



Access S3 from a VPC

OR

ucbethuel

```
n: $'\E[200~sudo': command not found
-user@ip-10-0-0-48 ~]$ sudo touch /tmp/test.txt
-user@ip-10-0-0-48 ~]$ touch /tmp/test2.txt
-user@ip-10-0-0-48 ~]$ aws s3 cp /tmp/test.txt s3://nextwork-vpc-project-ucbethuel
ad: ../../tmp/test.txt to s3://nextwork-vpc-project-ucbethuel/test.txt
-user@ip-10-0-0-48 ~]$ aws s3 ls s3://nextwork-vpc-project-ucbethuel
-09-08 15:16:49      215396 Screenshot 2025-09-04 170526.png
-09-08 15:16:50      55295 Screenshot 2025-09-04 172857.png
-09-08 15:32:24      0 test.txt
-user@ip-10-0-0-48 ~]$
```

OR

ucbethuel
NextWork Student

nextwork.org

Introducing Today's Project!

What is Amazon VPC?

Amazon VPC is Virtual Private Cloud and it is useful because it helps us create private network and connect our resources together.

How I used Amazon VPC in this project

In today's project, I used Amazon VPC to interact with my s3 resource via ec2 instance.

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

null

This project took me...

This project took me 2 hours.

 OR

ucbethuel
NextWork Student

nextwork.org

In the first part of my project...

Step 1 - Architecture set up

In this step, I will 1. Create a VPC from scratch! 2. Launch an EC2 instance into your VPC.

Step 2 - Connect to my EC2 instance

In this step, I will connect directly to my EC2 instance.

Step 3 - Set up access keys

In this step, I will give my EC2 instance access to myAWS environment by creating an access key.

OR

ucbethuel
NextWork Student

nextwork.org

Architecture set up

I started my project by launching my VPC using the VPC wizard, and then created an instance known as Instance - NextWork VPC Project, of which I dynamically created a security group along

I also set up aws s3 resource

Objects (2)			
Objects are the fundamental entities stored in Amazon S3. You can use Amazon S3 inventory to get a list of all objects in your bucket. For others to access your objects, you must grant them permission.			
<input type="text"/> Find objects by prefix			
Name	Type	Last modified	Size
<input type="checkbox"/> Screenshot 2025-09-04 170526.png	png	September 8, 2025, 16:16:49 (UTC+01:00)	
<input type="checkbox"/> Screenshot 2025-09-04 172857.png	png	September 8, 2025, 16:16:50 (UTC+01:00)	

OR

ucbethuel
NextWork Student

nextwork.org

Running CLI commands

AWS CLI is Command Line Interface, I have access to AWS CLI because am using an Instance which command along with the CLI installed.

The first command I ran was aws s3 ls. This command is used to list s3 services connected to my account.

The second command I ran was aws configure. This command is used to set up or login via terminal

```
/m/'  
ec2-user@ip-10-0-0-48 ~]$ aws s3 ls  
nable to locate credentials. You can configure credentials by running "aws configure".  
ec2-user@ip-10-0-0-48 ~]$ █
```

 OR

ucbethuel
NextWork Student

nextwork.org

Access keys

Credentials

To set up my EC2 instance to interact with my AWS environment, I configured my aws cli, providing my access id, secret and region code.

Access keys are like username, mostly used for CLI base login to aws services.

Secret access keys are like the password we provide via terminal that helps us access resources we intend to.

Best practice

Although I'm using access keys in this project, a best practice alternative is to use AWS CloudShell and AWS CLI V2

OR

ucbethuel

NextWork Student

nextwork.org

In the second part of my project...

Step 4 - Set up an S3 bucket

In this step, I will lunching aws s2 service, with two files.

Step 5 - Connecting to my S3 bucket

In this step, I will be try to use my ec2 instance to interact with my s3 resource.

OR

ucbethuel
NextWork Student

nextwork.org

Connecting to my S3 bucket

The first command I ran was aws s3 ls. This command is used to list s3 services connected to my account.

When I ran the command "aws s3 ls" again, the terminal responded with a list of my bucket name, This indicated that my aws configuration was successful and well in sync.

```
Default output format [None]:  
[ec2-user@ip-10-0-0-48 ~]$ aws s3 ls  
2025-09-08 15:15:45 nextwork-vpc-project-ucbethuel  
[ec2-user@ip-10-0-0-48 ~]$ █
```

OR

ucbethuel
NextWork Student

nextwork.org

Connecting to my S3 bucket

Another CLI command I ran was "aws s3 ls s3://nextwork-vpc-project-ucbethuel" which returned a list of object in my buckets.

```
25-09-08 15:15:45 nextwork-vpc-project-ucbethuel
c2-user@ip-10-0-0-48 ~]$ aws s3 ls s3://nextwork-vpc-project-ucbethuel
25-09-08 15:16:49      215396 Screenshot 2025-09-04 170526.png
25-09-08 15:16:50      55295 Screenshot 2025-09-04 172857.png
c2-user@ip-10-0-0-48 ~]$ |
```

OR

ucbethuel
NextWork Student

nextwork.org

Uploading objects to S3

To upload a new file to my bucket, I first ran the command sudo touch /tmp/test.txt
This command creates a new file in tmp folder called test.txt.

The second command I ran was "aws s3 cp /tmp/test.txt s3://nextwork-vpc-project-ucbethuel" This command will copy file form a source (i.e /tmp/test.txt) to a destination (i.e s3://nextwork-vpc-project-ucbethuel)

The third command I ran was s3://nextwork-vpc-project-ucbethuel which validated that the test.txt file was copied.

```
n: $'\E[200~sudo': command not found
-user@ip-10-0-0-48 ~]$ sudo touch /tmp/test.txt
-user@ip-10-0-0-48 ~]$ touch /tmp/test2.txt
-user@ip-10-0-0-48 ~]$ aws s3 cp /tmp/test.txt s3://nextwork-vpc-project-ucbethuel
ad: ../../tmp/test.txt to s3://nextwork-vpc-project-ucbethuel/test.txt
-user@ip-10-0-0-48 ~]$ aws s3 ls s3://nextwork-vpc-project-ucbethuel
-09-08 15:16:49      215396 Screenshot 2025-09-04 170526.png
-09-08 15:16:50      55295 Screenshot 2025-09-04 172857.png
-09-08 15:32:24          0 test.txt
-user@ip-10-0-0-48 ~]$
```



nextwork.org

The place to learn & showcase your skills

Check out nextwork.org for more projects

