

EPAM University Programs

DevOps external course

Module 2 Virtualization and Cloud Basic

TASK 2.3

1. Ознайомтесь з умовами безкоштовного використання AWS Free Tier https://docs.aws.amazon.com/en_us/awsaccountbilling/latest/aboutv2/billing-free-tier.html та можливостями контролю власних витрат.

The screenshot shows a web browser with multiple tabs open, including 'Using the AWS Free Tier', 'Free Tier Limits', 'AWS Free Tier', and 'Tracking Your Free Tier Usage'. The active tab displays the AWS documentation page for 'Using the AWS Free Tier'. The page has a dark header with the AWS logo, a search bar, and navigation links. A left sidebar contains a table of contents for 'AWS Billing and Cost Management'. The main content area is titled 'Using the AWS Free Tier' and includes links for PDF, Kindle, and RSS. The text explains that the Free Tier allows users to try AWS services at no charge within specific usage limits for 12 months. It also mentions that users are charged for usage exceeding these limits and provides links to 'Free Tier Limits' and 'Tracking Your Free Tier Usage' for more details. A 'Topics' section at the bottom lists 'Eligibility for the Free Tier', 'Free Tier Limits', and 'Tracking Your Free Tier Usage'.

Using the AWS Free Tier

PDF | Kindle | RSS

You can try some AWS services free of charge within certain usage limits. AWS calls this the [AWS Free Tier](#). The Free Tier is designed to give you hands-on experience with a range of AWS services at no charge. For example, you can explore AWS as a platform for your business by setting up a test website with a server, alarms, and database. You can also try out services for developers, such as AWS CodePipeline, AWS Data Pipeline, and AWS Device Farm.

When you create an AWS account, you're automatically signed up for the Free Tier for 12 months. Your Free Tier eligibility expires at the end of the 12-month period. When your Free Tier expires, AWS starts charging the regular rates for any AWS services and resources that you're using.

To avoid charges while on the Free Tier, you must keep your usage below the Free Tier limits. You are charged for any usage that exceeds the limits. To help you stay within the limits, you can track your Free Tier usage and set a billing alarm to notify you if you start incurring charges. For more information, see [Free Tier Limits](#) and [Tracking Your Free Tier Usage](#). For tips about avoiding unexpected charges, see [Avoiding Unexpected Charges](#). Contact [AWS Support](#) if you require additional explanation of unexpected charges on your bill.

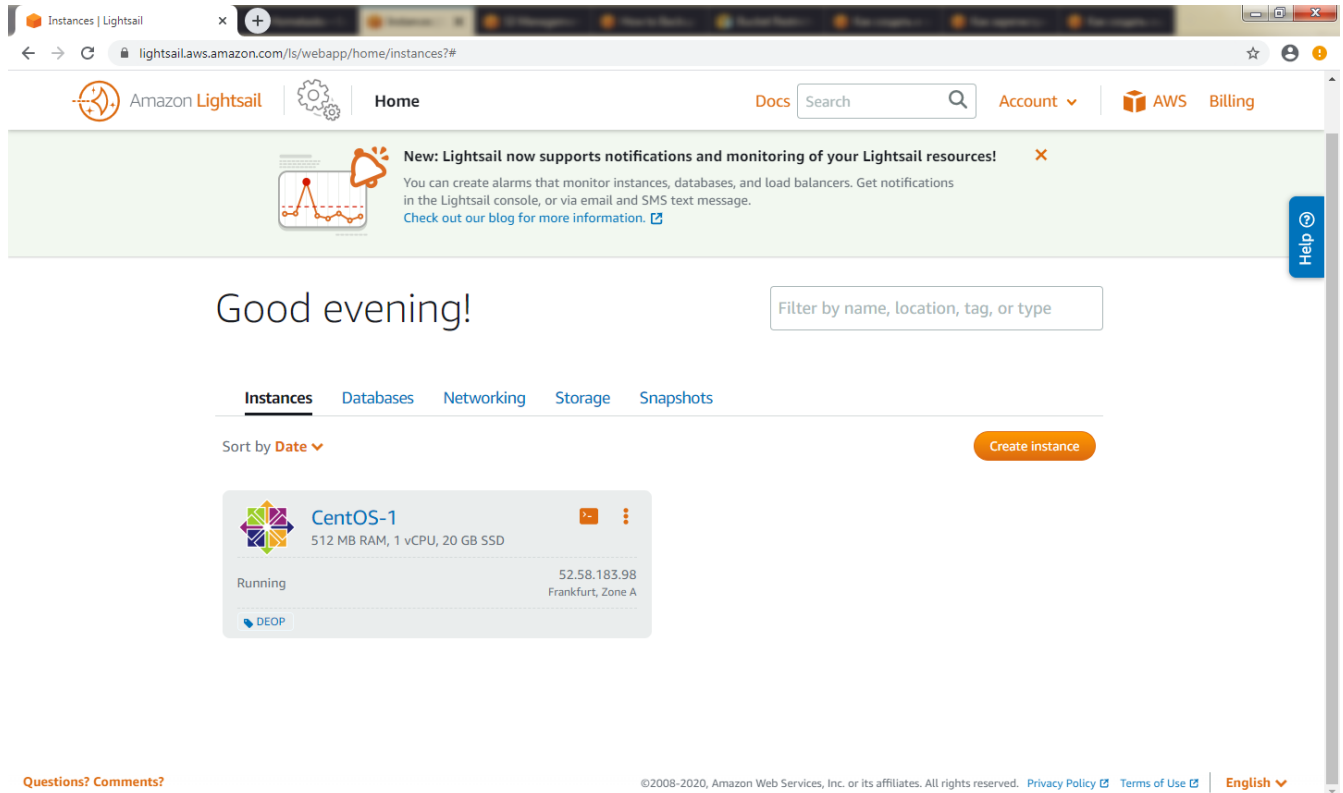
If you don't use the full benefits provided by the Free Tier in a given month, the benefits don't roll over to the next month. To maximize your Free Tier benefits, be sure to spend time with AWS each month, trying out the services that you're curious about.

For more information about which services offer a Free Tier, see [AWS Free Tier](#).

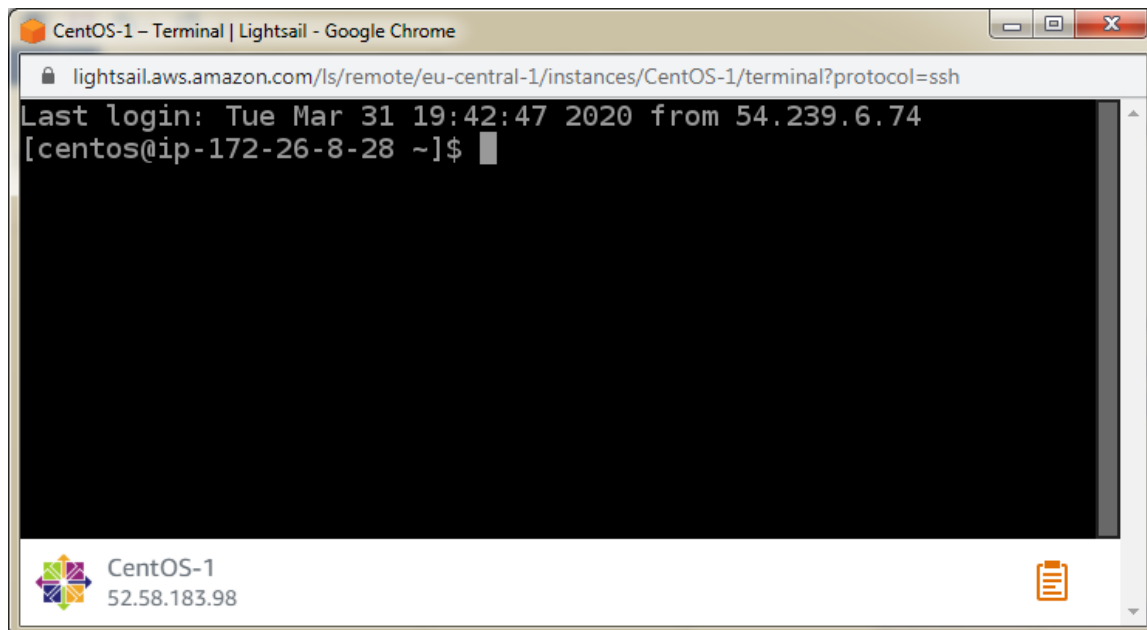
Topics

- [Eligibility for the Free Tier](#)
- [Free Tier Limits](#)
- [Tracking Your Free Tier Usage](#)

2. Перегляньте 10-хвилинний приклад Launch a LinuxVirtualMachine. https://aws.amazon.com/getting-started/tutorials/launch-a-virtualmachine/?trk=gs_card. Повторити дії, створити власну VM в хмарі AWS та підключитись до неї. Рекомендовано використати інстанс t2.micro та операційну систему CentOS.

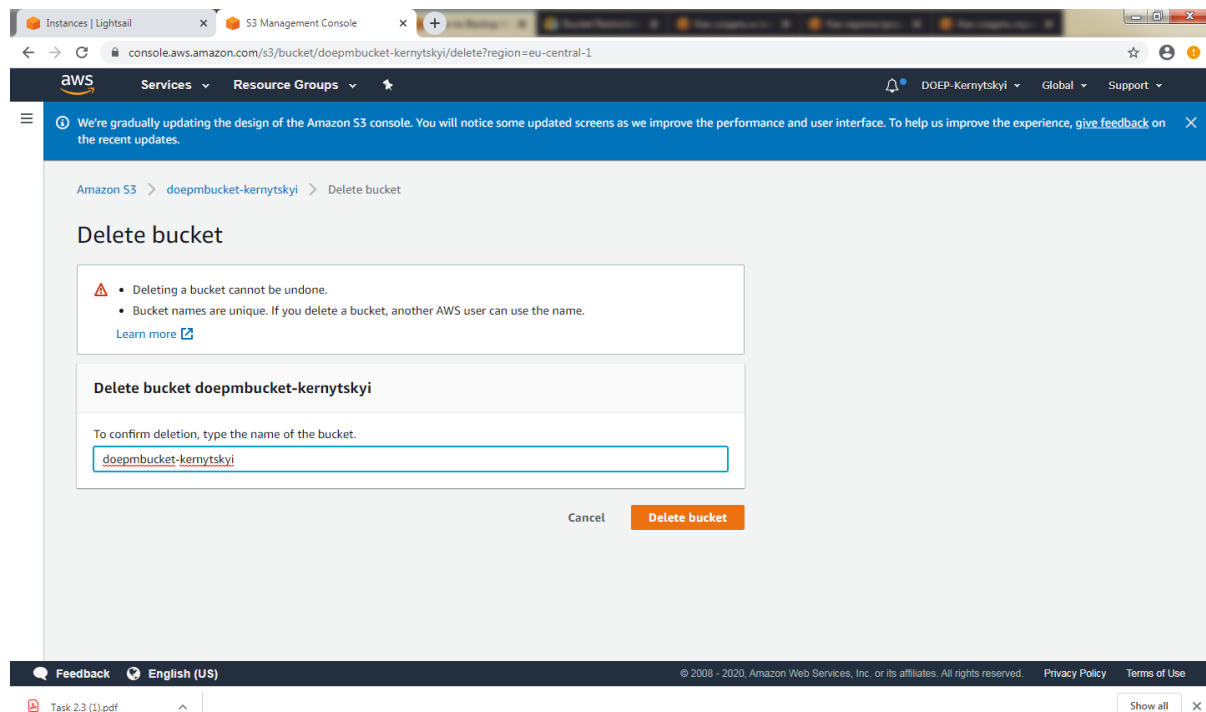
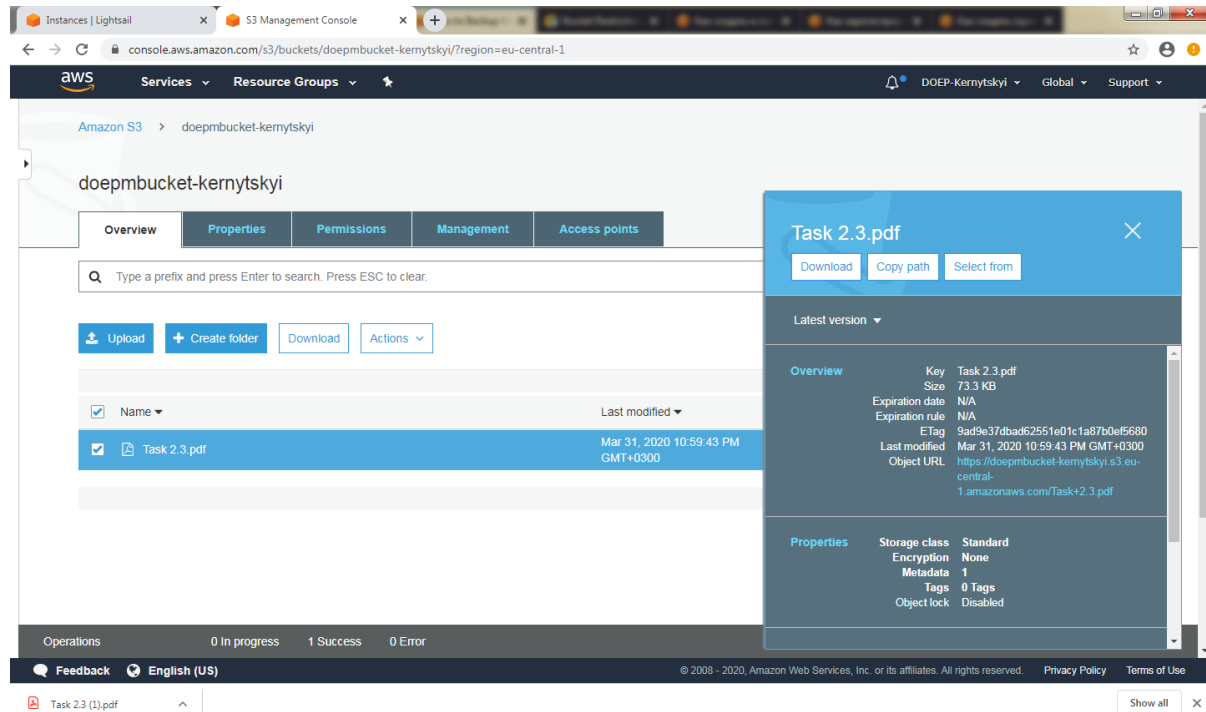


The screenshot shows the Amazon Lightsail console. At the top, there's a navigation bar with the Amazon Lightsail logo, a search bar, and links to Docs, Account, AWS, and Billing. A notification banner states: "New: Lightsail now supports notifications and monitoring of your Lightsail resources! You can create alarms that monitor instances, databases, and load balancers. Get notifications in the Lightsail console, or via email and SMS text message. Check out our blog for more information." Below the banner, a greeting "Good evening!" is displayed next to a filter box. The main content area has tabs for Instances, Databases, Networking, Storage, and Snapshots. The "Instances" tab is active, showing a list of instances. A single instance, "CentOS-1", is listed with specifications: 512 MB RAM, 1 vCPU, 20 GB SSD. It is in a "Running" state with a public IP of 52.58.183.98 in the Frankfurt, Zone A region. A "Create instance" button is visible on the right. At the bottom, there are links for "Questions? Comments?" and a copyright notice for Amazon Web Services, Inc.



The screenshot shows a terminal window titled "CentOS-1 - Terminal | Lightsail - Google Chrome". The terminal displays the SSH connection URL: `lightsail.aws.amazon.com/ls/remote/eu-central-1/instances/CentOS-1/terminal?protocol=ssh`. It shows the last login time: "Last login: Tue Mar 31 19:42:47 2020 from 54.239.6.74". The prompt is `[centos@ip-172-26-8-28 ~]$`. The terminal is currently empty. At the bottom of the terminal window, there's a status bar showing the instance name "CentOS-1" and its public IP "52.58.183.98" next to a clipboard icon.

3. Перегляньте 10-хвилинний приклад Store and Retrieve a File https://aws.amazon.com/getting-started/tutorials/backup-files-to-amazons3/?trk=gs_card. Повторити дії, створивши власне сховище,



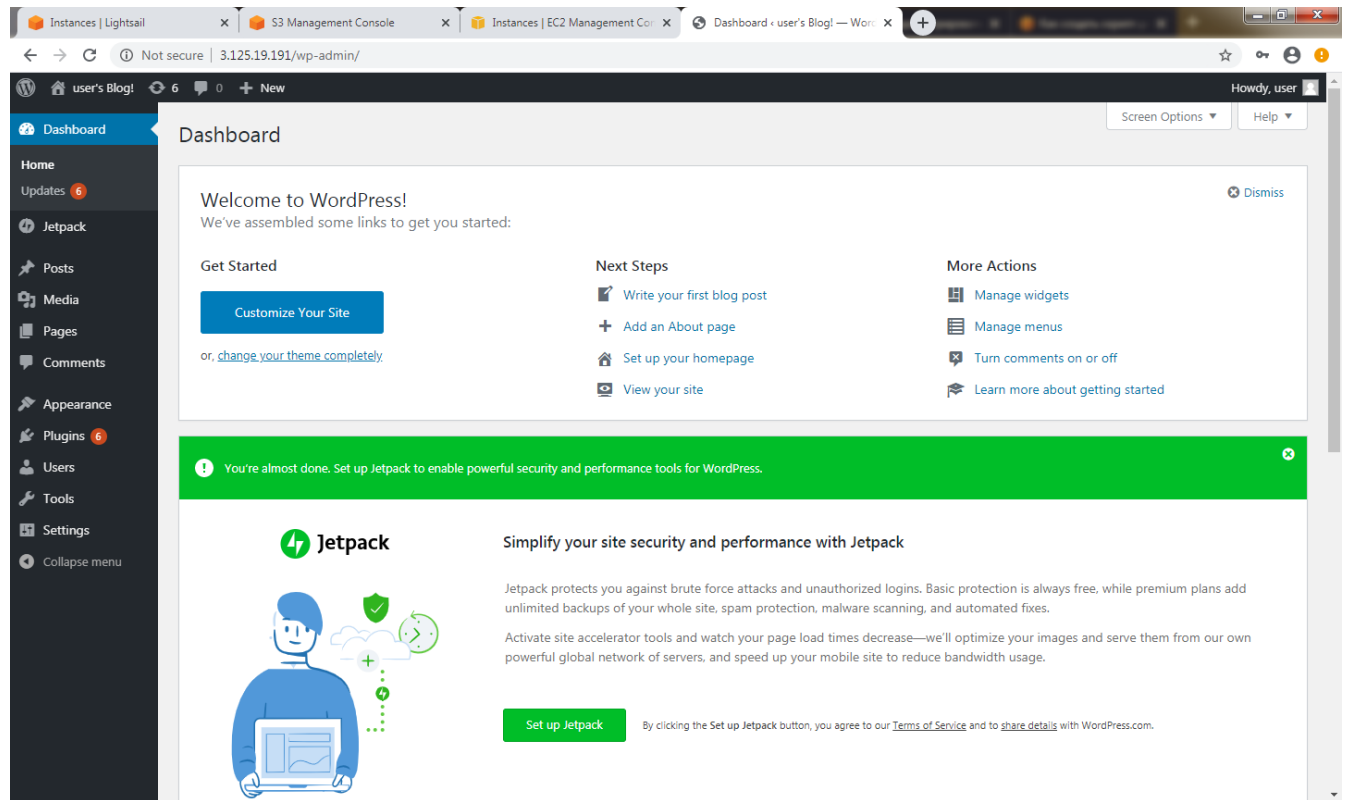
4. Перегляньте

10-хвилинний

приклад

<https://aws.amazon.com/ru/gettingstarted/tutorials/launch-a-wordpress-website/>.

Повторити дії, створити власний сайт.

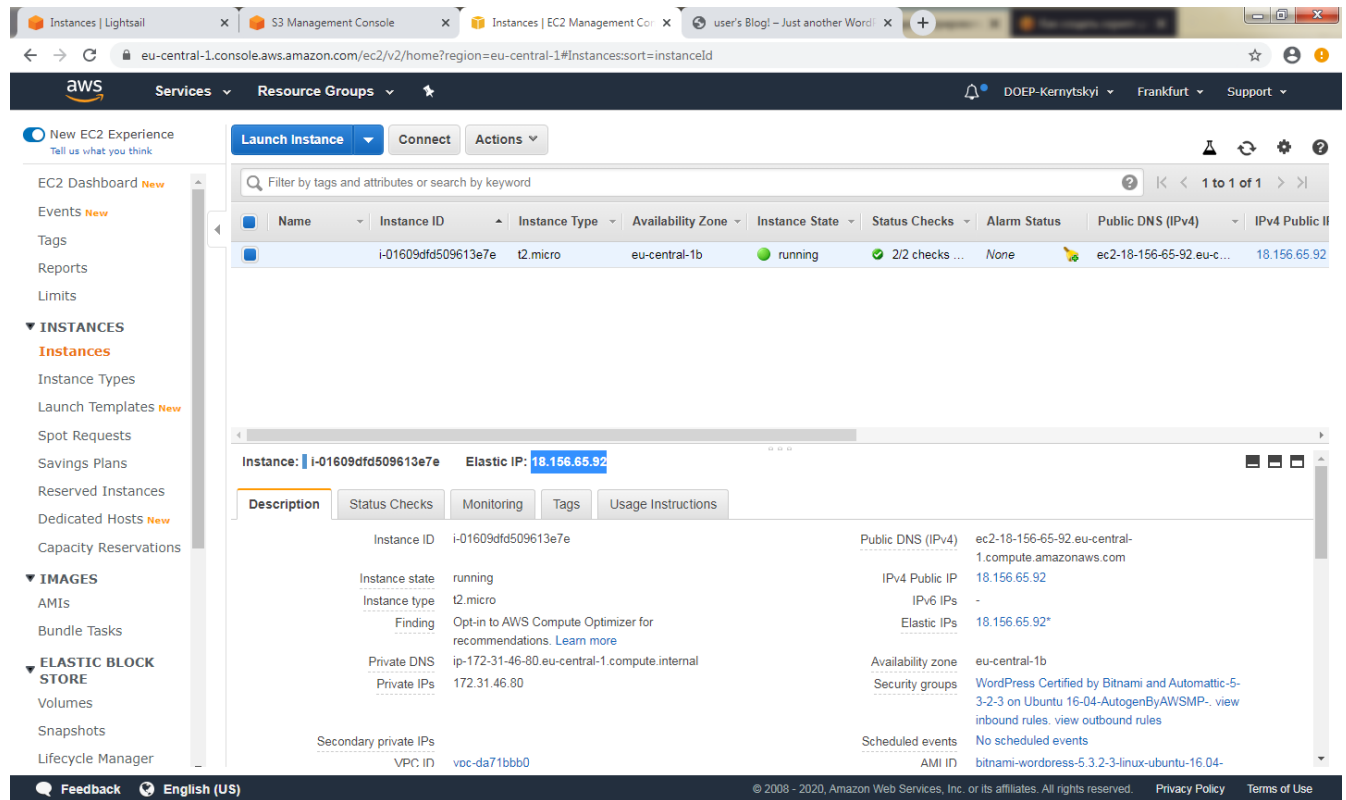


5. Перегляньте 10-хвилинний приклад

<https://aws.amazon.com/ru/gettingstarted/tutorials/get-a-domain/>.

Вивчити

можливості створення власного домену та доменного імені для свого сайту.

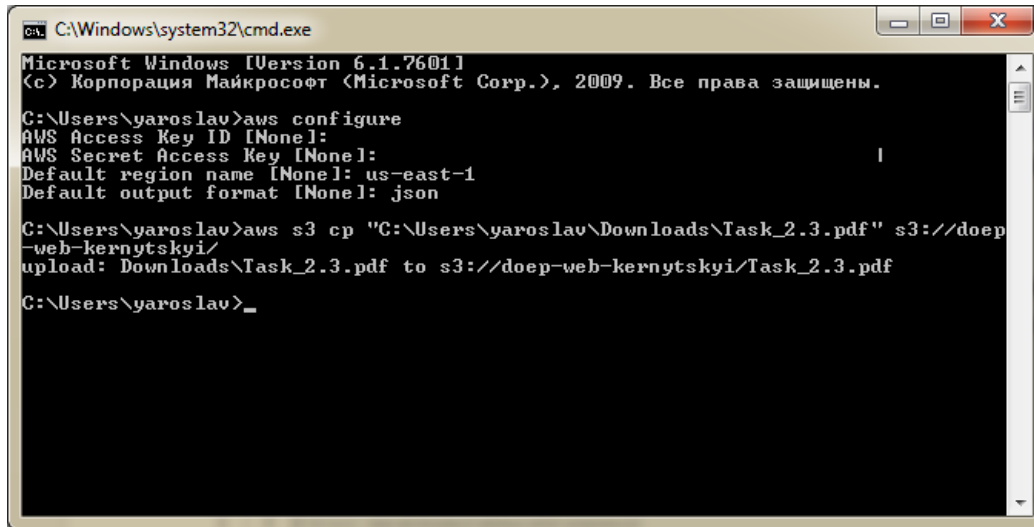


Since getting a domain name in AWS is payable, I have learned how I can do according to instruction(find an available domain name – buy it – provide your contact information that will be assigned to this domain name – confirm through a confirmation email)

Then, I have learned, how I can make a DNS note to assign my domain name to a static IPv4 allocated and associated with my instance above.

6. Перегляньте 10-хвилинний приклад

<https://aws.amazon.com/ru/gettingstarted/tutorials/backup-to-s3-cli/>. Створити користувача AWS IAM, налаштувати CLI AWS та завантажити будь-які файли в S3.



```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
(c) Корпорация Майкрософт (Microsoft Corp.), 2009. Все права защищены.

C:\Users\yaroslav>aws configure
AWS Access Key ID [None]:
AWS Secret Access Key [None]:
Default region name [None]: us-east-1
Default output format [None]: json

C:\Users\yaroslav>aws s3 cp "C:\Users\yaroslav\Downloads\Task_2.3.pdf" s3://doep-
web-kernytskyi/
upload: Downloads\Task_2.3.pdf to s3://doep-web-kernytskyi/Task_2.3.pdf

C:\Users\yaroslav>
```

7. Створити статичний сайт в S3, доступний публічно. Розмістити на сторінці власне фото, назву тренінга та перелік сервісів AWS з якими працював студент в межах тренінгу чи раніше.

<http://doep-web-kernytskyi.s3-website.eu-central-1.amazonaws.com/>

Module 2 Virtualization and Cloud Basic



Amazon services I had a practice with during this training

Lightsail

S3

EC2