

МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ
НАЦІОНАЛЬНИЙ ТЕХНІЧНИЙ УНІВЕРСИТЕТ
«ДНІПРОВСЬКА ПОЛІТЕХНІКА»



Факультет інформаційних технологій
Кафедра системного аналізу та управління

Звіт
з практичних робіт з дисципліни
«Аналіз програмного забезпечення»

Виконав:

Студент групи 122-22-6

Попов І.А.

Перевірили:

доц. Мінєєв О.С.

ас. Шевченко Ю.О.

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Тема: AWS S3.

Мета: Набування навичок у створення і розміщенні статичної веб-сторінки на AWS S3.

Очікувані результати навчання: уміння створити і розмістити сторінку з власними даними на ресурсі AWS S3.

Хід роботи

Крок 1. Зареєструватися в системі AWS.

Я вже маю AWS акаунт, тому цей крок я винущений пропустити. Для виконання використовую один з моїх IAM юзерів.

The screenshot shows the 'Account Info' section of the AWS Management Console. It includes three main sections: 'Account details', 'Account display settings - new', and 'Contact information'. In 'Account details', fields include Name (escoutdoor), ID (082964050975), Service provider (Amazon Web Services EMEA SARL), and ARN (arn:aws:account::082964050975:account). In 'Account display settings', there is an 'Account color' field set to 'Unset'. In 'Contact information', fields include Full name (Попов Іван Анатолійович), Company name (None), and Address (Dnipro Raї).

Рис. №1. Billing and Cost Management: деталі акаунту.

Крок 2. Створити бакет у S3 з вашим прізвищем та іменем.

Створюю S3 бакет: вказав своє ім'я та прізвище у назві, зняв блок публічного доступу.

General configuration

AWS Region

Europe (Stockholm) eu-north-1

Bucket type | [Info](#)

General purpose

Recommended for most use cases and access patterns. General purpose buckets are the original S3 bucket type. They allow a mix of storage classes that redundantly store objects across multiple Availability Zones.

Directory

Recommended for low-latency use cases, processing of data within a single Availability Zone.

Bucket name | [Info](#)

ivan-popov-bucket-apz

Bucket names must be 3 to 63 characters and unique within the global namespace. Bucket names must also begin and end with a letter or number. Valid characters are a-z, 0-9, periods (.), and hyphens (-).

Copy settings from existing bucket - optional

Only the bucket settings in the following configuration are copied.

[Choose bucket](#)

Format: s3://bucket/prefix

Block Public Access settings for this bucket

Public access is granted to buckets and objects through access control lists (ACLs), bucket policies, access point policies, or all. These settings apply only to this bucket and its access points. AWS recommends that you turn on Block all public access, but before doing so, if you want to limit the level of public access to this bucket or objects within, you can customize the individual settings below to suit your specific storage needs.

Block all public access

Turning this setting on is the same as turning on all four settings below. Each of the following settings are independent of one another.

Block public access to buckets and objects granted through new access control lists (ACLs)

S3 will block public access permissions applied to newly added buckets or objects, and prevent the creation of new public access ACLs for them.

Block public access to buckets and objects granted through any access control lists (ACLs)

S3 will ignore all ACLs that grant public access to buckets and objects.

Block public access to buckets and objects granted through new public bucket or access point policies

S3 will block new bucket and access point policies that grant public access to buckets and objects. This setting doesn't change any existing policies.

Block public and cross-account access to buckets and objects through any public bucket or access point policies

S3 will ignore public and cross-account access for buckets or access points with policies that grant public access to buckets and objects.



Turning off block all public access might result in this bucket and the objects within becoming public

AWS recommends that you turn on block all public access, unless public access is required for specific and verified use cases.

I acknowledge that the current settings might result in this bucket and the objects within becoming public.

Рис. №2-3. Кроки при створенні S3 бакету.

Створений S3 бакет:

ivan-popov-bucket-apz [Info](#)

Objects | [Properties](#) | Permissions | Metrics | Management | Access Points

Bucket overview

AWS Region
Europe (Stockholm) eu-north-1

Amazon Resource Name (ARN)
 arn:aws:s3:::ivan-popov-bucket-apz

Creation date
November 16, 2025, 18:57:27 (UTC+02:00)

Bucket Versioning

Versioning is a means of keeping multiple variants of an object in the same bucket. You can use versioning to preserve, retrieve, and restore every version of every object stored in your Amazon S3 bucket. With versioning, you can track both unintended user actions and application failures. [Learn more](#)

Bucket Versioning
Enabled

Multi-factor authentication (MFA) delete

An additional layer of security that requires multi-factor authentication for changing Bucket Versioning settings and permanently deleting object versions. To modify MFA delete settings, use the AWS CLI, AWS SDK, or the Amazon S3 REST API. [Learn more](#)

Disabled

Рис. №4. Успішно створений бакет

Крок 3. Розмістити на S3 статичну веб-сторінку, яка містить ваше ПІБ та Вашу академічну групу.

Створюю index.html файл з коротеньким текстом та картинкою:

```
<html>
  <head>
    <title>Lab 4 APZ</title>
  </head>
  <body>
    <h1>I love pets</h1>
    <p>Hi from Ivan Popov!</p>
  </body>

  
</html>
```

Рис. №5. Редагування файлу index.html

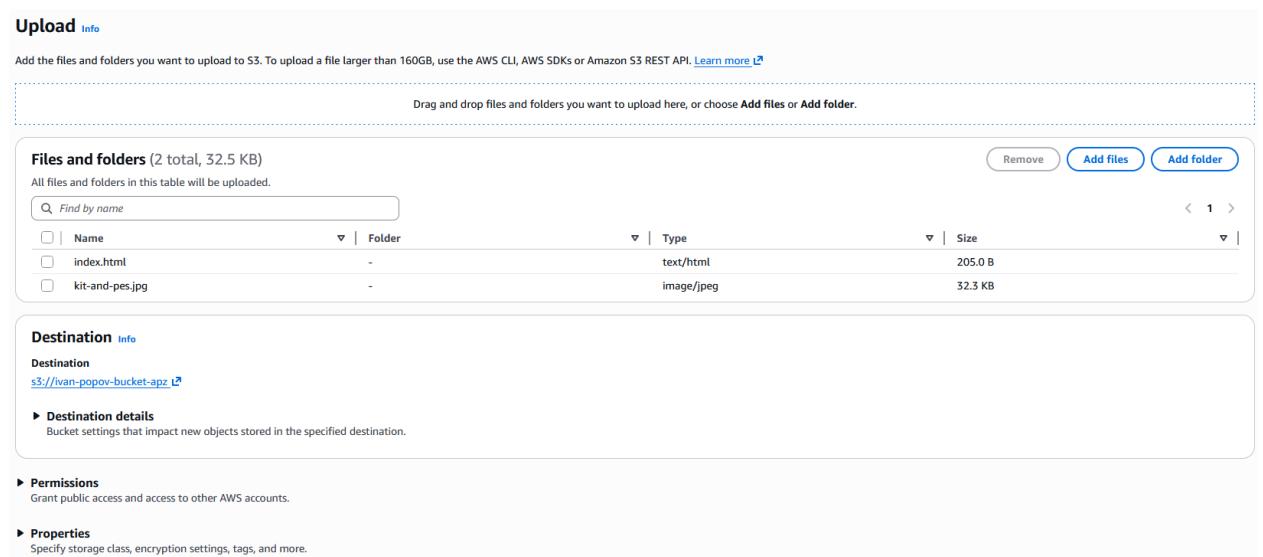


Рис. №6. Завантажуємо картинку та index.html

Налаштуємо S3 Bucket Policy для того, щоб інші користувачі мали доступ до нашого ресурсу. Я скористався AWS Policy Generator і надав право на GetObject для всіх:

Step 2: Add statement(s)

A statement is the formal description of a single permission. See [a description of elements](#) that you can use in statements.

Effect
 Allow
 Deny

Principal

Use a comma to separate multiple values.

Actions
 All Actions ("*")
 [Select Actions...](#)

Amazon Resource Name (ARN)
 All Resources ("*")
 ARN should follow the following format: arn:aws:s3:::
[Add conditions \(optional\)](#)

[Add Statement](#)

Policy JSON Document

Click below to edit. To save the policy, copy the text below to a text editor. Changes made below will not be reflected in the policy generator tool.

```

1 * []
2 "Version": "2012-10-17",
3 "Statement": [
4 {
5   "Sid": "Statement1",
6   "Effect": "Allow",
7   "Principal": "*",
8   "Action": [
9     "s3:GetObject"
10   ],
11   "Resource": "arn:aws:s3:::ivan-popov-bucket-apz/*"
12 }
13 ]
14 []

```

1:1 JSON

This AWS Policy Generator is provided for informational purposes only, you are still responsible for your use of Amazon Web Services technologies and ensuring that your use is in compliance with all applicable terms and conditions. This AWS Policy Generator is provided as is without warranty of any kind, whether express, implied, or statutory. This AWS Policy Generator does not modify the applicable terms and conditions governing your use of Amazon Web Services technologies.

Statements added (1)
You added the following statements. Click the [Edit](#) link to view or edit the statement.

Principal(s)	Effect	Action	Resource	Condition
*	Allow	s3:GetObject	arn:aws:s3:::ivan-popov-bucket-apz/*	None

[Close](#) [Copy Policy](#)

Step 3: Generate policy

Bucket policy

The bucket policy, written in JSON, provides access to the objects stored in the bucket. Bucket policies don't apply to objects owned by other accounts. [Learn more](#)

Bucket ARN

arn:aws:s3:::ivan-popov-bucket-apz

Policy

```

1 * []
2 "Version": "2012-10-17",
3 "Statement": [
4 {
5   "Sid": "Statement1",
6   "Effect": "Allow",
7   "Principal": "*",
8   "Action": [
9     "s3:GetObject"
10   ],
11   "Resource": "arn:aws:s3:::ivan-popov-bucket-apz/*"
12 }
13 ]
14 []

```

Рис. №7-8. Налаштування S3 Bucket Policy.

Тепер всі можуть отримати наші файли, але лише для читання.

Крок 4. Налаштування хостингу і отримання публічної адреси сторінки, наприклад: <https://kbaleiko-bucket-apz.s3-website.eu-north-1.amazonaws.com/>.

Тепер треба ввімкнути Static website hosting і вказати Index document, який вже завантажив раніше.

The screenshot shows the AWS S3 console interface for configuring a static website hosting bucket. At the top, there's a header with the bucket name and a 'Static website hosting' section. Below it, a note recommends using AWS Amplify Hosting for static website hosting. The 'S3 static website hosting' section is currently disabled. The main configuration area includes sections for 'Static website hosting' (with 'Enable' selected), 'Hosting type' (with 'Host a static website' selected), and 'Index document' (set to 'index.html'). A note at the bottom states that public access must be enabled for customer access to the website endpoint.

Static website hosting

Use this bucket to host a website or redirect requests. [Learn more ↗](#)

Static website hosting

We recommend using AWS Amplify Hosting for static website hosting Deploy a fast, secure, and reliable website quickly with AWS Amplify Hosting. [Learn more ↗](#)

S3 static website hosting

Disabled

Static website hosting

Use this bucket to host a website or redirect requests. [Learn more ↗](#)

Static website hosting

Disable
 Enable

Hosting type

Host a static website
Use the bucket endpoint as the web address. [Learn more ↗](#)

Redirect requests for an object
Redirect requests to another bucket or domain. [Learn more ↗](#)

For your customers to access content at the website endpoint, you must make your bucket publicly accessible.

Index document

Specify the home or default page of the website.

index.html

Рис. №9-10. Налаштування Static website hosting.

В результаті успішного ввімкнення отримали bucket website endpoint:

Static website hosting

Use this bucket to host a website or redirect requests. [Learn more ↗](#)

We recommend using AWS Amplify Hosting for static website hosting
Deploy a fast, secure, and reliable website quickly with AWS Amplify Hosting. [Learn more ↗](#)

S3 static website hosting
Enabled

Hosting type
Bucket hosting

Bucket website endpoint
When you configure your bucket as a static website, the website is available at the AWS Region-specific website endpoint.
<http://ivan-popov-bucket-apz.s3-website.eu-north-1.amazonaws.com> ↗

Рис. №11. Успішна операція, отримали лінк.

Перевіряю:

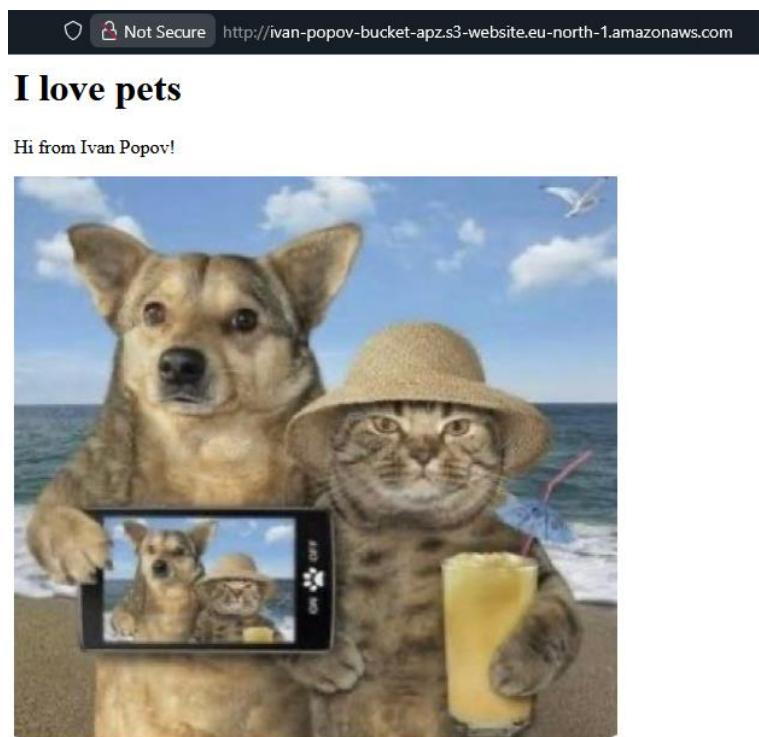


Рис. №12. Отримали наш сайт з повідомленням.

Отримуємо очікуваний результат, все працює відмінно.