



Access S3 from a VPC



Ivan Delgadillo Fernandez

```
[ec2-user@ip-10-0-14-58 ~]$ sudo touch /tmp/test.ext
[ec2-user@ip-10-0-14-58 ~]$
[ec2-user@ip-10-0-14-58 ~]$
[ec2-user@ip-10-0-14-58 ~]$ aws s3 cp /tmp/test.ext s3://bucket-ivandelgadillo
upload: ../../tmp/test.ext to s3://bucket-ivandelgadillo/test.ext
[ec2-user@ip-10-0-14-58 ~]$
[ec2-user@ip-10-0-14-58 ~]$
[ec2-user@ip-10-0-14-58 ~]$ aws s3 ls s3://bucket-ivandelgadillo
2024-09-27 15:50:09    11304177 legendary-aws-host-a-website-on-s3.pdf
2024-09-27 15:49:58    11044629 legendary-aws-networks-connectivity.pdf
2024-09-27 16:03:51          0 test.ext
[ec2-user@ip-10-0-14-58 ~]$
[ec2-user@ip-10-0-14-58 ~]$ █
```



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Introducing Today's Project!

What is Amazon VPC?

Amazon Virtual Private Cloud (Amazon VPC) gives you full control over your virtual networking environment, including resource placement, connectivity, and security.

How I used Amazon VPC in this project

Use VPC to connect a S3 bucket

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

I didn't expect create a security access

This project took me...

around 60 minutes.



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In the first part of my project...

Step 1 - Architecture set up

In this step, I'm going to: Create a VPC from scratch! Launch an EC2 instance into your VPC.

Step 2 - Connect to my EC2 instance

In this step, I'm gonna connect to your EC2 instance and try access an AWS service!

Step 3 - Set up access keys

I'm gonna to create a Access Keys to access to S3 bucket



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Architecture set up

I started my project by launching a Public Instance

I also set up a S3 bucket to upload 2 files

The screenshot shows a web-based interface for monitoring file uploads to an S3 bucket. At the top, a green header bar displays the message "Upload succeeded" and "View details below." Below this is a main content area titled "Upload: status". A note in a blue-bordered box states: "The information below will no longer be available after you navigate away from this page." Under the heading "Summary", there is a table with three columns: "Destination" (s3://bucket-ivandelgadillo), "Succeeded" (2 files, 21.3 MB (100.00%)), and "Failed" (0 files, 0 B (0%)). Below this is a navigation bar with tabs for "Files and folders" (which is selected) and "Configuration". The "Files and folders" tab shows a table with the following data:

Files and folders (2 Total, 21.3 MB)						
Name	Folder	Type	Size	Status	Error	Actions
legendary-a...	-	application/pdf	10.5 MB	Succeeded	-	< >
legendary-a...	-	application/pdf	10.8 MB	Succeeded	-	< >



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Running CLI commands

There is a special software called the AWS CLI (Command Line Interface) that you install and run on your computer to control AWS services directly from the command line i.e. your terminal! You can install this in your local computer too, and all EC2

The first command I ran was "aws s3 ls" This command is used to which is a command used to list the S3 buckets in your account

The second command I ran was "aws configure" This command is used to audit, and evaluate the configurations of your AWS resources.

```
Amazon Linux 2
AI.2 End of Life is 2025-06-30.
A newer version of Amazon Linux is available!
Amazon Linux 2023, GA and supported until 2028-03-15.
https://aws.amazon.com/linux/amazon-linux-2023/
[ec2-user@ip-10-0-14-58 ~]$ 
[ec2-user@ip-10-0-14-58 ~]$ ls
[ec2-user@ip-10-0-14-58 ~]$ ls
[ec2-user@ip-10-0-14-58 ~]$ aws s3 ls
Unable to locate credentials. You can configure credentials by running "aws configure".
[ec2-user@ip-10-0-14-58 ~]$ aws configure
AWS Access Key ID [None]: 
```



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Access keys

Credentials

To set up my EC2 instance to interact with my AWS environment, I configured AWS access key and AWS secret access key.

An access key grants programmatic access to your resources.

The secret access key is like the password that pairs with your access key ID (your username). You need both to access AWS services.

Best practice

It is best practice to not have access keys assigned to your root user, to remove or delete old access keys, to rotate access keys regularly, properly secure and keep track of access keys, and instead consider using temporary access credentials



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In the second part of my project...

Step 4 - Set up an S3 bucket

I'm gonna create a S3 bucket to access from VPC

Step 5 - Connecting to my S3 bucket

I'm trying to connect VPC with S3 bucket.



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Connecting to my S3 bucket

The first command I ran was "aws s3 ls" This command is used to which is a command used to list the S3 buckets in your account

When I ran the command "aws s3 ls" again, the terminal responded with "bucket-ivandelgadillo" This indicated that connect to S3 bucket

```
[ec2-user@ip-10-0-14-58 ~]$  
[ec2-user@ip-10-0-14-58 ~]$ aws s3 ls  
2024-09-27 15:48:18 bucket-ivandelgadillo  
[ec2-user@ip-10-0-14-58 ~]$  
[ec2-user@ip-10-0-14-58 ~]$ █
```



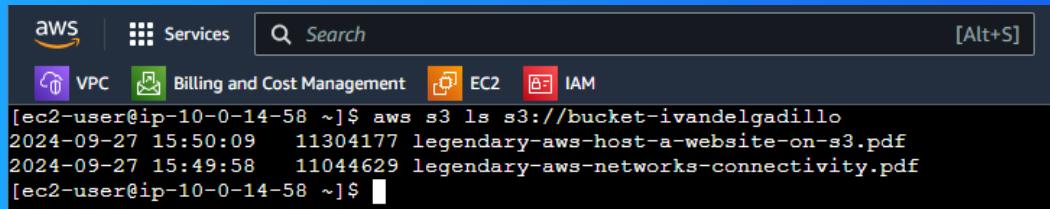
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Connecting to my S3 bucket

Another CLI command I ran was "aws s3 ls s3://bucket-ivandelgadillo" which returned list of files.



```
[ec2-user@ip-10-0-14-58 ~]$ aws s3 ls s3://bucket-ivandelgadillo
2024-09-27 15:50:09    11304177 legendary-aws-host-a-website-on-s3.pdf
2024-09-27 15:49:58    11044629 legendary-aws-networks-connectivity.pdf
[ec2-user@ip-10-0-14-58 ~]$
```



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Uploading objects to S3

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

The second command I ran was "aws s3 cp /tmp/test.ext s3://bucket-ivandelgadillo" This command will copy a file from /tmp to S3 bucket

The third command I ran was "aws s3 ls" which validated that files was uploaded

```
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[ec2-user@ip-10-0-14-58 ~]$
[ec2-user@ip-10-0-14-58 ~]$
[ec2-user@ip-10-0-14-58 ~]$ aws s3 cp /tmp/test.ext s3://bucket-ivandelgadillo
upload: ../../tmp/test.ext to s3://bucket-ivandelgadillo/test.ext
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```



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