Final Project
Online Resume on AWS

Course: CNE430 Cloud Architecture

Quarter: Fall 2024

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I. Project Overview

In this project, CAN IT Consulting builds and hosts an interactive resume for XYZ Company on a secure web server using a range of AWS services. Specifically, it will utilize S3, Route 53, CloudFront, and AWS Certificate Manager to provide scalability, security, and reliability.

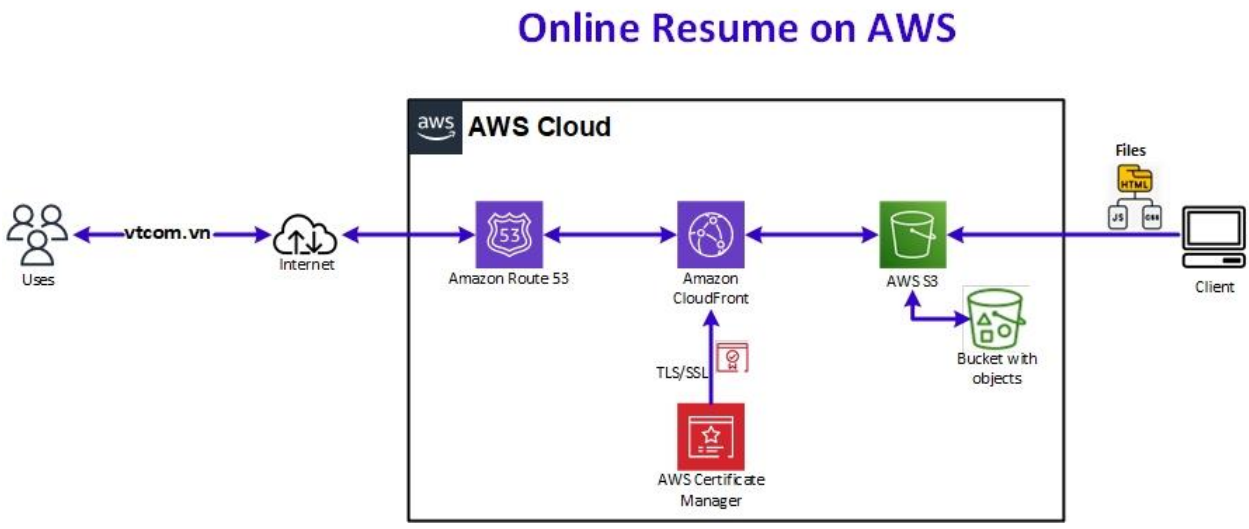


Figure 1. Online Resume on AWS Architecture.

II. Project Scope of Work

Scope of Work:

- Creating a branch of the main repository on GitHub, including granting the write privileges to CNA IT Consulting, debugging code, and conducting QA on Pull Request from GitHub.
- Create project management on Jira and conduct scrum meetings twice weekly on Monday and Thursday.
- Building budget for all AWS resources for this project.
- Build a static Online Resume Website on S3. This website has 4 pages:
    - Main page: introduction.
    - Page 1: John Doe's Resume.
    - Page 2: Alex Johnson's Resume.
    - Page 3: Ryan Miller's Resume.
- Configure Route53 as a DNS Service for Domain Name: "vtcom.vn".
- Create TLS/SSL Certificate using AWS Certificate Manager.
- Distribute the website by using CloudFront Distribution.
- CNA IT Consulting Push final commit to conclude the project.

III. How to Build a Static Online Resume Website on S3

1. Prerequisites

AWS Account: Ensure you have an active AWS account.

Domain Name: Acquire a domain name (you can register one on AWS Route 53 or use an external provider).

Website Files: Prepare your static HTML, CSS, and JavaScript files for the resume website.

2. Default Resume Home Page

a. HTML File (index.html)

This HTML file outlines the structure of the "Online Resume Hub" page. It includes a header welcoming users, an introduction section explaining the project, and a technical overview describing how it uses AWS services like S3, Route 53, CloudFront, and ACM. The file also contains a navigation section with links to individual resumes for John, Alex, and Ryan.

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Online Resume Hub</title>
    <link rel="stylesheet" href="styles.css">
</head>
<body>
    <header>
        <h1>Welcome to the Online Resume Hub</h1>
    </header>

    <section id="introduction">
        <h2>About This Project</h2>
        <p>This hub showcases professional resumes for talented individuals.
Click on a name below to view their resume and learn more about their skills
and experience.</p>

        <h2>Technical Overview</h2>
        <p>This project leverages Amazon Web Services (AWS) to host the
online resume hub with a focus on scalability, security, and reliability. The
setup utilizes:</p>
        <ul class="no-bullets">
            <li><strong>Amazon S3</strong> for static website hosting</li>
            <li><strong>Route 53</strong> for DNS management</li>
            <li><strong>CloudFront</strong> for content delivery and
caching</li>
            <li><strong>AWS Certificate Manager (ACM)</strong> for SSL/TLS
encryption</li>
        </ul>
        <p>This combination ensures resumes are securely accessible and
optimized for fast loading across the globe, demonstrating best practices for
hosting static websites on AWS.</p>
    </section>
```

```
    <nav>
        <ul>
            <li><a href="/john/john_doe.html" target="_blank">John
Doe</a></li>
            <li><a href="/alex/alex_johnson.html" target="_blank">Alex
Johnson</a></li>
            <li><a href="/ryan/ryan_miller.html" target="_blank">Ryan
Miller</a></li>
        </ul>
    </nav>

    <script src="script.js"></script>
</body>
</html>
```

b. JavaScript File (script.js)

This JavaScript file triggers a welcome alert when the page is loaded, greeting visitors and prompting them to click on a name to view the respective resume.

```
1    // Display a welcome alert when the page loads
2    document.addEventListener("DOMContentLoaded", function() {
3        alert("Welcome to the Online Resume Hub! Click on a name to view their resume.");
4    });
```

c. CSS File (styles.css):

This file styles the website with a clean design, using a gradient background and flexible layouts. It also customizes the navigation links with hover effects and adds spacing between sections for better readability.

```
/* Reset default styling */
* {
    margin: 0;
    padding: 0;
    box-sizing: border-box;
}

body {
    font-family: Arial, sans-serif;
    background: linear-gradient(135deg, #e2e8f0, #f4f4f9);
    color: #333;
    display: flex;
    flex-direction: column;
    align-items: center;
    padding: 20px;
}

header {
```

```
    text-align: center;
    margin-bottom: 20px;
}

header h1 {
    font-size: 2.5em;
    color: #3b82f6;
}

/* Section spacing */
section {
    margin-bottom: 30px;  /* Adds space between sections */
}

/* Paragraph spacing */
p {
    margin-bottom: 15px;  /* Adds space between paragraphs */
}

#introduction {
    text-align: center;
    font-size: 1.1em;
    color: #475569;
}

/* Remove bullets from specific lists */
.no-bullets {
    list-style-type: none;
    padding: 0;
}

nav ul {
    list-style-type: none;
    display: flex;
    gap: 20px;
}

nav a {
    display: block;
    padding: 10px 20px;
    font-size: 1.5em;
    color: #3b82f6;
    background-color: #ffffff;
    border-radius: 8px;
    text-decoration: none;
    transition: transform 0.2s ease, box-shadow 0.2s ease;
    box-shadow: 0 4px 6px rgba(0, 0, 0, 0.1);
}

nav a:hover {
    color: #2563eb;
    transform: translateY(-5px);
    box-shadow: 0 8px 12px rgba(0, 0, 0, 0.2);
}
```

3. Alex's Resume Page

a. HTML File (index.html)

Modify the structure and content of Alex's resume. Such as professional summary, technical skills, education, professional experiences, projects, and personal information like LinkedIn and GitHub links.

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Alex's Resume</title>
    <link rel="stylesheet" href="styles.css">
</head>
<body>
    <div class="container">
        <!-- Sidebar for Quick Navigation -->
        <aside class="sidebar">
            <header>
                <h1>Alex Johnson</h1>
                <p>Renton, WA</p>
                <p><a
href="mailto:alex.johnson@email.com">alex.johnson@email.com</a></p>
                <p><a href="https://linkedin.com/in/2323alex-johnson"
target="_blank">LinkedIn</a> | <a href="https://github.com/2323alexjohnson"
target="_blank">GitHub</a></p>
            </header>
            <nav>
                <ul>
                    <li><a href="#summary">Professional Summary</a></li>
                    <li><a href="#skills">Technical Skills</a></li>
                    <li><a href="#education">Education</a></li>
                    <li><a href="#experience">Experience</a></li>
                    <li><a href="#projects">Projects</a></li>
                </ul>
            </nav>
        </aside>

        <!-- Main Content Area -->
        <main class="content">
            <section id="summary" class="card">
                <h2>Professional Summary</h2>
                <p>Detail-oriented IT professional with a strong background
in cloud infrastructure, network engineering, and systems administration.
Proven expertise in implementing and managing AWS-based solutions and skilled
in both software and network troubleshooting. Currently pursuing a Bachelor
of Applied Science in Computer Network Engineering, demonstrating a
commitment to continuous learning and technical proficiency.</p>
            </section>

            <section id="skills" class="card">
                <h2>Technical Skills</h2>
                <ul>
                    <li><strong>Cloud Platforms:</strong> AWS (S3, EC2, Route
53, CloudFront, IAM)</li>
```

```
                    <li><strong>Networking:</strong> DNS, DHCP, TCP/IP,
Network Security, VPN</li>
                    <li><strong>Languages:</strong> Python, Bash, SQL</li>
                    <li><strong>Tools & Software:</strong> GitHub, Jira,
Linux, Docker</li>
                    <li><strong>Certifications:</strong> AWS Cloud
Practitioner, CompTIA Linux+</li>
                </ul>
            </section>

            <section id="education" class="card">
                <h2>Education</h2>
                <div>
                    <h3>Bachelor of Applied Science in Computer Network
Engineering</h3>
                    <p>Renton Technical College | Expected Graduation:
2025</p>
                </div>
                <div>
                    <h3>Associate of Applied Science - Transfer in Cloud
Network Technology</h3>
                    <p>Renton Technical College | 2022</p>
                </div>
            </section>

            <section id="experience" class="card">
                <h2>Professional Experience</h2>
                <div class="job">
                    <h3>Network Intern</h3>
                    <p>ABC Solutions, Kent, WA | Jan 2024 - Present</p>
                    <ul>
                        <li>Assisted in configuring and monitoring network
systems, troubleshooting connectivity issues to ensure optimal
performance.</li>
                        <li>Implemented AWS infrastructure solutions for
testing environments, including setting up EC2 instances and configuring S3
buckets.</li>
                        <li>Collaborated with team to develop documentation
and support materials for network configurations and AWS solutions.</li>
                    </ul>
                </div>
                <div class="job">
                    <h3>IT Support Technician</h3>
                    <p>XYZ Tech, Renton< WA | Jun 2022 - Dec 2023</p>
                    <ul>
                        <li>Provided technical support for a range of
software and hardware issues, ensuring a high level of customer
satisfaction.</li>
                        <li>Automated routine processes using Python scripts,
reducing time spent on manual tasks by 30%.</li>
                        <li>Configured routers, switches, and firewalls to
enhance network security and reliability.</li>
                    </ul>
                </div>
            </section>

            <section id="projects" class="card">
```

```
                <h2>Projects</h2>
                <div class="project">
                    <h3>Online Resume Website</h3>
                    <p>Developed a static resume website hosted on AWS S3,
configured with Route 53 for DNS, CloudFront for content delivery, and
secured using AWS Certificate Manager (ACM).</p>
                    <p>Created and managed a GitHub repository with all
configuration files and documentation, enabling easy deployment and
collaboration.</p>
                </div>
                <div class="project">
                    <h3>Network Automation with Python</h3>
                    <p>Designed Python scripts to automate network monitoring
and troubleshooting tasks, reducing the need for manual interventions and
improving response times.</p>
                </div>
            </section>
        </main>
    </div>

    <script src="script.js"></script>
</body>
</html>
```

b. JavaScript File (script.js)

Customize interactive features like expand/collapse for sections. Add new dynamic elements tailored to Alex's website.

```
// Wait for the DOM to load before adding event listeners
document.addEventListener("DOMContentLoaded", () => {
    // Select all sections to add expand/collapse functionality
    const sections = document.querySelectorAll("section");

    sections.forEach(section => {
        // Add a "clickable" cursor and event listener to each section
heading (h2)
        const header = section.querySelector("h2");
        header.style.cursor = "pointer";

        // Set up a click event listener to toggle visibility of section
content
        header.addEventListener("click", () => {
            // Toggle visibility of each child element (e.g., paragraphs,
lists) within the section
            const content = section.querySelectorAll("p, ul, div");
            content.forEach(element => {
                // Switch between displaying and hiding each content element
                element.style.display = element.style.display === "none" ?
"block" : "none";
            });

            // Optionally, toggle the arrow symbol on the header to indicate
open/close state
```

```
            if (header.textContent.endsWith("▼")) {
                header.textContent = header.textContent.replace("▼", "▲");
            } else {
                header.textContent += " ▼";
            }
        });

        // Initially collapse all sections except the first (optional)
        if (section !== sections[0]) {
            const content = section.querySelectorAll("p, ul, div");
            content.forEach(element => {
                element.style.display = "none";
            });
            header.textContent += " ▼"; // Add down arrow to collapsed
sections
        }
    });
});
```

c. CSS File (styles.css)

Adjust visual styles like colors, fonts, and layout spacing to enhance Alex's website design.

```
/* General Reset */
* {
    margin: 0;
    padding: 0;
    box-sizing: border-box;
}

body {
    font-family: Arial, sans-serif;
    background-color: #f4f4f9;
    color: #333;
    line-height: 1.6;
    padding: 20px;
}

header {
    text-align: center;
    margin-bottom: 20px;
}

header h1 {
    font-size: 2em;
    color: #444;
}

header p {
    margin-top: 10px;
    color: #555;
}

section {
```

```
    margin: 20px 0;
}

h2 {
    color: blue;
    border-bottom: 2px solid #e4e4e4;
    padding-bottom: 5px;
    margin-bottom: 10px;
}

.job h3, .project h3 {
    font-size: 1.2em;
    color: #333;
}

.job p, .project p {
    font-style: italic;
    color: #666;
    margin-top: 5px;
}

ul {
    margin: 10px 0 10px 20px;
}

ul li {
    margin-bottom: 5px;
}

a {
    color: #009688;
    text-decoration: none;
}

a:hover {
    text-decoration: underline;
}
```

4. John's Resume Page

a. HTML File (index.html)

Update John’s resume content, including contact details, education, skills, and work experience.

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>John Doe - Resume</title>
    <link rel="stylesheet" href="styles.css">
</head>
<body>
    <header>
        <h1>John Doe</h1>
        <p>Renton, WA | <a
```

```
href="mailto:johndoe@google.com">johndoe@google.com</a></p>
        <p><a href="https://linkedin.com/in/doe-john"
target="_blank">LinkedIn</a> | <a href="https://github.com/johndoe"
target="_blank">GitHub</a></p>
    </header>

    <section id="education">
        <h2>Education</h2>
        <p>Bachelor of Applied Science in Computer Network Engineering
(Expected Graduation Date: June 2025)</p>
        <p>GPA: 4.0</p>
        <p>Scholarships: College's Foundations Scholarship</p>
    </section>

    <section id="skills">
        <h2>Skills</h2>
        <ul>
            <li><strong>Development & Version Control:</strong> Jira, Agile,
Git, GitHub, Docker, GitHub Repositories</li>
          <li><strong>Cloud Computing & Platforms:</strong> AWS, Azure, GCP,
Lambda</li>
          <li><strong>Networking & Systems:</strong> VirtualBox, Packet
Tracer, Linux, Ubuntu, SSH, Cisco Networking Basics Badge</li>
          <li><strong>Databases:</strong> SQL Database
Analysis/Collection</li>
          <li><strong>Programming Languages & Automation:</strong> Python,
BASH, PHP, SQL, Powershell</li>
          <li><strong>Web Development:</strong> WordPress, Nginx, AI</li>
          <li><strong>Operating Systems:</strong> Windows, Linux, Android,
iOS</li>
          <li><strong>Security & SSL:</strong> SSL</li>
          <li><strong>PC Customization & Solutions:</strong> Deploying PCs
and networks in home/small office environments, network solutions, training,
sales</li>
          <li><strong>Other Tools:</strong> Genesys CLI, AS/400 CLI,
Markdown</li>
          <li><strong>Office Productivity:</strong> MS Office/Office 365</li>
        </ul>
    </section>

    <section id="experience">
       <h2>Experience</h2>

       <h3>Company Name #1, Owner</h3>
       <p>November 2019 - June 2023</p>
       <ul>
          <li>Assisted home and small office computer networks, reducing
customer costs by 25%</li>
          <li>Set up and maintained networks for LAN events (up to 12
computers), reducing setup time by 5%</li>
          <li>Provided clients with instruction/training manuals and
technical documentation, reducing training costs by 10%</li>
       </ul>

       <h3>Company Name #2, Vehicle Inspector</h3>
       <p>September 2017 - October 2019</p>
       <ul>
```

```
          <li>Conducted vehicle inspections and handled initial reports and
disputes, saving over $100,000 annually</li>
          <li>Leveraged CLI tools to insert and update 3,000+ rows in the
vehicle database, improving SQL data accuracy by 10%</li>
          <li>Provided critical data to the vehicle database used by the
state's largest auction, processing over 5M cars annually</li>
       </ul>

       <h3>Company Name #3, Inside Associate</h3>
       <p>October 2015 - October 2016</p>
       <ul>
          <li>Improved inventory location, organization, and accuracy by
10%</li>
          <li>Increased sales of wood-free products by 5% and provided
technical customer support</li>
       </ul>

       <h3>Company Name #4, Demonstrator</h3>
       <p>February 2015 - September 2015</p>
       <ul>
          <li>Won first place in company's national stick vacuum registered
warranty competition</li>
          <li>Increased company customer warranty registrations by 10% and
answered technical customer queries</li>
       </ul>

       <h3>Company Name #5, Associate</h3>
       <p>June 2013 - June 2014</p>
       <ul>
          <li>Improved inventory location, organization, and accuracy by
5%</li>
          <li>Received customer satisfaction and service awards while
enhancing customer appliance knowledge by 5%</li>
          <li>Boosted appliance warranty sales by 5% and answered technical
customer questions</li>
       </ul>

       <h3>Company Name #6, Owner</h3>
       <p>May 2010 - April 2013</p>
       <ul>
          <li>Hired and trained 2 staff members, funded training/technical
manuals, reducing costs by 5%</li>
          <li>Wrote NDAs, set budgets, raised funds, and organized meetings,
improving company efficiency by 5%</li>
          <li>Coordinated visual graphics personnel with programming teams to
improve cross-department communication by 5%</li>
       </ul>

       <h3>Company Name #7, Body Team Leader/Research Assistant</h3>
       <p>September 2007 - April 2010</p>
       <ul>
          <li>Trained and led 20 students in end-to-end carbon fiber
production, contributing to the successful completion of projects</li>
          <li>Raised $2,500 and recruited 4 new members to enhance program
awareness</li>
          <li>Created training manuals and technical documentation for 30
students, reducing training and part production time by 50%</li>
```

```
        </ul>

</section>

<br><br>

    <footer>
        <p>&copy; 2024 John Doe</p>
    </footer>

    <script src="scripts.js"></script>
</body>
</html>
```

b. JavaScript File (script.js)

The script provided controls the visibility of the "Education" section on your website. When the section is clicked.

```
// Example of a simple script to toggle visibility of a section
document.addEventListener('DOMContentLoaded', function() {
    const educationSection = document.getElementById('education');
    educationSection.addEventListener('click', function() {
        educationSection.style.display = educationSection.style.display ===
'none' ? 'block' : 'none';
    });
});
```

c. CSS File (styles.css)

The CSS file styles John's resume, handling layout, colors, fonts, and spacing to create a visually appealing presentation.

```
body {
    font-family: Arial, sans-serif;
    margin: 0;
    padding: 0;
    background-color: #f4f4f4;
}

header {
    background-color: #333;
    color: white;
    padding: 20px;
    text-align: center;
}

header h1 {
    margin: 0;
}
```

```
header p a {
    color: #66c2ff;
    text-decoration: none;
}

header p a:hover {
    text-decoration: underline;
}

section {
    padding: 20px;
    margin: 20px;
    background-color: white;
    border-radius: 8px;
    box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
}

h2 {
    color: #333;
}

ul {
    list-style-type: none;
    padding-left: 0;
}

ul li {
    margin-bottom: 8px;
}

footer {
    background-color: #333;
    color: white;
    text-align: center;
    padding: 10px;
    position: fixed;
    width: 100%;
    bottom: 0;
}
```

5. Ryan's Resume Page

a. HTML File (index.html)

Ryan's HTML file sets up the basic structure of his resume, with sections like About Me, Professional Experience, Skills, and Education. It links to an external CSS file for styling.

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Online Resume Hub</title>
    <link rel="stylesheet" href="styles.css">
```

```
</head>
<body>
    <header>
        <h1>Welcome to the Online Resume Hub</h1>
    </header>

    <section id="introduction">
        <h2>About This Project</h2>
        <p>This hub showcases professional resumes for talented individuals.
Click on a name below to view their resume and learn more about their skills
and experience.</p>

        <h2>Technical Overview</h2>
        <p>This project leverages Amazon Web Services (AWS) to host the
online resume hub with a focus on scalability, security, and reliability. The
setup utilizes:</p>
        <ul class="no-bullets">
            <li><strong>Amazon S3</strong> for static website hosting</li>
            <li><strong>Route 53</strong> for DNS management</li>
            <li><strong>CloudFront</strong> for content delivery and
caching</li>
            <li><strong>AWS Certificate Manager (ACM)</strong> for SSL/TLS
encryption</li>
        </ul>
        <p>This combination ensures resumes are securely accessible and
optimized for fast loading across the globe, demonstrating best practices for
hosting static websites on AWS.</p>
    </section>

    <nav>
        <ul>
            <li><a href="/john/john_doe.html" target="_blank">John
Doe</a></li>
            <li><a href="/alex/alex_johnson.html" target="_blank">Alex
Johnson</a></li>
            <li><a href="/ryan/ryan_miller.html" target="_blank">Ryan
Miller</a></li>
        </ul>
    </nav>

    <script src="script.js"></script>
</body>
</html>
```

b. JavaScript File (script.js)

This JavaScript file adds an alert when the page loads, welcoming visitors to the resume hub. It serves as a simple interactive element for the user.

```
// Display a welcome alert when the page loads
document.addEventListener("DOMContentLoaded", function() {
    alert("Welcome to the Online Resume Hub! Click on a name to view their
resume.");
});
```

c. CSS File (styles.css)

The CSS file styles Ryan's resume, giving it a clean, modern look with easy-to-read sections and a professional color scheme.

```
/* Reset default styling */
* {
    margin: 0;
    padding: 0;
    box-sizing: border-box;
}

body {
    font-family: Arial, sans-serif;
    background: linear-gradient(135deg, #e2e8f0, #f4f4f9);
    color: #333;
    display: flex;
    flex-direction: column;
    align-items: center;
    padding: 20px;
}

header {
    text-align: center;
    margin-bottom: 20px;
}

header h1 {
    font-size: 2.5em;
    color: #3b82f6;
}

/* Section spacing */
section {
    margin-bottom: 30px;  /* Adds space between sections */
}

/* Paragraph spacing */
p {
    margin-bottom: 15px;  /* Adds space between paragraphs */
}

#introduction {
    text-align: center;
    font-size: 1.1em;
    color: #475569;
}

/* Remove bullets from specific lists */
.no-bullets {
    list-style-type: none;
    padding: 0;
```

```
}

nav ul {
    list-style-type: none;
    display: flex;
    gap: 20px;
}

nav a {
    display: block;
    padding: 10px 20px;
    font-size: 1.5em;
    color: #3b82f6;
    background-color: #ffffff;
    border-radius: 8px;
    text-decoration: none;
    transition: transform 0.2s ease, box-shadow 0.2s ease;
    box-shadow: 0 4px 6px rgba(0, 0, 0, 0.1);
}

nav a:hover {
    color: #2563eb;
    transform: translateY(-5px);
    box-shadow: 0 8px 12px rgba(0, 0, 0, 0.2);
}
```

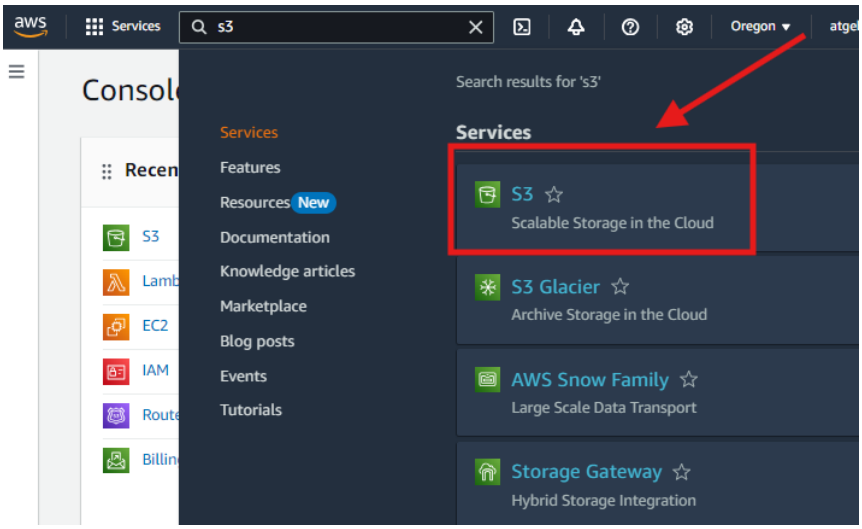
6. Create a S3-hosted website

a. Step 1: Create an S3 Bucket

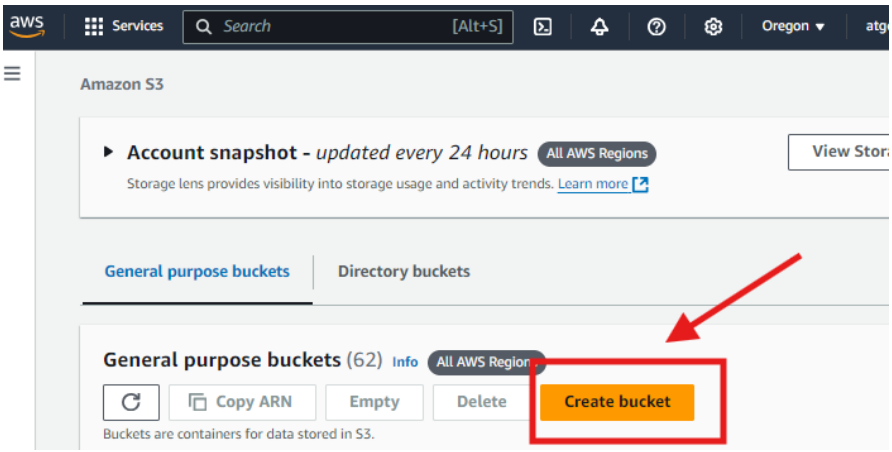
Go to AWS Console, and login.

Create an S3 Bucket

Navigate to S3 in the AWS Management Console.



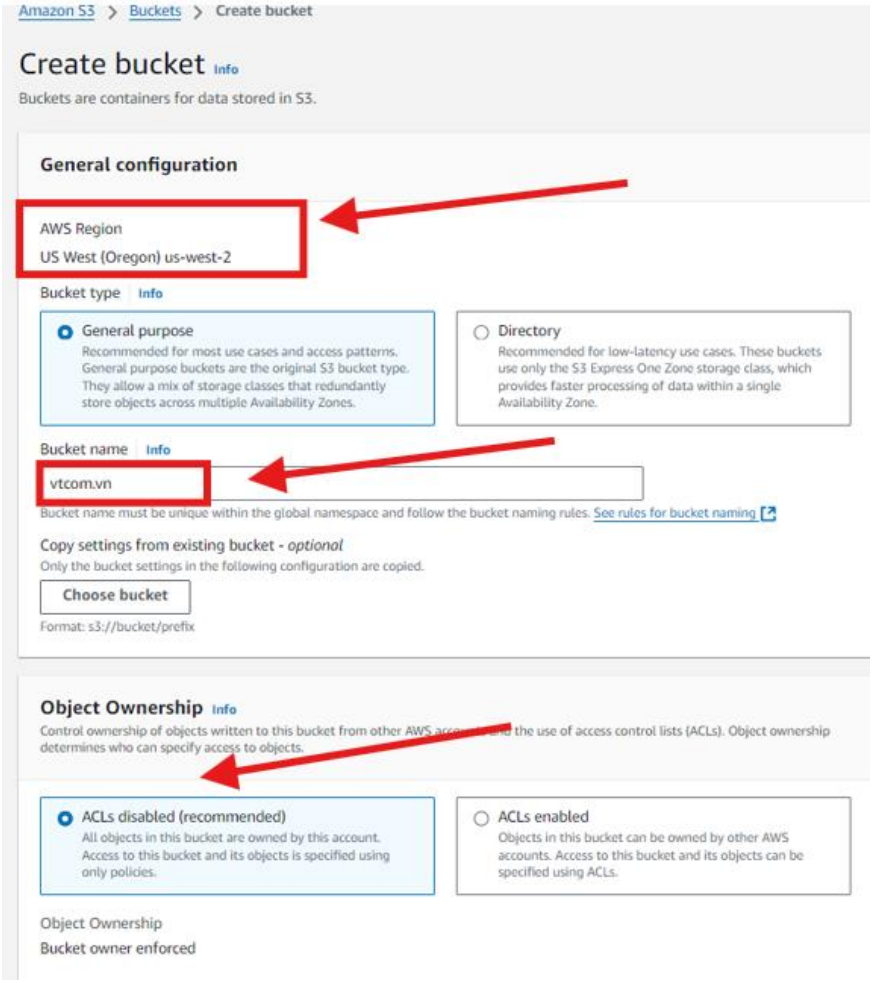
Click Create Bucket



Choose your AWS Region. It's best to choose the one closest to you.

Enter your Bucket name. (Tip: If you plan to use a custom domain, match the bucket name with your domain name, e.g., cne.com.)

Set Object Ownership to ACLs disabled (recommended).

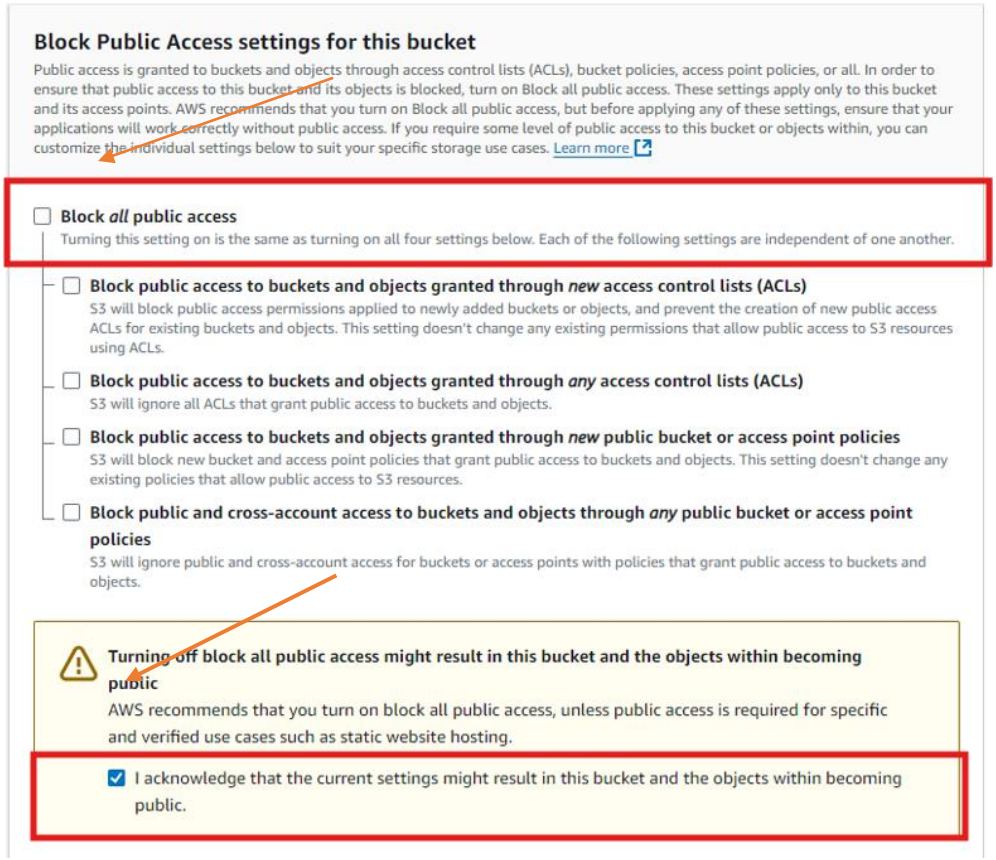


Allow Public Access

Scroll down to Block Public Access settings for this bucket.

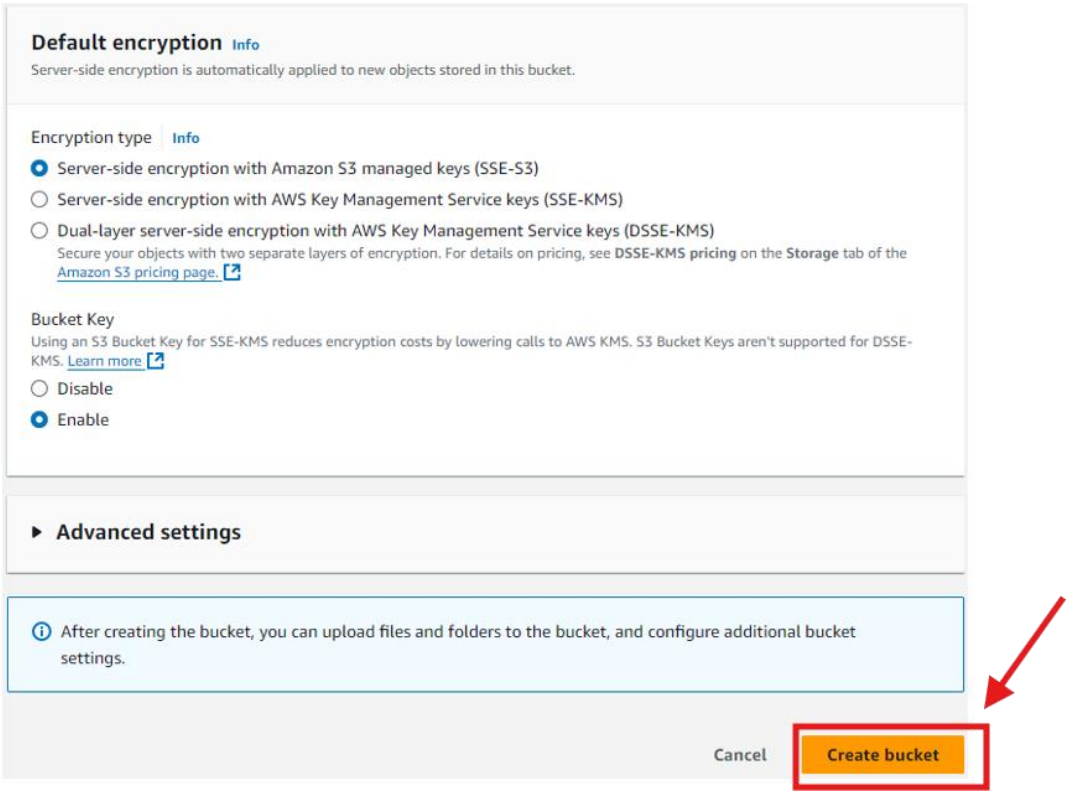
Deselect Block all public access (required for a public resume).

Confirm by selecting the acknowledgment checkbox for public access.



Create Bucket

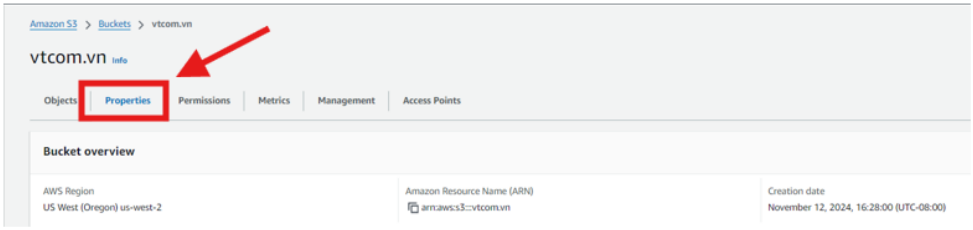
Use default settings for the rest of the configuration, then click Create bucket.



b. Step 2: Enable Static Website Hosting on S3

Open Bucket Properties

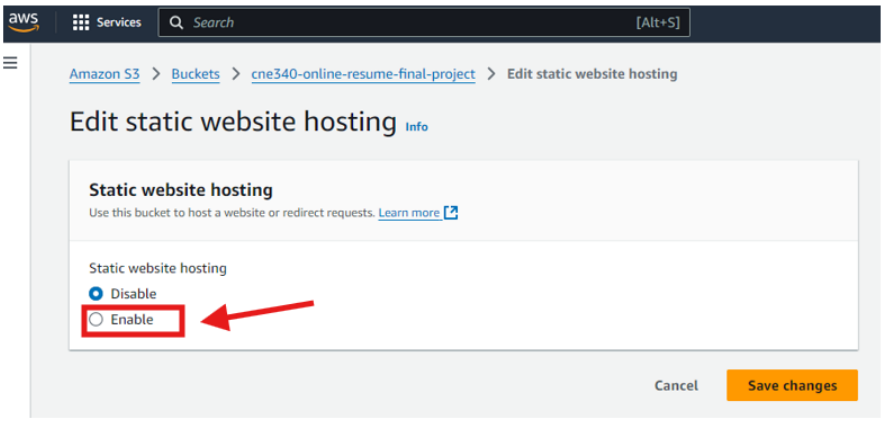
Click into the bucket you just created, and navigate to the Properties tab.



Enable Static Website Hosting

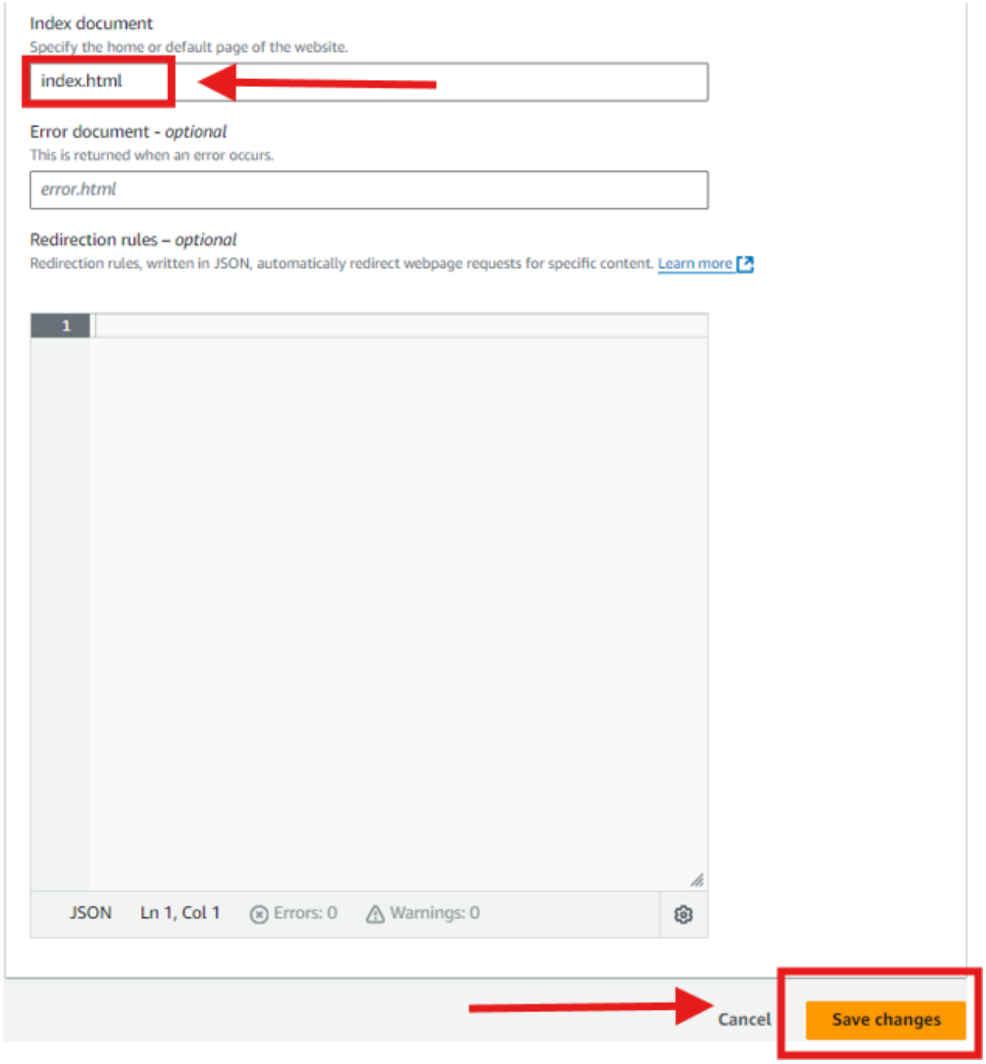
Scroll down to the Static website hosting section and click Edit.

Select Enable to allow static website hosting.



In the Index document field, type index.html (this serves as the default homepage for your website).

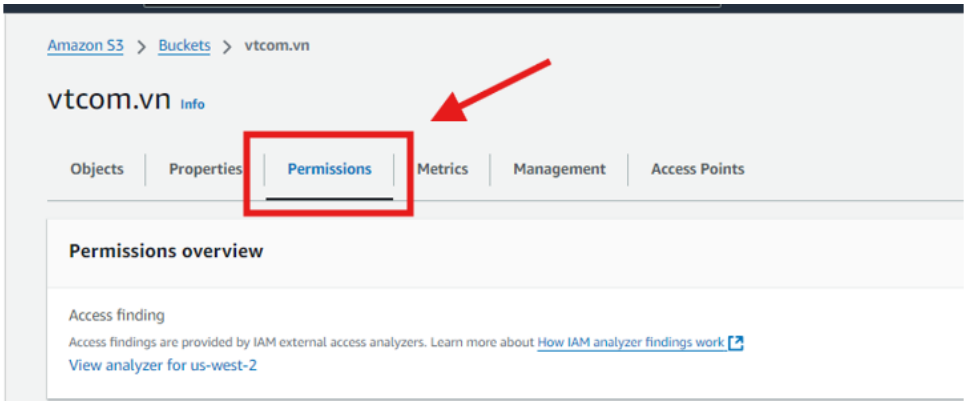
Click Save changes.



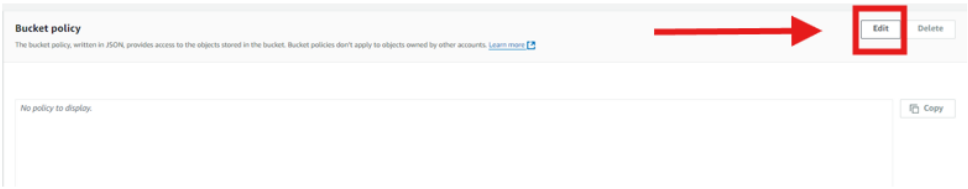
c. Step 3: Configure Bucket Policy for Public Access

Open Bucket Permissions

Go to the Permissions tab in the S3 bucket.

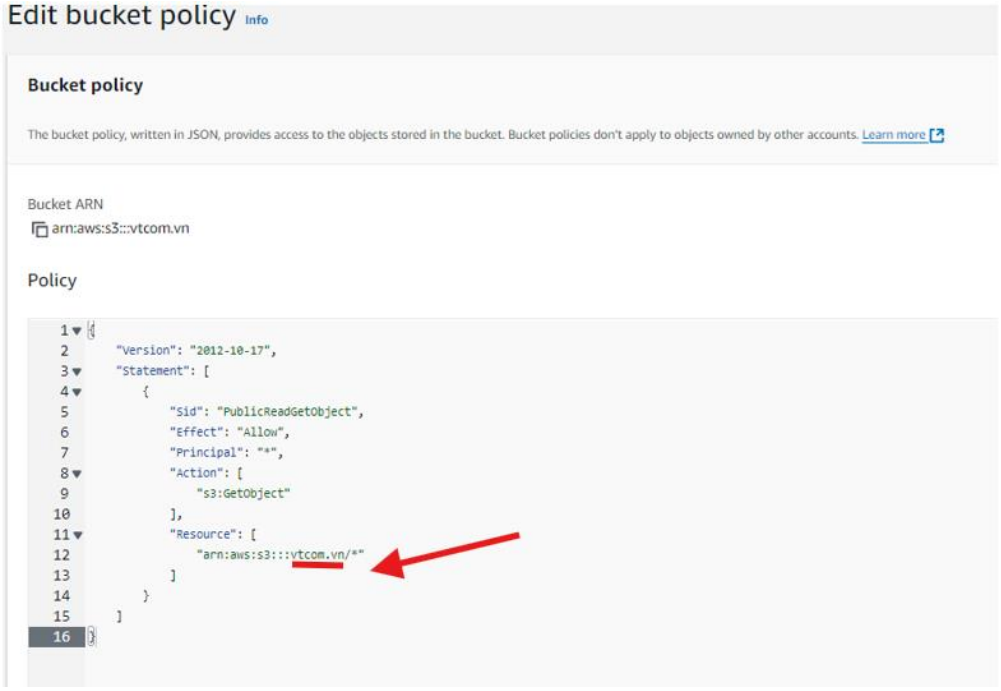


Scroll to Bucket policy and click Edit.



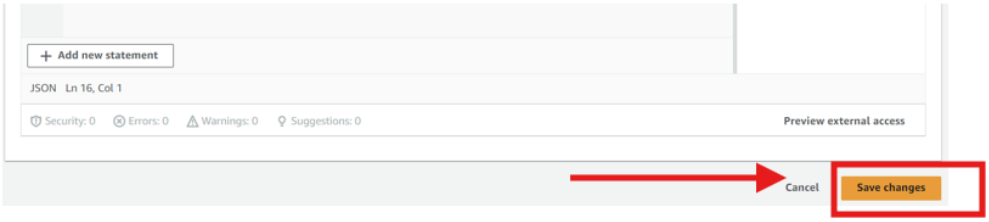
Copy the following policy code and paste it into the policy editor:

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Sid": "PublicReadGetObject",
            "Effect": "Allow",
            "Principal": "*",
            "Action": [
                "s3:GetObject"
            ],
            "Resource": [
                "arn:aws:s3:::your-bucket-name/*"
            ]
        }
    ]
}
```



Replace "your-bucket-name" with your actual bucket name.

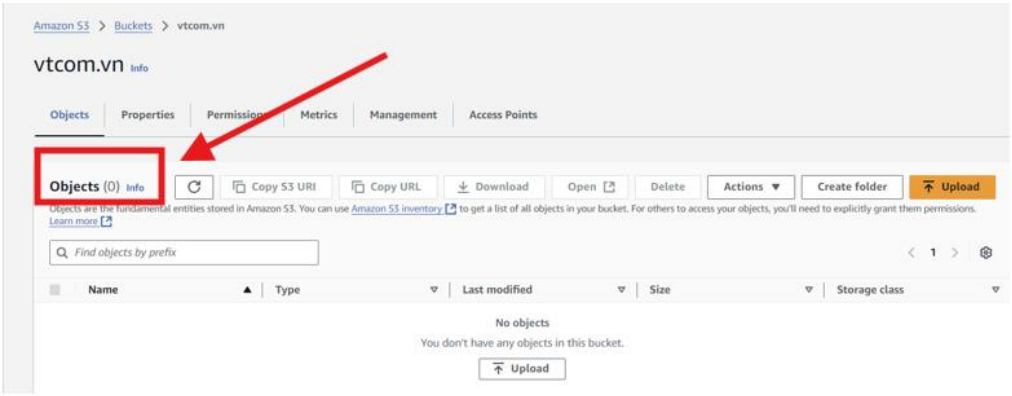
Click Save changes to apply the policy.



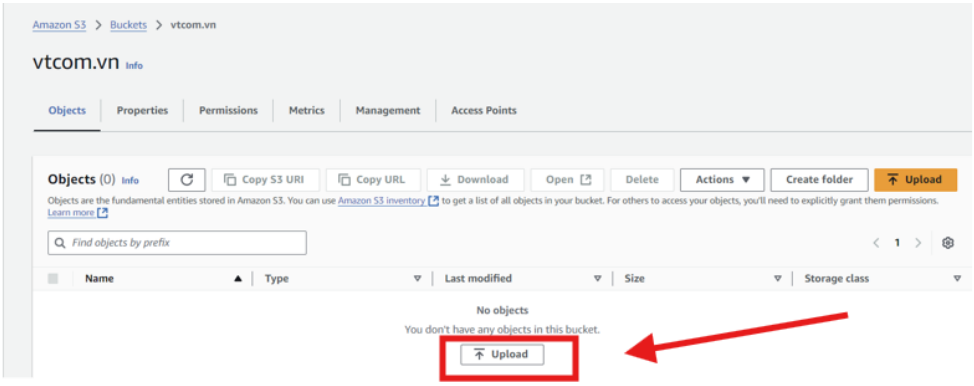
d. Step 4: Upload Your Resume Files to S3

Go to Objects

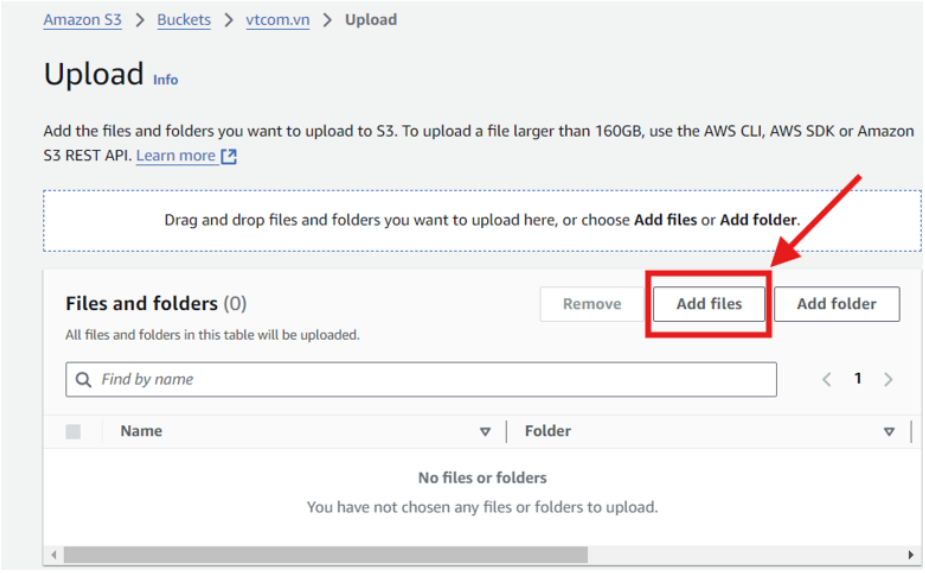
Click the Objects tab in your bucket.



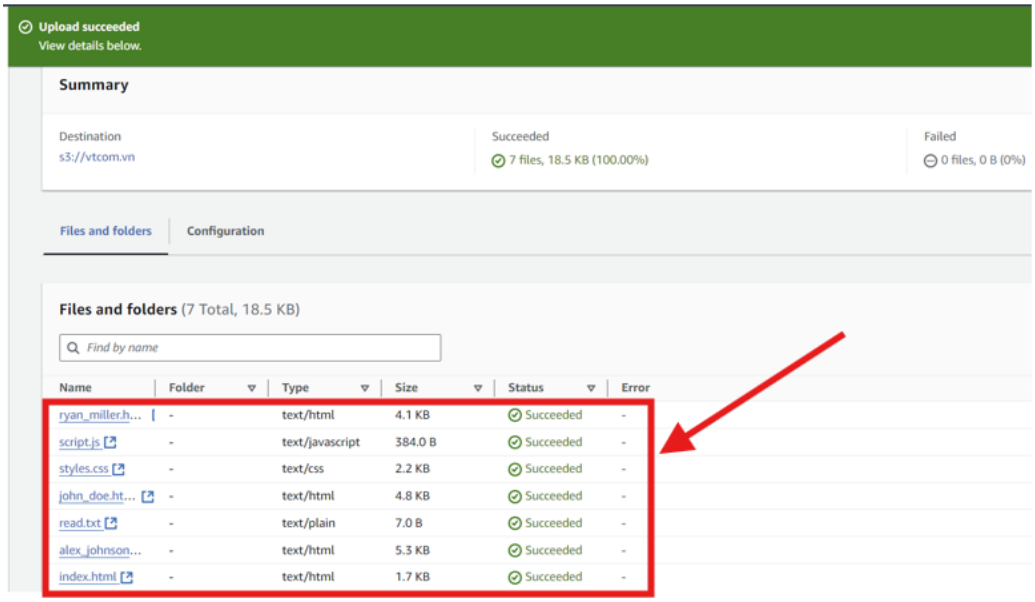
Click Upload and drag-and-drop all your website files (e.g., index.html, styles.css, script.js, and headshot.jpg) into the upload area.



Click Upload to add the files to your bucket.



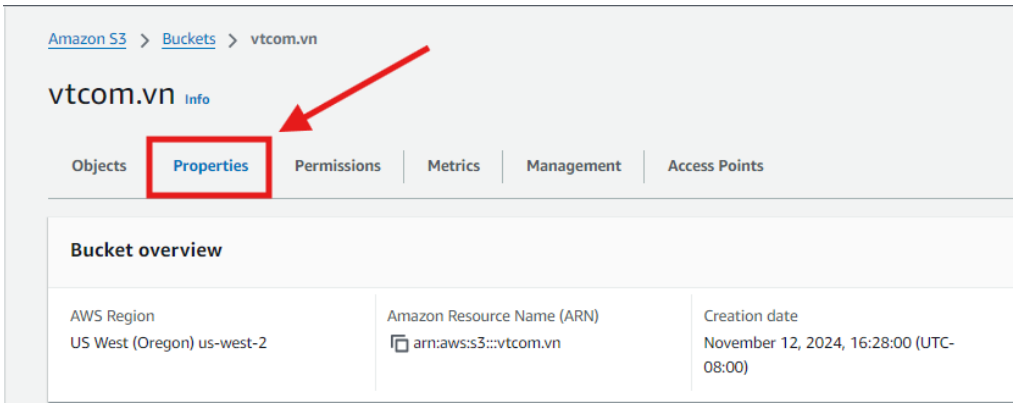
Confirm All Files are Uploaded.



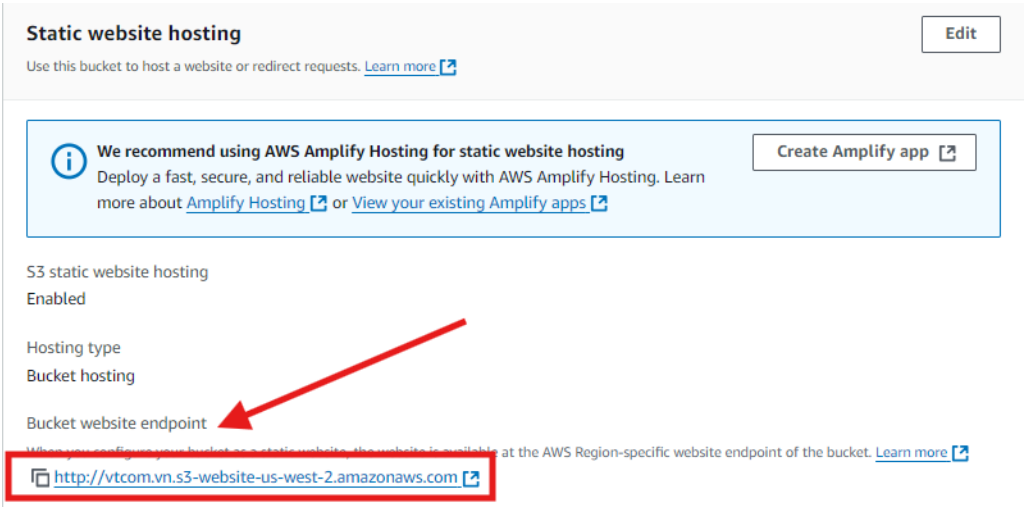
e. Step 5: Test Your Resume Website

Locate the Website Endpoint

In your S3 bucket, navigate to the Properties tab.

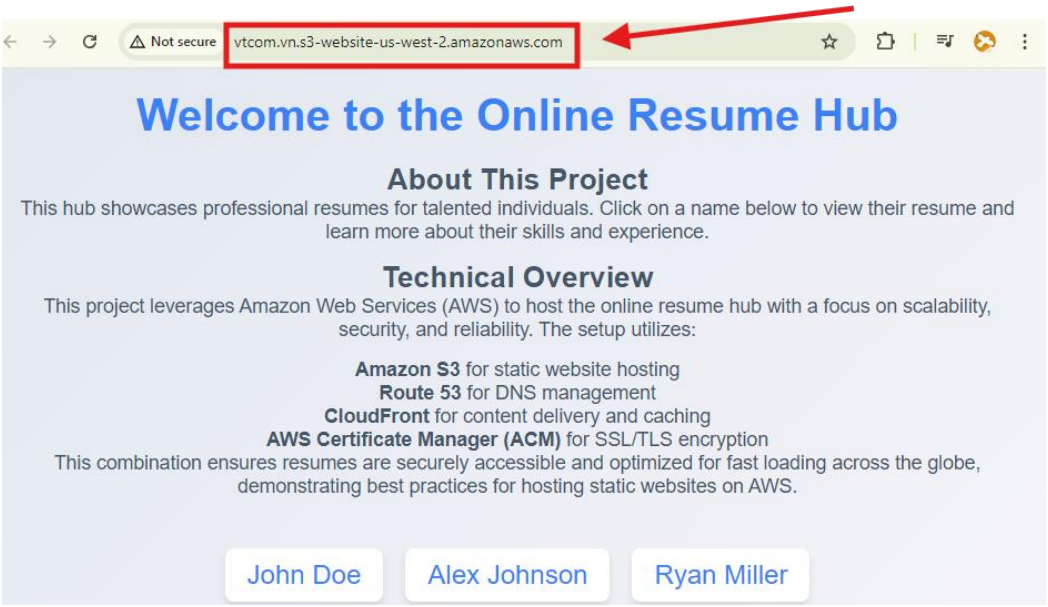


Scroll to the Static website hosting section and find the Bucket website endpoint link.



Click the endpoint link to view your live resume website.

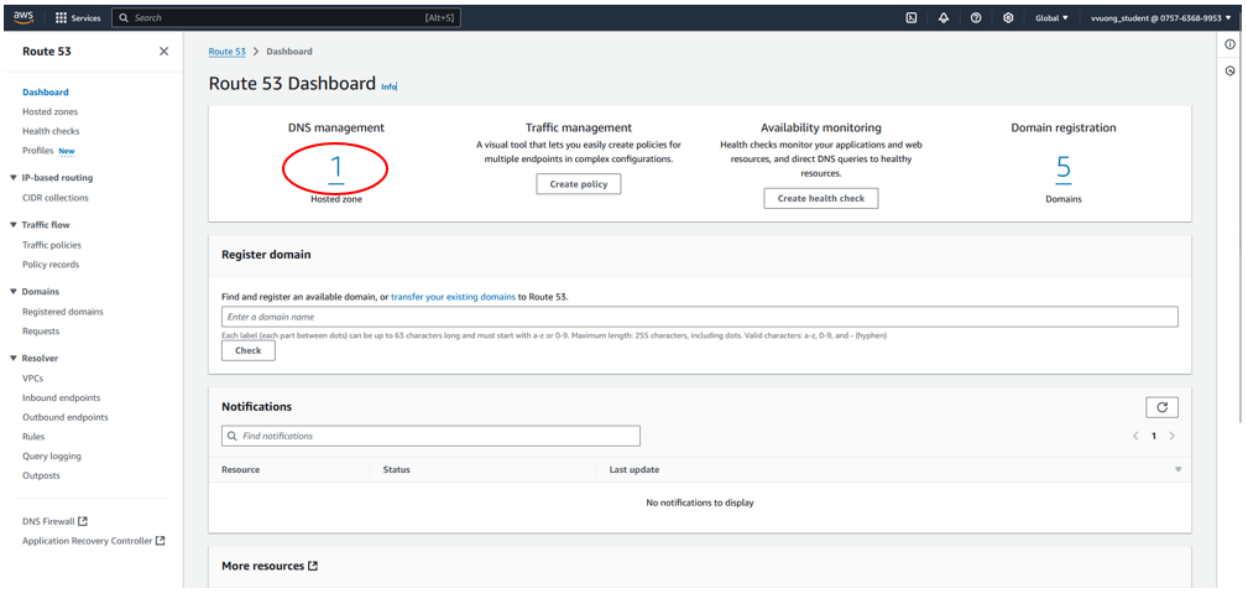
Your resume website is now live!



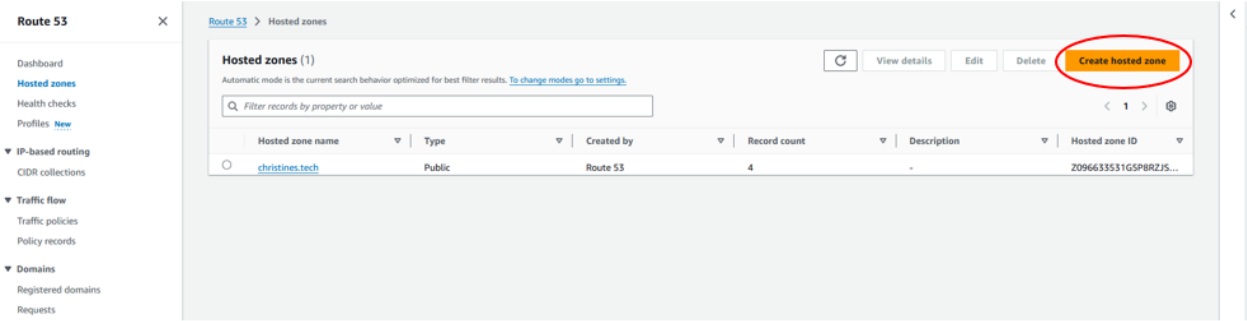
IV. How to Configure Route53 as a DNS Service for Domain Name: "vtcom.vn".

Go to Route53 Dashboard.

Because we have our own domain name, so we will skip the register domain process.

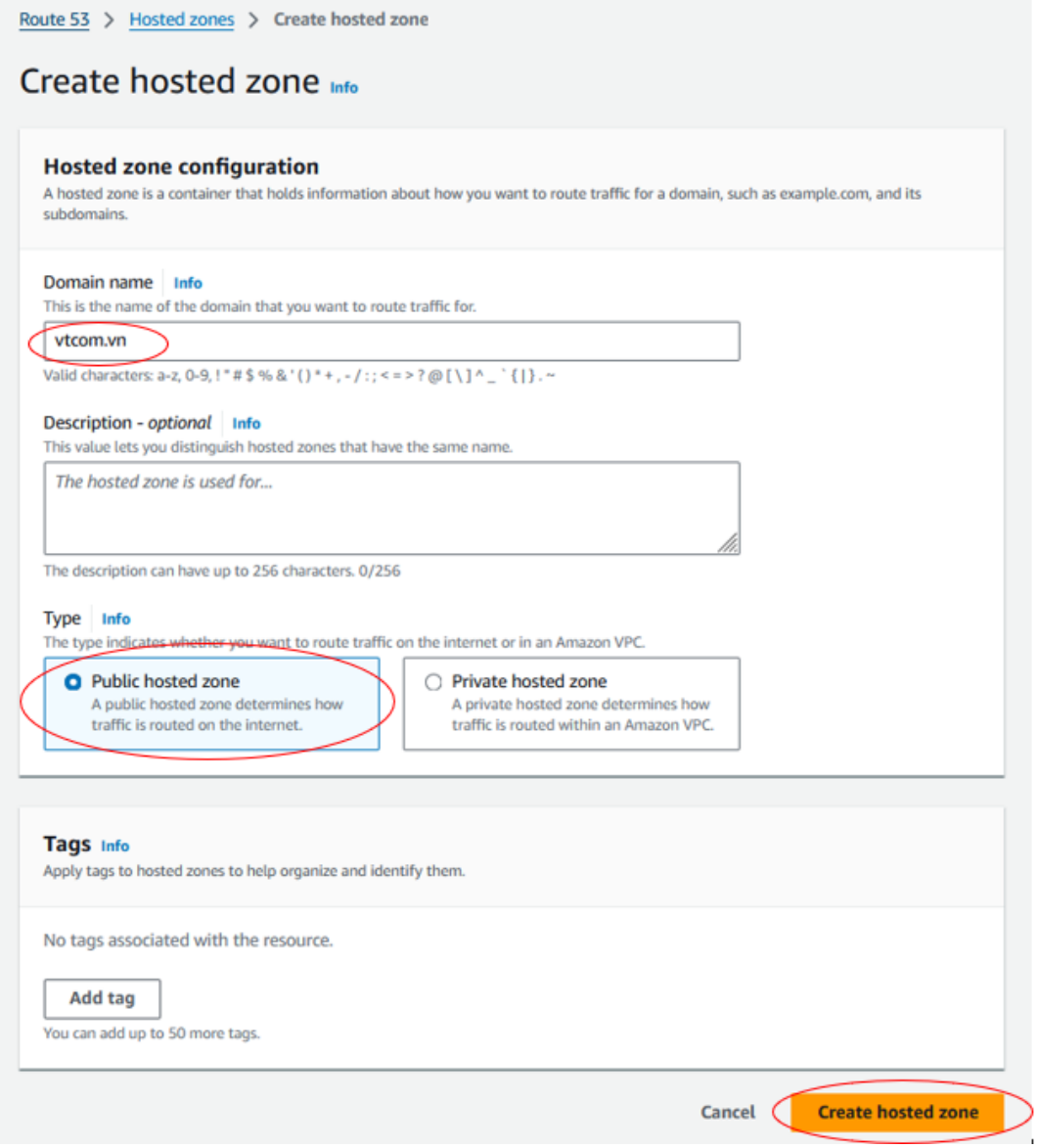


Click Hosted Zone:



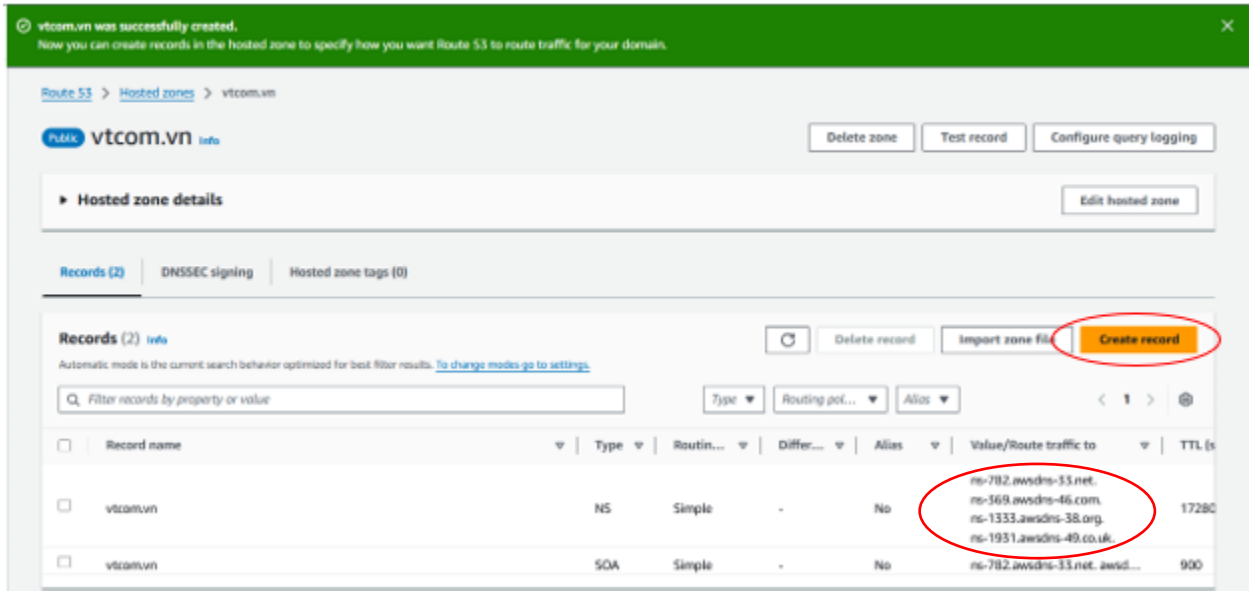
Click Create hosted zone.

Domain name: Type your domain name.



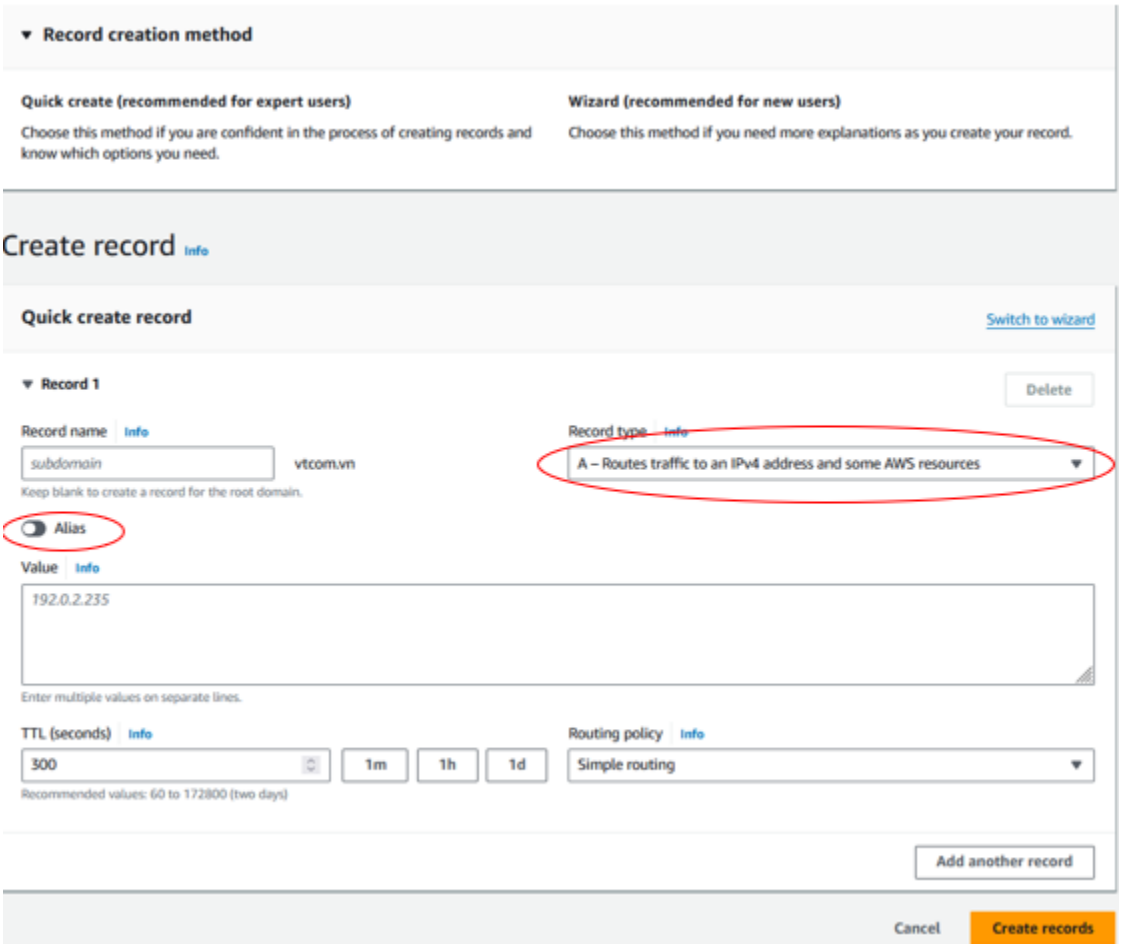
Click Create hosted zone.

Click Create record:

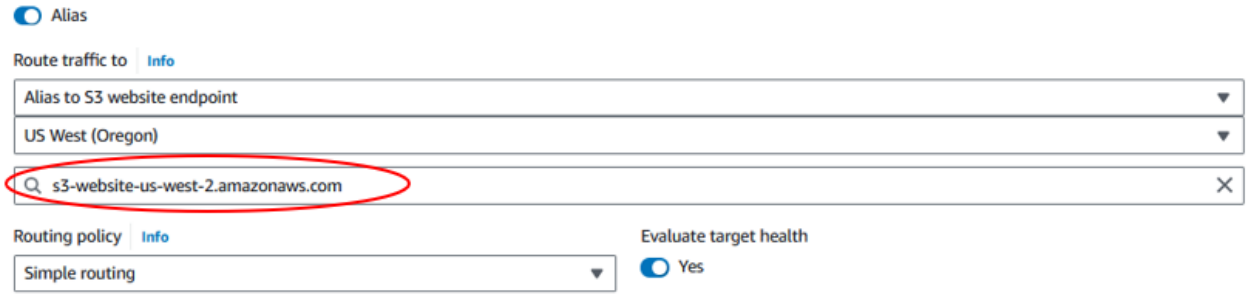


Now, you have to update the Name Servers on your domain name provider to be on the list of Name Servers.

Name Server 1	ns-782.awsdns-33.net
IPv4	
IPv6	
Name Server 2	ns-369.awsdns-46.com
IPv4	
IPv6	
Name Server 3	ns-1333.awsdns-38.org
IPv4	
IPv6	
Name Server 4	ns-1931.awsdns-49.co.uk
IPv4	
IPv6	
Name Server 5	
IPv4	
IPv6	



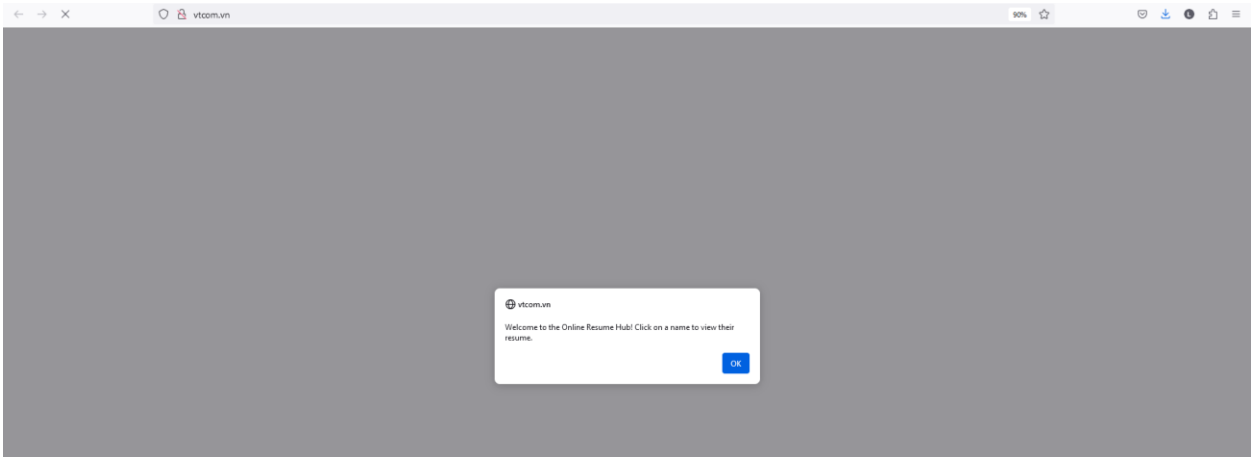
Click Alias:

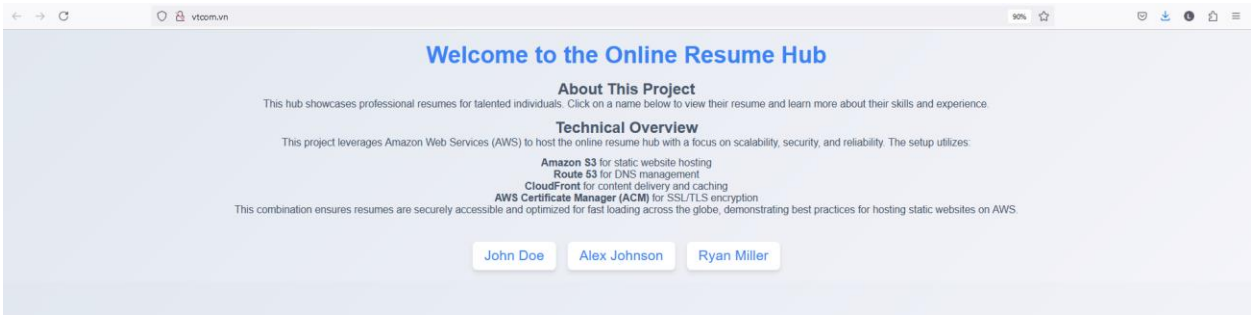


Click Create record.

Click View status and wait a little bit of time, Status will turn to “INSYNC”

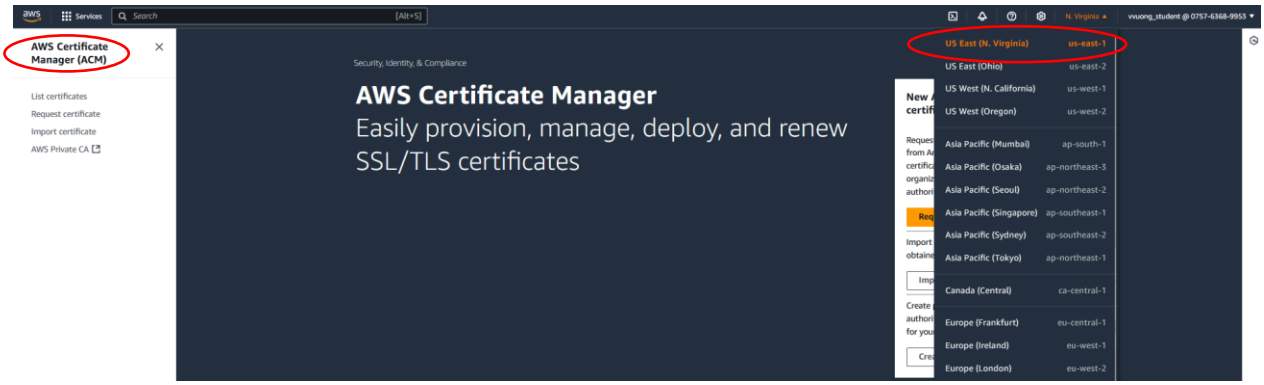
Open web browser, on address bar, type: vtcom.vn:



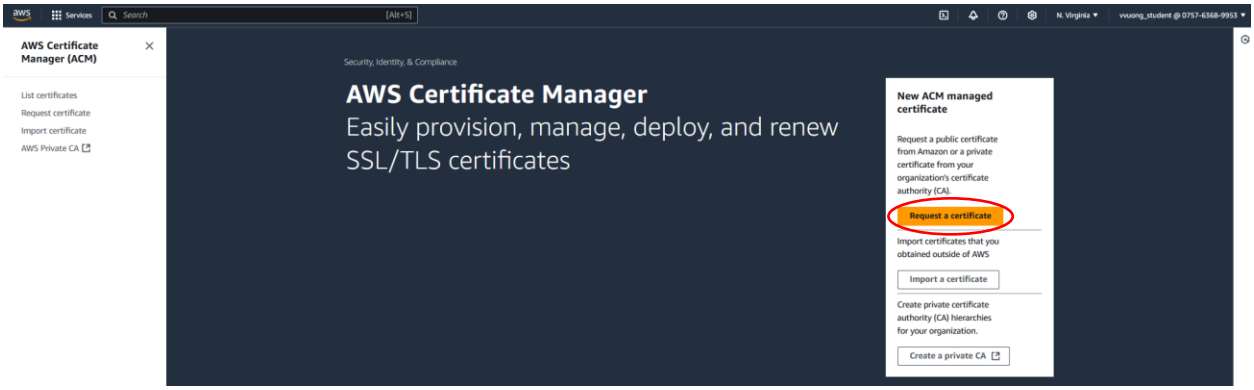


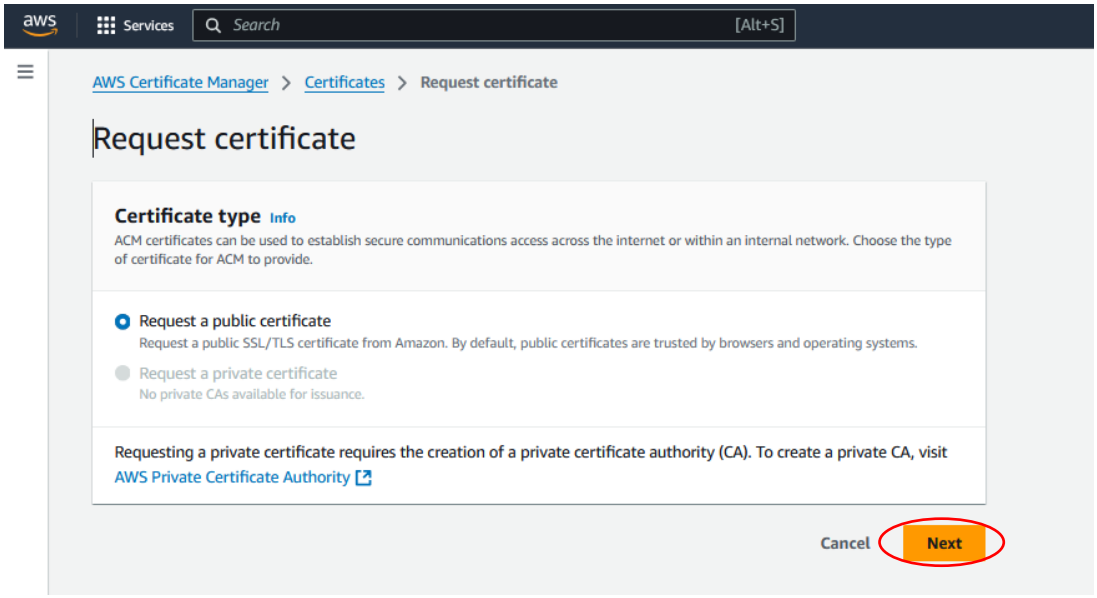
V. Create TLS/SSL Certificate using AWS Certificate Manager.

On AWS console, go to AWS Certificate Manager.

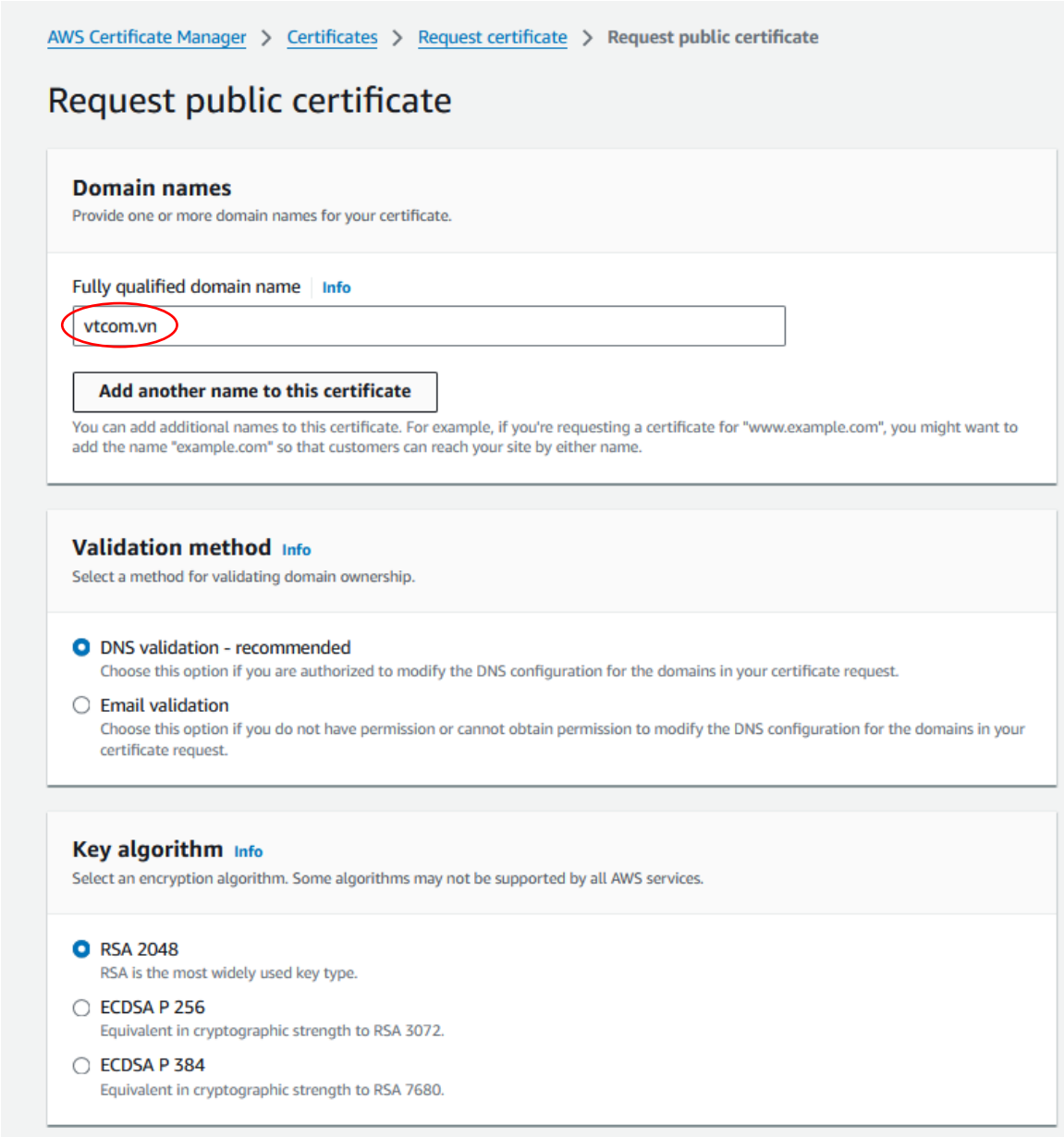


Select Region: N.Virgina. Then click Request a certificate.

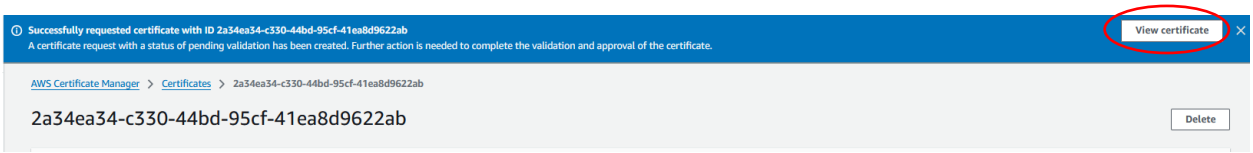




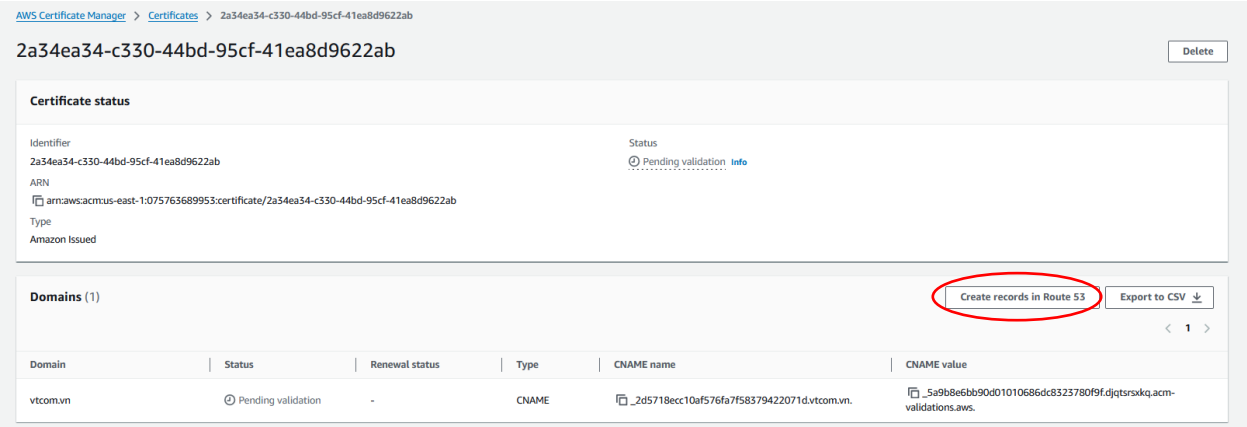
Click Next to continue.



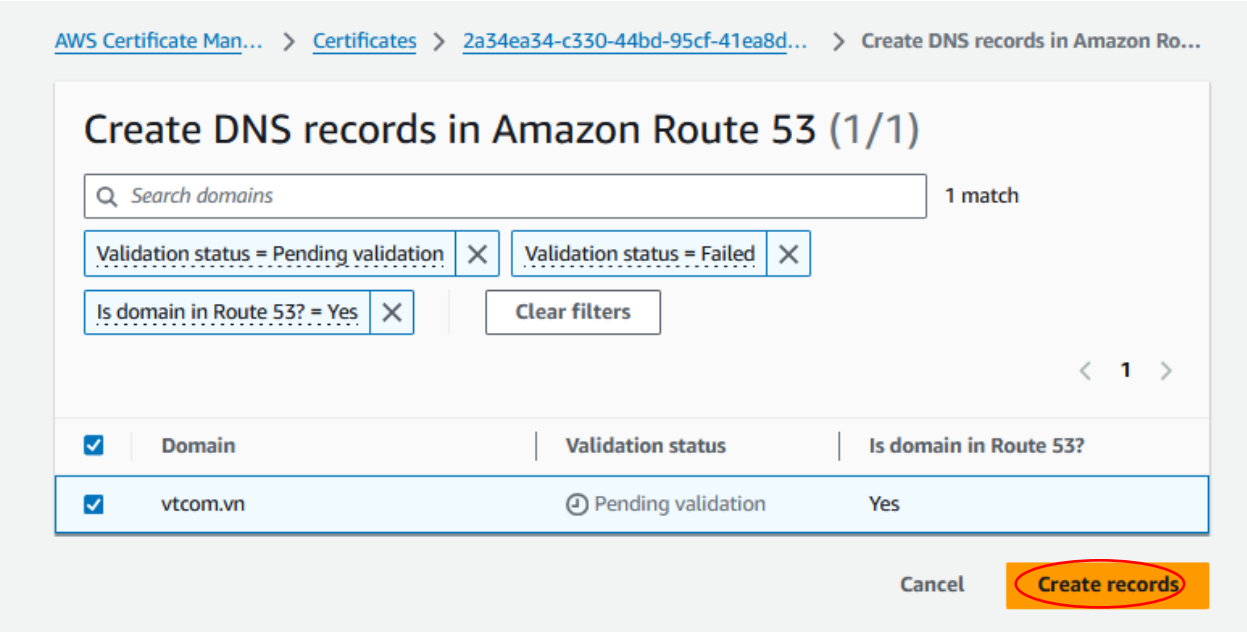
Typing the domain name, then click Request.



Click View certificate.

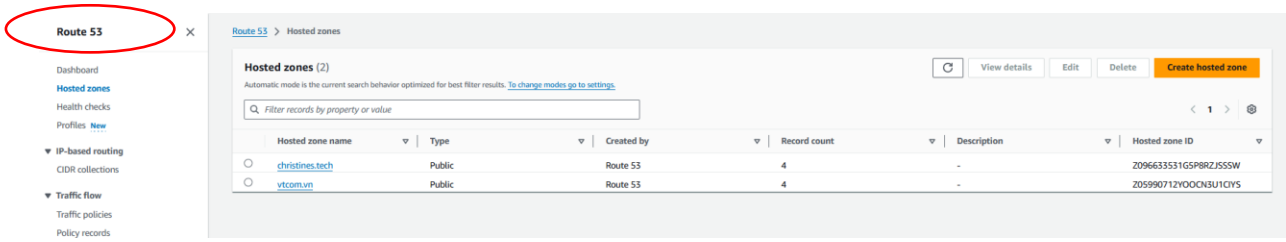


Click Create records in Route53.

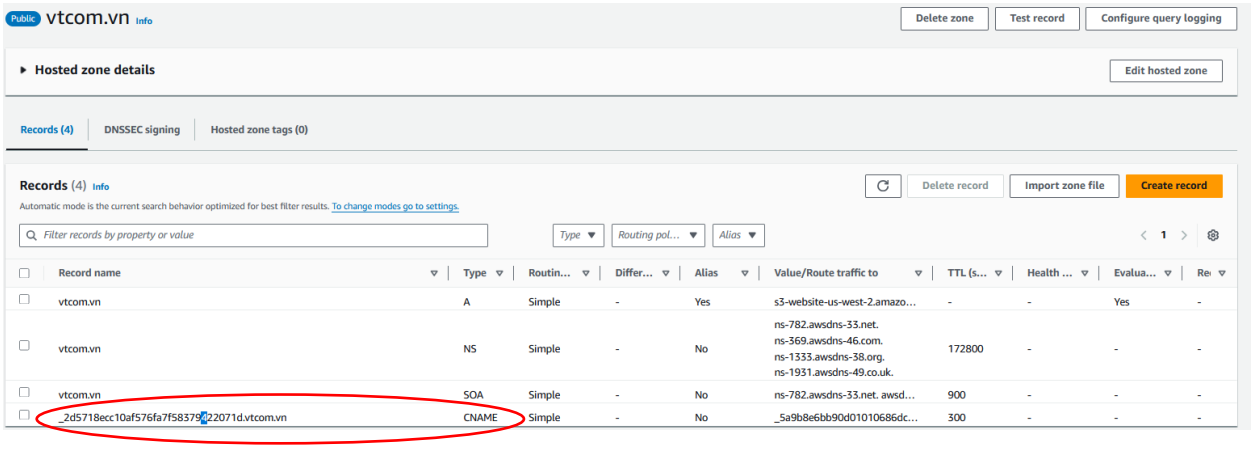


Click Create records.

Now, back to Route53.

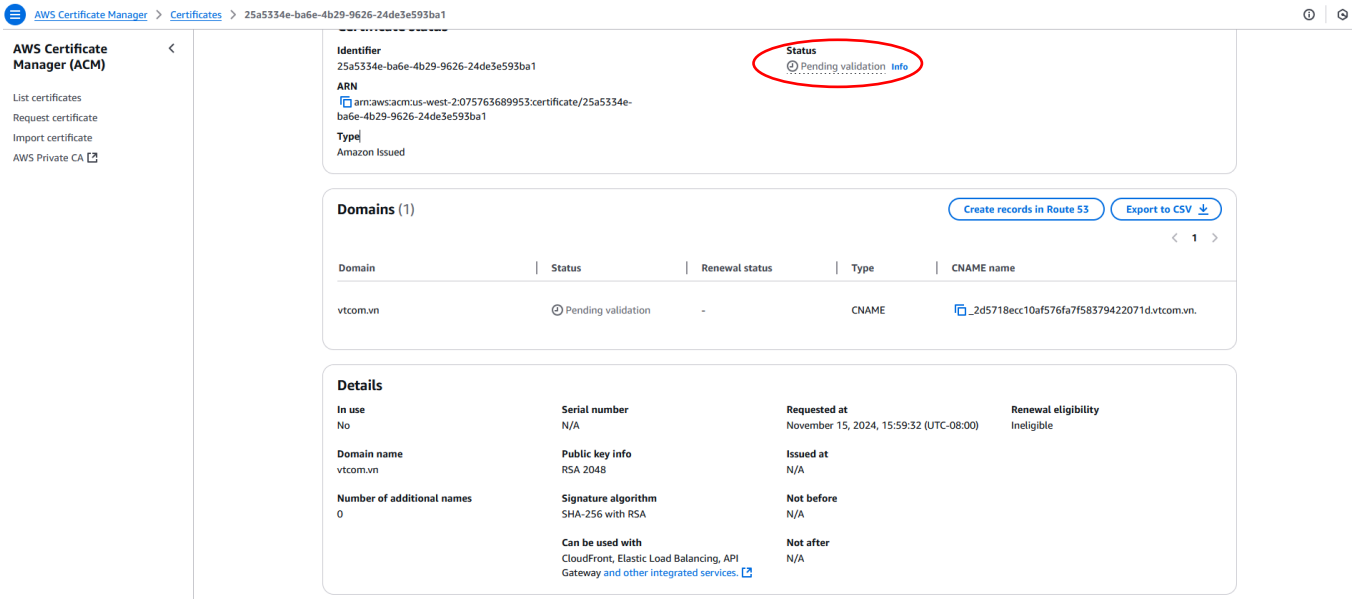


Click on the domain name.

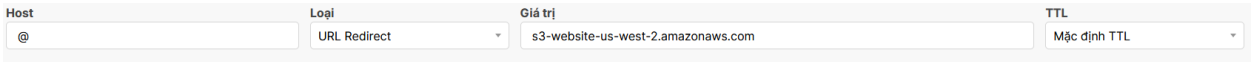


One CNAME record has been created through the Certificate Manager.

Back to Certificate Manager, click refresh.



To make sure this validation goes successfully, we have to add an A/CNAME record or URL redirect to your website address on S3 Bucket.



The validation process will take about 30 minutes to be issued.

29085180-916b-47b6-9147-954b09ae34dd

Delete

Certificate status

Identifier
29085180-916b-47b6-9147-954b09ae34dd

Status
Issued

ARN
arn:aws:acm:us-east-1:075763689953:certificate/29085180-916b-47b6-9147-954b09ae34dd

Type
Amazon Issued

Domains (1)

Create records in Route 53 | Export to CSV

1

Domain	Status	Renewal status	Type	CNAME name	CNAME value
vtcom.vn	Success	-	CNAME	_2d5718ecc10af576fa7f58379422071d.vtcom.vn.	_5a9b8e6bb90d0101 validations.aws.

Details

In use
No

Serial number
07:9d:87:c7:45:ad:4d:d8:2e:14:77:9f:4c:66:44:07

Requested at
November 18, 2024, 00:47:26 (UTC-08:00)

Renewal eligibility
Ineligible

Domain name
vtcom.vn

Public key info
RSA 2048

Issued at
November 18, 2024, 00:52:40 (UTC-08:00)

Number of additional names
0

Signature algorithm
SHA-256 with RSA

Not before
November 17, 2024, 16:00:00 (UTC-08:00)

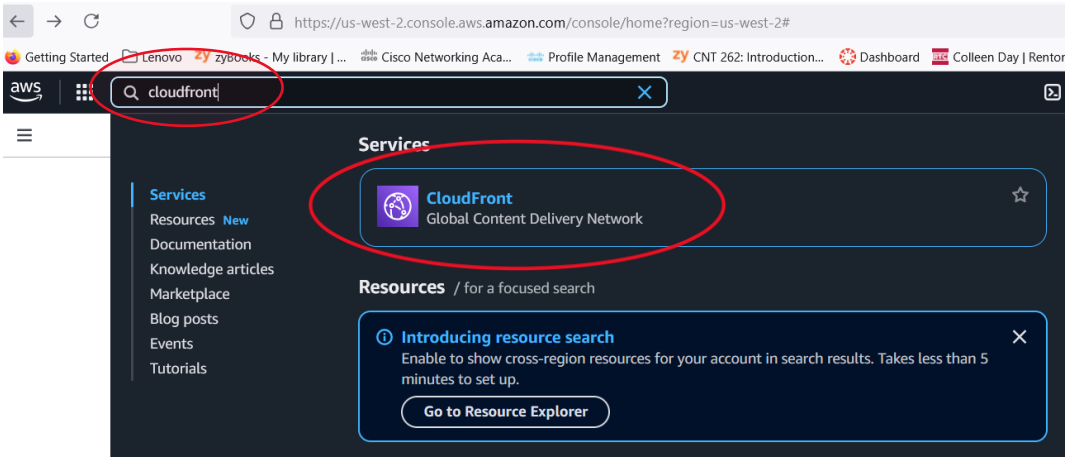
Can be used with
CloudFront, Elastic Load Balancing, API Gateway and other integrated services.

Not after
December 17, 2025, 15:59:59 (UTC-08:00)

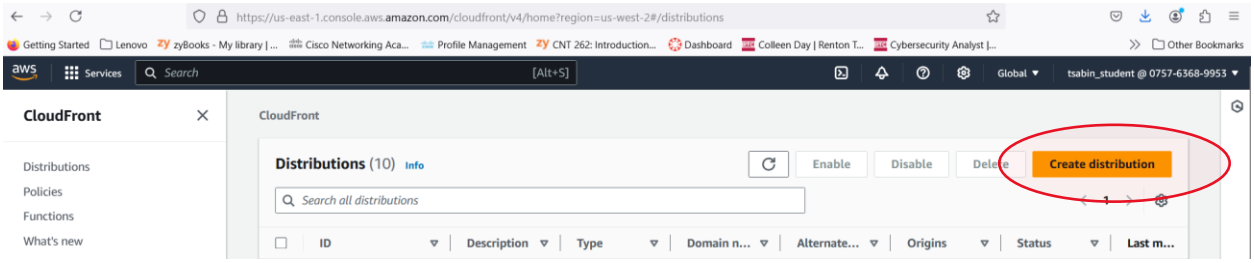
VI. Distribute the website by using CloudFront Distribution.

1. Setting up Origin Access Control to CloudFront

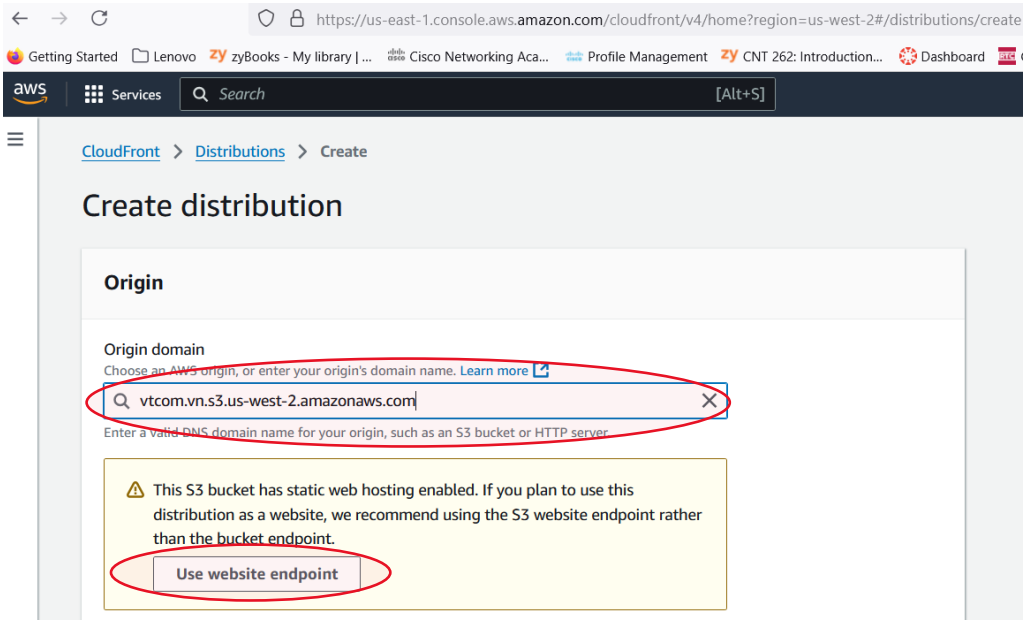
1. Log into AWS account and search for CloudFront. Then click on CloudFront



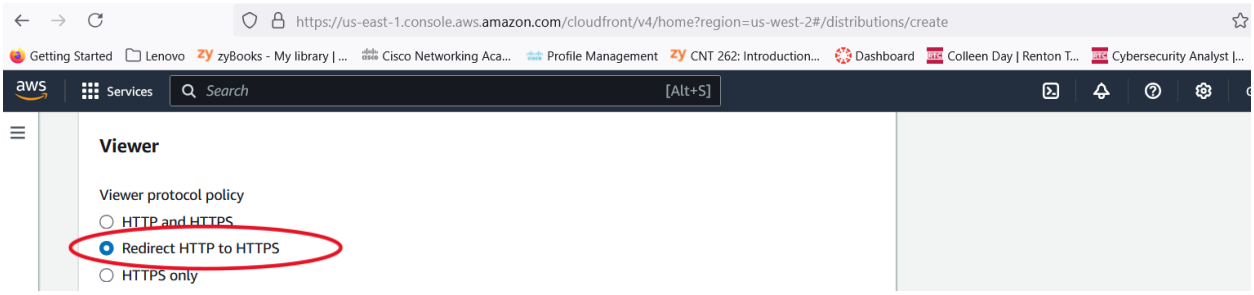
2. Then click on Create distribution.



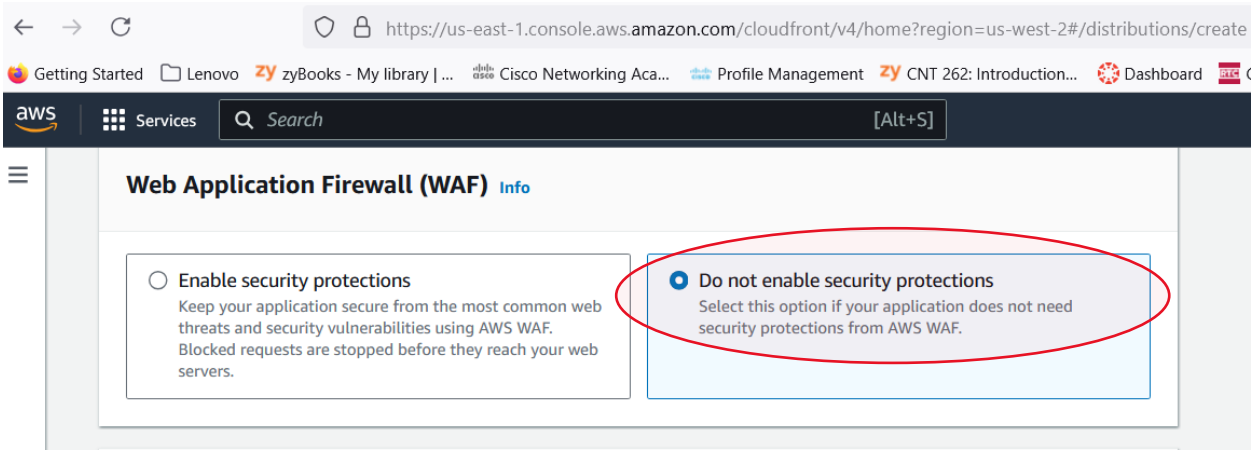
3. For Origin domain, select the S3 Bucket you created earlier. Next click Use website endpoint. This is necessary as the S3 Bucket is being used for a website.



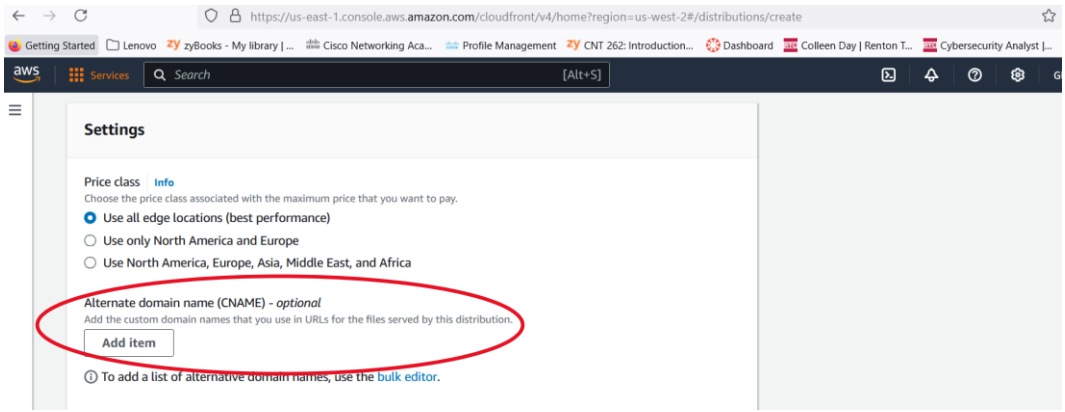
4. Leave everything default and scroll down to Viewer and select Redirect HTTP to HTTPS.



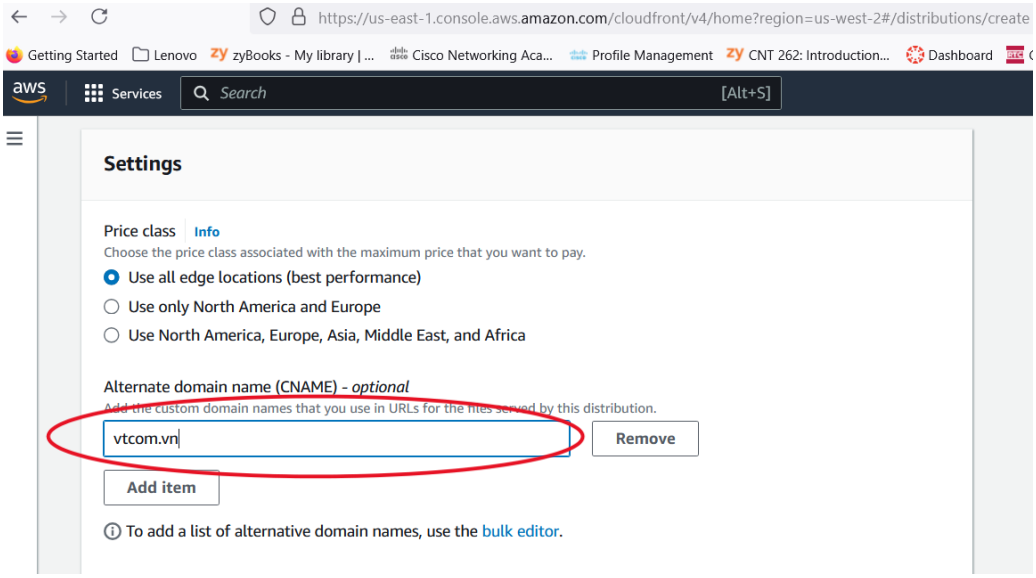
5. Leave everything else default and scroll down to Web Application Firewall (WAF) and select Do not enable security protections.



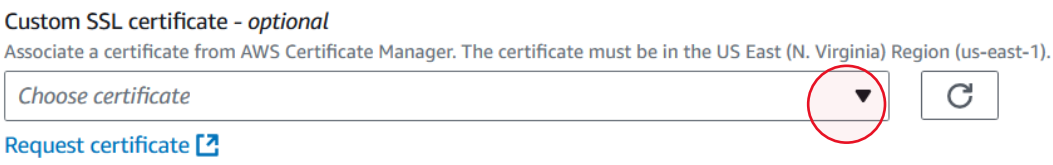
6. Scroll down to Settings and click on add item.



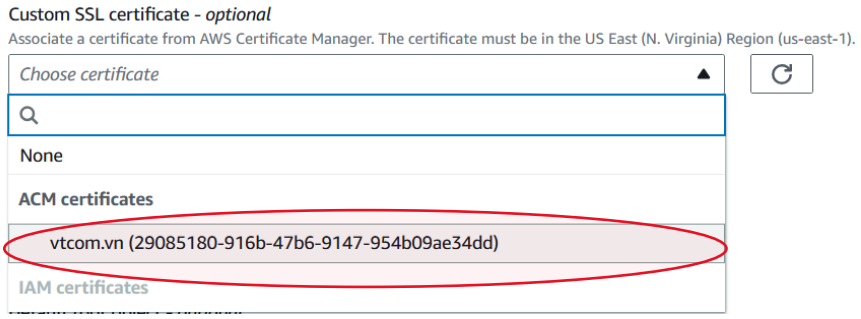
Next type in the domain name you created earlier in the Alternate domain name (CNAME) – optional.



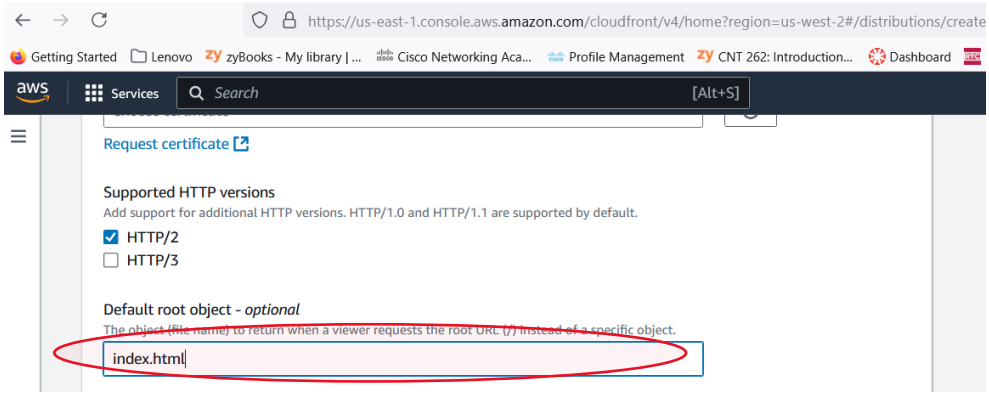
Furthermore, you should see Custom SSL certificate – optional, click on the downward pointing arrow.



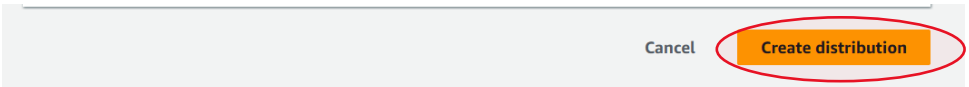
In the dropdown menu, under ACM certificates, select the certificate you created in the previous ACM section.



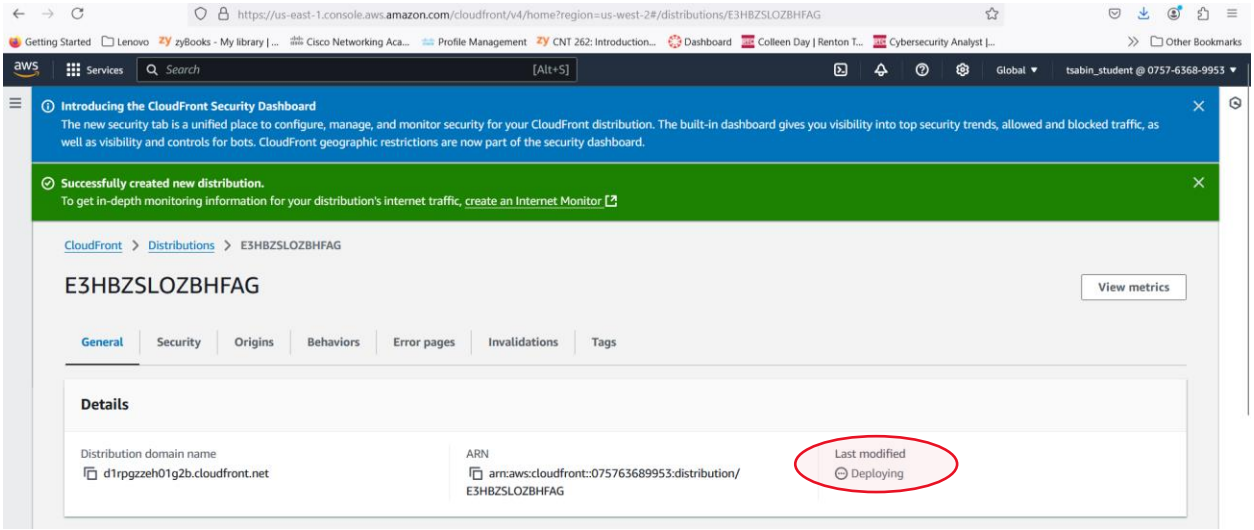
Now scroll down to the default root object – optional and type your default home page, which is usually *index.html*



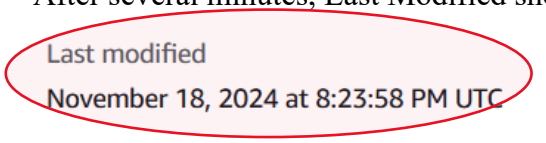
After that scroll down and click Create distribution.



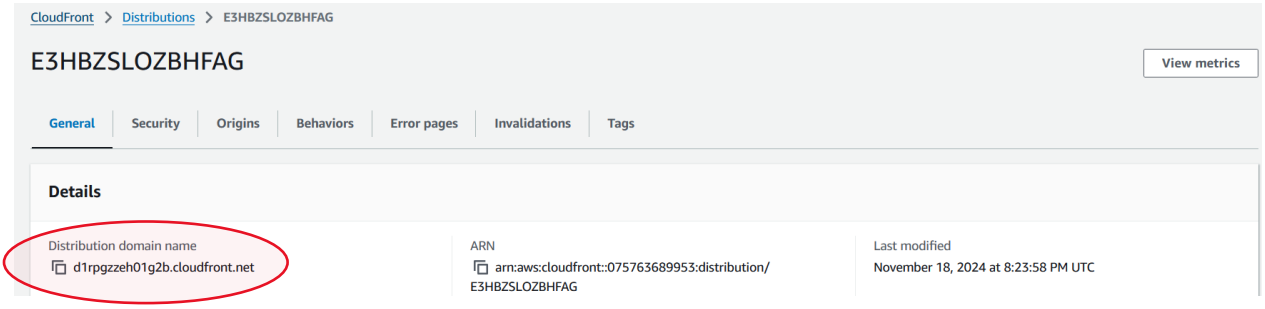
You will see a success screen like this. This may take some time and when last modified changes to a date, it is finished.



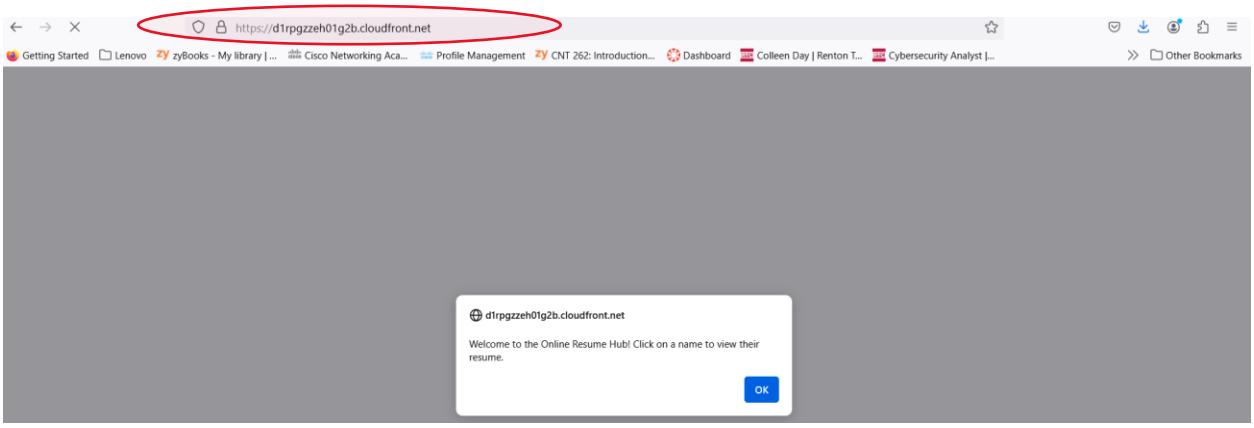
After several minutes, Last Modified should look like this when finished.



7. Testing, type in the Distribution domain name into a new tab in your web browser and navigate to the site, see eg. Below.

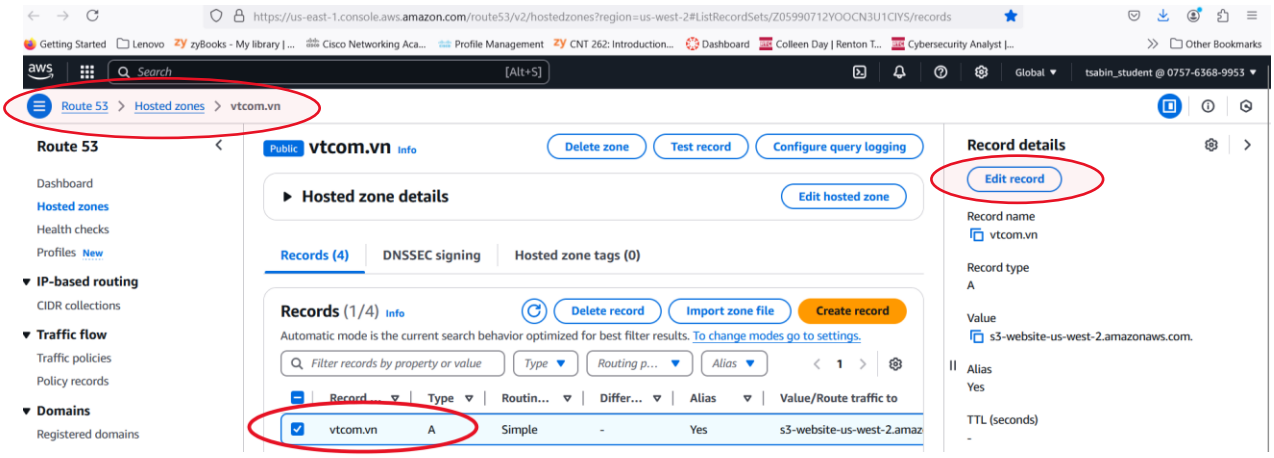


Example of our webpage being navigated to successfully. The padlock icon means that the connection is secure.

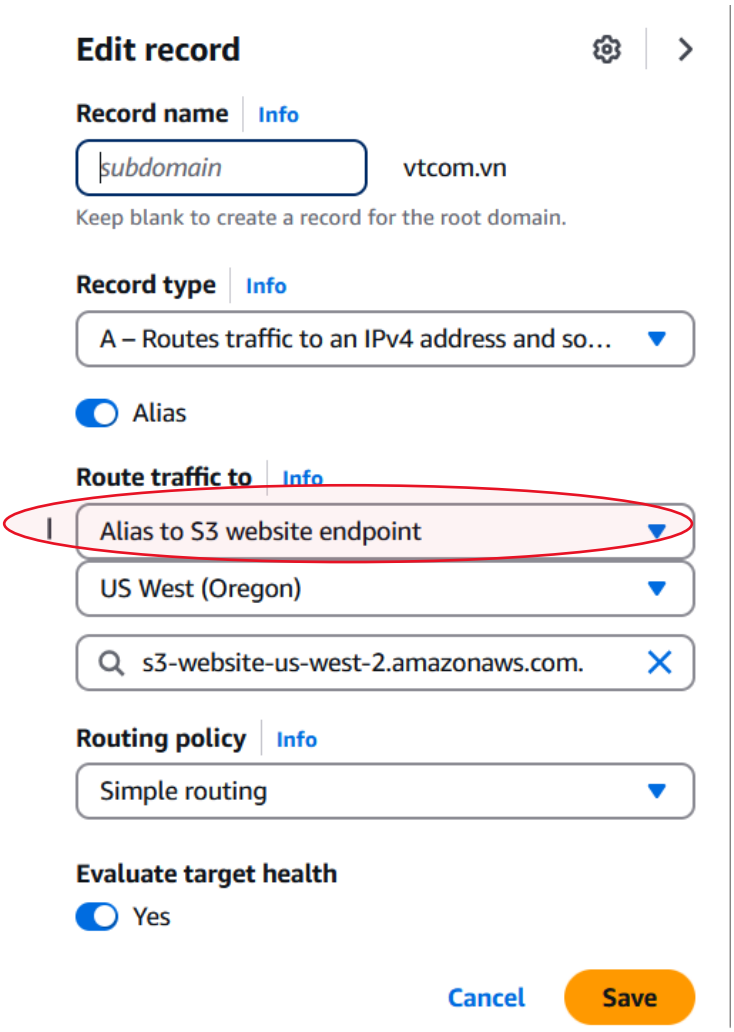


2. Updating the A Record in Route53 to point to CloudFront distribution

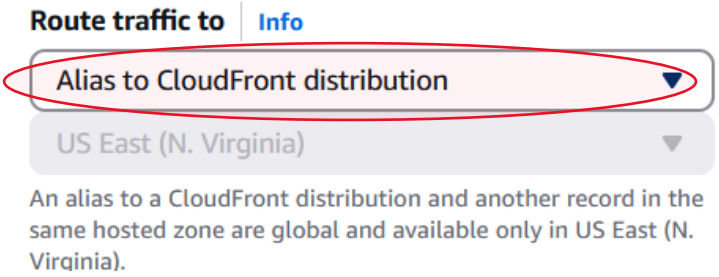
1. Navigate to Route53 that you previously created, select A under type, and click Edit record.



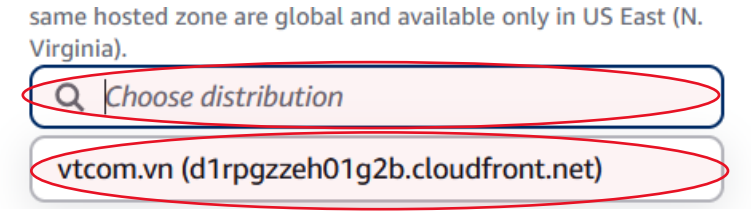
In Edit record, change Alias to S3 website endpoint to Alias to CloudFront Distribution, see eg's of before and after below.



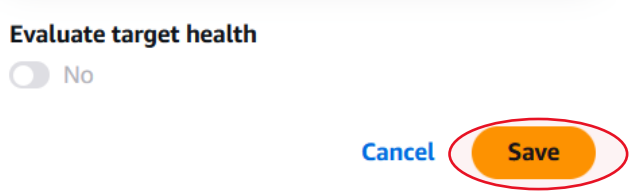
Example of what to change to.



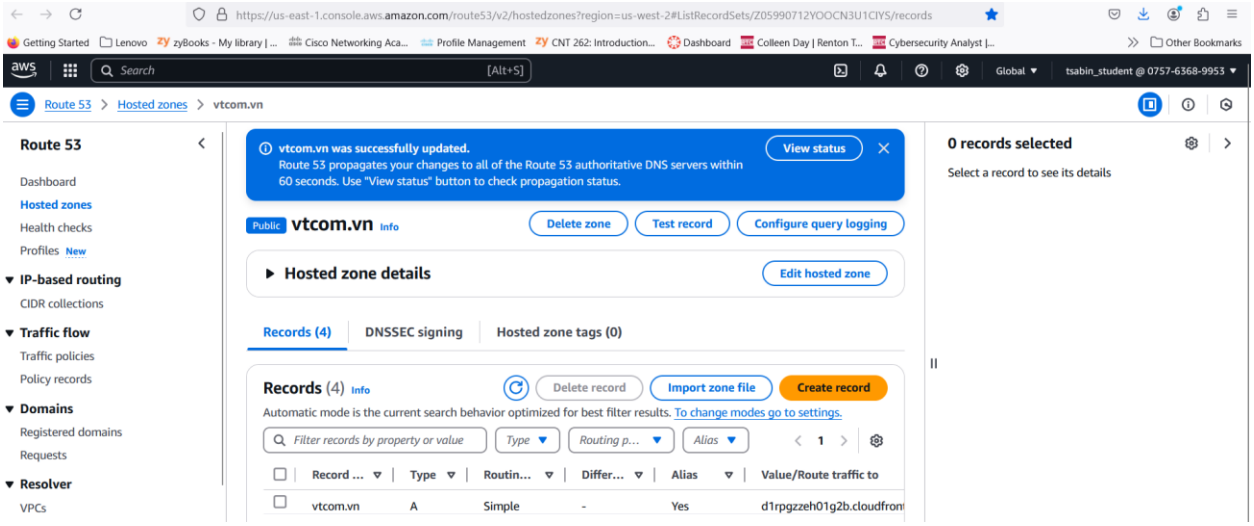
Now choose distribution and select the one it generates below it.



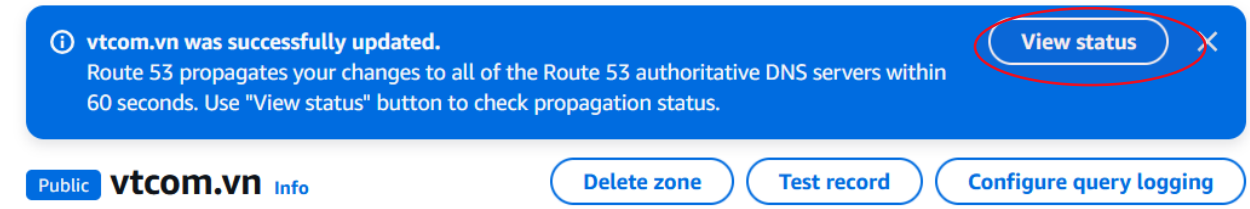
Then click on Save.



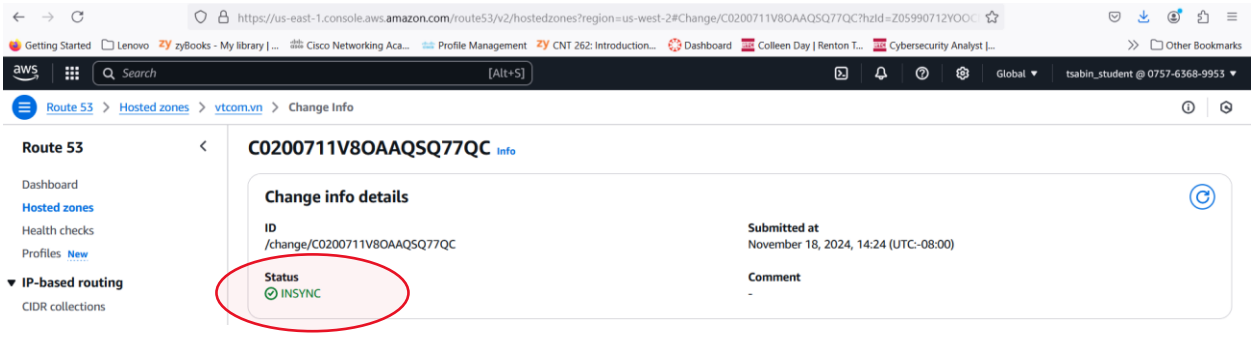
A screen like this should appear.



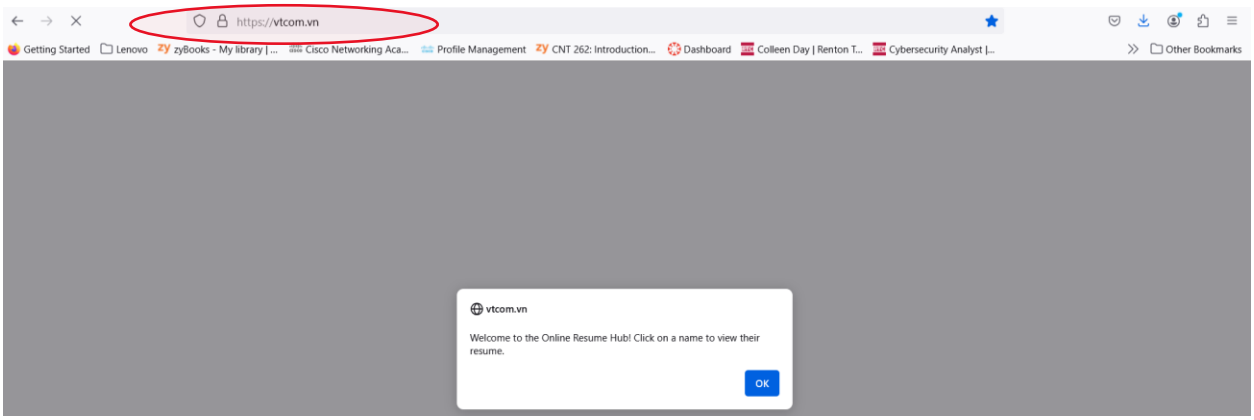
Furthermore, view the propagation status by clicking on view status.



The status should show it is in sync.



2. Testing. In a new browser tab, type in your domain name, do not use the distribution domain name. You should be navigated to the name of your website.



VII. References

freeCodeCamp. (2023, November 8). *How to build an online résumé on AWS using S3, Route 53, CloudFront, and ACM*. freeCodeCamp.org. https://www.freecodecamp.org/news/aws-project-build-a-resume

YouTube. (n.d.). YouTube. https://www.youtube.com/watch?v=x7YjX2_zGsk