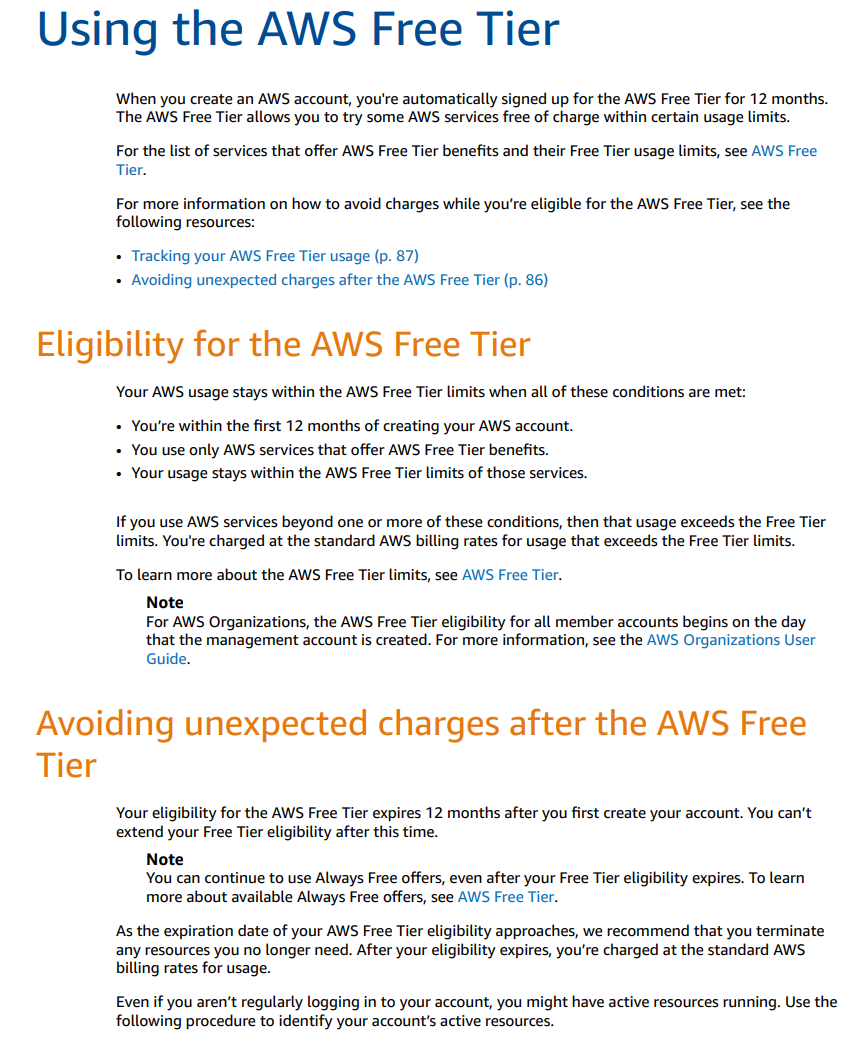
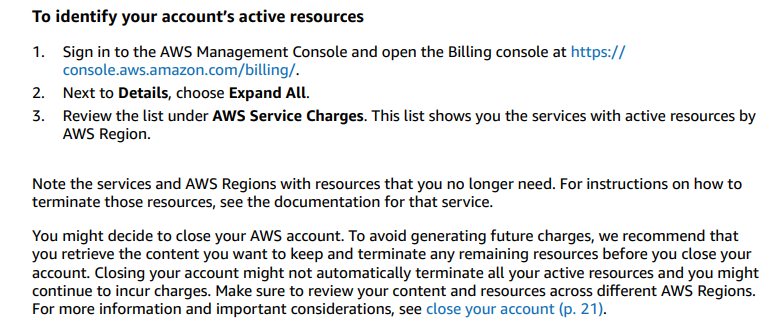
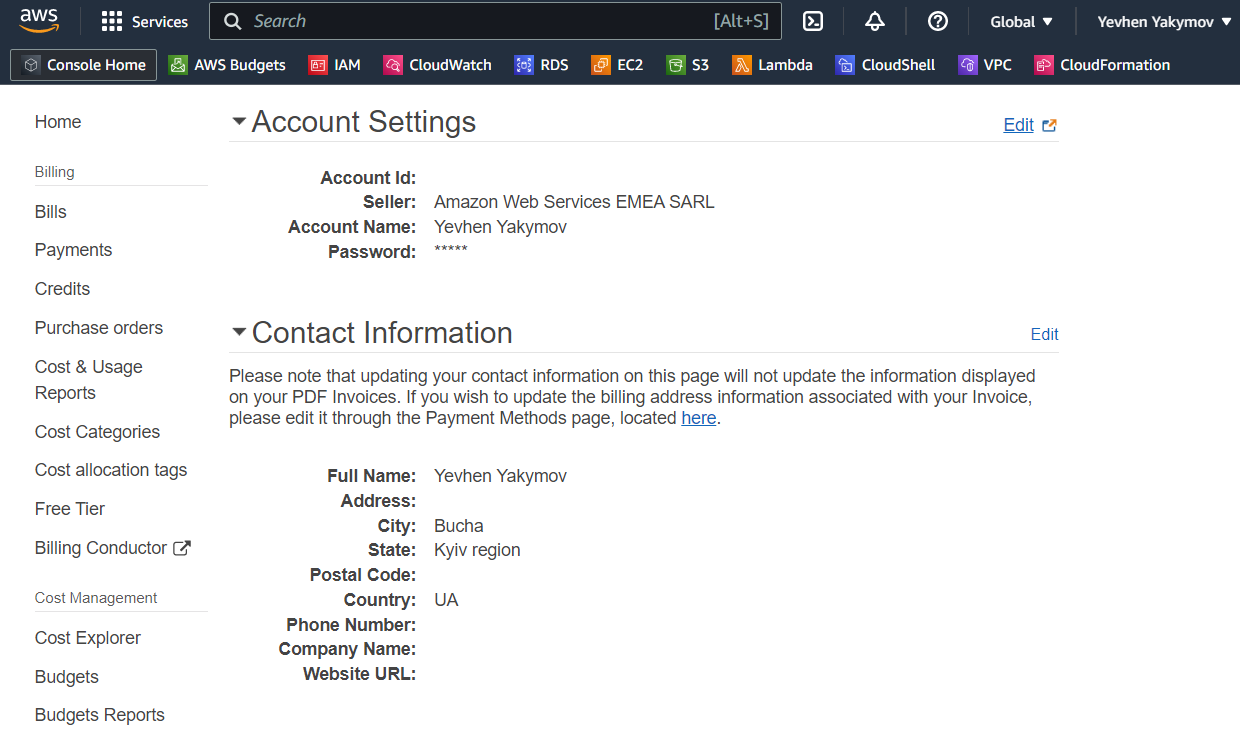
**AWS Cloud Basic**

1. [Read the terms of Using the AWS Free Tier and the ability to control their own costs](#task_1) .
2. [Register with AWS (first priority) or alternatively, you can request access to courses in AWS Academy if you are currently student of certain University](#task_2).
3. [Register and pass free courses on AWS Skillbuilder. AWS Cloud Practitioner Essentials: Core Services, Cloud Concepts.](#task_5)
4. [Register Pass free courses on Amazon qwiklabs](#task_6).
5. [Review Getting Started with Amazon EC2. Log into your AWS Account, launch, configure, connect and terminate your instance.](#task_7)
6. [Create a snapshot of your instance to keep as a backup](#task_8).
7. [Register Create and attach a Disk\_D (EBS) to your instance to add more storage space. Create and save some file on Disk\_D](#task_9)
8. [Launch the second instance from backup.](#task_10)
9. [Detach Disk\_D from the 1st instance and attach disk\_D to the new instance.](#task_11)
10. [Registe Review the 10-minute example. Explore the possibilities of creating your own domain and domain name for your site.](#task_12)
11. [Launch and configure a WordPress instance with Amazon Lightsail link.](#task_13)
12. [Review the 10-minute Store and Retrieve a File. Repeat, creating your own repository.](#task_14)
13. [Review the 10-minute example Batch upload files to the cloud to Amazon S3 using the AWS CLI. Create a user AWS IAM, configure CLI AWS and upload any files to S3.](#task_15)
14. [Run a Serverless "Hello, World!" with AWS Lambda.](#task_17)
15. [Create a static website on Amazon S3, publicly available using a custom domain registered with Route 53.](#task_18)
16. Read the terms of Using the [AWS Free Tier](https://docs.aws.amazon.com/en_us/awsaccountbilling/latest/aboutv2/billing-free-tier.html) and the ability to control their own costs.

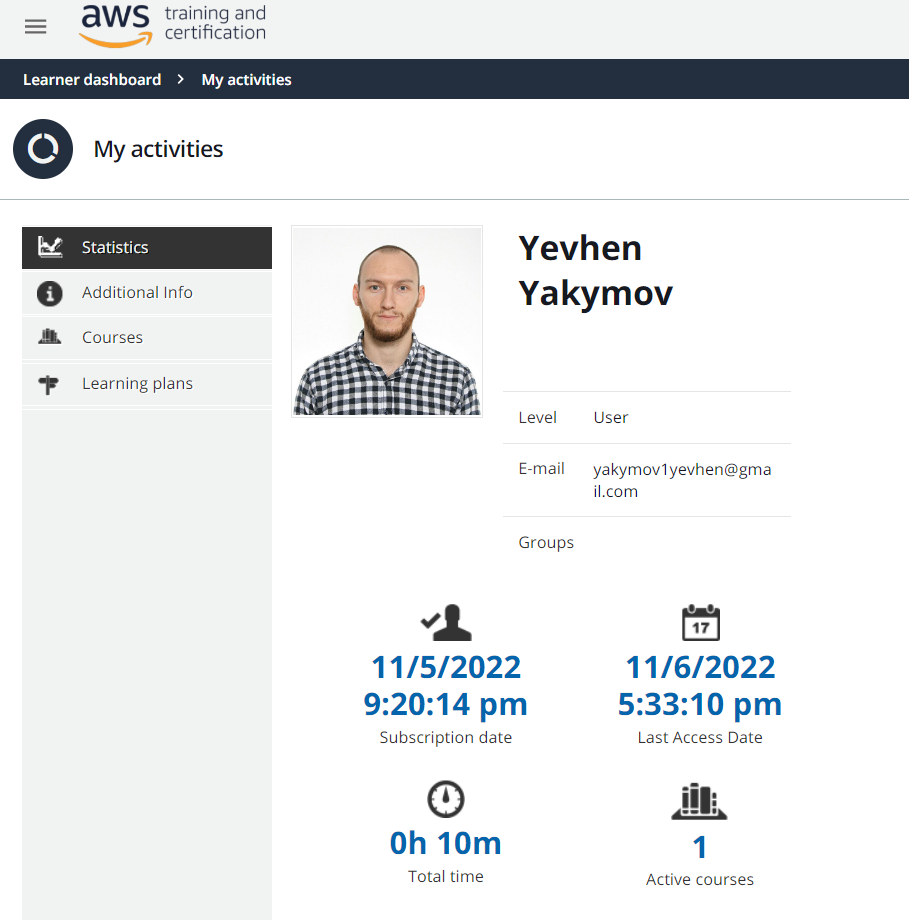


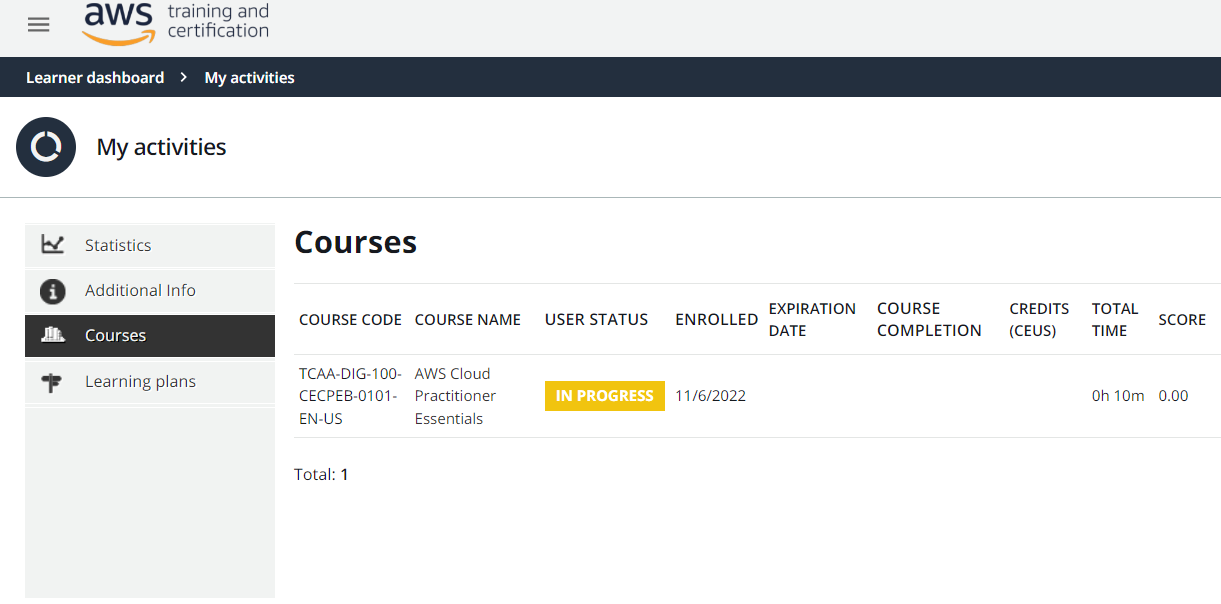


1. [Register with AWS](https://portal.aws.amazon.com/billing/signup?redirect_url=https%3A%2F%2Faws.amazon.com%2Fregistration-confirmation" \l "/start) (first priority) or alternatively, you can request access to courses in [AWS Academy](https://aws.amazon.com/training/awsacademy/member-list/) if you are currently a student of [certain University](https://aws.amazon.com/training/awsacademy/member-list/)

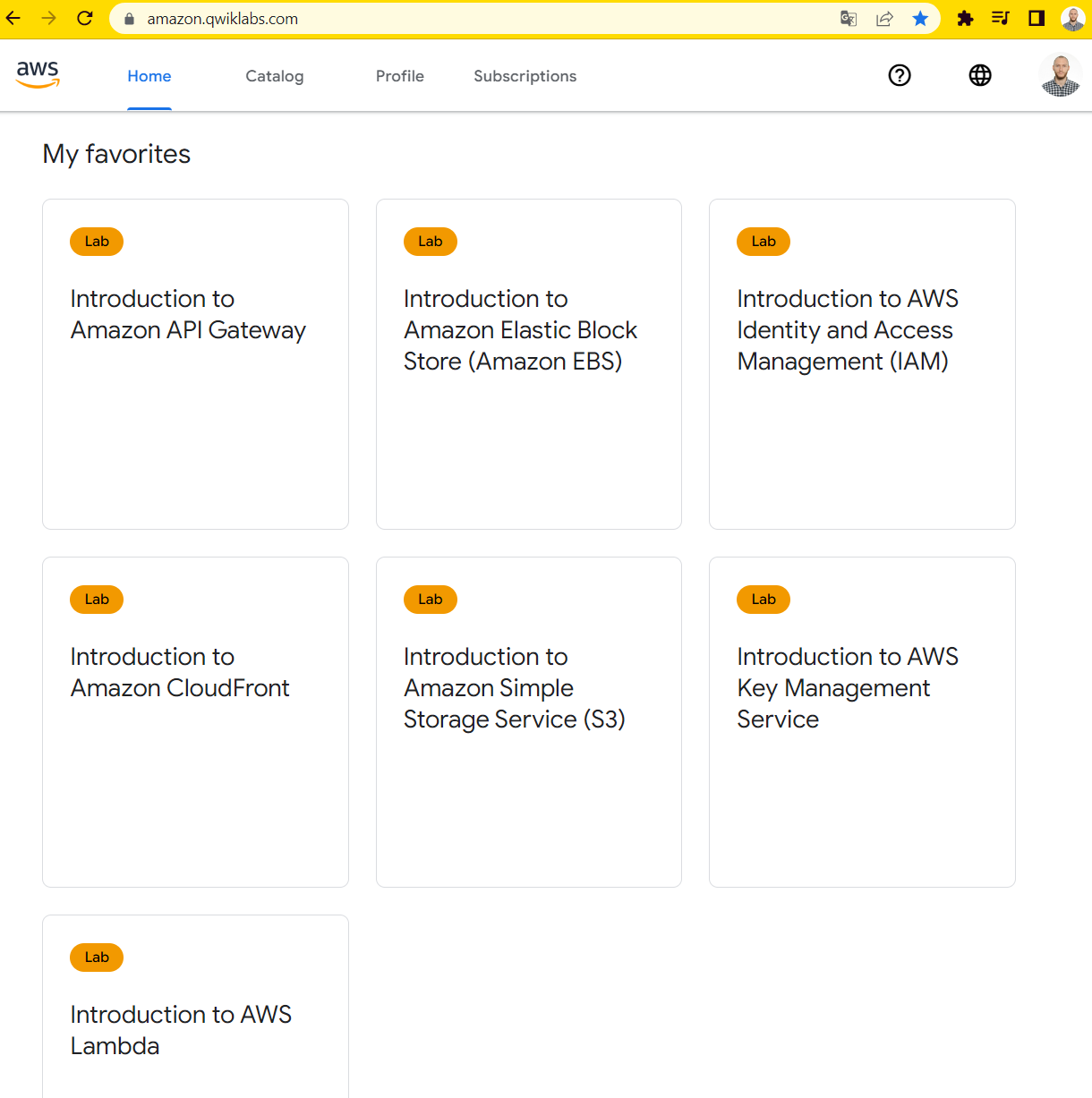


1. Find the [hands-on tutorials](https://aws.amazon.com/ru/getting-started/hands-on/?awsf.getting-started-category=category%23compute&awsf.getting-started-content-type=content-type%23hands-on&?e=gs2020&p=gsrc&awsf.getting-started-level=*all) and AWS Well-Architected Labs for your AWS needs. Explore list of step-by-step tutorials for deferent category. Use, repeat as many as you can and have fun))
2. Register and pass courses on [AWS Educate](https://www.awseducate.com/). Filter by checking Topic Cloud Computing and Foundational Level. Feel free to pass more.
3. Register and pass free courses on [AWS Skillbuilder](https://explore.skillbuilder.aws/learn). AWS Cloud Practitioner Essentials: Core Services, AWS Cloud Practitioner Essentials: Cloud Concepts. Try AWS Cloud Quest: Cloud Practitioner.



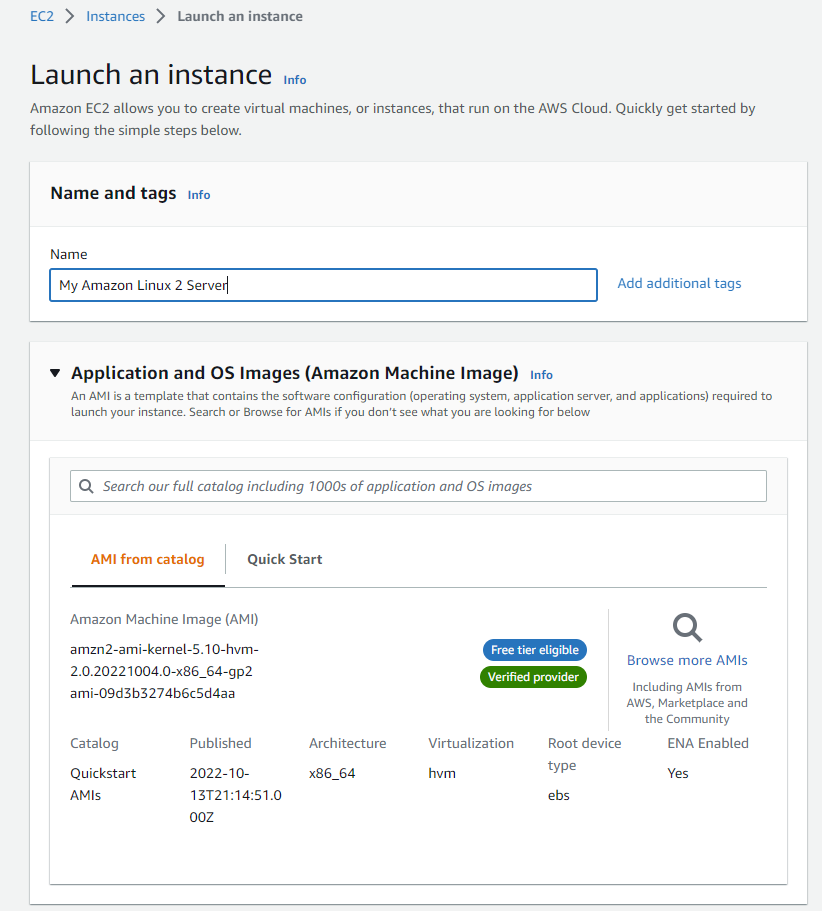


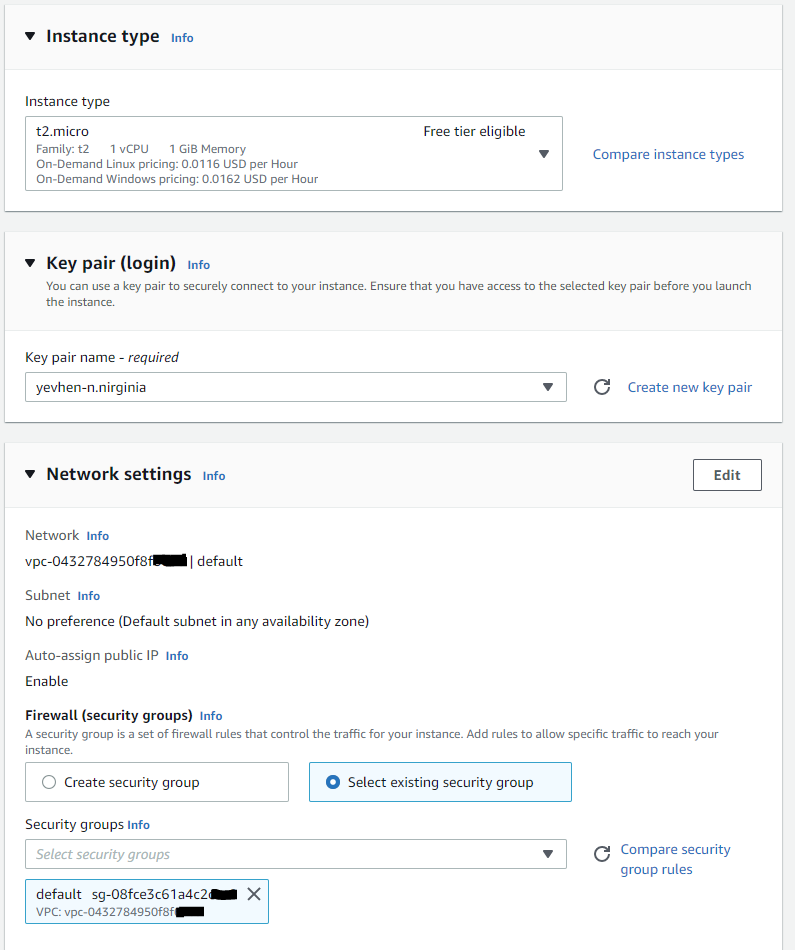
1. Pass free courses on [Amazon qwiklabs](https://amazon.qwiklabs.com/)

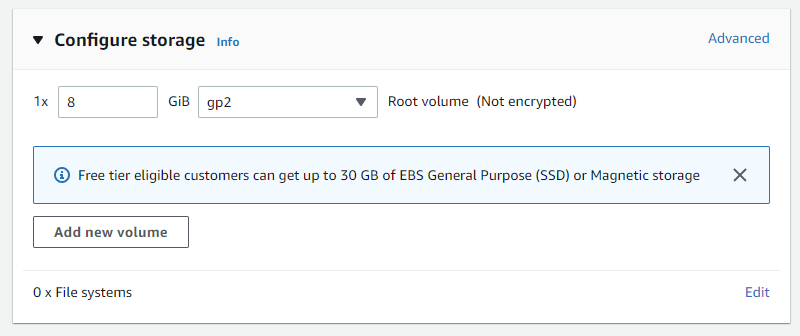


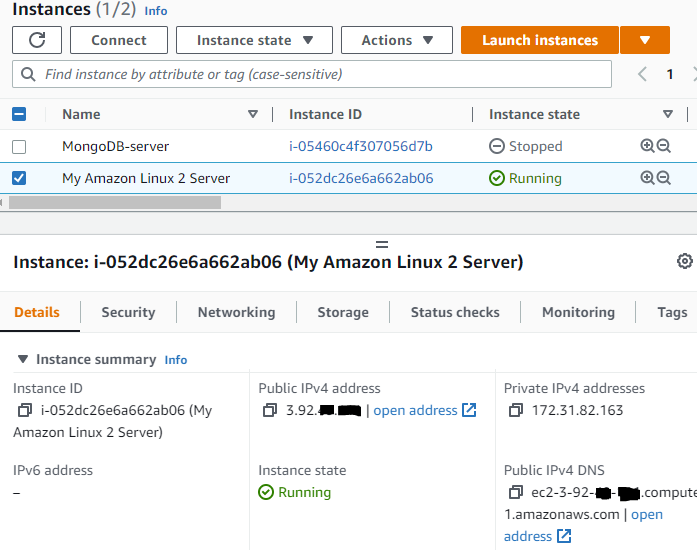
1. Review [Getting Started with Amazon EC2](https://aws.amazon.com/ec2/getting-started/?nc1=h_ls). Log Into Your AWS Account, Launch, Configure, Connect and Terminate Your Instance. Do not use Amazon Lightsail. It is recommended to use the t2 or t3.micro instance and the CentOS operating system.

**Configure and launch Instanse**

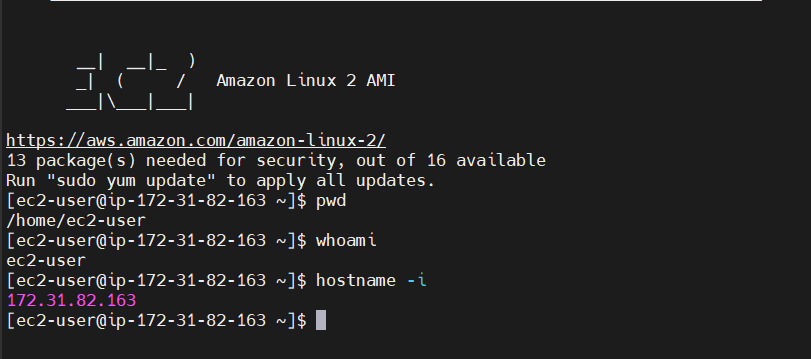




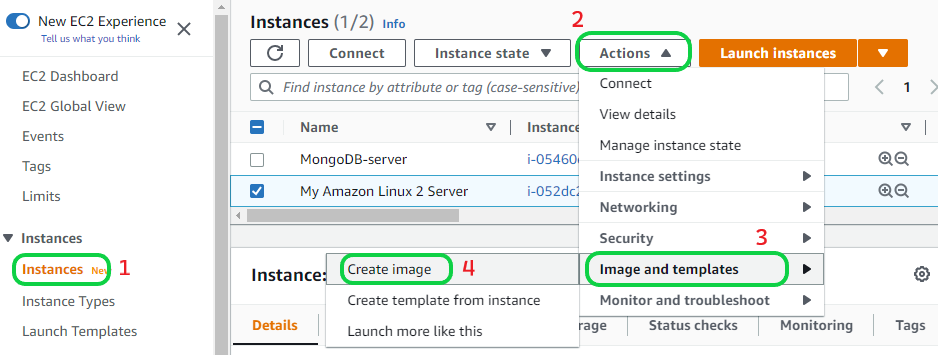




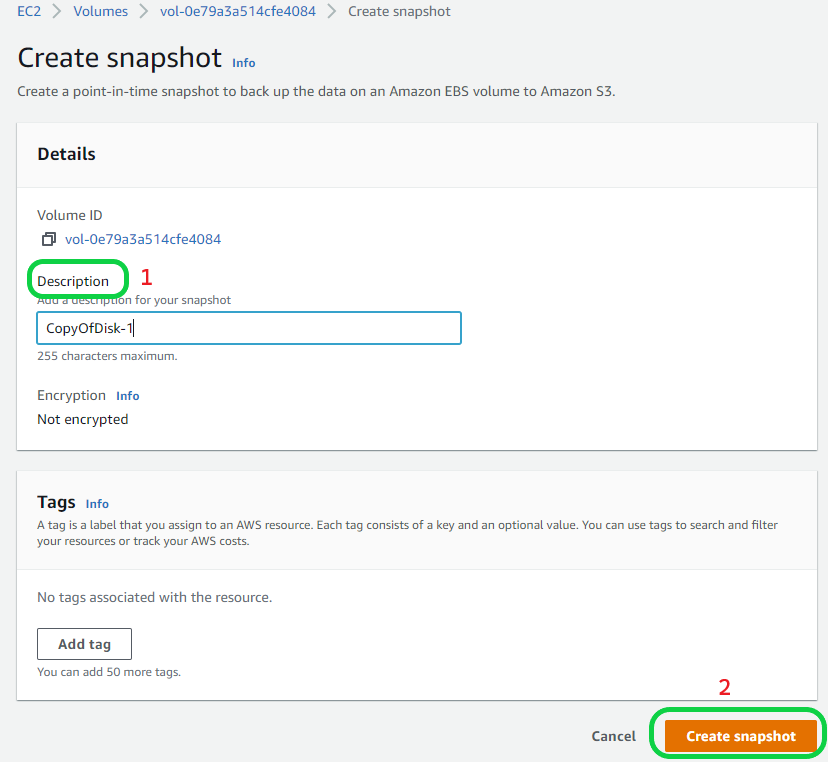
**Connecting to Instance through SSH connection**



1. Create a snapshot of your instance to keep as a backup.

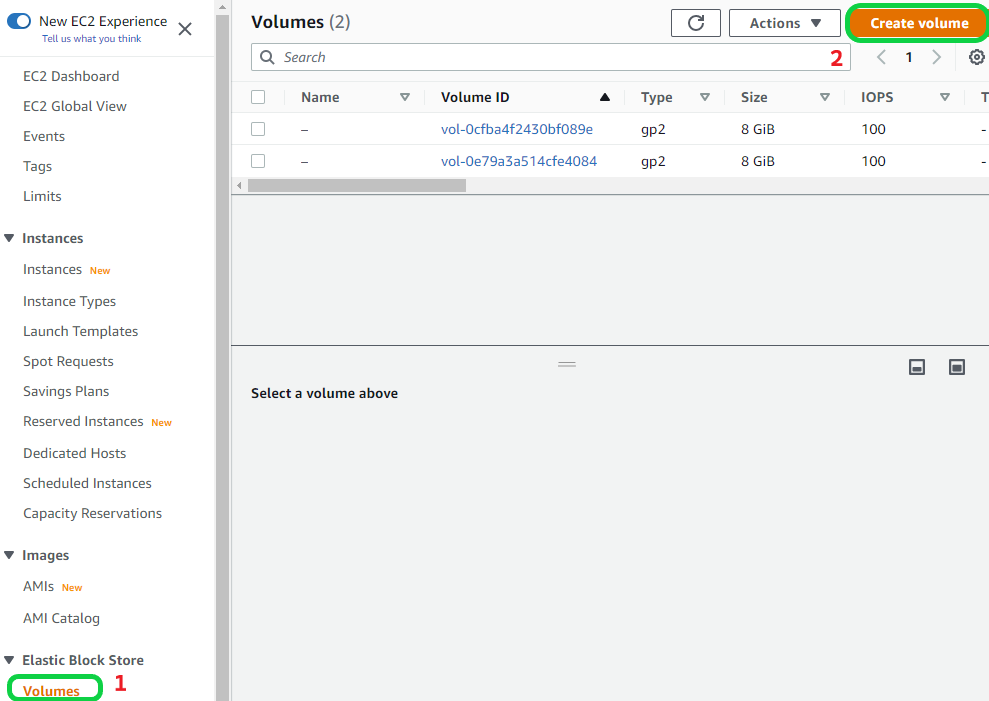


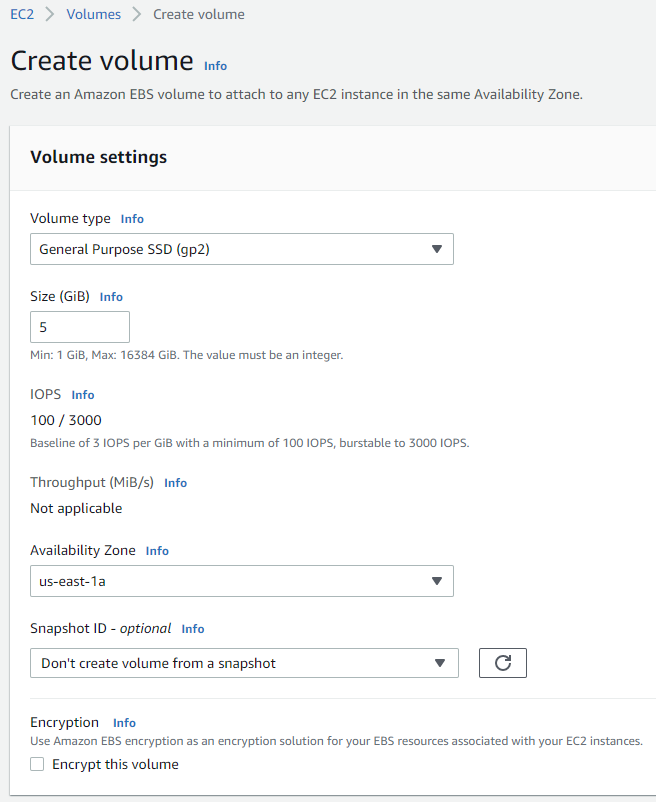


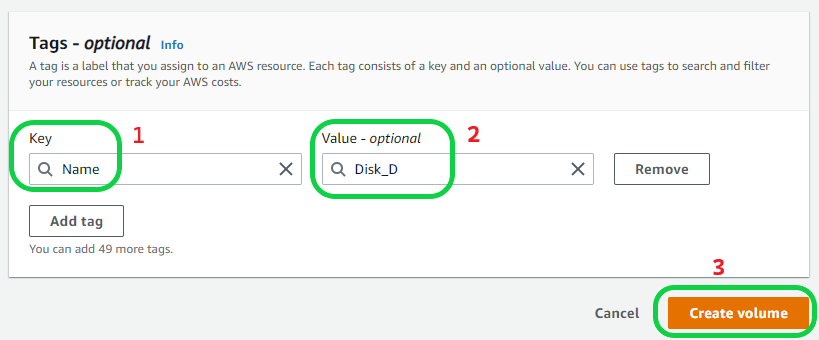


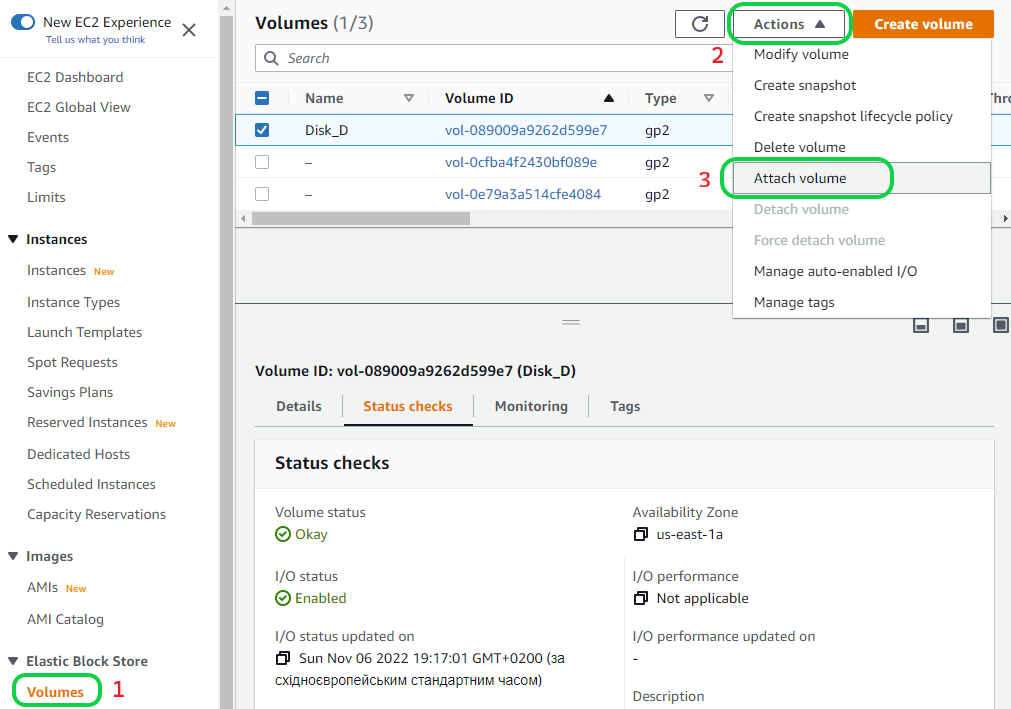
1. Create and attach a Disk\_D (EBS) to your instance to add more storage space. Create and save some file on Disk\_D

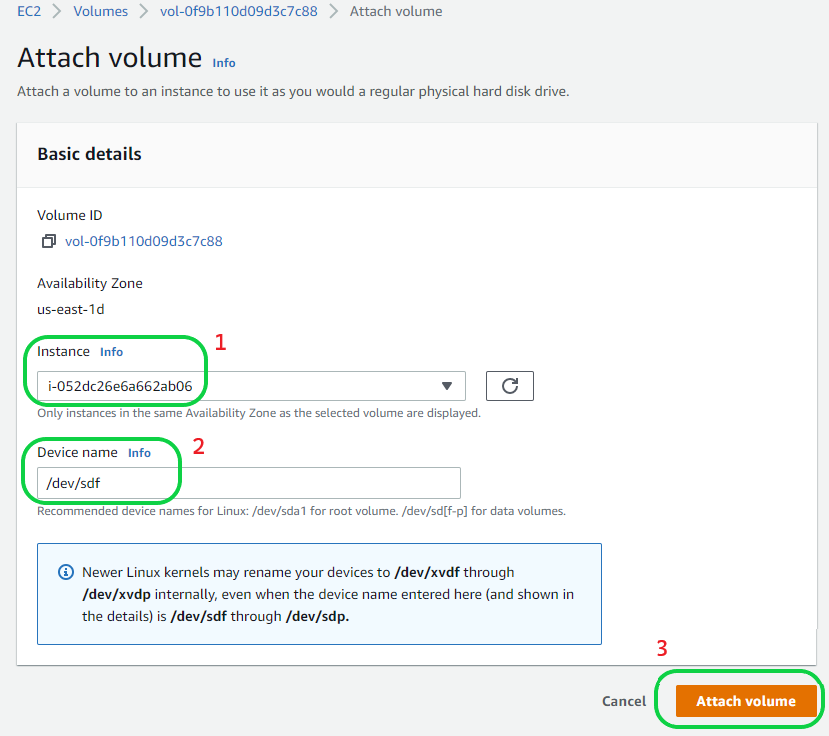
**Create and attach Disk\_D**

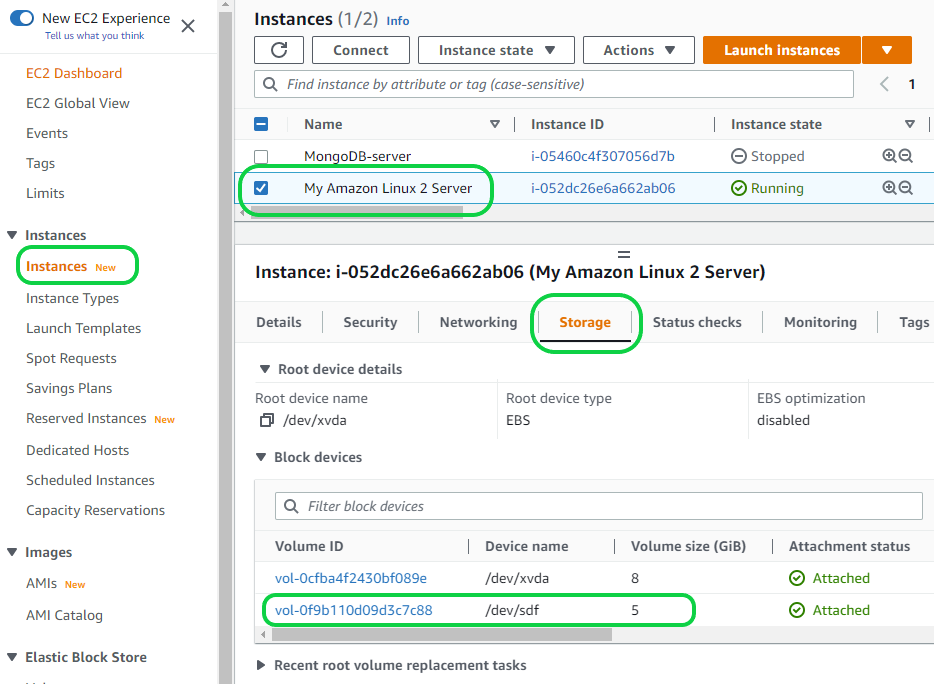




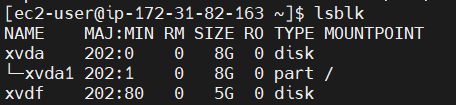


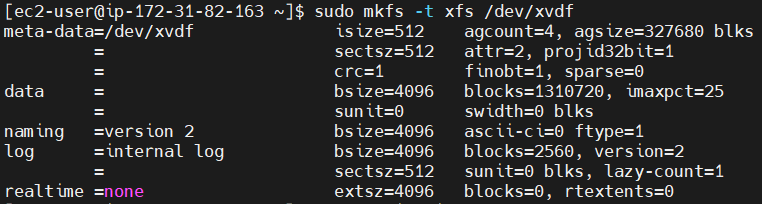


**

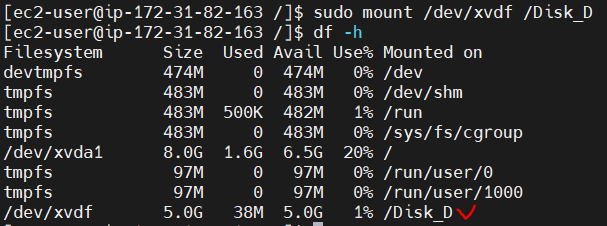


**Formating and Mounting an attached volume**

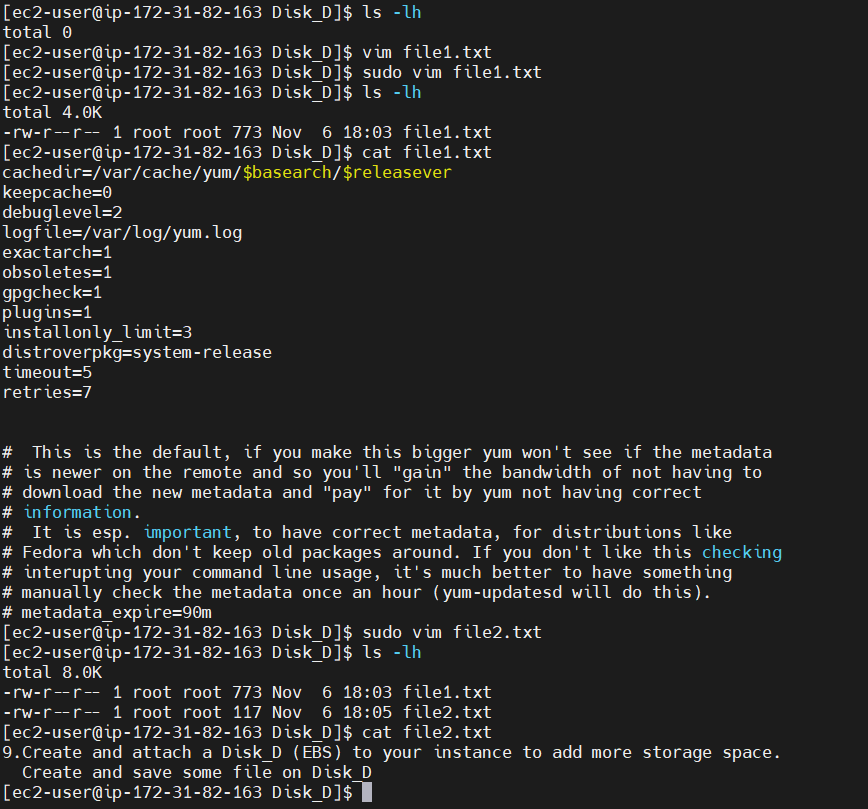




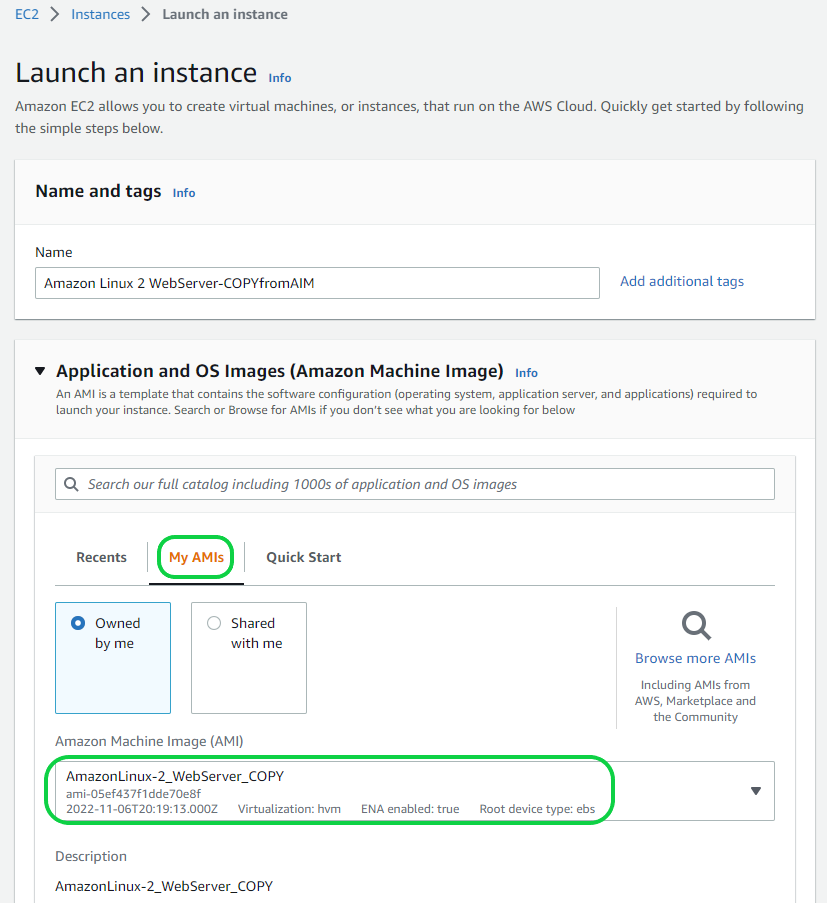


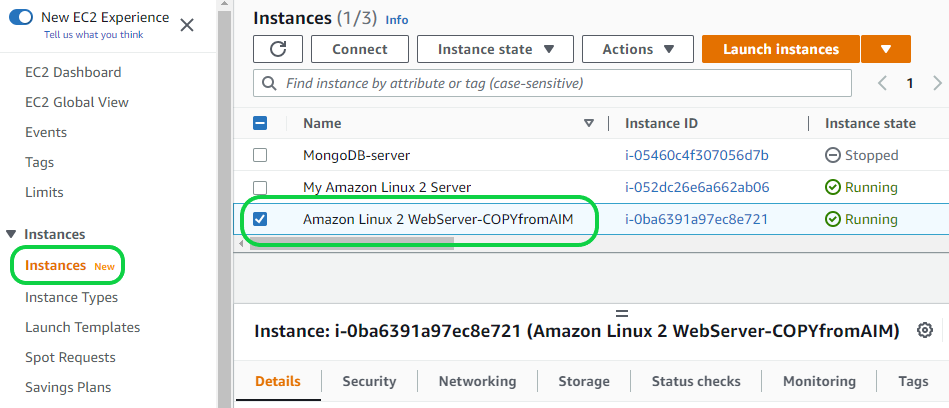


**Creating and save some file on Disk\_D**



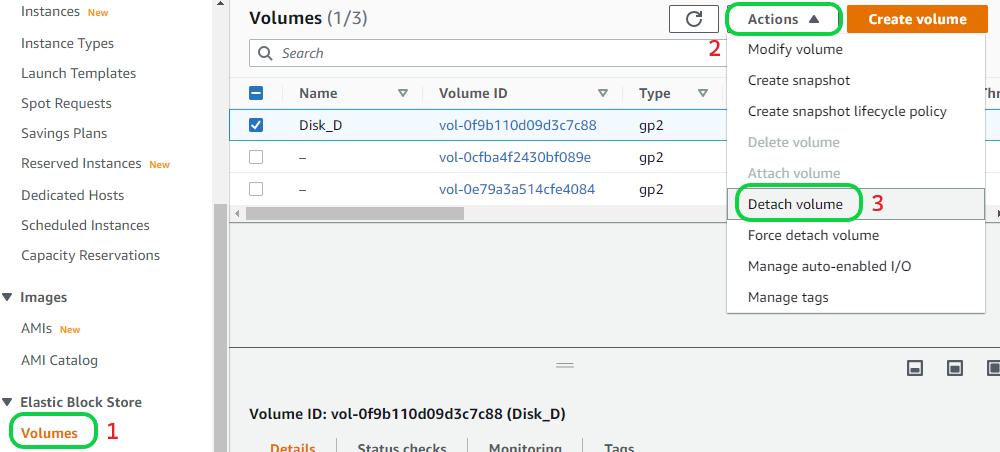
1. Launch the second instance from backup.



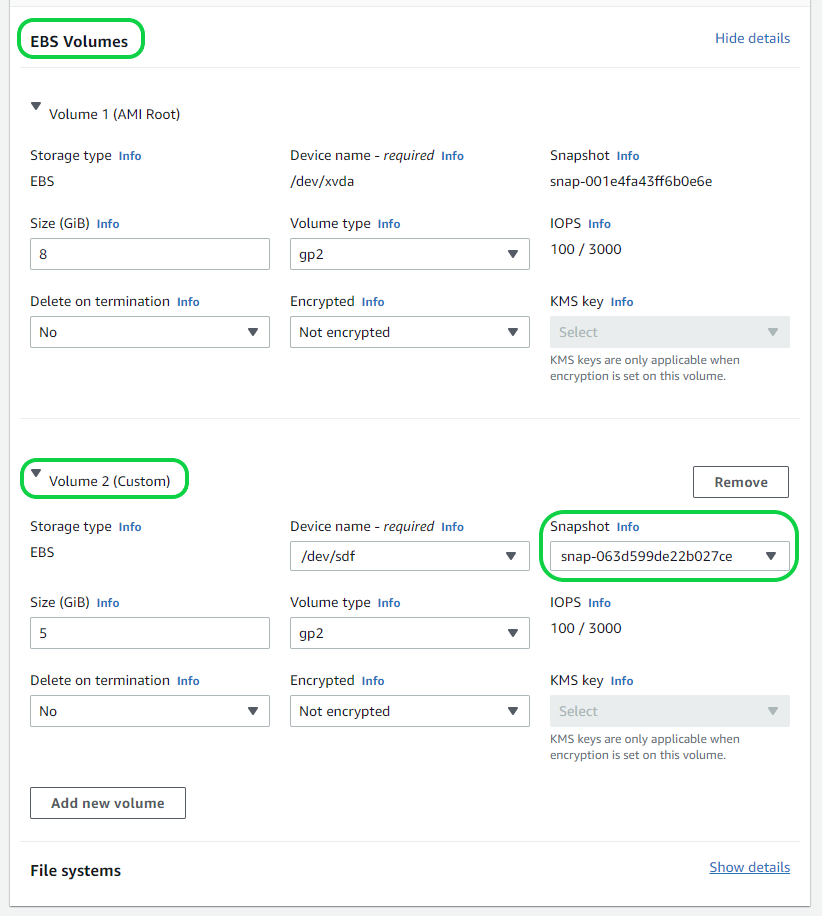


1. Detach Disk\_D from the 1st instance and attach disk\_D to the new instance.

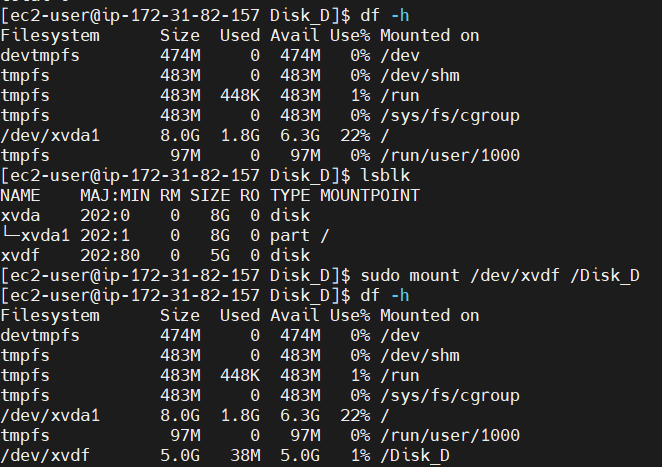
**Detaching volume Disk\_D from the 1st instacne**

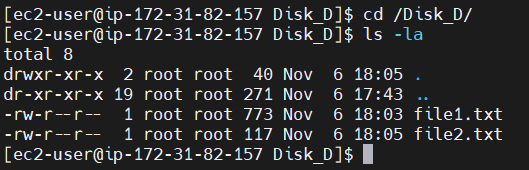


**Attaching volume Disk\_D to the new instance during the launch**

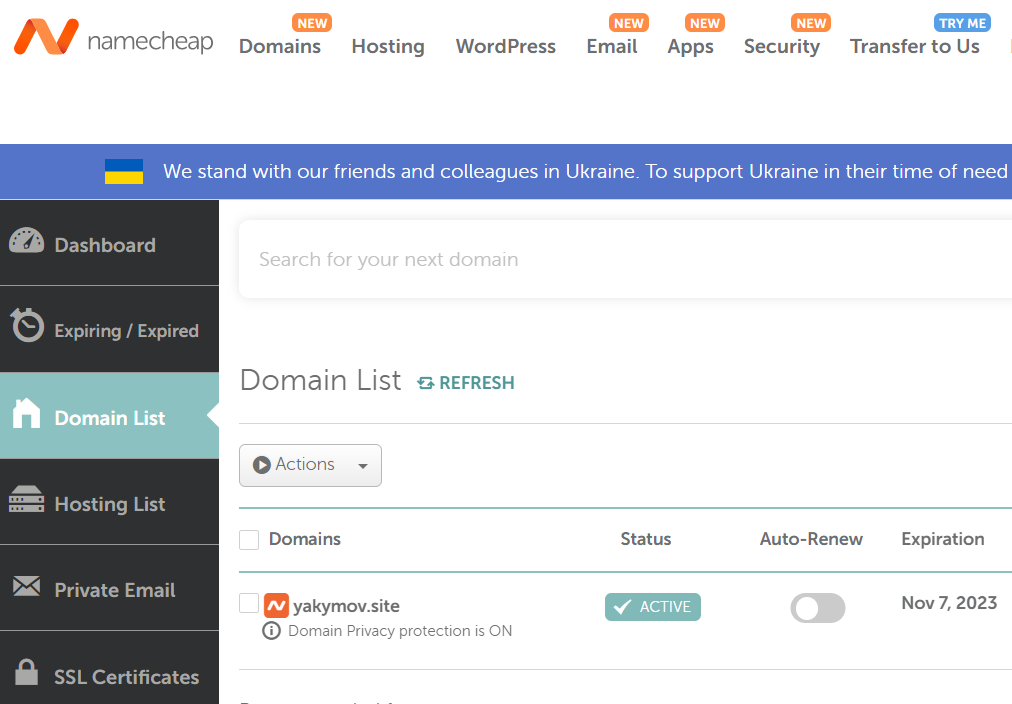


**Mounting an attached volume and checking that file1.txt and file2.txt on disk**

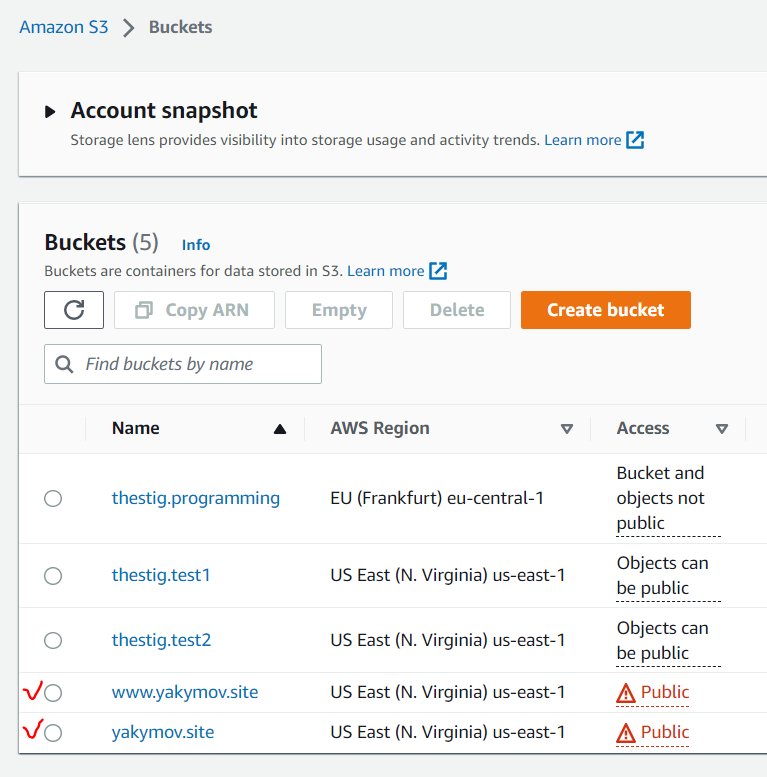


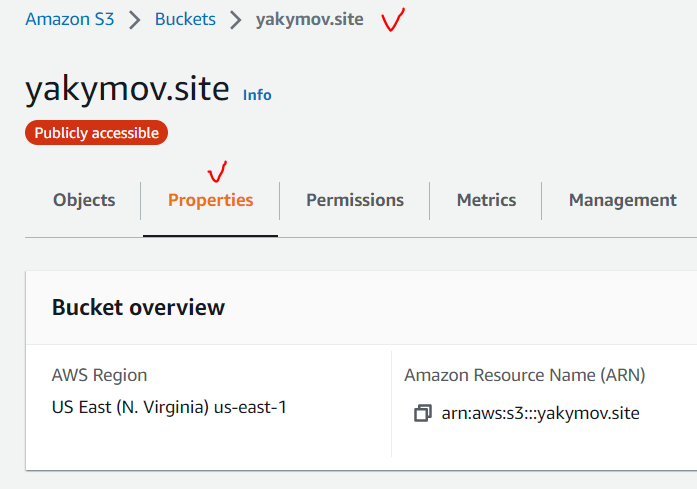


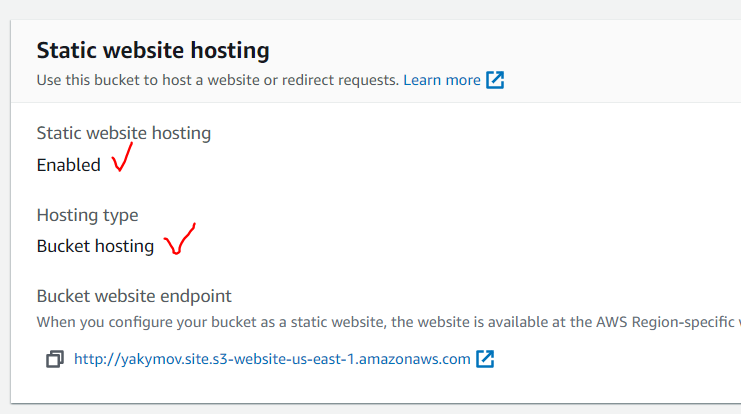
1. Review the 10-minute [example](https://aws.amazon.com/getting-started/hands-on/get-a-domain/?nc1=h_ls). Explore the possibilities of creating your own domain and domain name for your site. Note, that Route 53 not free service. Alternatively you can free register the domain name \*.PP.UA and use it.
2. **I bought and registered my domain name at** [**namecheap.com**](https://www.namecheap.com/) **website.**

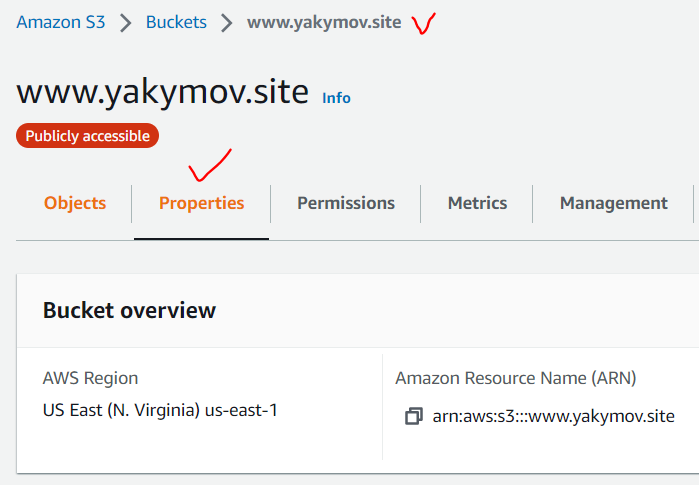


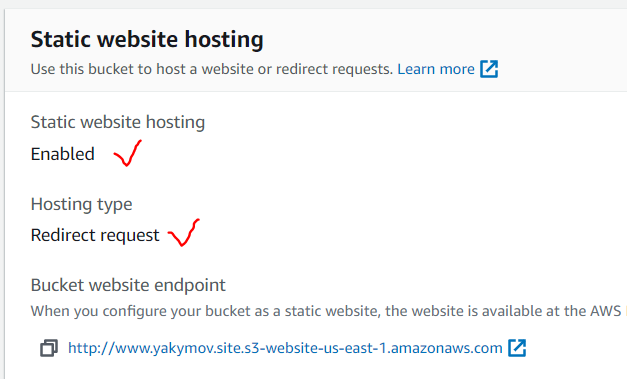
1. **Created at AWS S3 service new buckets “yakymov.site” with enable Static website hosting and Public permissions, and put there a small static website(index.html) and bucket “www. yakymov.site” which have option Redirect request to “yakymov.site”.**



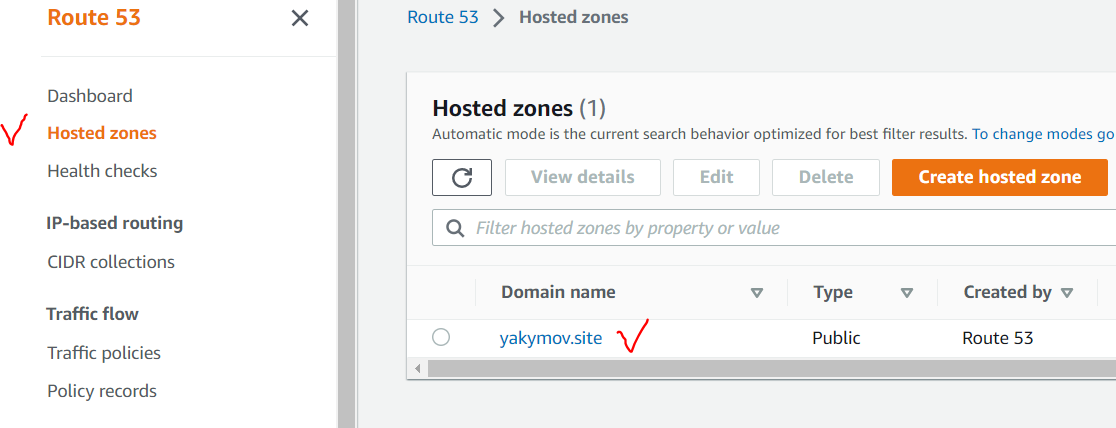




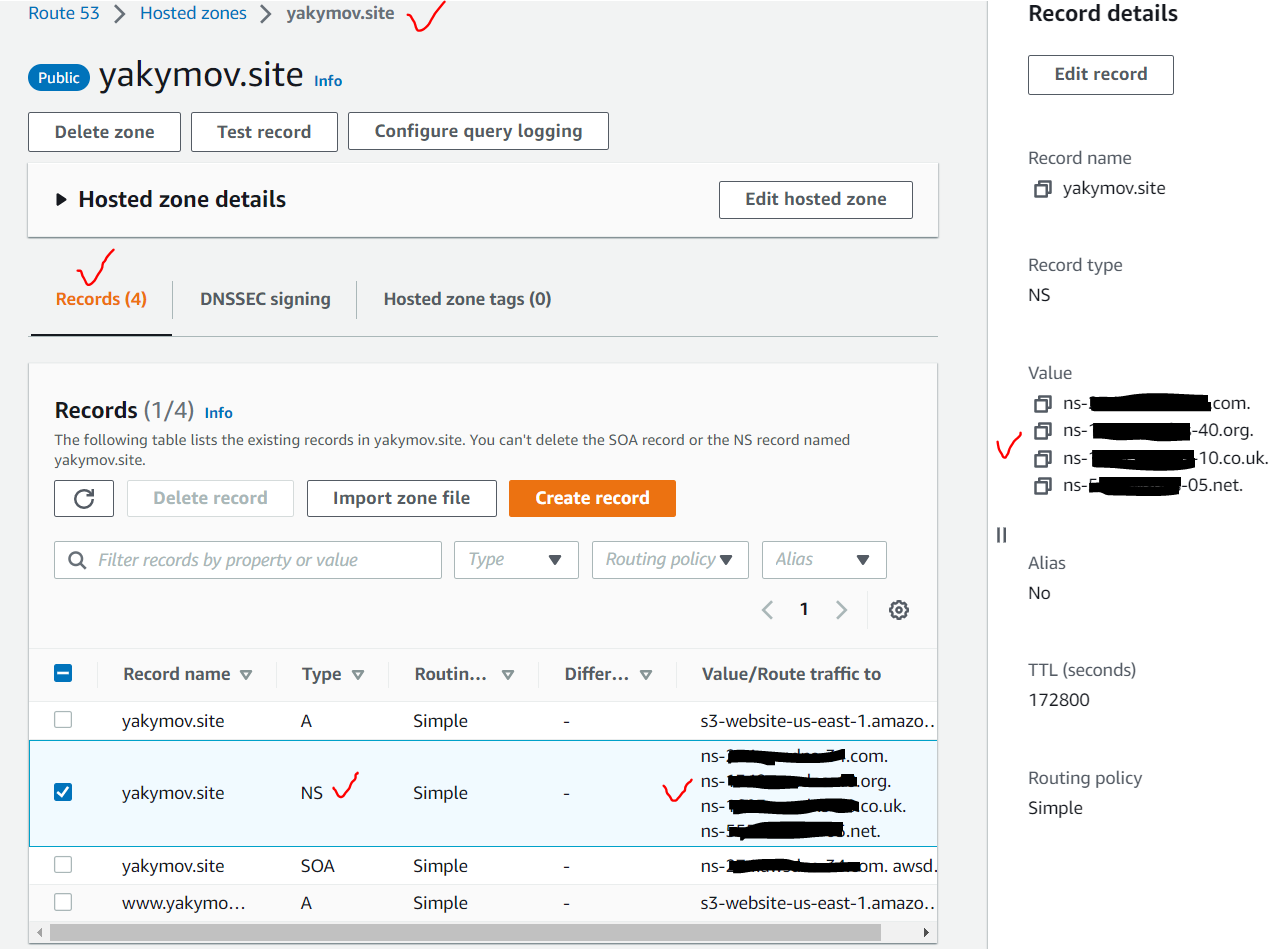




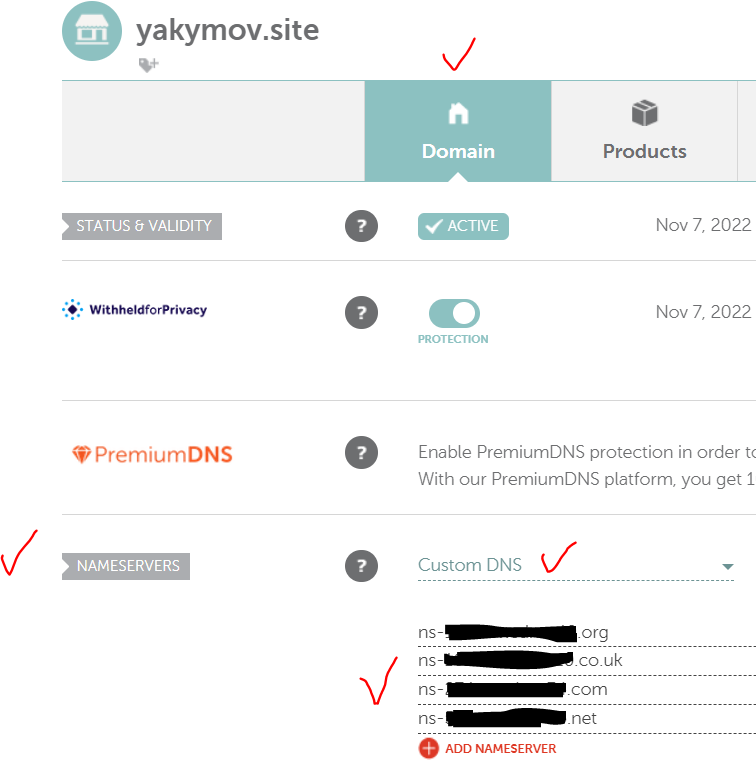
1. **Than created at Route 53 service Hosted zone with domain name “yakymov.site” and Public permissions.**



1. **After creation Hosted zone we have the adresses of DNS servers which responsible for the zone “yakymov.site” (Record type NS).**

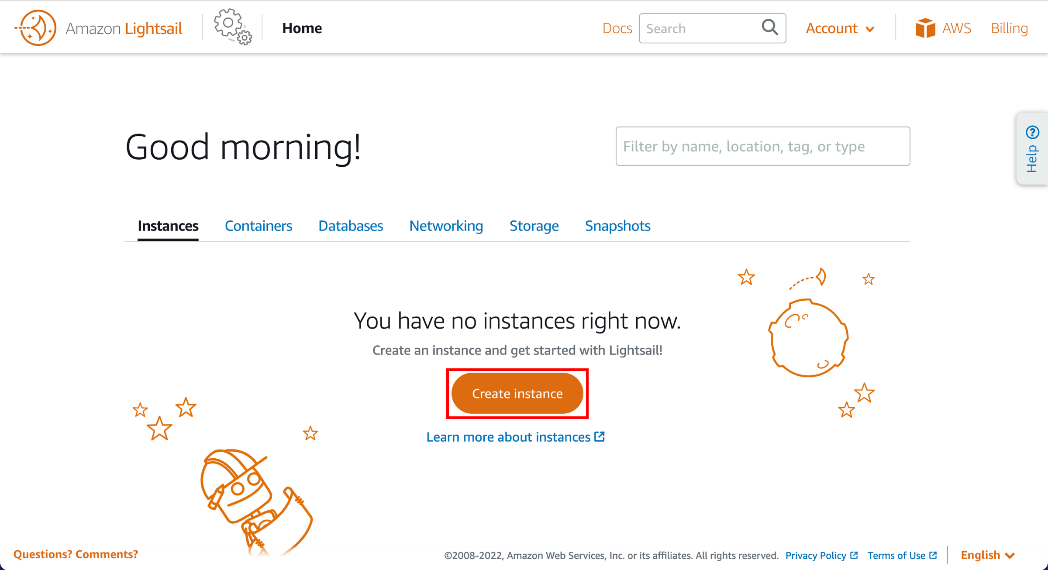


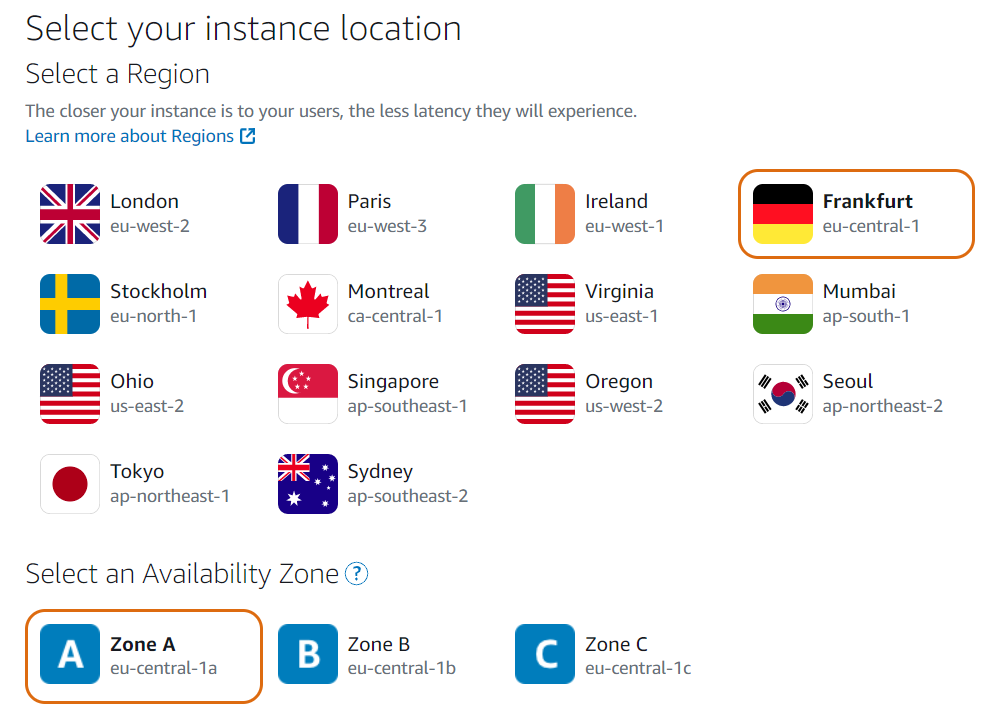
1. **Finally, I coppied the adresses of DNS servers to my account on** [**namecheap.com**](https://www.namecheap.com/)**.**



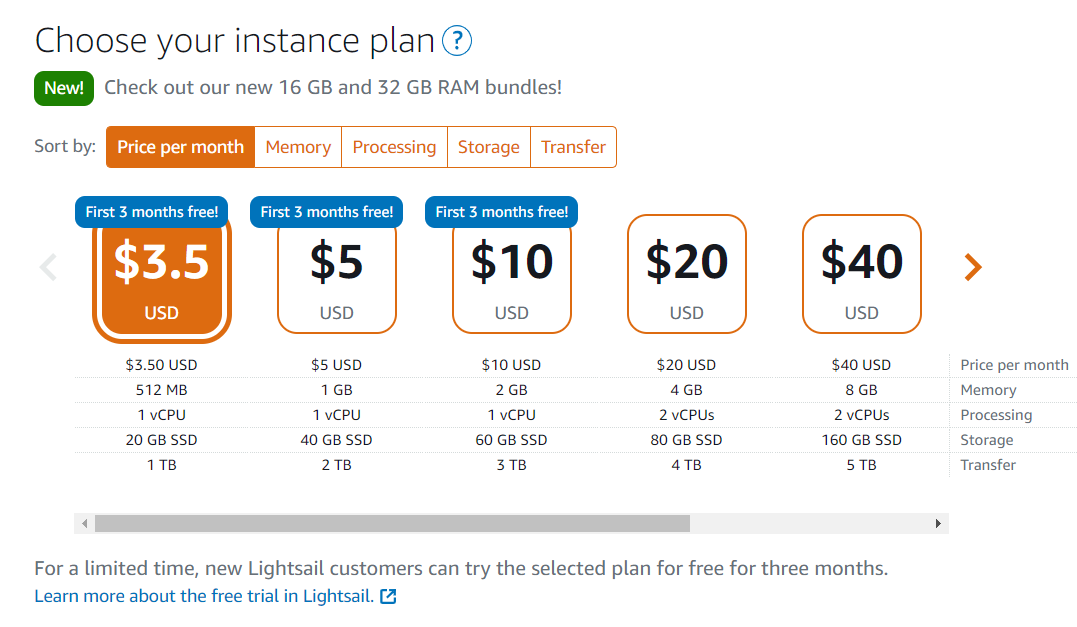
1. **Result -** [**yakymov.site**](http://yakymov.site/)**.**
2. Launch and configure a WordPress instance with Amazon Lightsail [link](https://aws.amazon.com/getting-started/hands-on/launch-a-wordpress-website/?trk=gs_card)

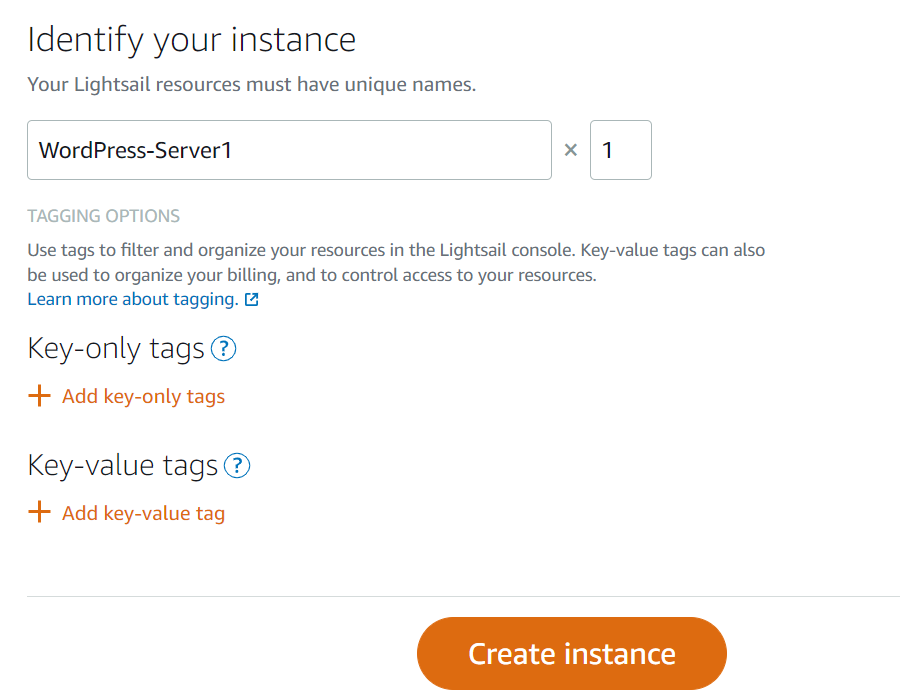
**Step 1: Create a WordPress instance in Lightsail**





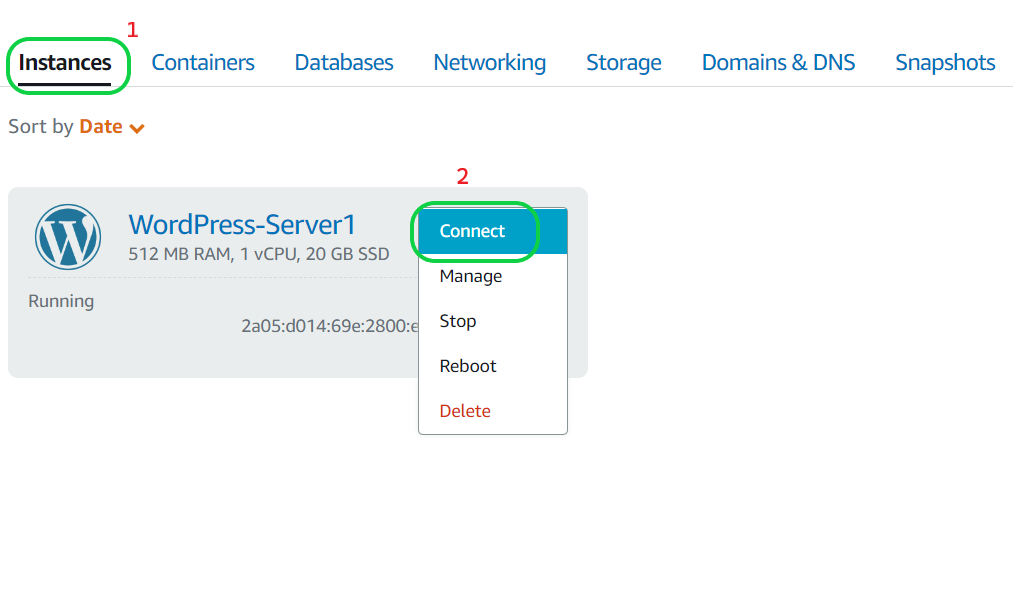






**Step 2: Connect to your instance via SSH and get the password for your WordPress website**

**a. On the Instances tab of the Lightsail home page, choose the SSH quick-connect icon for your WordPress instance.**



**b. After the browser-based SSH client window opens, enter the following command to retrieve the default application password:**

cat $HOME/bitnami\_application\_password

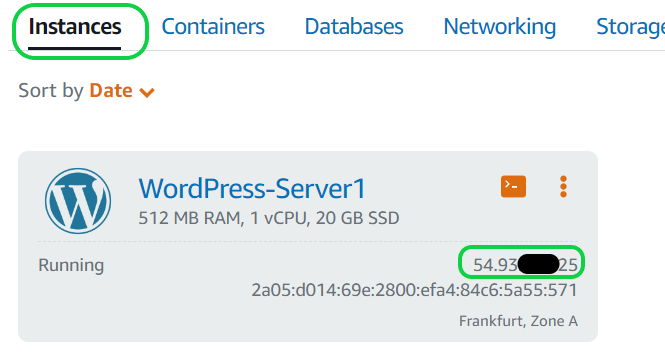


**Step 3: Sign in to the administration dashboard of your WordPress website**

**a. In a browser, go to:**

http://PublicIpAddress/wp-login.php

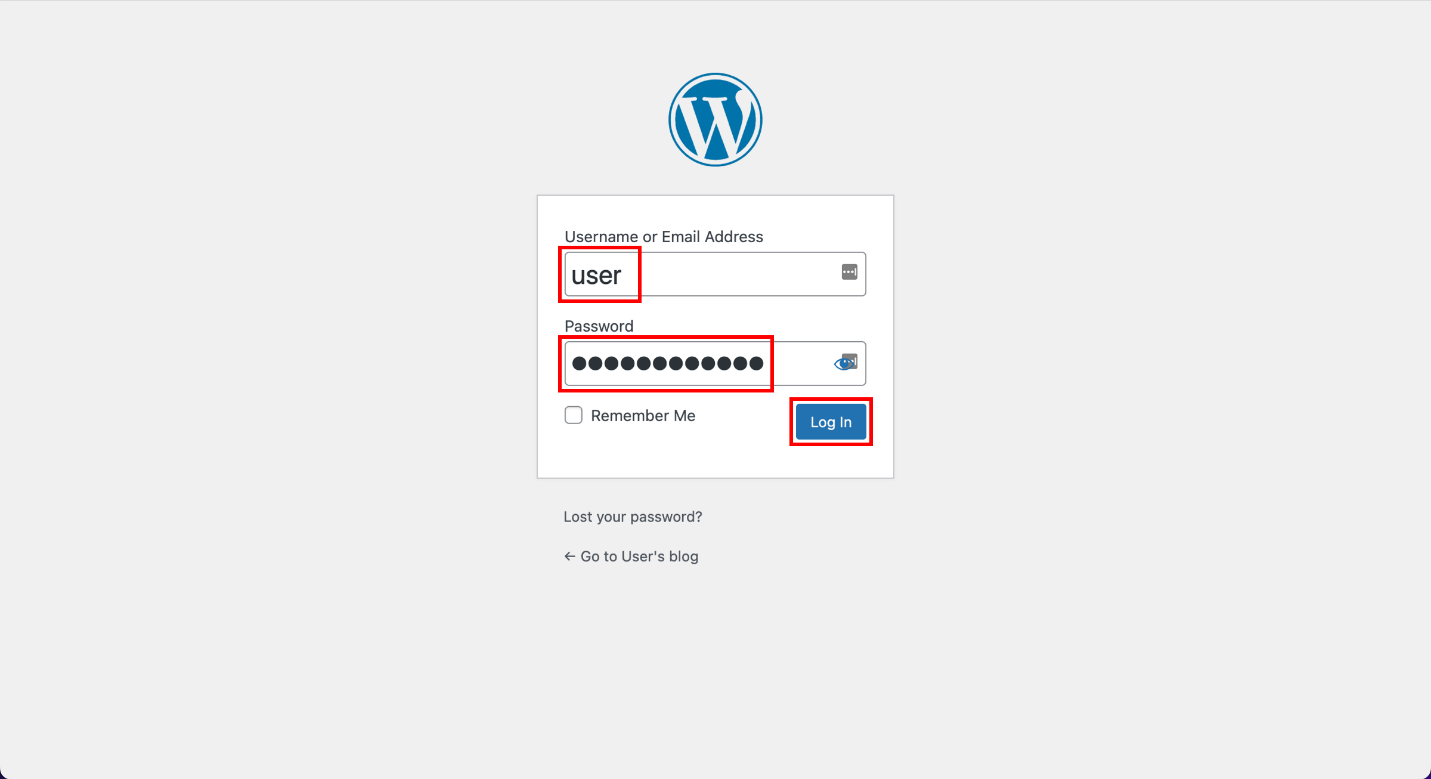
replace PublicIpAddress with the public IP address of your WordPress instance.

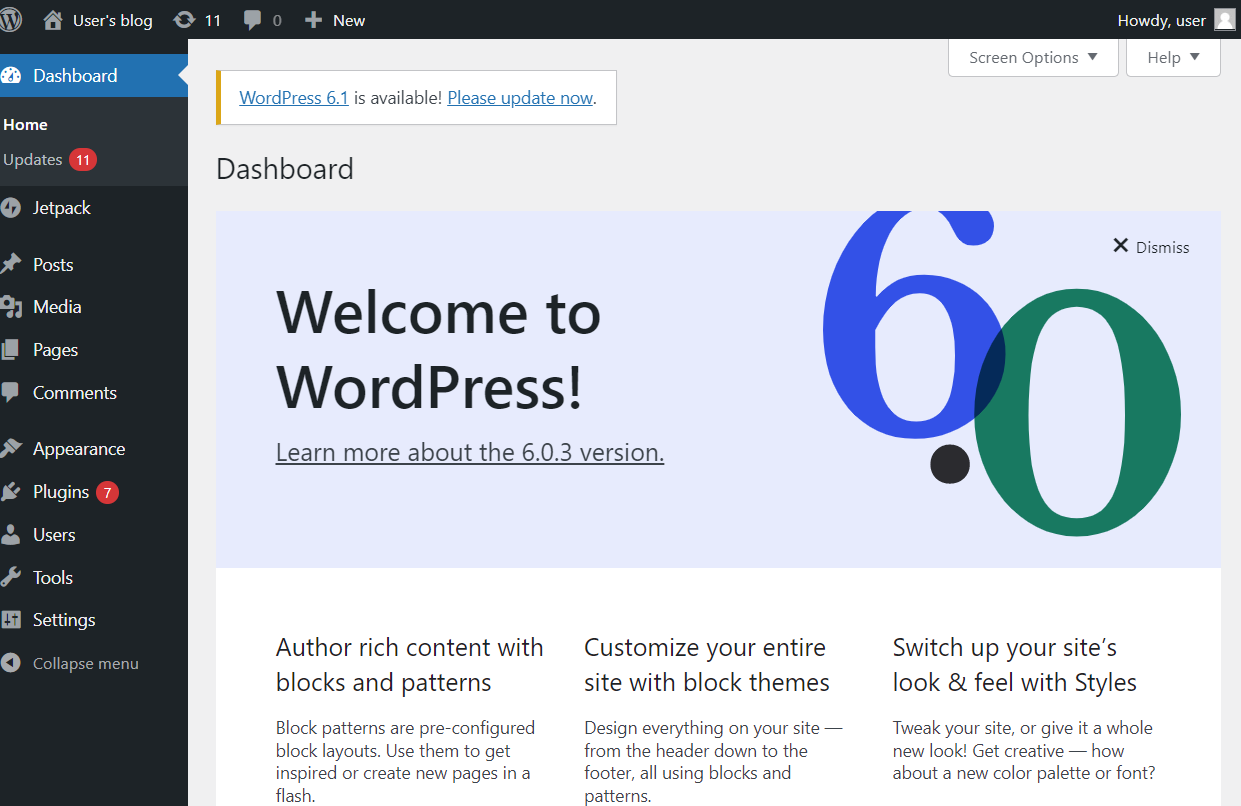


**a. Log in to your instance.:**

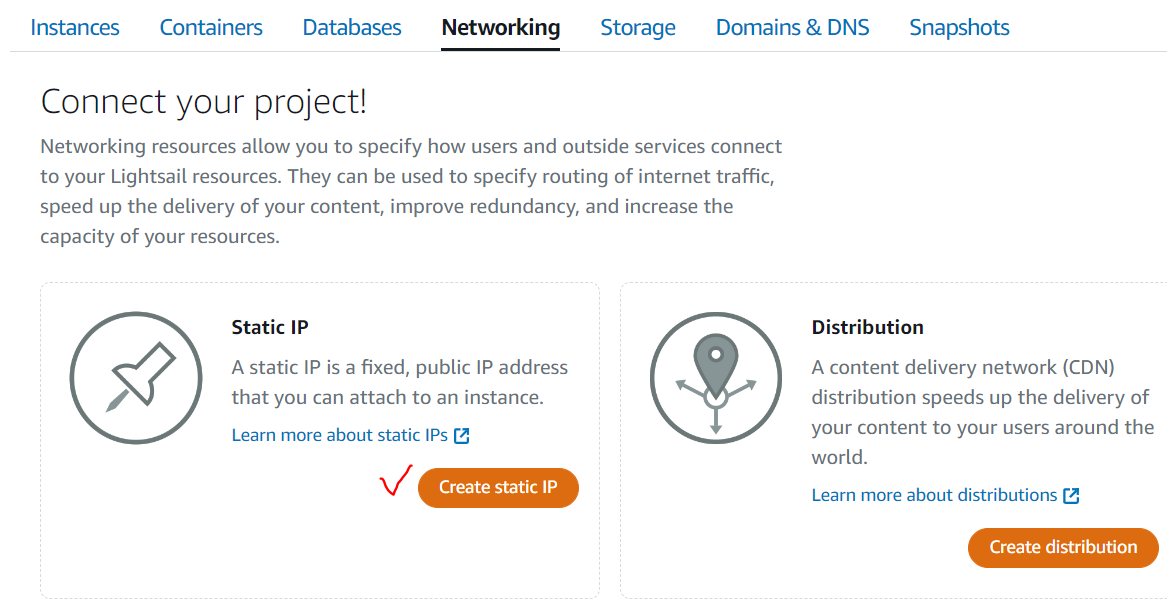
In the Username or Email Address box, enter user.

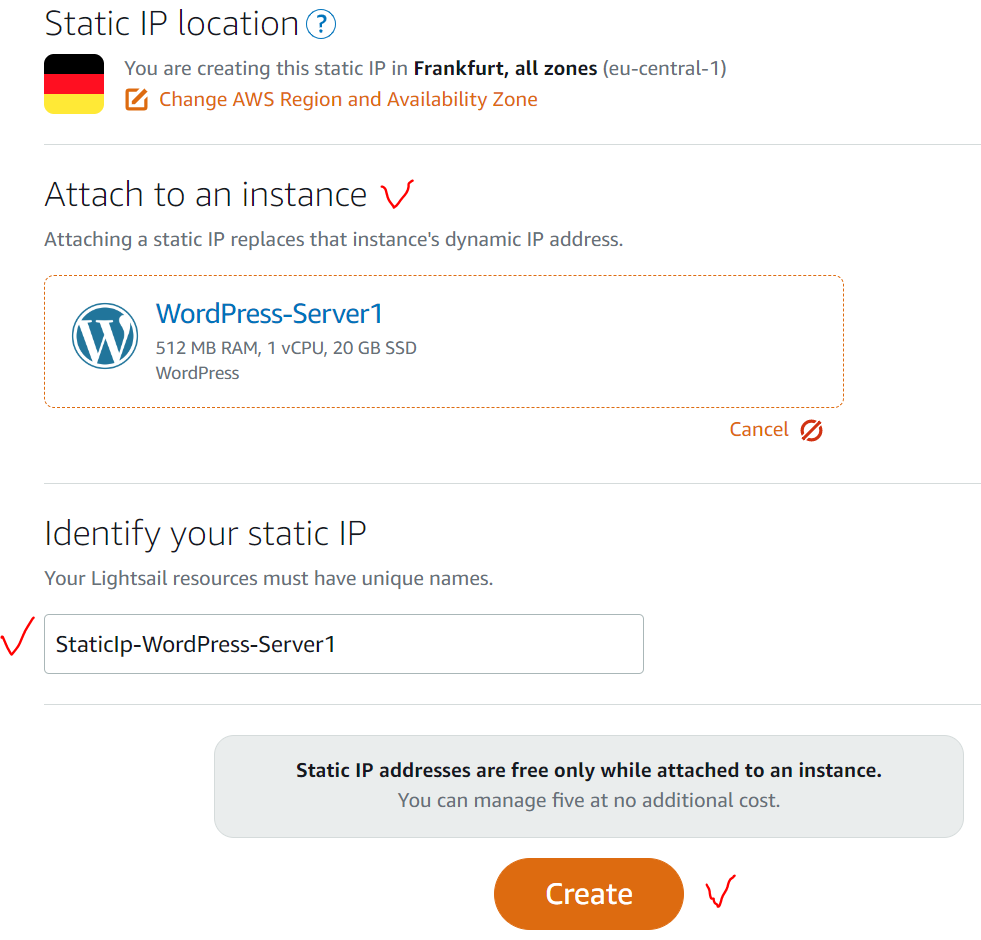
In the Password box, enter the default password obtained earlier



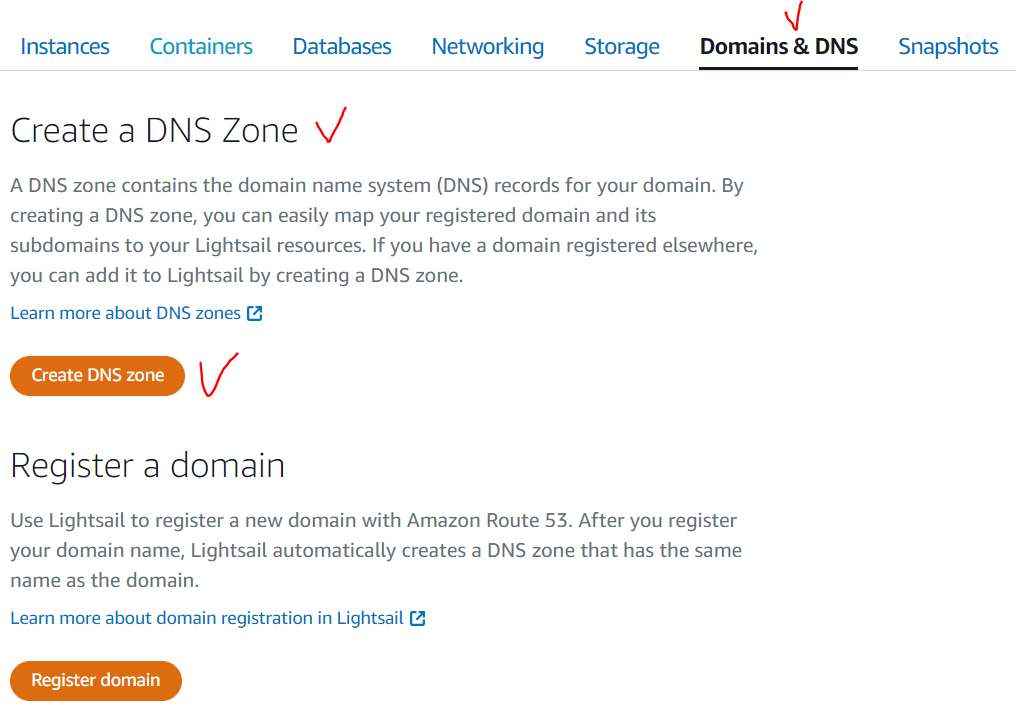


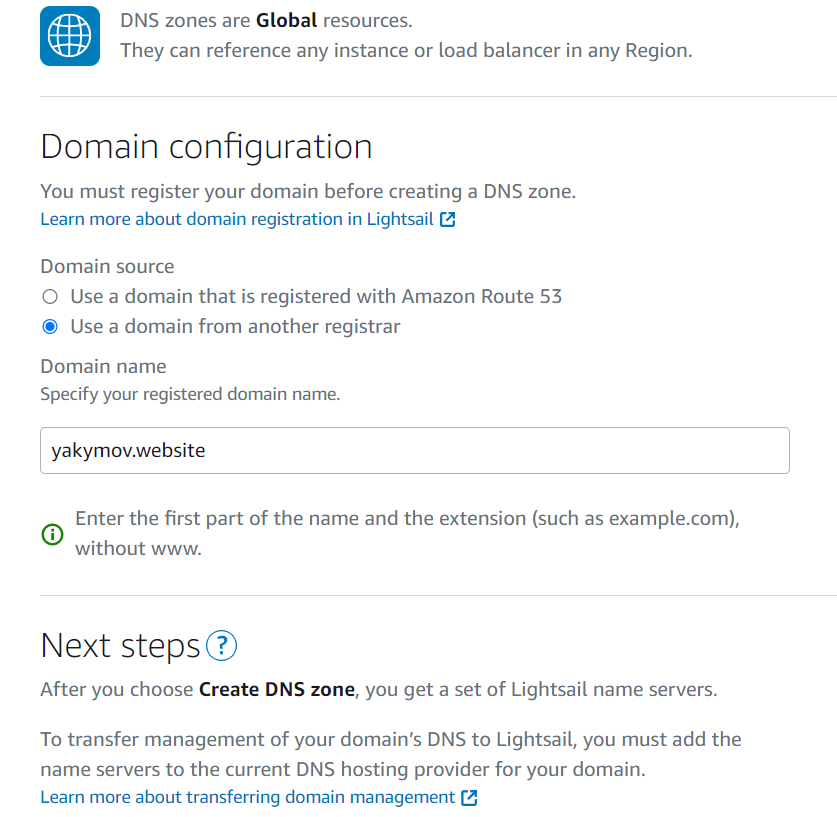
**Step 4: Create a Lightsail static IP address and attach it to your WordPress instance**

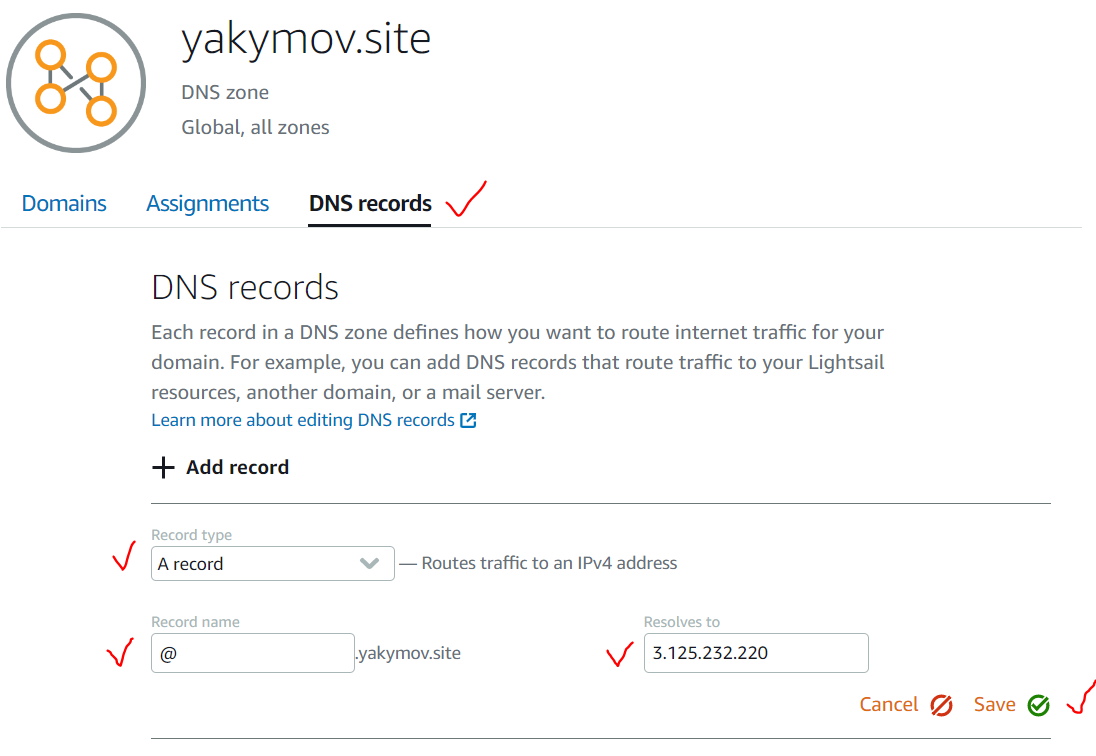


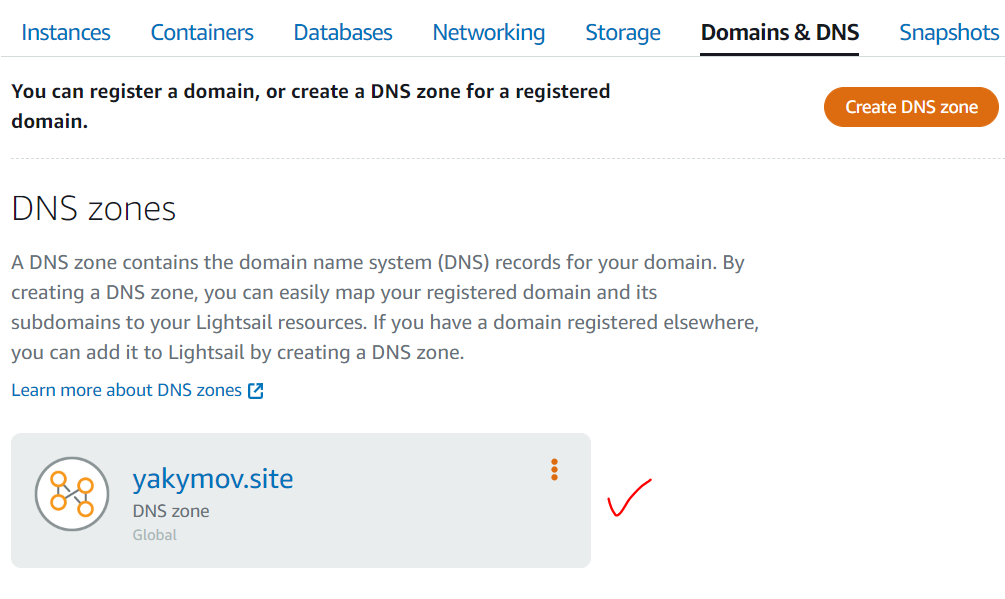


### Step 5: Create a Lightsail DNS zone and map a domain to your WordPress instance

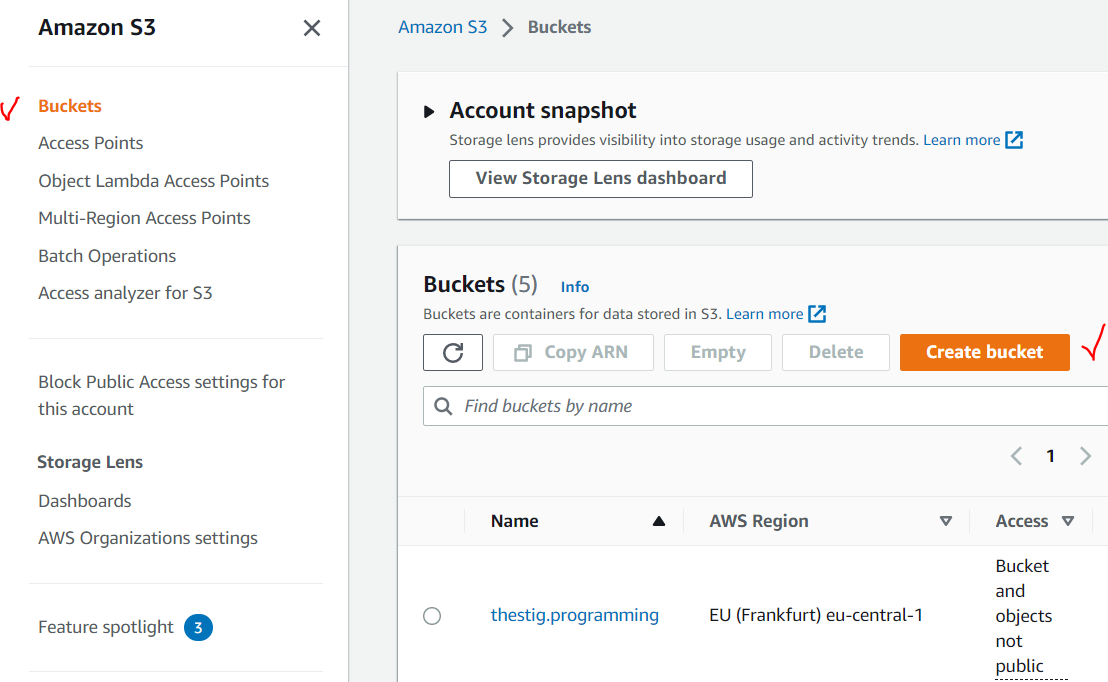


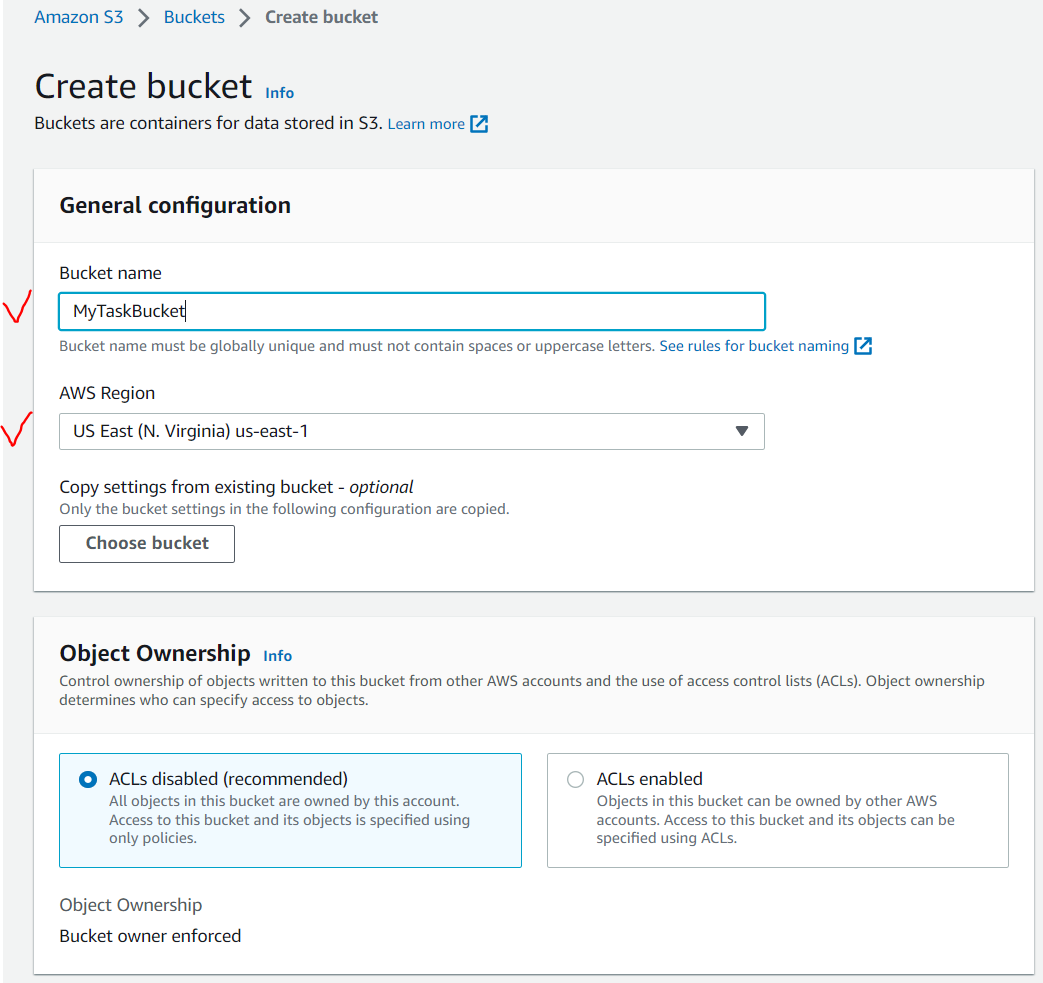


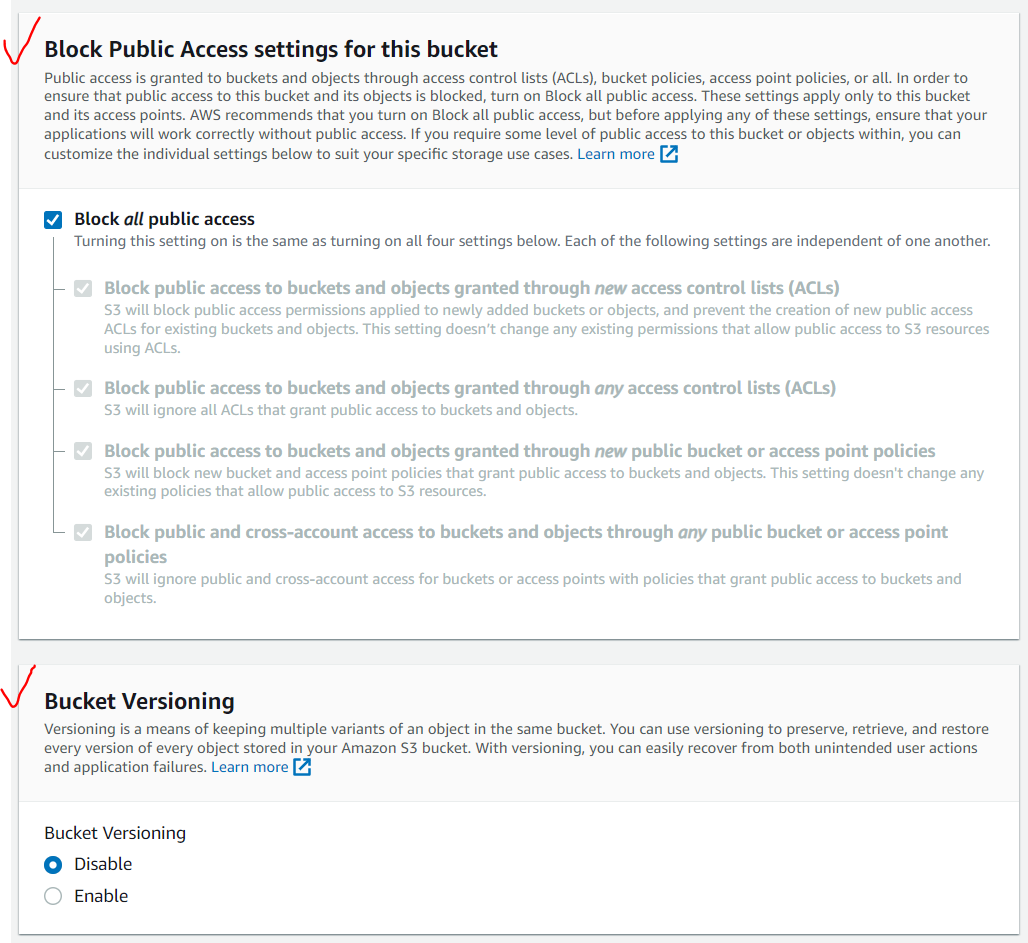


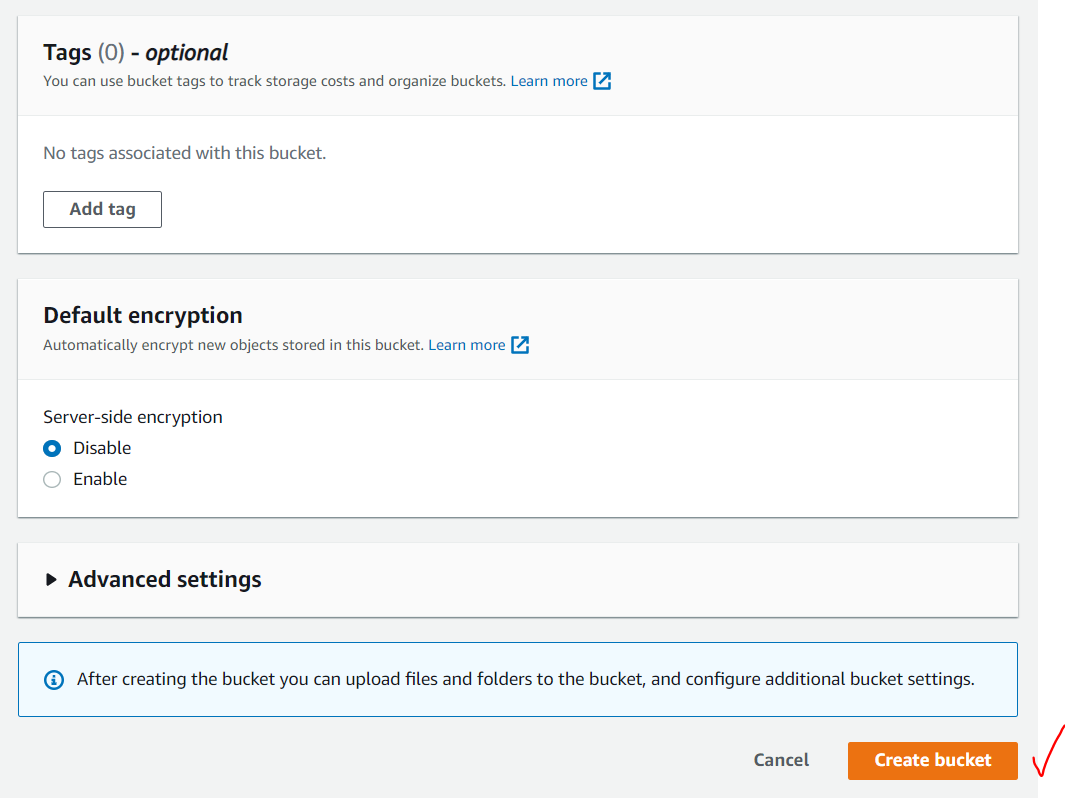


1. Review the 10-minute [Store and Retrieve a File](https://aws.amazon.com/getting-started/hands-on/backup-files-to-amazon-s3/). Repeat, creating your own repository
2. **Creating an S3 bucket**

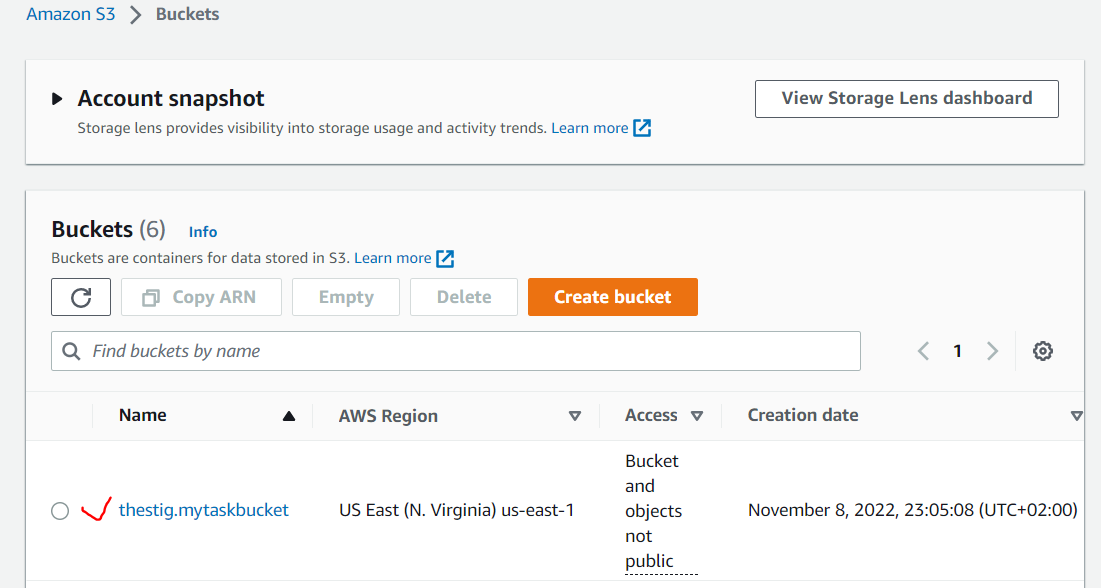


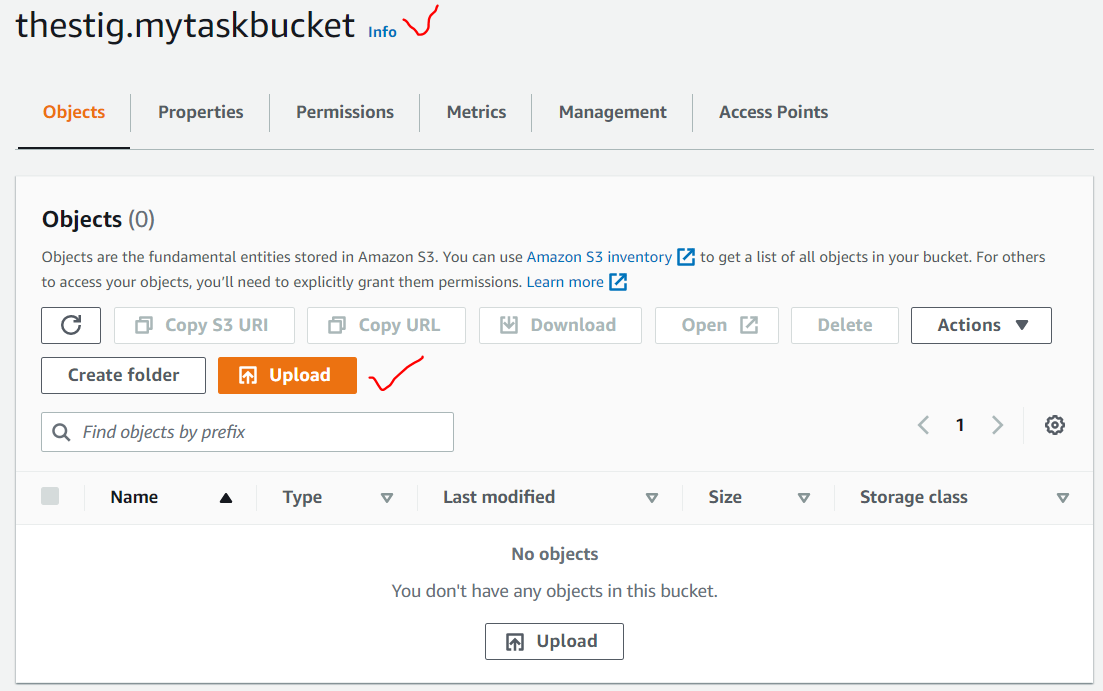




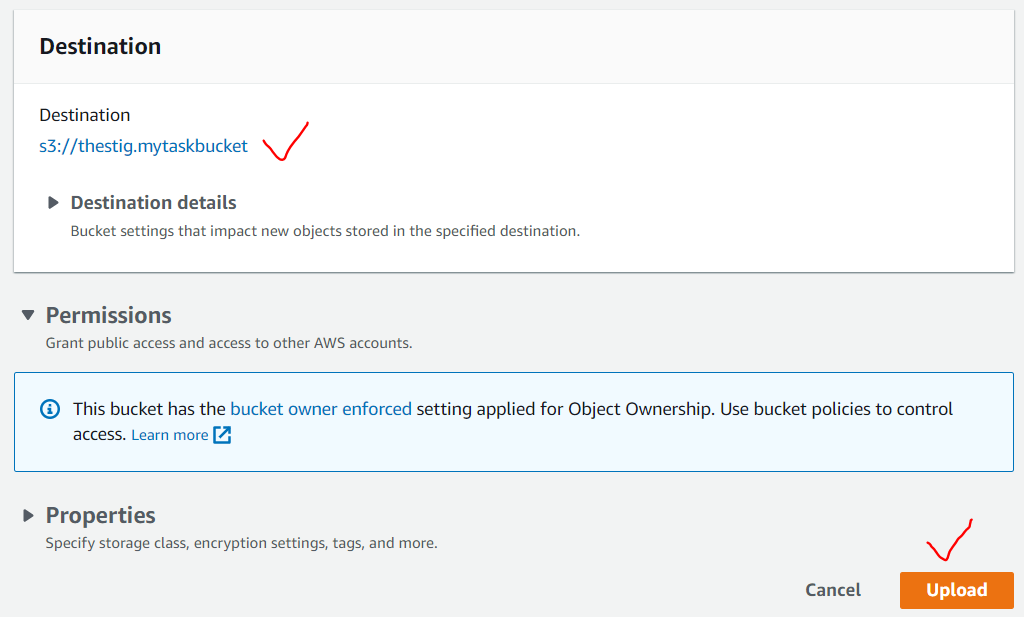


1. **Upload a file**

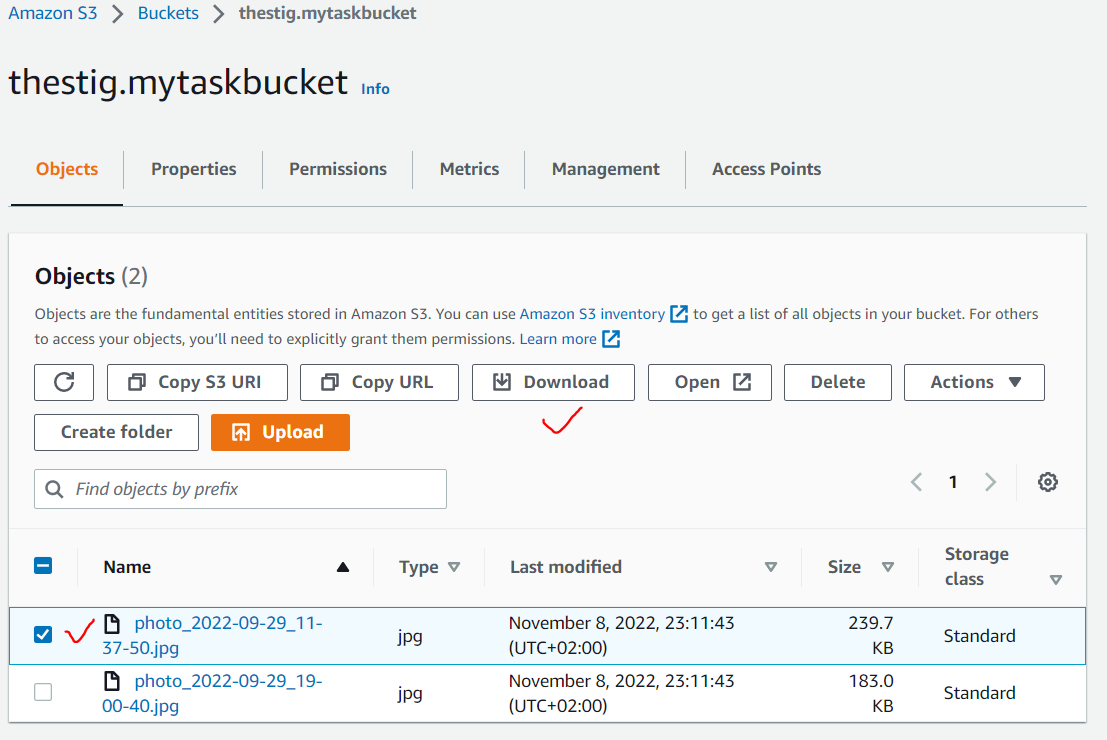




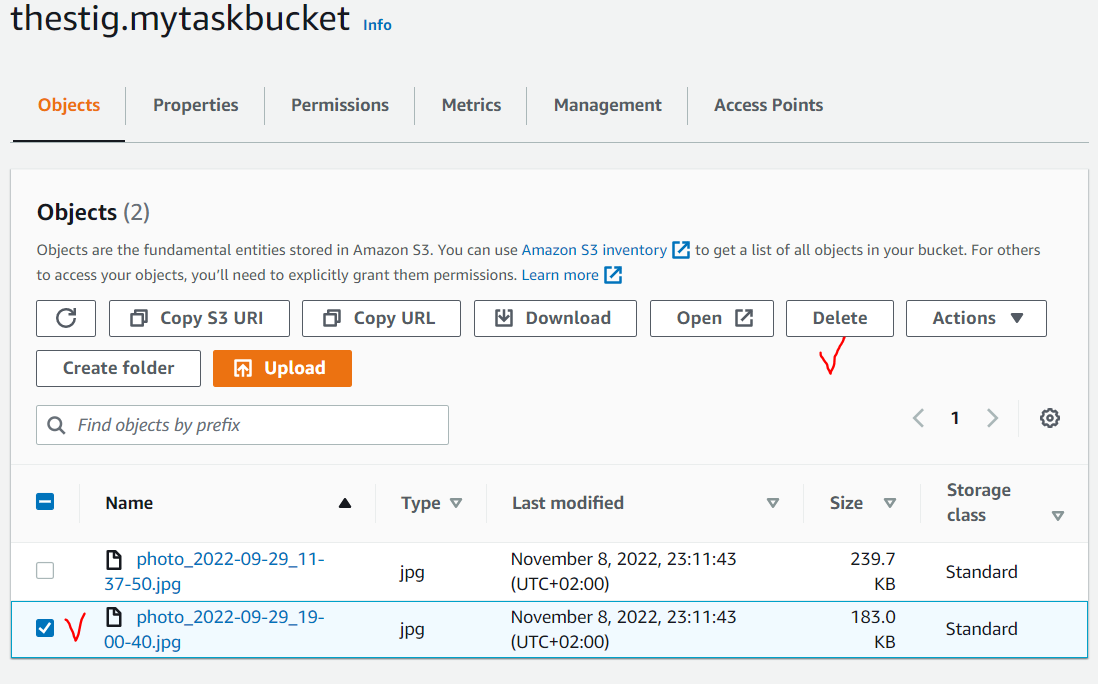


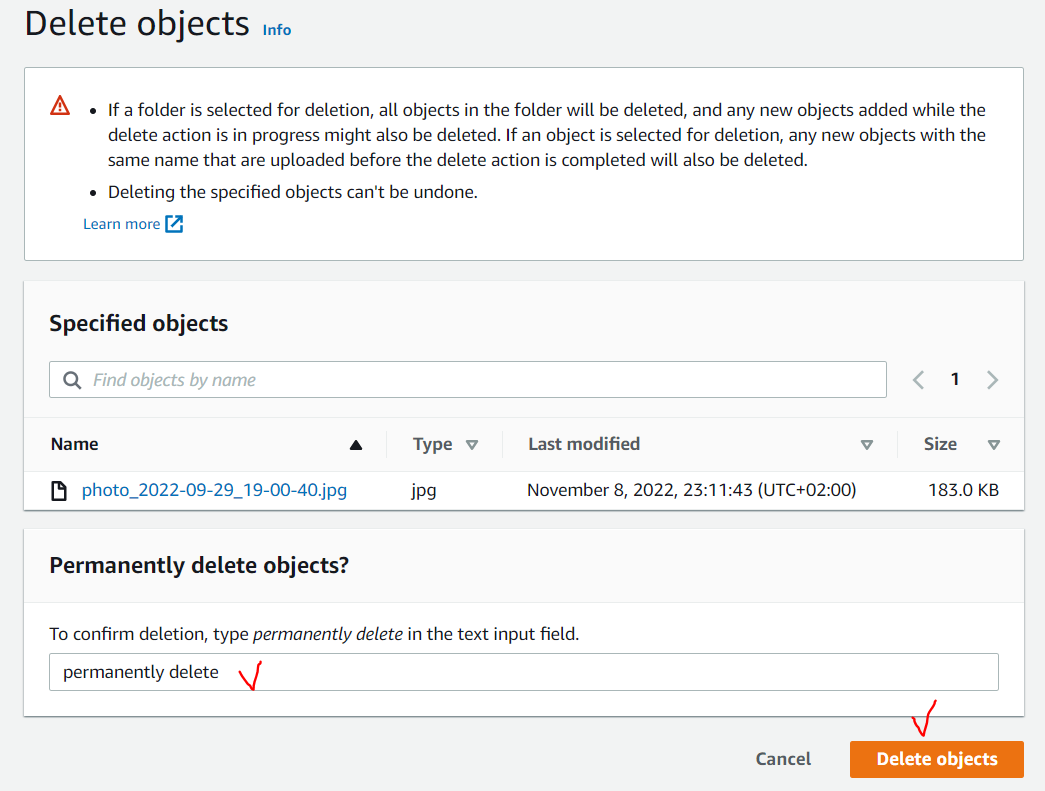


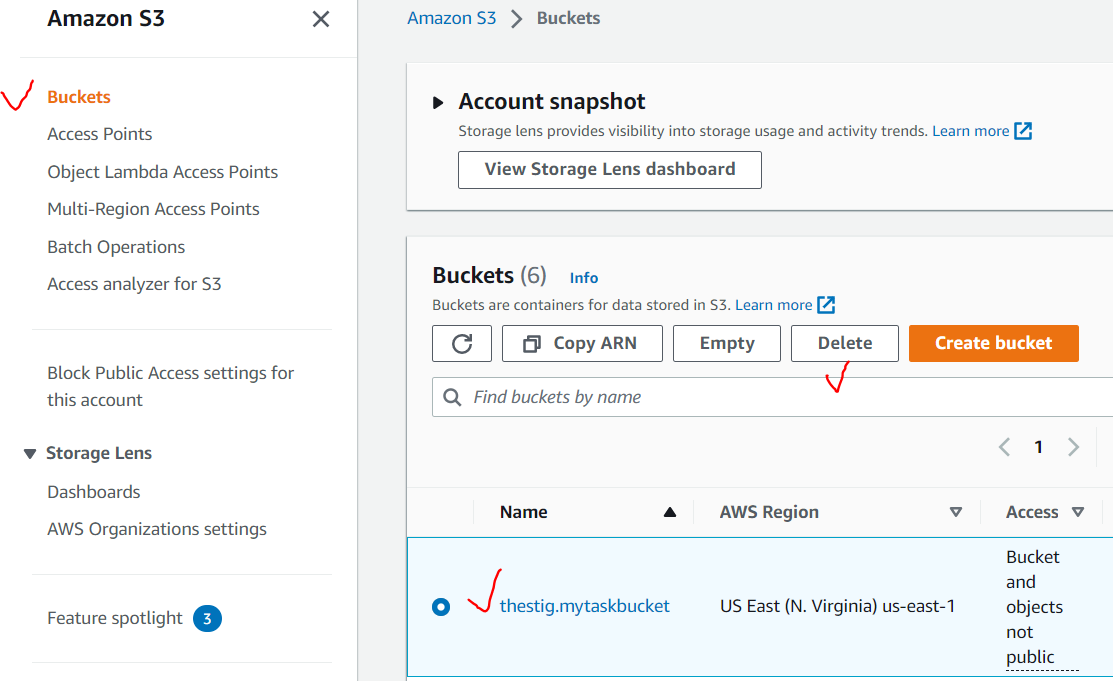
1. **Retrieve the object**

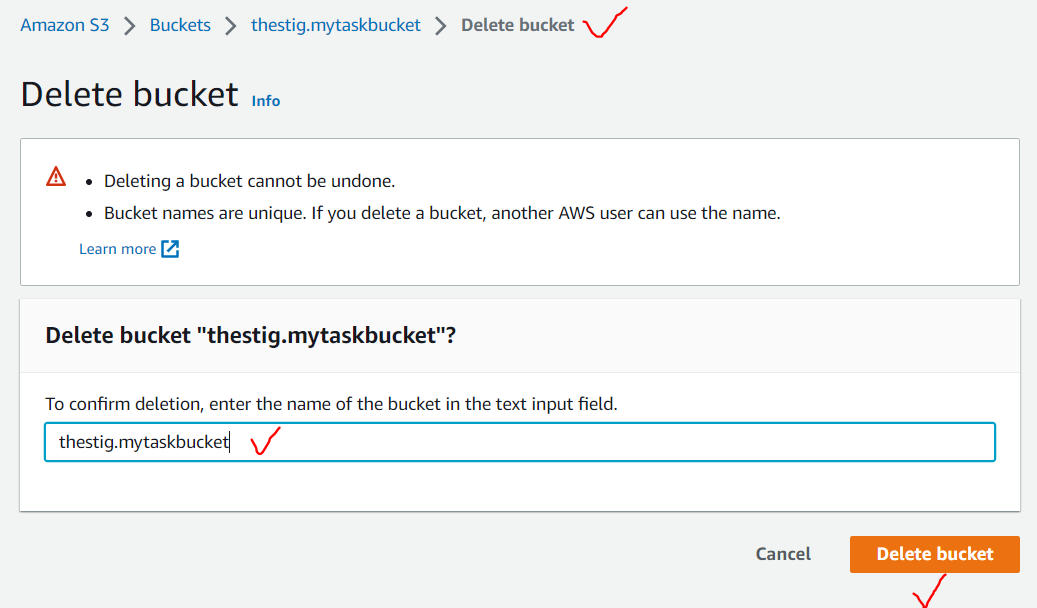


1. **Delete the object and bucket**



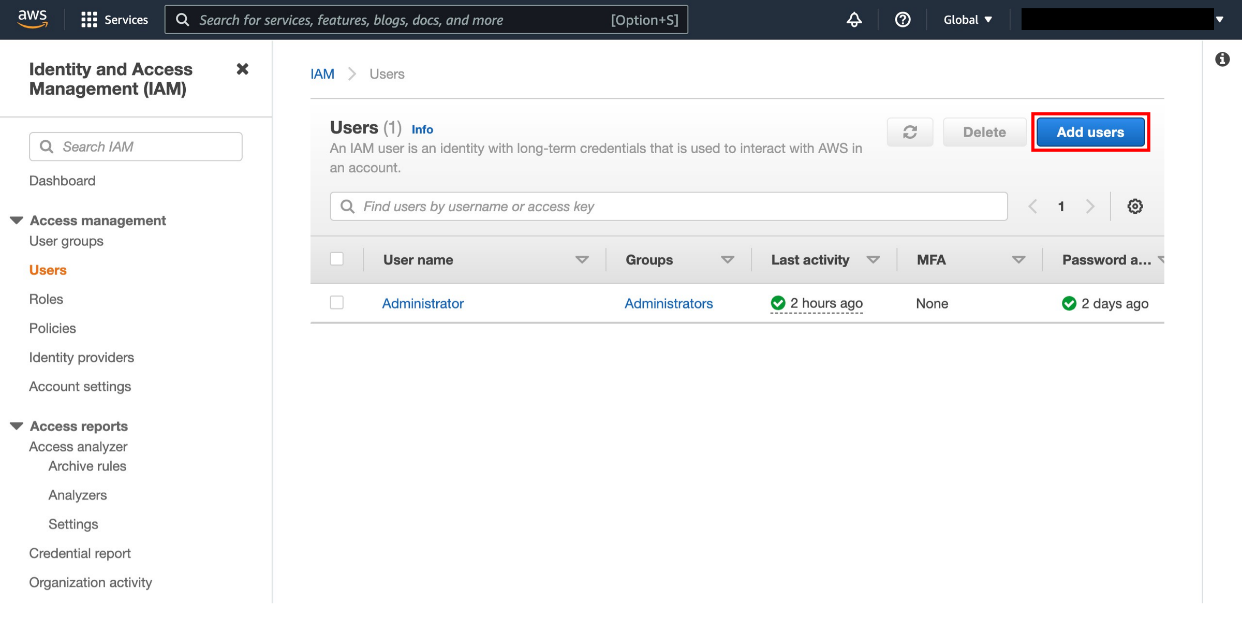


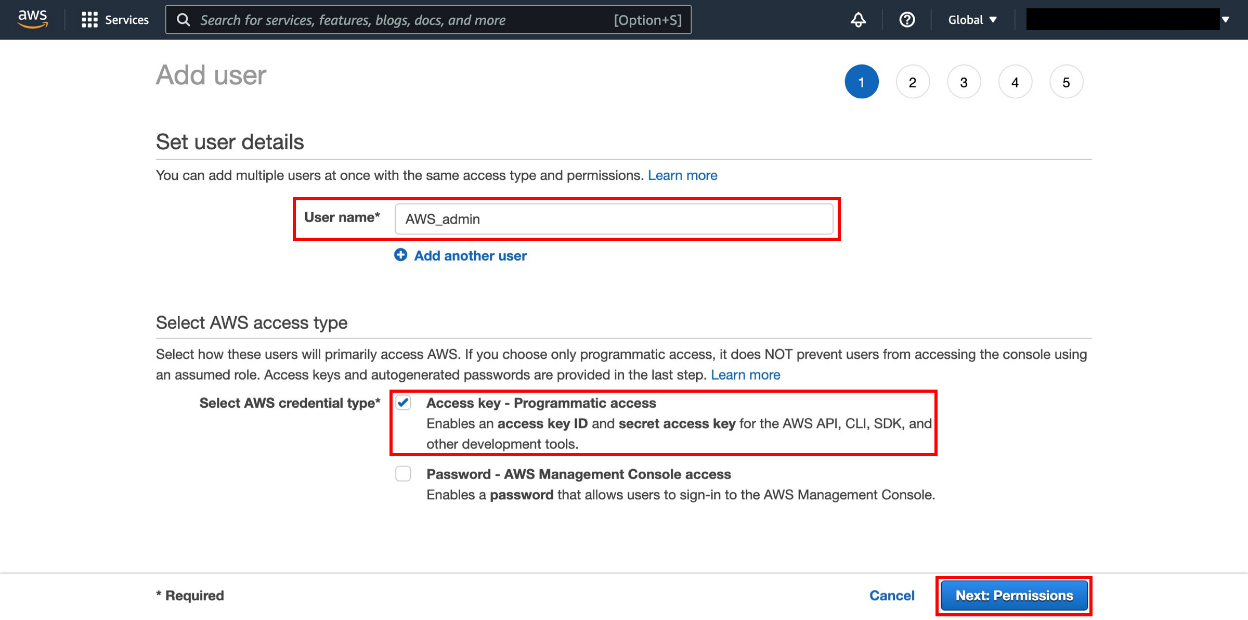


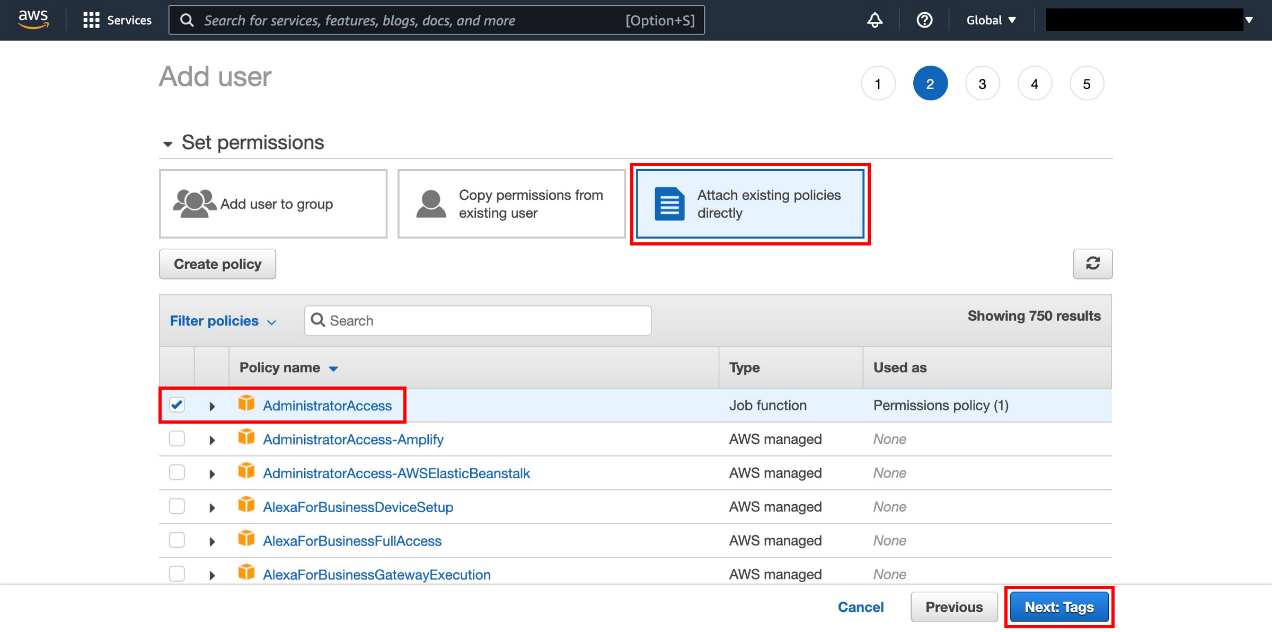


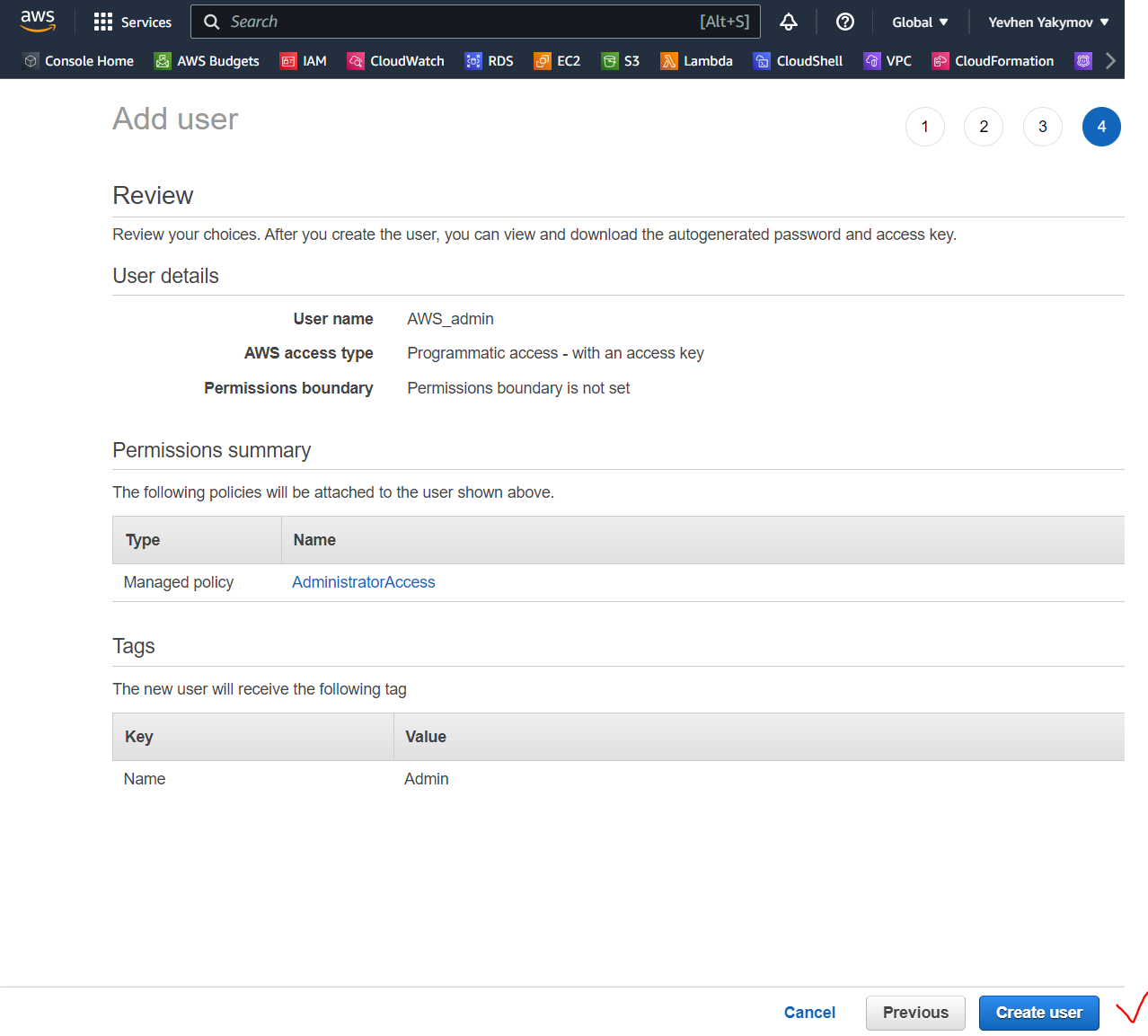
1. Review the 10-minute [example](https://aws.amazon.com/getting-started/hands-on/backup-to-s3-cli/?nc1=h_ls) Batch upload files to the cloud to Amazon S3 using the AWS CLI. Create a user AWS IAM, configure CLI AWS and upload any files to S3

### Step 1: Create an AWS IAM User









### Step 2: Install and Configure the AWS CLI (Windows)

1. Download and run the Windows installer
2. Type aws configure and press enter. When prompted, enter the following:

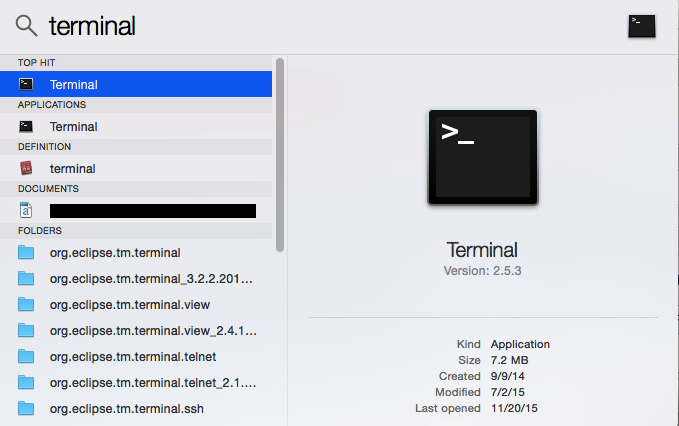


### Step 3: Install and Configure the AWS CLI (Mac/Linux)

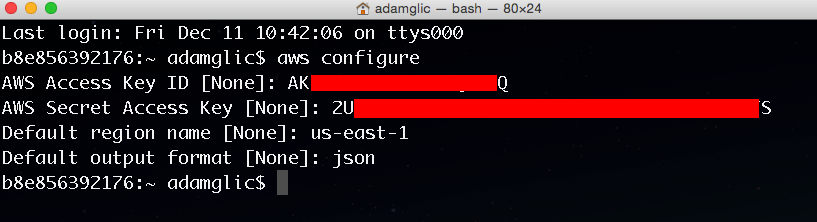
a. Follow [these directions](https://docs.aws.amazon.com/cli/latest/userguide/getting-started-install.html?bck-files-amz-s3) for installing the AWS CLI bundled installer.

b. MacOS users: Open a terminal window by pressing Command + Space and typing terminal in the search window. Then press enter to open the terminal window.

Linux users: Open a terminal window.

[](https://aws.amazon.com/getting-started/hands-on/backup-to-s3-cli/?nc1=h_ls)

1. Type aws configure and press enter. Enter the following when prompted:



AWS Access Key ID [None]: Enter the Access Key Id from the credentials.csv file you downloaded in step 1, part d

Note: This should look something like AKIAPWINCOKAO3U4FWTN

AWS Secret Access Key [None]: Enter the Secret Access Key from the credentials.csv file you downloaded in step 1, part d

Note: This should look something like 5dqQFBaGuPNf5z7NhFrgou4V5JJNaWPy1XFzBfX3

Default region name [None]: Enter us-east-1

Default output format [None]: Enter json

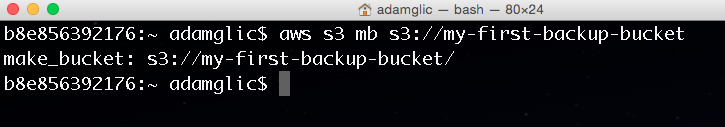
### Step 4: Using the AWS CLI with Amazon S3

In this step, you will use the AWS CLI to create a bucket in Amazon S3 and copy a file to the bucket.

a. Creating a bucket is optional if you already have a bucket created that you want to use. To create a new bucket named my-first-backup-bucket type:

aws s3 mb s3://my-first-backup-bucket

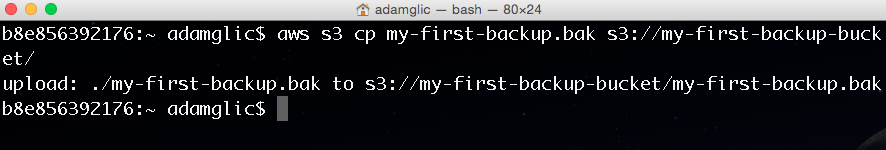
Note: Bucket naming has some restrictions; one of those restrictions is that bucket names must be globally unique (e.g., two different AWS users can not have the same bucket name); because of this, if you try the command above you will get a BucketAlreadyExists error.

[](https://aws.amazon.com/getting-started/hands-on/backup-to-s3-cli/?nc1=h_ls)

b. To upload the file *my first backup.bak* located in the local directory (C:\users) to the S3 bucket *my-first-backup-bucket*, you would use the following command:

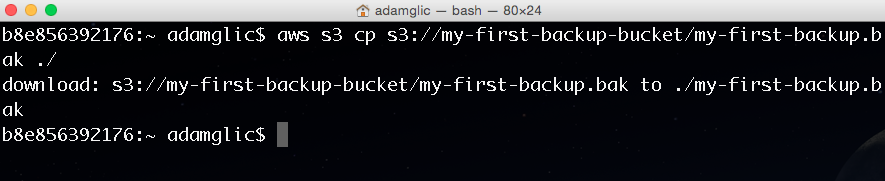
aws s3 cp “C:\users\my first backup.bak” s3://my-first-backup-bucket/

Or, use the original syntax if the filename contains no spaces.

[](https://aws.amazon.com/getting-started/hands-on/backup-to-s3-cli/?nc1=h_ls)

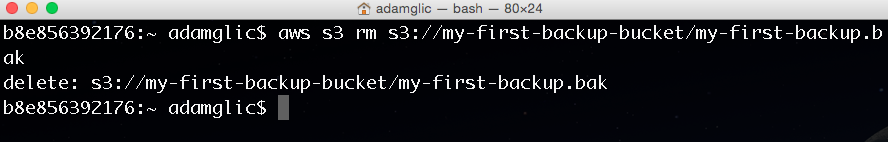
c. To download *my-first-backup.bak* from S3 to *the local directory* we would reverse the order of the commands as follows:

aws s3 cp s3://my-first-backup-bucket/my-first-backup.bak ./

[](https://aws.amazon.com/getting-started/hands-on/backup-to-s3-cli/?nc1=h_ls)

d. To delete *my-first-backup.bak* from your *my-first-backup-bucket* bucket, use the following command:

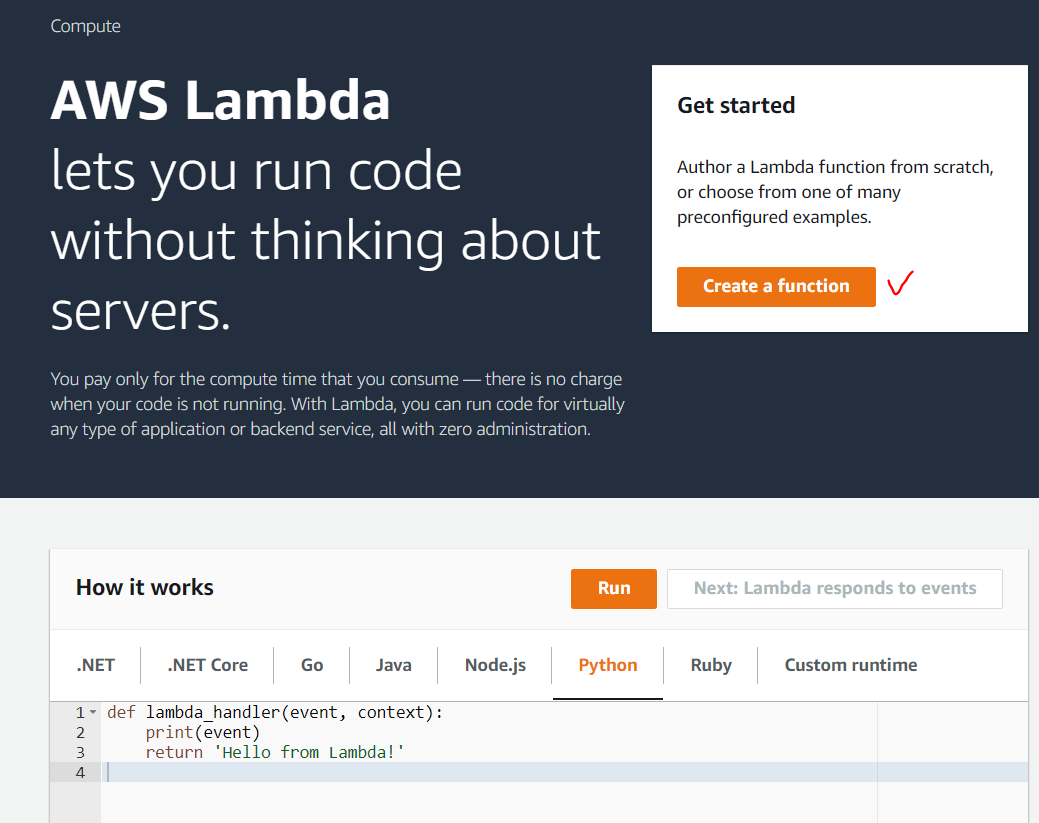
aws s3 rm s3://my-first-backup-bucket/my-first-backup.bak

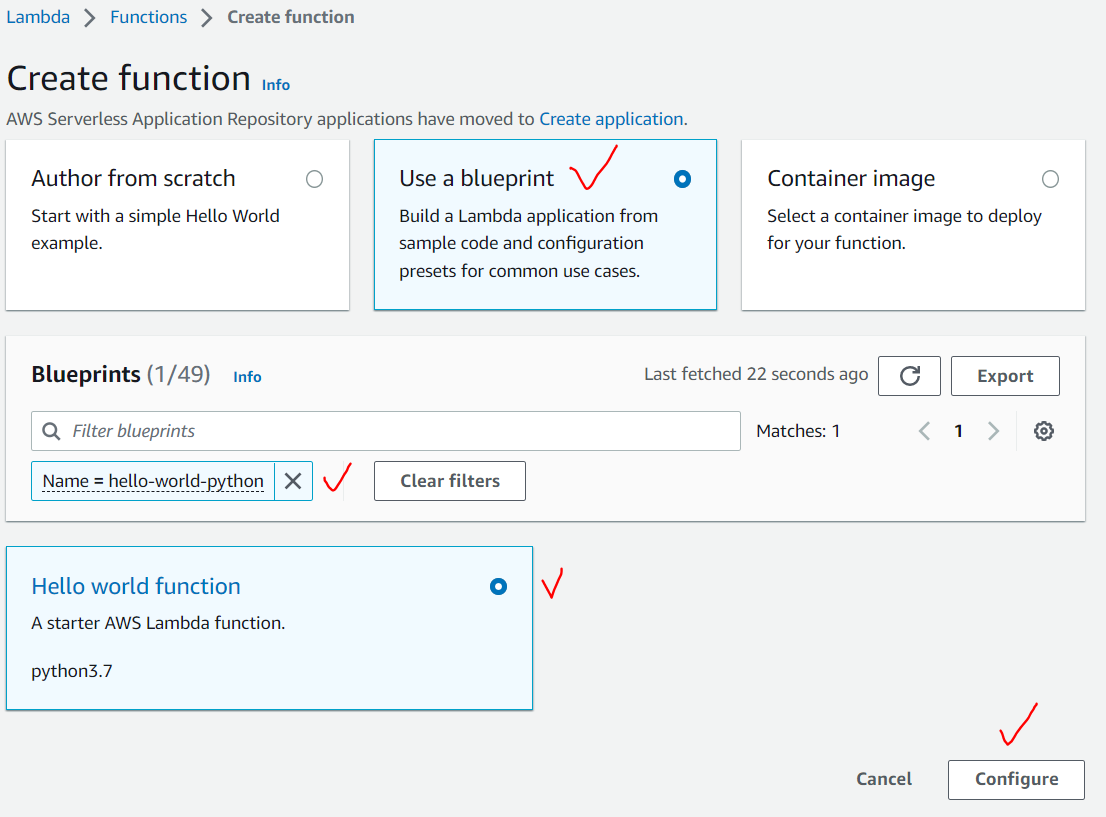
[](https://aws.amazon.com/getting-started/hands-on/backup-to-s3-cli/?nc1=h_ls)

1. Review the 10-minute [example](https://aws.amazon.com/getting-started/hands-on/deploy-docker-containers/?nc1=h_ls) Deploy Docker Containers on Amazon Elastic Container Service (Amazon ECS). Repeat, create a cluster, and run the online demo application or better other application with custom settings.

1. [Run a Serverless](https://aws.amazon.com/getting-started/hands-on/run-serverless-code/?nc1=h_ls) "Hello, World!" with AWS Lambda.

### a: Select a Lambda blueprint





### b: Configure and create your Lambda function

### 

### 

### c: Invoke Lambda function and verify results

### 

### 

### 

### 

1. Create a static website on Amazon S3, publicly available ([link1](https://docs.aws.amazon.com/AmazonS3/latest/dev/HostingWebsiteOnS3Setup.html) or [link2](https://docs.aws.amazon.com/AmazonS3/latest/dev/website-hosting-custom-domain-walkthrough.html) - using a custom domain registered with Route 53). Post on the page your own photo, the name of the educational program (EPAM Cloud&DevOps Fundamentals Autumn 2022), the list of AWS services with which the student worked within the educational program or earlier and the full list with links of completed labs (based on [tutorials](https://aws.amazon.com/getting-started/hands-on/?awsf.getting-started-content-type=content-type%23hands-on&?e=gs2020&p=gsrc) or [qwiklabs](https://amazon.qwiklabs.com/)). Provide the link to the website in your report and СV.

**Link -** [**http://yakymov.site/**](http://yakymov.site/)

