

# VASAVI COLLEGE OF ENGINEERING

AUTONOMOUS  
(Affiliated to Osmania University)  
Hyderabad- 500 031.

DEPARTMENT OF : Computer Science and Engineering  
NAME OF THE LABORATORY : DSCC LAB

Name : \_\_\_\_\_ Roll No : 1602-19-733- Page No: \_\_\_\_\_

## Lab Experiment

### Hosting a Static Website

#### Accessing the AWS Management Console

1. At the top of these instructions, choose **Start Lab** to launch your lab.

A **Start Lab** panel opens, and it displays the lab status.

2. Wait until the **Start Lab** panel displays the message *Lab status: ready*, then close the panel by choosing the **X**.
3. At the top of these instructions, choose **AWS**.

This action opens the AWS Management Console in a new browser tab. The system automatically logs you in.

4. Arrange the **AWS Management Console** tab so that it displays alongside these instructions. Ideally, you will have both browser tabs open at the same time so that you can follow the lab steps more easily.

**Do not change the Region unless specifically instructed to do so.**

#### Task 1: Creating a bucket in Amazon S3

In this task, you will create an S3 bucket and configure it for static website hosting.

In the **AWS Management Console**, on the **Services** menu, choose **S3**.

5. Choose **Create bucket**

An S3 bucket name is globally unique, and the namespace is shared by all AWS accounts. After you create a bucket, the name of that bucket cannot be used by another AWS account in any AWS Region unless you delete the bucket.

Thus, for this lab, you will use a bucket name that includes a random number, such as: *website-123*

6. For **Bucket name**, enter: `website-<123>` (replace *<123>* with a random number)

Public access to buckets is blocked by default. Because the files in your static website will need to be accessible through the internet, you must permit public access.

- Verify the **AWS Region** is set to **us-east-1** (if it is not, choose the us-east-1 Region)

7. In the **Object Ownership** section, select **ACLs enabled**, then verify **Bucket owner preferred** is selected.

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8. Clear **Block all public access**, then select the box that states **I acknowledge that the current settings may result in this bucket and the objects within becoming public**.
9. Choose **Create bucket**.

You can use tags to add additional information to a bucket, such as a project code, cost centre, or owner.

10. Choose the name of your new bucket.
11. Choose the **Properties** tab.
12. Scroll to the **Tags** panel.
13. Choose **Edit** then **Add tag** and enter:

- **Key:** Department
- **Value:** Marketing

14. Choose **Save changes** to save the tag.

Next, you will configure the bucket for static website hosting.

15. Stay in the **Properties** console.
16. Scroll to the **Static website hosting** panel.
17. Choose **Edit**

18. Configure the following settings:
  - **Static web hosting:** Enable
  - **Hosting type:** Host a static website
  - **Index document:** index.html
    - **Note:** You must enter this value, even though it is already displayed.
  - **Error document:** error.html

19. Choose **Save changes**
20. In the **Static website hosting** panel, choose the link under **Bucket website endpoint**.

You will receive a *403 Forbidden* message because the bucket permissions have not been configured yet. Keep this tab open in your web browser so that you can return to it later.

Your bucket has now been configured to host a static website.

## Task 2: Uploading content to your bucket

In this task, you will upload the files that will serve as your static website to the bucket.

21. Right-click each of these links and download the files to your computer:

Ensure that each file keeps the same file name, including the extension.

- [index.html](#)

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- [script.js](#)
- [style.css](#)

22. Return to the Amazon S3 console and in the `website-<123>` bucket you created earlier, choose the **Objects** tab.
23. Choose **Upload**.
24. Choose **Add files**
25. Locate and select the three files that you downloaded.
26. If prompted, choose I acknowledge that existing objects with the same name will be overwritten.
27. Choose **Upload**.

Your files are uploaded to the bucket.

- Choose **Close**

## Task 3: Enabling access to the objects

Objects that are stored in Amazon S3 are private by default. This ensures that your organization's data remains secure.

In this task, you will make the uploaded objects publicly accessible.

First, confirm that the objects are currently private.

28. Return to the browser tab that showed the *403 Forbidden* message.
29. Refresh the webpage

You should still see a *403 Forbidden* message.

*Analysis:* This response is expected! This message indicates that your static website is being hosted by Amazon S3, but that the content is private.

You can make Amazon S3 objects public through two different ways:

- To make either a whole bucket public, or a specific directory in a bucket public, use a *bucket policy*.
  - To make individual objects in a bucket public, use an *access control list (ACL)*.
30. Return to the web browser tab with the Amazon S3 console (but do not close the website tab).
31. Select all three objects.
32. In the **Actions** menu, choose **Make public via ACL**.

A list of the three objects is displayed.

33. Choose **Make public**

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Your static website is now publicly accessible.

34. Return to the web browser tab that has the *403 Forbidden* message.
35. Refresh the webpage.

You should now see the static website that is being hosted by Amazon S3.

## Task 4: Updating the website

You can change the website by editing the HTML file and uploading it again to the S3 bucket.

36. On your computer, load the **index.html** file into a text editor (for example, Notepad or TextEdit).
37. Find the text **Served from Amazon S3** and replace it with **Created by <YOUR-NAME>**, substituting your name for **<YOUR-NAME>** (for example, *Created by Jane*).
38. Save the file.
39. Return to the Amazon S3 console and upload the **index.html** file that you just edited.
40. Select **index.html** and use the **Actions** menu to choose the **Make public via ACL** option again.
41. Return to the web browser tab with the static website and refresh the page.

Your name should now be on the page.

Your static website is now accessible on the internet. Because it is hosted on Amazon S3, the website has high availability and can serve high volumes of traffic without using any servers.

You can also use your own domain name to direct users to a static website that is hosted on Amazon S3. To accomplish this, you could use the Amazon Route 53 Domain Name System (DNS) service in combination with Amazon S3.

## Submitting your work

42. At the top of these instructions, choose **Submit** to record your progress and when prompted, choose **Yes**.
43. If the results don't display after a couple of minutes, return to the top of these instructions, and choose **Grades**
44. To find detailed feedback on your work, choose **Details** followed by **View Submission Report**.

## Lab complete

45. Choose **End Lab** at the top of this page, and then select **Yes** to confirm that you want to end the lab.

A panel indicates that *DELETE has been initiated... You may close this message box now*.

46. Select the **X** in the top right corner to close the panel.

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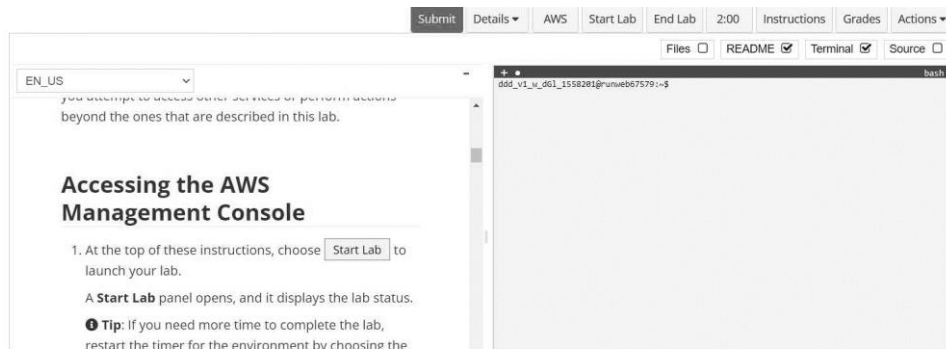
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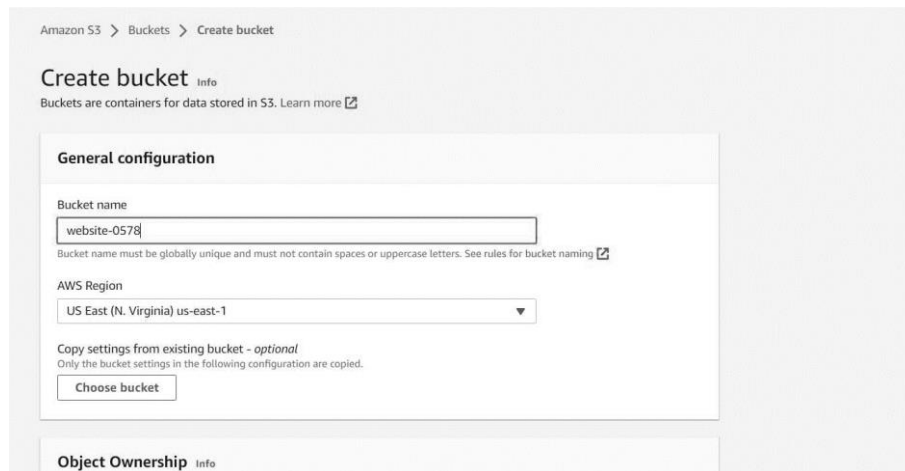
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## OUTPUT SCREENSHOTS:

### Instructions Panel



### Bucket Creation



### Forbidden Error

## 403 Forbidden

- Code: AccessDenied
- Message: Access Denied
- RequestId: YJFWFVYPRMA8PRZ9
- HostId: ITJVNl0zuDIRbTQP0Uw9FgCeNEYkxaD4LJEnNSaNdCui0eRP4w4LqCrAnmZx5K8p0CIh+GwkMRQ=

### An Error Occurred While Attempting to Retrieve a Custom Error Document

- Code: AccessDenied
- Message: Access Denied

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## Uploading Files

Upload succeeded  
View details below.

Summary

Destination  
s3://website-0578

Succeeded  
3 files, 14.8 KB (100.00%)

Failed  
0 files, 0 B (0%)

Files and folders

Configuration

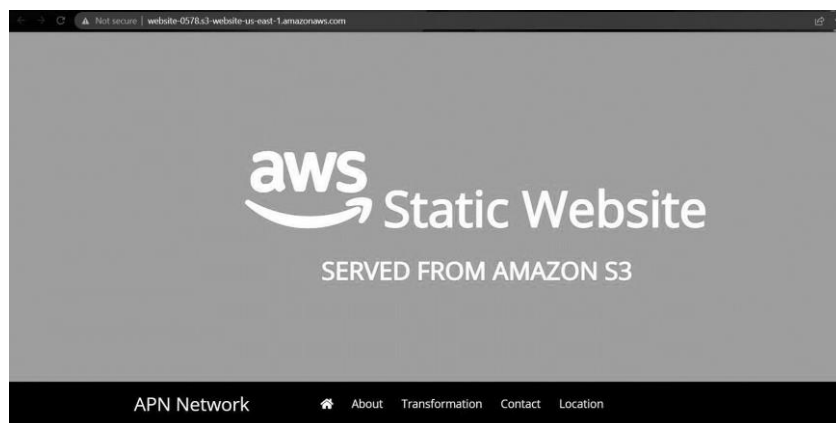
Files and folders (3 Total, 14.8 KB)

Find by name

< 1 >

Name	Folder	Type	Size	Status	Error
index.html	-	text/html	9.8 KB	Succeeded	-
script.js	-	text/javascript	2.0 KB	Succeeded	-
style.css	-	text/css	3.1 KB	Succeeded	-

## Static Website-1



## Static Website-2 (Updated)

