

# LetsUpgrade AWS Advance Project-5

**Day-10**

## AWS ASSESSMENT PROJECT-1

### 1.Create a VPC with a private subnet and a public subnet

The screenshot shows the AWS Management Console 'Create subnet' page. The browser address bar shows the URL: console.aws.amazon.com/vpc/home?region=us-east-1#CreateSubnet:. The page title is 'Create subnet'. Below the title, there is a brief instruction: 'Specify your subnet's IP address block in CIDR format; for example, 10.0.0.0/24. IPv4 block sizes must be between a /16 netmask and /28 netmask, and can be the same size as your VPC. An IPv6 CIDR block must be a /64 CIDR block.'

The form fields are as follows:

- Name tag:** MyPublicSubnet
- VPC\*:** vpc-0039e4fd92705aff6
- Availability Zone:** No preference
- VPC CIDRs:** A table with columns 'CIDR', 'Status', and 'Status Reason'. It contains one row: CIDR: 10.0.0.0/16, Status: associated, Status Reason: (empty).
- IPv4 CIDR block\*:** 10.0.0.0/24

At the bottom right, there are 'Cancel' and 'Create' buttons. An 'Activate Windows' watermark is visible in the bottom right corner of the screenshot.

This screenshot is identical to the one above, showing the 'Create subnet' page in the AWS console. The only difference is the value entered in the 'IPv4 CIDR block\*' field, which is now 10.0.1.0/24, indicating the creation of a private subnet.

Subnets | VPC Management Console

console.aws.amazon.com/vpc/home?region=us-east-1#subnets:sort=SubnetId

Services

New VPC Experience  
Tell us what you think

VPC Dashboard **New**

Filter by VPC:  
Select a VPC

**VIRTUAL PRIVATE CLOUD**

Your VPCs **New**

**Subnets**

Route Tables

Internet Gateways **New**

Egress Only Internet Gateways **New**

Carrier Gateways **New**

DHCP Options Sets **New**

Elastic IPs **New**

Managed Prefix Lists **New**

Endpoints

Endpoint Services

Create subnet Actions

Filter by tags and attributes or search by keyword

Name	Subnet ID	State	VPC	IPv4 CIDR	Available IPv4	IPv6 CIDR
MyPrivateSubnet	subnet-0500f9e75b9f967dc	available	vpc-0039e4fd92705aff6   ...	10.0.1.0/24	251	-
	subnet-0528410b	available	vpc-5c1ada21	172.31.64.0/20	4091	-
MyPublicSubnet	subnet-0df6ccdc485982c7	available	vpc-0039e4fd92705aff6   ...	10.0.0.0/24	251	-
	subnet-21ee1510	available	vpc-5c1ada21	172.31.48.0/20	4091	-

Subnet: subnet-0df6ccdc485982c7

Description Flow Logs Route Table Network ACL Tags Sharing

Subnet ID: subnet-0df6ccdc485982c7  
VPC: vpc-0039e4fd92705aff6 | MyVPC  
Available IPv4 Addresses: 251  
Availability Zone: us-east-1a (use1-az1)  
Route Table: rtb-0bfa8b23c500ca787  
Default subnet: No  
Auto-assign customer-owned IPv4 address: No  
Auto-assign IPv6 address: No

State: available  
IPv4 CIDR: 10.0.0.0/24  
IPv6 CIDR: -  
Network Border Group: us-east-1  
Network ACL: acl-03d9e670aecee824e  
Auto-assign public IPv4 address: No  
Customer-owned IPv4 pool: -  
Outpost ID: -

Activate Windows  
Go to Settings to activate Windows.

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Subnets | VPC Management Console

console.aws.amazon.com/vpc/home?region=us-east-1#subnets:sort=SubnetId

Services

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Filter by VPC:  
Select a VPC

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**Subnets**

Route Tables

Internet Gateways **New**

Egress Only Internet Gateways **New**

Carrier Gateways **New**

DHCP Options Sets **New**

Elastic IPs **New**

Managed Prefix Lists **New**

Endpoints

Endpoint Services

Create subnet Actions

Filter by tags and attributes or search by keyword

Name	Subnet ID	State	VPC	IPv4 CIDR	Available IPv4	IPv6 CIDR
MyPrivateSubnet	subnet-0500f9e75b9f967dc	available	vpc-0039e4fd92705aff6   ...	10.0.1.0/24	251	-
	subnet-0528410b	available	vpc-5c1ada21	172.31.64.0/20	4091	-
MyPublicSubnet	subnet-0df6ccdc485982c7	available	vpc-0039e4fd92705aff6   ...	10.0.0.0/24	251	-
	subnet-21ee1510	available	vpc-5c1ada21	172.31.48.0/20	4091	-

Subnet: subnet-0500f9e75b9f967dc

Description Flow Logs Route Table Network ACL Tags Sharing

Subnet ID: subnet-0500f9e75b9f967dc  
VPC: vpc-0039e4fd92705aff6 | MyVPC  
Available IPv4 Addresses: 251  
Availability Zone: us-east-1a (use1-az1)  
Route Table: rtb-0bfa8b23c500ca787  
Default subnet: No  
Auto-assign customer-owned IPv4 address: No  
Auto-assign IPv6 address: No

State: available  
IPv4 CIDR: 10.0.1.0/24  
IPv6 CIDR: -  
Network Border Group: us-east-1  
Network ACL: acl-03d9e670aecee824e  
Auto-assign public IPv4 address: No  
Customer-owned IPv4 pool: -  
Outpost ID: -

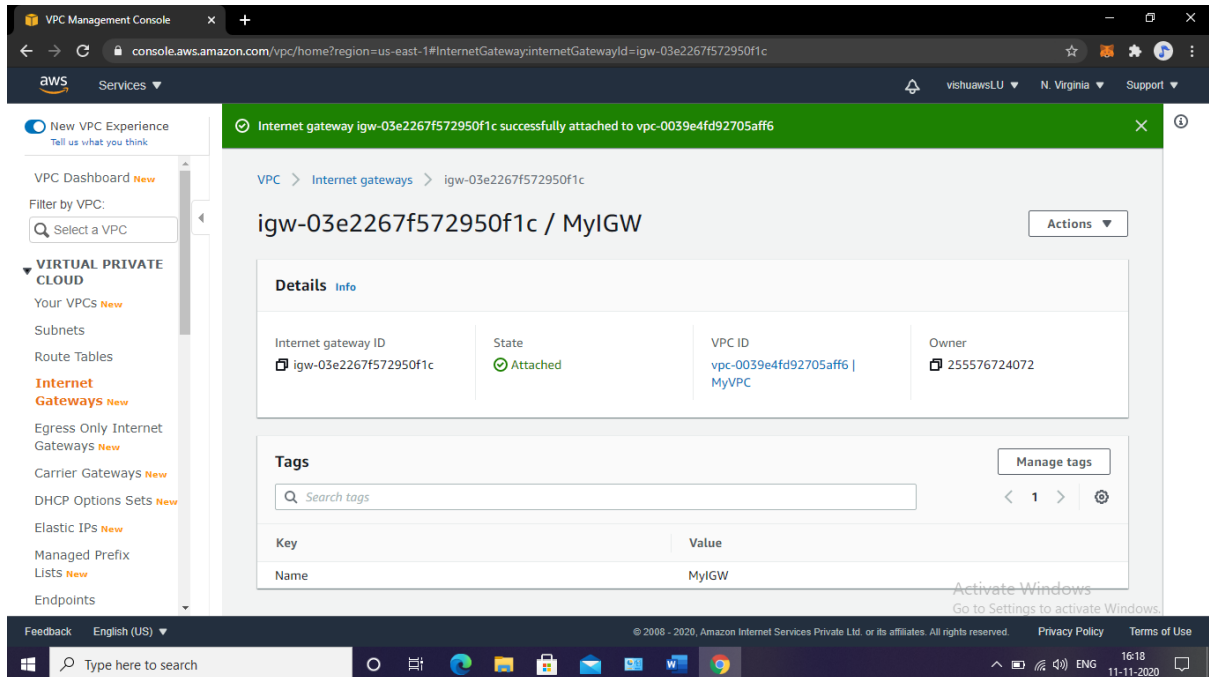
Activate Windows  
Go to Settings to activate Windows.

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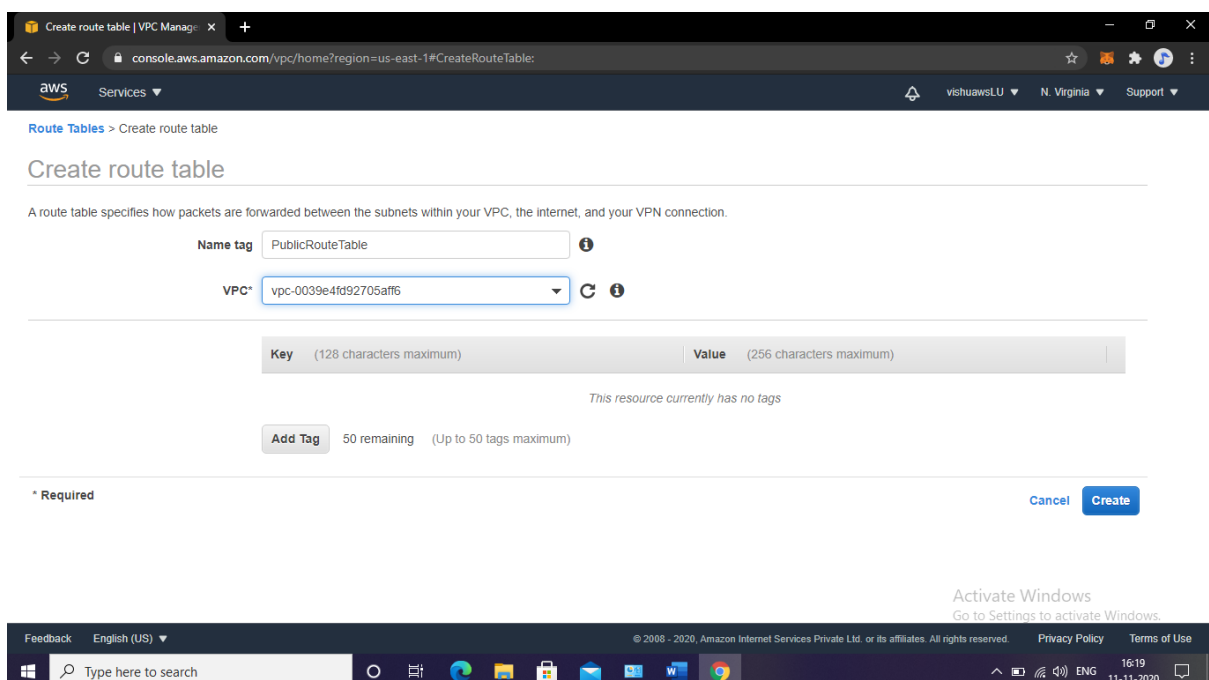
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## 2.Create a IGW and associate with the public subnet



## 3.Create a route table with VPC



The screenshot shows the AWS Management Console for Route Tables. The left sidebar contains navigation links for VPC Dashboard, Subnets, Route Tables, Internet Gateways, Egress Only Internet Gateways, Carrier Gateways, DHCP Options Sets, Elastic IPs, Managed Prefix Lists, Endpoints, and Endpoint Services. The main content area displays a table of Route Tables. The 'PublicRouteTable' is selected, showing its details in the 'Summary' tab.

Name	Route Table ID	Explicit subnet association	Edge associations	Main	VPC ID
	rtb-0bfa8b23c500ce787	-	-	Yes	vpc-0039e4fd92705aff6
PublicRouteTable	rtb-0d8dd83822eac611b	subnet-0df6ccdc485982c7	-	No	vpc-0039e4fd92705aff6
	rtb-8698d7f8	-	-	Yes	vpc-5c1ada21

Route Table: rtb-0d8dd83822eac611b

Summary	Routes	Subnet Associations	Edge Associations	Route Propagation	Tags
<p>Route Table ID: rtb-0d8dd83822eac611b</p> <p>Explicitly Associated with: subnet-0df6ccdc485982c7</p> <p>Owner: 255576724072</p> <p>Main: No</p> <p>VPC: vpc-0039e4fd92705aff6   MyVPC</p>					

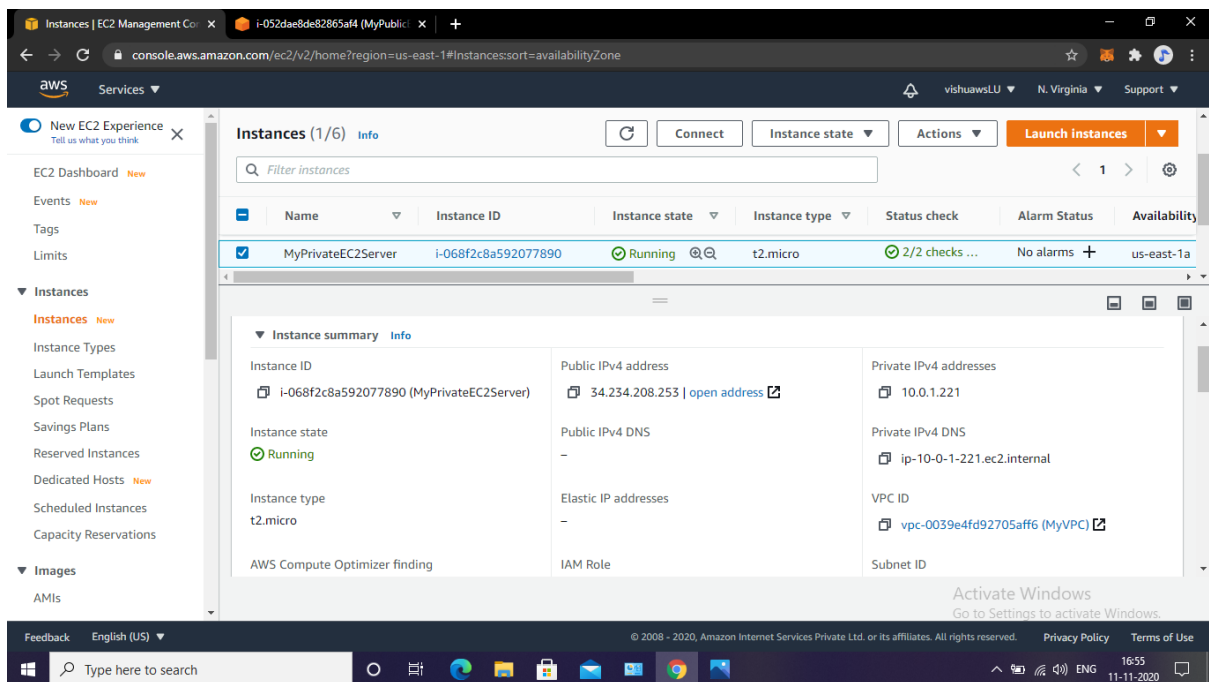
## 4. Creating two instances using Linux

The screenshot shows the AWS Management Console for EC2 Instances. The left sidebar contains navigation links for EC2 Dashboard, Events, Tags, Limits, Instances, Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Scheduled Instances, Capacity Reservations, Images, and AMIs. The main content area displays a table of EC2 Instances. The 'MyPublicEC2Server' instance is selected, showing its details in the 'Instance summary' tab.

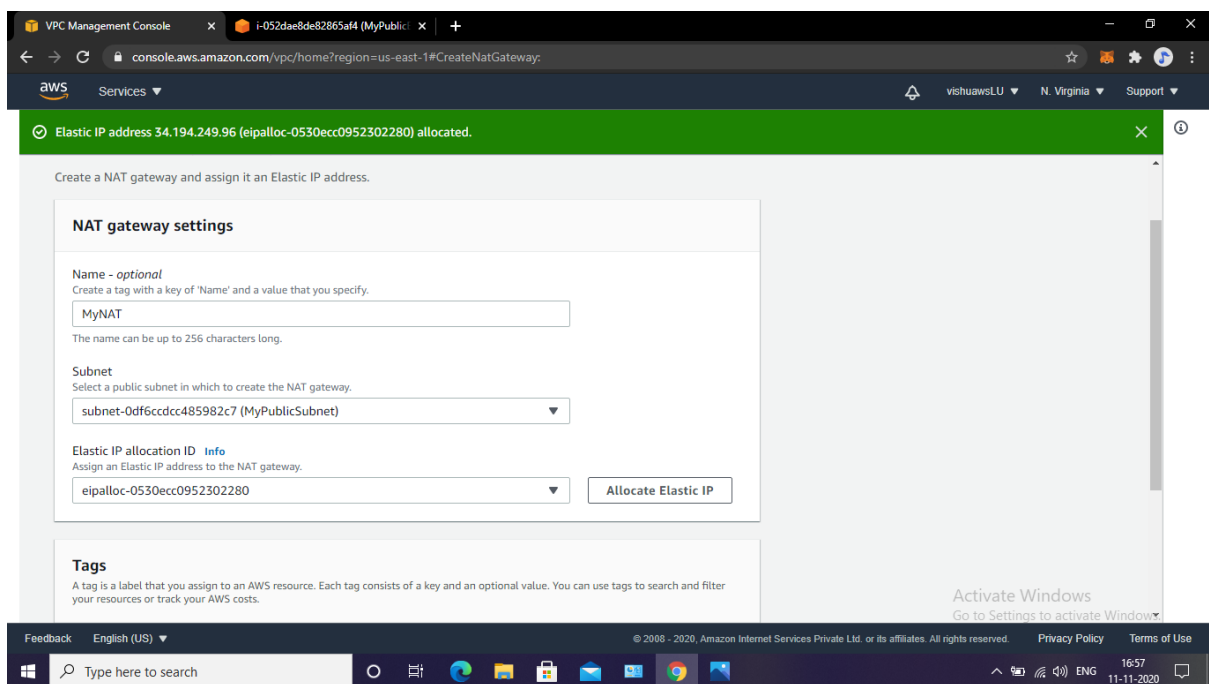
Name	Instance ID	Instance state	Instance type	Status check	Alarm Status	Availability
MyPublicEC2Server	i-052dae8de82865af4	Running	t2.micro	2/2 checks ...	No alarms	us-east-1a

Instance summary

Instance ID: i-052dae8de82865af4 (MyPublicEC2Server)	Public IPv4 address: 34.201.21.143   <a href="#">open address</a>	Private IPv4 addresses: 10.0.0.24
Instance state: Running	Public IPv4 DNS: -	Private IPv4 DNS: ip-10-0-0-24.ec2.internal
Instance type: t2.micro	Elastic IP addresses: -	VPC ID: vpc-0039e4fd92705aff6 (MyVPC)
AWS Compute Optimizer finding: Opt-in to AWS Compute Optimizer for recommendations. <a href="#">Learn more</a>	IAM Role: -	Subnet ID: subnet-0df6ccdc485982c7 (MyPublicSubnet)



## 5. Create a NAT gateway and associate with public subnet



NAT gateways | VPC Management | i-052dae8de82865af4 (MyPublic) | console.aws.amazon.com/vpc/home?region=us-east-1#NatGateways:

Services

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- Subnets
- Route Tables
- Internet Gateways **New**
- Egress Only Internet Gateways **New**
- Carrier Gateways **New**
- DHCP Options Sets **New**
- Elastic IPs **New**
- Managed Prefix Lists **New**
- Endpoints
- Endpoint Services
- NAT Gateways **New****
- Peering Connections

**SECURITY**

**NAT gateways (1/1) Info**

Filter NAT gateways

Name	NAT gateway ID	State	State message	Elastic IP address
MyNAT	nat-04a1c437605db0d66	Available	-	34.194.249.96

**Details**

NAT gateway ID nat-04a1c437605db0d66	State Available	State message -	Elastic IP address 34.194.249.96
Private IP address 10.0.0.143	Network interface ID eni-0be285909e6a34a5f	VPC vpc-0039e4fd92705aff6 / MyVPC	Subnet subnet-0df6ccdc485982c7 / MyPublicSubnet
Created 2020/11/11 16:58 GMT+5:30	Deleted -		

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Type here to search

Edit routes | VPC Management | i-052dae8de82865af4 (MyPublic) | console.aws.amazon.com/vpc/home?region=us-east-1#EditRoutes:routeTableId=rtb-0bfa8b23c500ce787

Services

Route Tables > Edit routes

### Edit routes

Destination	Target	Status	Propagated
10.0.0.0/16	local	active	No
0.0.0.0/0	nat-04a1c437605db0d66		No

Add route

\* Required

Cancel Save routes

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## 6. Connect the public instance and copy the private key and login to private IP

```
Connect to instance | EC2 Mana: X i-052dae8de82865af4 (MyPublicEC2Server) X +
console.aws.amazon.com/ec2/v2/connect/ec2-user/i-052dae8de82865af4
Installed:
kernel.x86_64 0:4.14.200-155.322.amzn2
Updated:
amazon-ssm-agent.x86_64 0:3.0.161.0-1.amzn2
awscli.noarch 0:1.18.147-1.amzn2.0.1
cpio.x86_64 0:2.11-28.amzn2
e2fsprogs-libs.x86_64 0:1.42.9-19.amzn2
ec2-utils.noarch 0:1.2-3.amzn2
glibc.x86_64 0:2.26-37.amzn2
glibc-common.x86_64 0:2.26-37.amzn2
glibc-minimal-langpack.x86_64 0:2.26-37.amzn2
libcom_err.x86_64 0:1.42.9-19.amzn2
libcrypt.x86_64 0:2.26-37.amzn2
libss.x86_64 0:1.42.9-19.amzn2
libtiff.x86_64 0:4.0.3-35.amzn2
libxml2-python.x86_64 0:2.9.1-6.amzn2.5.1
openldap.x86_64 0:2.4.44-22.amzn2
p11-kit-trust.x86_64 0:0.23.21-2.amzn2.0.1
python-pillow.x86_64 0:2.0.0-21.gitd1c6db8.amzn2.0.1
python2-rpm.x86_64 0:4.11.3-40.amzn2.0.5
rpm-build-libs.x86_64 0:4.11.3-40.amzn2.0.5
rpm-plugin-systemd-inhibit.x86_64 0:4.11.3-40.amzn2.0.5
aws-cfn-bootstrap.noarch 0:1.4-34.amzn2
bash.x86_64 0:4.2.46-34.amzn2
e2fsprogs.x86_64 0:1.42.9-19.amzn2
ec2-net-utils.noarch 0:1.4-3.amzn2
expat.x86_64 0:2.1.0-12.amzn2
glibc-all-langpacks.x86_64 0:2.26-37.amzn2
glibc-locale-source.x86_64 0:2.26-37.amzn2
hunspell.x86_64 0:1.3.2-16.amzn2
libcroc.x86_64 0:0.6.12-6.amzn2
libpng.x86_64 2:1.5.13-8.amzn2
libssh2.x86_64 0:1.4.3-12.amzn2.2.3
libxml2.x86_64 0:2.9.1-6.amzn2.5.1
mariadb-libs.x86_64 1:5.5.68-1.amzn2
p11-kit.x86_64 0:0.23.21-2.amzn2.0.1
pam.x86_64 0:1.1.8-23.amzn2.0.1
python2-boto.noarch 0:1.18.6-1.amzn2.0.1
rpm.x86_64 0:4.11.3-40.amzn2.0.5
rpm-libs.x86_64 0:4.11.3-40.amzn2.0.5
unzip.x86_64 0:6.0-21.amzn2
Complete!
[root@ip-10-0-0-24 ec2-user]#
```

i-052dae8de82865af4 (MyPublicEC2Server)

Public IPs: 34.201.21.143 Private IPs: 10.0.0.24

Activate Windows

Go to Settings to activate Windows.



```
Instances | EC2 Management Co: X i-052dae8de82865af4 (MyPublicEC2Server) X +
console.aws.amazon.com/ec2/v2/connect/ec2-user/i-052dae8de82865af4
uxlahhxm6nYEnnYHSLY5HjPA+dSpPANoPpHq2kwDAoGBA0nWFB6U3Y6HseJhhKuj
niyownbakN42rgMnThfiFbniYdk4xc0N7gMmj9Y5e02SE+sx8r8g+z5+sB73P1vy
3T9uXPD+W0EVRyKiCrhp1mUish8ZYM6gQy0c7StxDJZjW/FfBvzKh19J34Foi2
307JbekaYDeGSEkheug4apB5AoGBAI9t04JDkyA17iHKHk3nCHq+xj26Twp+ZnP5
L8DOX7n0amPT1h+uL4ZhjWN29FbEzcc8YI86nuhfI7SpW5c0CCDt4CVW5xd0Nqyp
9+XpSr4mDoXzD7vdmLUIa1khKPSzx6bSetp1quWLW0iw98gyIAznj4Xv8H4SHC+1
mV/DH46HAoGBAJx0Q10cawzTJsBBeS6/e0iH4dt9E6ig6G4jwpJyBdXM0kIfqTK4
3QRkpzqXvftlFxdT131ql8nZuAia19mKQkV6kCWK00oFqrrfgCLHsk7gAhIXxjsi
Wdfvzsj60K8ndt1o2YPBhUwbIVht8U4I4n0Y60aCuJWKTRsGYL0p5rPP
-----END RSA PRIVATE KEY-----

"webserverkey2.pem" [New] 27L, 1679C written
[root@ip-10-0-0-24 ec2-user]# chmod 400 webserverkey2.pem
[root@ip-10-0-0-24 ec2-user]# ssh -i webserverkey2.pem ec2-user@10.0.1.221
Last login: Wed Nov 11 12:08:54 2020 from 10.0.0.24

 _ _ | _ _ | _ _ |
 _ _ | _ _ | _ _ | Amazon Linux 2 AMI

https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-10-0-1-221 ~]$
```

i-052dae8de82865af4 (MyPublicEC2Server)

Public IPs: 34.201.21.143 Private IPs: 10.0.0.24

Activate Windows

Go to Settings to activate Windows.



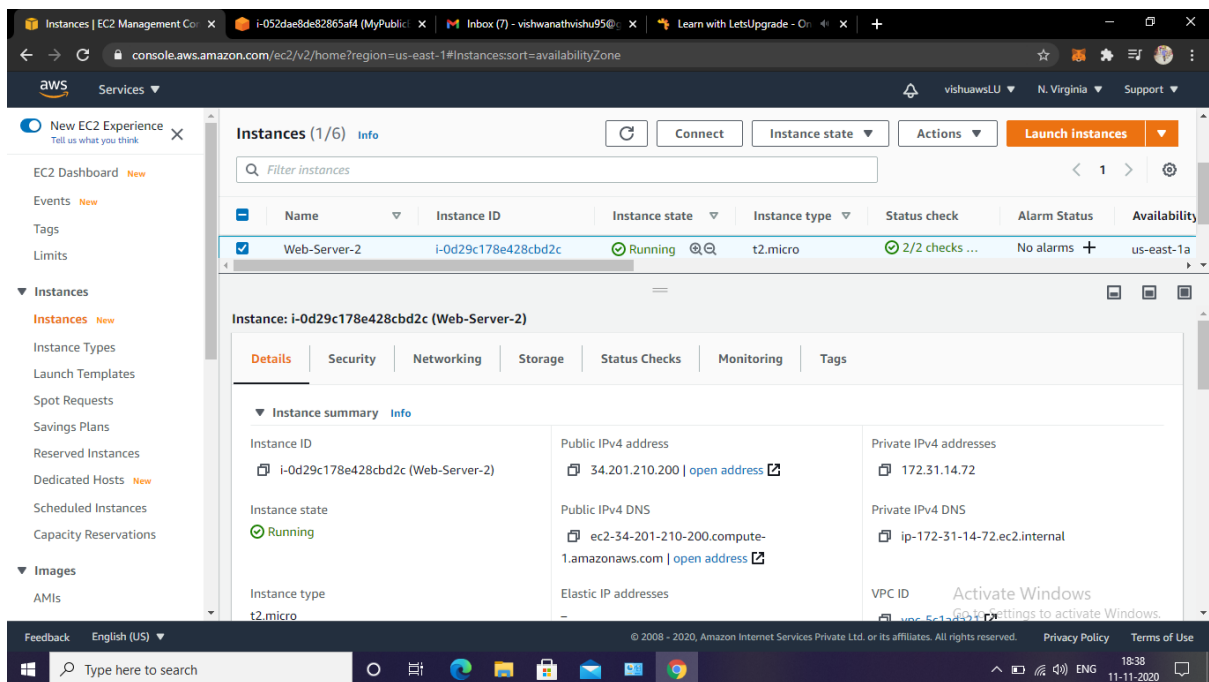
## 7. Now launch bastion server in the public subnet

The screenshot shows the AWS Management Console interface. The left sidebar contains navigation options like 'New EC2 Experience', 'EC2 Dashboard', 'Events', 'Tags', 'Limits', 'Instances', 'Instance Types', 'Launch Templates', 'Spot Requests', 'Savings Plans', 'Reserved Instances', 'Dedicated Hosts', 'Scheduled Instances', 'Capacity Reservations', 'Images', and 'AMIs'. The main content area displays the 'Instances (1/6)' page. A table lists the instances, with 'BastionServer' (ID: i-0a8c7377138045da4) in a 'Running' state. Below the table, the 'Details' tab for the selected instance shows its configuration: Instance ID i-0a8c7377138045da4 (BastionServer), Instance state Running, Instance type t2.micro, Public IPv4 address 54.197.25.121, Public IPv4 DNS ec2-54-197-25-121.compute-1.amazonaws.com, Private IPv4 addresses 172.31.24.188, Private IPv4 DNS ip-172-31-24-188.ec2.internal, Elastic IP addresses, and VPC ID. The bottom of the screen shows a Windows taskbar with the search bar and various application icons.

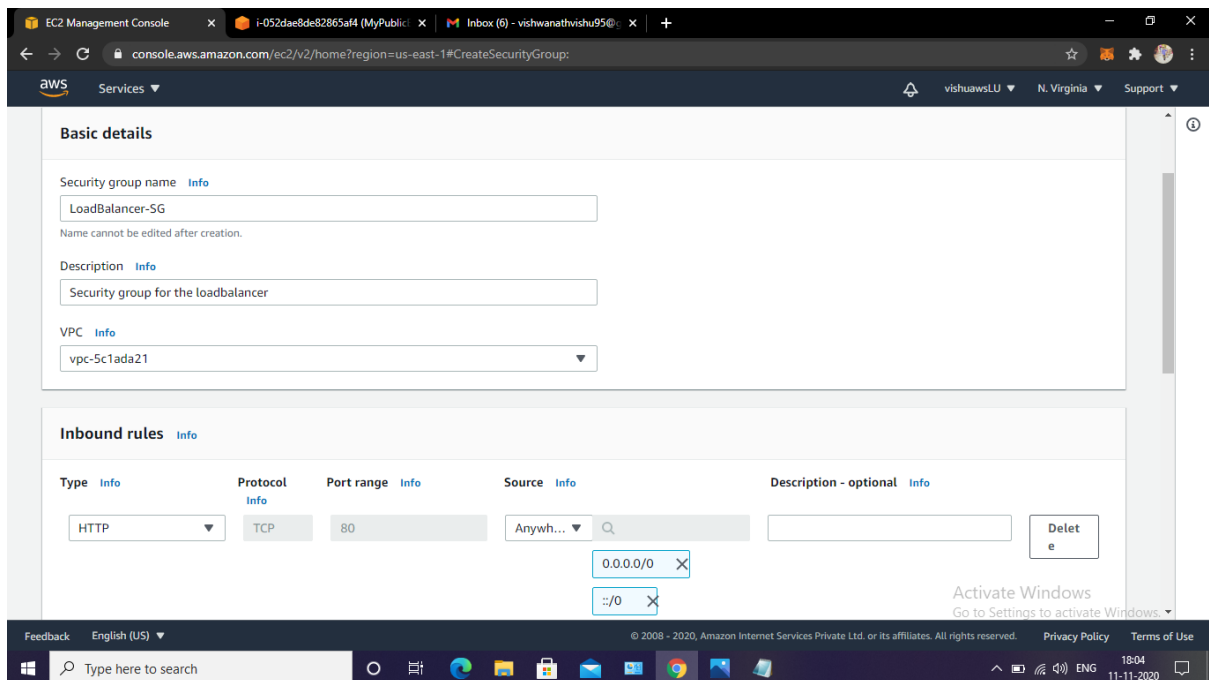
## 8. Launch two webservers in the private subnet

The screenshot shows the AWS Management Console interface, similar to the previous one. The left sidebar is the same. The main content area displays the 'Instances (1/6)' page. A table lists the instances, with 'Web-Server-1' (ID: i-0d4d9808b0fab698b) in a 'Running' state. Below the table, the 'Details' tab for the selected instance shows its configuration: Instance ID i-0d4d9808b0fab698b (Web-Server-1), Instance state Running, Instance type t2.micro, Public IPv4 address 3.238.3.104, Public IPv4 DNS ec2-3-238-3-104.compute-1.amazonaws.com, Private IPv4 addresses 172.31.7.35, Private IPv4 DNS ip-172-31-7-35.ec2.internal, Elastic IP addresses, and VPC ID. The bottom of the screen shows a Windows taskbar with the search bar and various application icons.





## 9. Create a load balancer in the public subnet range



Create Load Balancer | EC2 Man...i-052dae8de82865af4 (MyPublic...Inbox (7) - vishwanathvishu95@...+

console.aws.amazon.com/ec2/v2/home?region=us-east-1#V2CreateELBWizard?type=application:

ServicesvishuawsLUN. VirginiaSupport

1. Configure Load Balancer2. Configure Security Settings3. Configure Security Groups4. Configure Routing5. Register Targets6. Review

### Step 3: Configure Security Groups

A security group is a set of firewall rules that control the traffic to your load balancer. On this page, you can add rules to allow specific traffic to reach your load balancer. First, decide whether to create a new security group or select an existing one.

**Assign a security group:** ☐ Create a **new** security group  
☒ Select an **existing** security group

FilterVPC security groups

Security Group ID	Name	Description	Actions
<input type="checkbox"/> sg-005d8f5d6c2122611	Bastion-SG	Security group for Bastion Server	<a href="#">Copy to new</a>
<input type="checkbox"/> sg-ed9658dc	default	default VPC security group	<a href="#">Copy to new</a>
<input type="checkbox"/> sg-09c22dbc514feed24	launch-wizard-1	launch-wizard-1 created 2020-11-10T11:36:41.428+05:30	<a href="#">Copy to new</a>
<input checked="" type="checkbox"/> sg-027f02d82e8f118de	LoadBalancer-SG	Security group for the loadbalancer	<a href="#">Copy to new</a>
<input type="checkbox"/> sg-0ab2676ccc500441f	Web-Server-SG	Security group for webserver	<a href="#">Copy to new</a>
<input type="checkbox"/> sg-0865bbc915fe67cb1	Webserver-SG	security group for webserver	<a href="#">Copy to new</a>

[Cancel](#)[Previous](#)[Next: Configure Routing](#)

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18:3011-11-2020

EC2 Management Consolei-052dae8de82865af4 (MyPublic...Inbox (7) - vishwanathvishu95@...Learn with LetsUpgrade - On...+

console.aws.amazon.com/ec2/v2/home?region=us-east-1#LoadBalancers:sort=loadBalancerName

ServicesvishuawsLUN. VirginiaSupport

VolumesSnapshotsLifecycle Manager

▼ Network & SecuritySecurity Groups **New**Elastic IPs **New**Placement Groups **New**Key Pairs **New**Network Interfaces **New**

▼ Load BalancingLoad BalancersTarget Groups **New**

▼ Auto ScalingLaunch ConfigurationsAuto Scaling Groups

Create Load BalancerActions

Filter by tags and attributes or search by keyword1 to 1 of 1

Name	DNS name	State	VPC ID	Availability Zones	Type
Web-application-LB	Web-application-LB-151248...	active	vpc-5c1ada21	us-east-1f, us-east-1e, ...	application

Load balancer: Web-application-LB

DescriptionListenersMonitoringIntegrated servicesTags

**Basic Configuration**

Name	Web-application-LB
ARN	arn:aws:elasticloadbalancing:us-east-1:255576724072:loadbalancer/app/Web-application-LB/c87feca0b23f4ac1
DNS name	Web-application-LB-1512485857.us-east-1.elb.amazonaws.com (A Record)
State	active
Type	application
Scheme	internet-facing
IP address type	ipv4

[Edit IP address type](#)

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18:3511-11-2020

## 10. Connect the Bastion server with the web server 1 & 2 private IP addresses

```
Instances | EC2 Management | i-0a8c7377138045da4 (Bastion) | i-052dae8de82865af4 (MyPub) | Deepak commented on What | Learn with LetsUpgrade - | +
console.aws.amazon.com/ec2/v2/connect/ec2-user/i-0a8c7377138045da4
yU0fi0ucmD5wNqR8+SkNDyxqBZ5u5CFJNo9qQ5j8T8lF0Fenvs7XUnENrB1mzdo5
VU13eXJr0efBEKvR+3Lcjd9ija+ONK3jnegrM6bzJ1ql5ar4ID7XqwX5AoGBA0bq
jf13U7Wfr5v8fmi0eEqoDoSP5jUGJnCUpD0h2Hwyb4Cz34vo7XH3iKTLsKaqfan4
No89/XC9i9gCd4DTGUsiArMDJA5ibw303Mzy1ccn/AcnLyF1Ik+BG/k8ihKfL/S
uxlahxmn6nYEnnYHSLYSHjPA+dSpPANOppHq2kWDAAoGBA0nWFB6U3Y6HseJhhKuj
niyownbakN42rgMNthfifbniYdk4xc0N7gMmj9Y5e02SE+sx8r8g+z5+sB73P1vy
3T9uXPD+W0EVRyKiCrhp1mUIsh8ZY5M6g0y0c7S5x0JZjW/FfBvyzKh19J34Foi2
307JbekaYDeGSEKheug4apB5AoGBAIA9t04JDkyA17iHKHk3nCHq+xj26Twp+ZnP5
L8D0X7n0amPT1h+uL4ZhjWN29FbEzcc8YI86nuhfI7SpW5c0CCDt4CVW5xd0Nqyp
9+Xp5r4mDoXzD7vdmLUia1khKPSzx6bSetp1quWLW0iw98gyIAznj4Xv8H4SHC+1
mV/DH46HAoGBAJxDQi0cawzTJsBBES6/e0iH4dt9E6iq664jwpJyBdXM0KIffqTK4
3QRkpzgXvftlFxdtd131ql8nZuAia19mKQkV6kCWK00oFqrfGCLMSK7gAhIXxxsi
wdfvzsj60K8ndt1o2YPBhUwbIVht8U4I4n0Y60aCuJWKTRsGYL0p5rPP
-----END RSA PRIVATE KEY-----
"webserverkey.pem" [New] 27L, 1679C written
[root@ip-172-31-24-188 ec2-user]# chmod 400 webserverkey.pem
[root@ip-172-31-24-188 ec2-user]# ssh -i webserverkey.pem ec2-user@172.31.7.35

  _ | _ | _ |
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                        Amazon Linux 2 AMI

https://aws.amazon.com/amazon-linux-2/
25 package(s) needed for security, out of 39 available
Run "sudo yum update" to apply all updates.
[ec2-user@ip-172-31-7-35 ~]$
```

i-0a8c7377138045da4 (BastionServer)

Public IPs: 54.197.25.121 Private IPs: 172.31.24.188

Activate Windows

Go to Settings to activate Windows.



```
Instances | EC2 Management | i-0a8c7377138045da4 (Bastion) | i-0a8c7377138045da4 (Bastion) | Deepak commented on What | Learn with LetsUpgrade - | +
console.aws.amazon.com/ec2/v2/connect/ec2-user/i-0a8c7377138045da4
Verifying : mod_http2-1.15.14-2.amzn2.x86_64 5/9
Verifying : apr-1.6.3-5.amzn2.0.2.x86_64 6/9
Verifying : mailcap-2.1.41-2.amzn2.noarch 7/9
Verifying : generic-logos-httpd-18.0.0-4.amzn2.noarch 8/9
Verifying : httpd-2.4.46-1.amzn2.x86_64 9/9

Installed:
httpd.x86_64 0:2.4.46-1.amzn2

Dependency Installed:
apr.x86_64 0:1.6.3-5.amzn2.0.2 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 0:2.4.46-1.amzn2 httpd-tools.x86_64 0:2.4.46-1.amzn2
mailcap.noarch 0:2.1.41-2.amzn2 mod_http2.x86_64 0:1.15.14-2.amzn2

Complete!
[root@ip-172-31-7-35 ec2-user]# systemctl start httpd
[root@ip-172-31-7-35 ec2-user]# systemctl enable httpd
Created symlink from /etc/systemd/system/multi-user.target.wants/httpd.service to /usr/lib/systemd/system/httpd.service.
[root@ip-172-31-7-35 ec2-user]# echo "REQUEST HANDLING BY SERVER1">index.html
[root@ip-172-31-7-35 ec2-user]# exit
exit
[ec2-user@ip-172-31-7-35 ~]$ exit
logout
Connection to 172.31.7.35 closed.
[root@ip-172-31-24-188 ec2-user]#
```

i-0a8c7377138045da4 (BastionServer)

Public IPs: 54.197.25.121 Private IPs: 172.31.24.188

Activate Windows

Go to Settings to activate Windows.



```
Instances | EC2 Management | i-0a8c7377138045da4 (Bastion) | i-0a8c7377138045da4 (Bastion) | Deepak commented on What | Learn with LetsUpgrade - | + - X
console.aws.amazon.com/ec2/v2/connect/ec2-user/i-0a8c7377138045da4
Verifying : mod_http2-1.15.14-2.amzn2.x86_64 5/9
Verifying : apr-1.6.3-5.amzn2.0.2.x86_64 6/9
Verifying : mailcap-2.1.41-2.amzn2.noarch 7/9
Verifying : generic-logos-httpd-18.0.0-4.amzn2.noarch 8/9
Verifying : httpd-2.4.46-1.amzn2.x86_64 9/9

Installed:
  httpd.x86_64 0:2.4.46-1.amzn2

Dependency Installed:
  apr.x86_64 0:1.6.3-5.amzn2.0.2          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
  httpdfilesystem.noarch 0:2.4.46-1.amzn2  httpd-tools.x86_64 0:2.4.46-1.amzn2
  mailcap.noarch 0:2.1.41-2.amzn2          mod_http2.x86_64 0:1.15.14-2.amzn2

Complete!
[root@ip-172-31-14-72 ec2-user]# systemctl start httpd
[root@ip-172-31-14-72 ec2-user]# systemctl enable httpd
Created symlink from /etc/systemd/system/multi-user.target.wants/httpd.service to /usr/lib/systemd/system/httpd.service.
[root@ip-172-31-14-72 ec2-user]# echo "REQUEST HANDLING BY SERVER2">index.html
[root@ip-172-31-14-72 ec2-user]# exit
exit
[ec2-user@ip-172-31-14-72 ~]$ exit
logout
Connection to 172.31.14.72 closed.
[root@ip-172-31-24-188 ec2-user]#
```

i-0a8c7377138045da4 (BastionServer)

Public IPs: 54.197.25.121 Private IPs: 172.31.24.188

Activate Windows

Go to Settings to activate Windows.

