

Linux

1

```
GNU nano 6.2 leap.sh
#!/bin/bash

echo "Enter year"
read yr

if [[ (( yr%4 -eq 0 )) && (( yr%100 -ne 0 )) || (( yr%400 -ne 0 )) ]]
then
echo "$yr is a leap year"
else
echo "$yr is non-leap year"
fi
```

```
kunal@kk: ~
kunal@kk:~$ nano leap.sh
kunal@kk:~$ bash leap.sh
Enter year
2024
2024 is a leap year
kunal@kk:~$
```

2.

3.1

```
kunal@kk:~$  
kunal@kk:~$ mkdir dir_new  
kunal@kk:~$ tree  
.  
|-- Desktop  
|-- Documents  
|-- Downloads  
|-- Music  
|-- Pictures  
|-- Public  
|-- Templates  
|-- Videos  
|-- dir_new  
|-- fib.sh  
|-- if  
|-- if.shn  
|-- leap.sh  
|-- new.sh  
|-- new_dir
```

3.2

```
kunal@kk:~$ mv old_dir new-dir  
kunal@kk:~$ tree  
.  
|-- Desktop  
|-- Documents  
|-- Downloads  
|-- Music  
|-- Pictures  
|-- Public  
|-- Templates  
|-- Videos  
|-- dir_new  
|-- fib.sh  
|-- if  
|-- if.shn  
|-- leap.sh  
|-- new-dir
```

3.3

3.4

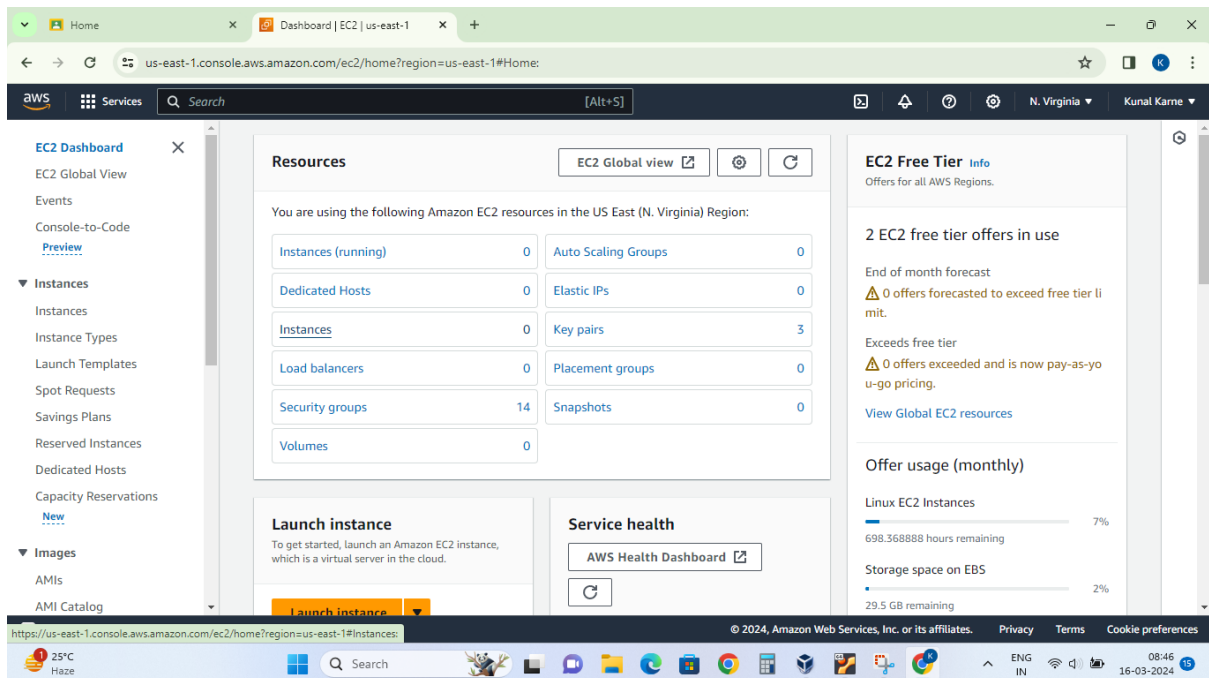
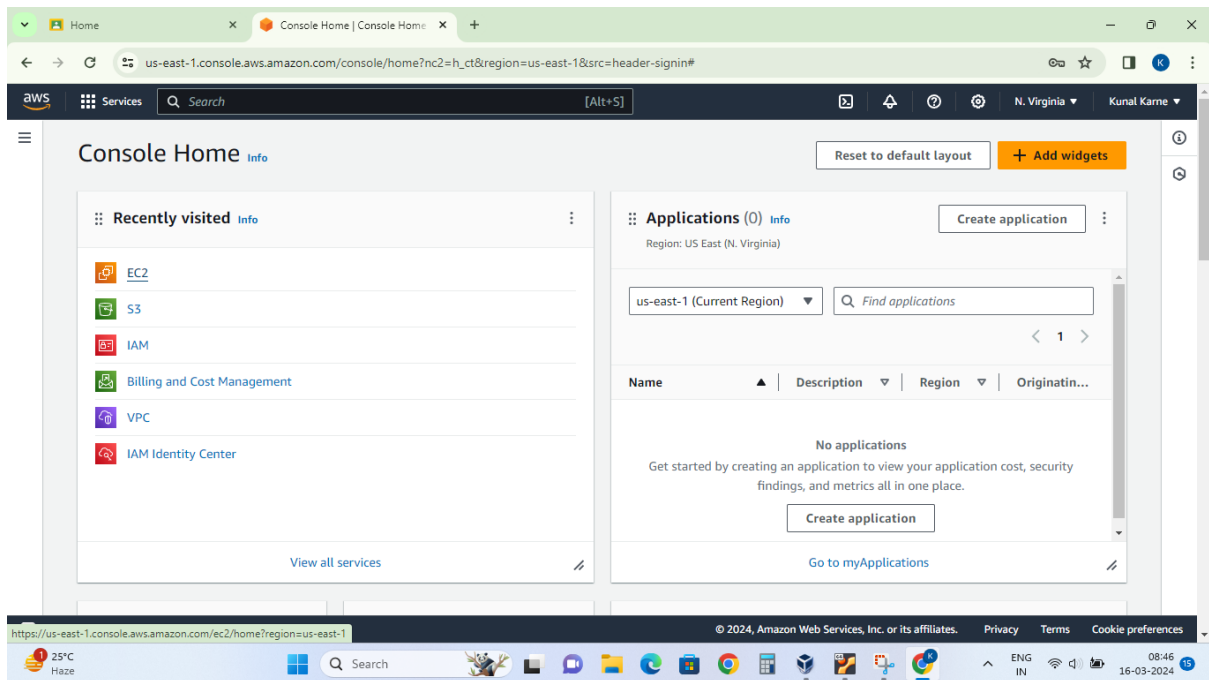
```
kunal@kk:~$ mkdir new_  
kunal@kk:~$ rm -r new_  
kunal@kk:~$ ls  
Desktop  dir_new  Documents  Downloads  fib.sh  if  if.shn  leap.sh  Music  new.  
sh  Pictures  Public  snap  Templates  Videos  
kunal@kk:~$
```

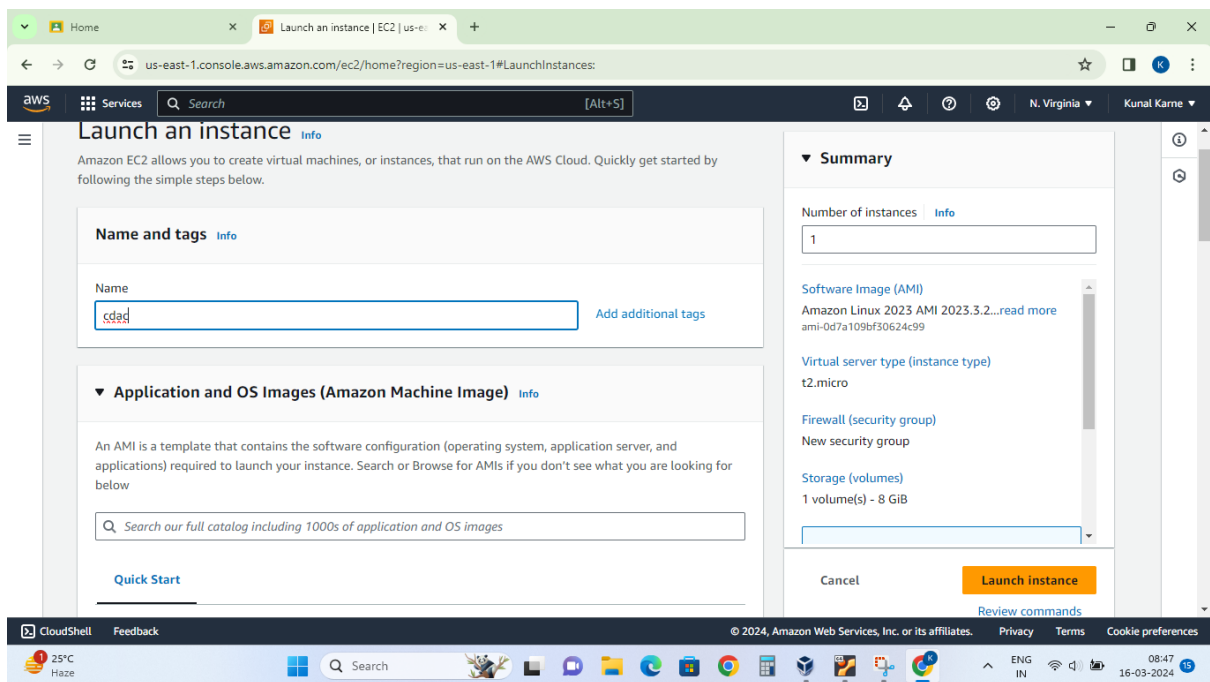
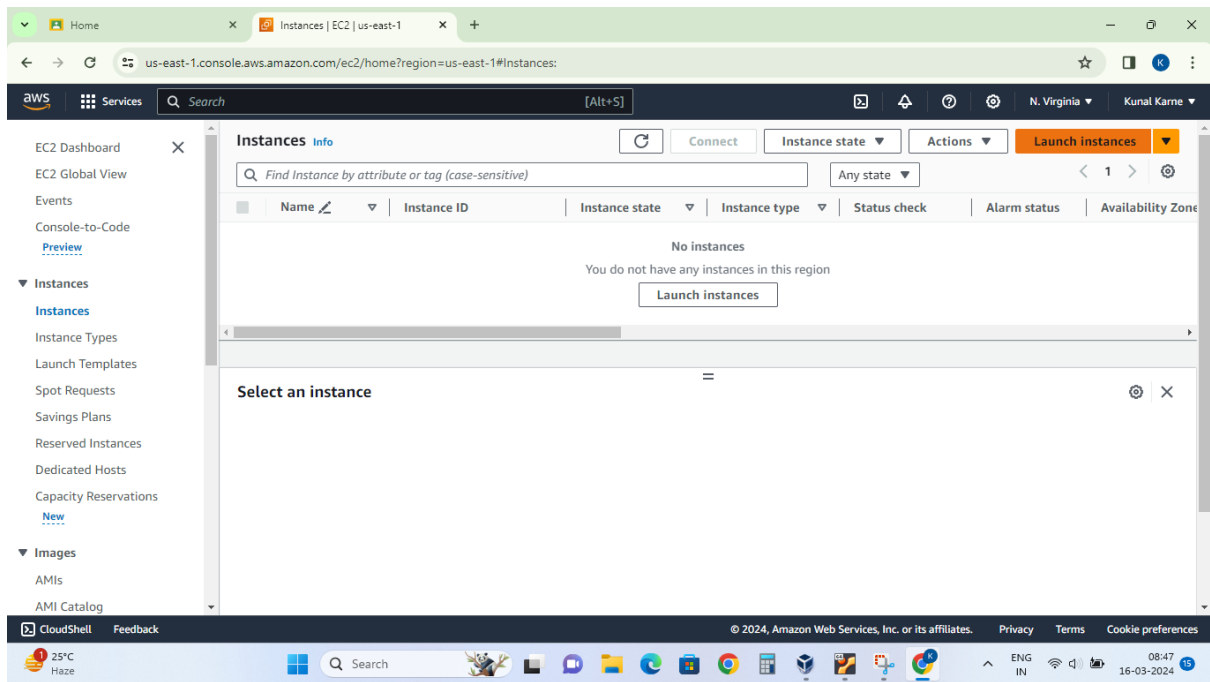
3.5

```
kunal@kk:~$ touch file1.txt  
kunal@kk:~$ ln file1.txt newfile.txt  
kunal@kk:~$ tree  
.  
|-- Desktop  
|-- Documents  
|-- Downloads  
|-- Music  
|-- Pictures  
|-- Public  
|-- Templates  
|-- Videos  
|-- dir_new  
|-- fib.sh  
|-- file1.txt  
|-- if  
|-- if.shn  
|-- leap.sh  
|-- new.sh  
|-- newfile.txt  
|-- snap  
    |-- snapd-desktop-integration [error opening dir]  
    |-- tree  
        |-- 18  
        |-- common  
        |-- current -> 18  
  
15 directories, 7 files  
kunal@kk:~$
```

Cloud

EC2





us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LaunchInstances:

Services

Search

[Alt+S]

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On-Demand SUSE base pricing: 0.0116 USD per Hour
On-Demand RHEL base pricing: 0.0716 USD per Hour
On-Demand Linux base pricing: 0.0116 USD per Hour

Compare instance types

Additional costs apply for AMIs with pre-installed software

▼ Key pair (login) Info

You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

Key pair name - required

Select

Q |

Create new key pair

Proceed without a key pair (Not recommended) Default value

cdac
Type: rsa

CDAC 1
Type: rsa

cdac1
Type: rsa

Edit

No preference (Default subnet in any availability zone)

▼ Summary

Number of instances Info

1

Software Image (AMI)
Amazon Linux 2023 AMI 2023.3.2...read more
ami-0d7a109bf30624c99

Virtual server type (instance type)
t2.micro

Firewall (security group)
New security group

Storage (volumes)
1 volume(s) - 8 GiB

Cancel Launch instance

Review commands

CloudShell Feedback

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08:47 16-03-2024

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LaunchInstances:

Services

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▼ Configure storage Info Advanced

1x 8 GiB gp3 Root volume (Not encrypted)

Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage

Add new volume

Click refresh to view backup information

The tags that you assign determine whether the instance will be backed up by any Data Lifecycle Manager policies.

0 x File systems Edit

► Advanced details Info

▼ Summary

Number of instances Info

1

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Review commands

CloudShell Feedback

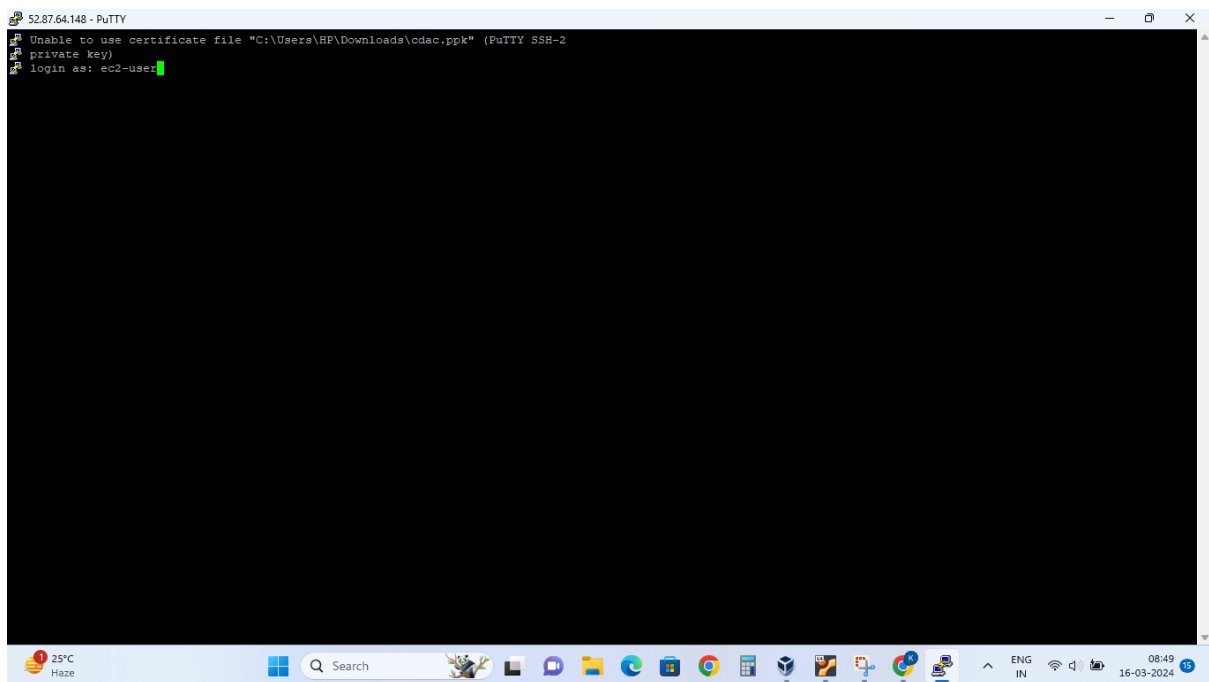
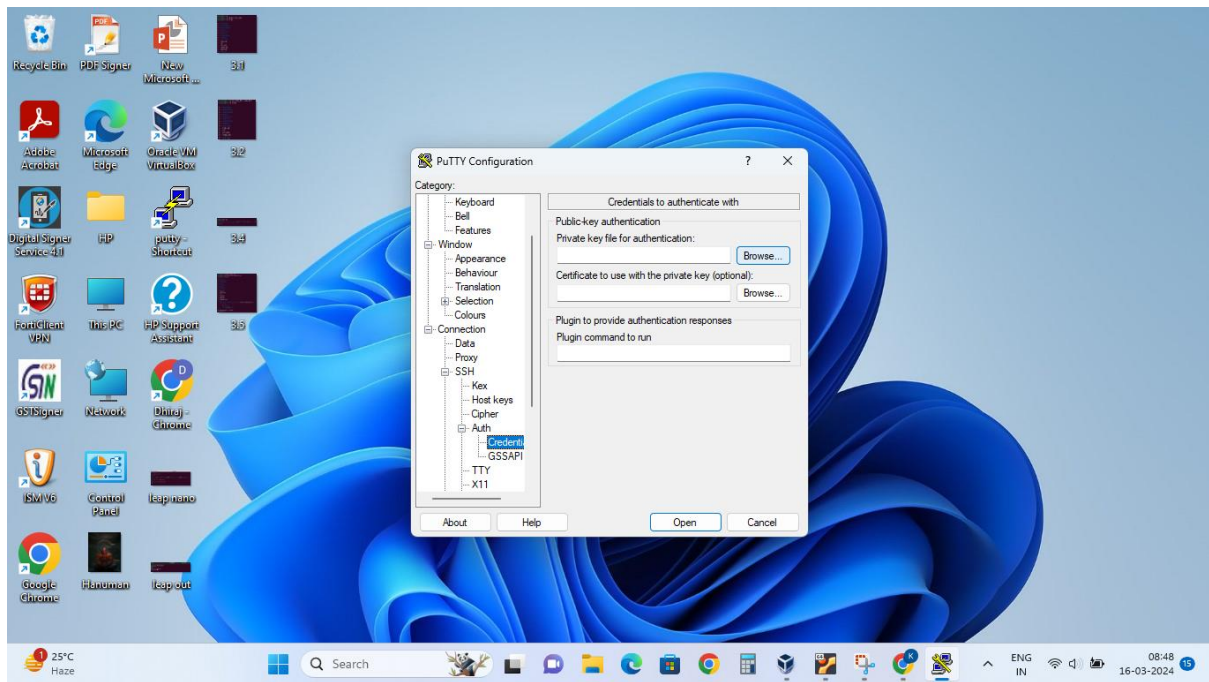
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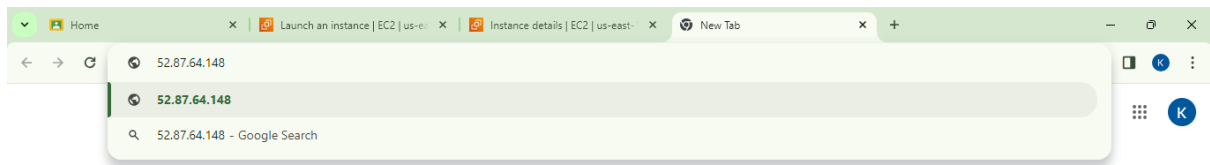
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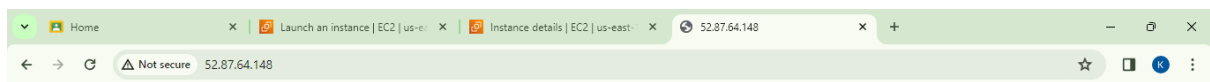


Google

Search Google or type a URL



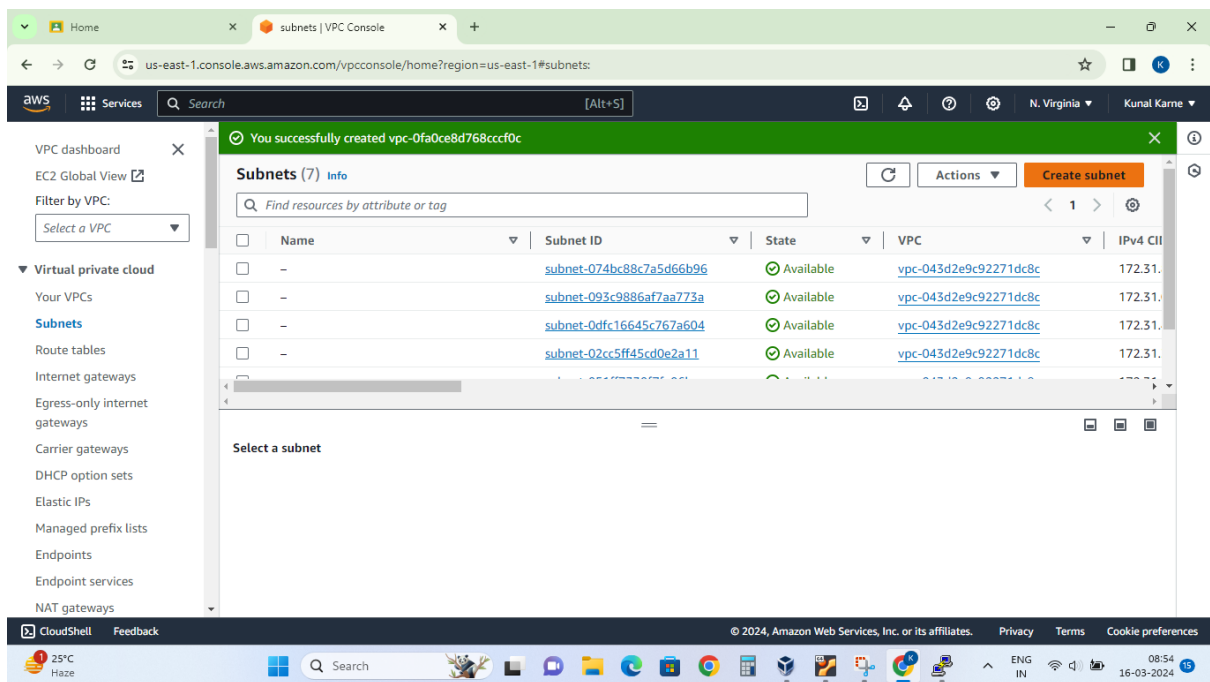
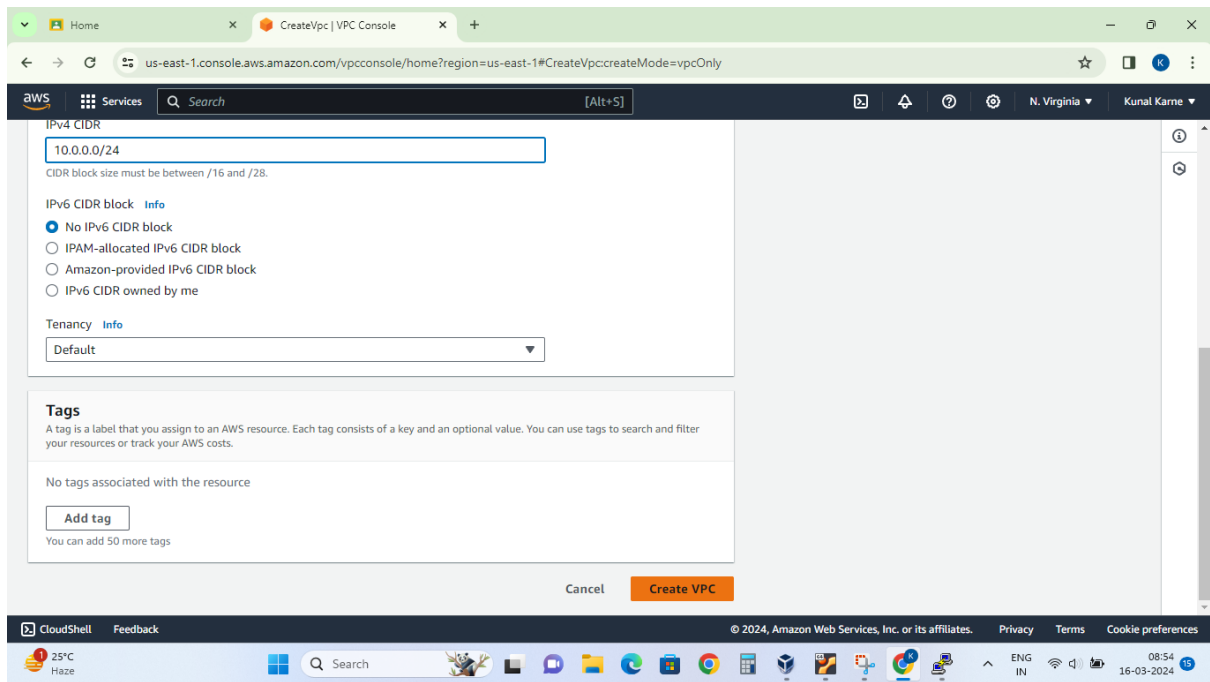
Customize Chrome



VPC

The screenshot shows the AWS VPC console home page in the us-east-1 region. The left sidebar contains the 'VPC dashboard' and a list of VPC resources: Your VPCs, Subnets, Route tables, Internet gateways, Egress-only internet gateways, Carrier gateways, DHCP option sets, Elastic IPs, Managed prefix lists, Endpoints, Endpoint services, and NAT gateways. The main content area is titled 'Resources by Region' and displays a grid of resource counts for US East 2. The resources and their counts are: VPCs (2), NAT Gateways (0), Subnets (7), VPC Peering Connections (0), Route Tables (3), Network ACLs (2), Internet Gateways (1), Security Groups (15), Egress-only Internet (0), and Customer Gateways (0). The right sidebar includes 'Service Health', 'Settings' (with links to Zones and Console Experiments), 'Additional Information' (with links to VPC Documentation, All VPC Resources, Forums, and Report an Issue), and 'AWS Network Manager'.

The screenshot shows the 'Create VPC' wizard in the AWS VPC console. The breadcrumb navigation is 'VPC > Your VPCs > Create VPC'. The page title is 'Create VPC' with an 'Info' link. A descriptive text states: 'A VPC is an isolated portion of the AWS Cloud populated by AWS objects, such as Amazon EC2 instances.' The 'VPC settings' section includes: 'Resources to create' with 'VPC only' selected; 'Name tag - optional' with the value 'my-vpc-01'; 'IPv4 CIDR block' with 'IPv4 CIDR manual input' selected; and 'IPv4 CIDR' with the value '10.0.0.0/24'. A note at the bottom of the settings section states: 'CIDR block size must be between /16 and /28.'



The screenshot displays the AWS Management Console's 'CreateSubnet' page. The browser's address bar shows the URL 'us-east-1.console.aws.amazon.com/vpconsole/home?region=us-east-1#CreateSubnet:'. The page title is 'Subnet settings', and a sub-header indicates the user should 'Specify the CIDR blocks and Availability Zone for the subnet.'.

Under the 'Subnet 1 of 1' section, the 'Subnet name' field is populated with 'm-sbnt1'. A note below the field states, 'The name can be up to 256 characters long.' The 'Availability Zone' is set to 'No preference', with a link to 'Info' for more details. The 'IPv4 VPC CIDR block' is set to '10.0.0/24', and the 'IPv4 subnet CIDR block' is set to '10.0.0/28'. Both fields have dropdown arrows indicating they can be changed.

At the bottom, the 'Tags' section is expanded, showing a note: 'Tags - optional'. The page footer includes the AWS logo, 'CloudShell', 'Feedback', and copyright information for Amazon Web Services, Inc. The system tray at the very bottom shows the date and time as '16-03-2024 08:56'.

Home

CreateSubnet | VPC Console

+

us-east-1.console.aws.amazon.com/vpcconsole/home?region=us-east-1#CreateSubnet:

aws

Services

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Choose the zone in which your subnet will reside, or let Amazon choose one for you.

No preference

IPv4 VPC CIDR block [Info](#)

Choose the VPC's IPv4 CIDR block for the subnet. The subnet's IPv4 CIDR must lie within this block.

10.0.0.0/24

IPv4 subnet CIDR block

10.0.0.0/28 16 IPs

< > ^ v

Tags - optional

Key

Value - optional

Q Name X

Q m-sbnt1 X

Remove

Add new tag

You can add 49 more tags.

Remove

Add new subnet

Cancel

Create subnet

CloudShell

Feedback

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Home

RouteTables | VPC Console

+

us-east-1.console.aws.amazon.com/vpcconsole/home?region=us-east-1#RouteTables:

aws

Services

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VPC dashboard

EC2 Global View

Filter by VPC:

Select a VPC

Virtual private cloud

Your VPCs

Subnets

Route tables

Internet gateways

Egress-only internet gateways

Carrier gateways

DHCP option sets

Elastic IPs

Managed prefix lists

Endpoints

Endpoint services

NAT gateways

Route tables (4) [Info](#)

Find resources by attribute or tag

< 1 >

<input type="checkbox"/>	Name	Route table ID	Explicit subnet associ...	Edge associations	Main
<input type="checkbox"/>	-	rtb-026636262263b9d24	-	-	Yes
<input type="checkbox"/>	-	rtb-0900c9a04bbf2c3ba	-	-	Yes
<input type="checkbox"/>	-	rtb-0af5486624f9b7346	-	-	Yes
<input type="checkbox"/>	basanti	rtb-0047b832c7960f582	subnet-0eb5774a1512e7...	-	No

Select a route table

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Home

Create internet gateway | VPC

us-east-1.console.aws.amazon.com/vpcconsole/home?region=us-east-1#CreateInternetGateway:

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Route table rtb-0fa2a5bf63e47b8a4 | my-route was created successfully.

VPC > Internet gateways > Create internet gateway

Create internet gatewayInfo

An internet gateway is a virtual router that connects a VPC to the internet. To create a new internet gateway specify the name for the gateway below.

Internet gateway settings

Name tag

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

my-intr

Tags - optional

A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.

Key

Value - optional

Name

my-intr

Remove

Add new tag

You can add 49 more tags.

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Home

InternetGateway | VPC Console

us-east-1.console.aws.amazon.com/vpcconsole/home?region=us-east-1#InternetGateway:internetGatewayId=igw-091f66787441a8771

ServicesSearch[Alt+S]

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The following internet gateway was created: igw-091f66787441a8771 - my-intr. You can now attach to a VPC to enable the VPC to communicate with the internet. Attach to a VPC

Notifications 0 0 2 0 0 0

VPC > Internet gateways > igw-091f66787441a8771

igw-091f66787441a8771 / my-intr

Actions

DetailsInfo

Internet gateway ID

igw-091f66787441a8771

State

Detached

VPC ID

-

Owner

211125630876

Tags

Search tags

Manage tags

1

Key

Value

Name

my-intr

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Home

VpcDetails | VPC Console

us-east-1.console.aws.amazon.com/vpccconsole/home?region=us-east-1#VpcDetails:VpcId=vpc-0496afd954a93ff18

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VPC dashboard

EC2 Global View

Filter by VPC:
Select a VPC

Virtual private cloud

Your VPCs

Subnets

Route tables

Internet gateways

Egress-only internet gateways

Carrier gateways

DHCP option sets

Elastic IPs

Managed prefix lists

Endpoints

Endpoint services

NAT gateways

Updated routes for rtb-0fa2a5bf63e47b8a4 / my-rout successfully

Details

Network Address Usage metrics
Disabled

Route 53 Resolver DNS Firewall
rule groups
-

Owner ID
211125630876

Resource map

CIDRs

Flow logs

Tags

Integrations

Resource map

Info

Subnets (1)
Subnets within this VPC

us-east-1f

m-sbnt1

Route tables (2)
Route network traffic to resources

my-rout

rtb-00d6022bb4fa9e56d

Network connections (1)
Connections to other networks

my-intr

https://us-east-1.console.aws.amazon.com/vpccconsole/home?region=us-east-1#SubnetDetails:subnetId=subnet-0a4477acd5cd877c3

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