

Assignment 7

Ques 1:

Create your own new custom VPC

- And configure your EC2 linux instance inside your custom VPC
- and then create 3 subnets of that VPC
- Attach an internet gateway to your custom VPC

- 1) I am creating my custom VPC name myvpc1 with 3 subnets. And adding internet gateway.

The screenshot shows the AWS Management Console interface for creating a new VPC. The page title is "VPC settings". Below the title, there is a description: "A VPC is an isolated portion of the AWS Cloud populated by AWS objects, such as Amazon EC2 instances." The "Resources to create" section has two radio buttons: "VPC only" (selected) and "VPC and more". The "Name tag - optional" section has a text input field containing "myvpc1". The "IPv4 CIDR block" section has two radio buttons: "IPv4 CIDR manual input" (selected) and "IPAM-allocated IPv4 CIDR block". Below this, the "IPv4 CIDR" text input field contains "10.0.0.0/16". The "IPv6 CIDR block" section has four radio buttons: "No IPv6 CIDR block" (selected), "IPAM-allocated IPv6 CIDR block", "Amazon-provided IPv6 CIDR block", and "IPv6 CIDR owned by me". The "Tenancy" section has a dropdown menu set to "Default". The footer of the console shows the AWS logo, "Services", a search bar, and the user's name "Aman".

aws Services Search [Alt+S]

N. Virginia Aman

A VPC is an isolated portion of the AWS Cloud populated by AWS objects, such as Amazon EC2 instances.

VPC settings

Resources to create [Info](#)
Create only the VPC resource or the VPC and other networking resources.

☒ VPC only ☐ VPC and more

Name tag - *optional*
Creates a tag with a key of 'Name' and a value that you specify.

myvpc1

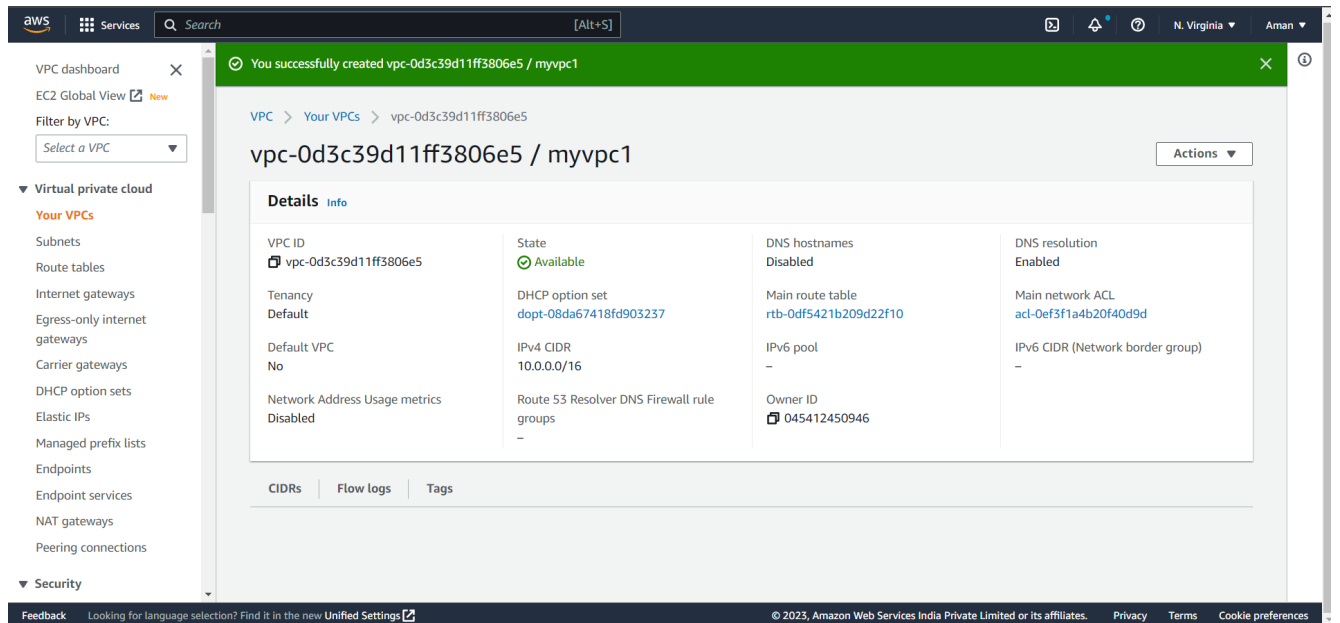
IPv4 CIDR block [Info](#)
☒ IPv4 CIDR manual input ☐ IPAM-allocated IPv4 CIDR block

IPv4 CIDR
10.0.0.0/16

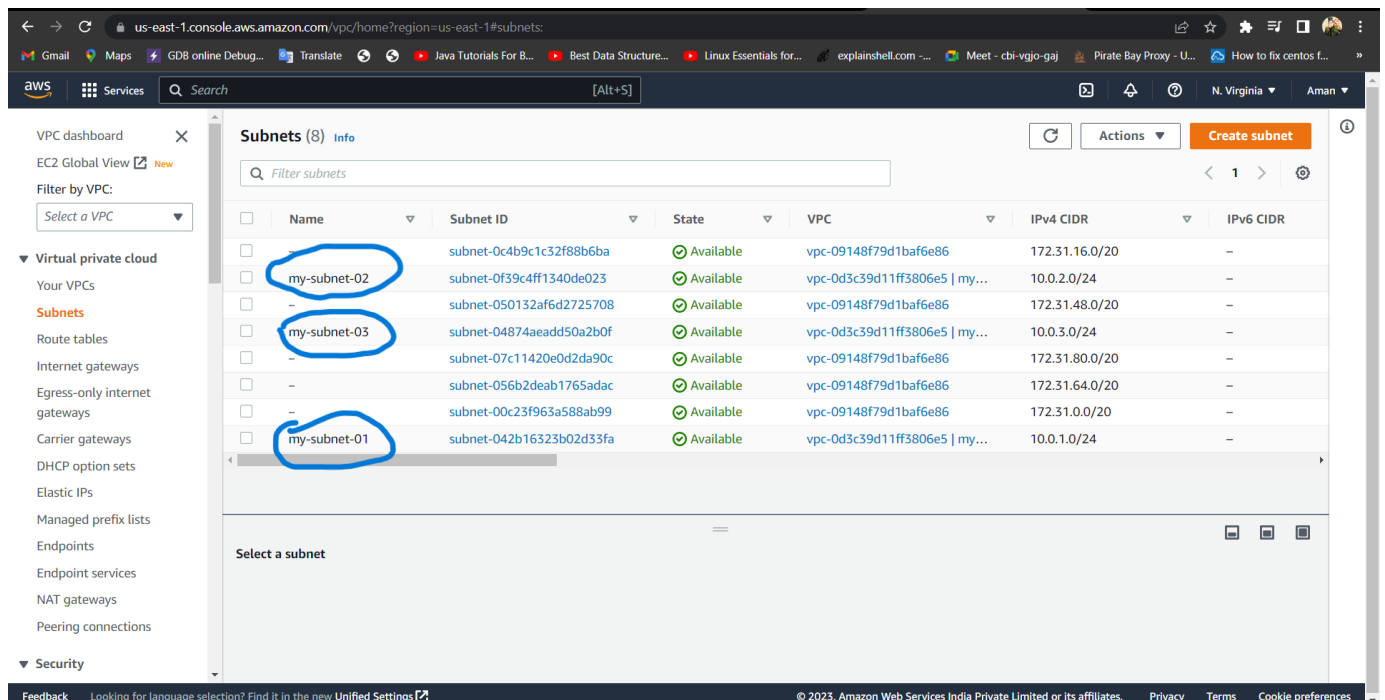
IPv6 CIDR block [Info](#)
☒ No IPv6 CIDR block ☐ IPAM-allocated IPv6 CIDR block ☐ Amazon-provided IPv6 CIDR block ☐ IPv6 CIDR owned by me

Tenancy [Info](#)
Default

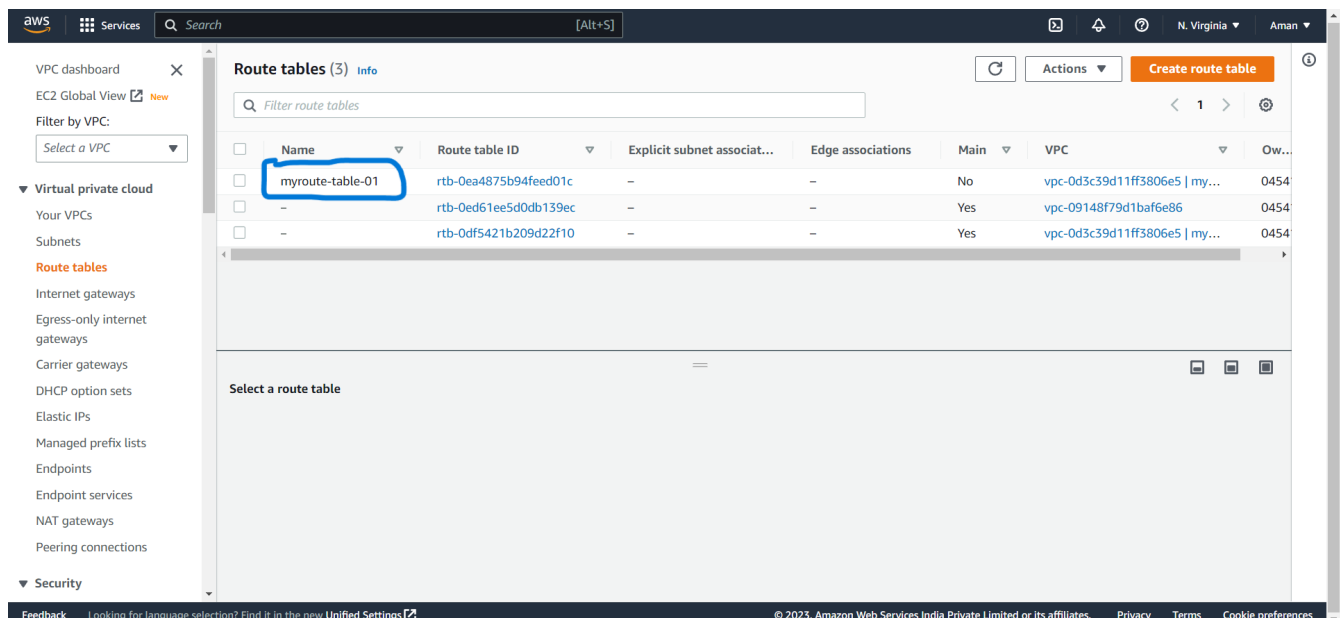
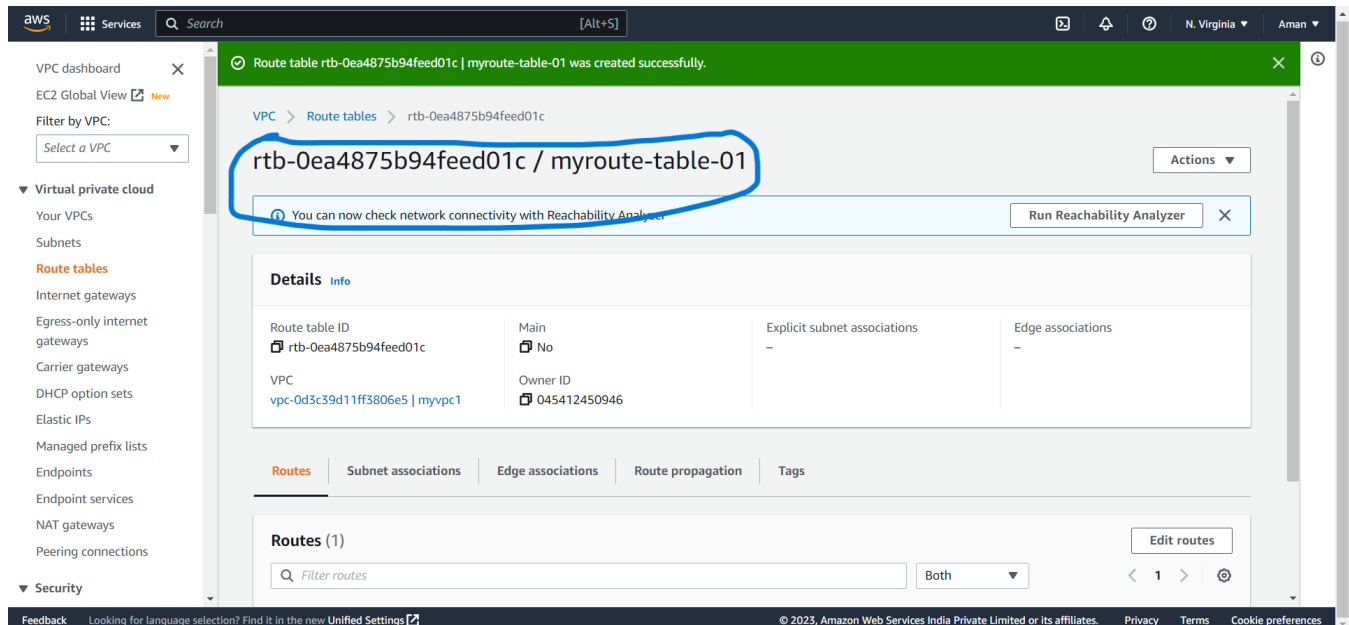
Feedback Looking for language selection? Find it in the new Unified Settings [\[?\]](#) © 2023, Amazon Web Services India Private Limited or its affiliates. Privacy Terms Cookie preferences



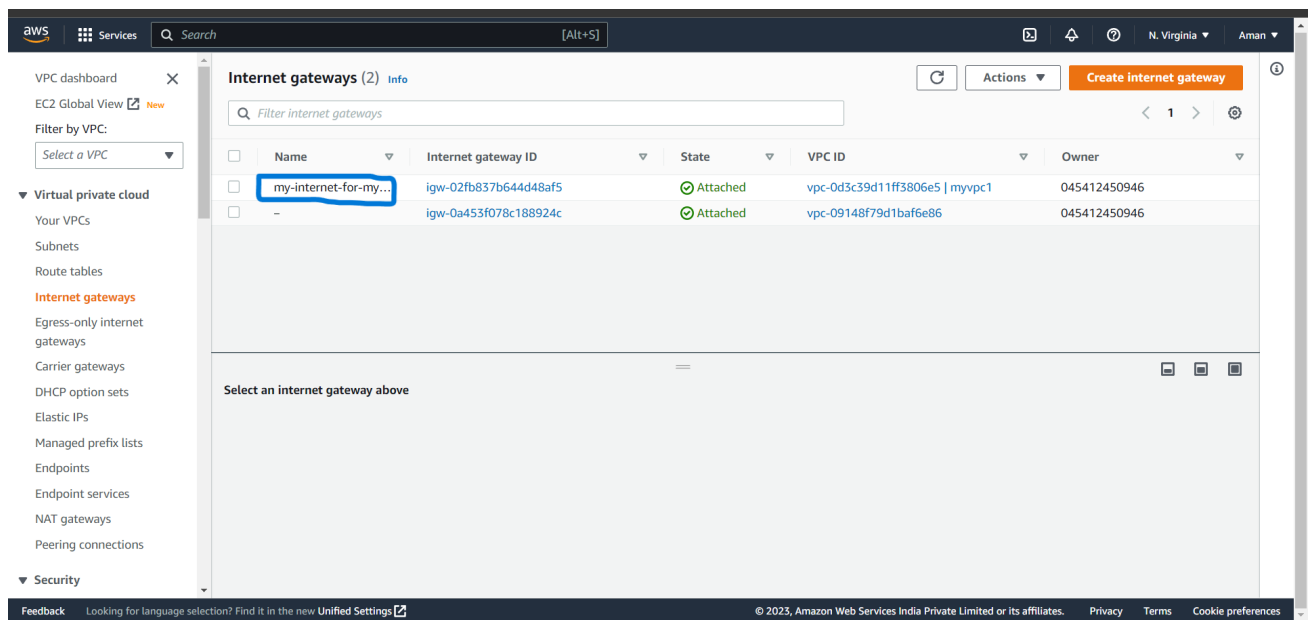
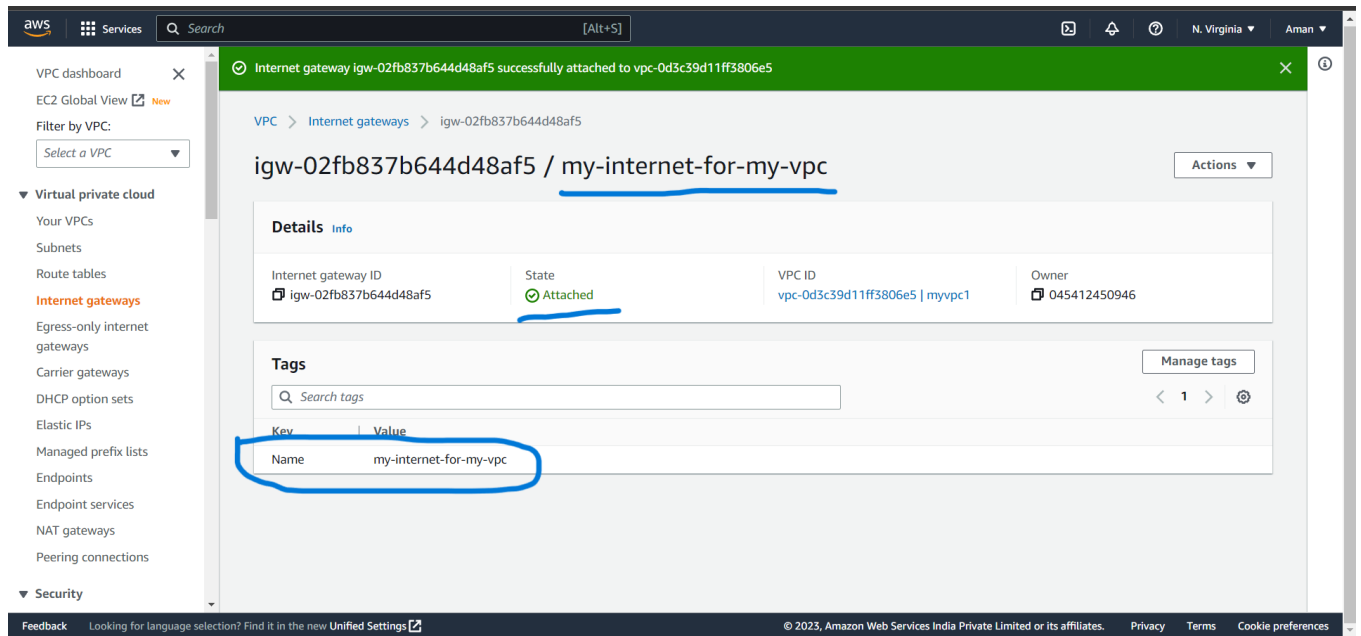
Now here are my 3 subnets for my private vpc(myvpc1).



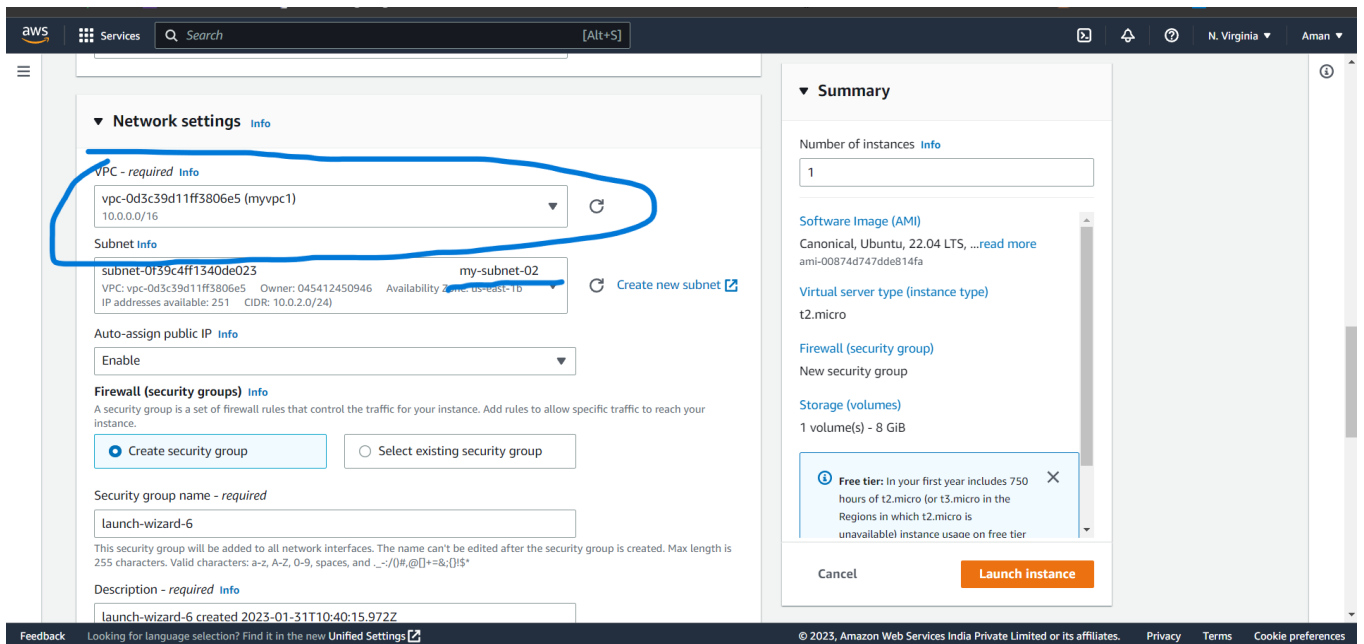
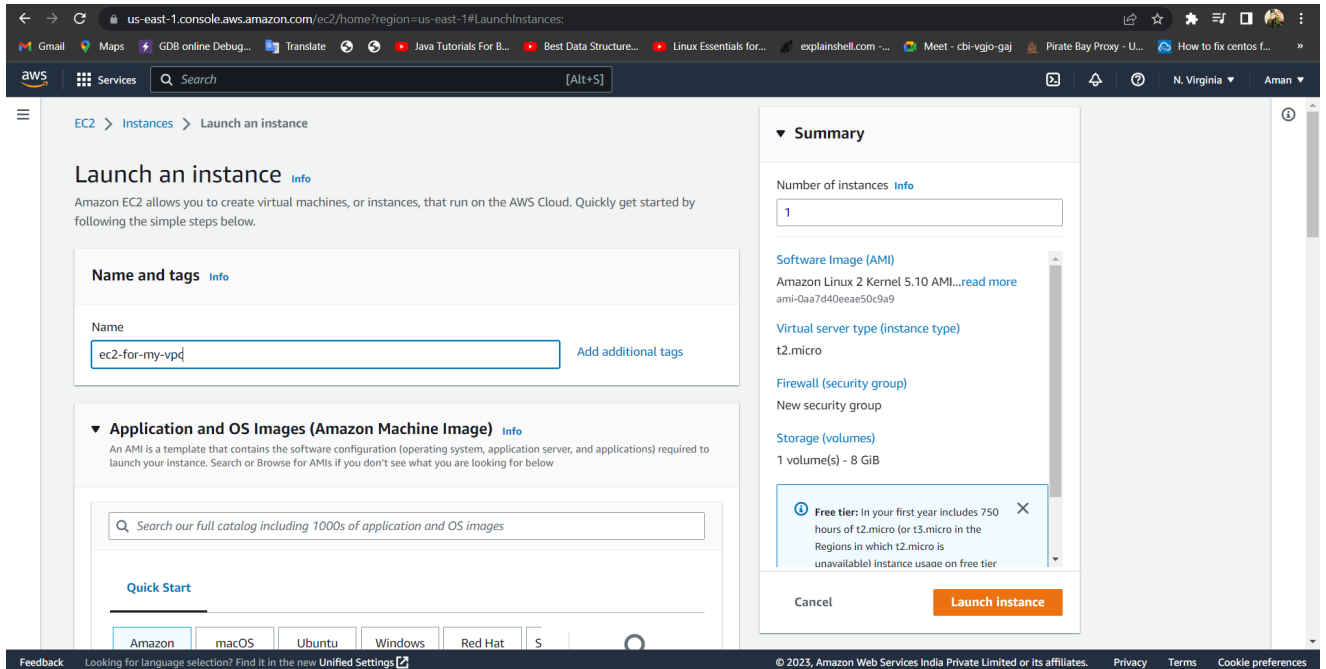
Now here are my route table for my 3 subnets.



Now here is my internet gateway for myvpc.



Above I created my private vpc and 3 subnets , an internet gateway.
Now I am creating ec2 instance with my private vpc.



aws Services Search [Alt+S] N. Virginia Aman

New EC2 Experience

EC2 Dashboard
EC2 Global View
Events
Tags
Limits

Instances

Instances
Instance Types
Launch Templates
Spot Requests
Savings Plans
Reserved Instances
Dedicated Hosts
Scheduled Instances
Capacity Reservations

Images
AMIs
AMI Catalog

Instances (1/1) info

Find instance by attribute or tag (case-sensitive)

Instance state = running X Clear filters

	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS
<input checked="" type="checkbox"/>	ec2-for-my-vpc	i-0cfd48b2d53892b57	Running	t2.micro	Initializing	No alarms +	us-east-1b	-

Instance: i-0cfd48b2d53892b57 (ec2-for-my-vpc)

Details Security Networking Storage Status checks Monitoring Tags

Instance summary info

Instance ID i-0cfd48b2d53892b57 (ec2-for-my-vpc)	Public IPv4 address 54.163.49.3 open address	Private IPv4 addresses 10.0.2.65
IPv6 address -	Instance state Running	Public IPv4 DNS -
Hostname type IP name: ip-10-0-2-65.ec2.internal	Private IP DNS name (IPv4 only) ip-10-0-2-65.ec2.internal	

Sending request...

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us-east-1.console.aws.amazon.com/ec2-instance-connect/ssh?region=us-east-1&connType=standard&instanceId=i-0cfd48b2d53892b57&osUser=ubuntu&sshPort=22#

aws Services Search [Alt+S] N. Virginia Aman

```
System information as of Tue Jan 31 10:42:26 UTC 2023
System load: 0.49365234375    Processes: 101
Usage of /: 19.6% of 7.57GB    Users logged in: 0
Memory usage: 20%            IPv4 address for eth0: 10.0.2.65
Swap usage: 0%

0 updates can be applied immediately.

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-10-0-2-65:~$
```

i-0cfd48b2d53892b57 (ec2-for-my-vpc)

PublicIPs: 54.163.49.3 PrivateIPs: 10.0.2.65

Feedback Looking for language selection? Find it in the new Unified Settings

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```
aws Services Search [Alt+S]
Get:19 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 c-n-f Metadata [286 kB]
Get:20 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 Packages [217 kB]
Get:21 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse Translation-en [112 kB]
Get:22 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 c-n-f Metadata [8372 B]
Get:23 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [851 kB]
Get:24 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main Translation-en [189 kB]
Get:25 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 c-n-f Metadata [13.1 kB]
Get:26 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 Packages [566 kB]
Get:27 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted Translation-en [87.1 kB]
Get:28 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 c-n-f Metadata [556 B]
Get:29 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Packages [796 kB]
Get:30 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe Translation-en [142 kB]
Get:31 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 c-n-f Metadata [15.0 kB]
Get:32 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 Packages [7988 B]
Get:33 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse Translation-en [2448 B]
Get:34 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 c-n-f Metadata [432 B]
Get:35 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd64 Packages [3324 B]
Get:36 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main Translation-en [1580 B]
Get:37 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd64 c-n-f Metadata [272 B]
Get:38 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/restricted amd64 c-n-f Metadata [116 B]
Get:39 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 Packages [6744 B]
Get:40 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe Translation-en [9460 B]
Get:41 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 c-n-f Metadata [352 B]
Get:42 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/multiverse amd64 c-n-f Metadata [116 B]
Fetched 25.5 MB in 4s (6275 kB/s)
```

i-Ocfd48b2d53892b57 (ec2-for-my-vmc)

PublicIPs: 54.163.49.3 PrivateIPs: 10.0.2.65

Above i created my ec2 instance with my VPC and everything working fine.