

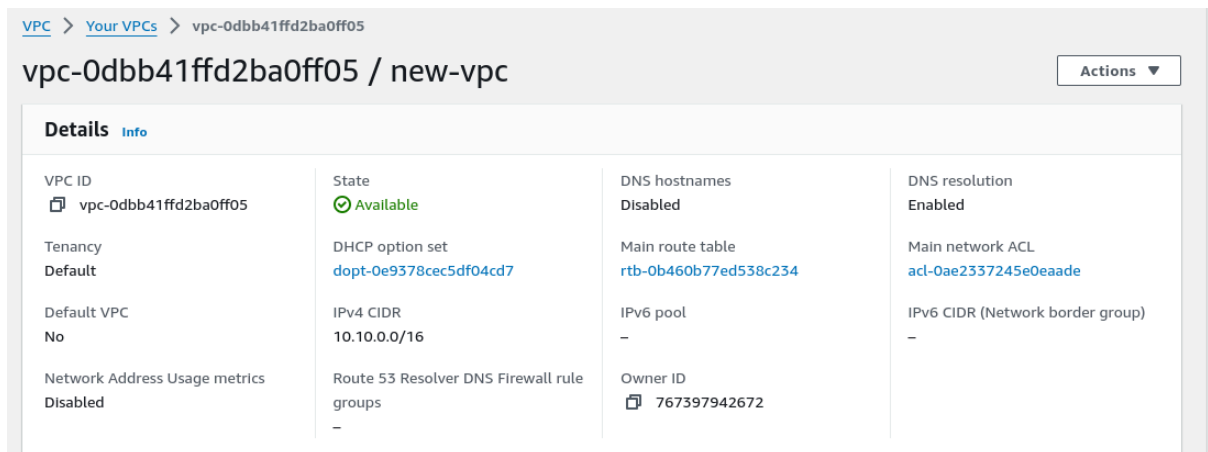
VPC configuration

This documentation will help you to create vpc and full configuration of vpc.




- Login to aws and go to the AWS console.

CREATION OF VPC:

- Search VPC and go to create VPC. Choose VPC name: new-vpc and its CIDR range: 10.10.0.0/16.



The screenshot shows the AWS VPC console interface. At the top, there's a breadcrumb trail: [VPC](#) > [Your VPCs](#) > [vpc-0dbb41ffd2ba0ff05](#). Below this, the VPC name 'new-vpc' and ID 'vpc-0dbb41ffd2ba0ff05' are displayed. An 'Actions' dropdown menu is visible on the right. The main content area is titled 'Details' and contains a table with various VPC configuration parameters.

VPC ID  vpc-0dbb41ffd2ba0ff05	State  Available	DNS hostnames Disabled	DNS resolution Enabled
Tenancy Default	DHCP option set dopt-0e9378cec5df04cd7	Main route table rtb-0b460b77ed538c234	Main network ACL acl-0ae2337245e0eaade
Default VPC No	IPv4 CIDR 10.10.0.0/16	IPv6 pool -	IPv6 CIDR (Network border group) -
Network Address Usage metrics Disabled	Route 53 Resolver DNS Firewall rule groups -	Owner ID  767397942672	

CREATION OF SUBNETS:

- Navigate through subnet
- Choose to create a subnet and create two subnets(public and private).
- Create
 - public subnet: new-public-subnet
 - vpc : new-vpc
 - Availability zone : 1a
 - CIDR range : 10.10.1.0/24

VPC > Subnets > subnet-0c9efd83d1b642040

subnet-0c9efd83d1b642040 / new-public-subnet Actions ▼

Details

Subnet ID subnet-0c9efd83d1b642040	Subnet ARN arn:aws:ec2:us-east-1:767397942672:subnet/subnet-0c9efd83d1b642040	State Available	IPv4 CIDR 10.10.1.0/24
Available IPv4 addresses 251	IPv6 CIDR -	Availability Zone us-east-1a	Availability Zone ID use1-az2
Network border group us-east-1	VPC vpc-0dbb41ffd2ba0ff05 new-vpc	Route table rtb-0b460b77ed538c234	Network ACL acl-0ae2337245e0eaade
Default subnet No	Auto-assign public IPv4 address No	Auto-assign IPv6 address No	Auto-assign customer-owned IPv4 address No
Customer-owned IPv4 pool -	Outpost ID -	IPv4 CIDR reservations -	IPv6 CIDR reservations -
IPv6-only No	Hostname type IP name	Resource name DNS A record Disabled	Resource name DNS AAAA record Disabled
DNS64 Disabled	Owner 767397942672		

- Create
 - private subnet: new-private-subnet
 - vpc : new-vpc
 - Availability zone : 1b
 - CIDR range : 10.10.2.0/24

VPC > Subnets > subnet-029a0cffa72ba81af

subnet-029a0cffa72ba81af / new-private-subnet Actions ▼

Details

Subnet ID subnet-029a0cffa72ba81af	Subnet ARN arn:aws:ec2:us-east-1:767397942672:subnet/subnet-029a0cffa72ba81af	State Available	IPv4 CIDR 10.10.2.0/24
Available IPv4 addresses 251	IPv6 CIDR -	Availability Zone us-east-1b	Availability Zone ID use1-az4
Network border group us-east-1	VPC vpc-0dbb41ffd2ba0ff05 new-vpc	Route table rtb-0b460b77ed538c234	Network ACL acl-0ae2337245e0eaade
Default subnet No	Auto-assign public IPv4 address No	Auto-assign IPv6 address No	Auto-assign customer-owned IPv4 address No
Customer-owned IPv4 pool -	Outpost ID -	IPv4 CIDR reservations -	IPv6 CIDR reservations -
IPv6-only No	Hostname type IP name	Resource name DNS A record Disabled	Resource name DNS AAAA record Disabled
DNS64 Disabled	Owner 767397942672		

CREATION OF INTERNET GATEWAY:

- Navigate through internet gateway
- Create an internet gateway named new-internet-gateway.

VPC > Internet gateways > igw-032a5ad915d60fef0

igw-032a5ad915d60fef0 / new-internet-gateway Actions ▼

Details [Info](#)

Internet gateway ID igw-032a5ad915d60fef0	State ⊖ Detached	VPC ID -	Owner 767397942672
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Tags Manage tags

Key	Value
Name	new-internet-gateway

- Go through actions and Attach it to vpc (new-vpc).

VPC > Internet gateways > igw-032a5ad915d60fef0

igw-032a5ad915d60fef0 / new-internet-gateway Actions ▼

Details [Info](#)

Internet gateway ID igw-032a5ad915d60fef0	State ✔ Attached	VPC ID vpc-0ddb41ffd2ba0ff05 new-vpc	Owner 767397942672
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Tags Manage tags

Key	Value
Name	new-internet-gateway

CREATION OF NAT GATEWAY:

- Navigate through Nat gateway and choose nat gateway.
- Choose
Name : new-nat-gateway
Subnet : new-public-subnet
Note : nat gateway is always placed in a public subnet.

- Allocate elastic IP for nat gateway.

VPC > NAT gateways > nat-0d17c5564b2337278

nat-0d17c5564b2337278 / new-nat-gateway Actions ▼

Details			
NAT gateway ID nat-0d17c5564b2337278	Connectivity type Public	State Pending	State message Info –
NAT gateway ARN arn:aws:ec2:us-east-1:767397942672:natgateway/nat-0d17c5564b2337278	Primary public IPv4 address –	Primary private IPv4 address 10.10.1.200	Primary network interface ID eni-06aa6a62686b9bbda
VPC vpc-0dbb41ffd2ba0ff05 / new-vpc	Subnet subnet-0c9efd83d1b642040 / new-public-subnet	Created Friday, 8 March 2024 at 10:58:57 GMT-5	Deleted –

CREATING PUBLIC ROUTE TABLE:

- Navigate through route table and choose create route table
- Choose
Name : new-public-route-table
Vpc : new-vpc

VPC > Route tables > rtb-04f43c04da6efae01

rtb-04f43c04da6efae01 / new-public-route-table Actions ▼

Details Info			
Route table ID rtb-04f43c04da6efae01	Main No	Explicit subnet associations –	Edge associations –
VPC vpc-0dbb41ffd2ba0ff05 new-vpc	Owner ID 767397942672		

- Choose **Edit subnet association** and select new-public-subnet for association.

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

Explicit subnet associations (1) Edit subnet associations

Name	Subnet ID	IPv4 CIDR	IPv6 CIDR
new-public-subnet	subnet-0c9efd83d1b642040	10.10.1.0/24	–

- Choose **edit routes** and select

Destination : 0.0.0.0/0
Target : new-internet-gateway

Routes	Subnet associations	Edge associations	Route propagation	Tags
Routes (2)				
<input type="text" value="Filter routes"/>				
<div>Both Edit routes</div>				
<div>< 1 > ⚙</div>				
Destination	Target	Status	Propagated	
0.0.0.0/0	lgw-032a5ad915d60fef0	Active	No	
10.10.0.0/16	local	Active	No	

CREATING PRIVATE ROUTE TABLE:

- Choose create route table
- Choose
Name : new-private-route-table
Vpc : new-vpc

VPC > Route tables > rtb-07575d53a9e4bf2e7			
rtb-07575d53a9e4bf2e7 / new-private-route-table			
Actions			
Details Info			
Route table ID rtb-07575d53a9e4bf2e7	Main No	Explicit subnet associations -	Edge associations -
VPC vpc-0dbb41ffd2ba0ff05 new-vpc	Owner ID 767397942672		

- Choose **Edit subnet association** and select new-private-subnet for association.

Routes	Subnet associations	Edge associations	Route propagation	Tags
Explicit subnet associations (1)				
<input type="text" value="Find subnet association"/>				
<div>Edit subnet associations</div>				
<div>< 1 > ⚙</div>				
Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	
new-private-subnet	subnet-029a0cfa72ba81af	10.10.2.0/24	-	

- Choose **edit routes** and select
Destination : 0.0.0.0/0

Target : new-nat-gateway

Routes				
Subnet associations				
Edge associations				
Route propagation				
Tags				
Routes (2)				
Filter routes				
< 1 > ⚙				
Destination	Target	Status	Propagated	
0.0.0.0/0	nat-0d17c5564b2337278	✓ Active	No	
10.10.0.0/16	local	✓ Active	No	

CHECKING THE CONFIGURATION OF VPC:

- The configuration of vpc can be checked through a resource map by its path.

vpc-0dbb41ffd2ba0ff05 / new-vpc

