

# Creating a Private Subnet



Pietfontein Nhlanhla

**Create Subnet** Info

**VPC**

**VPC ID**  
Create subnets in this VPC.

**Associated VPC CIDRs**

**IPv4 CIDRs**

**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.  
  
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.

**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.

**IPv4 subnet CIDR block**  
 256 IPs



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# Introducing Today's Project!

## What is Amazon VPC?

a logically isolated network within the AWS cloud where you can launch and manage resources such as Amazon EC2 instances, databases, and other services.

## How I used Amazon VPC in this project

We created a private and public subnet, NACL and a security

## One thing I didn't expect in this project was...

Elasticity

## This project took me...

45 min



# Private vs Public Subnets

The difference between public and private subnets is that one section is on the main road while the other is further inside the neighbour.

'Having private subnets are useful because' primarily to provide isolation and security for resources that do not need direct access to the internet.

My private and public subnets cannot have the same'Instances in public subnets can have public IPs or Elastic IPs assigned, allowing them to be directly accessible from the internet.

The screenshot shows the 'Create subnet' wizard in the AWS VPC console. The 'VPC' section displays the VPC ID 'vpc-0a06771b4213fbfa7 (NextWork VPC)'. The 'Subnet settings' section for 'Subnet 1 of 1' includes:

- Subnet name:** NextWork Private Subnet
- Availability Zone:** No preference
- IPv4 VPC CIDR block:** 10.0.0.0/16
- IPv4 subnet CIDR block:** 10.0.1.0/24 (with 256 IPs available)



# A dedicated route table

Direct access to the internet (private subnets must use NAT).

Private subnets do not directly handle inbound internet traffic.

Private subnets usually route internet-bound traffic through a NAT Gateway/Instance located in a public subnet, so they do not directly route traffic to an Internet Gateway.

Route tables (1/5) <a href="#">Info</a>							
<input type="text"/> Find resources by attribute or tag							
Name	Route table ID	Explicit subnet associ...	Edge associations	Main	VPC	Owner ID	Last updated
RDS-Pvt-rt	rtb-02b3bb6620b361ed	subnet-086c267567d46...	-	No	vpc-043d367e1f97ca62b	565393042582	less than a minute ago
-	rtb-0af03e197788c2e1f	-	-	Yes	vpc-043d367e1f97ca62b	565393042582	
-	rtb-0039eb1f822c795ef	-	-	Yes	vpc-0a06771b4213fbfa7   Next...	565393042582	
<input checked="" type="checkbox"/> NextWork Public route table	rth-05954d1a9ef1a4df	subnet-0acfbeefcb2a1cc0...	-	No	vpc-0a06771b4213fbfa7   Next...	565393042582	
NextWork Private Route Table	rtb-03b77b0159eb0711d	subnet-031089b68396947...	-	No	vpc-0a06771b4213fbfa7   Next...	565393042582	



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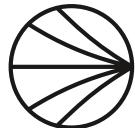
# A new network ACL

This default NACL is automatically applied to all subnets unless you explicitly associate a different NACL with a subnet.

I set up a dedicated network ACL for my private subnet because AWS might be necessary for several reasons related to network security, traffic control, or specific compliance requirements.

These rules allow you to specify what traffic is permitted or denied based on conditions such as IP address ranges, port numbers, and protocols.

Network ACLs (1/4) <a href="#">Info</a>						
Name	Network ACL ID	Associated with	Default	VPC ID	Inbound rules count	Outbound rules count
<input type="checkbox"/> <a href="#">acl-04762c9fb18302a66</a>	acl-04762c9fb18302a66	4 Subnets	Yes	vpc-043d3567e1f97ca62b	1 Inbound rule	1 Outbound rule
<input type="checkbox"/> <a href="#">acl-0fe082af5555708a</a>	acl-0fe082af5555708a	-	Yes	vpc-0a06771b4213fbfa7 / NextWork VPC	2 Inbound rules	2 Outbound rules
<input checked="" type="checkbox"/> <a href="#">NextWork Public NACL</a>	acl-056e090635a67ba89	subnet-0acfbefc2a1cc037 / NextWork Public S...	No	vpc-0a06771b4213fbfa7 / NextWork VPC	2 Inbound rules	2 Outbound rules
<input type="checkbox"/> <a href="#">NextWork Private NACL</a>	acl-065169811cbd7a05f	subnet-031d8b68396947719 / NextWork Priva...	No	vpc-0a06771b4213fbfa7 / NextWork VPC	1 Inbound rule	1 Outbound rule



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