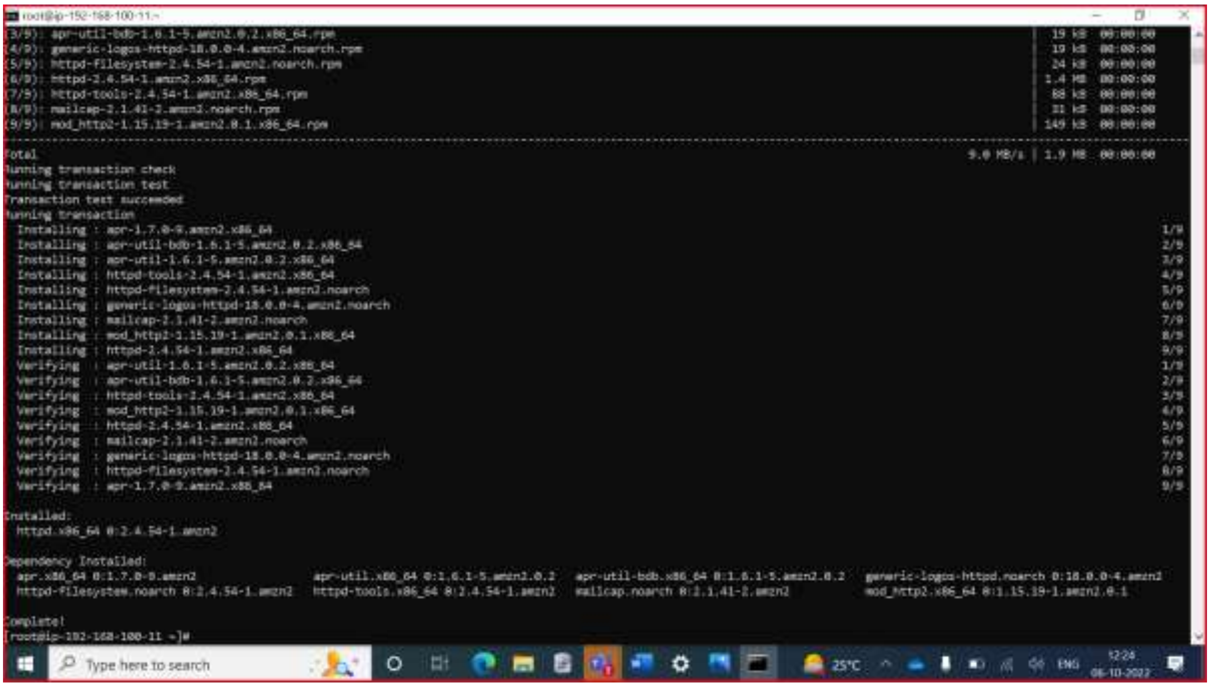
Owner ID: 643900739365

Step 13: Connected EC2 instance using SSH



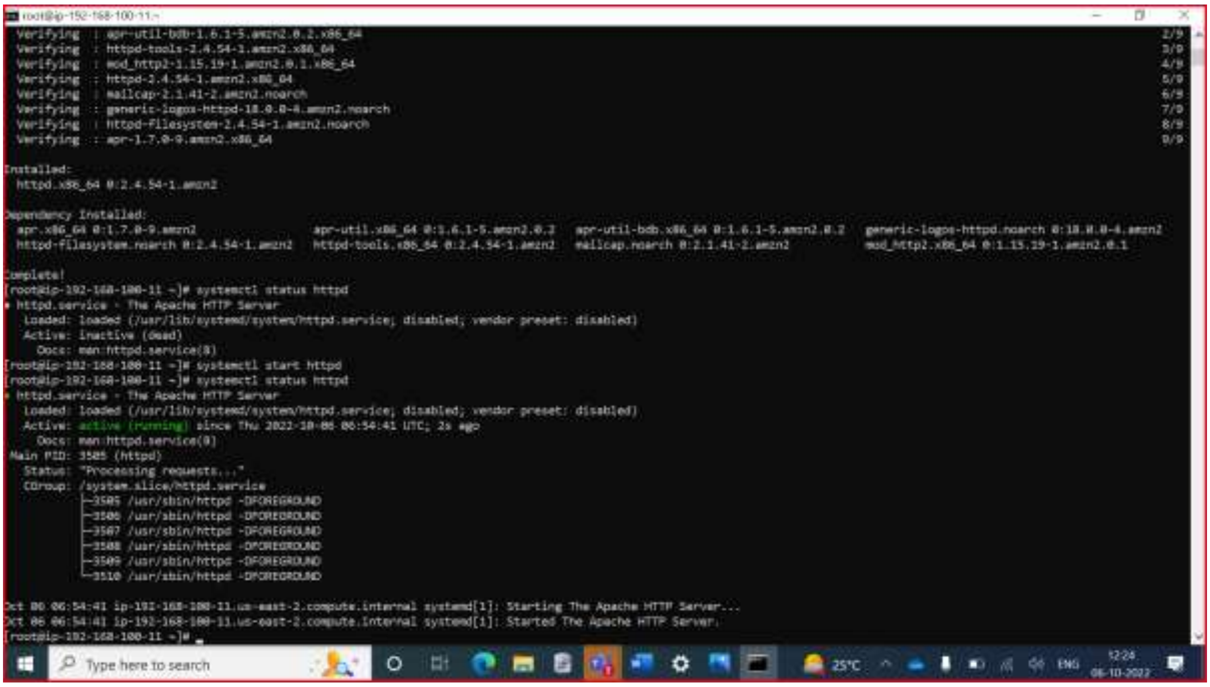
```
Microsoft Windows [Version 10.0.19044.2006]
(c) Microsoft Corporation. All rights reserved.

C:\Users\rathour_siddharth_singh@lilly.com\Downloads>ssh -i "sid.pem" ec2-user@18.220.31.173
The authenticity of host '18.220.31.173 (18.220.31.173)' can't be established.
ECDSA key fingerprint is SHA256:jsuDCYvV0nbvWLaSlAbpc2yosgg jRzhAJeAi4ricGUA.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '18.220.31.173' (ECDSA) to the list of known hosts.

       __|  __|_  )
       _|  (     /   Amazon Linux 2 AMI
      ___|\___|___|

https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-192-168-100-11 ~]$ yum update
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
You need to be root to perform this command.
[ec2-user@ip-192-168-100-11 ~]$ yum install apache2
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
You need to be root to perform this command.
[ec2-user@ip-192-168-100-11 ~]$ sudo su -
[root@ip-192-168-100-11 ~]# yum install apache2
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
amzn2-core                                                                            | 3.7 kB  00:00:00
amzn2extra-docker                                                                     | 3.0 kB  00:00:00
amzn2extra-kernel-5.10                                                                | 3.0 kB  00:00:00
(1/7): amzn2-core/2/x86_64/group_gz                                                   | 2.5 kB  00:00:00
(2/7): amzn2-core/2/x86_64/updateinfo                                                 | 498 kB  00:00:00
(3/7): amzn2extra-docker/2/x86_64/updateinfo                                          | 6.4 kB  00:00:00
(4/7): amzn2extra-docker/2/x86_64/primary_db                                          |  93 kB  00:00:00
(5/7): amzn2extra-kernel-5.10/2/x86_64/updateinfo                                     |  18 kB  00:00:00
(6/7): amzn2extra-kernel-5.10/2/x86_64/primary_db                                     |  11 MB  00:00:00
(7/7): amzn2-core/2/x86_64/primary_db                                                 |  65 MB  00:00:00
No package apache2 available.
Error: Nothing to do
[root@ip-192-168-100-11 ~]# _
```

Step 12: Installing the dependencies



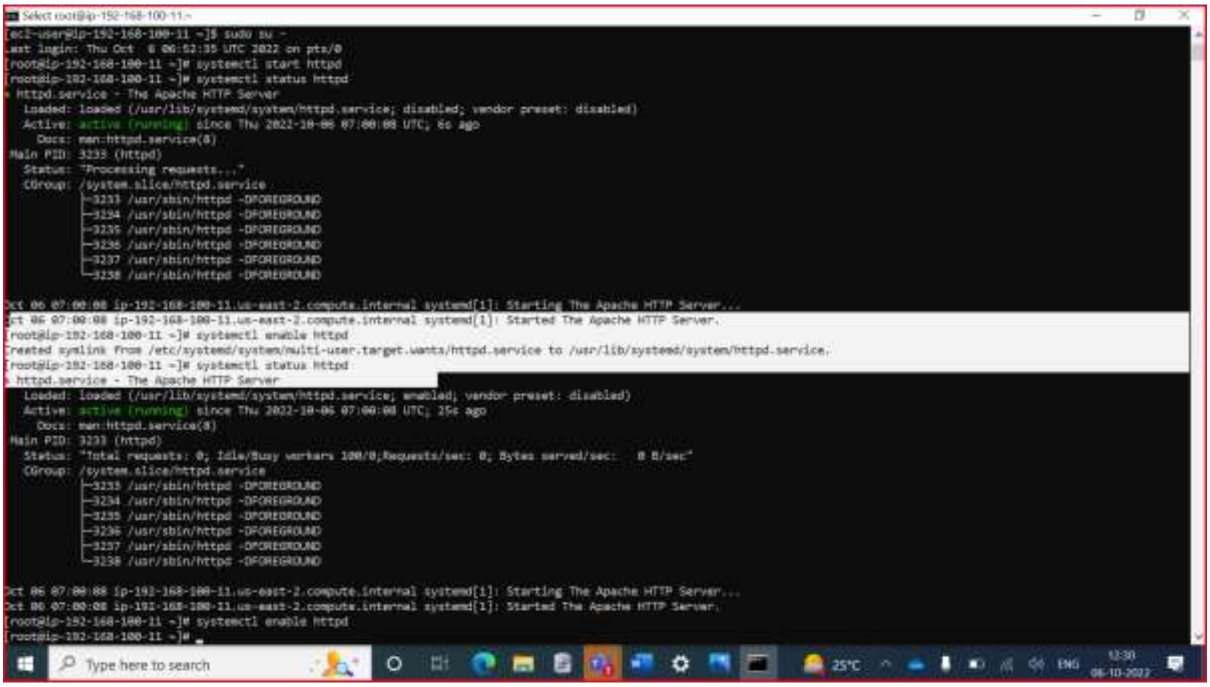
```
(3/9): apr-util-bdb-1.6.1-5.amzn2.0.2.x86_64.rpm                                      |  19 kB  00:00:00
(4/9): generic-logos-httpd-18.0.0-4.amzn2.noarch.rpm                                  |  19 kB  00:00:00
(5/9): httpd-filesystem-2.4.54-1.amzn2.noarch.rpm                                     |  24 kB  00:00:00
(6/9): httpd-2.4.54-1.amzn2.x86_64.rpm                                                | 1.4 MB  00:00:00
(7/9): httpd-tools-2.4.54-1.amzn2.x86_64.rpm                                          |  88 kB  00:00:00
(8/9): mailcap-2.1.41-2.amzn2.noarch.rpm                                              |  31 kB  00:00:00
(9/9): mod_http2-1.15.19-1.amzn2.0.1.x86_64.rpm                                       | 149 kB  00:00:00
----------------------------------------------------------------------------------------------------------
Total                                                                        9.0 MB/s | 1.9 MB  00:00:00
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
  Installing : apr-1.7.0-9.amzn2.x86_64                                                                1/9
  Installing : apr-util-bdb-1.6.1-5.amzn2.0.2.x86_64                                                   2/9
  Installing : apr-util-1.6.1-5.amzn2.0.2.x86_64                                                       3/9
  Installing : httpd-tools-2.4.54-1.amzn2.x86_64                                                       4/9
  Installing : httpd-filesystem-2.4.54-1.amzn2.noarch                                                  5/9
  Installing : generic-logos-httpd-18.0.0-4.amzn2.noarch                                               6/9
  Installing : mailcap-2.1.41-2.amzn2.noarch                                                           7/9
  Installing : mod_http2-1.15.19-1.amzn2.0.1.x86_64                                                    8/9
  Installing : httpd-2.4.54-1.amzn2.x86_64                                                             9/9
  Verifying  : apr-util-1.6.1-5.amzn2.0.2.x86_64                                                       1/9
  Verifying  : apr-util-bdb-1.6.1-5.amzn2.0.2.x86_64                                                   2/9
  Verifying  : httpd-tools-2.4.54-1.amzn2.x86_64                                                       3/9
  Verifying  : mod_http2-1.15.19-1.amzn2.0.1.x86_64                                                    4/9
  Verifying  : httpd-2.4.54-1.amzn2.x86_64                                                             5/9
  Verifying  : mailcap-2.1.41-2.amzn2.noarch                                                           6/9
  Verifying  : generic-logos-httpd-18.0.0-4.amzn2.noarch                                               7/9
  Verifying  : httpd-filesystem-2.4.54-1.amzn2.noarch                                                  8/9
  Verifying  : apr-1.7.0-9.amzn2.x86_64                                                                9/9

Installed:
  httpd.x86_64 0:2.4.54-1.amzn2

Dependency Installed:
  apr.x86_64 0:1.7.0-9.amzn2                 apr-util.x86_64 0:1.6.1-5.amzn2.0.2   apr-util-bdb.x86_64 0:1.6.1-5.amzn2.0.2   generic-logos-httpd.noarch 0:18.0.0-4.amzn2
  httpd-filesystem.noarch 0:2.4.54-1.amzn2   httpd-tools.x86_64 0:2.4.54-1.amzn2   mailcap.noarch 0:2.1.41-2.amzn2           mod_http2.x86_64 0:1.15.19-1.amzn2.0.1

Complete!
[root@ip-192-168-100-11 ~]#
```

Step 13: Checking the status of httpd



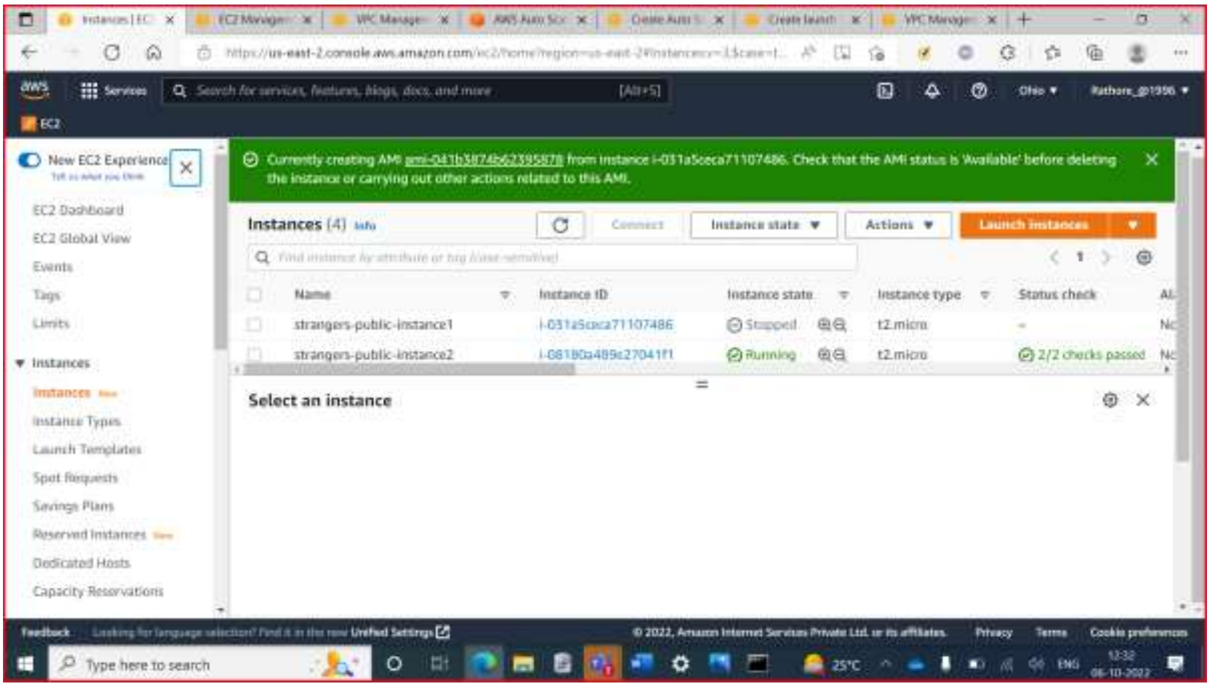
```
  Verifying  : apr-util-bdb-1.6.1-5.amzn2.0.2.x86_64                                                                                      2/9
  Verifying  : httpd-tools-2.4.54-1.amzn2.x86_64                                                                                          3/9
  Verifying  : mod_http2-1.15.19-1.amzn2.0.1.x86_64                                                                                       4/9
  Verifying  : httpd-2.4.54-1.amzn2.x86_64                                                                                                5/9
  Verifying  : mailcap-2.1.41-2.amzn2.noarch                                                                                              6/9
  Verifying  : generic-logos-httpd-18.0.0-4.amzn2.noarch                                                                                  7/9
  Verifying  : httpd-filesystem-2.4.54-1.amzn2.noarch                                                                                     8/9
  Verifying  : apr-1.7.0-9.amzn2.x86_64                                                                                                   9/9

Installed:
  httpd.x86_64 0:2.4.54-1.amzn2

Dependency Installed:
  apr.x86_64 0:1.7.0-9.amzn2                  apr-util.x86_64 0:1.6.1-5.amzn2.0.2   apr-util-bdb.x86_64 0:1.6.1-5.amzn2.0.2   generic-logos-httpd.noarch 0:18.0.0-4.amzn2
  httpd-filesystem.noarch 0:2.4.54-1.amzn2   httpd-tools.x86_64 0:2.4.54-1.amzn2   mailcap.noarch 0:2.1.41-2.amzn2           mod_http2.x86_64 0:1.15.19-1.amzn2.0.1

Complete!
[root@ip-192-168-100-11 ~]# systemctl status httpd
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; disabled; vendor preset: disabled)
   Active: inactive (dead)
     Docs: man:httpd.service(8)
[root@ip-192-168-100-11 ~]# systemctl start httpd
[root@ip-192-168-100-11 ~]# systemctl status httpd
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; disabled; vendor preset: disabled)
   Active: active (running) since Thu 2022-10-06 06:54:41 UTC; 2s ago
     Docs: man:httpd.service(8)
 Main PID: 3505 (httpd)
   Status: "Processing requests..."
   CGroup: /system.slice/httpd.service
           ├─3505 /usr/sbin/httpd -DFOREGROUND
           ├─3506 /usr/sbin/httpd -DFOREGROUND
           ├─3507 /usr/sbin/httpd -DFOREGROUND
           ├─3508 /usr/sbin/httpd -DFOREGROUND
           ├─3509 /usr/sbin/httpd -DFOREGROUND
           └─3510 /usr/sbin/httpd -DFOREGROUND

Oct 06 06:54:41 ip-192-168-100-11.us-east-2.compute.internal systemd[1]: Starting The Apache HTTP Server...
Oct 06 06:54:41 ip-192-168-100-11.us-east-2.compute.internal systemd[1]: Started The Apache HTTP Server.
[root@ip-192-168-100-11 ~]# _
```

Step 14: Enabling the httpd server



```
[ec2-user@ip-192-168-100-11 ~]$ sudo su -
Last login: Thu Oct  6 06:52:35 UTC 2022 on pts/0
[root@ip-192-168-100-11 ~]# systemctl start httpd
[root@ip-192-168-100-11 ~]# systemctl status httpd
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; disabled; vendor preset: disabled)
   Active: active (running) since Thu 2022-10-06 07:00:08 UTC; 6s ago
     Docs: man:httpd.service(8)
 Main PID: 3233 (httpd)
   Status: "Processing requests..."
   CGroup: /system.slice/httpd.service
           ├─3233 /usr/sbin/httpd -DFOREGROUND
           ├─3234 /usr/sbin/httpd -DFOREGROUND
           ├─3235 /usr/sbin/httpd -DFOREGROUND
           ├─3236 /usr/sbin/httpd -DFOREGROUND
           ├─3237 /usr/sbin/httpd -DFOREGROUND
           └─3238 /usr/sbin/httpd -DFOREGROUND

Oct 06 07:00:08 ip-192-168-100-11.us-east-2.compute.internal systemd[1]: Starting The Apache HTTP Server...
Oct 06 07:00:08 ip-192-168-100-11.us-east-2.compute.internal systemd[1]: Started The Apache HTTP Server.
[root@ip-192-168-100-11 ~]# systemctl enable httpd
Created symlink from /etc/systemd/system/multi-user.target.wants/httpd.service to /usr/lib/systemd/system/httpd.service.
[root@ip-192-168-100-11 ~]# systemctl status httpd
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; enabled; vendor preset: disabled)
   Active: active (running) since Thu 2022-10-06 07:00:08 UTC; 25s ago
     Docs: man:httpd.service(8)
 Main PID: 3233 (httpd)
   Status: "Total requests: 0; Idle/Busy workers 100/0;Requests/sec: 0; Bytes served/sec:   0 B/sec"
   CGroup: /system.slice/httpd.service
           ├─3233 /usr/sbin/httpd -DFOREGROUND
           ├─3234 /usr/sbin/httpd -DFOREGROUND
           ├─3235 /usr/sbin/httpd -DFOREGROUND
           ├─3236 /usr/sbin/httpd -DFOREGROUND
           ├─3237 /usr/sbin/httpd -DFOREGROUND
           └─3238 /usr/sbin/httpd -DFOREGROUND

Oct 06 07:00:08 ip-192-168-100-11.us-east-2.compute.internal systemd[1]: Starting The Apache HTTP Server...
Oct 06 07:00:08 ip-192-168-100-11.us-east-2.compute.internal systemd[1]: Started The Apache HTTP Server.
[root@ip-192-168-100-11 ~]# systemctl enable httpd
[root@ip-192-168-100-11 ~]# _
```

Step 15: Image of the public Instance 1



Currently creating AMI ami-041b3874b62395878 from instance i-031a5ceca71107486. Check that the AMI status is 'Available' before deleting the instance or carrying out other actions related to this AMI.

Instances (4) Info

Name	Instance ID	Instance state	Instance type	Status check	Al
strangers-public-instance1	i-031a5ceca71107486	Stopped	t2.micro	-	Nc
strangers-public-instance2	i-08180a489e27041f1	Running	t2.micro	2/2 checks passed	Nc

Select an instance

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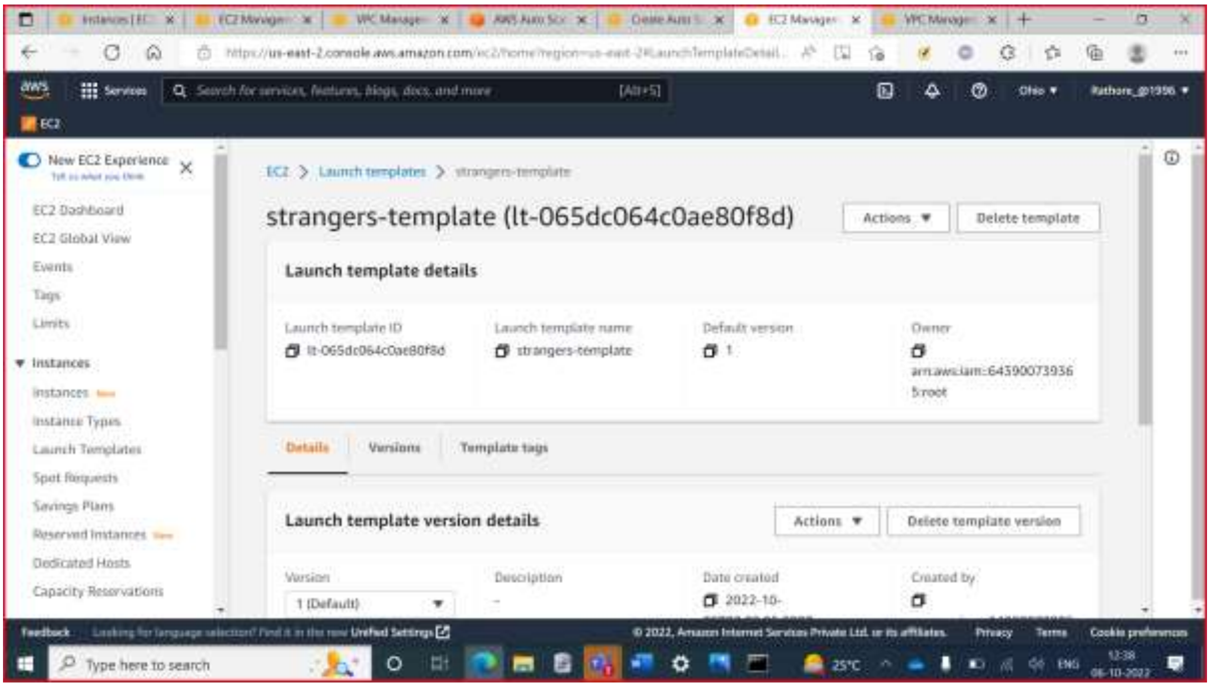
Step 16: Template required for the auto-scaling



EC2 > Launch templates > strangers-template

strangers-template (lt-065dc064c0ae80f8d)

Launch template details

Launch template ID	Launch template name	Default version	Owner
lt-065dc064c0ae80f8d	strangers-template	1	arn:aws:iam::643900739365:root

Launch template version details

Version	Description	Date created	Created by
1 (Default)	-	2022-10-	

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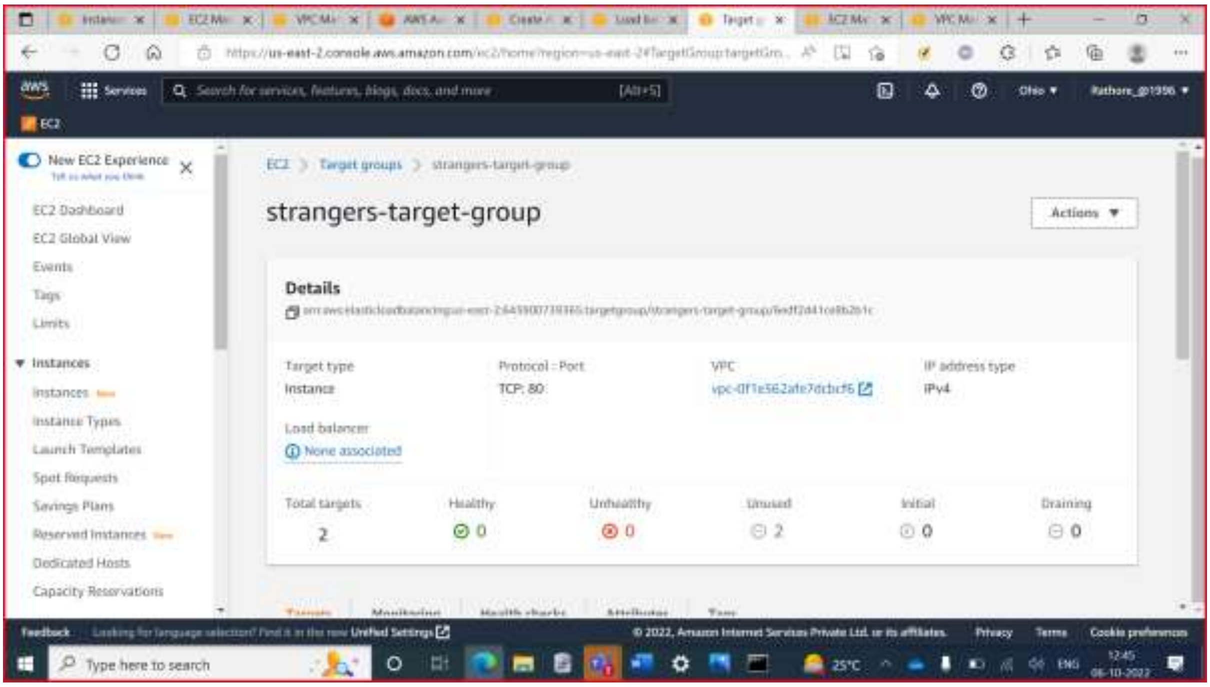
Step 17: Target group



EC2 > Target groups > strangers-target-group

strangers-target-group

Actions ▼

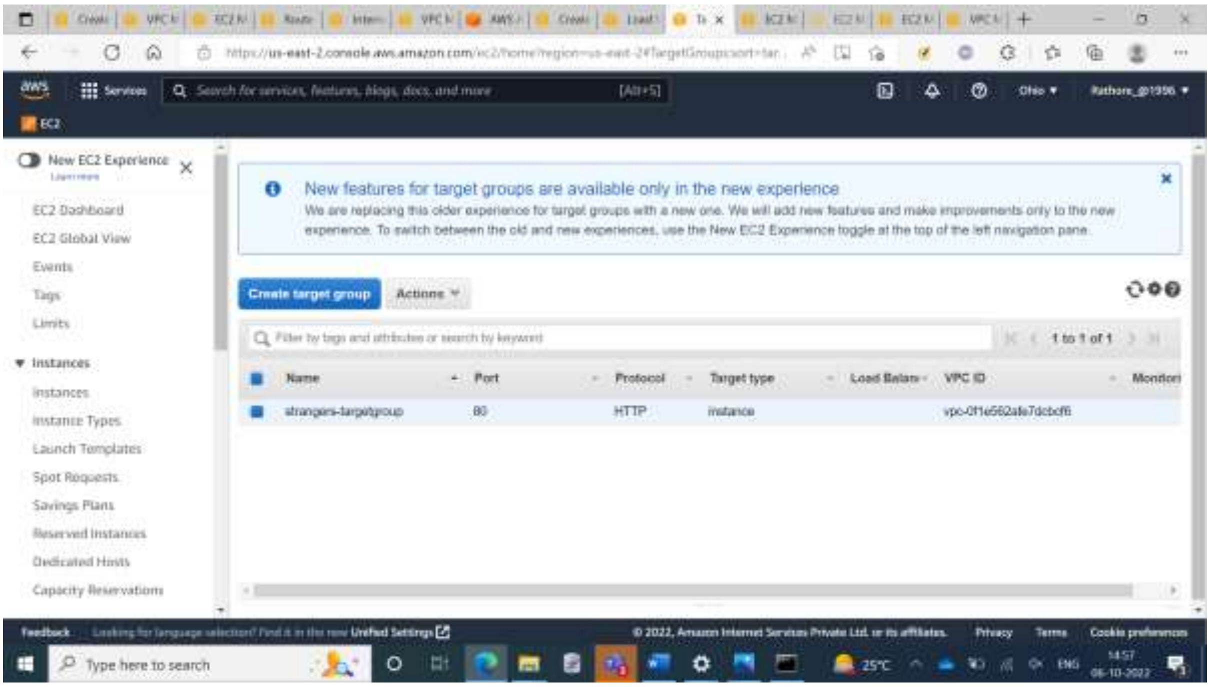
Details

arn:aws:elasticloadbalancing:us-east-2:645900739365:targetgroup/strangers-target-group/fedf2d41ce8b2b1c

Target type	Protocol : Port	VPC	IP address type
Instance	TCP: 80	vpc-0f1e562afe7dcbcf6	IPv4

Load balancer
None associated

Total targets	Healthy	Unhealthy	Unused	Initial	Draining
2	0	0	2	0	0



New features for target groups are available only in the new experience

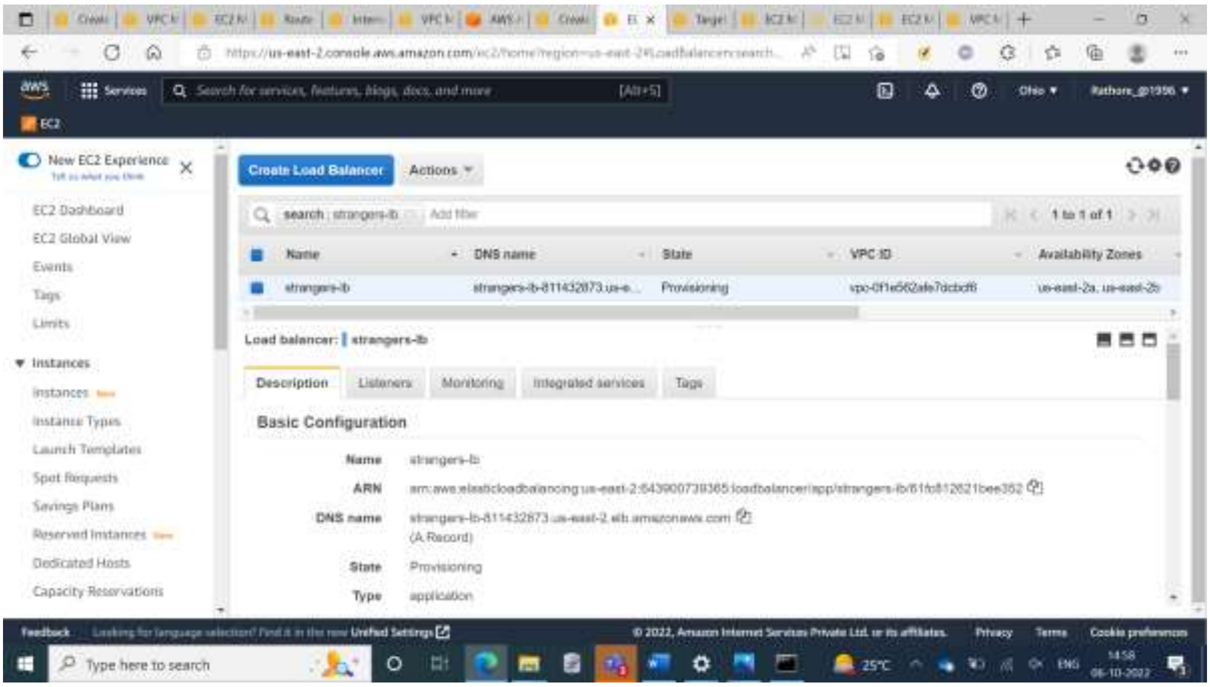
We are replacing this older experience for target groups with a new one. We will add new features and make improvements only to the new experience. To switch between the old and new experiences, use the New EC2 Experience toggle at the top of the left navigation pane.

Create target group | Actions ▼

Filter by tags and attributes or search by keyword — 1 to 1 of 1

Name	Port	Protocol	Target type	Load Balan	VPC ID	Monitori
strangers-targetgroup	80	HTTP	instance		vpc-0f1e562afe7dcbcf6	

Step 18: Load Balancer



Name	DNS name	State	VPC ID	Availability Zones
strangers-lb	strangers-lb-811432873.us-e...	Provisioning	vpc-0f1e562afe7dcbdf6	us-east-2a, us-east-2b

Load balancer: strangers-lb

Description | Listeners | Monitoring | Integrated services | Tags

Basic Configuration

Name	strangers-lb
ARN	arn:aws:elasticloadbalancing:us-east-2:643900739365:loadbalancer/app/strangers-lb/61fc812621bee352
DNS name	strangers-lb-811432873.us-east-2.elb.amazonaws.com (A Record)
State	Provisioning
Type	application

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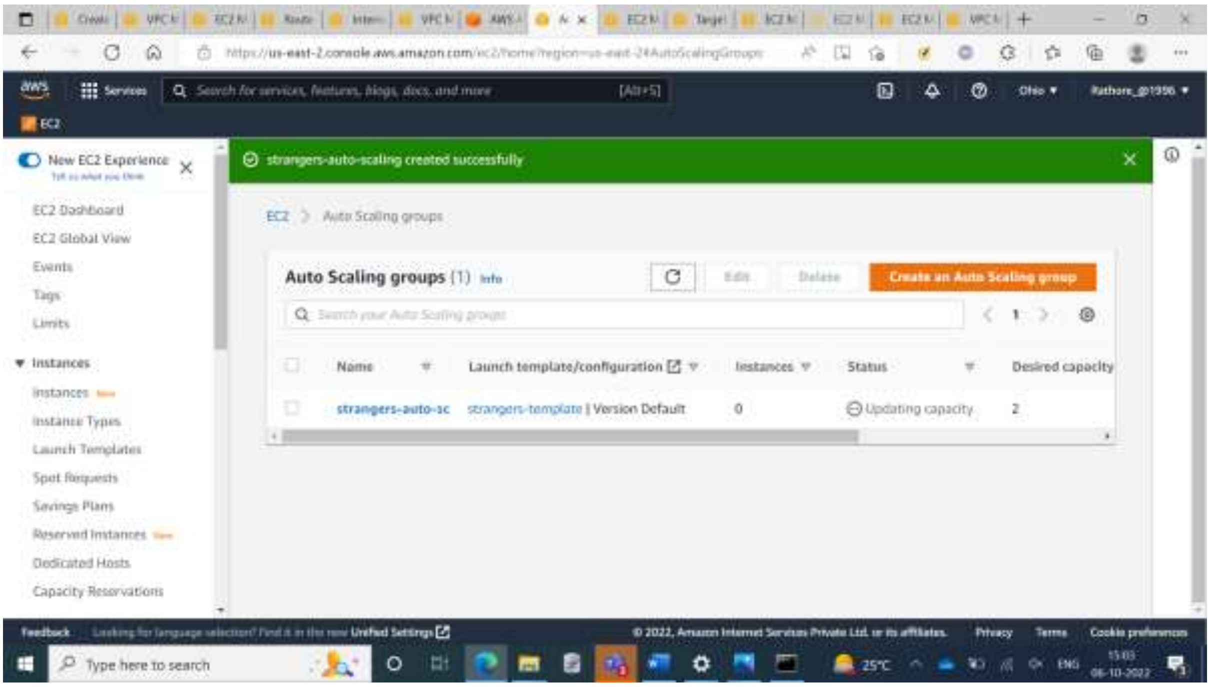
Step 18: Auto Scaling group



strangers-auto-scaling created successfully

EC2 > Auto Scaling groups

Auto Scaling groups (1) Info

Name	Launch template/configuration	Instances	Status	Desired capacity
strangers-auto-sc	strangers-template | Version Default	0	Updating capacity	2

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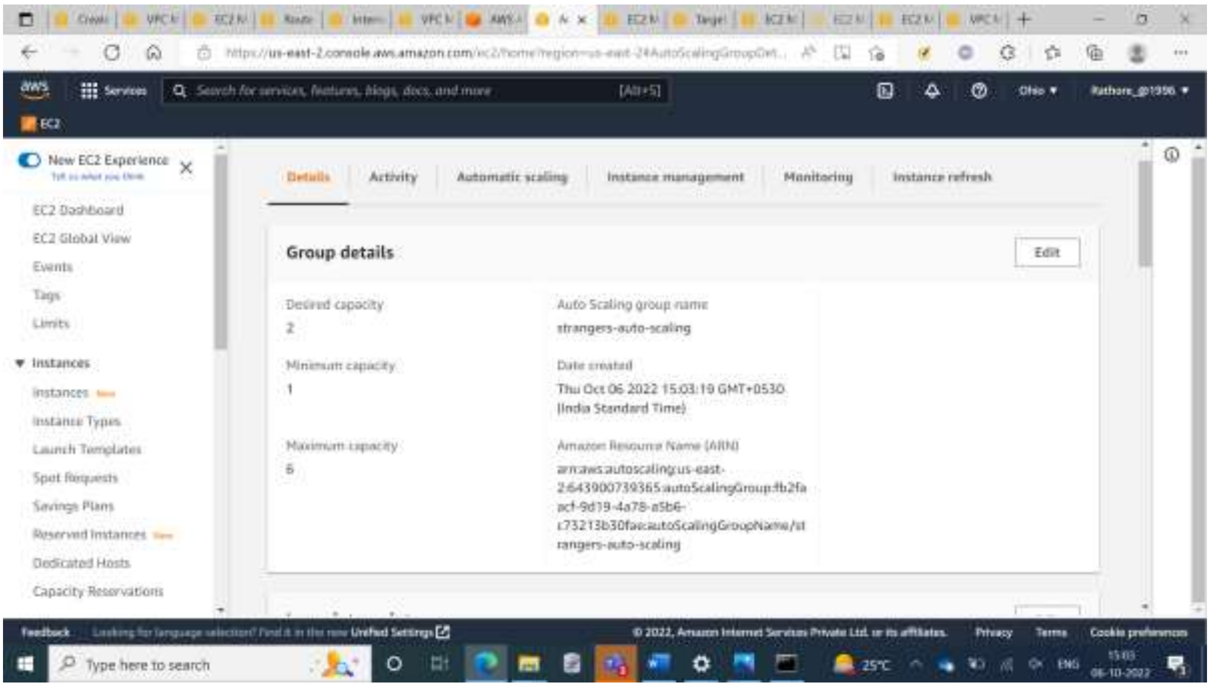
Step 19: Auto Scaling group



Group details

Desired capacity
2

Minimum capacity
1

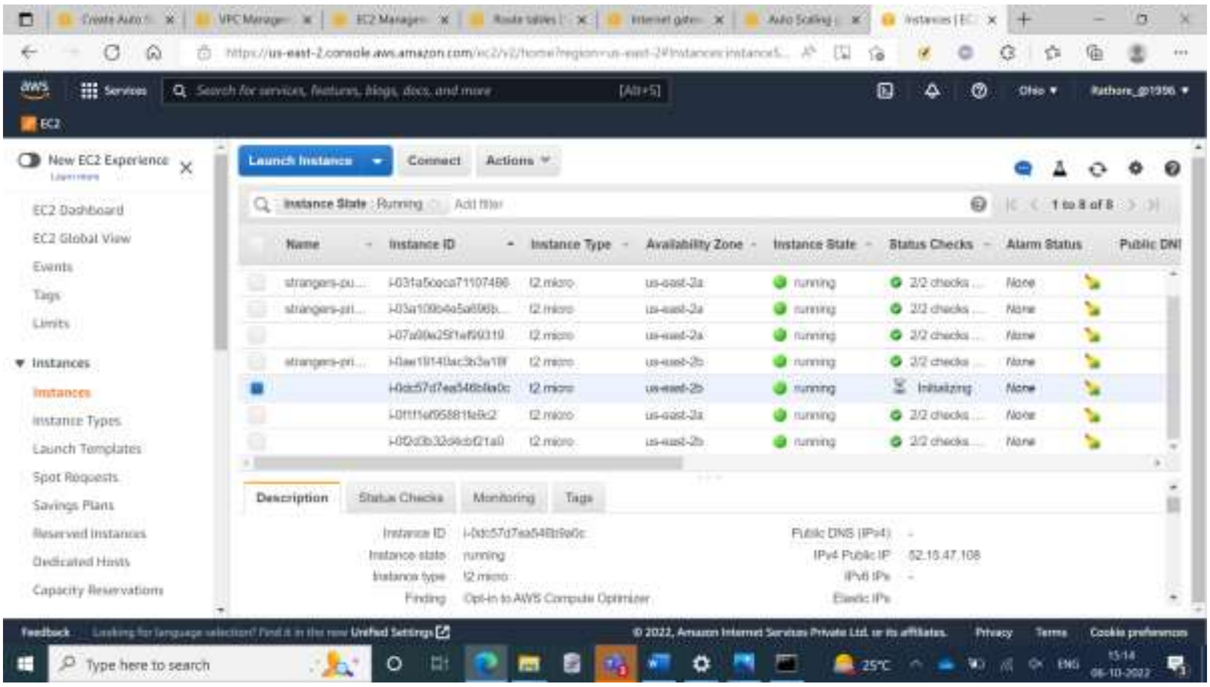
Maximum capacity
6

Auto Scaling group name
strangers-auto-scaling

Date created
Thu Oct 06 2022 15:03:19 GMT+0530 (India Standard Time)

Amazon Resource Name (ARN)
arn:aws:autoscaling:us-east-2:643900739365:autoScalingGroup:fb2faacf-9d19-4a78-a5b6-c73213b30fae:autoScalingGroupName/strangers-auto-scaling

Step 20: Showing the Instances



Instance State : Running

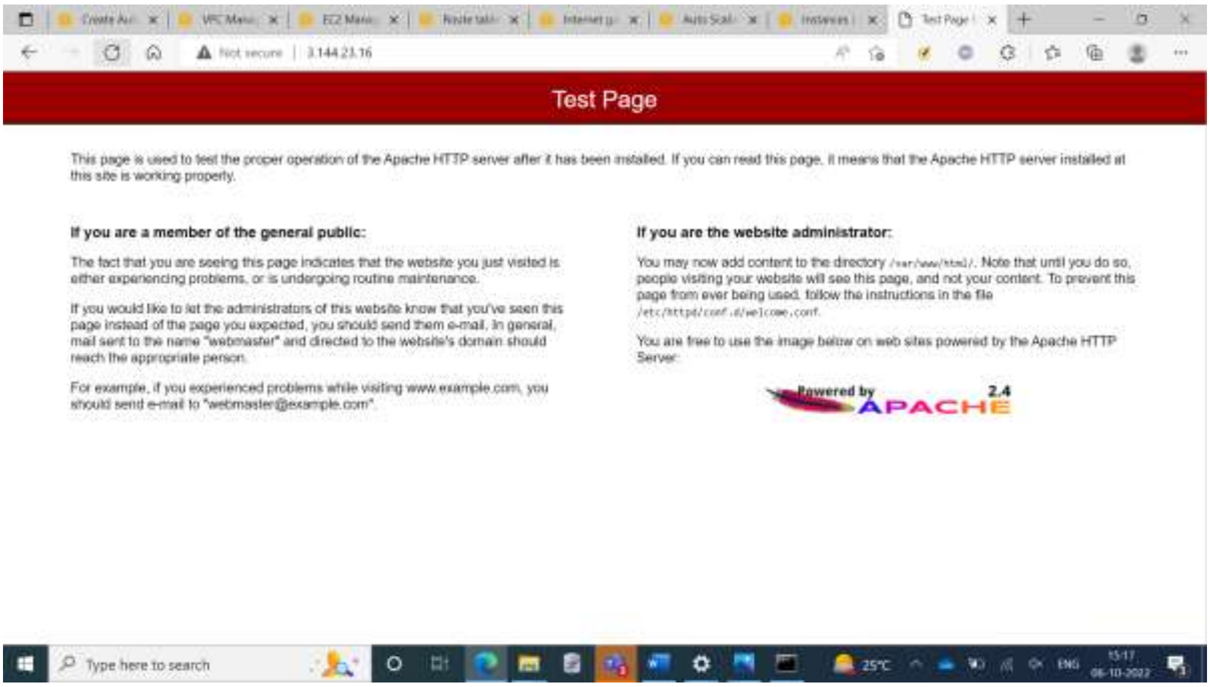
1 to 8 of 8

	Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status
□	strangers-pu...	i-031a5ceca71107486	t2.micro	us-east-2a	● running	2/2 checks ...	None
□	strangers-pri...	i-03a109b4a5a898b...	t2.micro	us-east-2a	● running	2/2 checks ...	None
□		i-07a90a25f1ef99319	t2.micro	us-east-2a	● running	2/2 checks ...	None
□	strangers-pri...	i-0ae19140ac3b3a18f	t2.micro	us-east-2b	● running	2/2 checks ...	None
☑		i-0dc57d7ea548b9a0c	t2.micro	us-east-2b	● running	Initializing	None
□		i-0f1f1ef95881fe9c2	t2.micro	us-east-2a	● running	2/2 checks ...	None
□		i-0f2d3b32d4cbf21a0	t2.micro	us-east-2b	● running	2/2 checks ...	None

Instance ID i-0dc57d7ea548b9a0c
Instance state running
Instance type t2.micro
Finding Opt-in to AWS Compute Optimizer

Public DNS (IPv4) -
IPv4 Public IP 52.15.47.108
IPv6 IPs -
Elastic IPs

Step 21: Testing the Auto Scaling



Test Page

This page is used to test the proper operation of the Apache HTTP server after it has been installed. If you can read this page, it means that the Apache HTTP server installed at this site is working properly.

If you are a member of the general public:

The fact that you are seeing this page indicates that the website you just visited is either experiencing problems, or is undergoing routine maintenance.

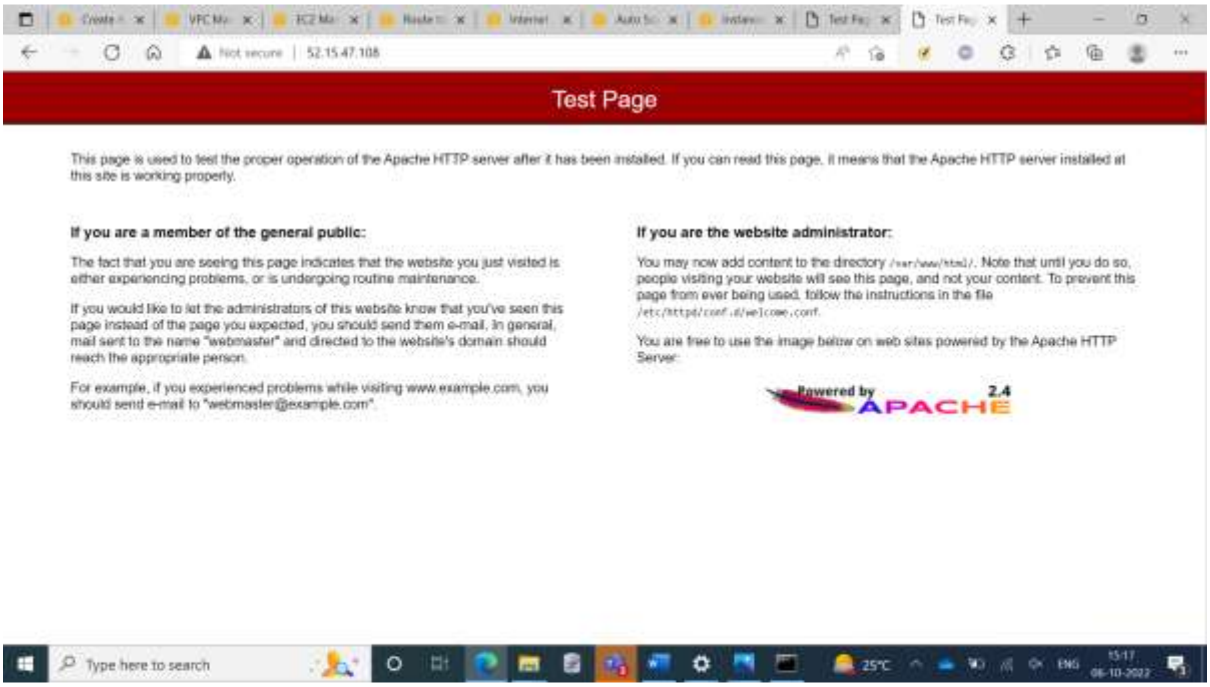
If you would like to let the administrators of this website know that you've seen this page instead of the page you expected, you should send them e-mail. In general, mail sent to the name "webmaster" and directed to the website's domain should reach the appropriate person.

For example, if you experienced problems while visiting www.example.com, you should send e-mail to "webmaster@example.com".

If you are the website administrator:

You may now add content to the directory `/var/www/html/`. Note that until you do so, people visiting your website will see this page, and not your content. To prevent this page from ever being used, follow the instructions in the file `/etc/httpd/conf.d/welcome.conf`.

You are free to use the image below on web sites powered by the Apache HTTP Server:



Test Page

This page is used to test the proper operation of the Apache HTTP server after it has been installed. If you can read this page, it means that the Apache HTTP server installed at this site is working properly.

If you are a member of the general public:

The fact that you are seeing this page indicates that the website you just visited is either experiencing problems, or is undergoing routine maintenance.

If you would like to let the administrators of this website know that you've seen this page instead of the page you expected, you should send them e-mail. In general, mail sent to the name "webmaster" and directed to the website's domain should reach the appropriate person.

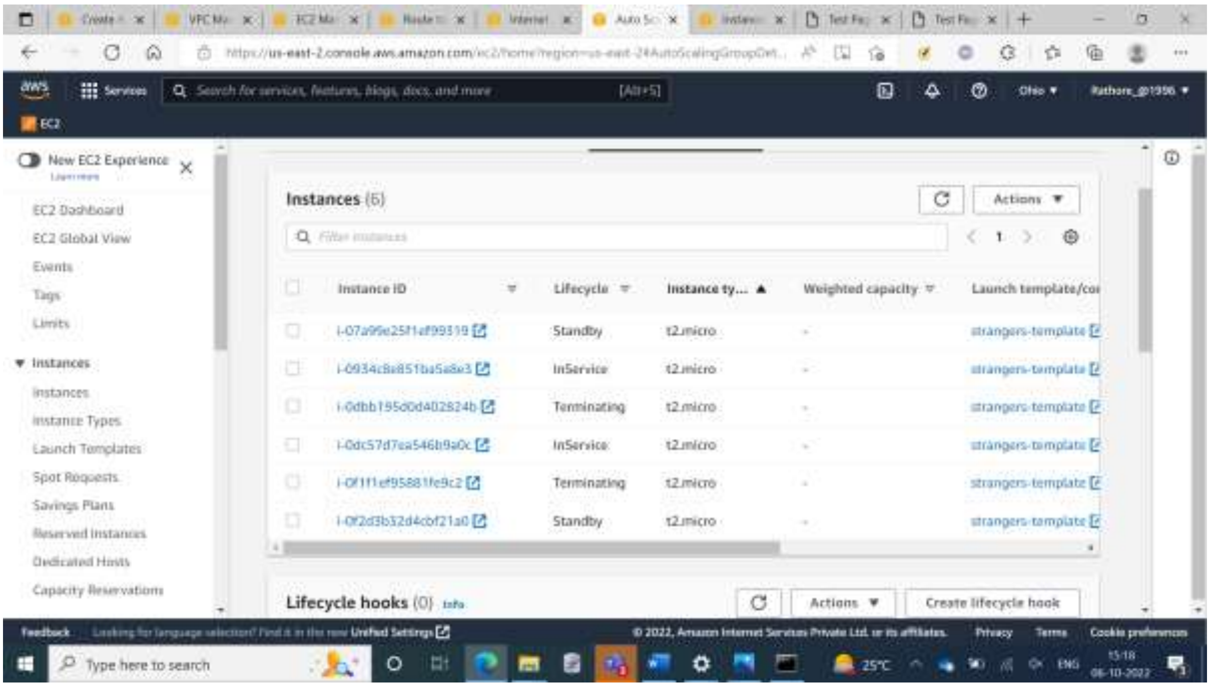
For example, if you experienced problems while visiting www.example.com, you should send e-mail to "webmaster@example.com".

If you are the website administrator:

You may now add content to the directory `/var/www/html/`. Note that until you do so, people visiting your website will see this page, and not your content. To prevent this page from ever being used, follow the instructions in the file `/etc/httpd/conf.d/welcome.conf`.

You are free to use the image below on web sites powered by the Apache HTTP Server:

Step 22: Showing the Auto Scaling

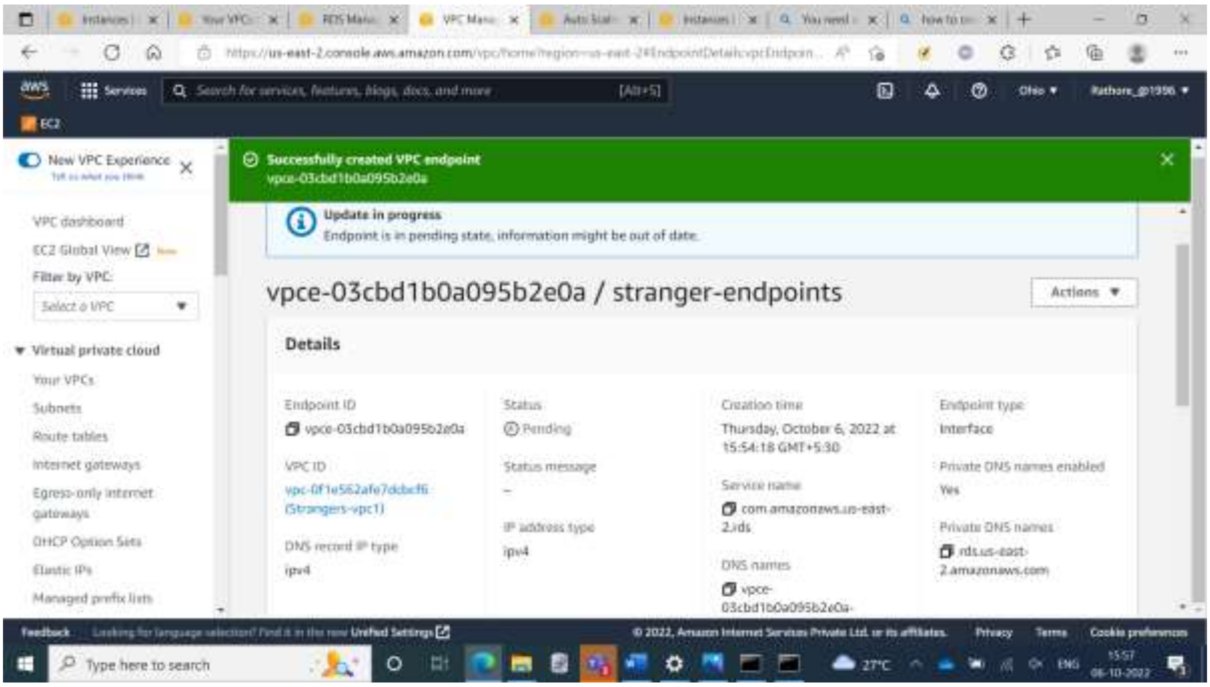


Instances (6)

Instance ID	Lifecycle	Instance ty...	Weighted capacity	Launch template/co
i-07a99e25f1ef99319	Standby	t2.micro	-	strangers-template
i-0934c8e851ba5a8e3	InService	t2.micro	-	strangers-template
i-0dbb195d0d402824b	Terminating	t2.micro	-	strangers-template
i-0dc57d7ea546b9a0c	InService	t2.micro	-	strangers-template
i-0f1f1ef95881fe9c2	Terminating	t2.micro	-	strangers-template
i-0f2d3b32d4cbf21a0	Standby	t2.micro	-	strangers-template

Lifecycle hooks (0)

Step 23: Created Endpoints



Successfully created VPC endpoint
vpce-03cbd1b0a095b2e0a

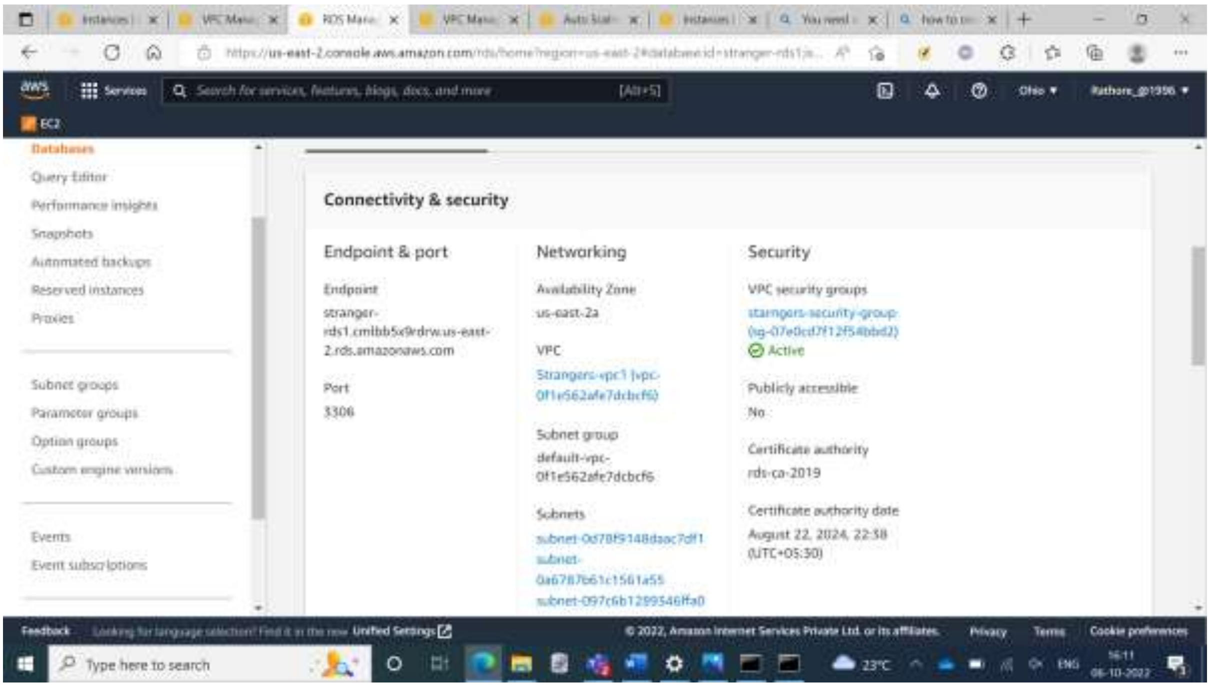
Update in progress
Endpoint is in pending state, information might be out of date.

vpce-03cbd1b0a095b2e0a / stranger-endpoints

Details

Endpoint ID: vpce-03cbd1b0a095b2e0a
Status: Pending
Creation time: Thursday, October 6, 2022 at 15:54:18 GMT+5:30
Endpoint type: Interface
VPC ID: vpc-0f1e562afe7dcbcf6 (Strangers-vpc1)
Status message: –
Service name: com.amazonaws.us-east-2.rds
Private DNS names enabled: Yes
DNS record IP type: ipv4
IP address type: ipv4
DNS names: vpce-03cbd1b0a095b2e0a-
Private DNS names: rds.us-east-2.amazonaws.com

Step 24: Created RDS



Connectivity & security

Endpoint & port

Endpoint
stranger-rds1.cmlbb5x9rdrw.us-east-2.rds.amazonaws.com

Port
3306

Networking

Availability Zone
us-east-2a

VPC
Strangers-vpc1 (vpc-0f1e562afe7dcbcf6)

Subnet group
default-vpc-0f1e562afe7dcbcf6

Subnets
subnet-0d78f9148daac7df1
subnet-0a6787b61c1561a55
subnet-097c6b1299546ffa0

Security

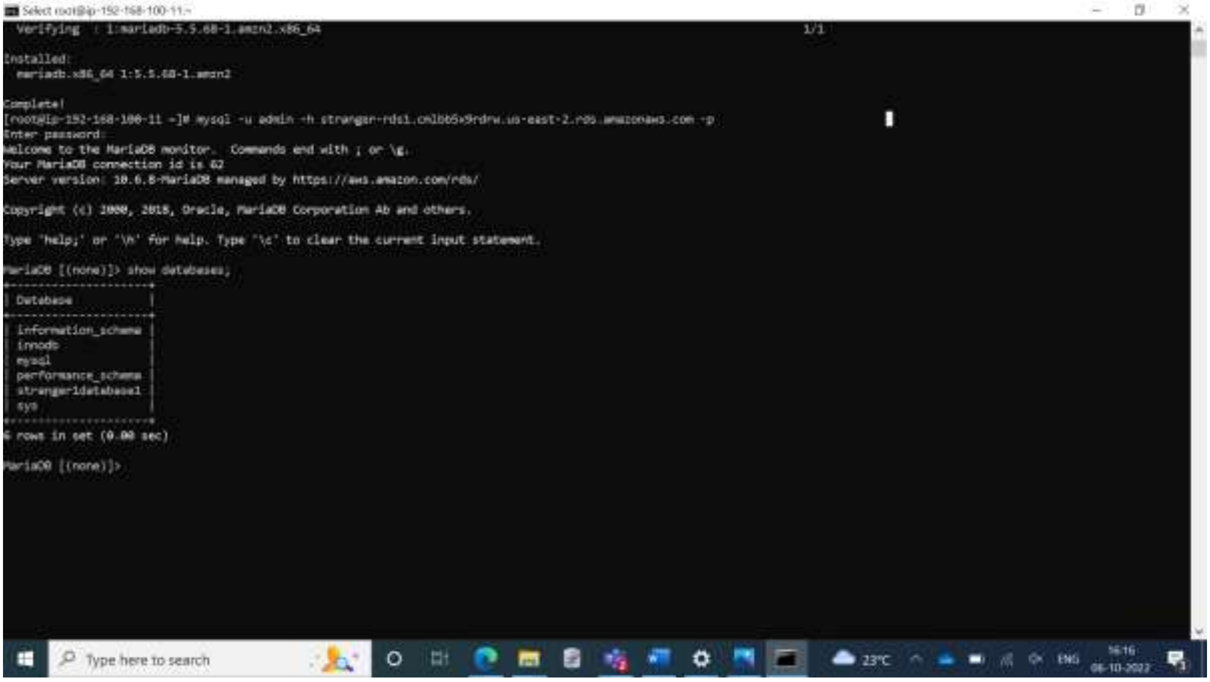
VPC security groups
starngers-security-group (sg-07e0cd7f12f54bbd2)
Active

Publicly accessible
No

Certificate authority
rds-ca-2019

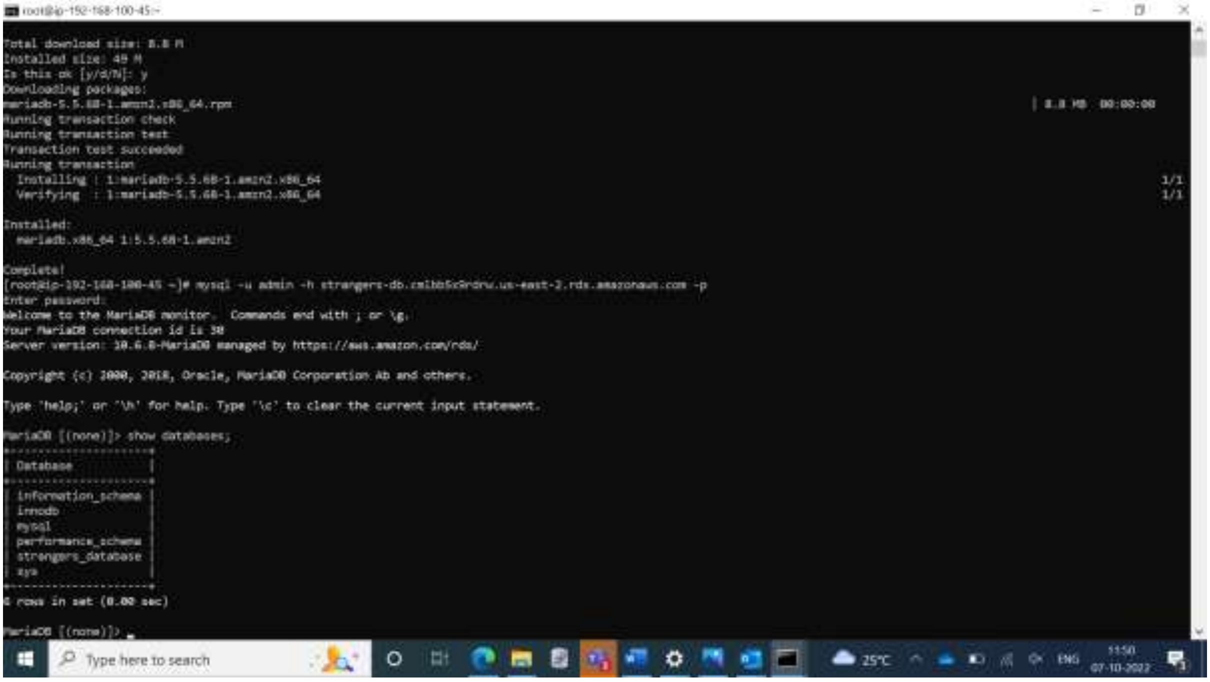
Certificate authority date
August 22, 2024, 22:38 (UTC+05:30)

Step 25: Connected RDS with EC2 Instances



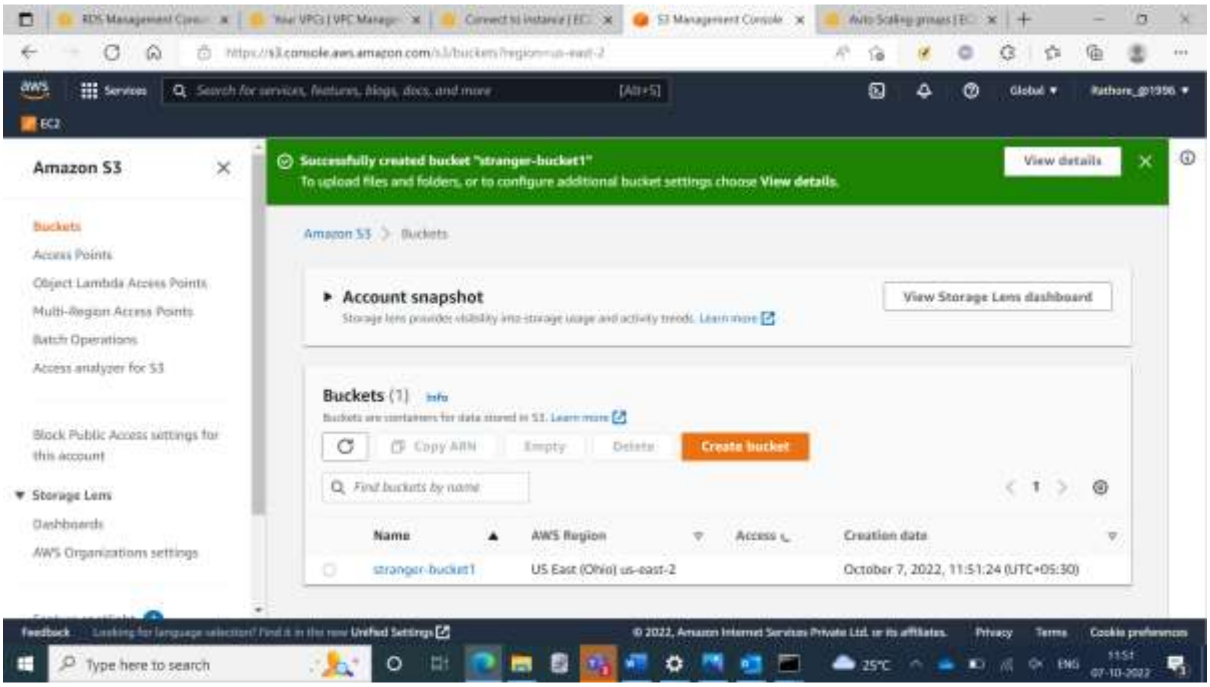
```
  Verifying  : 1:mariadb-5.5.68-1.amzn2.x86_64                                 1/1

Installed:
  mariadb.x86_64 1:5.5.68-1.amzn2

Complete!
[root@ip-192-168-100-11 ~]# mysql -u admin -h stranger-rds1.cmlbb5x9rdrw.us-east-2.rds.amazonaws.com -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 62
Server version: 10.6.8-MariaDB managed by https://aws.amazon.com/rds/

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| innodb             |
| mysql              |
| performance_schema |
| stranger1database1 |
| sys                |
+--------------------+
6 rows in set (0.00 sec)

MariaDB [(none)]>
```

Step 26: Showing the database



```
Total download size: 8.8 M
Installed size: 49 M
Is this ok [y/d/N]: y
Downloading packages:
mariadb-5.5.68-1.amzn2.x86_64.rpm                                                           | 8.8 MB  00:00:00
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
  Installing : 1:mariadb-5.5.68-1.amzn2.x86_64                                                                 1/1
  Verifying  : 1:mariadb-5.5.68-1.amzn2.x86_64                                                                 1/1

Installed:
  mariadb.x86_64 1:5.5.68-1.amzn2

Complete!
[root@ip-192-168-100-45 ~]# mysql -u admin -h strangers-db.cmlbb5x9rdrw.us-east-2.rds.amazonaws.com -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 30
Server version: 10.6.8-MariaDB managed by https://aws.amazon.com/rds/

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| innodb             |
| mysql              |
| performance_schema |
| strangers_database |
| sys                |
+--------------------+
6 rows in set (0.00 sec)

MariaDB [(none)]> _
```

Step 27: Created S3 bucket for mounting



Successfully created bucket "stranger-bucket1"
To upload files and folders, or to configure additional bucket settings choose **View details**.

Amazon S3 > Buckets

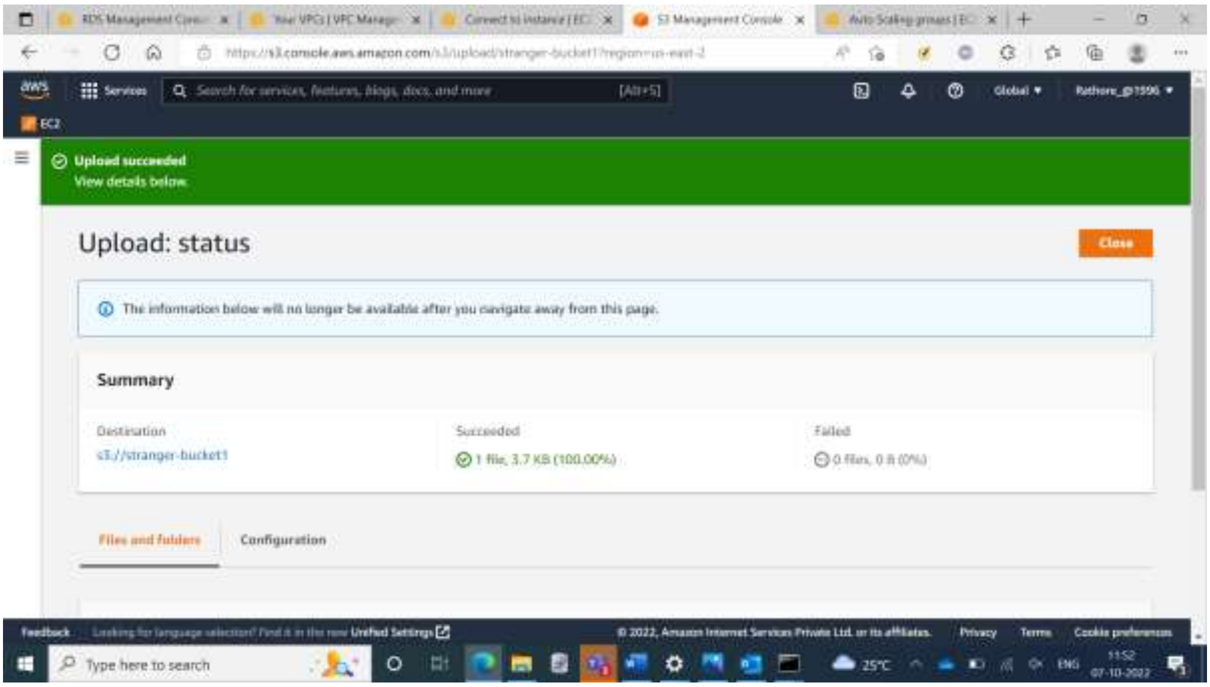
Account snapshot
Storage lens provides visibility into storage usage and activity trends. Learn more

Buckets (1) Info
Buckets are containers for data stored in S3. Learn more

Name	AWS Region	Access	Creation date
stranger-bucket1	US East (Ohio) us-east-2		October 7, 2022, 11:51:24 (UTC+05:30)

https://s3.console.aws.amazon.com/s3/buckets?region=us-east-2
Services
Search for services, features, blogs, docs, and more
[Alt+S]
Global
Rathore_@1956
EC2
View details
Amazon S3
Buckets
Access Points
Object Lambda Access Points
Multi-Region Access Points
Batch Operations
Access analyzer for S3
Block Public Access settings for this account
Storage Lens
Dashboards
AWS Organizations settings
View Storage Lens dashboard
Copy ARN
Empty
Delete
Create bucket
Find buckets by name
Feedback
Looking for language selection? Find it in the new Unified Settings
© 2022, Amazon Internet Services Private Ltd. or its affiliates.
Privacy
Terms
Cookie preferences
Type here to search
25°C
11:51
07-10-2022

Step 28: uploaded a file in S3 bucket



Upload succeeded
View details below

Upload: status

The information below will no longer be available after you navigate away from this page.

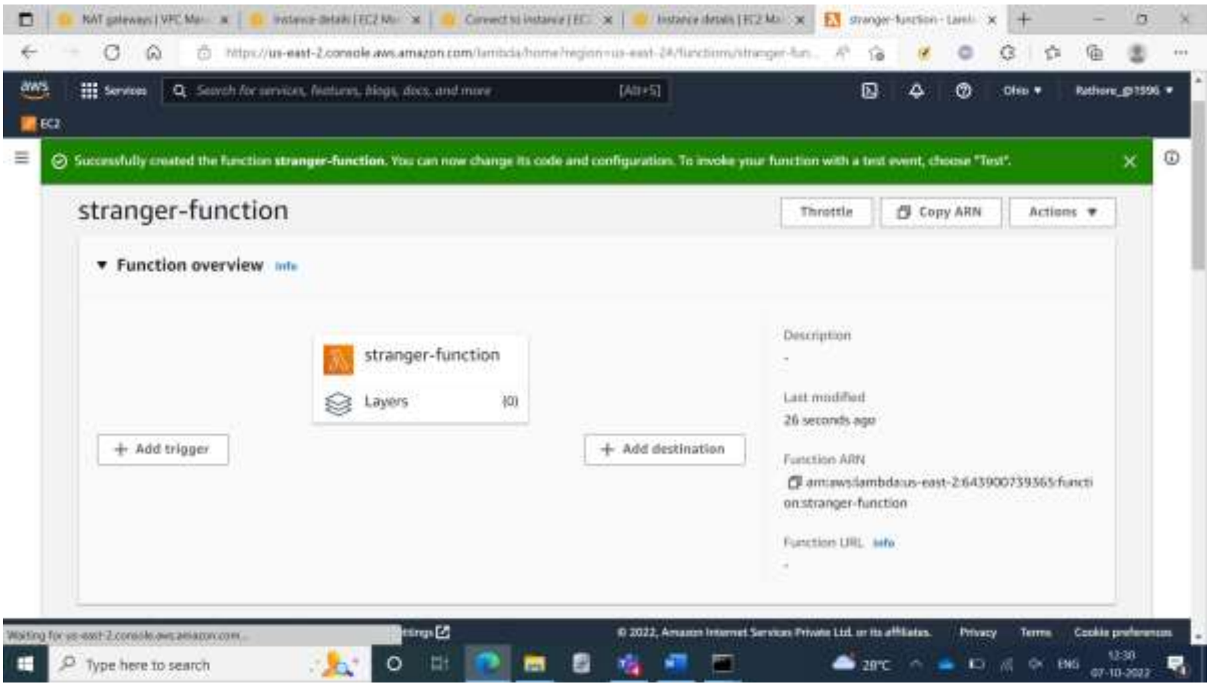
Summary

Destination: s3://stranger-bucket1

Succeeded: 1 file, 3.7 KB (100.00%)

Failed: 0 files, 0 B (0%)

Step 29: Created a Lambda function



Successfully created the function **stranger-function**. You can now change its code and configuration. To invoke your function with a test event, choose "Test".

stranger-function

Function overview

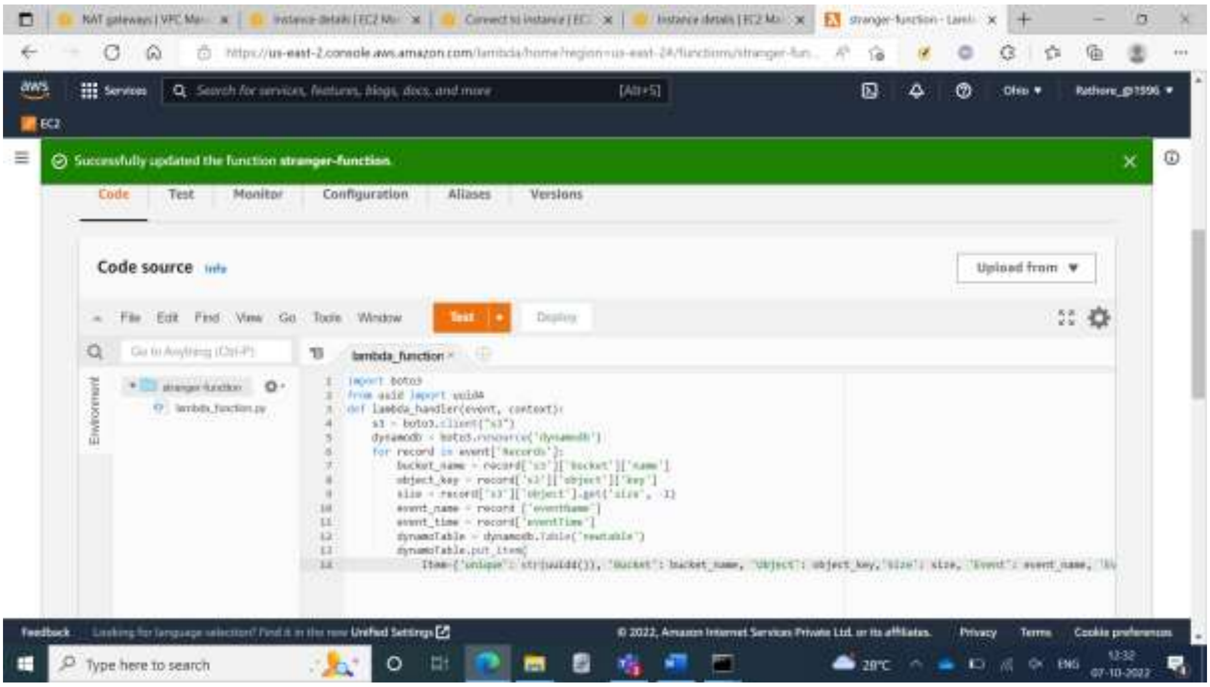
Description: -

Last modified: 26 seconds ago

Function ARN: arn:aws:lambda:us-east-2:643900739365:function:stranger-function

Function URL: -

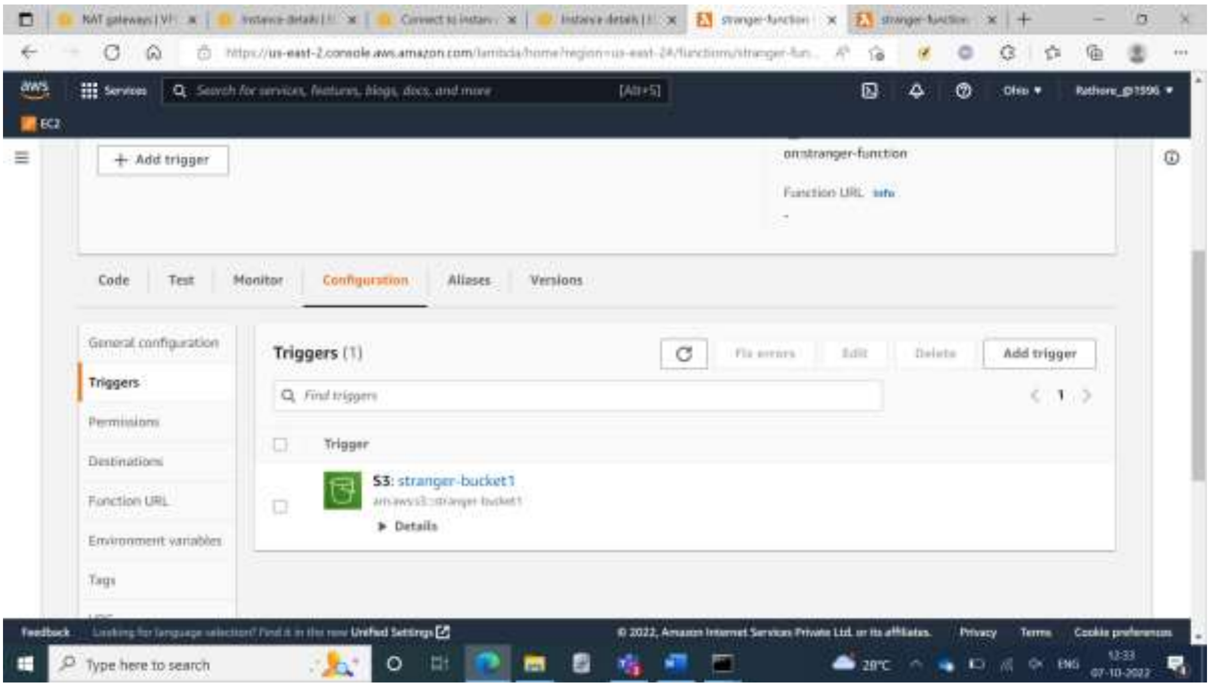
Step 30: Deploying a code in lambda function



Successfully updated the function **stranger-function**.

```
import boto3
from uuid import uuid4
def lambda_handler(event, context):
    s3 = boto3.client("s3")
    dynamodb = boto3.resource('dynamodb')
    for record in event['Records']:
        bucket_name = record['s3']['bucket']['name']
        object_key = record['s3']['object']['key']
        size = record['s3']['object'].get('size', -1)
        event_name = record ['eventName']
        event_time = record['eventTime']
        dynamoTable = dynamodb.Table('newtable')
        dynamoTable.put_item(
            Item={'unique': str(uuid4()), 'Bucket': bucket_name, 'Object': object_key,'Size': size, 'Event': event_name, 'Ev
```

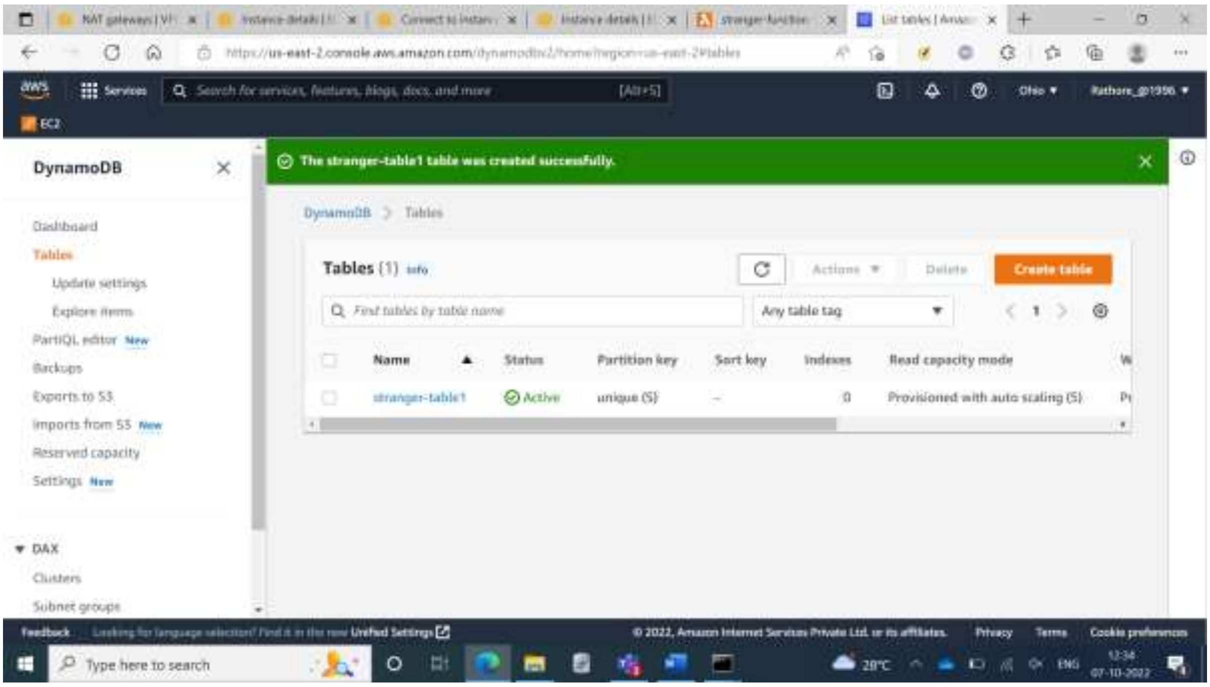
Step 31: Triggering S3 bucket in lambda function



Triggers (1)

	Trigger
□	S3: stranger-bucket1 arn:aws:s3:::stranger-bucket1 ▶ Details

Step 32: DynamoDB Table



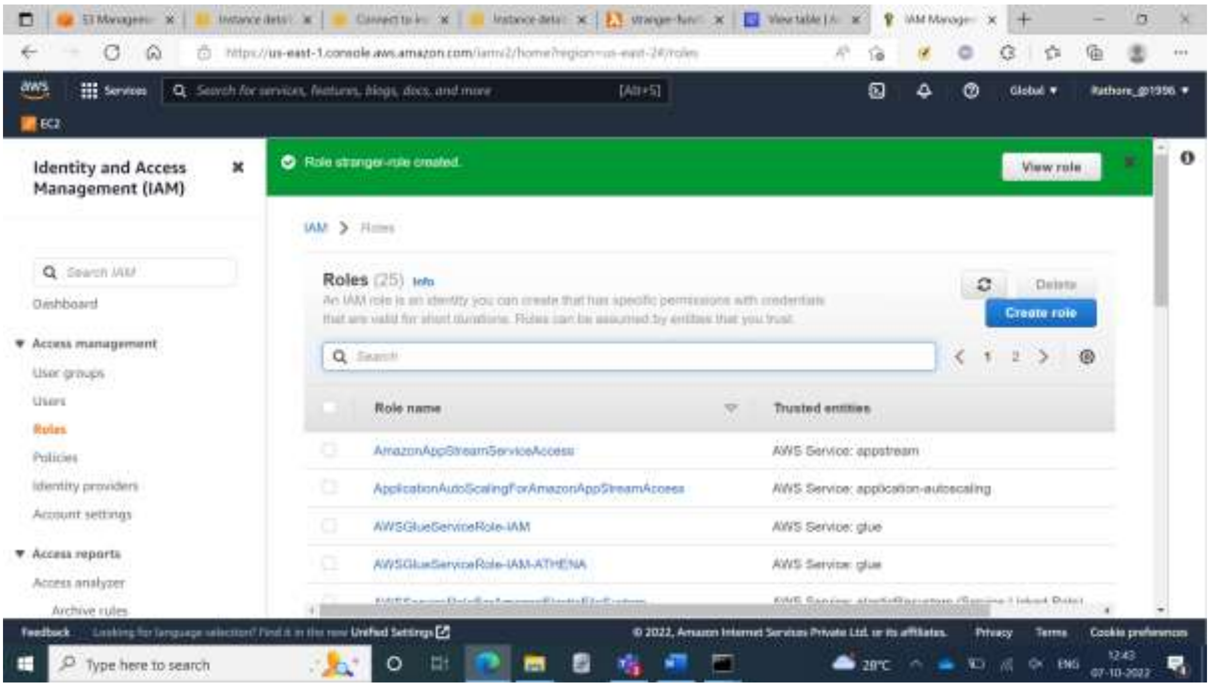
The stranger-table1 table was created successfully.

DynamoDB > Tables

Tables (1)

Name	Status	Partition key	Sort key	Indexes	Read capacity mode
stranger-table1	Active	unique (S)	–	0	Provisioned with auto scaling (S)

Step 33: Applying the roles for DynamoDB



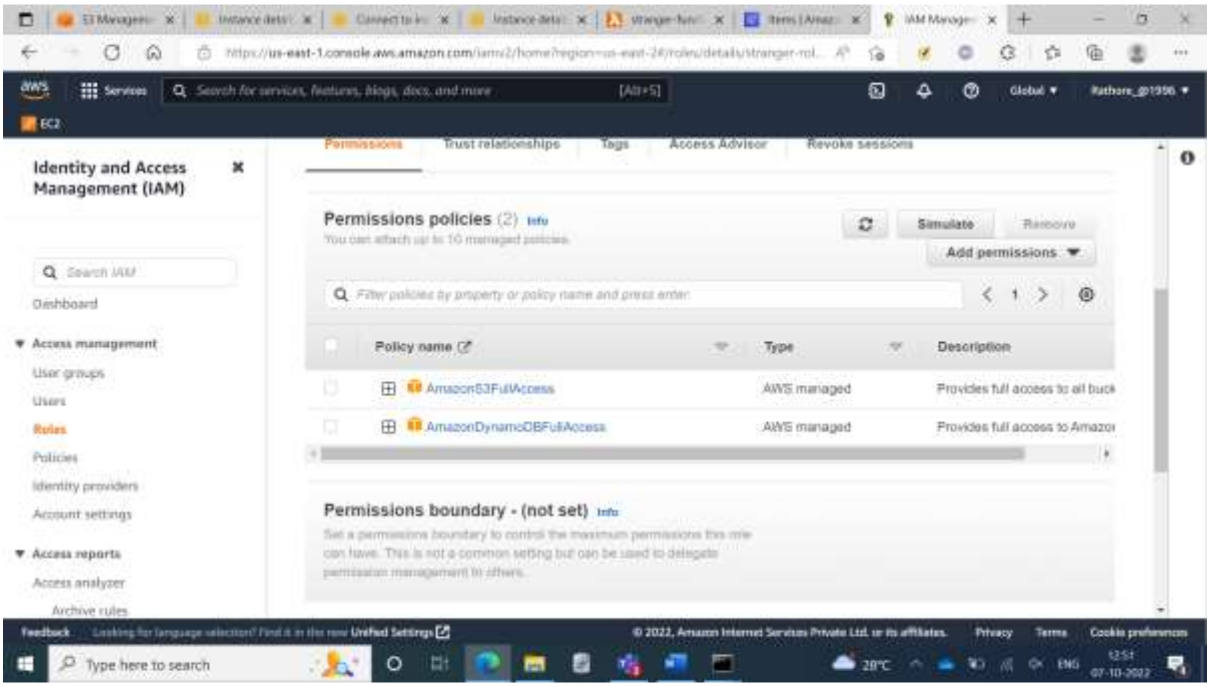
Role stranger-role created.

IAM > Roles

Roles (25)

An IAM role is an identity you can create that has specific permissions with credentials that are valid for short durations. Roles can be assumed by entities that you trust.

Role name	Trusted entities
AmazonAppStreamServiceAccess	AWS Service: appstream
ApplicationAutoScalingForAmazonAppStreamAccess	AWS Service: application-autoscaling
AWSGlueServiceRole-IAM	AWS Service: glue
AWSGlueServiceRole-IAM-ATHENA	AWS Service: glue



Permissions policies (2) Info

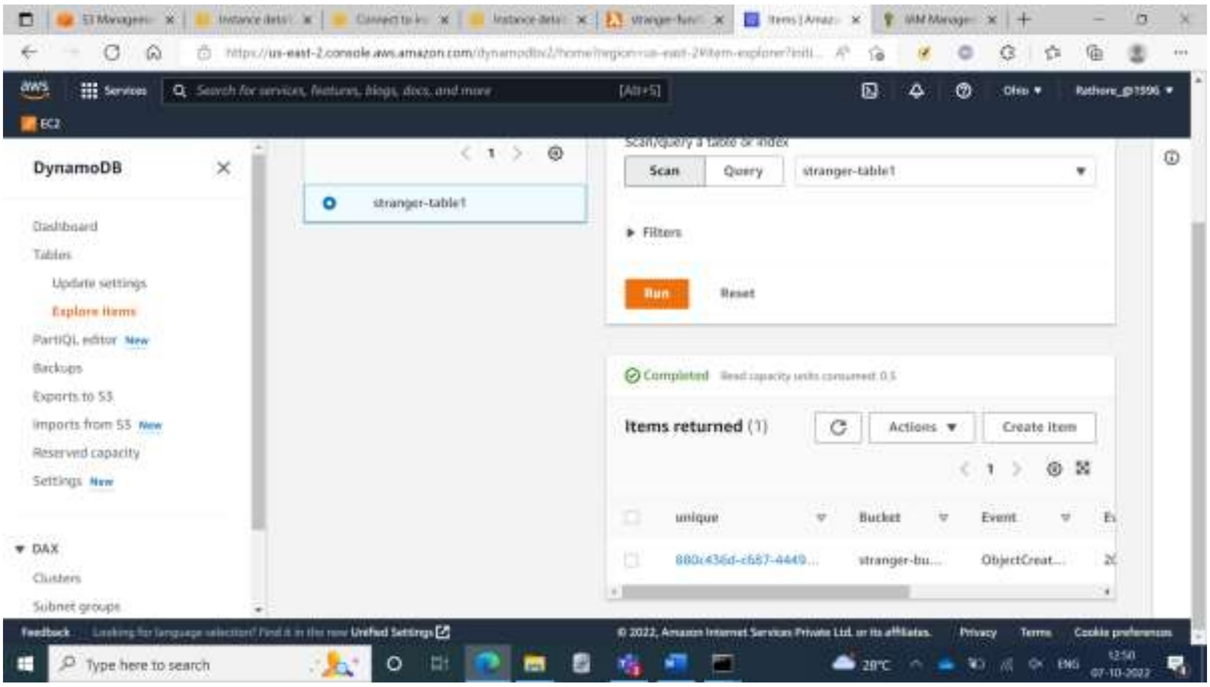
You can attach up to 10 managed policies.

Policy name	Type	Description
AmazonS3FullAccess	AWS managed	Provides full access to all buck
AmazonDynamoDBFullAccess	AWS managed	Provides full access to Amazon

Permissions boundary - (not set) Info

Set a permissions boundary to control the maximum permissions this role can have. This is not a common setting but can be used to delegate permission management to others.

Step 34: Showing the files of S3 bucket in DynamoDB table

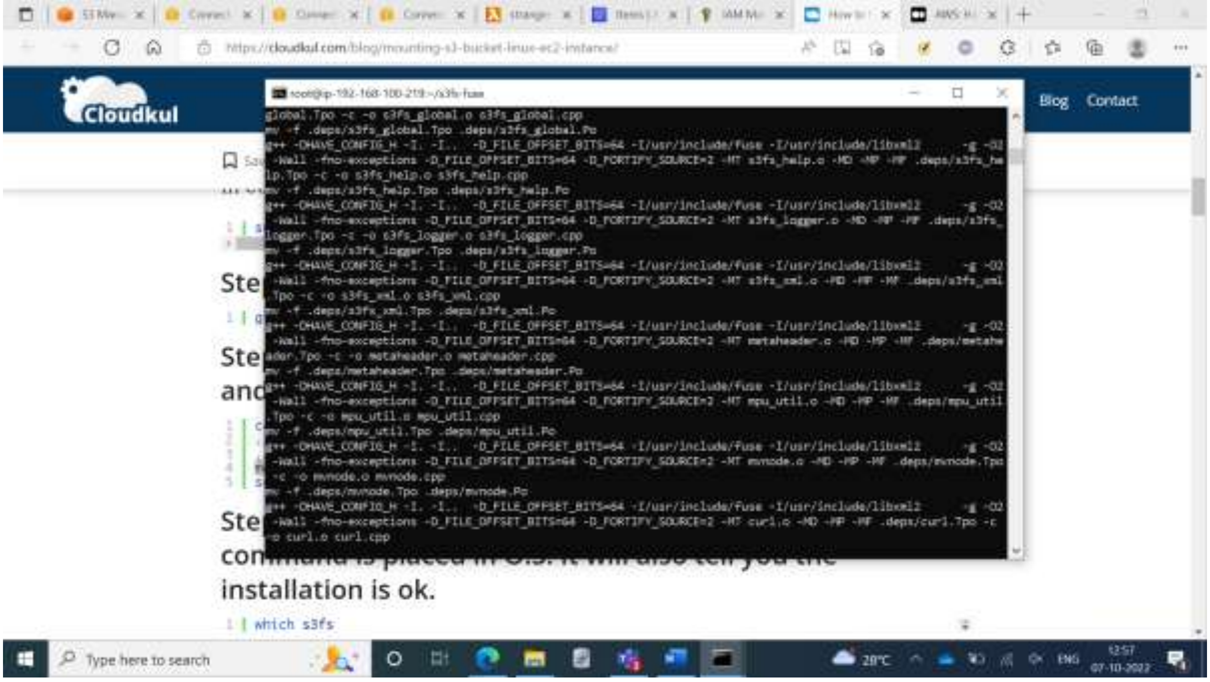


Completed Read capacity units consumed: 0.5

Items returned (1)

unique	Bucket	Event
880c436d-c687-4449...	stranger-bu...	ObjectCreat...

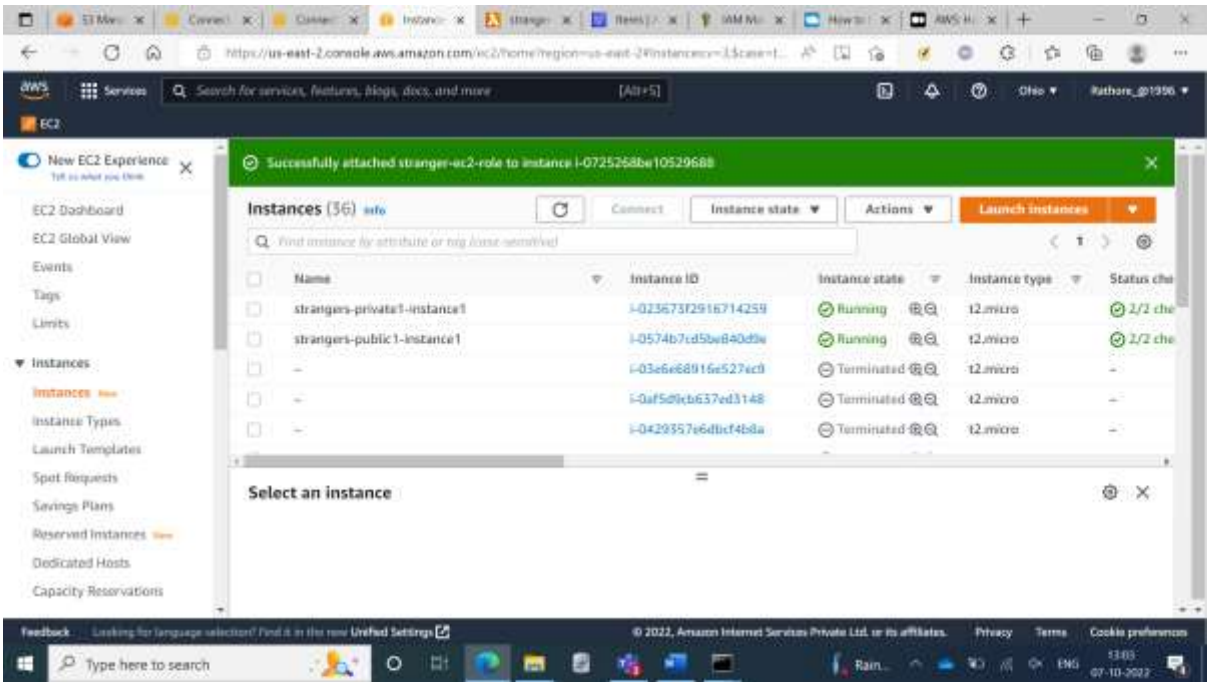
Step 35: Installing the dependencies in EC2 Instance for mounting the instance with S3 bucket



```
global.Tpo -c -o s3fs_global.o s3fs_global.cpp
mv -f .deps/s3fs_global.Tpo .deps/s3fs_global.Po
g++ -DHAVE_CONFIG_H -I. -I..  -D_FILE_OFFSET_BITS=64 -I/usr/include/fuse -I/usr/include/libxml2     -g -O2
 -Wall -fno-exceptions -D_FILE_OFFSET_BITS=64 -D_FORTIFY_SOURCE=2 -MT s3fs_help.o -MD -MP -MF .deps/s3fs_he
lp.Tpo -c -o s3fs_help.o s3fs_help.cpp
mv -f .deps/s3fs_help.Tpo .deps/s3fs_help.Po
g++ -DHAVE_CONFIG_H -I. -I..  -D_FILE_OFFSET_BITS=64 -I/usr/include/fuse -I/usr/include/libxml2     -g -O2
 -Wall -fno-exceptions -D_FILE_OFFSET_BITS=64 -D_FORTIFY_SOURCE=2 -MT s3fs_logger.o -MD -MP -MF .deps/s3fs_
logger.Tpo -c -o s3fs_logger.o s3fs_logger.cpp
mv -f .deps/s3fs_logger.Tpo .deps/s3fs_logger.Po
g++ -DHAVE_CONFIG_H -I. -I..  -D_FILE_OFFSET_BITS=64 -I/usr/include/fuse -I/usr/include/libxml2     -g -O2
 -Wall -fno-exceptions -D_FILE_OFFSET_BITS=64 -D_FORTIFY_SOURCE=2 -MT s3fs_xml.o -MD -MP -MF .deps/s3fs_xml
.Tpo -c -o s3fs_xml.o s3fs_xml.cpp
mv -f .deps/s3fs_xml.Tpo .deps/s3fs_xml.Po
g++ -DHAVE_CONFIG_H -I. -I..  -D_FILE_OFFSET_BITS=64 -I/usr/include/fuse -I/usr/include/libxml2     -g -O2
 -Wall -fno-exceptions -D_FILE_OFFSET_BITS=64 -D_FORTIFY_SOURCE=2 -MT metaheader.o -MD -MP -MF .deps/metahe
ader.Tpo -c -o metaheader.o metaheader.cpp
mv -f .deps/metaheader.Tpo .deps/metaheader.Po
g++ -DHAVE_CONFIG_H -I. -I..  -D_FILE_OFFSET_BITS=64 -I/usr/include/fuse -I/usr/include/libxml2     -g -O2
 -Wall -fno-exceptions -D_FILE_OFFSET_BITS=64 -D_FORTIFY_SOURCE=2 -MT mpu_util.o -MD -MP -MF .deps/mpu_util
.Tpo -c -o mpu_util.o mpu_util.cpp
mv -f .deps/mpu_util.Tpo .deps/mpu_util.Po
g++ -DHAVE_CONFIG_H -I. -I..  -D_FILE_OFFSET_BITS=64 -I/usr/include/fuse -I/usr/include/libxml2     -g -O2
 -Wall -fno-exceptions -D_FILE_OFFSET_BITS=64 -D_FORTIFY_SOURCE=2 -MT mvnode.o -MD -MP -MF .deps/mvnode.Tpo
 -c -o mvnode.o mvnode.cpp
mv -f .deps/mvnode.Tpo .deps/mvnode.Po
g++ -DHAVE_CONFIG_H -I. -I..  -D_FILE_OFFSET_BITS=64 -I/usr/include/fuse -I/usr/include/libxml2     -g -O2
 -Wall -fno-exceptions -D_FILE_OFFSET_BITS=64 -D_FORTIFY_SOURCE=2 -MT curl.o -MD -MP -MF .deps/curl.Tpo -c
 -o curl.o curl.cpp
```

installation is ok.

```
which s3fs
```



Successfully attached stranger-ec2-role to instance i-0725268be10529688

Instances (36)

Name	Instance ID	Instance state	Instance type	Status che
strangers-private1-instance1	i-023673f2916714259	Running	t2.micro	2/2 che
strangers-public1-instance1	i-0574b7cd5be840d9e	Running	t2.micro	2/2 che
–	i-03e6e68916e527ec9	Terminated	t2.micro	–
–	i-0af5d9cb637ed3148	Terminated	t2.micro	–
–	i-0429357e6dbcf4b8a	Terminated	t2.micro	–

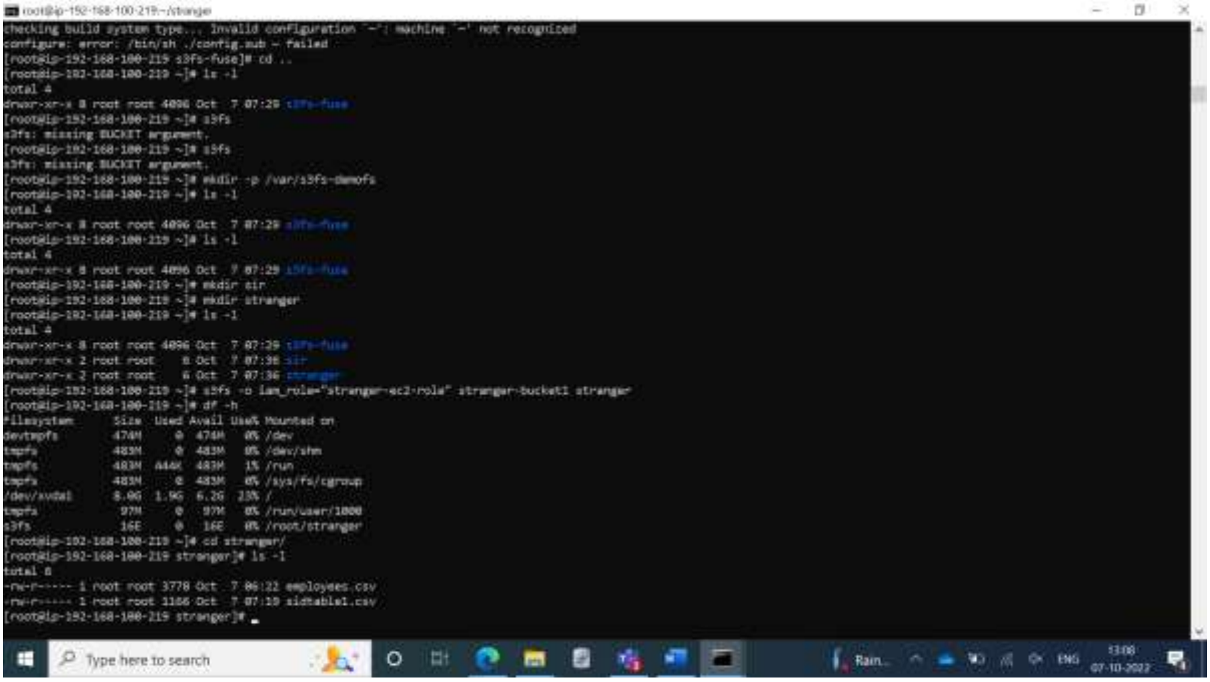
Select an instance

Commands for mounting with the results

```
drwxr-xr-x 8 root root 4096 Oct  7 07:29 s3fs-fuse

[root@ip-192-168-100-219 ~]# s3fs

s3fs: missing BUCKET argument.

[root@ip-192-168-100-219 ~]# s3fs

s3fs: missing BUCKET argument.

[root@ip-192-168-100-219 ~]# mkdir -p /var/s3fs-demofs

[root@ip-192-168-100-219 ~]# ls -l

total 4

drwxr-xr-x 8 root root 4096 Oct  7 07:29 s3fs-fuse

[root@ip-192-168-100-219 ~]# ls -l

total 4

drwxr-xr-x 8 root root 4096 Oct  7 07:29 s3fs-fuse

[root@ip-192-168-100-219 ~]# mkdir sir

[root@ip-192-168-100-219 ~]# mkdir stranger

[root@ip-192-168-100-219 ~]# ls -l

total 4

drwxr-xr-x 8 root root 4096 Oct  7 07:29 s3fs-fuse

drwxr-xr-x 2 root root    6 Oct  7 07:36 sir

drwxr-xr-x 2 root root    6 Oct  7 07:36 stranger

[root@ip-192-168-100-219 ~]# s3fs -o iam_role="stranger-ec2-role" stranger-bucket1
stranger

[root@ip-192-168-100-219 ~]# df -h

Filesystem      Size  Used Avail Use% Mounted on

devtmpfs        474M     0  474M   0% /dev

tmpfs           483M     0  483M   0% /dev/shm

tmpfs           483M  444K  483M   1% /run

tmpfs           483M     0  483M   0% /sys/fs/cgroup

/dev/xvda1      8.0G  1.9G  6.2G  23% /

tmpfs            97M     0   97M   0% /run/user/1000

s3fs             16E     0   16E   0% /root/stranger
```

```
[root@ip-192-168-100-219 ~]# cd stranger/

[root@ip-192-168-100-219 stranger]# ls -l

total 6

-rw-r----- 1 root root 3778 Oct  7 06:22 employees.csv

-rw-r----- 1 root root 1166 Oct  7 07:19 sidtable1.csv
```

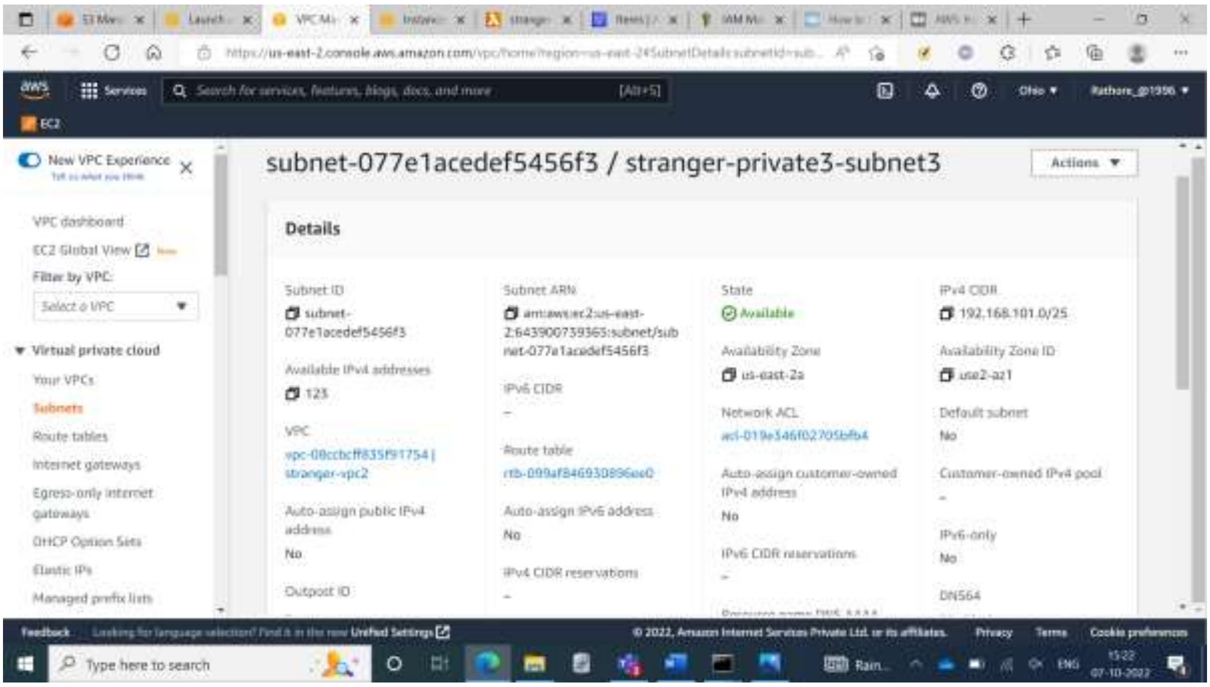
Step 36: S3 bucket mounted successfully with EC2 Instance



root@ip-192-168-100-219:~/stranger

```
checking build system type... Invalid configuration `-': machine `-' not recognized
configure: error: /bin/sh ./config.sub - failed
[root@ip-192-168-100-219 s3fs-fuse]# cd ..
[root@ip-192-168-100-219 ~]# ls -l
total 4
drwxr-xr-x 8 root root 4096 Oct  7 07:29 s3fs-fuse
[root@ip-192-168-100-219 ~]# s3fs
s3fs: missing BUCKET argument.
[root@ip-192-168-100-219 ~]# s3fs
s3fs: missing BUCKET argument.
[root@ip-192-168-100-219 ~]# mkdir -p /var/s3fs-demofs
[root@ip-192-168-100-219 ~]# ls -l
total 4
drwxr-xr-x 8 root root 4096 Oct  7 07:29 s3fs-fuse
[root@ip-192-168-100-219 ~]# ls -l
total 4
drwxr-xr-x 8 root root 4096 Oct  7 07:29 s3fs-fuse
[root@ip-192-168-100-219 ~]# mkdir sir
[root@ip-192-168-100-219 ~]# mkdir stranger
[root@ip-192-168-100-219 ~]# ls -l
total 4
drwxr-xr-x 8 root root 4096 Oct  7 07:29 s3fs-fuse
drwxr-xr-x 2 root root    6 Oct  7 07:36 sir
drwxr-xr-x 2 root root    6 Oct  7 07:36 stranger
[root@ip-192-168-100-219 ~]# s3fs -o iam_role="stranger-ec2-role" stranger-bucket1 stranger
[root@ip-192-168-100-219 ~]# df -h
Filesystem      Size  Used Avail Use% Mounted on
devtmpfs        474M     0  474M   0% /dev
tmpfs           483M     0  483M   0% /dev/shm
tmpfs           483M  444K  483M   1% /run
tmpfs           483M     0  483M   0% /sys/fs/cgroup
/dev/xvda1      8.0G  1.9G  6.2G  23% /
tmpfs            97M     0   97M   0% /run/user/1000
s3fs             16E     0   16E   0% /root/stranger
[root@ip-192-168-100-219 ~]# cd stranger/
[root@ip-192-168-100-219 stranger]# ls -l
total 6
-rw-r----- 1 root root 3778 Oct  7 06:22 employees.csv
-rw-r----- 1 root root 1166 Oct  7 07:19 sidtable1.csv
[root@ip-192-168-100-219 stranger]# _
```

Step 37: Created 2 more private subnets for VPC-2



subnet-077e1acedef5456f3 / stranger-private3-subnet3

Details

Subnet ID
subnet-077e1acedef5456f3

Available IPv4 addresses
123

VPC
vpc-08ccbcff835f91754 | stranger-vpc2

Auto-assign public IPv4 address
No

Outpost ID

Subnet ARN
arn:aws:ec2:us-east-2:643900739365:subnet/subnet-077e1acedef5456f3

IPv6 CIDR
–

Route table
rtb-099af846930896ee0

Auto-assign IPv6 address
No

IPv4 CIDR reservations
–

State
Available

Availability Zone
us-east-2a

Network ACL
acl-019e346f02705bfb4

Auto-assign customer-owned IPv4 address
No

IPv6 CIDR reservations
–

IPv4 CIDR
192.168.101.0/25

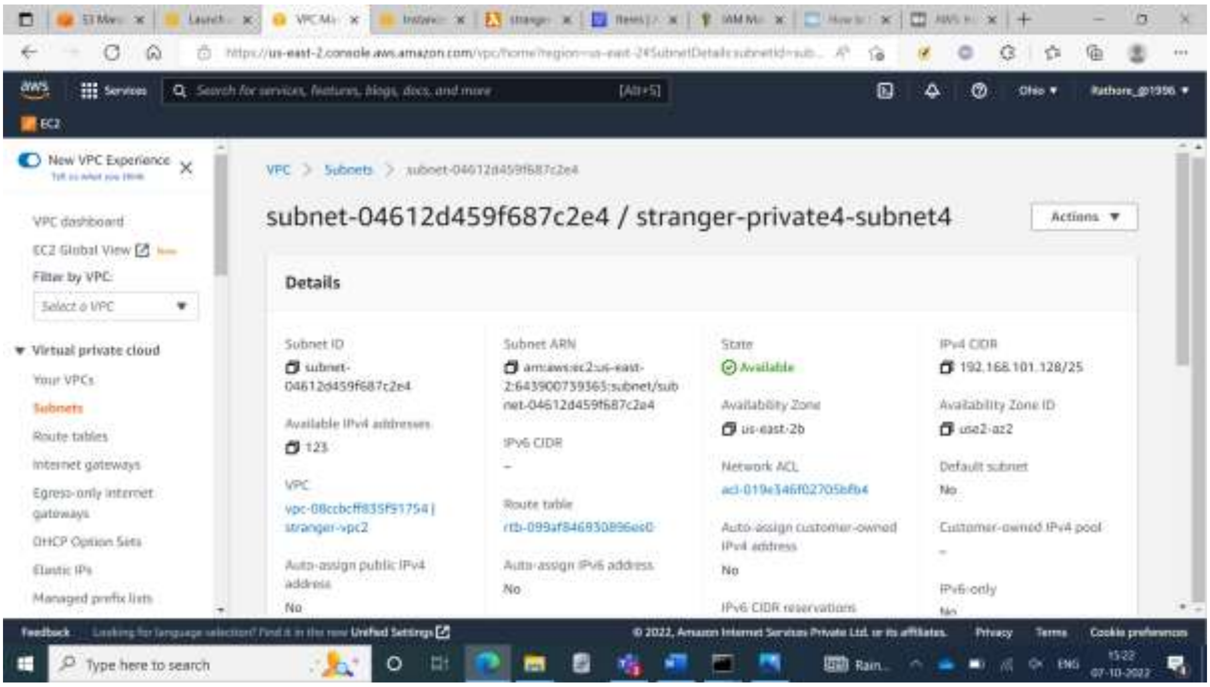
Availability Zone ID
use2-az1

Default subnet
No

Customer-owned IPv4 pool
–

IPv6-only
No

DNS64



VPC > Subnets > subnet-04612d459f687c2e4

subnet-04612d459f687c2e4 / stranger-private4-subnet4

Details

Subnet ID
subnet-04612d459f687c2e4

Available IPv4 addresses
123

VPC
vpc-08ccbcff835f91754 | stranger-vpc2

Auto-assign public IPv4 address
No

Subnet ARN
arn:aws:ec2:us-east-2:643900739365:subnet/subnet-04612d459f687c2e4

IPv6 CIDR
–

Route table
rtb-099af846930896ee0

Auto-assign IPv6 address
No

State
Available

Availability Zone
us-east-2b

Network ACL
acl-019e346f02705bfb4

Auto-assign customer-owned IPv4 address
No

IPv6 CIDR reservations

IPv4 CIDR
192.168.101.128/25

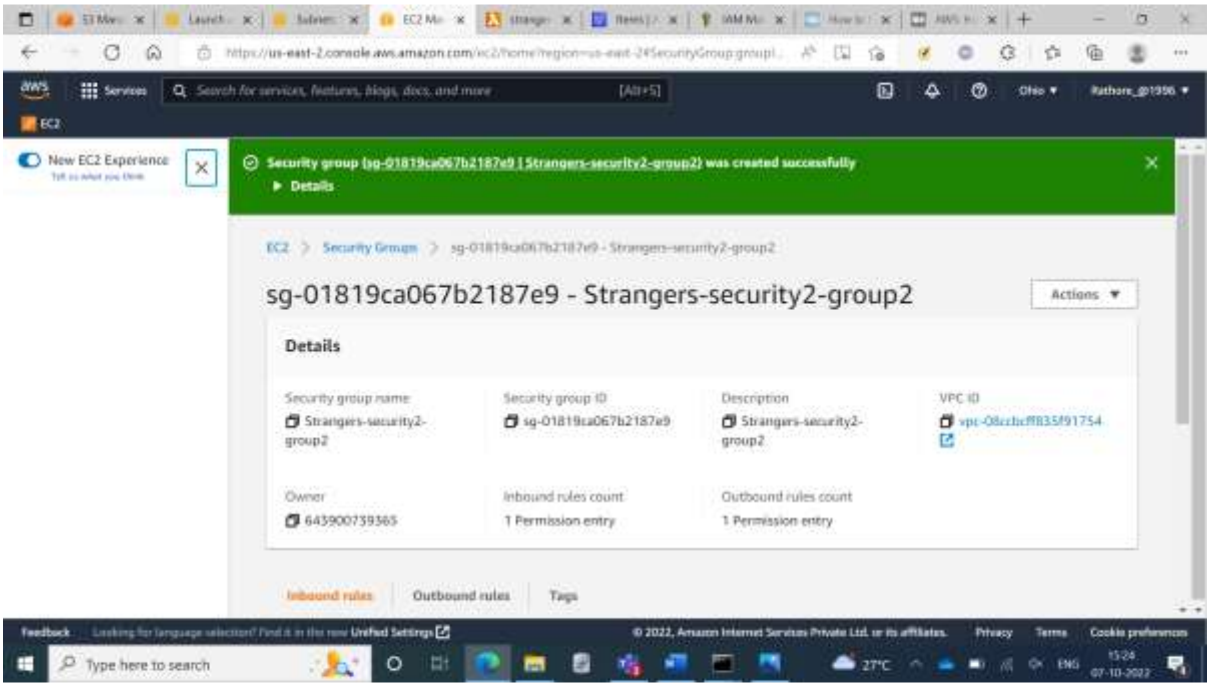
Availability Zone ID
use2-az2

Default subnet
No

Customer-owned IPv4 pool
–

IPv6-only
No

Step 38: Created Security group forVPC-2



Security group (sg-01819ca067b2187e9 | Strangers-security2-group2) was created successfully

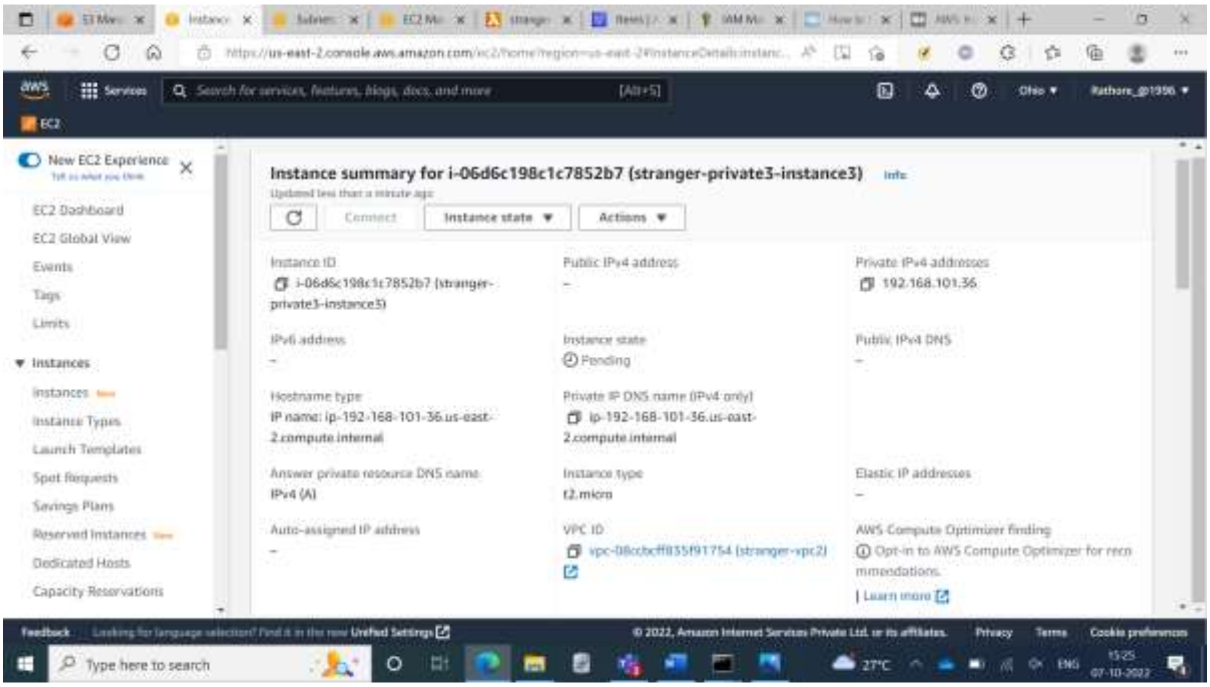
EC2 > Security Groups > sg-01819ca067b2187e9 - Strangers-security2-group2

sg-01819ca067b2187e9 - Strangers-security2-group2

Details

Security group name	Security group ID	Description	VPC ID
Strangers-security2-group2	sg-01819ca067b2187e9	Strangers-security2-group2	vpc-08ccbcff835f91754
Owner	**Inbound rules count**	**Outbound rules count**	
643900739365	1 Permission entry	1 Permission entry	

Step 39: Private Instance1 for VPC2

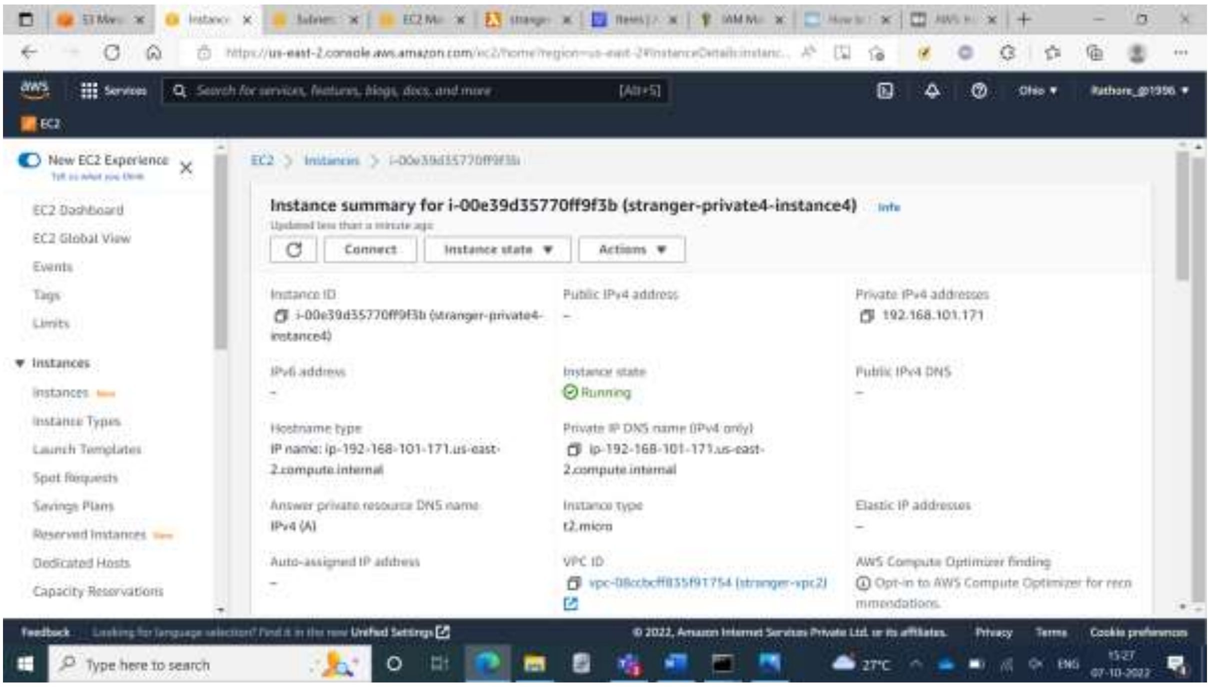


Instance summary for i-06d6c198c1c7852b7 (stranger-private3-instance3)

Updated less than a minute ago

Instance ID	Public IPv4 address	Private IPv4 addresses
i-06d6c198c1c7852b7 (stranger-private3-instance3)	–	192.168.101.36
IPv6 address	**Instance state**	**Public IPv4 DNS**
–	Pending	–
Hostname type	**Private IP DNS name (IPv4 only)**	
IP name: ip-192-168-101-36.us-east-2.compute.internal	ip-192-168-101-36.us-east-2.compute.internal	
Answer private resource DNS name	**Instance type**	**Elastic IP addresses**
IPv4 (A)	t2.micro	–
Auto-assigned IP address	**VPC ID**	**AWS Compute Optimizer finding**
–	vpc-08ccbcff835f91754 (stranger-vpc2)	Opt-in to AWS Compute Optimizer for recommendations. | Learn more

Step 39: Private Instance2 for VPC2



EC2 > Instances > i-00e39d35770ff9f3b

Instance summary for i-00e39d35770ff9f3b (stranger-private4-instance4)

Updated less than a minute ago

Instance ID	Public IPv4 address	Private IPv4 addresses
i-00e39d35770ff9f3b (stranger-private4-instance4)	–	192.168.101.171

IPv6 address	Instance state	Public IPv4 DNS
–	Running	–

Hostname type	Private IP DNS name (IPv4 only)	
IP name: ip-192-168-101-171.us-east-2.compute.internal	ip-192-168-101-171.us-east-2.compute.internal	

Answer private resource DNS name	Instance type	Elastic IP addresses
IPv4 (A)	t2.micro	–

Auto-assigned IP address	VPC ID	AWS Compute Optimizer finding
–	vpc-08ccbcff835f91754 (stranger-vpc2)	Opt-in to AWS Compute Optimizer for recommendations.

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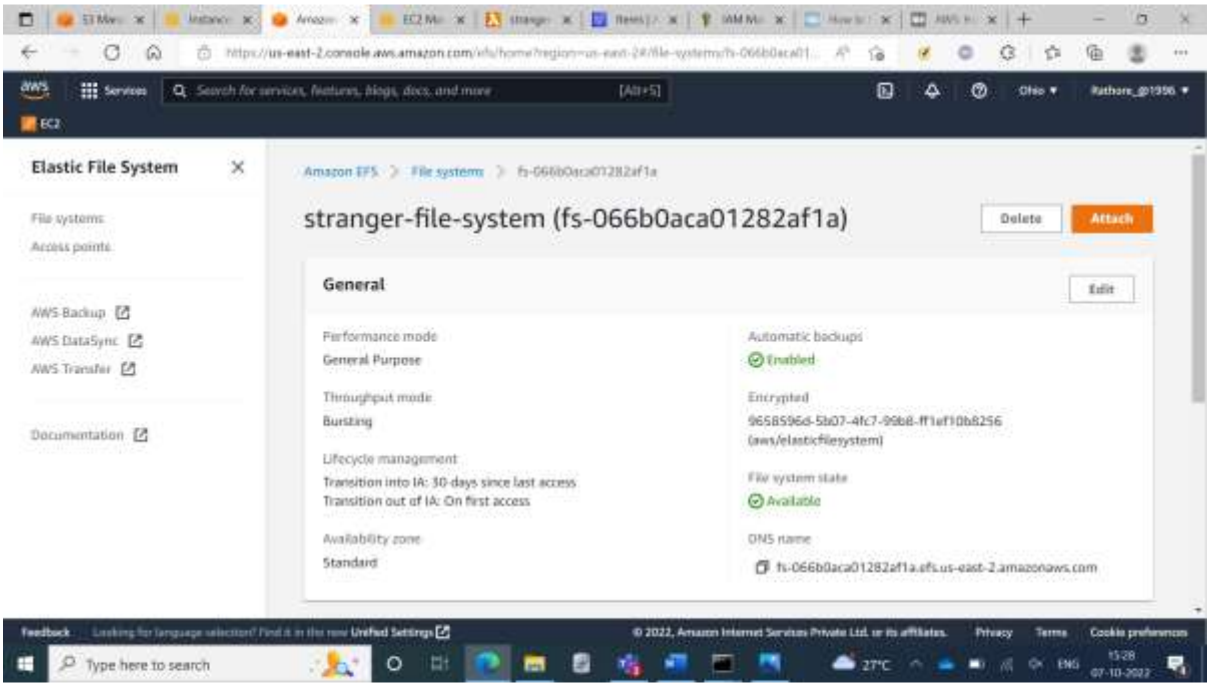
Step 40: Created EFS (Elastic File System)



Amazon EFS > File systems > fs-066b0aca01282af1a

stranger-file-system (fs-066b0aca01282af1a)

General

Performance mode	Automatic backups
General Purpose	Enabled
Throughput mode	**Encrypted**
Bursting	9658596d-5b07-4fc7-99b8-ff1ef10b8256 (aws/elasticfilesystem)
Lifecycle management	**File system state**
Transition into IA: 30 days since last access Transition out of IA: On first access	Available
Availability zone	**DNS name**
Standard	fs-066b0aca01282af1a.efs.us-east-2.amazonaws.com

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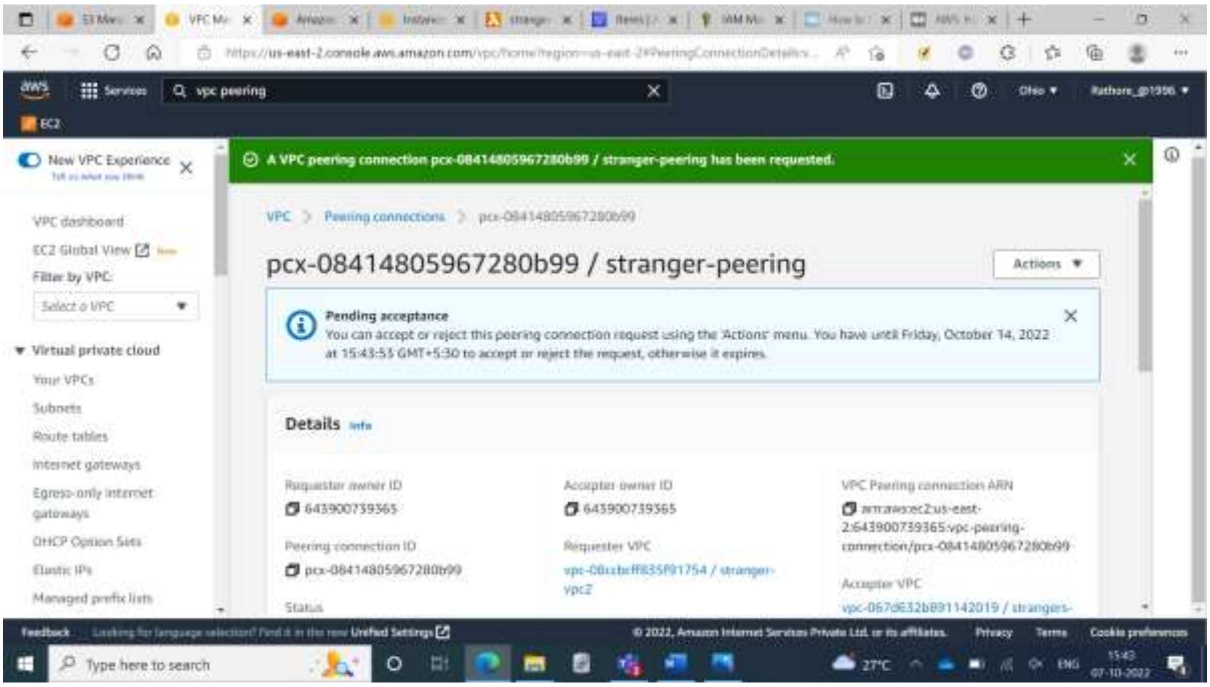
Step 41: Created peering between two VPC's i.e VPC1 & VPC2



A VPC peering connection pcx-08414805967280b99 / stranger-peering has been requested.

VPC > Peering connections > pcx-08414805967280b99

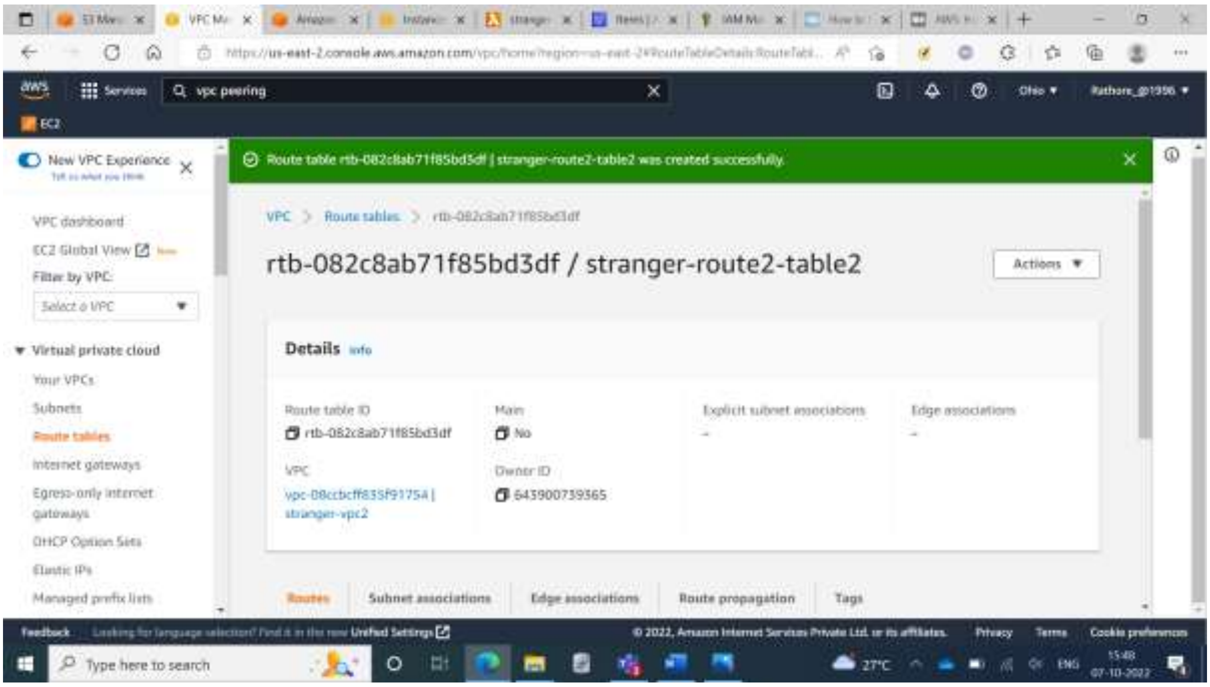
pcx-08414805967280b99 / stranger-peering

Pending acceptance
You can accept or reject this peering connection request using the 'Actions' menu. You have until Friday, October 14, 2022 at 15:43:53 GMT+5:30 to accept or reject the request, otherwise it expires.

Details

Requester owner ID: 643900739365
Accepter owner ID: 643900739365
VPC Peering connection ARN: arn:aws:ec2:us-east-2:643900739365:vpc-peering-connection/pcx-08414805967280b99
Peering connection ID: pcx-08414805967280b99
Requester VPC: vpc-08ccbcff835f91754 / stranger-vpc2
Accepter VPC: vpc-067d632b891142019 / strangers-
Status

Step 42: Created route table for VPC2



Route table rtb-082c8ab71f85bd3df | stranger-route2-table2 was created successfully.

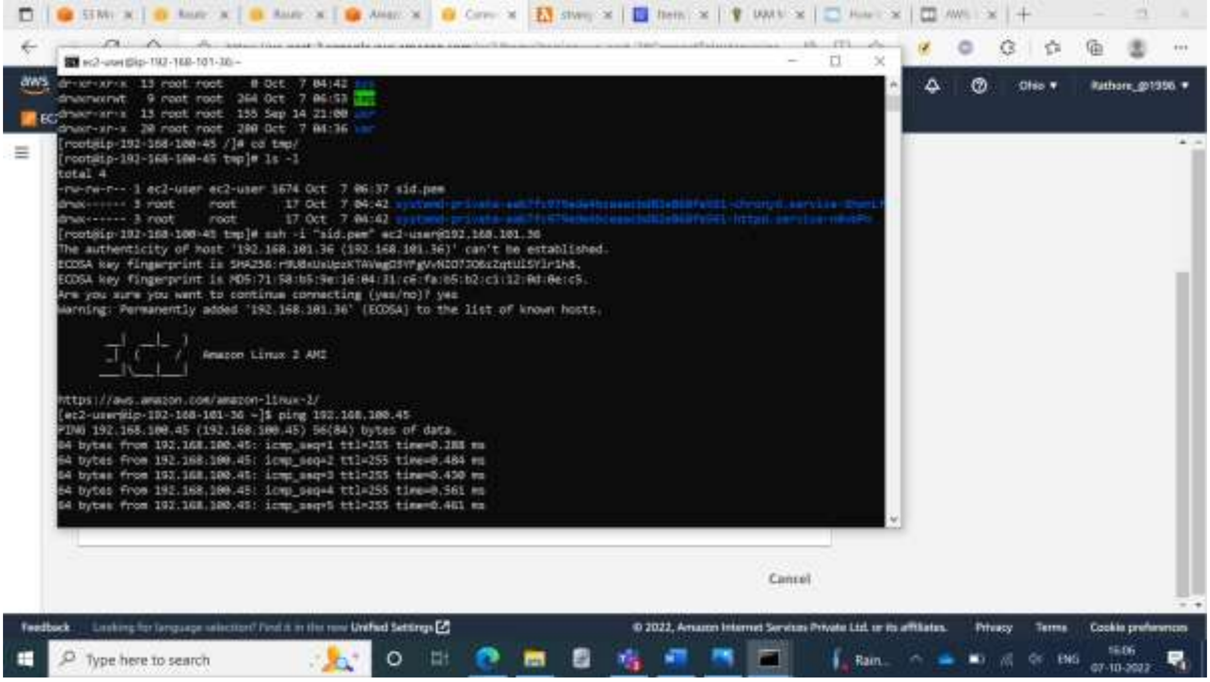
VPC > Route tables > rtb-082c8ab71f85bd3df

rtb-082c8ab71f85bd3df / stranger-route2-table2

Details

Route table ID: rtb-082c8ab71f85bd3df
Main: No
Explicit subnet associations: –
Edge associations: –
VPC: vpc-08ccbcff835f91754 | stranger-vpc2
Owner ID: 643900739365

Step 43: Pinging the VPC2's private EC2 Instance to VPC1's EC2 Instance



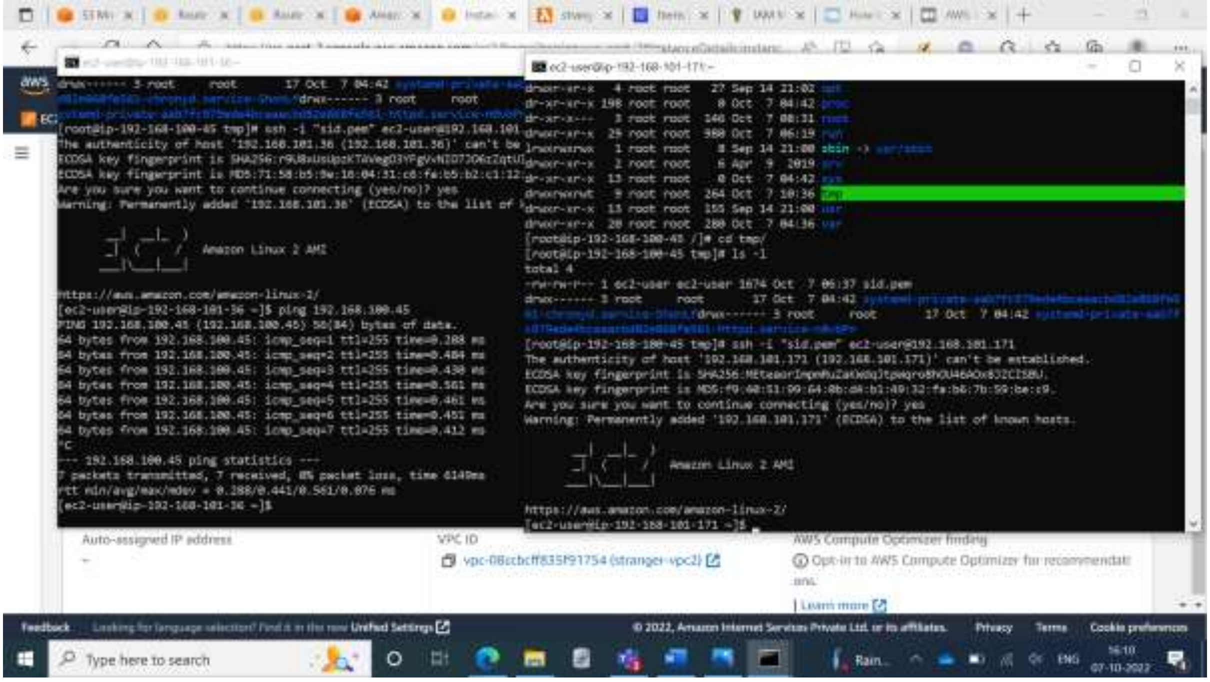
```
dr-xr-xr-x  13 root root    0 Oct  7 04:42 sys
drwxrwxrwt   9 root root  264 Oct  7 06:53 tmp
drwxr-xr-x  13 root root  155 Sep 14 21:00 usr
drwxr-xr-x  20 root root  280 Oct  7 04:36 var
[root@ip-192-168-100-45 /]# cd tmp/
[root@ip-192-168-100-45 tmp]# ls -l
total 4
-rw-rw-r-- 1 ec2-user ec2-user 1674 Oct  7 06:37 sid.pem
drwx------ 3 root     root       17 Oct  7 04:42 systemd-private-[illegible]-chronyd.service-[illegible]
drwx------ 3 root     root       17 Oct  7 04:42 systemd-private-[illegible]-httpd.service-[illegible]
[root@ip-192-168-100-45 tmp]# ssh -i "sid.pem" ec2-user@192.168.101.36
The authenticity of host '192.168.101.36 (192.168.101.36)' can't be established.
ECDSA key fingerprint is SHA256:r9U8xUsUpzKTAVegD3YFgVvNIO7JO6zZqtUlSYlr1h8.
ECDSA key fingerprint is MD5:71:58:b5:9e:16:04:31:c6:fa:b5:b2:c1:12:0d:0e:c5.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '192.168.101.36' (ECDSA) to the list of known hosts.

       __|  __|_  )
       _|  (     /   Amazon Linux 2 AMI
      ___|\___|___|

https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-192-168-101-36 ~]$ ping 192.168.100.45
PING 192.168.100.45 (192.168.100.45) 56(84) bytes of data.
64 bytes from 192.168.100.45: icmp_seq=1 ttl=255 time=0.288 ms
64 bytes from 192.168.100.45: icmp_seq=2 ttl=255 time=0.484 ms
64 bytes from 192.168.100.45: icmp_seq=3 ttl=255 time=0.430 ms
64 bytes from 192.168.100.45: icmp_seq=4 ttl=255 time=0.561 ms
64 bytes from 192.168.100.45: icmp_seq=5 ttl=255 time=0.461 ms
```

ec2-user@ip-192-168-101-36:~
Ohio ▾
Rathore_@1996 ▾
Cancel
Feedback
Looking for language selection? Find it in the new Unified Settings
© 2022, Amazon Internet Services Private Ltd. or its affiliates.
Privacy
Terms
Cookie preferences
Type here to search
Rain...
ENG
16:06
07-10-2022

Step 44: By Going inside of VPC1 EC2 Instance, connecting the VPC2 private EC2 Instance



```
drwx------ 3 root     root       17 Oct  7 04:42 systemd-private-[illegible]
[illegible]-chronyd.service-[illegible]drwx------ 3 root     root
systemd-private-[illegible]-httpd.service-[illegible]
[root@ip-192-168-100-45 tmp]# ssh -i "sid.pem" ec2-user@192.168.101
The authenticity of host '192.168.101.36 (192.168.101.36)' can't be
ECDSA key fingerprint is SHA256:r9U8xUsUpzKTAVegD3YFgVvNIO7JO6zZqtUl
ECDSA key fingerprint is MD5:71:58:b5:9e:16:04:31:c6:fa:b5:b2:c1:12:
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '192.168.101.36' (ECDSA) to the list of

       __|  __|_  )
       _|  (     /   Amazon Linux 2 AMI
      ___|\___|___|

https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-192-168-101-36 ~]$ ping 192.168.100.45
PING 192.168.100.45 (192.168.100.45) 56(84) bytes of data.
64 bytes from 192.168.100.45: icmp_seq=1 ttl=255 time=0.288 ms
64 bytes from 192.168.100.45: icmp_seq=2 ttl=255 time=0.484 ms
64 bytes from 192.168.100.45: icmp_seq=3 ttl=255 time=0.430 ms
64 bytes from 192.168.100.45: icmp_seq=4 ttl=255 time=0.561 ms
64 bytes from 192.168.100.45: icmp_seq=5 ttl=255 time=0.461 ms
64 bytes from 192.168.100.45: icmp_seq=6 ttl=255 time=0.451 ms
64 bytes from 192.168.100.45: icmp_seq=7 ttl=255 time=0.412 ms
^C
--- 192.168.100.45 ping statistics ---
7 packets transmitted, 7 received, 0% packet loss, time 6149ms
rtt min/avg/max/mdev = 0.288/0.441/0.561/0.076 ms
[ec2-user@ip-192-168-101-36 ~]$
```

```
drwxr-xr-x   4 root root   27 Sep 14 21:02 opt
dr-xr-xr-x 198 root root    0 Oct  7 04:42 proc
dr-xr-x---   3 root root  146 Oct  7 08:31 root
drwxr-xr-x  29 root root  980 Oct  7 06:19 run
lrwxrwxrwx   1 root root    8 Sep 14 21:00 sbin -> usr/sbin
drwxr-xr-x   2 root root    6 Apr  9  2019 srv
dr-xr-xr-x  13 root root    0 Oct  7 04:42 sys
drwxrwxrwt   9 root root  264 Oct  7 10:36 tmp
drwxr-xr-x  13 root root  155 Sep 14 21:00 usr
drwxr-xr-x  20 root root  280 Oct  7 04:36 var
[root@ip-192-168-100-45 /]# cd tmp/
[root@ip-192-168-100-45 tmp]# ls -l
total 4
-rw-rw-r-- 1 ec2-user ec2-user 1674 Oct  7 06:37 sid.pem
drwx------ 3 root     root       17 Oct  7 04:42 systemd-private-[illegible]
[illegible]-chronyd.service-[illegible]drwx------ 3 root     root       17 Oct  7 04:42 systemd-private-[illegible]
[illegible]-httpd.service-[illegible]
[root@ip-192-168-100-45 tmp]# ssh -i "sid.pem" ec2-user@192.168.101.171
The authenticity of host '192.168.101.171 (192.168.101.171)' can't be established.
ECDSA key fingerprint is SHA256:MEteaorImpmRuZaKWdqJtpWqroBhOU46AOx8J2CISBU.
ECDSA key fingerprint is MD5:f9:40:51:99:64:0b:d4:b1:49:32:fa:b6:7b:59:be:c9.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '192.168.101.171' (ECDSA) to the list of known hosts.

       __|  __|_  )
       _|  (     /   Amazon Linux 2 AMI
      ___|\___|___|

https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-192-168-101-171 ~]$
```

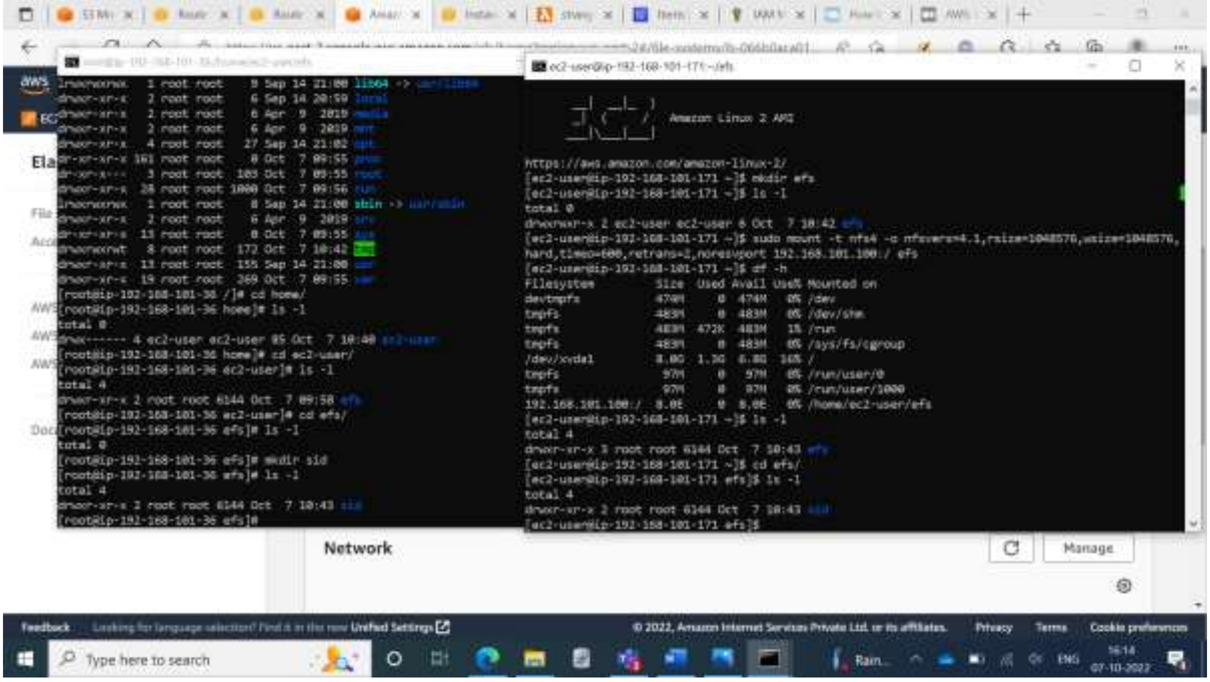
Auto-assigned IP address
–

VPC ID
vpc-08ccbcff835f91754 (stranger-vpc2)

AWS Compute Optimizer finding
Opt-in to AWS Compute Optimizer for recommendations.
Learn more

ec2-user@ip-192-168-101-171:~
Feedback
Looking for language selection? Find it in the new Unified Settings
© 2022, Amazon Internet Services Private Ltd. or its affiliates.
Privacy
Terms
Cookie preferences
Type here to search
Rain...
ENG
16:10
07-10-2022

Step 45: Copied the .pem file



```
lrwxrwxrwx   1 root root    9 Sep 14 21:00 lib64 -> usr/lib64
drwxr-xr-x   2 root root    6 Sep 14 20:59 local
drwxr-xr-x   2 root root    6 Apr  9  2019 media
drwxr-xr-x   2 root root    6 Apr  9  2019 mnt
drwxr-xr-x   4 root root   27 Sep 14 21:02 opt
dr-xr-xr-x 161 root root    0 Oct  7 09:55 proc
dr-xr-x---   3 root root  103 Oct  7 09:55 root
drwxr-xr-x  28 root root 1000 Oct  7 09:56 run
lrwxrwxrwx   1 root root    8 Sep 14 21:00 sbin -> usr/sbin
drwxr-xr-x   2 root root    6 Apr  9  2019 srv
dr-xr-xr-x  13 root root    0 Oct  7 09:55 sys
drwxrwxrwt   8 root root  172 Oct  7 10:42 tmp
drwxr-xr-x  13 root root  155 Sep 14 21:00 usr
drwxr-xr-x  19 root root  269 Oct  7 09:55 var
[root@ip-192-168-101-36 /]# cd home/
[root@ip-192-168-101-36 home]# ls -l
total 0
drwx------ 4 ec2-user ec2-user 85 Oct  7 10:40 ec2-user
[root@ip-192-168-101-36 home]# cd ec2-user/
[root@ip-192-168-101-36 ec2-user]# ls -l
total 4
drwxr-xr-x 2 root root 6144 Oct  7 09:58 efs
[root@ip-192-168-101-36 ec2-user]# cd efs/
[root@ip-192-168-101-36 efs]# ls -l
total 0
[root@ip-192-168-101-36 efs]# mkdir sid
[root@ip-192-168-101-36 efs]# ls -l
total 4
drwxr-xr-x 2 root root 6144 Oct  7 10:43 sid
[root@ip-192-168-101-36 efs]#
```

ec2-user@ip-192-168-101-171:~/efs

```
       __|  __|_  )
       _|  (     /   Amazon Linux 2 AMI
      ___|\___|___|

https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-192-168-101-171 ~]$ mkdir efs
[ec2-user@ip-192-168-101-171 ~]$ ls -l
total 0
drwxrwxr-x 2 ec2-user ec2-user 6 Oct  7 10:42 efs
[ec2-user@ip-192-168-101-171 ~]$ sudo mount -t nfs4 -o nfsvers=4.1,rsize=1048576,wsize=1048576,
hard,timeo=600,retrans=2,noresvport 192.168.101.100:/ efs
[ec2-user@ip-192-168-101-171 ~]$ df -h
Filesystem         Size  Used Avail Use% Mounted on
devtmpfs           474M     0  474M   0% /dev
tmpfs              483M     0  483M   0% /dev/shm
tmpfs              483M  472K  483M   1% /run
tmpfs              483M     0  483M   0% /sys/fs/cgroup
/dev/xvda1         8.0G  1.3G  6.8G  16% /
tmpfs               97M     0   97M   0% /run/user/0
tmpfs               97M     0   97M   0% /run/user/1000
192.168.101.100:/  8.0E     0  8.0E   0% /home/ec2-user/efs
[ec2-user@ip-192-168-101-171 ~]$ ls -l
total 4
drwxr-xr-x 3 root root 6144 Oct  7 10:43 efs
[ec2-user@ip-192-168-101-171 ~]$ cd efs/
[ec2-user@ip-192-168-101-171 efs]$ ls -l
total 4
drwxr-xr-x 2 root root 6144 Oct  7 10:43 sid
[ec2-user@ip-192-168-101-171 efs]$
```

Network
Manage
Feedback
Looking for language selection? Find it in the new Unified Settings
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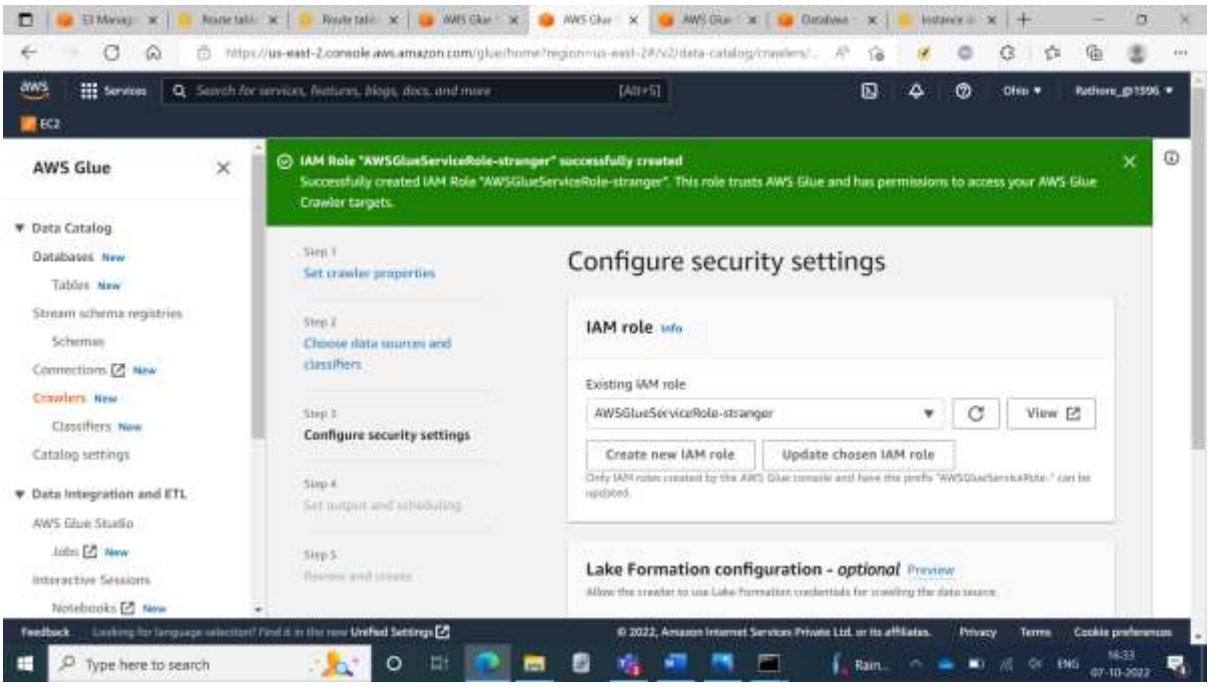
Terms
Cookie preferences
Type here to search
Rain...
ENG
16:14
07-10-2022

Glue with Athena

Step 1: Creating Crawlers



IAM Role "AWSGlueServiceRole-stranger" successfully created

Successfully created IAM Role "AWSGlueServiceRole-stranger". This role trusts AWS Glue and has permissions to access your AWS Glue Crawler targets.

Step 1 Set crawler properties

Step 2 Choose data sources and classifiers

Step 3 Configure security settings

Step 4 Set output and scheduling

Step 5 Review and create

Configure security settings

IAM role Info

Existing IAM role: AWSGlueServiceRole-stranger

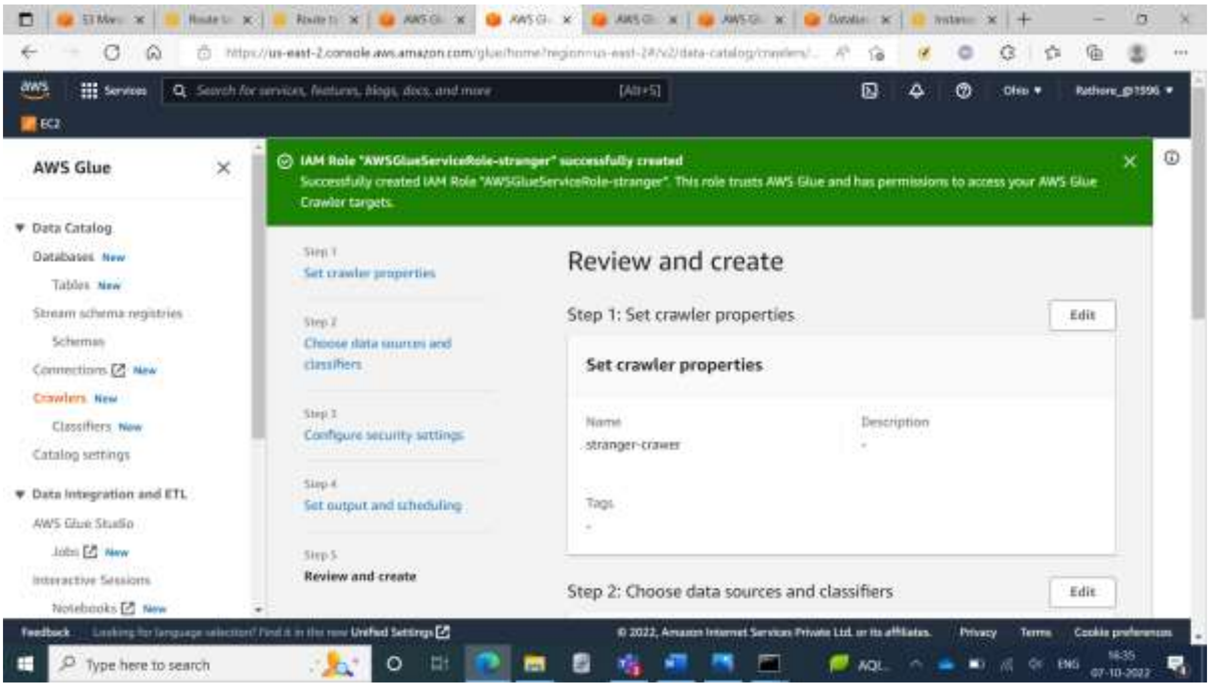
Create new IAM role | Update chosen IAM role

Only IAM roles created by the AWS Glue console and have the prefix "AWSGlueServiceRole-" can be updated.

Lake Formation configuration - *optional* Preview

Allow the crawler to use Lake Formation credentials for crawling the data source.

Creating Crawlers



IAM Role "AWSGlueServiceRole-stranger" successfully created

Successfully created IAM Role "AWSGlueServiceRole-stranger". This role trusts AWS Glue and has permissions to access your AWS Glue Crawler targets.

Step 1 Set crawler properties

Step 2 Choose data sources and classifiers

Step 3 Configure security settings

Step 4 Set output and scheduling

Step 5 Review and create

Review and create

Step 1: Set crawler properties — Edit

Set crawler properties

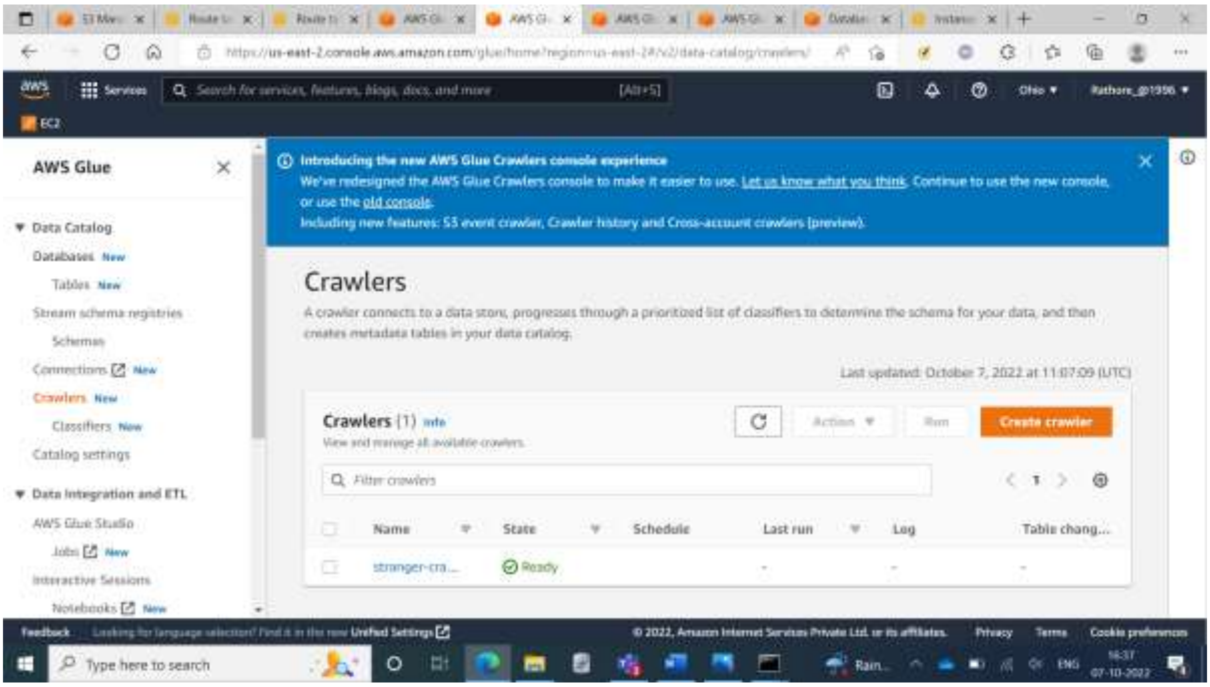
Name: stranger-crawer

Description: -

Tags: -

Step 2: Choose data sources and classifiers — Edit

Step 2: Created crawlers



Introducing the new AWS Glue Crawlers console experience

We've redesigned the AWS Glue Crawlers console to make it easier to use. Let us know what you think. Continue to use the new console, or use the old console.

Including new features: S3 event crawler, Crawler history and Cross-account crawlers (preview).

Crawlers

A crawler connects to a data store, progresses through a prioritized list of classifiers to determine the schema for your data, and then creates metadata tables in your data catalog.

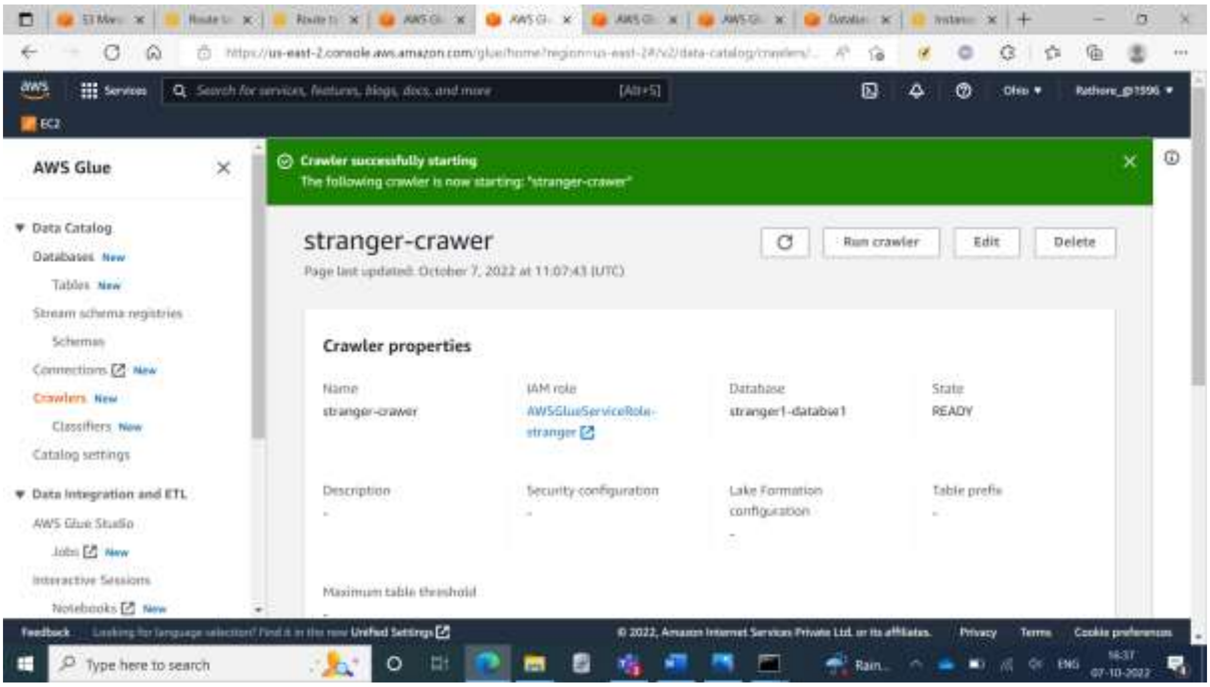
Last updated: October 7, 2022 at 11:07:09 (UTC)

Crawlers (1) Info

View and manage all available crawlers.

Name	State	Schedule	Last run	Log	Table chang...
stranger-cra...	Ready		-	-	-

Step 3: Showing the description of crawlers



Crawler successfully starting

The following crawler is now starting: "stranger-crawer"

stranger-crawer

Page last updated: October 7, 2022 at 11:07:43 (UTC)

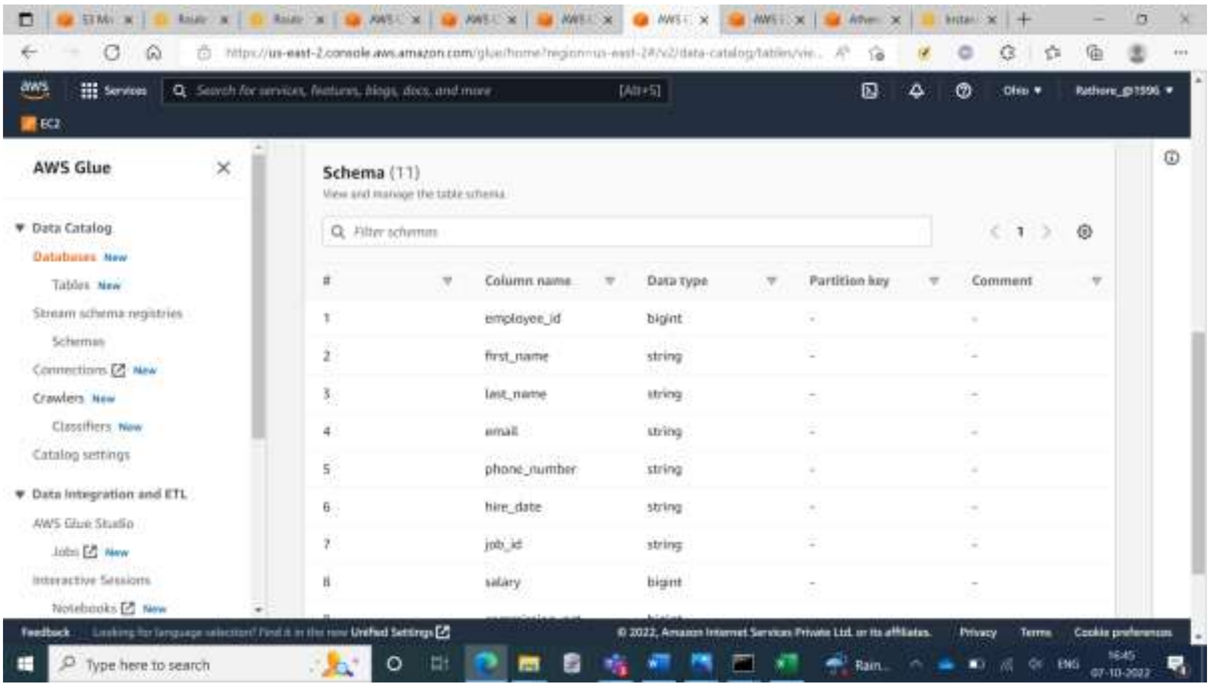
Crawler properties

Name	IAM role	Database	State
stranger-crawer	AWSGlueServiceRole-stranger	stranger1-databse1	READY

Description	Security configuration	Lake Formation configuration	Table prefix
-	-	-	-

Maximum table threshold

Step 4: Editing the schema

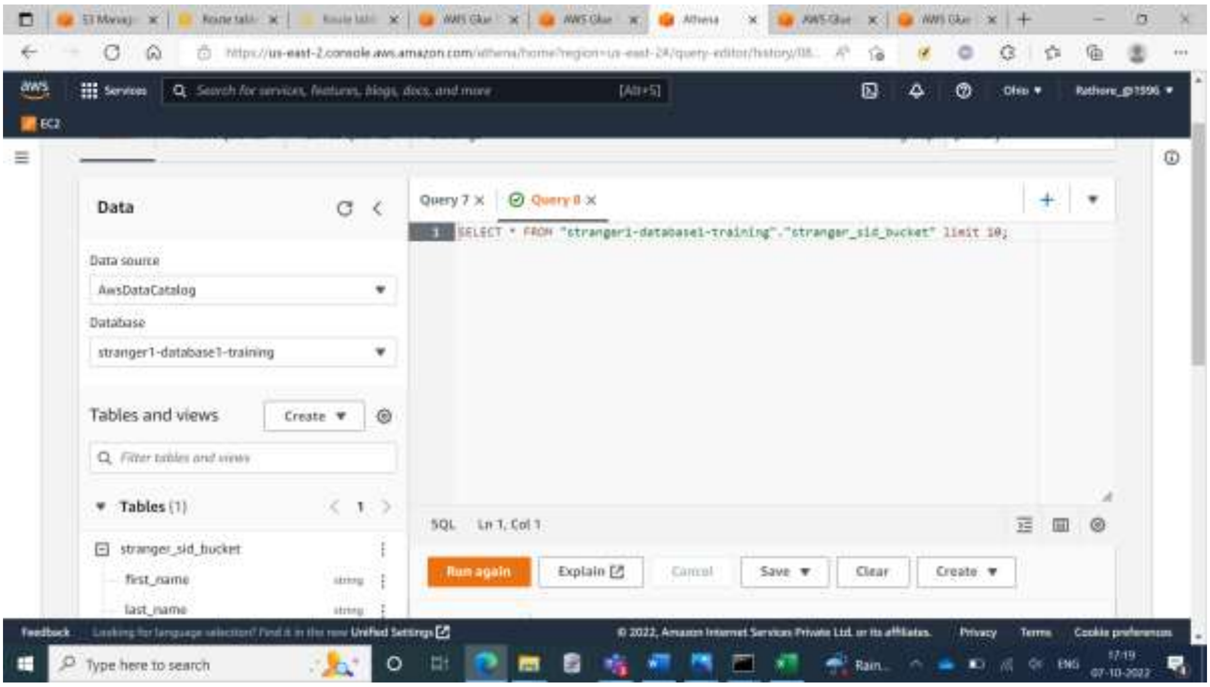


Schema (11)

View and manage the table schema

#	Column name	Data type	Partition key	Comment
1	employee_id	bigint	-	-
2	first_name	string	-	-
3	last_name	string	-	-
4	email	string	-	-
5	phone_number	string	-	-
6	hire_date	string	-	-
7	job_id	string	-	-
8	salary	bigint	-	-

Step 5: Executing the Query in Athena



```
SELECT * FROM "stranger1-database1-training"."stranger_sid_bucket" limit 10;
```

Data source: AwsDataCatalog

Database: stranger1-database1-training

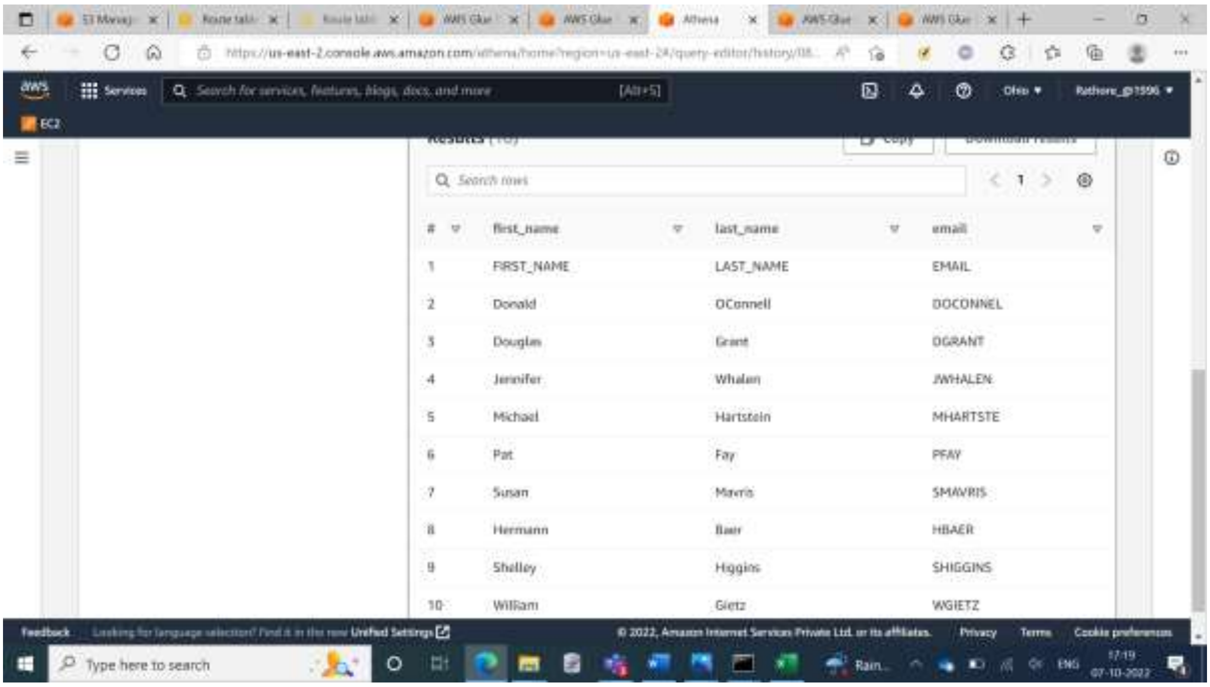
Tables (1)

⊟ stranger_sid_bucket

first_name string

last_name string

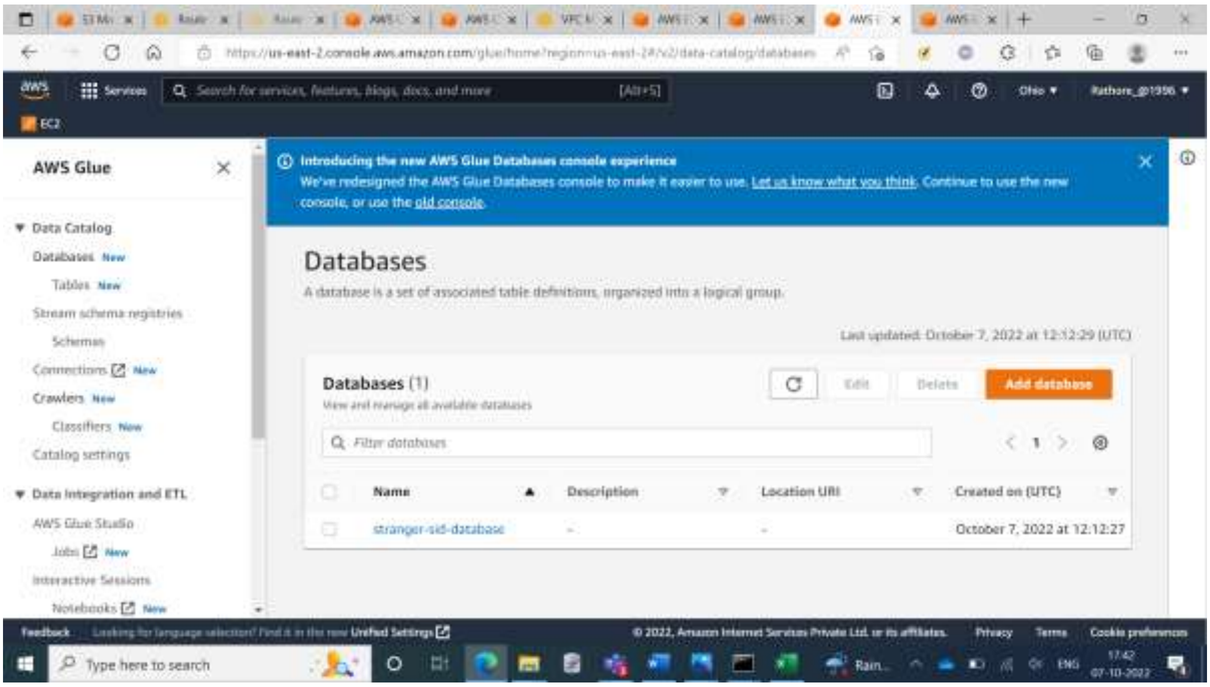
Step 6: Showing the results



#	first_name	last_name	email
1	FIRST_NAME	LAST_NAME	EMAIL
2	Donald	OConnell	DOCONNEL
3	Douglas	Grant	DGRANT
4	Jennifer	Whalen	JWHALEN
5	Michael	Hartstein	MHARTSTE
6	Pat	Fay	PFAY
7	Susan	Mavris	SMAVRIS
8	Hermann	Baer	HBAER
9	Shelley	Higgins	SHIGGINS
10	William	Gietz	WGIETZ

Glue with Redshift

Step 1: Creating Database



Introducing the new AWS Glue Databases console experience

We've redesigned the AWS Glue Databases console to make it easier to use. Let us know what you think. Continue to use the new console, or use the old console.

Databases

A database is a set of associated table definitions, organized into a logical group.

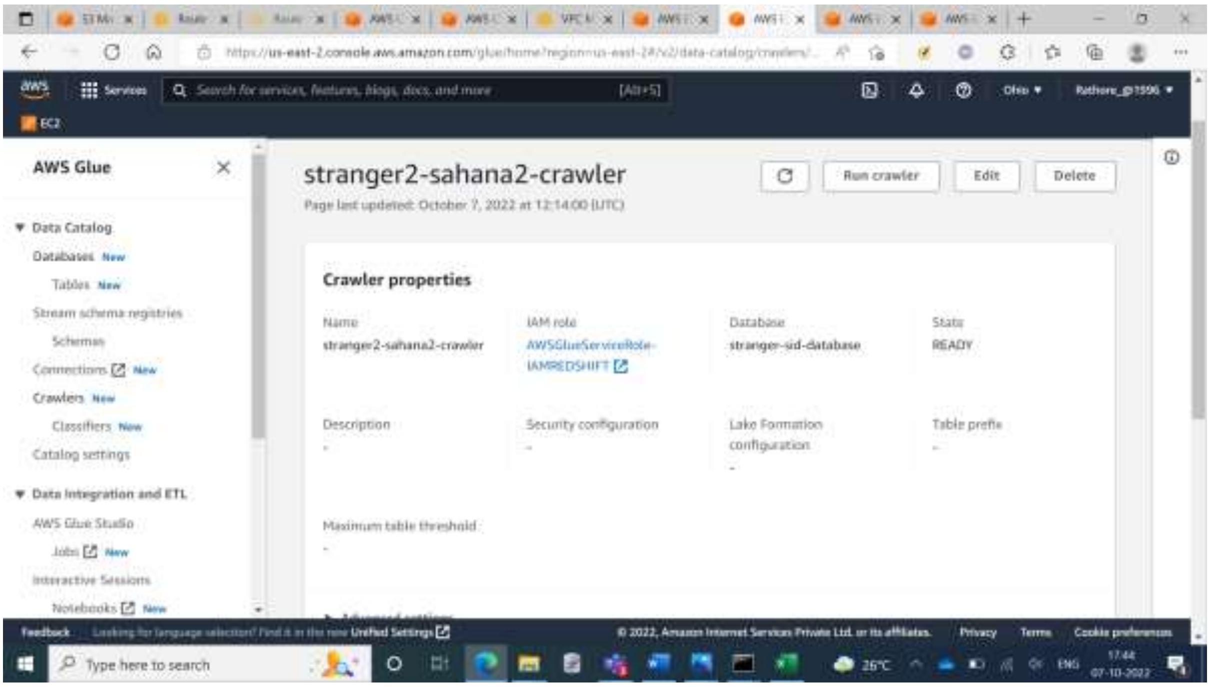
Last updated: October 7, 2022 at 12:12:29 (UTC)

Databases (1)

View and manage all available databases

Name	Description	Location URI	Created on (UTC)
stranger-sid-database	-	-	October 7, 2022 at 12:12:27

Step 2: Created Crawlers



stranger2-sahana2-crawler

Page last updated: October 7, 2022 at 12:14:00 (UTC)

Crawler properties

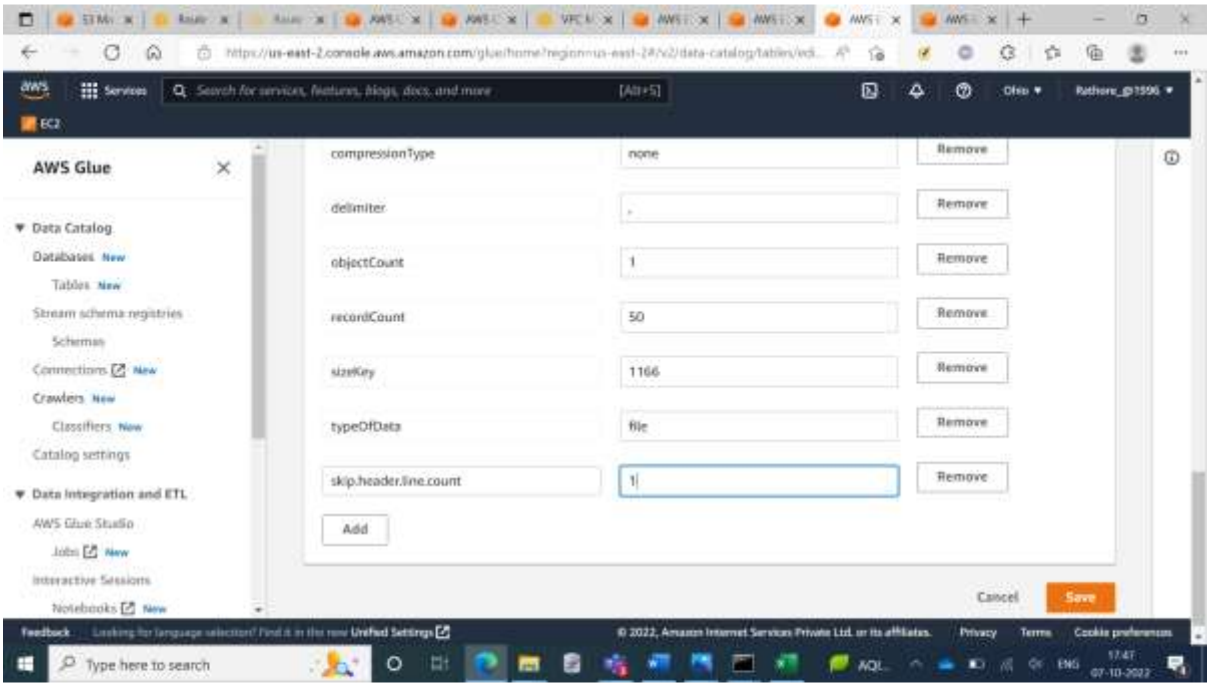
Name	IAM role	Database	State
stranger2-sahana2-crawler	AWSGlueServiceRole-IAMREDSHIFT	stranger-sid-database	READY

Description	Security configuration	Lake Formation configuration	Table prefix
-	-	-	-

Maximum table threshold

-

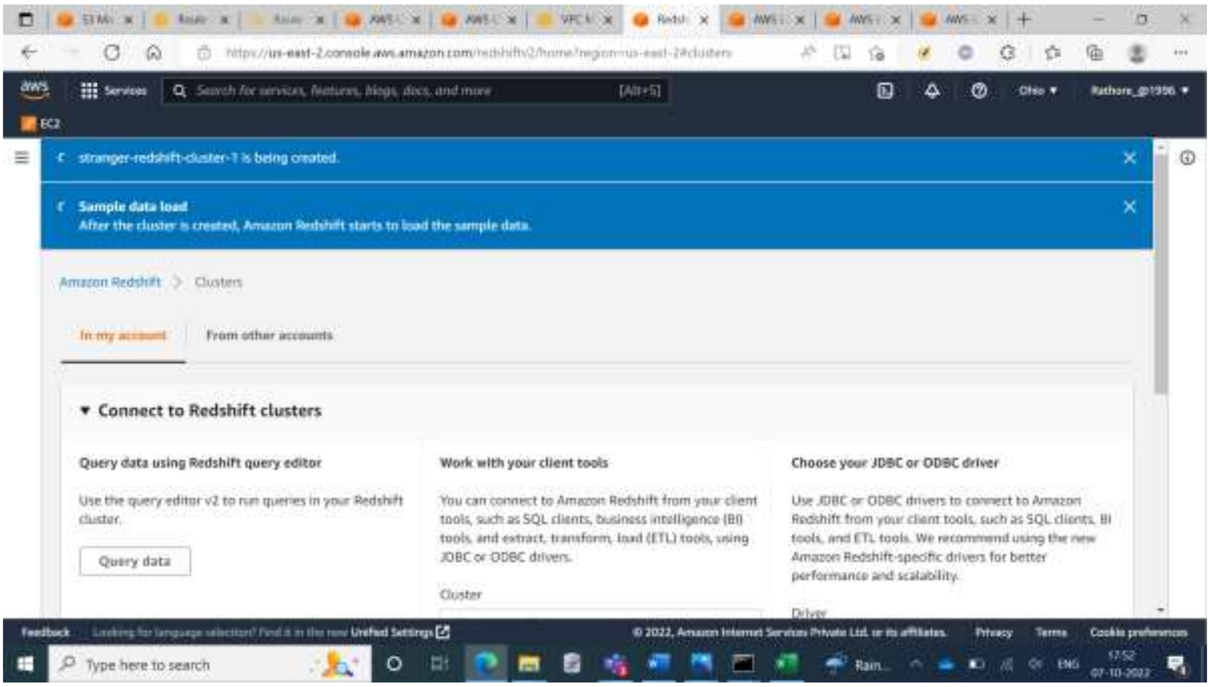
Step 3: Editing the table Configuration



https://us-east-2.console.aws.amazon.com/glue/home?region=us-east-2#/v2/data-catalog/tables/edi...

compressionType	none
delimiter	,
objectCount	1
recordCount	50
sizeKey	1166
typeOfData	file
skip.header.line.count	1

Step 4: Created Amazon Redshift Cluster



https://us-east-2.console.aws.amazon.com/redshiftv2/home?region=us-east-2#clusters

stranger-redshift-cluster-1 is being created.

Sample data load
After the cluster is created, Amazon Redshift starts to load the sample data.

Connect to Redshift clusters

Query data using Redshift query editor
Use the query editor v2 to run queries in your Redshift cluster.

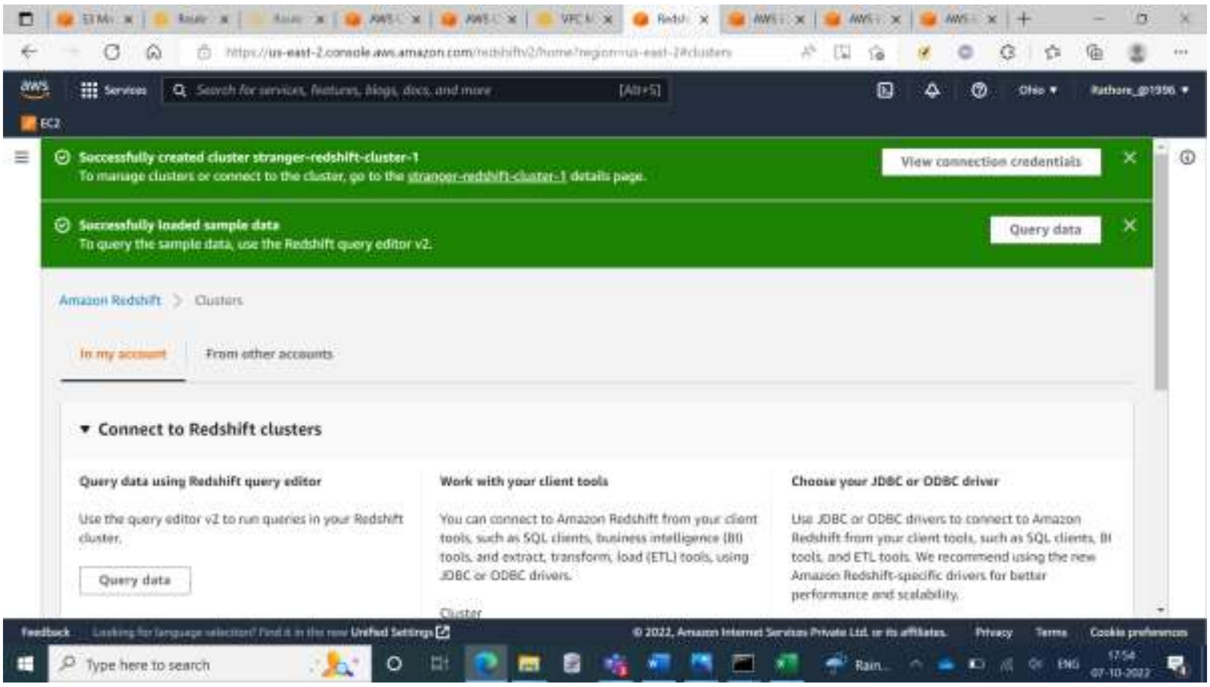
Work with your client tools
You can connect to Amazon Redshift from your client tools, such as SQL clients, business intelligence (BI) tools, and extract, transform, load (ETL) tools, using JDBC or ODBC drivers.

Cluster

Choose your JDBC or ODBC driver
Use JDBC or ODBC drivers to connect to Amazon Redshift from your client tools, such as SQL clients, BI tools, and ETL tools. We recommend using the new Amazon Redshift-specific drivers for better performance and scalability.

Driver

Step 5: Created Clusters



Successfully created cluster stranger-redshift-cluster-1
To manage clusters or connect to the cluster, go to the stranger-redshift-cluster-1 details page.

Successfully loaded sample data
To query the sample data, use the Redshift query editor v2.

Amazon Redshift > Clusters

In my account | From other accounts

Connect to Redshift clusters

Query data using Redshift query editor

Use the query editor v2 to run queries in your Redshift cluster.

Work with your client tools

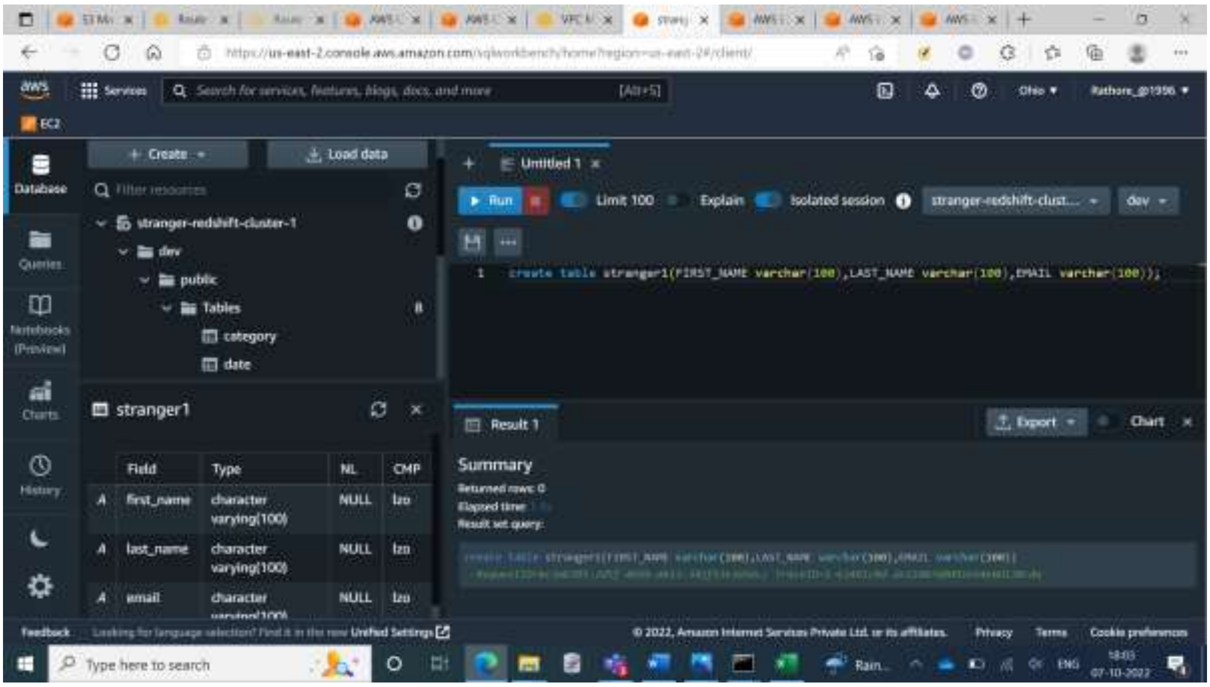
You can connect to Amazon Redshift from your client tools, such as SQL clients, business intelligence (BI) tools, and extract, transform, load (ETL) tools, using JDBC or ODBC drivers.

Choose your JDBC or ODBC driver

Use JDBC or ODBC drivers to connect to Amazon Redshift from your client tools, such as SQL clients, BI tools, and ETL tools. We recommend using the new Amazon Redshift-specific drivers for better performance and scalability.

View connection credentials
Query data
Query data
Cluster
https://us-east-2.console.aws.amazon.com/redshiftv2/home?region=us-east-2#clusters
Services
Search for services, features, blogs, docs, and more
[Alt+S]
Ohio
Rathore_@1996
EC2
Feedback
© 2022, Amazon Internet Services Private Ltd. or its affiliates.
Privacy
Terms
Cookie preferences
Type here to search
17:54
07-10-2022

Step 6: Executing the query in the redshift query editor



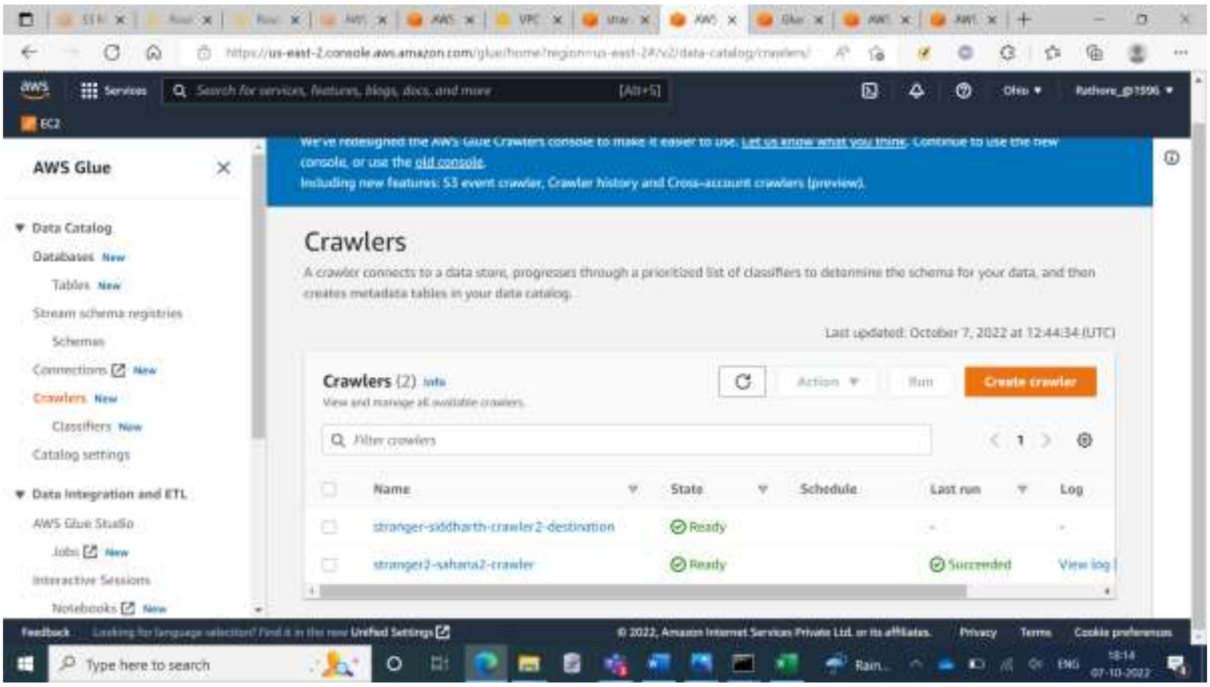
```
create table stranger1(FIRST_NAME varchar(100),LAST_NAME varchar(100),EMAIL varchar(100));
```

stranger1

	Field	Type	NL	CMP
A	first_name	character varying(100)	NULL	lzo
A	last_name	character varying(100)	NULL	lzo
A	email	character varying(100)	NULL	lzo

Summary
Returned rows: 0
Elapsed time:
Result set query:

Step 7: Created another crawler for the destination



We've redesigned the AWS Glue Crawlers console to make it easier to use. Let us know what you think. Continue to use the new console, or use the old console.
Including new features: S3 event crawler, Crawler history and Cross-account crawlers (preview).

Crawlers

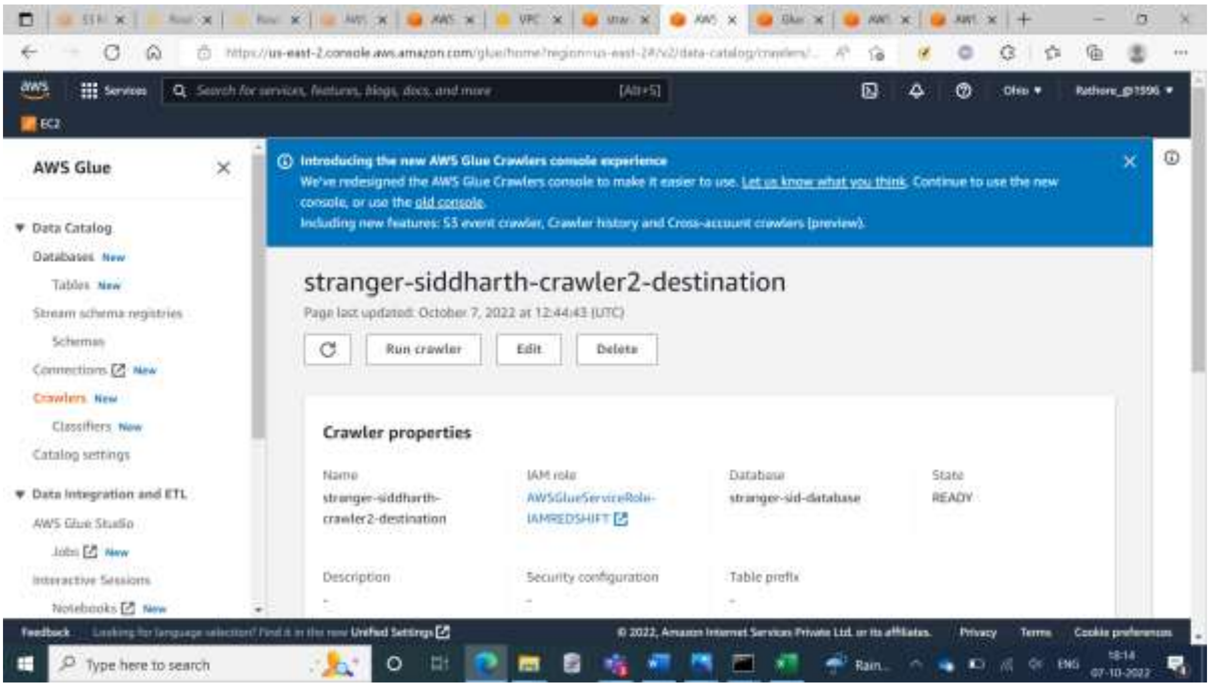
A crawler connects to a data store, progresses through a prioritized list of classifiers to determine the schema for your data, and then creates metadata tables in your data catalog.

Last updated: October 7, 2022 at 12:44:34 (UTC)

Crawlers (2) Info
View and manage all available crawlers.

Name	State	Schedule	Last run	Log
stranger-siddharth-crawler2-destination	Ready		-	-
stranger2-sahana2-crawler	Ready		Succeeded	View log

Step 8: Details of 2nd Crawler



Introducing the new AWS Glue Crawlers console experience
We've redesigned the AWS Glue Crawlers console to make it easier to use. Let us know what you think. Continue to use the new console, or use the old console.
Including new features: S3 event crawler, Crawler history and Cross-account crawlers (preview).

stranger-siddharth-crawler2-destination

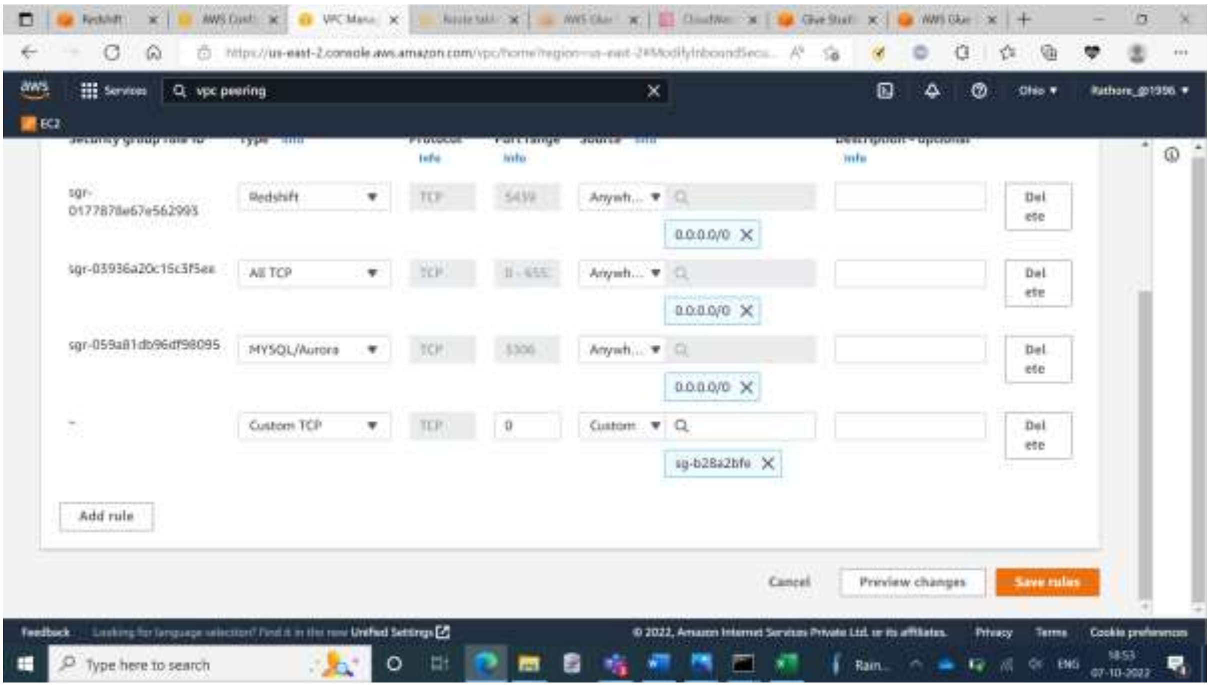
Page last updated: October 7, 2022 at 12:44:43 (UTC)

Crawler properties

Name	IAM role	Database	State
stranger-siddharth-crawler2-destination	AWSGlueServiceRole-IAMREDSHIFT	stranger-sid-database	READY

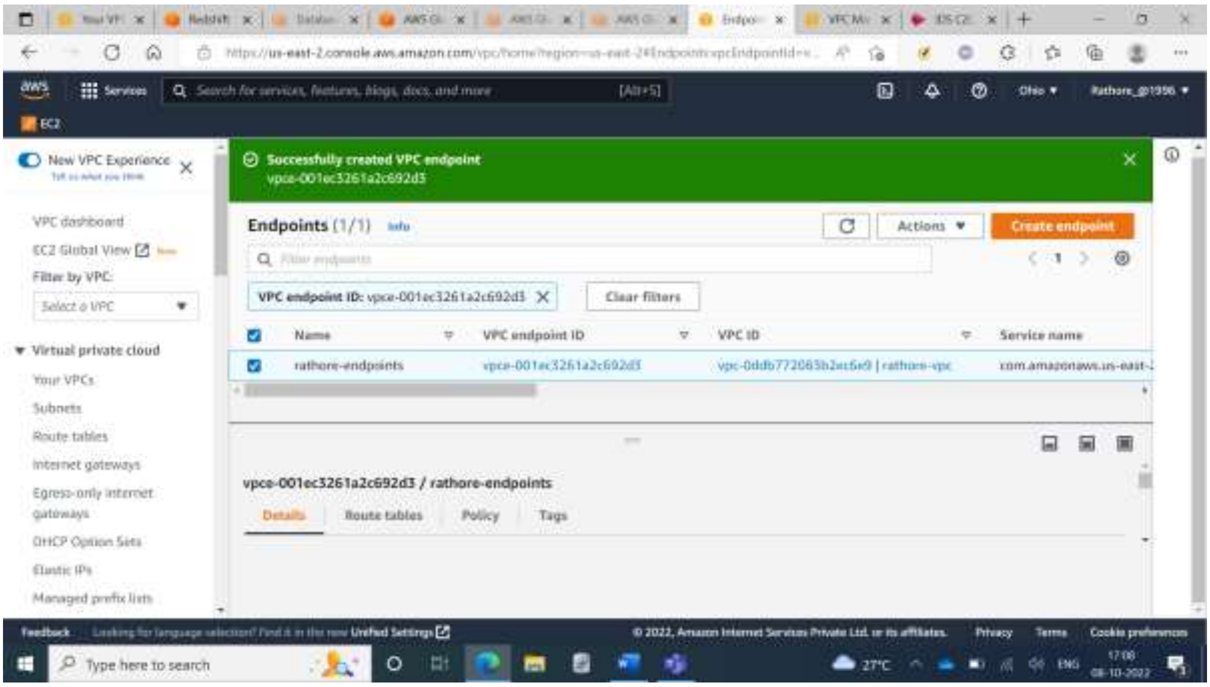
Description	Security configuration	Table prefix
-	-	-

Step 9: Updating the security group of VPC2



Security group rule ID	Type	Protocol	Port range	Source		Description - optional	
sgr-0177878e67e562993	Redshift	TCP	5439	Anywh...	0.0.0.0/0		Delete
sgr-03936a20c15c3f5ea	All TCP	TCP	0 - 655	Anywh...	0.0.0.0/0		Delete
sgr-059a81db96df98095	MYSQL/Aurora	TCP	3306	Anywh...	0.0.0.0/0		Delete
-	Custom TCP	TCP	0	Custom	sg-b28a2bfe		Delete

Step 10: Created Endpoints



Successfully created VPC endpoint
vpce-001ec3261a2c692d3

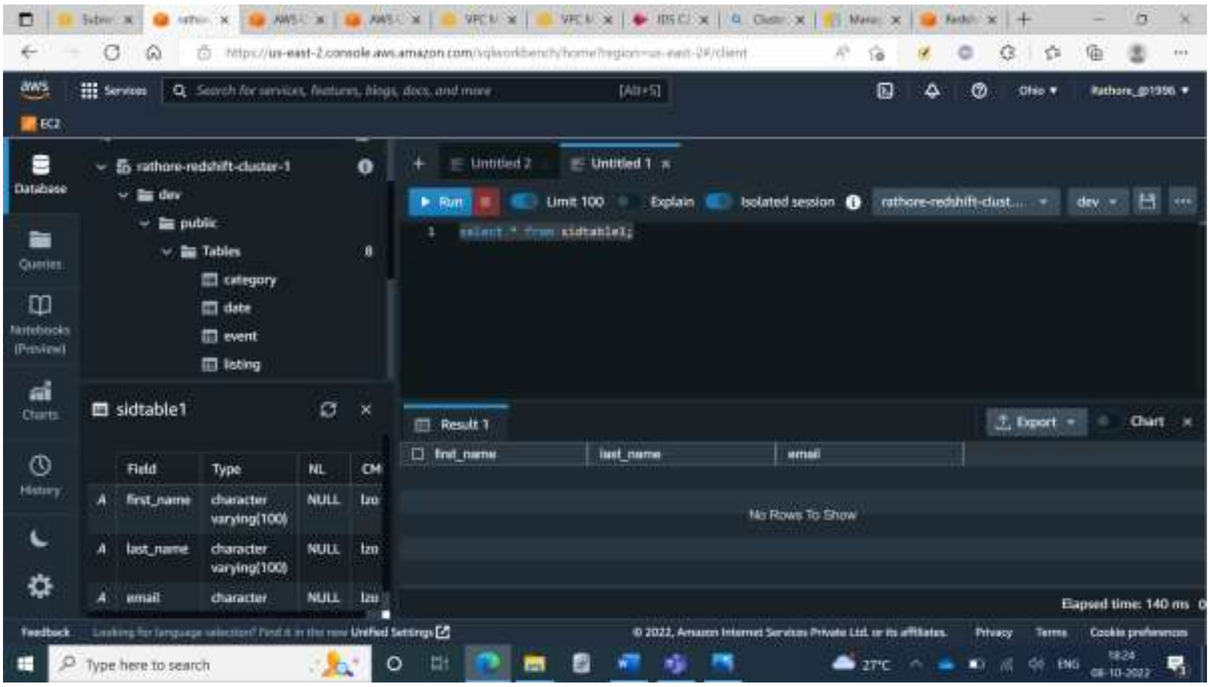
Endpoints (1/1)

VPC endpoint ID: vpce-001ec3261a2c692d3

Name	VPC endpoint ID	VPC ID	Service name
rathore-endpoints	vpce-001ec3261a2c692d3	vpc-0ddb772083b2ec6e9 | rathore-vpc	com.amazonaws.us-east-

vpce-001ec3261a2c692d3 / rathore-endpoints

Step 11: Executing the query in Amazon redshift query editor



```
select * from sidtable1;
```

Field	Type	NL
first_name	character varying(100)	NULL
last_name	character varying(100)	NULL
email	character	NULL

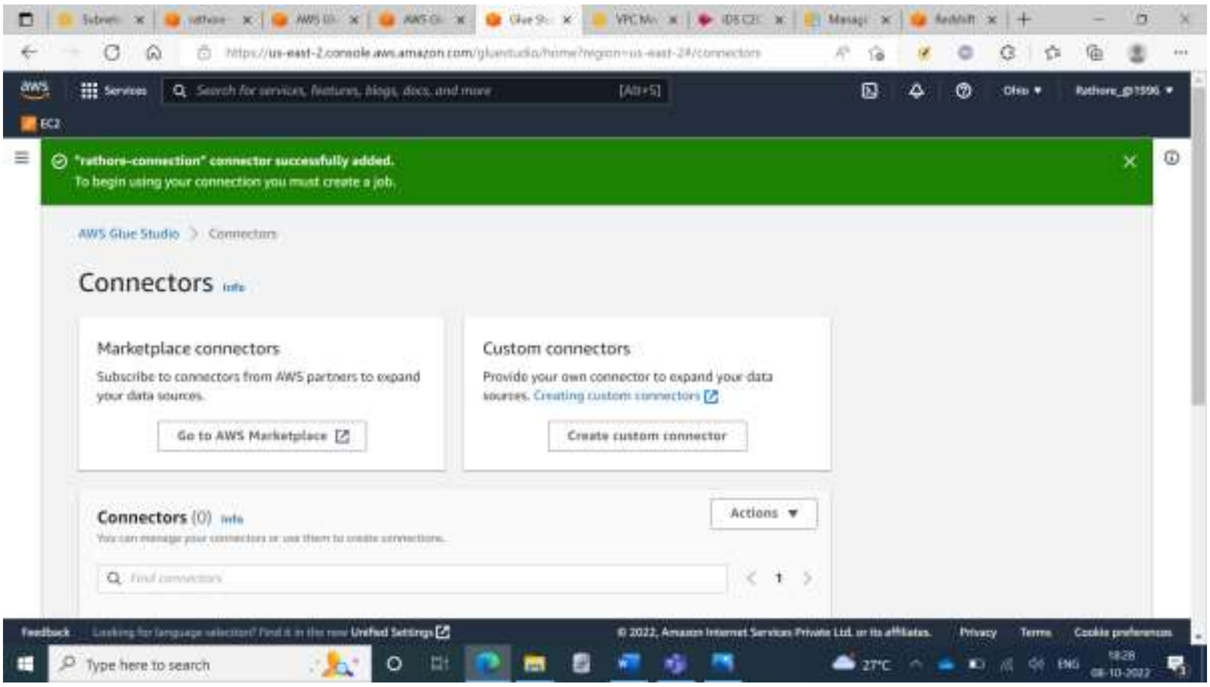
Result 1

first_name	last_name	email

No Rows To Show

Elapsed time: 140 ms

Step 12: Creating connectors



"rathore-connection" connector successfully added.
To begin using your connection you must create a job.

AWS Glue Studio > Connectors

Connectors Info

Marketplace connectors

Subscribe to connectors from AWS partners to expand your data sources.

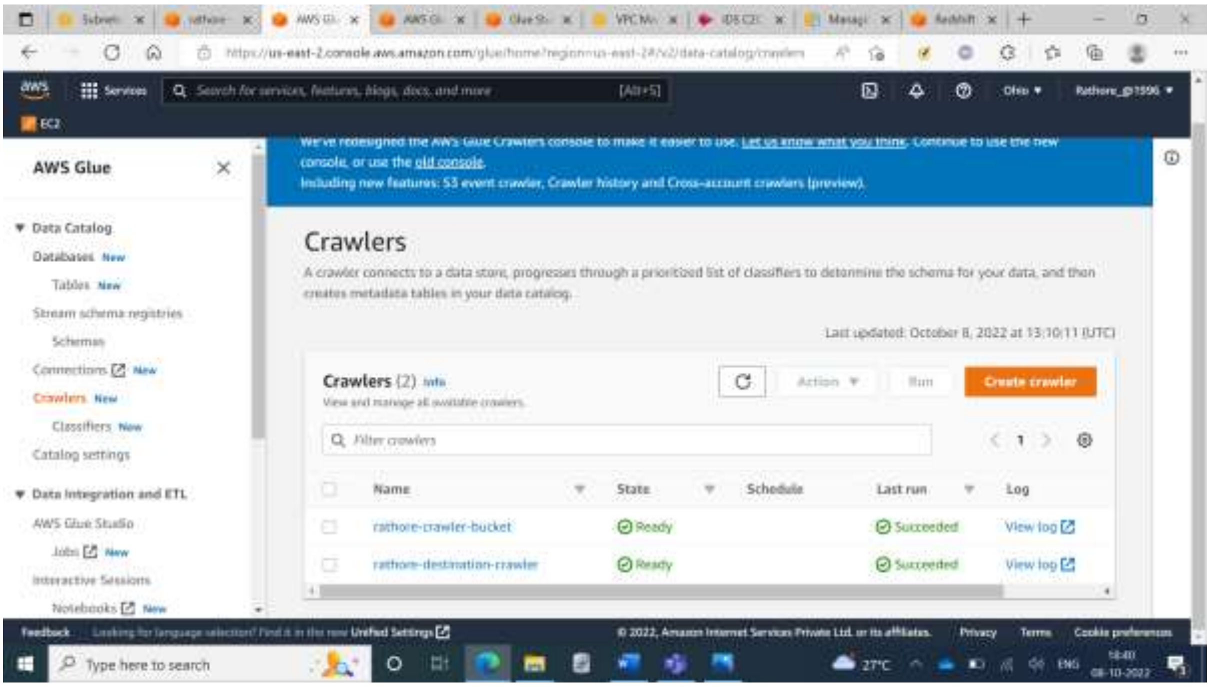
Custom connectors

Provide your own connector to expand your data sources. Creating custom connectors

Connectors (0) Info

You can manage your connectors or use them to create connections.

Step 13: Crawlers executed successfully



We've redesigned the AWS Glue Crawlers console to make it easier to use. Let us know what you think. Continue to use the new console, or use the old console.
Including new features: S3 event crawler, Crawler history and Cross-account crawlers (preview).

Crawlers

A crawler connects to a data store, progresses through a prioritized list of classifiers to determine the schema for your data, and then creates metadata tables in your data catalog.

Last updated: October 8, 2022 at 13:10:11 (UTC)

Crawlers (2) Info
View and manage all available crawlers.

Name	State	Schedule	Last run	Log
rathore-crawler-bucket	Ready		Succeeded	View log
rathore-destination-crawler	Ready		Succeeded	View log

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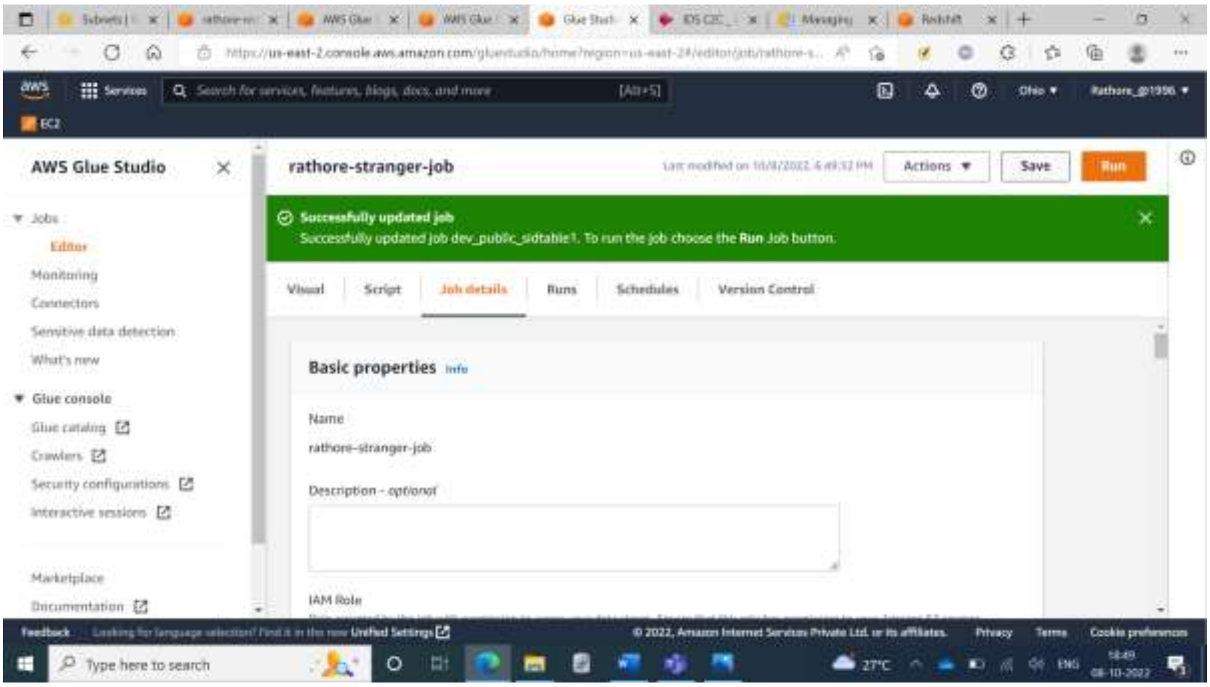
Step 14: Created Job



rathore-stranger-job

Last modified on 10/8/2022, 6:49:32 PM

Successfully updated job
Successfully updated job dev_public_sidtable1. To run the job choose the **Run** Job button.

Basic properties Info

Name
rathore-stranger-job

Description - *optional*

IAM Role

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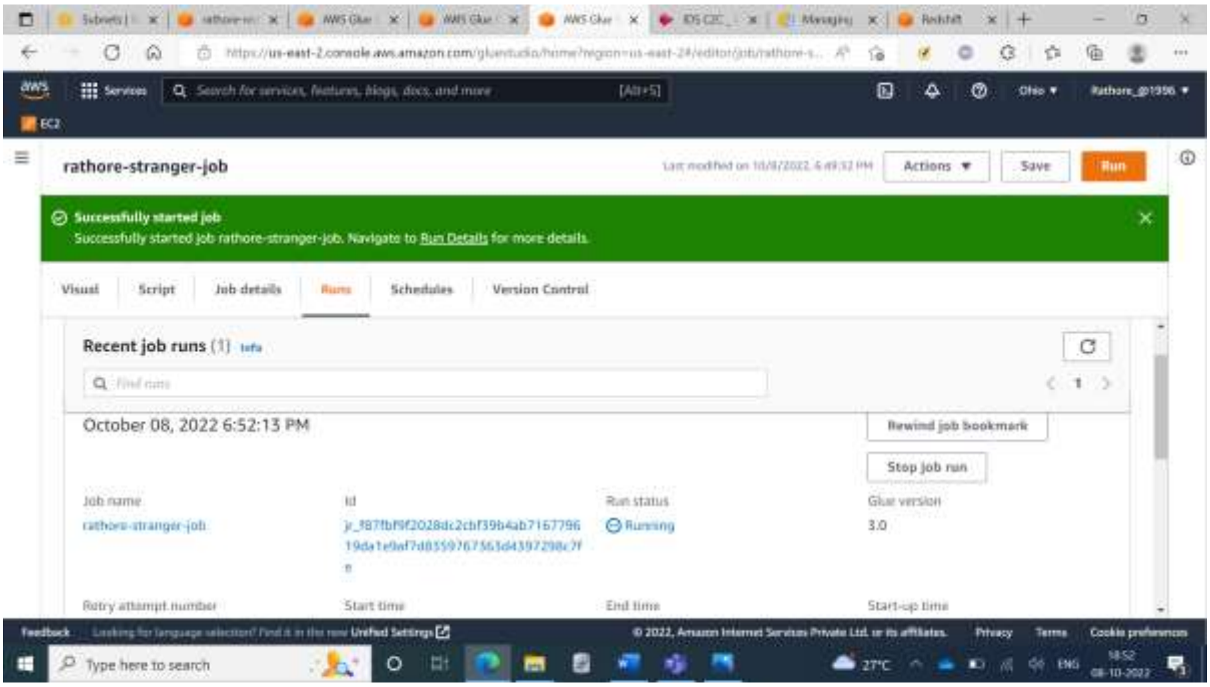
Step 15: Job Started



https://us-east-2.console.aws.amazon.com/gluestudio/home?region=us-east-2#/editor/job/rathore-s...

rathore-stranger-job

Last modified on 10/8/2022, 6:49:32 PM

Successfully started job
Successfully started job rathore-stranger-job. Navigate to Run Details for more details.

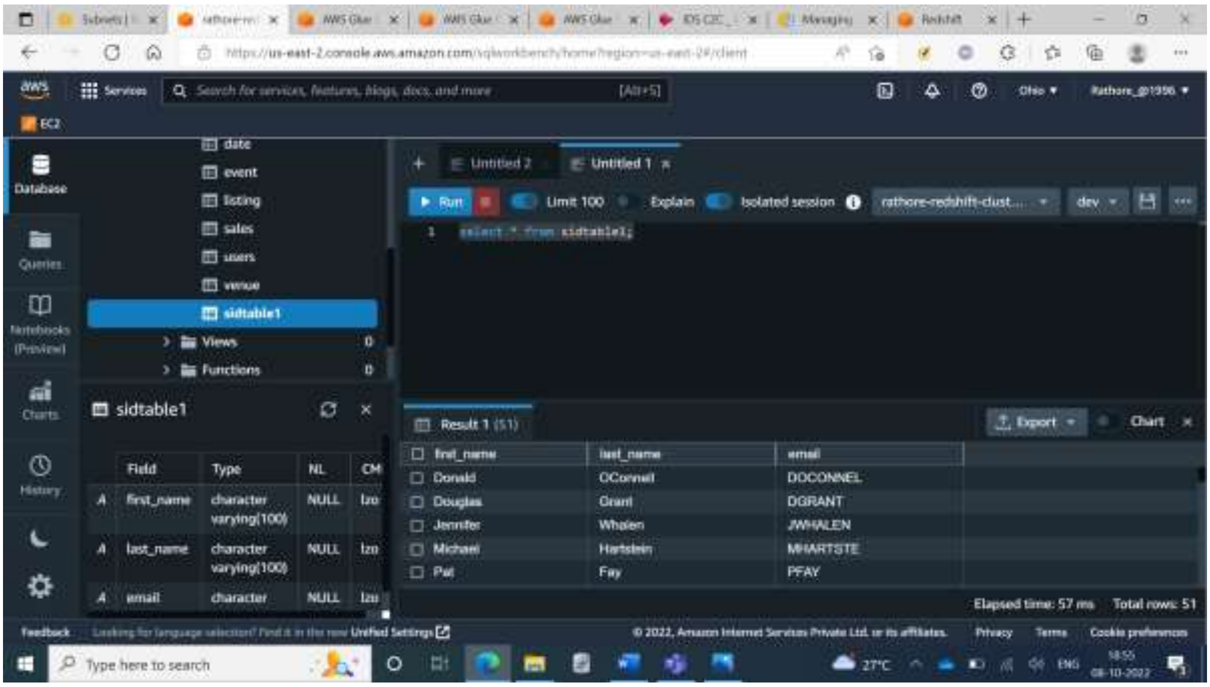
Recent job runs (1)

October 08, 2022 6:52:13 PM

Job name	Id	Run status	Glue version
rathore-stranger-job	jr_f87fbf9f2028dc2cbf39b4ab7167796 19da1e9af7d8359767363d4397298c7f e	Running	3.0

Retry attempt number | Start time | End time | Start-up time

Step 16: Executed the query and showing the results in Amazon Redshift



https://us-east-2.console.aws.amazon.com/sqlworkbench/home?region=us-east-2#/client

```
select * from sidtable1;
```

sidtable1

	Field	Type	NL	CM
A	first_name	character varying(100)	NULL	lzo
A	last_name	character varying(100)	NULL	lzo
A	email	character	NULL	lzo

Result 1 (51)

first_name	last_name	email
Donald	OConnell	DOCONNEL
Douglas	Grant	DGRANT
Jennifer	Whalen	JWHALEN
Michael	Hartstein	MHARTSTE
Pat	Fay	PFAY

Elapsed time: 57 ms Total rows: 51