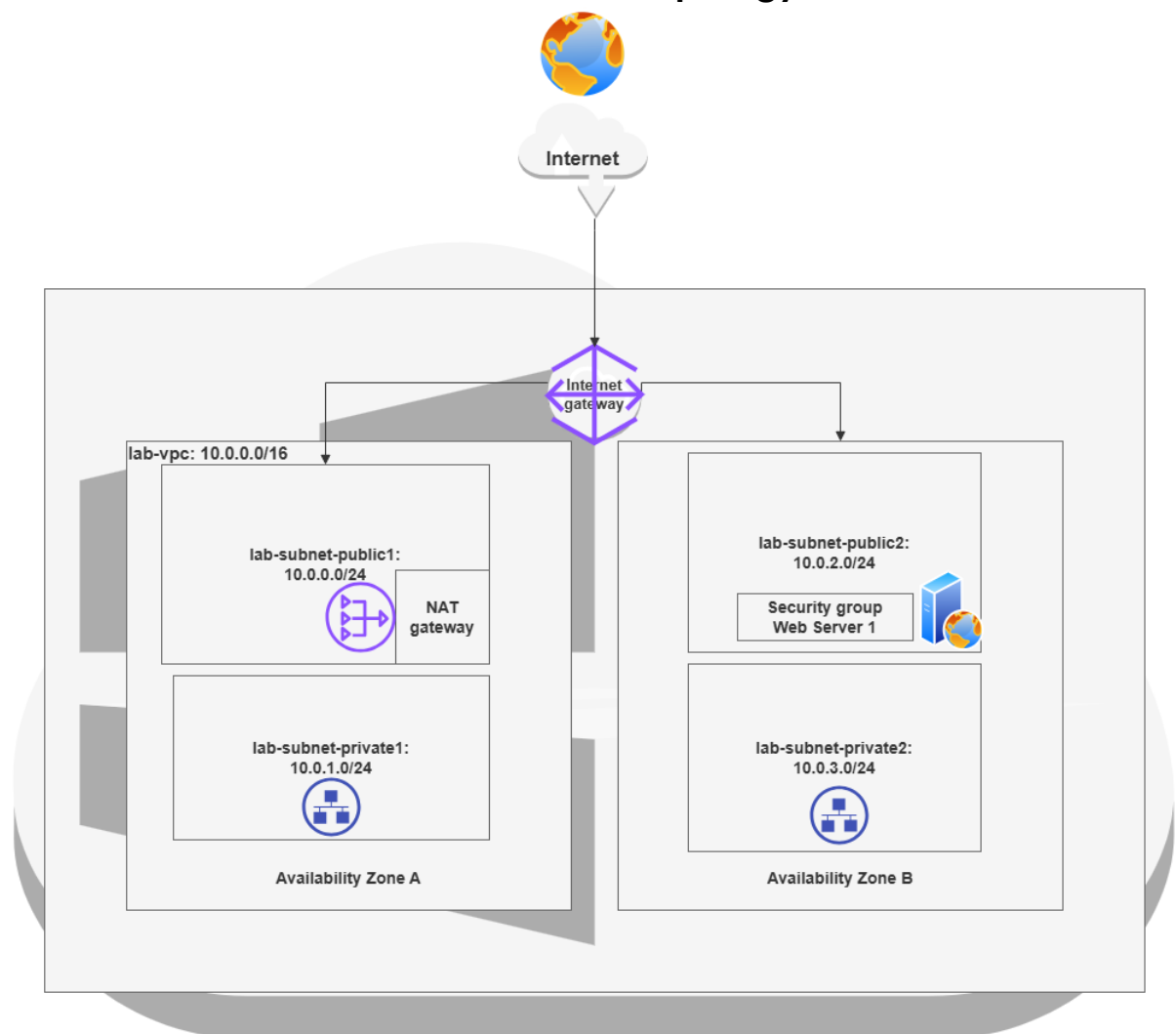


## (Module 5 Lab - Build VPC and Launch a Web Server)

- Screenshot of network infrastructure topology



- The network was designed to achieve the following objectives:

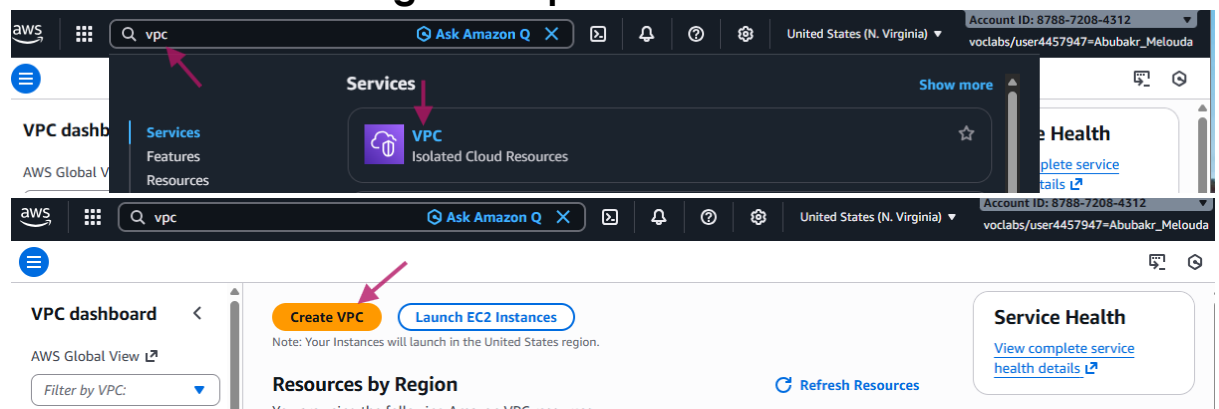
1. Security through segmentation: Public subnets (e.g. 10.0.0.0/24) host resources like web servers that must be accessible from the internet using an Internet Gateway for external connectivity. Private subnets (e.g. 10.0.1.0/24) host

internal resources such as application servers, backend systems and databases shielding them from direct internet exposure while still allowing controlled outbound access when needed.

**2. High availability across availability zones:** By deploying resources across multiple availability zones (AZs), services can continue running in another AZ if one becomes unavailable. This ensures improved fault tolerance and system resilience.

**3. Improvement opportunity and enhanced resilience:** To further strengthen this design, it would be ideal to deploy NAT Gateways in each availability zone. This would ensure private subnet resources maintain outbound internet connectivity even if availability zone-level failure impacts the NAT Gateway in a single zone.

- **Screenshot of creating virtual private cloud network.**



**Create VPC** [Info](#)

A VPC is an isolated portion of the AWS Cloud populated by AWS objects, such as Amazon EC2 instances. Mouse over a resource to highlight the related resources.

**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 auto-generation** [Info](#)  
Enter a value for the Name tag. This value will be used to auto-generate Name tags for all resources in the VPC.

☒ Auto-generate  
lab

**IPv4 CIDR block** [Info](#)  
Determine the starting IP and the size of your VPC using CIDR notation.

10.0.0.0/16 65,536 IPs  
CIDR block size must be between /16 and /28.

**IPv6 CIDR block** [Info](#)  
☒ No IPv6 CIDR block  
☐ Amazon-provided IPv6 CIDR block

**Tenancy** [Info](#)  
Default

► **Encryption settings - optional**

**Number of Availability Zones (AZs)** [Info](#)  
Choose the number of AZs in which to provision subnets. We recommend at least two AZs for high availability.

1 | 2 | 3

**Preview**

**VPC** [Show details](#)  
Your AWS virtual network

lab-vpc

**Subnets (2)**  
Subnets within this VPC

us-east-1a

lab-subnet-pub

lab-subnet-priv

## Screenshot of creating subnet 1 within the VPC.

**Create VPC** [Info](#)

**Number of public subnets** [Info](#)  
The number of public subnets to add to your VPC. Use public subnets for web applications that need to be publicly accessible over the internet.

0 | 1 | 2

**Number of private subnets** [Info](#)  
The number of private subnets to add to your VPC. Use private subnets to secure backend resources that don't need public access.

0 | 1 | 2

▼ **Customize subnets CIDR blocks**

**Public subnet CIDR block in us-east-1a**

10.0.0.0/24 256 IPs

**Private subnet CIDR block in us-east-1a**

10.0.1.0/24 256 IPs

**NAT gateways (\$)** - updated [Info](#)  
NAT gateway allows private resources to access the internet from any availability zone within a VPC, providing a single managed internet exit point for the entire region. Additional charges apply.

☒ None ☐ Regional - new ☐ Zonal

Introducing regional NAT gateway  
AWS now offers a multi-AZ NAT Gateway, eliminating the need for separate NAT Gateways across availability zones.

**VPC endpoints** [Info](#)  
Endpoints can help reduce NAT gateway charges and improve security by accessing S3 directly from the VPC. By default, full access policy is used. You can customize this policy at any time.

☐ None ☒ S3 Gateway

**Preview**

**VPC** [Show details](#)  
Your AWS virtual network

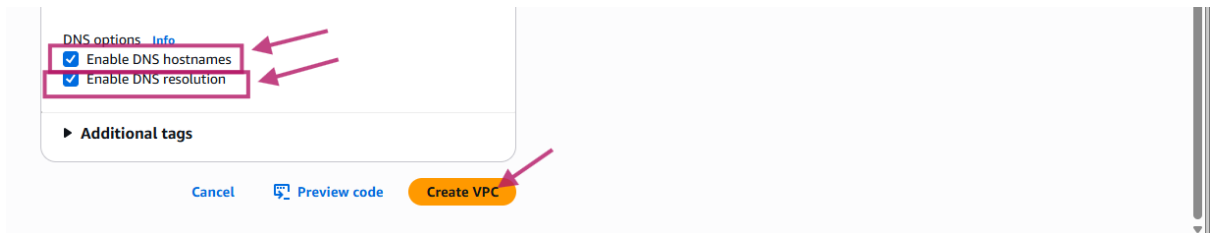
lab-vpc

**Subnets (2)**  
Subnets within this VPC

us-east-1a

lab-subnet-pub

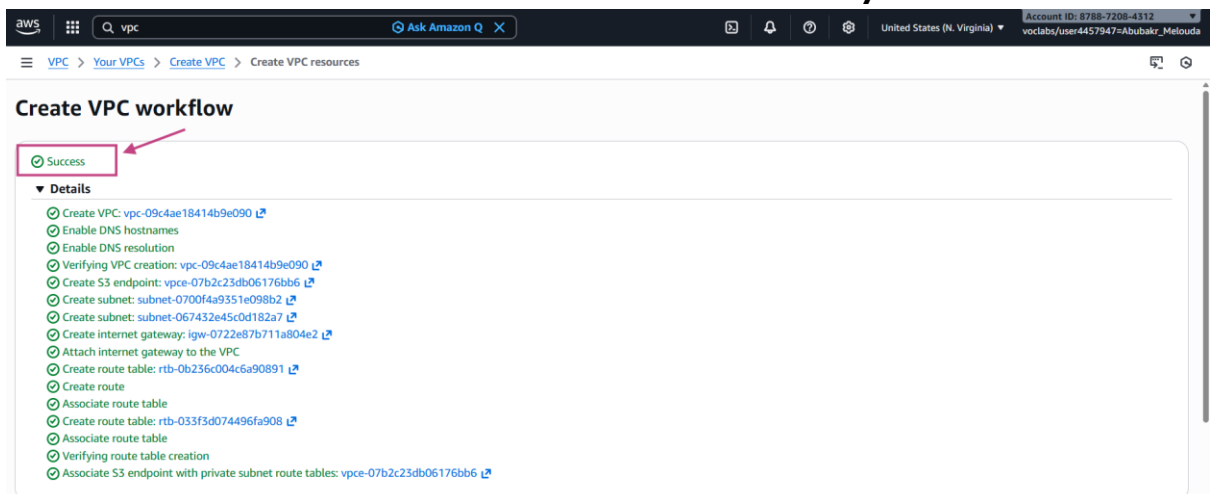
lab-subnet-priv



- Screenshot of network infrastructure overview before creation showing private and public subnet, routing table and network connection method.



## Screenshot of VPC subnet 1 created successfully:



- Screenshot step-by-step creating additional public subnet.

**Subnets (9)** Info

Last updated 2 minutes ago

Find subnets by attribute or tag

<input type="checkbox"/>	Name	Subnet ID	State	VPC
<input type="checkbox"/>	lab-subnet-public1-us-east-1a	subnet-0700f4a9351e098b2	Available	vpc-09c4ae18414b9e09c
<input type="checkbox"/>	-	subnet-05c836aa0580f0513	Available	vpc-0346a1a418e9b5c59
<input type="checkbox"/>	-	subnet-0f48a86ae3af024f0	Available	vpc-0346a1a418e9b5c59
<input type="checkbox"/>	-	subnet-078b9ba8daf1f8c50	Available	vpc-0346a1a418e9b5c59
<input type="checkbox"/>	Work Public Subnet	subnet-00f374ed01a41532f	Available	vpc-0331d7551335792eb
<input type="checkbox"/>	-	subnet-0f63dc1fff8409319	Available	vpc-0346a1a418e9b5c59
<input type="checkbox"/>	lab-subnet-private1-us-east-1a	subnet-067432e45c0d182a7	Available	vpc-09c4ae18414b9e09c
<input type="checkbox"/>	-	subnet-056bb1ae74964807c	Available	vpc-0346a1a418e9b5c59
<input type="checkbox"/>	-	subnet-00ae804e97b61ae95	Available	vpc-0346a1a418e9b5c59

Select a subnet

**Create subnet** Info

**VPC**

VPC ID

Create subnets in this VPC.

Select a VPC

Q |

- vpc-09c4ae18414b9e090 (lab-vpc) 10.0.0.0/16
- vpc-0331d7551335792eb (Work VPC) 10.0.0.0/16
- vpc-0346a1a418e9b5c59 172.31.0.0/16 (default)

Add new subnet

**Subnet settings**  
Specify the CIDR blocks and Availability Zone for the subnet.

**Subnet 1 of 1**

**Subnet name**  
Create a tag with a key of 'Name' and a value that you specify.  
lab-subnet-public2  
The name can be up to 256 characters long.

**Availability Zone** [Info](#)  
Choose the zone in which your subnet will reside, or let Amazon choose one for you.  
United States (N. Virginia) / use1-az2 (us-east-1b)

**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.  
10.0.0.0/16

**IPv4 subnet CIDR block**  
10.0.2.0/24 256 IPs

**Tags - optional**

Key	Value - optional	
Name	lab-subnet-public2	<a href="#">Remove</a>

[Add new tag](#)  
You can add 49 more tags.

[Remove](#)

[Add new subnet](#)

[Cancel](#) [Create subnet](#)

---

**VPC dashboard** [Subnets](#)

AWS Global View [Filter by VPC:](#)

**Virtual private cloud**

Your VPCs

[Subnets](#)

Route tables

Internet gateways

**Subnets (1)** [Info](#)  
Find subnets by attribute or tag  
Subnet ID : subnet-0a59cb866d2a4aff7 [Clear filters](#)

	Name	Subnet ID	State	VPC
<input type="checkbox"/>	lab-subnet-public2	subnet-0a59cb866d2a4aff7	Available	vpc-09c4ae18414b9e09c

[You have successfully created 1 subnet: subnet-0a59cb866d2a4aff7](#)

[Actions](#) [Create subnet](#)

- Screenshot step-by-step creating additional private subnet.

**Create subnet** Info

**VPC**  
VPC ID  
Create subnets in this VPC.  
vpc-09c4ae18414b9e090 (lab-vpc)

**Associated VPC CIDRs**  
IPv4 CIDRs  
10.0.0.0/16

**Subnet settings**  
Specify the CIDR blocks and Availability Zone for the subnet.

**Subnet 1 of 1**

**Subnet name**  
Create a tag with a key of 'Name' and a value that you specify.  
lab-subnet-private2  
The name can be up to 256 characters long.

**Availability Zone** Info  
Choose the zone in which your subnet will reside, or let Amazon choose one for you.  
United States (N. Virginia) / use1-az2 (us-east-1b)

**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.  
10.0.0.0/16

**IPv4 subnet CIDR block**  
10.0.3.0/24 256 IPs

**Subnets (1)** Info  
Last updated less than a minute ago

Find subnets by attribute or tag

Subnet ID : subnet-0bc3ae0f8346cd729 Clear filters

<input type="checkbox"/>	Name	Subnet ID	State	VPC
<input type="checkbox"/>	lab-subnet-private2	subnet-0bc3ae0f8346cd729	Available	vpc-09c4ae18414b9e090

- **Screenshot navigating to the routing table:**

**NAT gateways** Info

Find NAT gateways by attribute or tag

Name	NAT gateway ID	Connectivity...	State	State message	Av...
No NAT gateways found					

Select a NAT gateway

- Screenshot creating routing table:

**Create route table** [Info](#)

A route table specifies how packets are forwarded between the subnets within your VPC, the internet, and your VPN connection.

**Route table settings**

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

lab-rtb-private1-us-east-1a

**VPC**  
The VPC to use for this route table.

vpc-0e63f491381660ff9 (lab-vpc)

**Tags**  
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**

Q Name      Q lab-rtb-private1-us-east-1a      Remove

Add new tag  
You can add 49 more tags.

Cancel      Create route table

**VPC dashboard** <

AWS Global View

Filter by VPC:

Route table rtb-074d3761ce10cf8b6 | lab-rtb-private1-us-east-1a was created successfully.

rtb-074d3761ce10cf8b6 / lab-rtb-private1-us-east-1a      Actions

- Screenshot associating private subnet rules to “lab-subnet-private1-us-east-1a” and “lab-subnet-private2”:

**Edit subnet associations**

Change which subnets are associated with this route table.

**Available subnets (2/4)**

Filter subnet associations

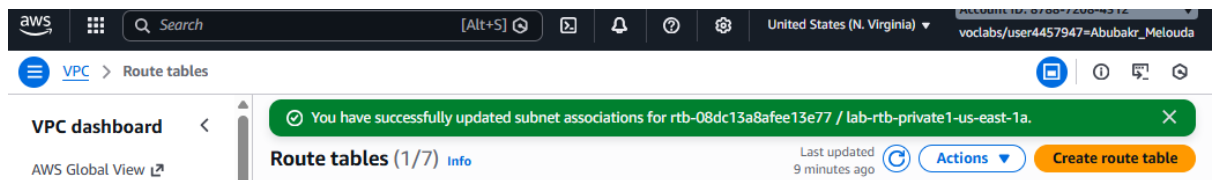
	Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	Route table ID
<input type="checkbox"/>	lab-subnet-public2	subnet-0dce3683c43cf4fea	10.0.2.0/24	-	Main (rtb-06ad0d99)
<input checked="" type="checkbox"/>	lab-subnet-private1-us-east-1a	subnet-0e6bd8025c58efa91	10.0.1.0/24	-	rtb-08dc13a8afee1
<input type="checkbox"/>	lab-subnet-public1-us-east-1a	subnet-0770765c36f4e7f...	10.0.0.0/24	-	rtb-017a8b447e80
<input checked="" type="checkbox"/>	lab-subnet-private2	subnet-0904294fd5dcb88da	10.0.3.0/24	-	rtb-074d3761ce10

**Selected subnets**

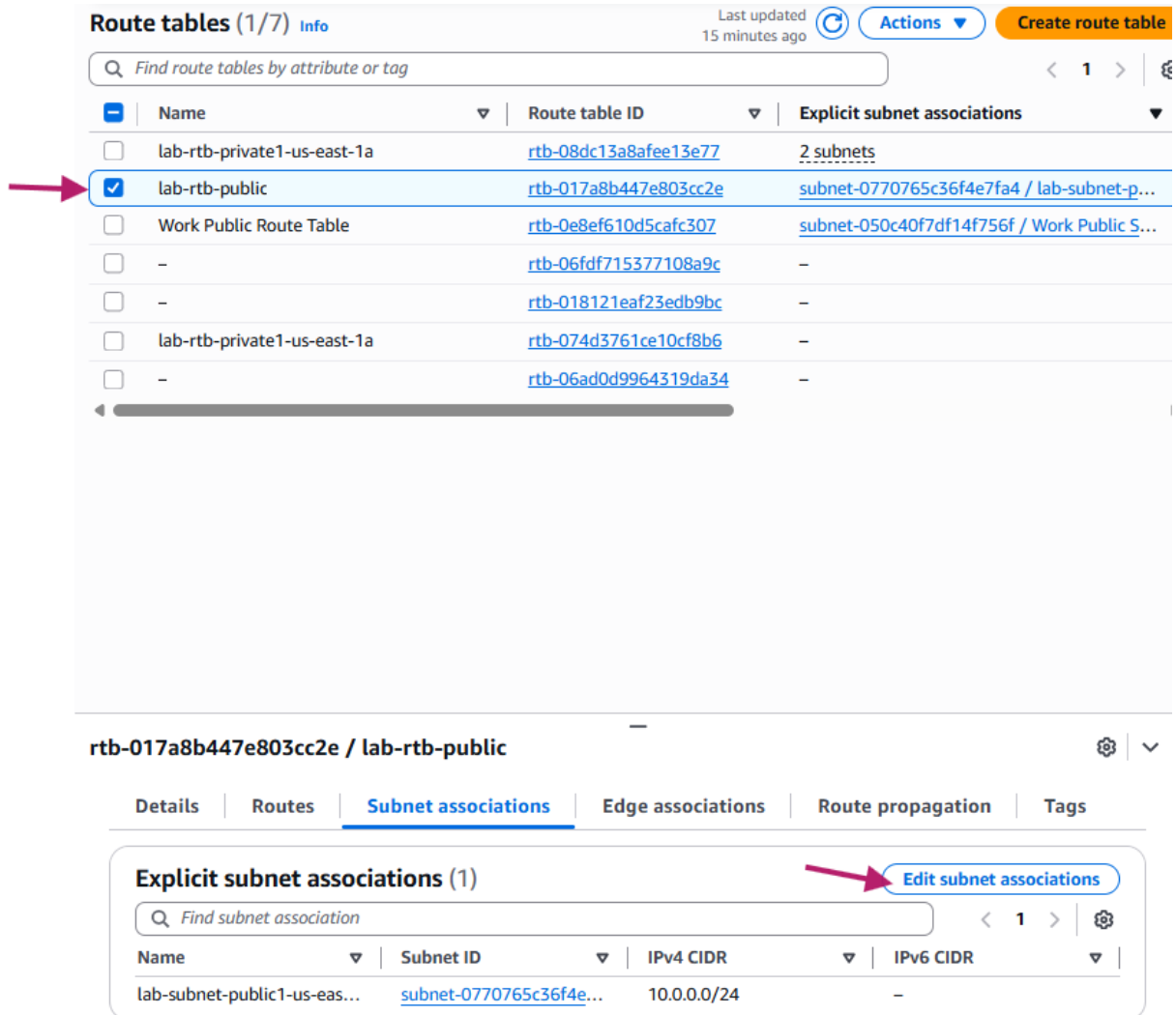
subnet-0e6bd8025c58efa91 / lab-subnet-private1-us-east-1a      subnet-0904294fd5dcb88da / lab-subnet-private2

Cancel      Save associations





- Screenshot associating public subnet rules to “lab-subnet-public1-us-east-1a” and “lab-subnet-public2”:



**Edit subnet associations**  
Change which subnets are associated with this route table.

**Available subnets (2/4)**

	Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	Route table ID
<input checked="" type="checkbox"/>	lab-subnet-public2	subnet-0dce3683c43cf4fea	10.0.2.0/24	-	Main (rtb-06ad0d9964319da34)
<input type="checkbox"/>	lab-subnet-private1-us-east-1a	subnet-0e6bd8025c58ef...	10.0.1.0/24	-	rtb-08dc13a8afee13e77 / lab-rtb-priv...
<input checked="" type="checkbox"/>	lab-subnet-public1-us-east-1a	subnet-0770765c36f4e7f...	10.0.0.0/24	-	rtb-017a8b447e803cc2e / lab-rtb-public...
<input type="checkbox"/>	lab-subnet-private2	subnet-0904294fd5dcb8...	10.0.3.0/24	-	rtb-08dc13a8afee13e77 / lab-rtb-priv...

**Selected subnets**

subnet-0770765c36f4e7fa4 / lab-subnet-public1-us-east-1a X    subnet-0dce3683c43cf4fea / lab-subnet-public2 X

Cancel    **Save associations**

**Route tables (1/7)** Info  
Last updated less than a minute ago  
Find route tables by attribute or tag

**You have successfully updated subnet associations for rtb-017a8b447e803cc2e / lab-rtb-public.**

- Screenshots of creating Security Group for Web Server access:

**Security Groups (4)** Info  
Find security groups by attribute or tag

	Name	Security group ID	Security group name	VPC ID
<input type="checkbox"/>	-	sg-054b1a5905e603b6f	Ec2SecurityGroup	vpc-018dadb5
<input type="checkbox"/>	-	sg-0e7c1a6bd556e5288	default	vpc-049a4df9
<input type="checkbox"/>	-	sg-0d64ec95cbb0cb54a	default	vpc-0e63f491
<input type="checkbox"/>	-	sg-06010a0f73aebd223	default	vpc-018dadb5

**Virtual private cloud**

- Your VPCs
- Subnets
- Route tables
- Internet gateways
- Egress-only Internet gateways
- Carrier gateways
- DHCP option sets
- Elastic IPs
- Managed prefix lists
- NAT gateways
- Peering connections
- Route servers

**Security**

- Network ACLs
- Security groups**

**Create security group**

aws | Search | [Alt+S] | United States (N. Virginia) | Account ID: 8788-7208-4312 | voclabs/user4457947=Abubakr\_Melouda

VPC > Security Groups > Create security group

### Create security group Info

A security group acts as a virtual firewall for your instance to control inbound and outbound traffic. To create a new security group, complete the fields below.

#### Basic details

**Security group name** Info  
Web Security Group  
Name cannot be edited after creation.

**Description** Info  
Enable HTTP access

**VPC** Info  
vpc-0e63f491381660ff9 (lab-vpc)

#### Inbound rules Info

Type <small>Info</small>	Protocol <small>Info</small>	Port range <small>Info</small>	Source <small>Info</small>	Description - optional <small>Info</small>
HTTP	TCP	80	A... 0.0.0.0/0	Permit web requests

[Add rule](#) [Delete](#)

aws | Search | [Alt+S] | United States (N. Virginia) | Account ID: 8788-7208-4312 | voclabs/user4457947=Abubakr\_Melouda

VPC > Security Groups > sg-0418cede566856827 - Web Security Group

Virtual private cloud  
Your VPCs  
Subnets  
Route tables

Security group (sg-0418cede566856827 | Web Security Group) was created successfully  
[Details](#)

sg-0418cede566856827 - Web Security Group [Actions](#)

- Screenshots of setting up a webserver:

aws | Search | Ask Amazon Q | United States (N. Virginia) | Account ID: 8788-7208-4312 | voclabs/user4457947=Abubakr\_Melouda

EC2 >

Launch a new Amazon EC2 instance following the steps in the Amazon EC2 console.

Services

- EC2  
Virtual Servers in the Cloud

Show more

**EC2**

Dashboard  
EC2 Global View  
Events

▼ **Instances**  
Instances  
Instance Types  
Launch Templates  
Spot Requests  
Savings Plans  
Reserved Instances  
Dedicated Hosts  
Capacity Reservations  
Capacity Manager [New](#)

▼ **Images**  
AMIs  
AMI Catalog

▼ **Elastic Block Store**  
Volumes

**Resources**

You are using the following Amazon EC2 resources in the United States (N. Virginia) Region:

Instances (running)	1	Auto Scaling Groups	0
Capacity Reservations	0	Dedicated Hosts	0
Elastic IPs	1	Instances	1
Key pairs	1	Load balancers	0
Placement groups	0	Security groups	5
Snapshots	0	Volumes	1

**Launch instance**

To get started, launch an Amazon EC2 instance, which is a virtual server in the cloud.

[Launch instance](#) ▼

[Migrate a server](#)

**Service health**

[AWS Health Dashboard](#)

Region  
United States (N. Virginia)

**Account attributes**

**Default VPC**  
vpc-049a4df9a8ebd025f

**Settings**  
[Data protection and security](#)  
[Allowed AMIs](#)  
[Zones](#)  
[EC2 Serial Console](#)  
[Default credit specification](#)  
[EC2 console preferences](#)

**Explore AWS**

**Get Up to 40% Better Price Performance**  
T4g instances deliver the best price performance for burstable general purpose workloads in Amazon EC2. [Learn more](#)

**Enable Best Price-Performance with AWS Graviton2**  
AWS Graviton2 powered EC2

**Launch an instance** [Info](#)

Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.

**Name and tags** [Info](#)

Name  
Web Server 1 [Add additional tags](#)

▼ **Application and OS Images (Amazon Machine Image)** [Info](#)

An AMI contains the operating system, application server, and applications for your instance. If you don't see a suitable AMI below, use the search field or choose [Browse more AMIs](#).

Search our full catalog including 1000s of application and OS images

Recents | **Quick Start**

Amazon Linux macOS Ubuntu Windows Red Hat SU

**Amazon Machine Image (AMI)**

Amazon Linux 2023 kernel-6.1 AMI  
ami-068c0051b15cdb816 (64-bit x86, uefi-preferred) / ami-0720c0a2e1e125edd (64-bit (Arm), uefi)  
Virtualization: hvm ENA enabled: true Root device type: ebs

**Description**

Amazon Linux 2023 (kernel-6.1) is a modern, general purpose Linux-based OS that comes with 5 years of long term support. It is optimized for AWS and designed to provide a secure, stable and high-performance execution environment to develop and run your cloud applications.

Amazon Linux 2023 AMI 2023.9.20251208.0 x86\_64 HVM kernel-6.1

**Architecture** 64-bit **Boot mode** uefi-preferred **AMI ID** ami-068c0051b15cdb816 **Publish Date** 2025-12-03 **Username** ec2-user

**Summary**

**Number of instances** 1 [Info](#)

**Software Image (AMI)**  
Amazon Linux 2023 AMI 2023.9.2...[read more](#)  
ami-068c0051b15cdb816

**Virtual server type (instance type)**  
t2.micro

**Firewall (security group)**  
New security group

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

**Free tier:** In your first year of opening an AWS account, you get 750 hours per month of t2.micro instance usage (or t3.micro where t2.micro isn't available) when used with free tier AMIs, 750 hours per month of public IPv4 address usage, 30 GiB of EBS storage, 2 million I/Os, 1 GB of snapshots, and 100 GB of bandwidth to the internet. Data transfer charges are not included as part of the free tier allowance.

[Cancel](#) [Launch instance](#) [Preview code](#)

aws

ECR

Ask Amazon Q

United States (N. Virginia)

Account ID: 8788-7208-4312  
voclabs/user4457947=Abubakr\_Melouda

EC2 > Instances > Launch an instance

▼ Instance type

Info | Get advice

Instance type

t2.micro

Family: t2 1 VCPU 1 GiB Memory Current generation: true  
On-Demand Windows base pricing: 0.0162 USD per Hour  
On-Demand Ubuntu Pro base pricing: 0.0134 USD per Hour  
On-Demand SUSE base pricing: 0.0116 USD per Hour  
On-Demand RHEL base pricing: 0.026 USD per Hour  
On-Demand Linux base pricing: 0.0116 USD per Hour

▼

All generations

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

vockey

▼

Create new key pair

▼ Network settings

Info

VPC - required

Info

vpc-0e63f491381660ff9

lab-vpc

▼

10.0.0.0/16

Subnet

Info

subnet-0dce3683c43cf4fea

lab-subnet-public2

▼

VPC: vpc-0e63f491381660ff9 Owner: 878872084312  
Availability Zone: us-east-1b (use1-az2) Zone type: Availability Zone  
IP addresses available: 251 CIDR: 10.0.2.0/24

Auto-assign public IP

Info

Enable

▼

Additional charges apply when outside of free tier allowance

Firewall (security groups)

Info

A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

Create security group

Select existing security group

▼ Summary

Number of instances

Info

1

Software Image (AMI)

Amazon Linux 2023 AMI 2023.9.2...read more  
ami-068c0051b15cdeb816

Virtual server type (instance type)

t2.micro

Firewall (security group)

Web Security Group

Storage (volumes)

1 volume(s) - 8 GiB

Free tier: In your first year of opening an AWS account, you get 750 hours per month of t2.micro instance usage (or t3.micro where t2.micro isn't available) when used with free tier AMIs, 750 hours per month of public IPv4 address usage, 30 GiB of EBS storage, 2 million I/Os, 1 GB of snapshots, and 100 GB of bandwidth to the internet. Data transfer charges are not included as part of the free tier allowance.

Cancel

Launch instance

Preview code

aws

EC2

Launch an instance

Account ID: 8788-7208-4312  
voclabs/user4457947=Abubakr\_Melouda

Firewall (security groups) | Info

A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

Create security group

Select existing security group

Common security groups | Info

Select security groups

Web Security Group sg-0418cede566856827  
VPC: vpc-0e63f491381660ff9

Compare security group rules

Security groups that you add or remove here will be added to or removed from all your network interfaces.

Advanced network configuration

Configure storage | Info

Advanced

1x 8 GiB gp3 Root volume, 3000 IOPS, 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

Summary

Number of instances | Info

1

Software Image (AMI)  
Amazon Linux 2023 AMI 2023.9.2...read more  
ami-068c0051b15cdb816

Virtual server type (instance type)  
t2.micro

Firewall (security group)  
Web Security Group

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

Free tier: In your first year of opening an AWS account, you get 750 hours per month of t2.micro instance usage (or t3.micro where t2.micro isn't available) when used with free tier AMIs, 750 hours per month of public IPv4 address usage, 30 GiB of EBS storage, 2 million I/Os, 1 GB of snapshots, and 100 GB of bandwidth to the internet. Data transfer charges are not included as part of the free tier allowance.

aws

EC2

Launch an instance

Account ID: 8788-7208-4312  
voclabs/user4457947=Abubakr\_Melouda

Metadata IPv6 endpoint | Info

Select

Metadata version | Info

V2 only (token required)

For V2 requests, you must include a session token in all instance metadata requests. Applications or agents that use V1 for instance metadata access will break.

Metadata response hop limit | Info

2

Allow tags in metadata | Info

Select

User data - optional | Info

Upload a file with your user data or enter it in the field.

Choose file

```
#!/bin/bash
# Install Apache Web Server and PHP
dnf install -y httpd wget php mariadb105-server
# Download Lab files
wget https://aws-tc-largeobjects.s3.us-west-2.amazonaws.com/CUR-
TF-100-ACCLFO-2/2-lab2-vpc/s3/lab-app.zip
unzip lab-app.zip -d /var/www/html/
# Turn on web server
chkconfig httpd on
service httpd start
```

☐ User data has already been base64 encoded

Summary

Number of instances | Info

1

Software Image (AMI)  
Amazon Linux 2023 AMI 2023.9.2...read more  
ami-068c0051b15cdb816

Virtual server type (instance type)  
t2.micro

Firewall (security group)  
Web Security Group

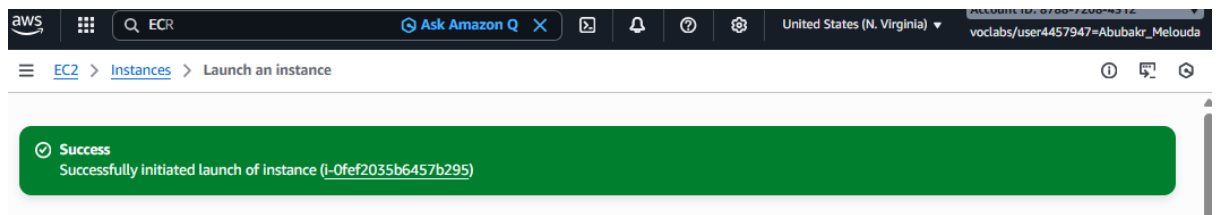
Storage (volumes)  
1 volume(s) - 8 GiB

Free tier: In your first year of opening an AWS account, you get 750 hours per month of t2.micro instance usage (or t3.micro where t2.micro isn't available) when used with free tier AMIs, 750 hours per month of public IPv4 address usage, 30 GiB of EBS storage, 2 million I/Os, 1 GB of snapshots, and 100 GB of bandwidth to the internet. Data transfer charges are not included as part of the free tier allowance.

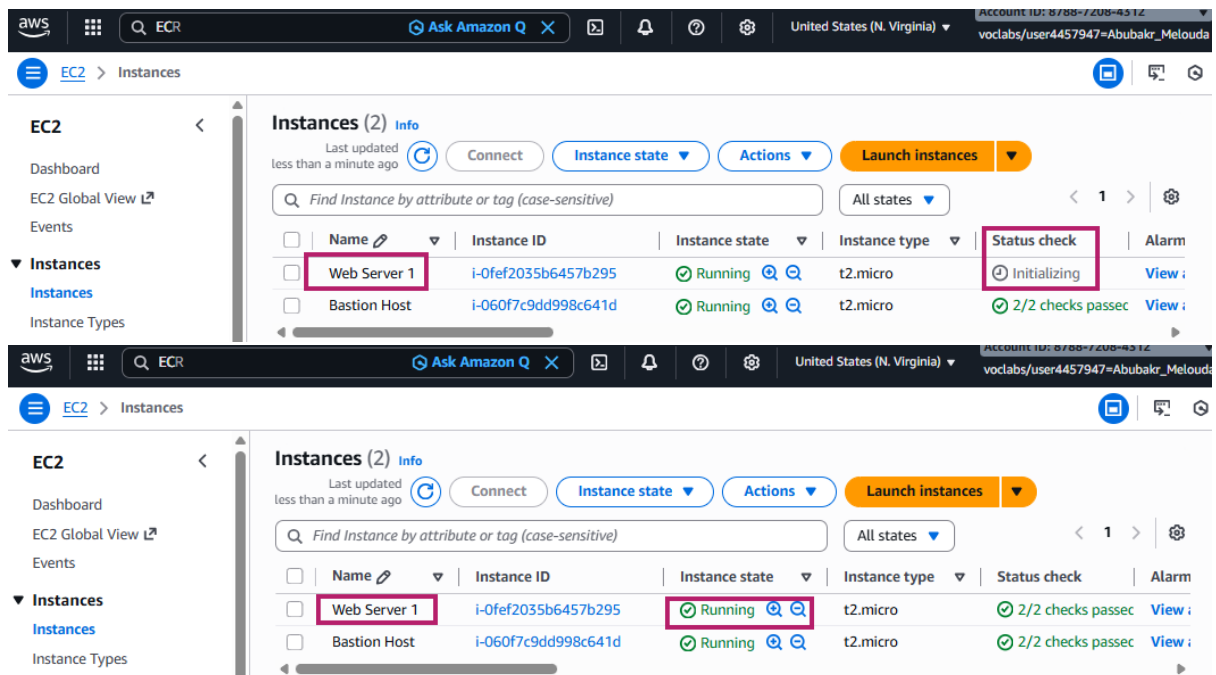
Cancel

Launch instance

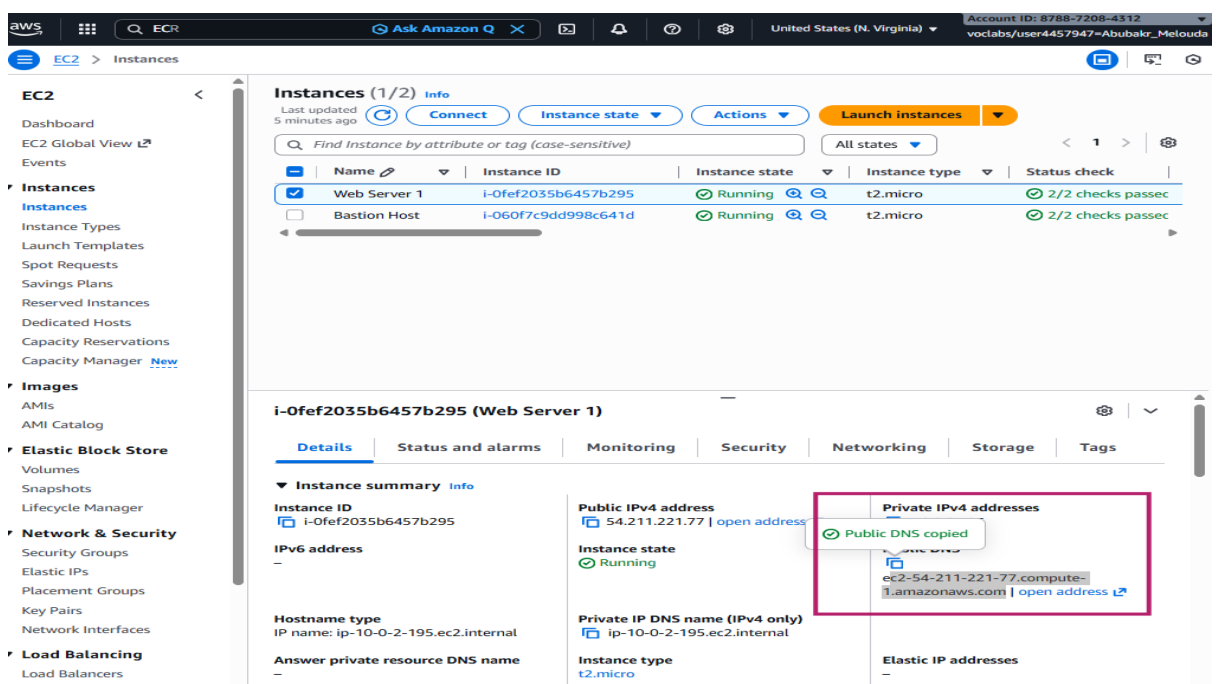
Preview code



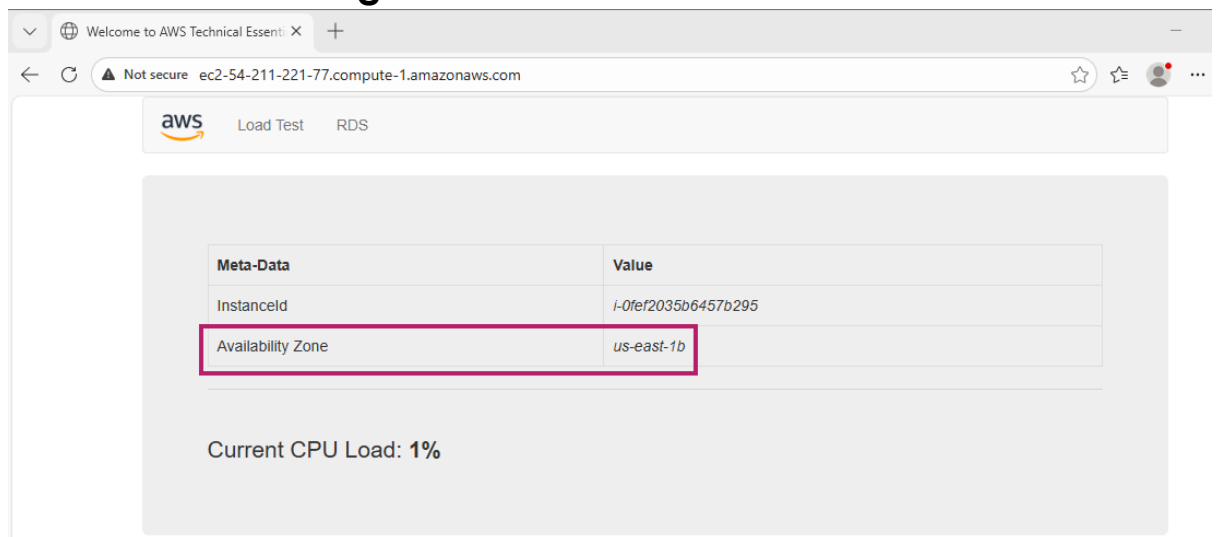
## Screenshot of successful test access to the Web server access in Zone B:



## Testing Web Server access using public IPv4 DNS.



## Screenshot of testing access to the Web server:



The last step confirms the successful deployment of a web server in the public subnet “lab-subnet-public2”. The Apache server is running with PHP support serving content from the /var/www/html/ directory as configured in the EC2 instance user data script. The displayed AWS logo and instance metadata verify that all VPC networking components, security groups, route tables and NAT Gateway are successfully configured.