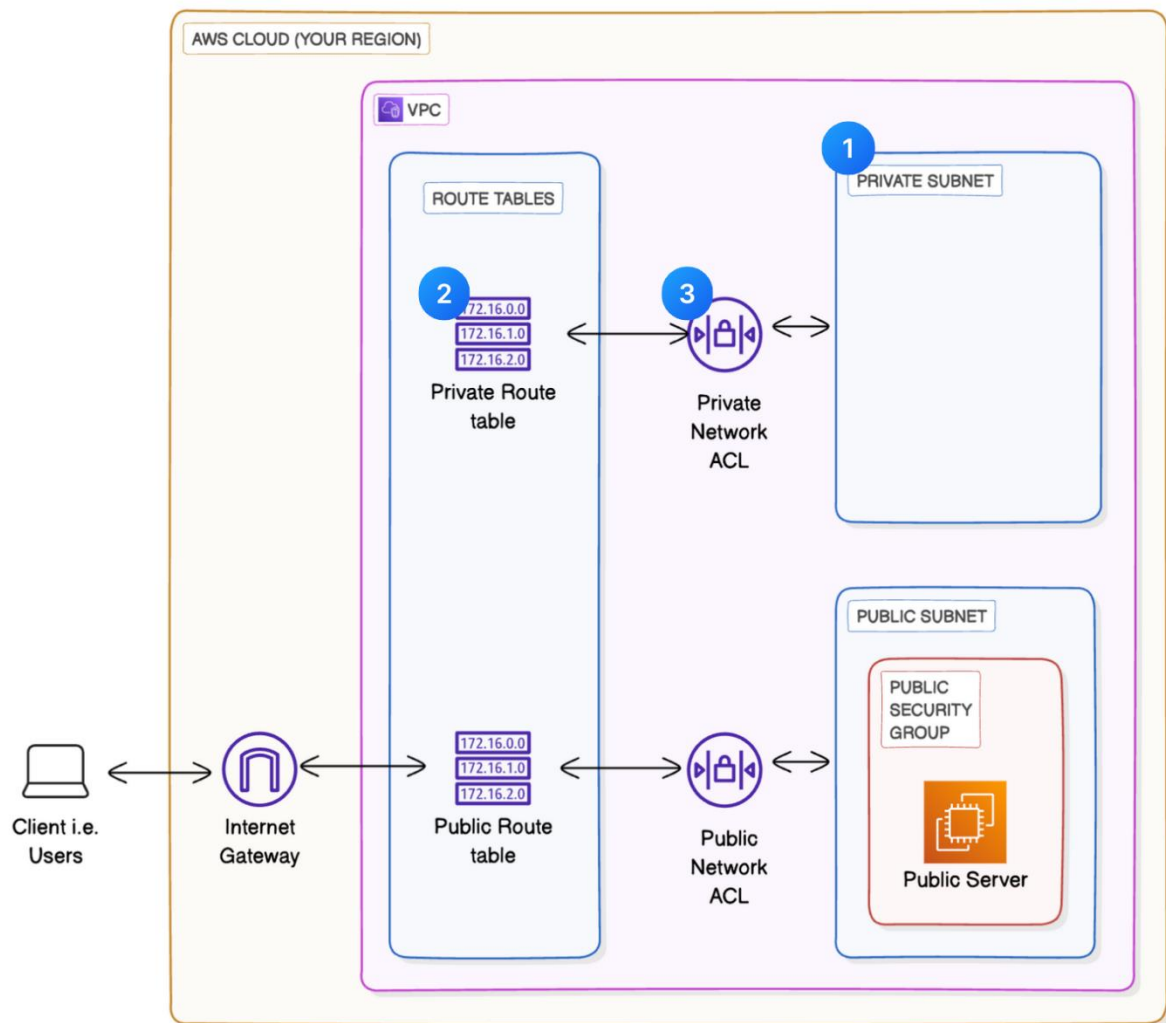**Creating a Private Subnet**



**Set up a private subnet**

Still in your VPC console, select the **Subnets** tab again.

- Select **Create subnet**.

- For the **VPC ID,** select **NextWork VPC**.

- Set the **Subnet name** as NextWork Private Subnet

- For the subnet's **Availability Zone**, use the second AZ on the dropdown (not the first!)

- The IPv4 VPC CIDR block is already pre-set to 10.0.0.0/16

- Select **Create subnet**.

- Let's assign your new subnet a CIDR block that doesn't overlap with Public 1.
- Replace the IPv4 subnet CIDR block with 10.0.1.0/24
- Select **Create subnet**.
- Success!

## VPC

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

vpc-0e970fd3119d8d225 (NextWork 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.

NextWork Private Subnet

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.

US West (Oregon) / us-west-2b ▼

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

10.0.1.0/24                                                256 IPs

‹   ›   ∧   ∨

▼ Tags - *optional*

| Key | Value - *optional* | |
|---|---|---|
| 🔍 Name                    ✕ | 🔍 NextWork Private Subnet    ✕ | Remove |

Add new tag

You can add 49 more tags.

Remove

Add new subnet

- To tidy up your subnets' naming conventions, let's rename your **Public 1** subnet to NextWork Public Subnet

**Set up a private route table**

Head to the **Route tables** page in your console.

- Select **Create route table**.

- Name your new route table NextWork Private Route Table

- Under **VPC**, select **NextWork VPC**.

- Select **Create route table.**

- With your private route table set up, let's make sure it can only direct traffic to another internal resource (instead of the public internet).
- Select **NextWork Private Route Table**.
- Check the **Routes** tab - does it only have one default route with a **local** target?
- Switch tabs to **Subnet associations.**
- Select **Edit subnet associations** under the **Explicit subnet associations** tab.
- Select the checkbox next to **NextWork Private Subnet**.
- Select **Save associations**.
- To tidy up your Route tables' naming conventions, let's also rename **NextWork route table** to NextWork Public Route Table
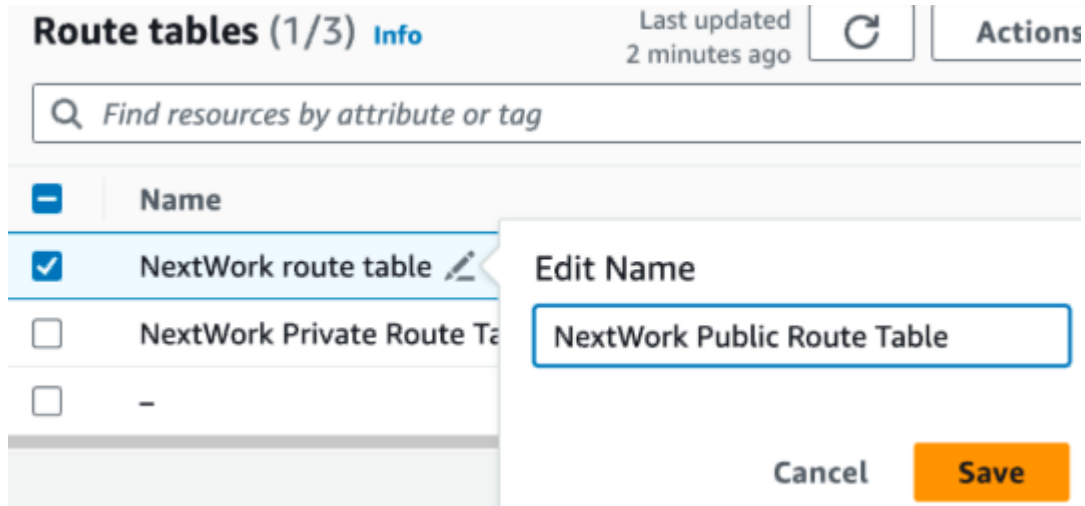


**Set up a private network ACL**

- Select **Network ACLs** from the left-hand navigation panel.

- Select the checkbox next to the default ACL for your VPC.

  - Note that this is NOT **NextWork Network ACL** - your default ACL isn't named!

- Select the **Inbound rules** and **Outbound rules** tabs.
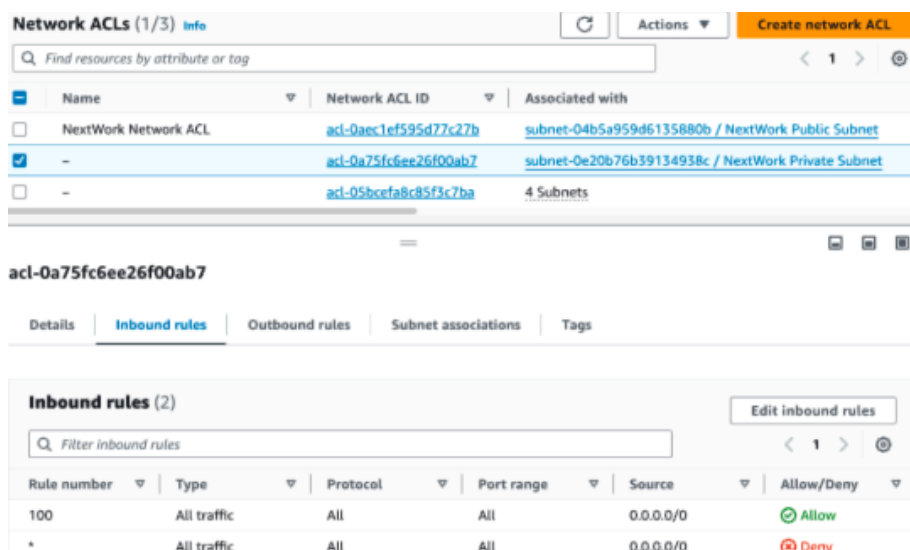
- So while the default ACL is very convenient in allowing all traffic types, we'll create a new custom network ACL to keep our private subnet safe.
- Select **Create network ACL** on the top right.
- For the name, enter NextWork Private NACL.
- Select **NextWork VPC**.
- Select **Create network ACL**.
- Done!
- Observe the **Inbound rules** and **Outbound rules** tabs for your private network ACL.
- Switch tabs to **Subnet associations.**
- Select **Edit subnet associations.**
- Select your private subnet.
- Select **Save changes.**
- To tidy up your Network ACLs' naming conventions, let's also rename **NextWork Network ACL** to NextWork Public NACL
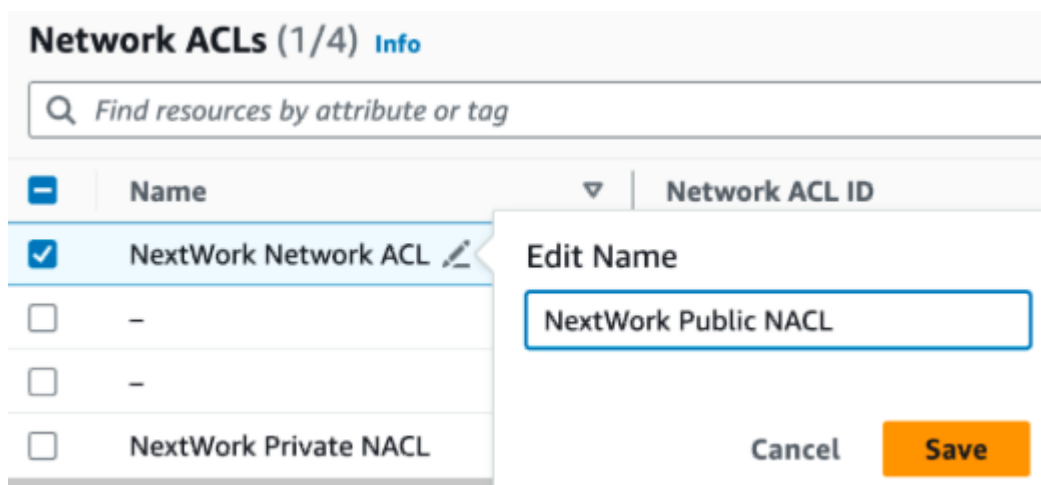


- All done! Your private subnet is set up and ready to go.