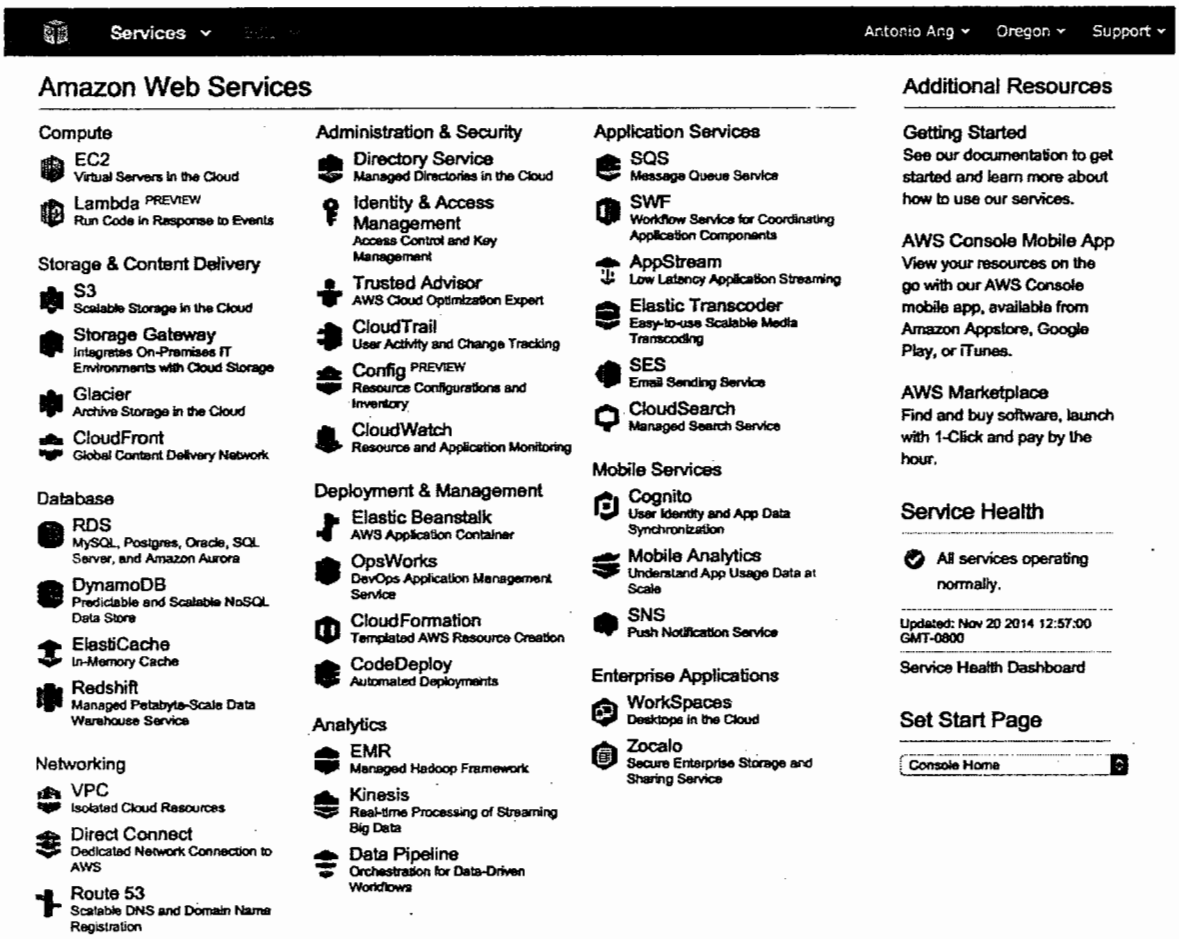
Lab 4

CREATE YOUR FIRST AMAZON S3 BUCKET

STEP 1: Log In to the Amazon Web Service Console

This laboratory experience is about Amazon Web Services and you will use the AWS Management Console in order to complete all the lab steps.



The AWS Management Console is a web control panel for managing all your AWS resources, from EC2 instances to SNS topics. The console enables cloud management for all aspects of the AWS account, including managing security credentials, or even setting up new IAM Users.

Log in to the AWS Management Console

In order to start the laboratory experience, open the Amazon Console by clicking this button:

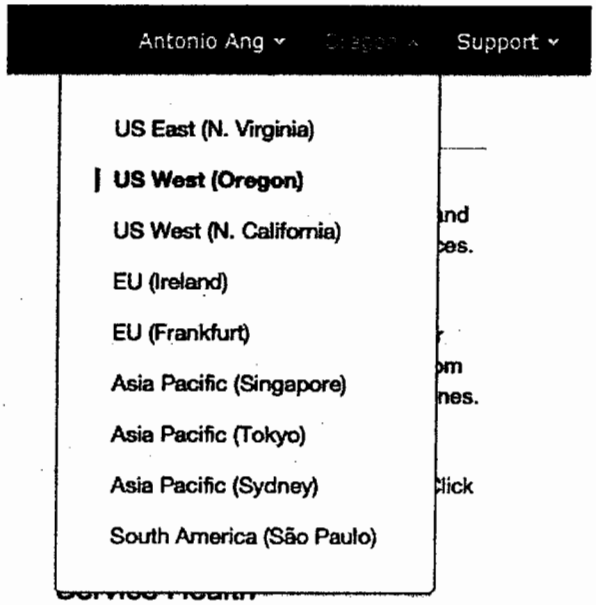
Open AWS Console

Log in with the username **xxxx** and the password **xxxx** .

Select the right AWS Region

Amazon Web Services is available in different regions all over the world, and the console lets you provision resources across multiple regions. You usually choose a region that best suits your business needs to optimize your customer's experience, but you must use the region **US West (Oregon)** for this laboratory.

You can select the **US West (Oregon)** region using the upper right dropdown menu on the AWS Console page.



STEP 2: Create an S3 bucket

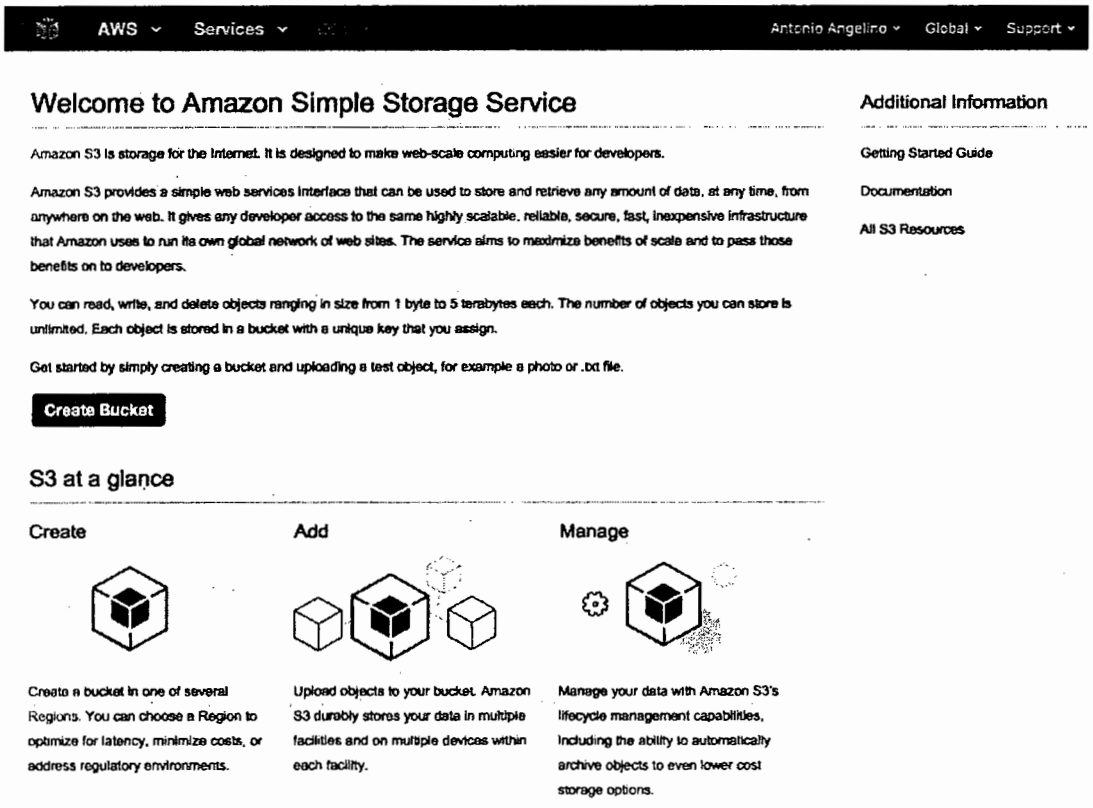
Amazon Simple Storage Service (Amazon S3) provides secure, durable, and highly scalable object storage. To upload data (photos, videos, documents etc.), you first create a logical storage bucket in one of the AWS regions. Then you can upload any number of objects to it. Buckets and objects are resources, and Amazon S3 provides APIs and a web management console to manage them.

Amazon S3 can be used alone or together with other AWS services such as Amazon EC2, Amazon Elastic Block Store (Amazon EBS), and Amazon Glacier, as well as third-party storage repositories and gateways. Amazon S3 provides cost-effective object storage for a wide variety of use cases including web applications, content distribution, backup and archiving, disaster recovery, and big data analytics.

You can create an S3 bucket using the S3 dashboard.

Select the S3 service from the Management Console dashboard:

From the S3 console dashboard, click the blue **Create Bucket** button.



The **Create a Bucket** dialog box appears and you have to enter the **Bucket Name** and select a **Region** from the selection box.

Bucket names must be globally unique, regardless of the AWS region in which you create the bucket, and they must be DNS-compliant.

The rules for DNS-compliant bucket names are:

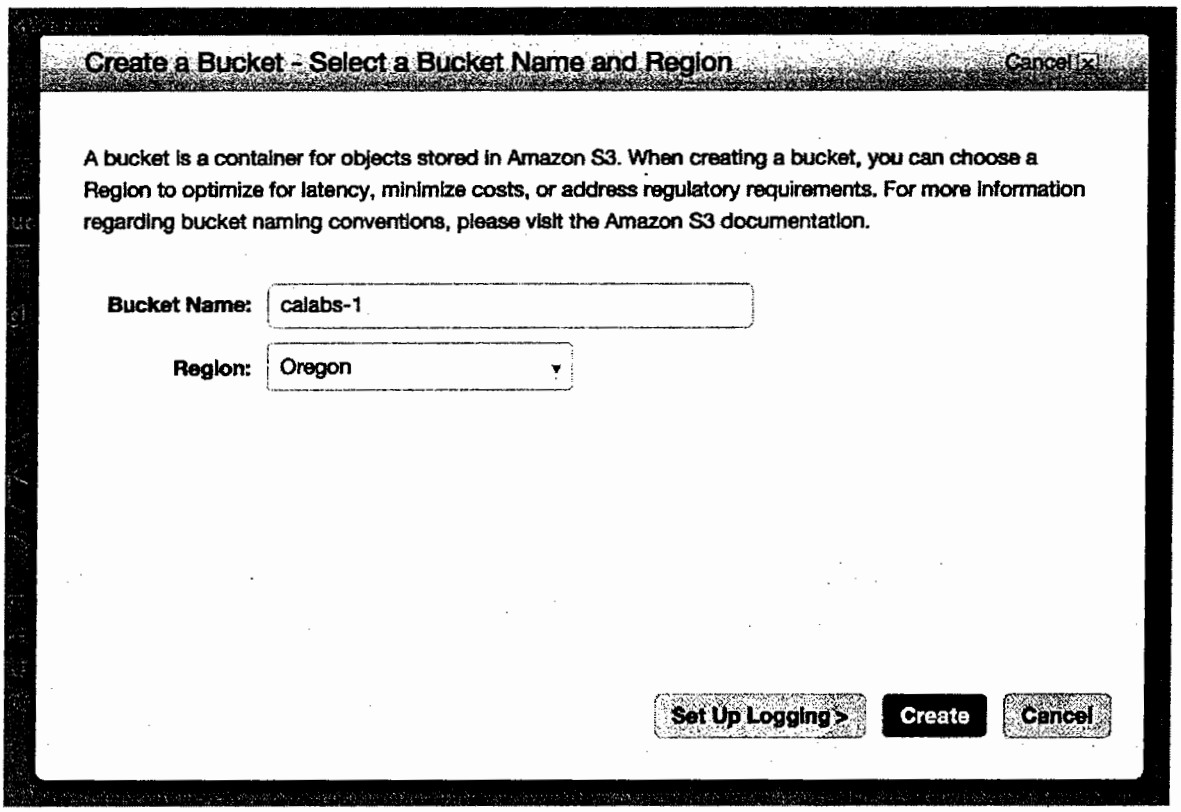
Bucket names must be at least 3 and no more than 63 characters long.

Bucket names can contain lowercase letters, numbers, periods, and/or hyphens. Each label must start and end with a lowercase letter or a number.

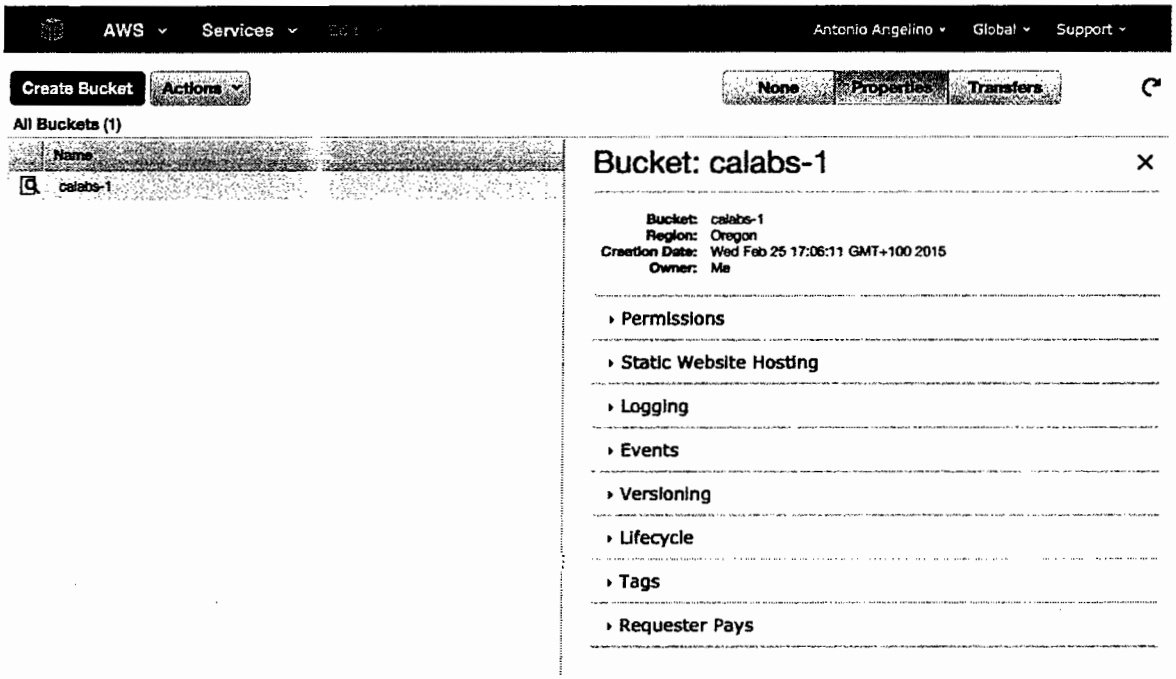
Bucket names must not be formatted as an IP address (e.g., 192.168.1.1).

The following examples are valid bucket names: vepsunbucket , vepsun.bucket , calabs.1 or calabs-bucket .

Please use the following bucket name **calabs-bucket** and add a numeric suffix if you receive the "That bucket already exists" error message.



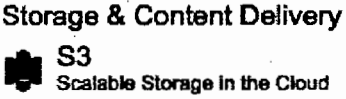
Click **Create** and the console will display your empty bucket in the buckets list.



STEP 3: Create a folder inside an S3 bucket

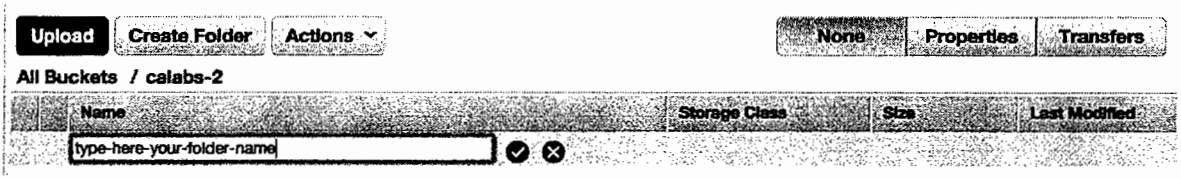
The AWS Management Console allows you to create folders for grouping objects. However, in Amazon S3, buckets and objects are the primary resources. A folder simply becomes a prefix for object key names that are virtually archived into it.

Select the S3 service from the Management Console dashboard:



In the buckets panel, select the bucket **calabs-bucket** and double-click on it. Click **Create Folder.**

Under **Name**, in the box that appears, type **cloudfolder** as the name for the folder, then click the check mark.



STEP 4: Upload a file inside an S3 bucket

When you upload a folder, Amazon S3 uploads all the files and subfolders from the specified folder to your bucket. It then assigns a key value that is a combination of the uploaded file name and the folder name.

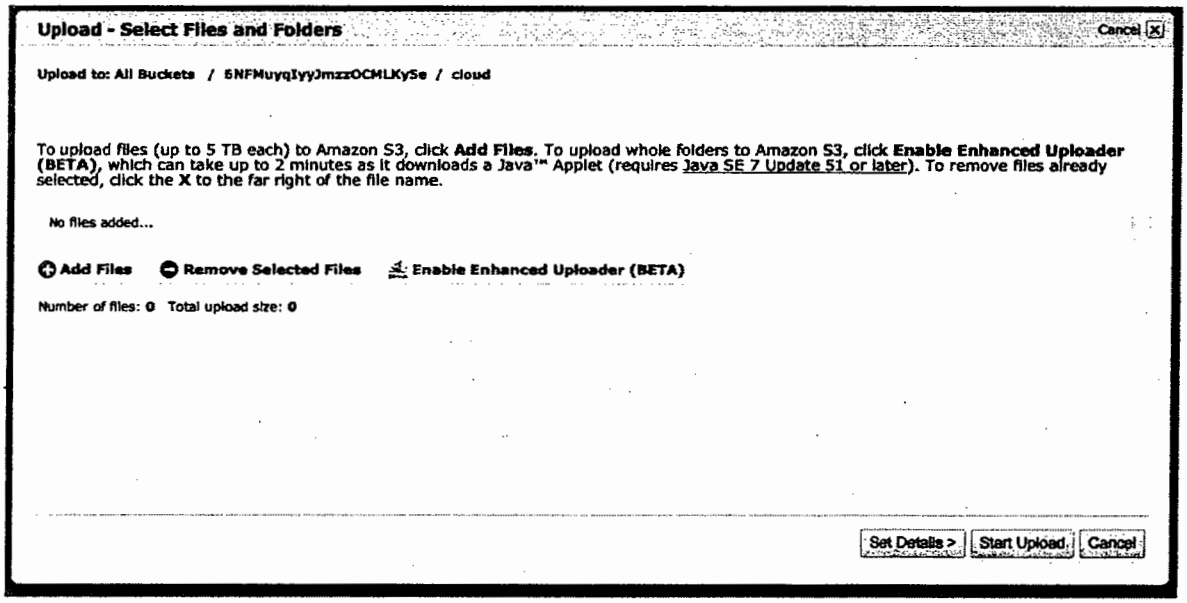
In order to complete this lab step, you have to upload the vepsun-logo.png file into the previously created folder.

You can download it from the following link: https://s3-us-west-2.amazonaws.com/vepsun-labs/scripts/s3/vepsun-logo.png

Click on the *cloudfolder* folder, and wait until the page reloads.

Click the **Upload** button.

The **Upload - Select Files and Folders** dialog box appears. Add the *vepsun-logo.png* file that you downloaded.



Click **Start Upload**, and then wait until it is uploaded.

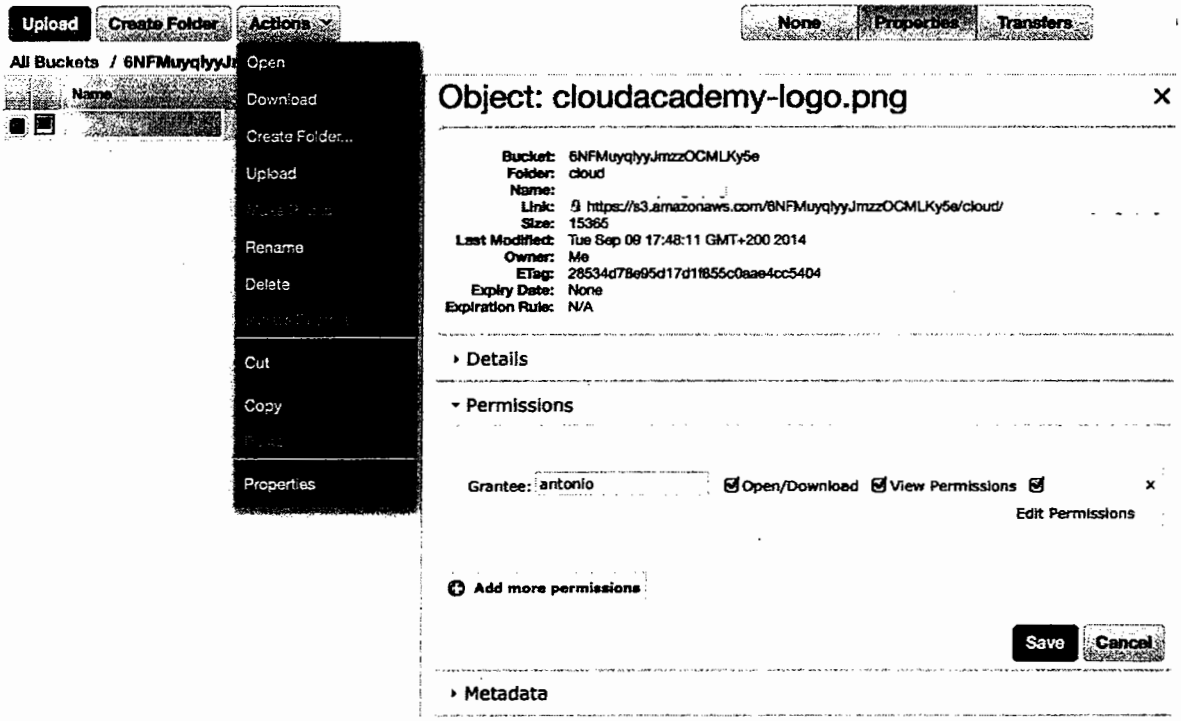
STEP 5: Set an S3 file to be publicly accessible

All uploaded files are **private** by default and they can only be viewed or edited by you.

In order to complete this lab step, you must make the uploaded vepsun-logo.png file public.

Select the *vepsun-logo.png* file

Click on the *Action* button, then select *Make Public.*



STEP 6: Change metadata of an S3 object

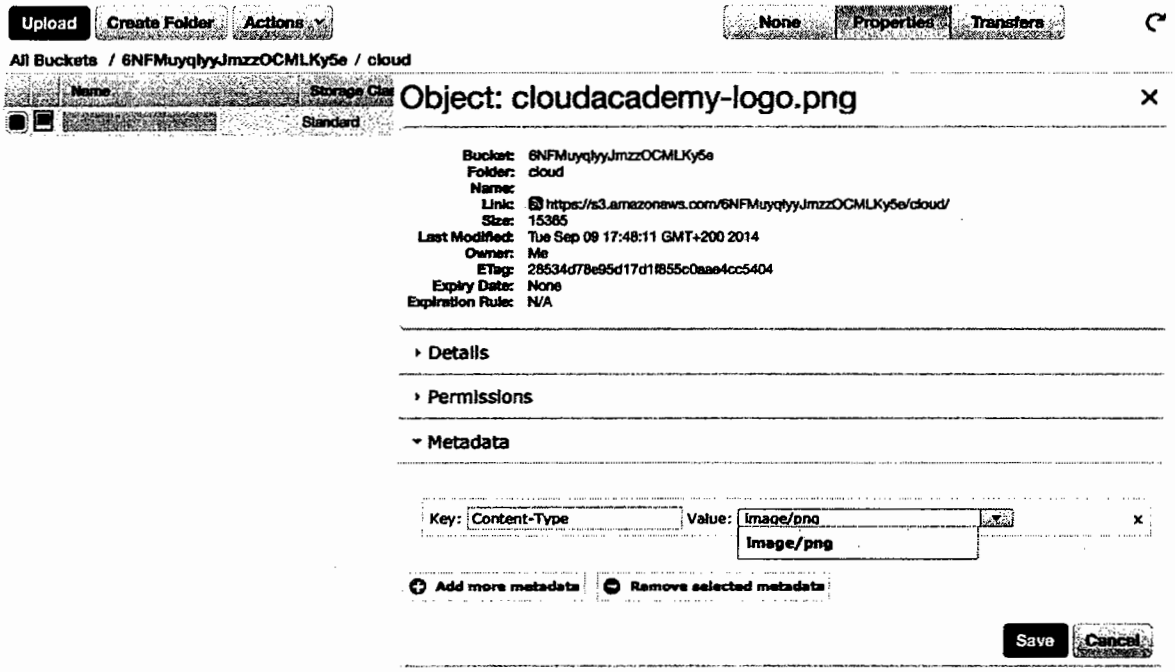
Each object in Amazon S3 has a set of key/value pairs representing its metadata. There are two types of metadata: "System metadata" (e.g. Content-Type and Content-Length) and custom "User metadata". User metadata is stored with the object and returned with it.

Let's change the Content-Type of our image to "text/plain"

Click on the *vepsun-logo.png* object, select the **Properties** pane and then click**Metadata**.

Select **text/plain** as the new **Content-Type** value.

Click on **Save**.

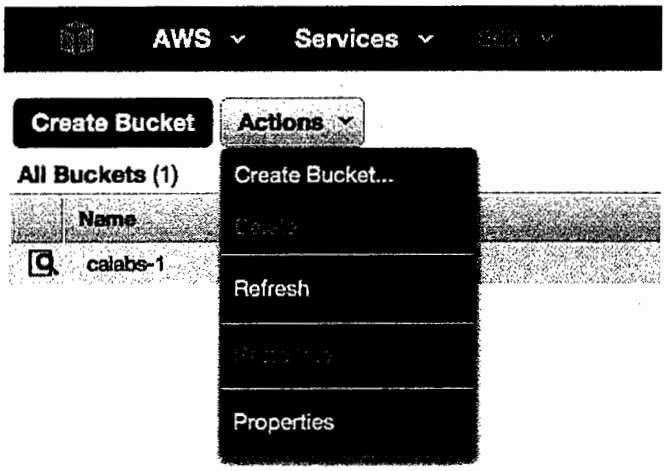


STEP 7: Destroy an S3 bucket

You can destroy an S3 bucket using the S3 dashboard, and all objects within the bucket will be deleted.

Select the S3 service from the Management Console dashboard:

From the S3 console dashboard, select the bucket **calabs-bucket**. and then click the **Actions** gray button.



Click **Delete** from the drop-down menu and then confirm the action when the confirmation popup appears.

If you receive an error message, check and see if the bucket is empty and try again.