

LAB | AWS Networking & Virtual Private Cloud

VPC :

The screenshot shows the AWS VPC dashboard for the VPC `vpc-0e2a38b53d5dd9470`. The main panel displays various configuration details:

Setting	Value
VPC ID	<code>vpc-0e2a38b53d5dd9470</code>
State	Available
DNS resolution	Enabled
Tenancy	default
Main network ACL	<code>acl-0e322d022b3a8694a</code>
Default VPC	No
IPv6 CIDR	-
Network Address Usage metrics	Disabled
Encryption control ID	-
Encryption control mode	-
Block Public Access	Off
DHCP option set	<code>dopt-08c50754b344c373f</code>
IPv4 CIDR	10.0.0.0/16
Route 53 Resolver DNS Firewall rule groups	-
DNS hostnames	Disabled
Main route table	<code>rtb-0f107b6d7da7ba8e5</code>
IPv6 pool	-
Owner ID	<code>686699774218</code>

Below the main panel, there are tabs for "Resource map", "CIDRs", "Flow logs", "Tags", and "Integrations". The "CIDRs" tab is selected, showing one entry:

Address family	CIDR	Status
IPv4	10.0.0.0/16	Associated

Public Subnet:

The screenshot shows the AWS Subnets dashboard for the subnet `subnet-00e3f83881a97f655`. The main panel displays various configuration details:

Setting	Value
Subnet ID	<code>subnet-00e3f83881a97f655</code>
State	Available
IPv4 CIDR	10.0.1.0/24
Availability Zone	<code>euw1-az2 (eu-west-1a)</code>
Default subnet	No
Customer-owned IPv4 pool	-
IPv6-only	No
DNS64	Disabled
Auto-assign public IPv4 address	No
Outpost ID	-
Hostname type	IP name
Owner	<code>686699774218</code>
IPv6 CIDR	-
Route table	<code>rtb-0a1ea6e384bb90b4d / prod-public-route-table-vijaya</code>
Block Public Access	Off
IPv6 CIDR association ID	-
Network ACL	<code>acl-0e322d022b3a8694a</code>
Auto-assign customer-owned IPv4 address	No
IPv6 CIDR reservations	-
Resource name DNS A record	Disabled

Below the main panel, there are tabs for "Flow logs", "Route table", "Network ACL", "CIDR reservations", "Sharing", and "Tags". The "Route table" tab is selected, showing the route table associated with the subnet.

Private Subnet:

subnet-047de1396724d26a0 / private-subnet-vijaya

Details

Subnet ID	arn:aws:ec2:eu-west-1:686699774218:subnet-047de1396724d26a0	State	Available
IPv4 CIDR	10.0.2.0/24	IPv6 CIDR	-
Availability Zone	euw1-az2 (eu-west-1a)	Route table	rtb-0abf68a2583a1d26a prod-private-route-table-vijaya
Default subnet	No	Auto-assign IPv4 address	No
Customer-owned IPv4 pool	-	Outpost ID	-
IPv6-only	No	Hostname type	IP name
DNS64	Disabled	Owner	686699774218

Flow logs | Route table | Network ACL | CIDR reservations | Sharing | Tags

Route table: rtb-0abf68a2583a1d26a / prod-private-route-table-vijaya | [Edit route table association](#)

Routes (2)

Internet Gateway:

igw-0cb723a7c0912f477 / prod-igw-vijaya

Details

Internet gateway ID	igw-0cb723a7c0912f477	State	Attached
VPC ID	vpc-0e2a38b53d5dd9470 prod-vpc-vijaya	Owner	686699774218

Tags (1)

Key	Value
Name	prod-igw-vijaya

[Manage tags](#)

NAT Gateway:

eu-west-1.console.aws.amazon.com/vpcconsole/home?region=eu-west-1#NatGatewayDetails:natGatewayId=nat-127263241e9fe557b

VPC > NAT gateways > nat-127263241e9fe557b

nat-127263241e9fe557b / prod-ngw-vijaya

Details

NAT gateway ID nat-127263241e9fe557b	Availability mode Regional	State Available	State message -
NAT gateway ARN arn:aws:ec2:eu-west-1:686699774218:natgateway/nat-127263241e9fe557b	Connectivity type Public	Created Wednesday, January 21, 2026 at 17:41:37 GMT+1	Deleted -
VPC vpc-0e2a38b53d5dd9470 / prod-vpc-vijaya	Method of EIP allocation Manual		

IP addresses | Monitoring | Flow logs | Tags

Associated IP addresses (1)

IP address	Status	Availability Zone	Allocation ID
52.215.14.143	Succeeded	euw1-az2 (eu-west-1a)	eipalloc-0bf9945b850aea216

Public Route Table :

AWS | Search [Alt+S] ▶

VPC > Route tables > rtb-0a1ea6e384bb90b4d

rtb-0a1ea6e384bb90b4d / prod-public-route-table-vijaya

Details

Route table ID rtb-0a1ea6e384bb90b4d	Main No	Explicit subnet associations subnet-00e3f83881a97f655 / public-subnet-vijaya	Edge associations -
VPC vpc-0e2a38b53d5dd9470 prod-vpc-vijaya	Owner ID 686699774218		

Routes | Subnet associations | Edge associations | Route propagation | Tags

Routes (2)

Destination	Target	Status	Propagated	Route Origin
0.0.0.0/0	igw-0cb723a7c0912f477	Active	No	Create Route
10.0.0.0/16	local	Active	No	Create Route Table

Private Route Table:

eu-west-1.console.aws.amazon.com/vpcconsole/home?region=eu-west-1#RouteTableDetails:RouteTableId=rtb-0abf68a2583a1d26a

VPC > Route tables > rtb-0abf68a2583a1d26a

rtb-0abf68a2583a1d26a / prod-private-route-table-vijaya

Details

Route table ID rtb-0abf68a2583a1d26a	Main No	Explicit subnet associations subnet-047de1396724d26a0 / private-subnet-vijaya	Edge associations -
VPC vpc-0e2a38b53d5dd9470 prod-vpc-vijaya	Owner ID 686699774218		

Routes (2)

Destination	Target	Status	Propagated	Route Origin
0.0.0.0/0	nat-127263241e9fe557b	Active	No	Create Route
10.0.0.16	local	Active	No	Create Route Table

Instances :

EC2 > Instances > i-00b4e1f83eb85c545

Instance summary for i-00b4e1f83eb85c545 (prod-public-instance-vijaya) [Info](#)

Updated less than a minute ago

Instance ID i-00b4e1f83eb85c545	Public IPv4 address 63.32.109.136 open address	Private IPv4 addresses 10.0.1.210
IPv6 address -	Instance state Running	Public DNS -
Hostname type IP name: ip-10-0-1-210.eu-west-1.compute.internal	Private IP DNS name (IPv4 only) ip-10-0-1-210.eu-west-1.compute.internal	Elastic IP addresses -
Answer private resource DNS name -	Instance type t2.micro	AWS Compute Optimizer finding Opt-in to AWS Compute Optimizer for recommendations. Learn more
Auto-assigned IP address 63.32.109.136 [Public IP]	VPC ID vpc-0e2a38b53d5dd9470 (prod-vpc-vijaya)	Subnet ID subnet-00e3f83881a97f655 (public-subnet-vijaya)
IAM role -	Instance ARN arn:aws:ec2:eu-west-1:686699774218:instance/i-00b4e1f83eb85c545	Auto Scaling Group name -
IMDSv2 Required	Operator -	Managed false

Security

Instance summary for i-0594d356ef7114364 (prod-private-instance-vijaya) [Info](#)

Updated less than a minute ago

Instance ID	i-0594d356ef7114364	Public IPv4 address	10.0.2.69
IPv6 address	-	Instance state	Running
Hostname type	IP name: ip-10-0-2-69.eu-west-1.compute.internal	Private IP DNS name (IPv4 only)	ip-10-0-2-69.eu-west-1.compute.internal
Answer private resource DNS name	-	Instance type	t2.micro
Auto-assigned IP address	-	VPC ID	vpc-0e2a38b53d5dd9470 (prod-vpc-vijaya)
IAM role	-	Subnet ID	subnet-047de1396724d26a0 (private-subnet-vijaya)
IMDSv2	Required	Instance ARN	arn:aws:ec2:eu-west-1:686699774218:instance/i-0594d356ef7114364
Operator	-		

Details | Status and alarms | Monitoring | **Security** | Networking | Storage | Tags

[View security details](#)

Connection Verification

```
vijayagagla@DESKTOP-FP4OP26:~$ ssh-add ~/.ssh/prod-private-instance-key-vijaya.pem
Identity added: /home/vijayagagla/.ssh/prod-private-instance-key-vijaya.pem (/home/vijayagagla/.ssh/prod-private-instance-key-vijaya)
vijayagagla@DESKTOP-FP4OP26:~$ ssh -A -i prod-public-instance-key-vijaya.pem ec2-user@63.32.109.136
A newer release of "Amazon Linux" is available.
 Version 2023.10.20260120:
 Version 2023.10.20260120:
Run "/usr/bin/dnf check-release-update" for full release and version update info
#
#_ _###_ _ Amazon Linux 2023
~~ \_ #####\_
~~ \###|
~~ \#/ ___ https://aws.amazon.com/linux/amazon-linux-2023
~~ V~' '-->
~~ /
~~ ._. /-
~~ /_ /-
~~ /m/
Last login: Sat Jan 24 19:01:44 2026 from 149.224.176.208
[ec2-user@ip-10-0-1-210 ~]$ |
```

```
[ec2-user@ip-10-0-1-210 ~]$ ssh ec2-user@10.0.2.69
The authenticity of host '10.0.2.69 (10.0.2.69)' can't be established.
ED25519 key fingerprint is SHA256:Z1ldS5LLIsLSxkZWTksndk8Uzvnnkhr88h6F8uw5P8w.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '10.0.2.69' (ED25519) to the list of known hosts.
#
#_ _###_ _ Amazon Linux 2023
~~ \_ #####\_
~~ \###|
~~ \#/ ___ https://aws.amazon.com/linux/amazon-linux-2023
~~ V~' '-->
~~ /
~~ ._. /-
~~ /_ /-
~~ /m/
[ec2-user@ip-10-0-2-69 ~]$
```

