



Create Cloud Storage Using AWS Simple Storage Service (S3)

Amazon Web Services (AWS) S3 is [object-based storage](#), where data (objects) are stored in S3 *buckets*. The AWS S3 *Standard* storage class provides safe, scalable, fast, and inexpensive storage and retrieval of any amount of data. The *Standard* class is designed for data that are accessed frequently. Other storage class options are available for different data storage requirements. [Read more](#) about the different types of storage available and their uses.

S3 has a basic monthly cost for storing data and this varies by AWS [region](#). Transfer charges are applied for data moved out of an S3 bucket to the Internet, as well as data transferred between AWS regions, though interregional transfer charges are much less. There are no charges for data uploaded to a bucket or transferred between S3 buckets (or any AWS services) in the *same region*.

This recipe demonstrates the basic concepts of S3 buckets using the *Amazon S3 console*.

Important to remember: There are no charges for creating an S3 bucket, but there are costs for storing data (objects) and transferring data out of a bucket.

Overview of the steps described in this recipe:

- A. Prerequisites
- B. Steps for creating an S3 bucket
- C. Adding a file to a bucket
- D. Download a file from a bucket
- E. Working with files in a bucket
- F. Deleting a bucket

A) Prerequisites

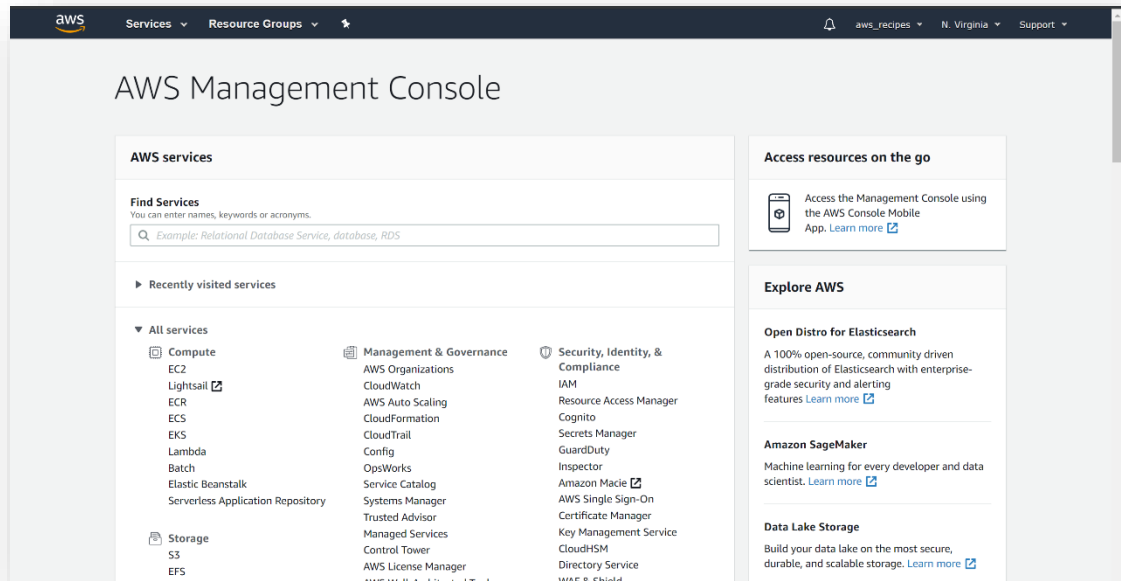
- You must have an AWS account. If you don't have an account, click [HERE](#) to create one.


Note: You will need to provide credit card information for your new account.

B) Steps for creating an S3 bucket

1. [SIGN IN](#) to AWS. The *AWS Management Console* will open (Fig. 1).

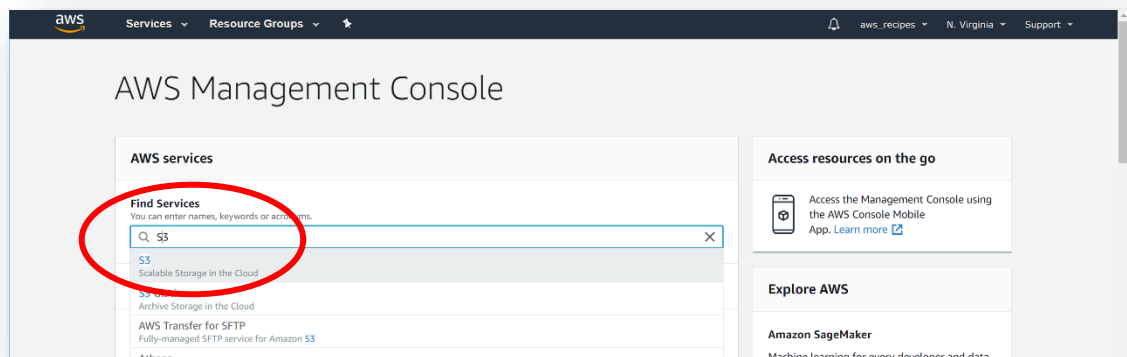
Figure 1



Hint: Clicking on the  logo in the upper left corner will open the *Management Console* from any AWS window.

2. Under **Find Services**, type S3 in the search box and click on “S3 Scalable Storage in the Cloud” (Fig. 2).

Figure 2



3. In the S3 console, click on **Create bucket** (Fig. 3).

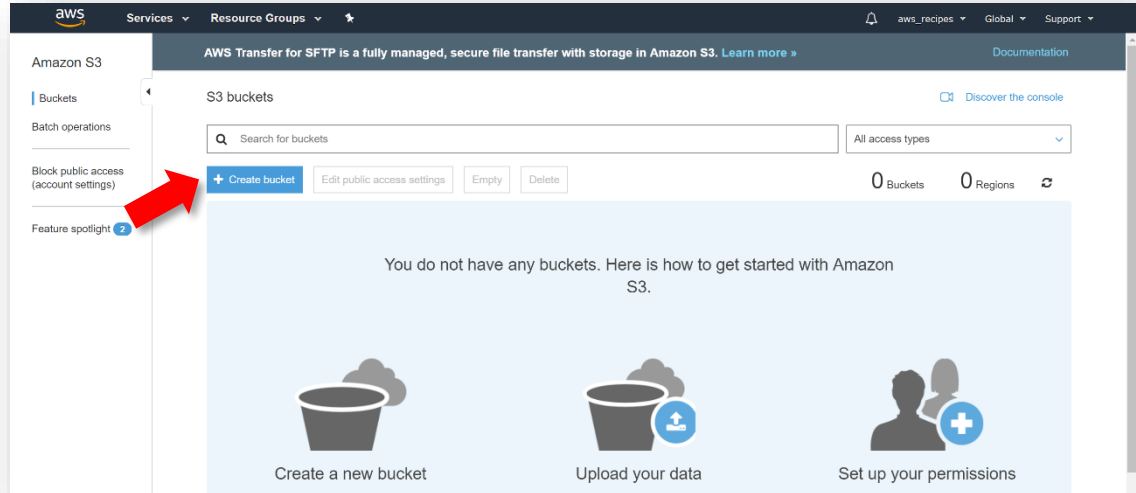


Figure 3

4. In the *Create bucket* pop-up window, enter a **Bucket name** (1) (Fig. 4).

- The bucket name has to be unique among all AWS bucket names.
- Once created, the name cannot be changed.
- Choose a name that's descriptive of what the contents will be, particularly if you will be using more than one bucket.

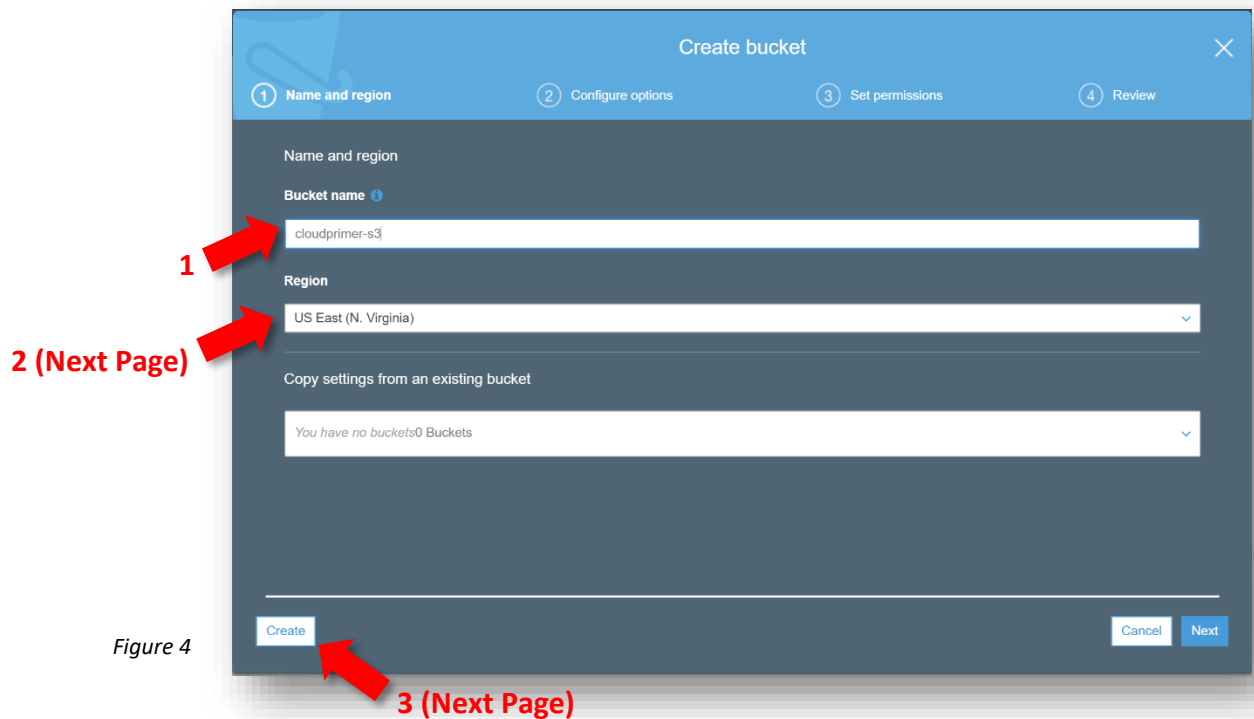
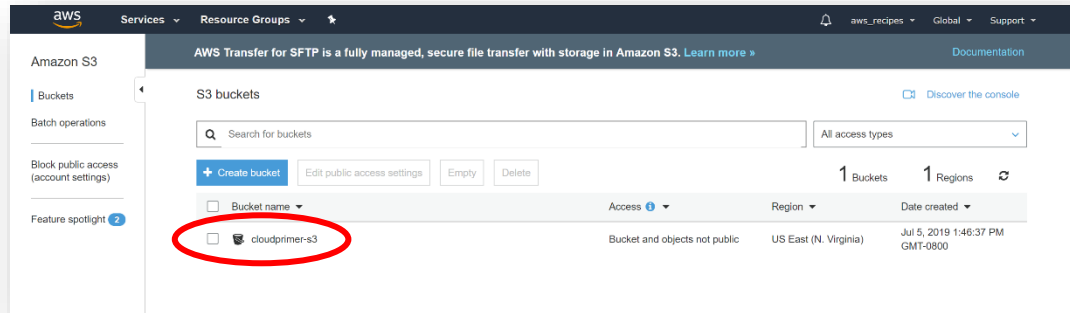


Figure 4

5. For **Region (2)** (Fig. 4) select *US East (N. Virginia)* for this recipe.
 - Remember, there are no costs for data that are transferred between AWS services *within the same region*. So, for example, if your bucket will be used to store data to be processed by an EC2 instance, make sure both are located in the same region.
6. Click **Create (3)** (Fig. 4).
 - Your new bucket is displayed in the *S3 buckets* console (Fig. 5).

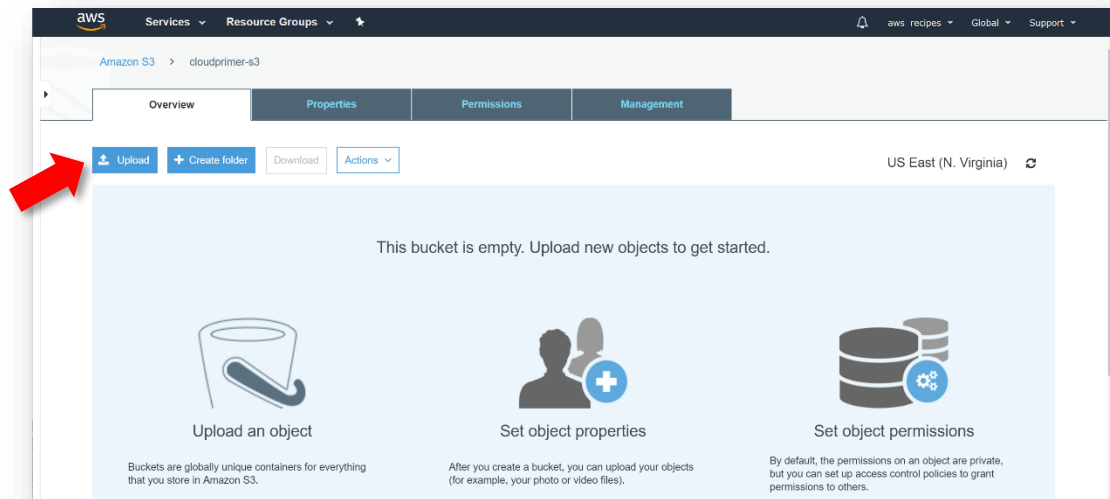
Figure 5



C) Adding a file to a bucket

1. In the *S3 buckets console*, click on the bucket name to open the bucket (Fig. 5).
 - The bucket contents windows shows that the bucket is empty (Fig. 6).

Figure 6



2. Click on **Upload** (Fig. 6).

3. In the *Upload* pop-up window, you have the option to drag and drop files into the bucket, or to click on **Add files** and navigate to the location of the files on your computer (Fig. 7).

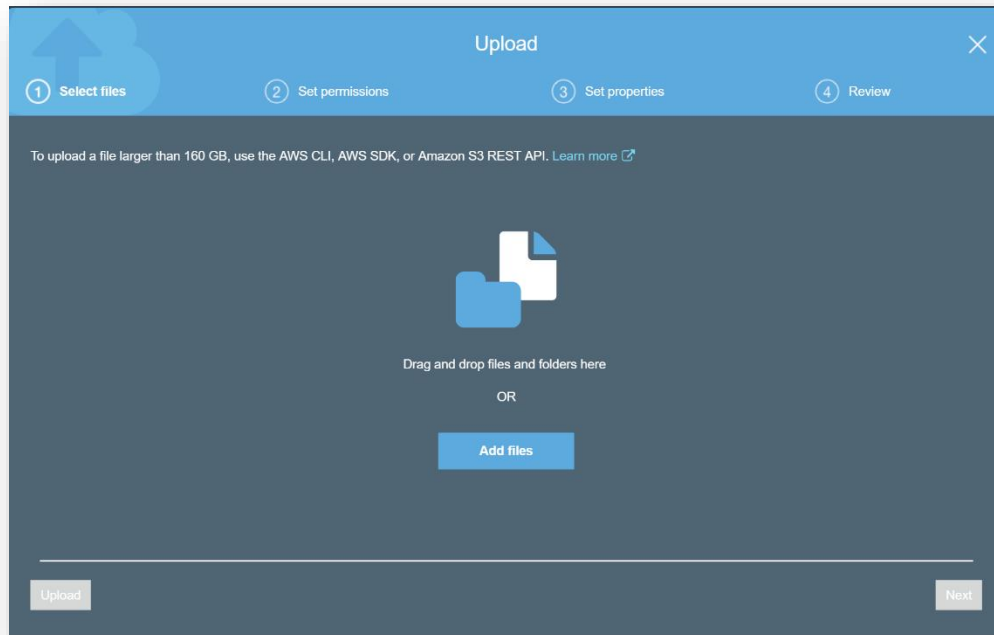


Figure 7

4. When you have selected the files to add to your bucket, click on **Upload** (Fig 8).

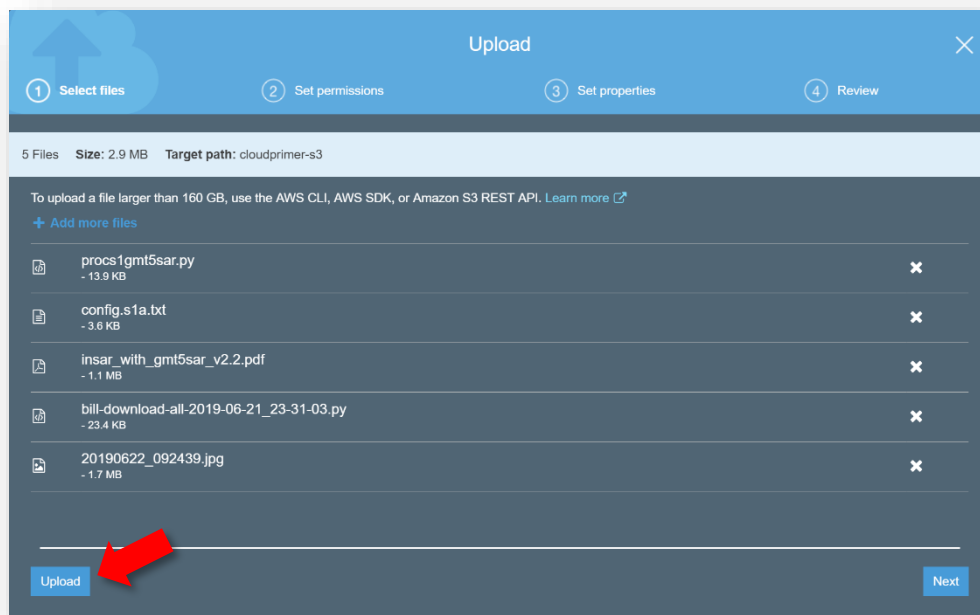


Figure 8

- When the upload is complete, the files appear in your bucket (Fig. 9).

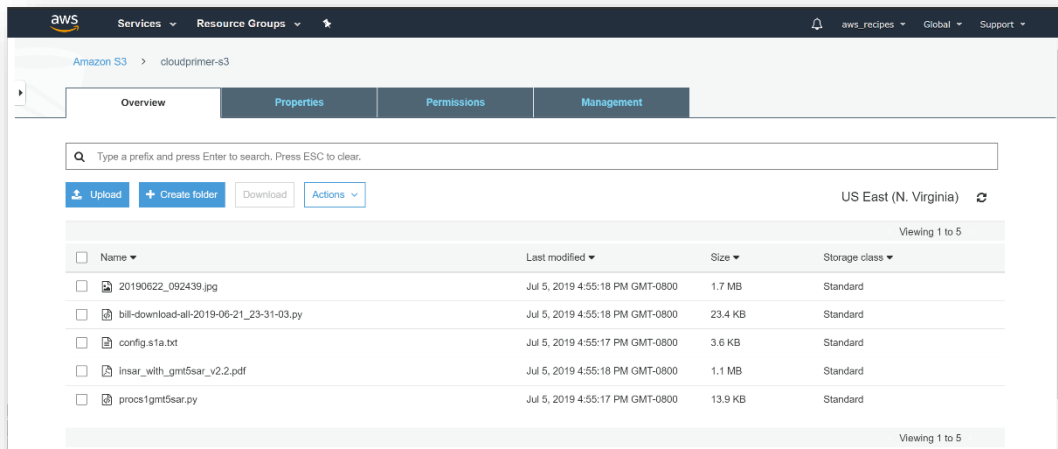


Figure 9

- Select the check box next to a filename to view information on the file (Fig. 10).

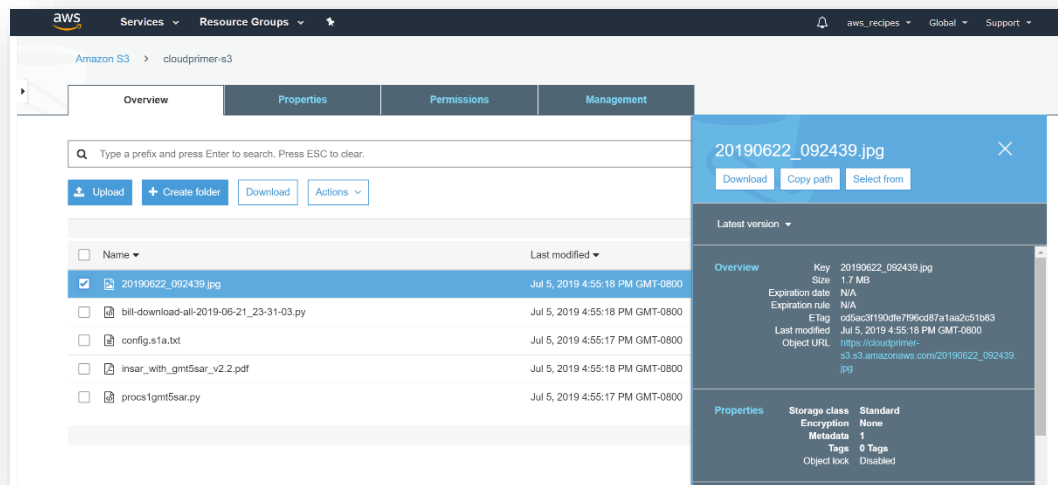


Figure 10

D) Download a file from a bucket

- Open a bucket to display the contents.
- Check the box in front of a file to open the file information window (Fig. 10).
- Click on **Download** (Fig. 11).

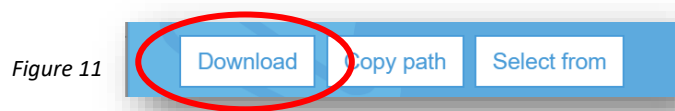


Figure 11

E) Working with files in a bucket

- Files can be organized in a bucket by creating a folder and copying and pasting files into the folder.
 - Click on **Create folder** (1), give the folder a *name* (2), then click **Save** (3) (Fig. 12).

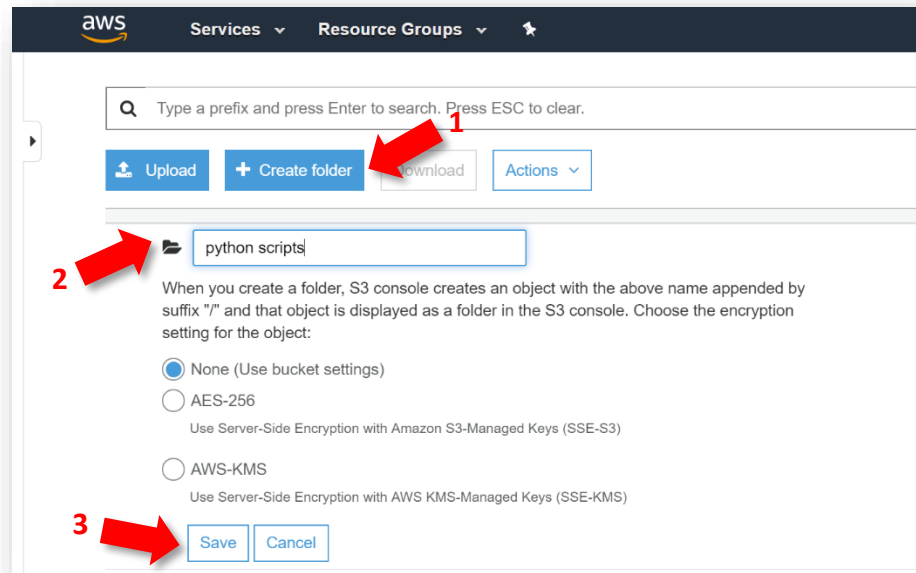


Figure 12

- Check the box in front of the file(s) you want to move to the new folder (**1**) (Fig. 13).

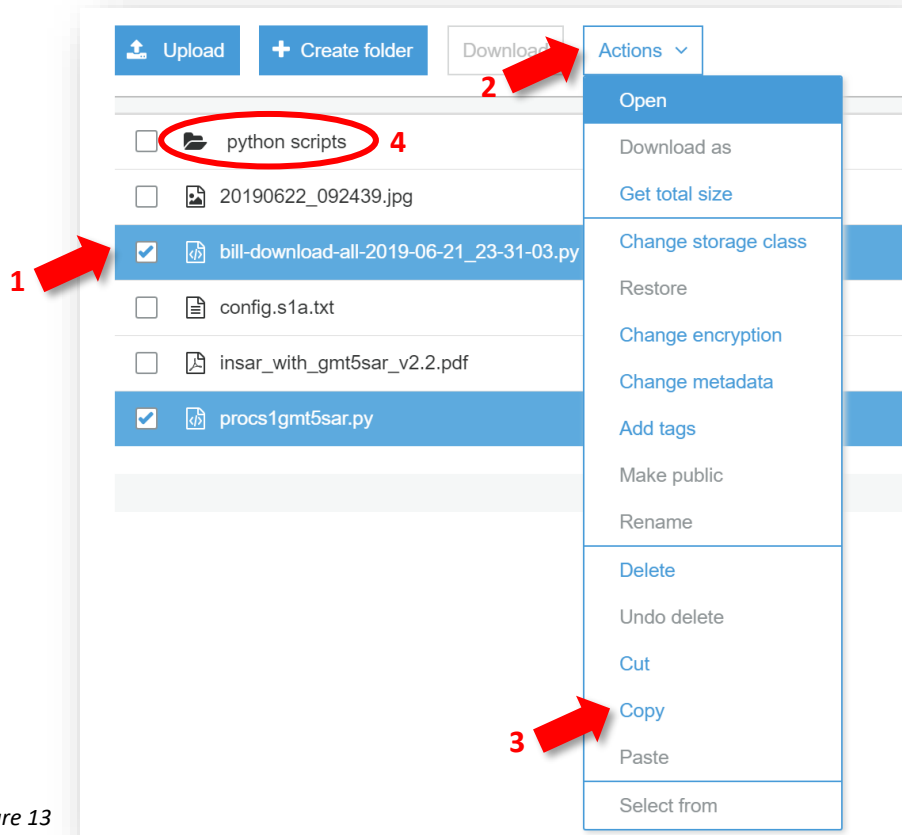


Figure 13

- Click on **Actions** (**2**) to open the dropdown menu, then click **Copy** (**3**) (Fig. 13).
- Click on the *folder name* to open the folder (**4**) (Fig.13).
- Click on **Actions**, then click **Paste**.
- Use the browser back arrow to return to the main level of the bucket (or use the breadcrumbs at the top of the bucket window to move one-level up).
- Select the file(s) you moved, click on **Actions**, then click **Delete**.
 1. Confirm that you want to delete the files in the *Delete objects* pop-up window. Click **Delete** (Fig. 14).

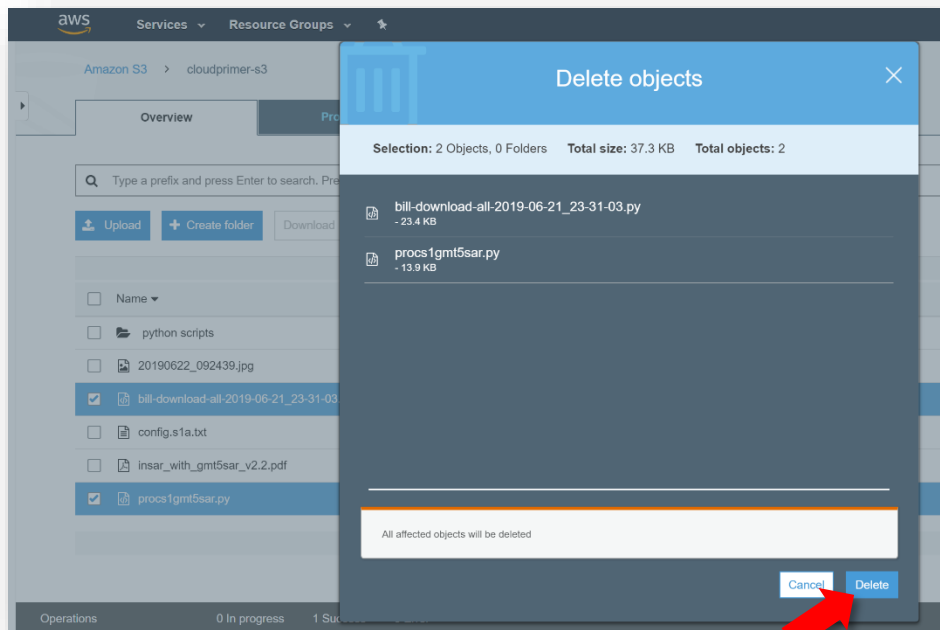


Figure 14

F) Deleting a bucket

Note: Deleting a bucket deletes the bucket as well as its contents. If you want to keep the bucket for future use and preserve the name, you can delete the content files individually. Or you can *empty* the bucket, which deletes the contents without deleting the bucket.

To delete files from a bucket

1. Use the steps outlined at the end of **Section E**.

To empty a bucket

1. In the S3 *buckets* list, check the box in front of the bucket name (Fig. 15).

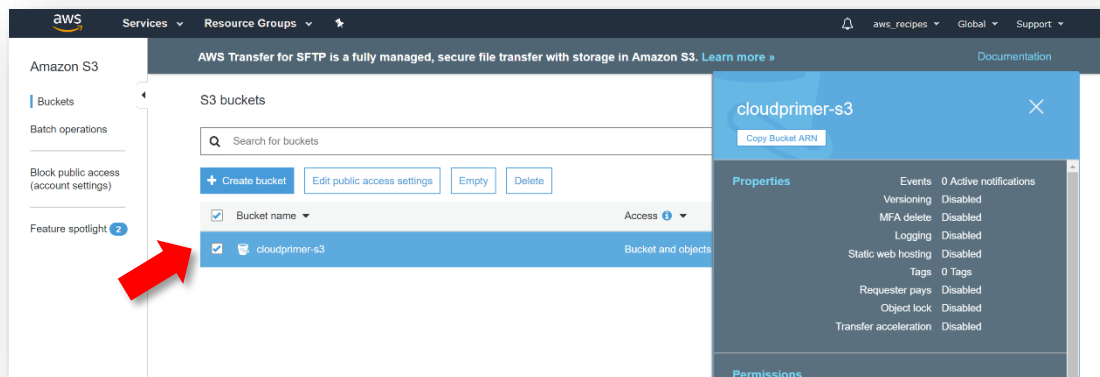
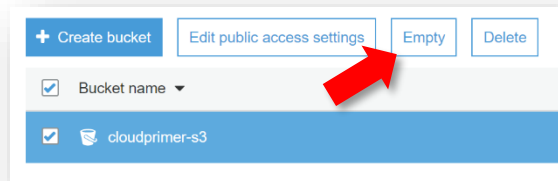


Figure 15

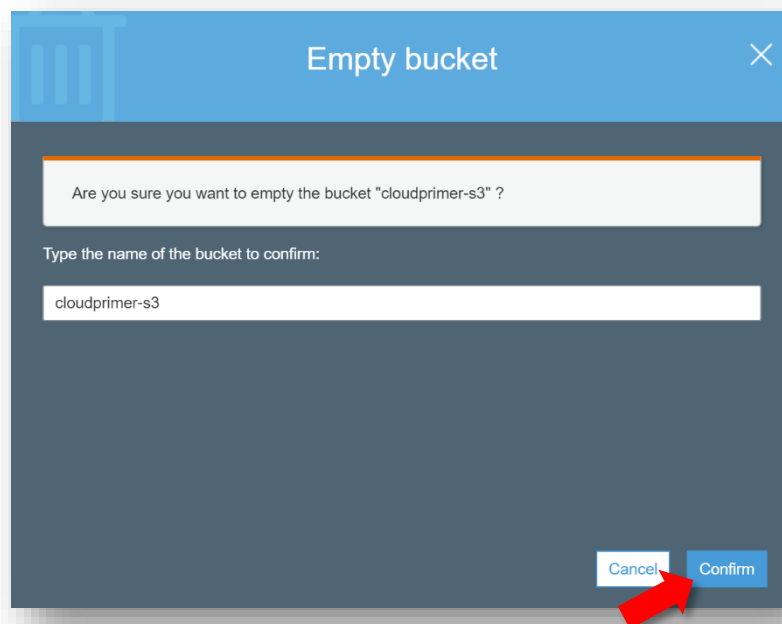
2. Click on **Empty** (Fig.16).

Figure 16



3. In the *Empty bucket* pop-up window, type or copy and paste the bucket name, then click on **Confirm** (Fig. 17).

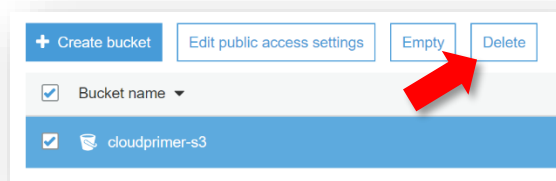
Figure 17



To delete a bucket

1. In the *S3 buckets* list, check the box in front of the bucket name (Fig. 15).
2. Click on **Delete** (Fig. 18).

Figure 18



3. In the *Delete bucket* pop-up window, type or copy and paste the bucket name, then click on **Confirm** (Fig. 19).

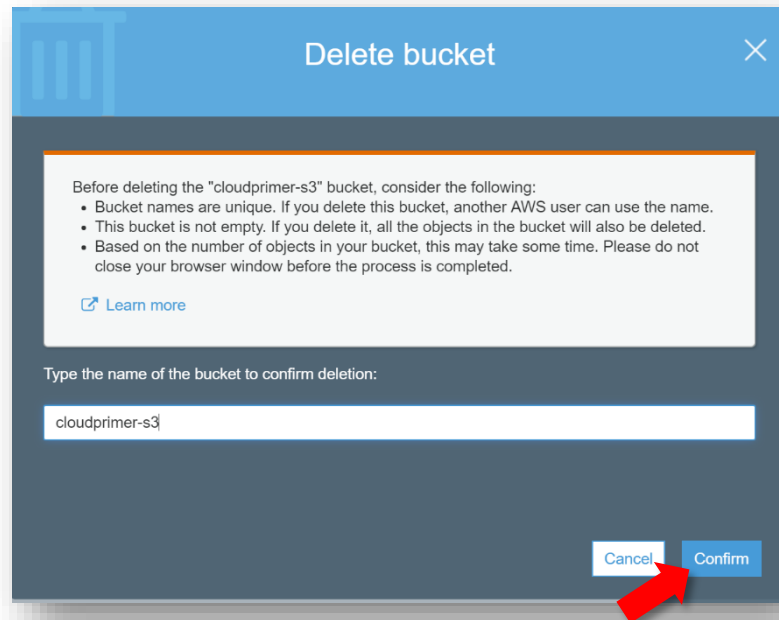


Figure 19