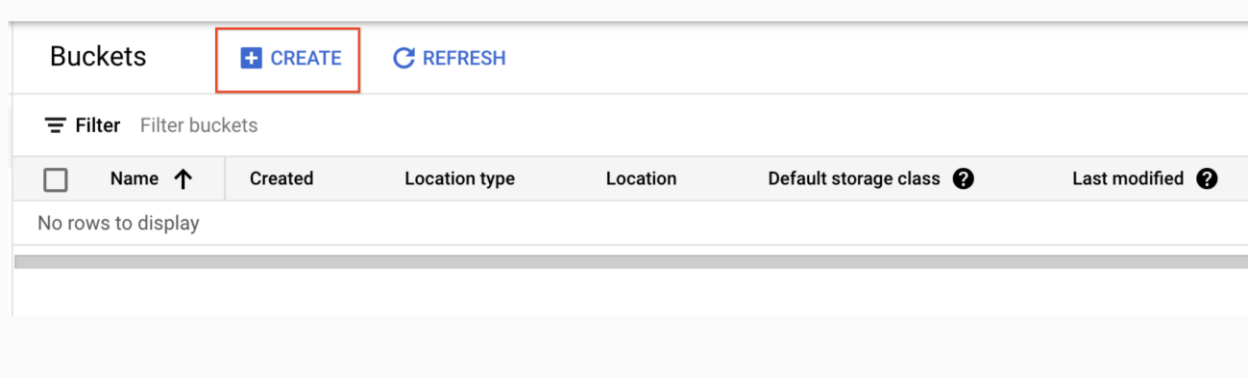
# Cloud Storage: Qwik Start - Cloud Console

**Task 1. Create a bucket**

*Buckets* are the basic containers that hold your data in Cloud Storage.

To create a bucket:

1. In the Cloud console, go to **Navigation menu (☰)** > **Cloud Storage** > **Buckets**.
2. Click **+ Create**:




3. Enter your bucket information and click **Continue** to complete each step:

    a. **Name your bucket:** Enter a unique name for your bucket. For this lab, you can use your **Project ID** as the bucket name because it will always be unique.

**Bucket naming rules:**

    b. Do not include sensitive information in the bucket name, because the bucket namespace is global and publicly visible.

    c. Bucket names must contain only lowercase letters, numbers, dashes (-), underscores (_), and dots (.). Names containing dots require verification.

    d. Bucket names must start and end with a number or letter.

    e. Bucket names must contain 3 to 63 characters. Names containing dots can contain up to 222 characters, but each dot-separated component can be no longer than 63 characters.

    f. Bucket names cannot be represented as an IP address in dotted-decimal notation (for example, 192.168.5.4).

g. Bucket names cannot begin with the "goog" prefix. Bucket names cannot contain "google" or close misspellings of "google".*

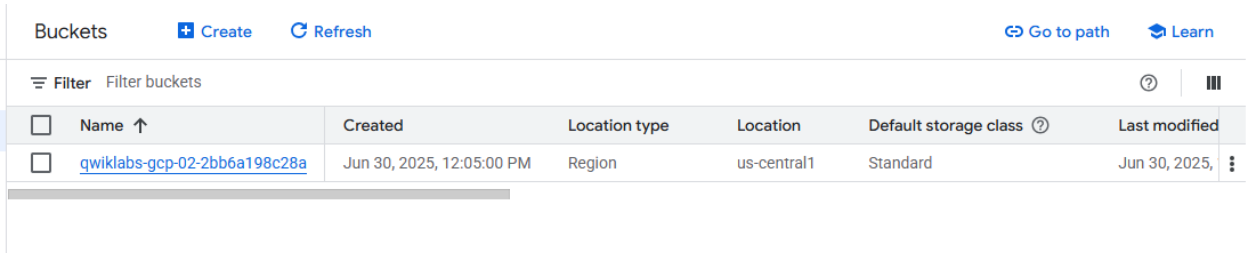
h. Also, for DNS compliance and future compatibility, you should not use underscores (_) or have a period adjacent to another period or dash. For example, ".." or "-." or ".-" are not valid in DNS names.

i. Choose **Region** for **Location type** and <filled in at lab start> for **Location**.

j. Choose **Standard** for **default storage class**.

k. Choose **Uniform** for **Access control** and **uncheck** *Enforce public access prevention on this bucket* to turn it off.

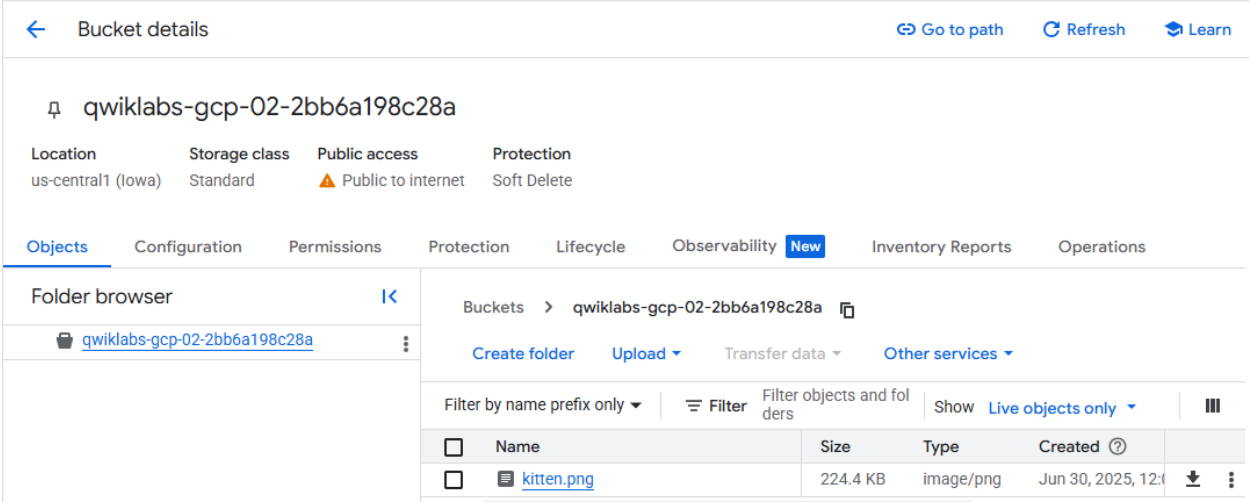
4. Leave the rest of the fields as their default values and click **Create**.




**Task 2. Upload an object into the bucket**

1. Right-click on the image above and download it to your computer. Save the image as **kitten.png**, renaming it on download.
2. In the Cloud Storage browser page, click the name of the bucket that you created.
3. In the **Objects** tab, click **Upload** > **Upload files**.

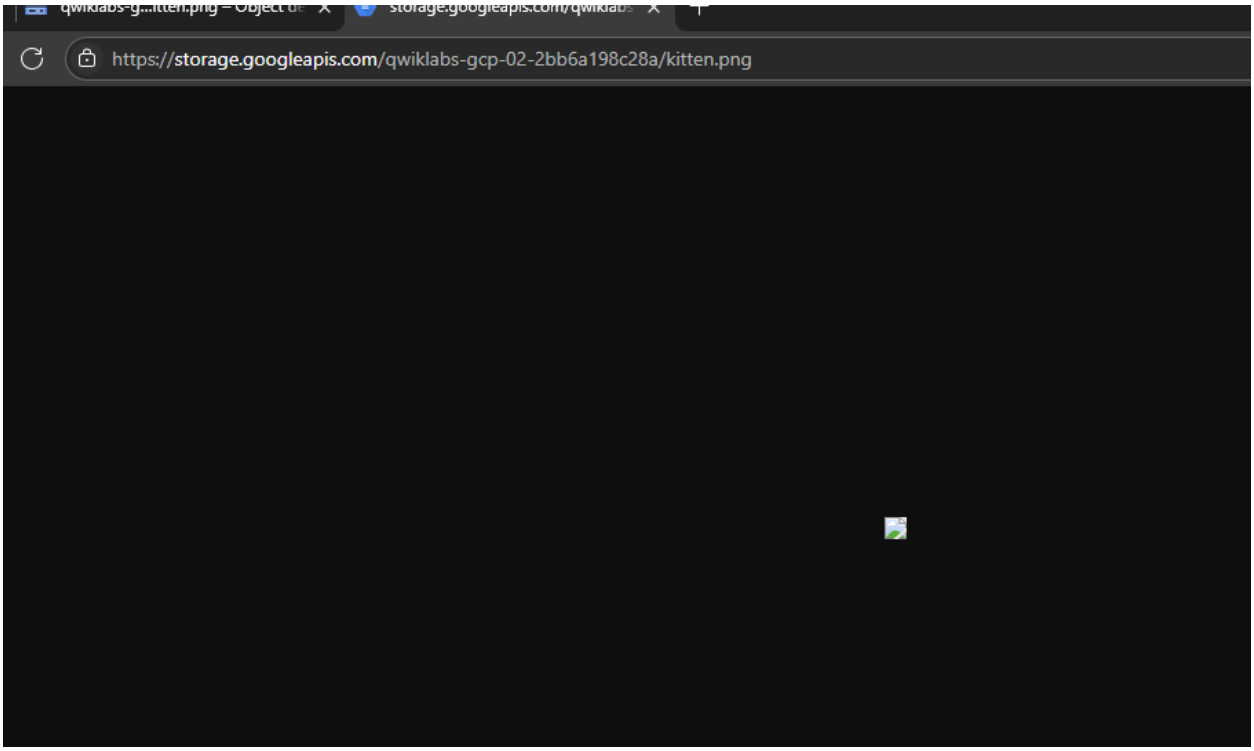
4. In the file dialog, go to the file that you downloaded and select it.
5. Ensure the file is named **kitten.png**. If it is not, click the **three dot** icon for your file, select **Rename** from the dropdown, and rename the file to **kitten.png**.




**Task 3. Share a bucket publicly**

To allow public access to the bucket and create a publicly accessible URL for the image:

1. Click the **Permissions** tab above the list of files.
2. Ensure the view is set to **Principals**. Click **Grant Access** to view the **Add principals** pane.
3. In the **New principals** box, enter *allUsers*.
4. In the **Select a role** drop-down, select **Cloud Storage** > **Storage Object Viewer**.
5. Click **Save**.
6. In the **Are you sure you want to make this resource public?** window, click **Allow public access**.
7. To verify, click the **Objects** tab to return to the list of objects. Your object's **Public access** column should read **Public to internet**.
8. Press the **Copy URL** button for your object and paste it into a separate tab to view your image.




**Task 4. Create folders**

1. In the **Objects** tab, click **Create folder**.
2. Enter **folder1** for **Name** and click **Create**.

You should see the folder in the bucket with an image of a folder icon to distinguish it from objects.

Create a subfolder and upload a file to it:

3. Click **folder1**.
4. Click **Create folder**.
5. Enter **folder2** for **Name** and click **Create**.
2. Click **folder2**.
3. Click **Upload** > **Upload files**.
4. In the file dialog, navigate to the screenshot that you downloaded and select it.

**Task 5. Delete a folder**

1. Click the arrow next to **Bucket details** to return to the buckets level.

2. Select the bucket.
3. Click on the **Delete** button.
4. In the window that opens, type DELETE to confirm the deletion of the folder.
5. Click **Delete** to permanently delete the folder and all objects and subfolders in it.