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# Amazon Simple Storage Service

## Getting Started Guide

**API Version 2006-03-01**



## **Amazon Simple Storage Service: Getting Started Guide**

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# Getting Started with Amazon Simple Storage Service

Amazon Simple Storage Service (Amazon S3) is storage for the Internet. You can use Amazon S3 to store and retrieve any amount of data at any time, from anywhere on the web. You can accomplish these tasks using the AWS Management Console, which is a simple and intuitive web interface. This guide introduces you to Amazon S3 and how to use the AWS Management Console to complete the tasks shown in the following figure.



For information on Amazon S3 features, pricing, and to see the FAQ, go to the [Amazon S3 product page](#).

## Amazon S3 Basics

To get the most out of Amazon S3, you need to understand a few simple concepts. Amazon S3 stores data as objects within buckets. An object consists of a file and optionally any metadata that describes that file.

To store an object in Amazon S3, you upload the file you want to store to a bucket. When you upload a file, you can set permissions on the object as well as any metadata.

Buckets are the containers for objects. You can have one or more buckets. For each bucket, you can control access to it (who can create, delete, and list objects in the bucket), view access logs for it and its objects, and choose the geographical region where Amazon S3 will store the bucket and its contents.

# Sign Up for Amazon S3



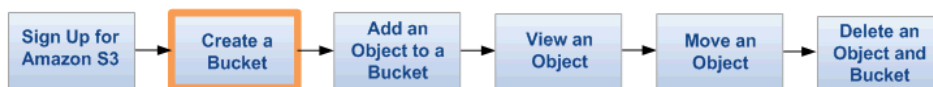
To use Amazon S3, you need an AWS account. If you don't already have one, you'll be prompted to create one when you sign up for Amazon S3. You will not be charged for Amazon S3 until you use it. For information on Amazon S3 features, pricing, and to see the FAQ, go to the [Amazon S3 product page](#).

## To sign up for Amazon S3

1. Go to <https://aws.amazon.com/s3/> and choose **Get started with Amazon S3**.
2. Follow the on-screen instructions.

AWS will notify you by email when your account is active and available for you to use.

# Create a Bucket



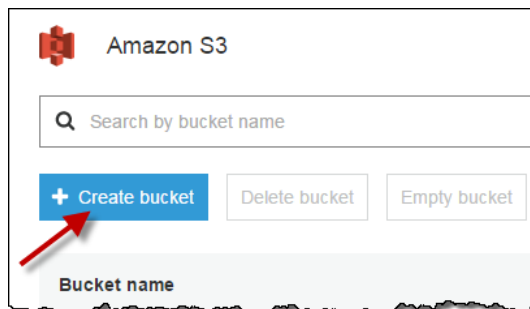
Now that you've signed up for Amazon S3, you're ready to create a bucket using the AWS Management Console. Every object in Amazon S3 is stored in a bucket. Before you can store data in Amazon S3, you must create a bucket.

## Note

You are not charged for creating a bucket; you are charged only for storing objects in the bucket and for transferring objects in and out of the bucket. The charges you will incur through following the examples in this guide are minimal (less than \$1). For more information about storage charges, see [Amazon S3 Pricing](#).

## To create an S3 bucket

1. Sign in to the AWS Management Console and open the Amazon S3 console at <https://console.aws.amazon.com/s3/>.
2. Choose **Create bucket**.



3. In the **Bucket name** field, type a unique DNS-compliant name for your new bucket. (The example screen shot uses the bucket name `admin-created`. You cannot use this name because S3 bucket names must be unique.) Create your own bucket name using the follow naming guidelines:
  - The name must be unique across all existing bucket names in Amazon S3.
  - After you create the bucket you cannot change the name, so choose wisely.
  - Choose a bucket name that reflects the objects in the bucket because the bucket name is visible in the URL that points to the objects that you're going to put in your bucket.

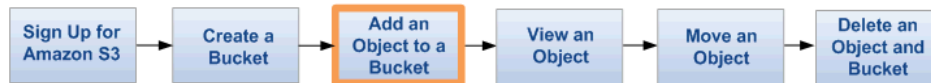
For information about naming buckets, see [Rules for Bucket Naming](#) in the *Amazon Simple Storage Service Developer Guide*.

4. For **Region**, choose US West (Oregon) as the region where you want the bucket to reside.
5. Choose **Create**.

The screenshot shows the 'Create bucket' wizard in the AWS Management Console. The wizard is titled 'Create bucket' and has a close button (X) in the top right corner. It consists of four steps: 1. Name and region, 2. Set properties, 3. Set permissions, and 4. Review. The first step, 'Name and region', is currently active. It contains a 'Bucket name' field with the value 'admin-created' and a 'Region' dropdown menu set to 'US West (Oregon)'. Below these is a section 'Copy settings from an existing bucket' with a 'Select bucket (optional)' dropdown. At the bottom, there are three buttons: 'Create', 'Cancel', and 'Next'. Red arrows point to the 'admin-created' text, the 'US West (Oregon)' dropdown, and the 'Create' button.

You've created a bucket in Amazon S3.

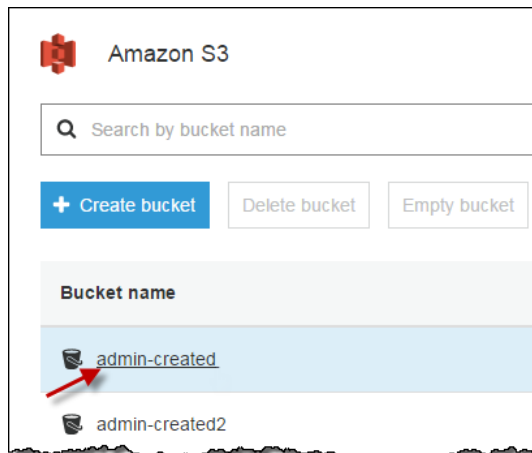
# Add an Object to a Bucket



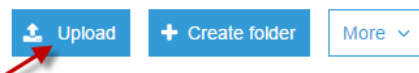
Now that you've created a bucket, you're ready to add an object to it. An object can be any kind of file: a text file, a photo, a video, and so on.

## To upload an object to a bucket

1. In the **Bucket name** list, choose the name of the bucket that you want to upload your object to.

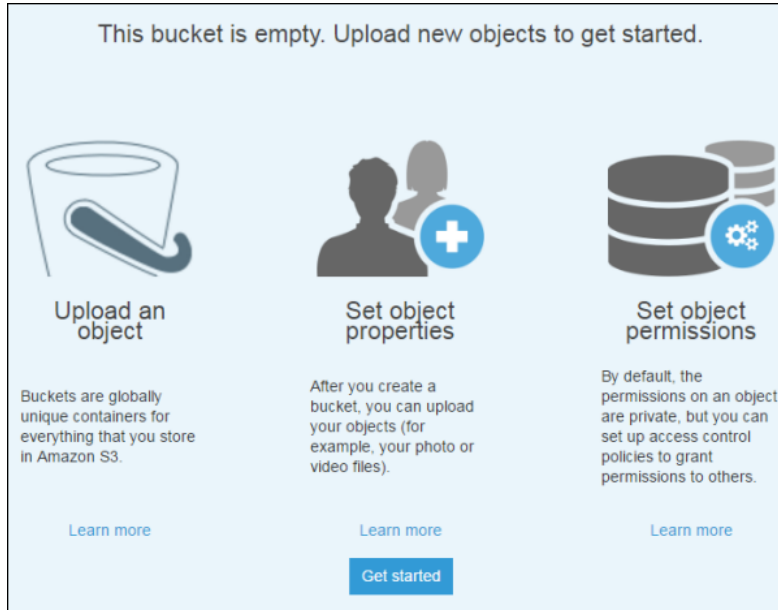


2. Choose **Upload**.

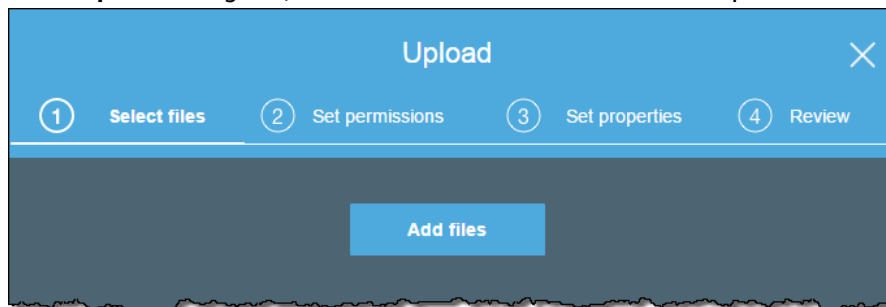


- Or you can choose **Get started**.

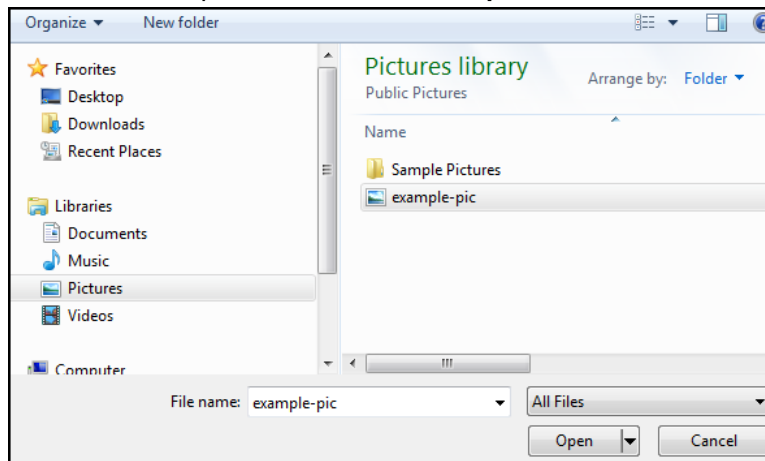




3. In the **Upload** dialog box, choose **Add files** to choose the file to upload.



4. Choose a file to upload, and then choose **Open**.



5. Choose **Upload**.

Upload

1 Select files


2 Set permissions

3 Set properties

4 Review

1 Files    **Size:** 368.0 KB    **Target path:** admin-created

+ Add more files

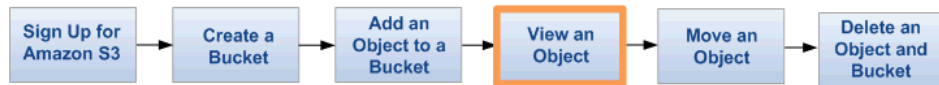
 example-pic.jpg  
- 368.0 KB

×

Upload

Next

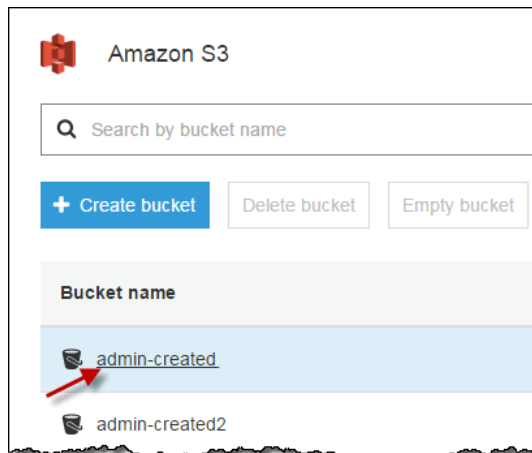
# View an Object



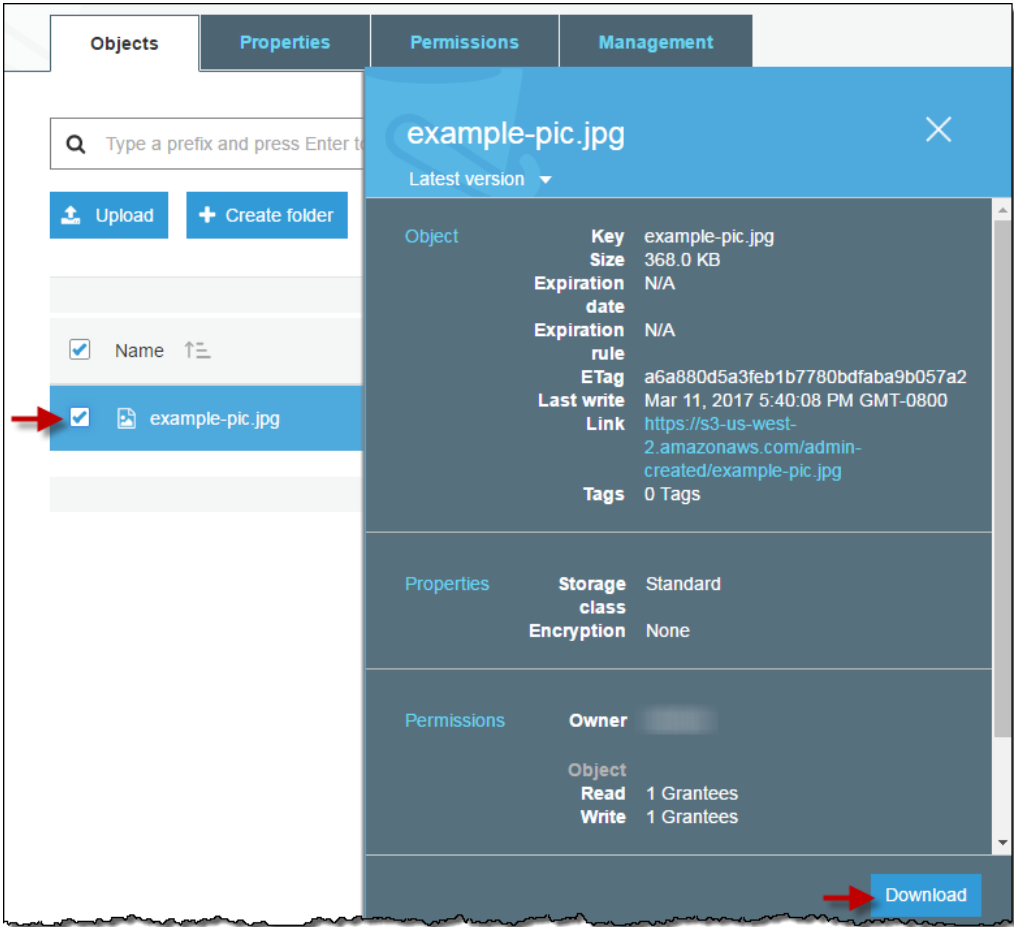
Now that you've added an object to a bucket, you can view information about your object and download the object to your local computer.

## To download an object from a bucket

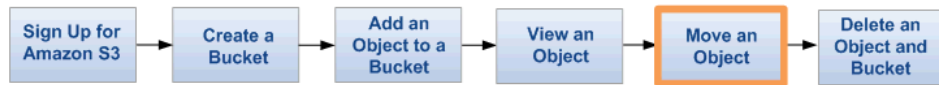
1. In the **Bucket name** list, choose the name of the bucket that you created.



2. In the **Name** list, select the check box next to the object that you uploaded, and then choose **Download** on the object overview panel.



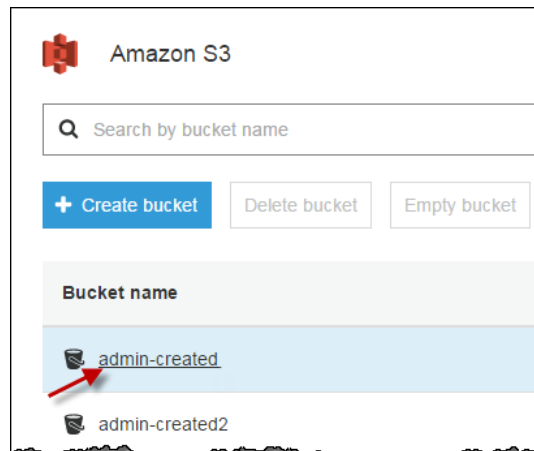
# Move an Object



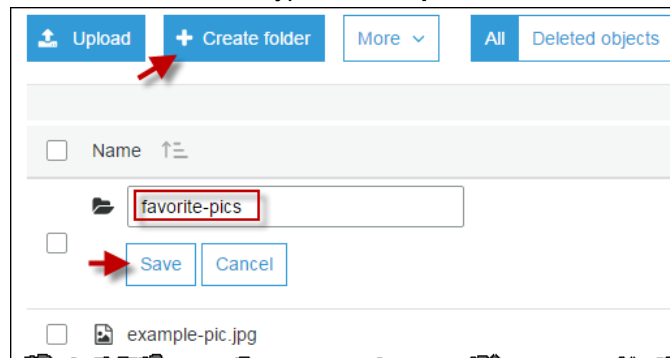
So far you've added an object to a bucket and downloaded the object. Now we create a folder and copy the object into the folder.

## To copy an object

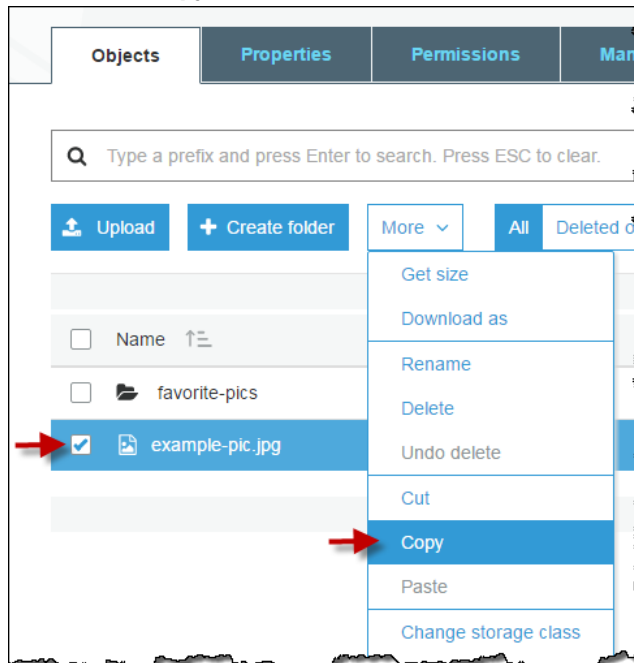
1. In the **Bucket name** list, choose the name of the bucket that you created.



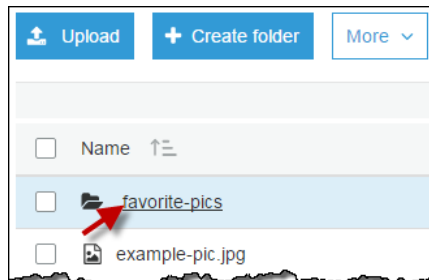
2. Choose **Create Folder**, type **favorite-pics** for the folder name, and then choose **Save**.



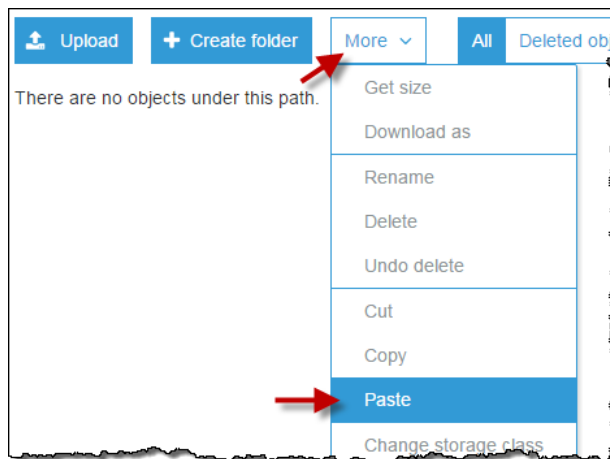
3. In the **Name** list, select the check box next to the object that you want to copy, choose **More**, and then choose **Copy**.



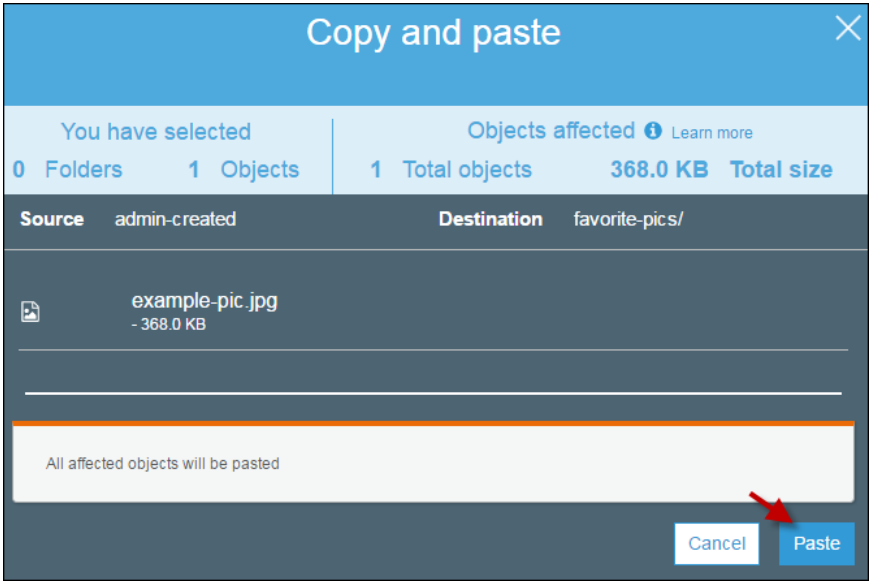
4. In the **Name** list, choose the name of the folder **favorite-pics**.



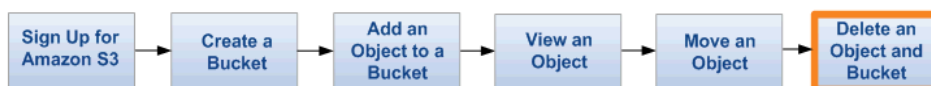
5. Choose **More**, and then choose **Paste**.



6. Choose **Paste**.



# Delete an Object and Bucket



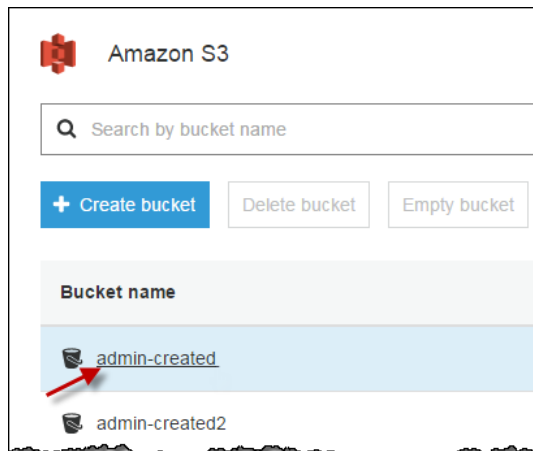
If you no longer need to store the object that you uploaded and made a copy of while going through this guide, you should delete the objects to prevent further charges.

You can delete the objects individually. Or you can empty a bucket, which deletes all the objects in the bucket without deleting the bucket.

You can also delete a bucket and all the objects contained in the bucket. However, if you want to continue to use the same bucket name, don't delete the bucket. We recommend that you empty the bucket and keep it. After a bucket is deleted, the name becomes available to reuse, but the name might not be available for you to reuse for various reasons. For example, it might take some time before the name can be reused and some other account could create a bucket with that name before you do.

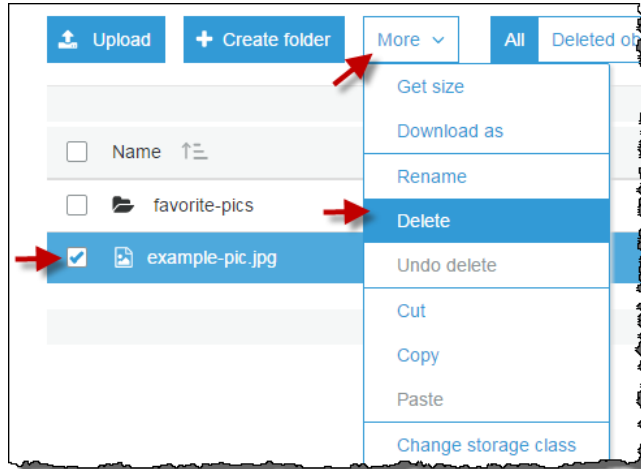
## To delete an object from a bucket

1. In the **Bucket name** list, choose the name of the bucket that you want to delete an object from.

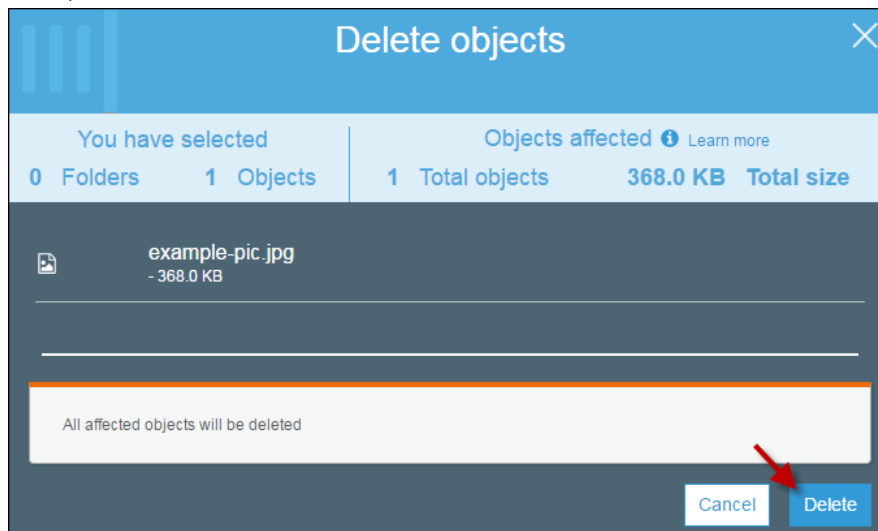


2. In the **Name** list, select the check box next to the object that you want to delete, choose **More**, and then choose **Delete**.





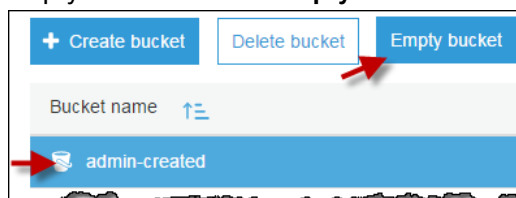
3. In the **Delete objects** dialog box, verify that the name of the object you selected for deletion is listed, and then choose **Delete**.



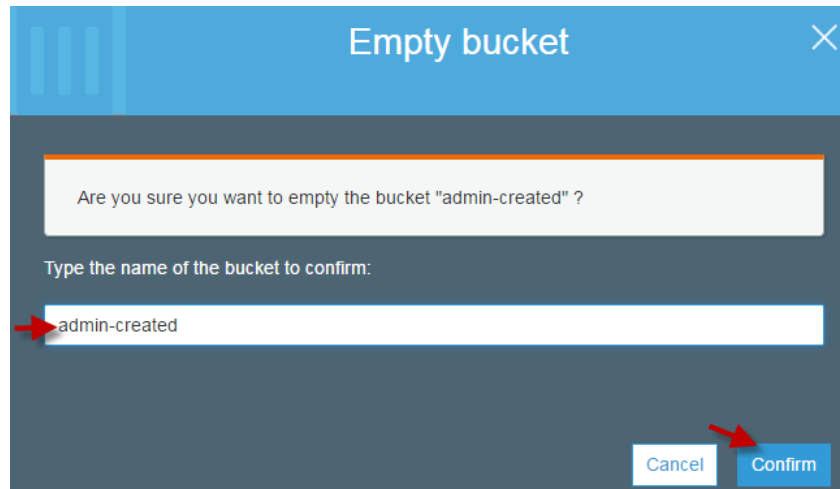
You can empty a bucket, which deletes all the objects in the bucket without deleting the bucket.

### To empty a bucket

1. In the **Bucket name** list, choose the bucket icon next to the name of the bucket that you want to empty and then choose **Empty bucket**.



2. In the **Empty bucket** dialog box, type the name of the bucket for confirmation and then choose **Confirm**.



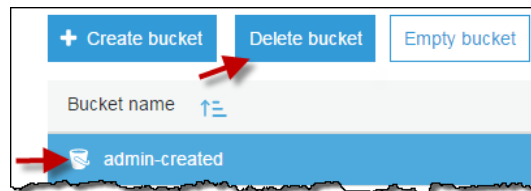
You can delete a bucket and all the objects contained in the bucket.

### Important

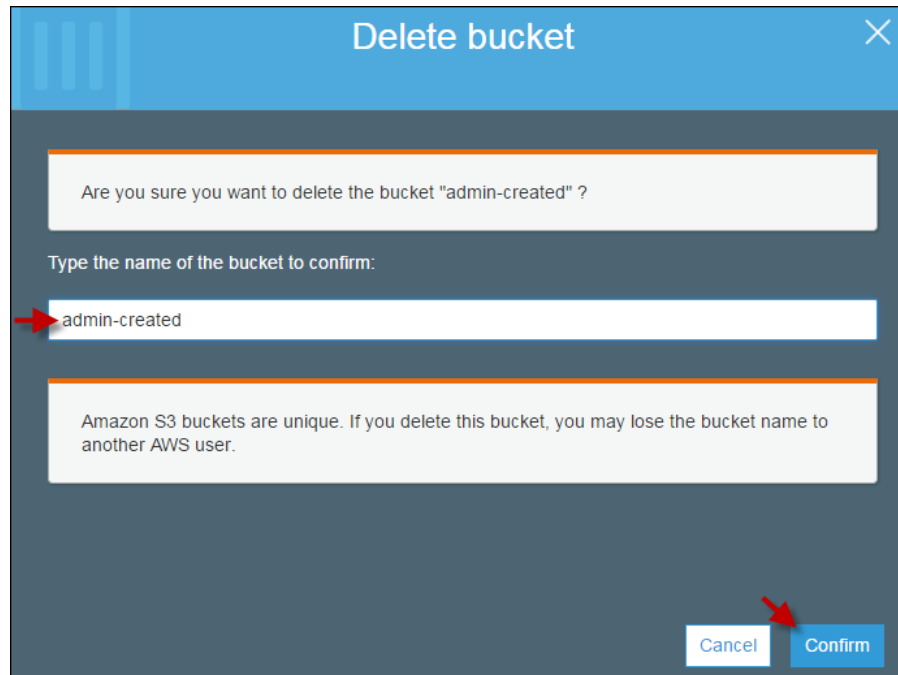
If you want to continue to use the same bucket name, don't delete the bucket. We recommend that you empty the bucket and keep it. After a bucket is deleted, the name becomes available to reuse, but the name might not be available for you to reuse for various reasons.

### To delete a bucket

1. In the **Bucket name** list, choose the bucket icon next to the name of the bucket that you want to delete and then choose **Delete bucket**.



2. In the **Delete bucket** dialog box, type the name of the bucket for delete confirmation and then choose **Confirm**.



The image shows a 'Delete bucket' dialog box with a blue header and a dark gray body. The header contains the title 'Delete bucket' and a close button (X). The body contains three main sections: a confirmation question, a text input field, and a warning message. The confirmation question is 'Are you sure you want to delete the bucket "admin-created" ?'. Below it is a text input field with the text 'admin-created' and a red arrow pointing to it. Below the input field is a warning message: 'Amazon S3 buckets are unique. If you delete this bucket, you may lose the bucket name to another AWS user.' At the bottom right are two buttons: 'Cancel' and 'Confirm', with a red arrow pointing to the 'Confirm' button.

Delete bucket

Are you sure you want to delete the bucket "admin-created" ?

Type the name of the bucket to confirm:

admin-created

Amazon S3 buckets are unique. If you delete this bucket, you may lose the bucket name to another AWS user.

Cancel Confirm

Next, see [Where Do I Go From Here? \(p. 17\)](#).

## Where Do I Go From Here?

In the preceding examples, you learned how to perform some basic Amazon Simple Storage Service (Amazon S3) tasks. For more in-depth information, see one of the following Amazon S3 guides:

- The [Amazon Simple Storage Service Console User Guide](#) to learn more about using the Amazon S3 console.
- The [Amazon Simple Storage Service Developer Guide](#) to find detailed information about Amazon S3 features and code examples to support those features.
- The [Amazon Simple Storage Service API Reference](#) to find details about the Amazon S3 REST API.

The following topics explain various ways in which you can gain a deeper understanding of Amazon S3 so that you can implement it in your applications.

### Topics

- [Common Use Scenarios](#) (p. 17)
- [Considerations Going Forward](#) (p. 18)
- [Advanced Amazon S3 Features](#) (p. 19)
- [Development Resources](#) (p. 19)
- [Reference Resources](#) (p. 20)

## Common Use Scenarios

The AWS Solutions web page lists many of the ways you can use Amazon S3. The following list summarizes some of those ways.

- **Backup and Storage** – Provide data backup and storage services for others.
- **Application Hosting** – Provide services that deploy, install, and manage web applications.
- **Media Hosting** – Build a redundant, scalable, and highly available infrastructure that hosts video, photo, or music uploads and downloads.
- **Software Delivery** – Host your software applications that customers can download.

For more information, go to [AWS Solutions](#).

## Considerations Going Forward

### Topics

- [AWS Account and Security Credentials](#) (p. 18)
- [Security](#) (p. 18)
- [AWS Integration](#) (p. 18)
- [Naming Strategy](#) (p. 18)
- [Pricing](#) (p. 19)

This section introduces you to topics you should consider before launching your own Amazon S3 product.

## AWS Account and Security Credentials

So far you signed up for the service, got an AWS account and security credentials, and then completed a short exercise covering the essential product functions. Now that you're finished with the exercise, we recommend that you check with an administrator or coworker in your organization to determine if he or she already has an AWS account and security credentials for you to use in future interactions with AWS.

If you're an account owner or administrator and want to know more about AWS Identity and Access Management, see the product description at <https://aws.amazon.com/iam> or the technical documentation in the [IAM User Guide](#).

## Security

Amazon S3 provides authentication mechanisms to secure data stored in Amazon S3 against unauthorized access. Unless you specify otherwise, only the AWS account owner can access data uploaded to Amazon S3. For more information about how to manage access to buckets and objects, go to [Managing Access Permissions to Your Amazon S3 Resources](#) in the *Amazon Simple Storage Service Developer Guide*.

You can also encrypt your data before uploading it to Amazon S3.

## AWS Integration

You can use Amazon S3 alone or in concert with one or more other Amazon products. The most common products used with Amazon S3 are:

- [Amazon EC2](#)
- [Amazon Elastic MapReduce](#)
- [Amazon SQS](#)
- [Amazon CloudFront](#)
- [Amazon DevPay](#)

## Naming Strategy

Plan your bucket names in advance. The location of your data in Amazon S3 is a URL, generally of the form: `http://[bucket-name].s3.amazonaws.com/[key]`. The bucket and key names should be descriptive

of the objects. Each bucket is a namespace. Within one bucket, key names cannot clash. Before naming objects in buckets, you should develop a naming strategy.

## Pricing

Learn the pricing structure for storing and transferring data on Amazon S3. For more information, go to [Amazon S3 Pricing](#).

## Advanced Amazon S3 Features

The examples in this guide show how to accomplish the basic tasks of creating a bucket, uploading and downloading data to and from it, and moving and deleting the data. The following table summarizes some of the most common advanced functionality offered by Amazon S3. Note that some advanced functionality is not available in the AWS Management Console and requires that you to use the Amazon S3 API. All advanced functionality and how to use it is described in the [Amazon Simple Storage Service Developer Guide](#).

Link	Functionality
<a href="#">Using Amazon DevPay with Amazon S3</a>	Learn how you can use Amazon DevPay to charge customers that access the data you store on Amazon S3.
<a href="#">Requester Pays Buckets</a>	Learn how to configure a bucket so that a customer pays for the downloads they make.
<a href="#">Using BitTorrent With Amazon S3</a>	Use BitTorrent, which is an open, peer-to-peer protocol for distributing files.
<a href="#">Versioning</a>	Learn about Amazon S3's Versioning capabilities.
<a href="#">Hosting Static Websites</a>	Learn how to host a static website on Amazon S3.
<a href="#">Object Lifecycle Management</a>	Learn how to manage the lifecycle of objects in your bucket. Lifecycle management includes expiring objects and archiving objects (transitioning objects to the <code>GLACIER</code> storage class).

## Development Resources

To help you build applications using the language of your choice, we provide the following resources:

- **Sample Code and Libraries** – The AWS Resource Center has sample code and libraries written especially for Amazon S3.

You can use these code samples as a means of understanding how to implement the Amazon S3 API. For more information, go to <https://aws.amazon.com/code/Amazon-S3>.

- **Tutorials** – Our Resource Center also offers more Amazon S3 tutorials.

These tutorials provide a hands-on approach for learning Amazon S3 functionality. For more information, go to <https://aws.amazon.com/articles/Amazon-S3>.

- **Customer Forum** – We recommend you review the Amazon S3 forum to get an idea of what other users are doing and to benefit from the questions they've asked.

The forum can help you understand what you can and can't do with Amazon S3. The forum also serves as a place for you to ask questions that other users or Amazon representatives might answer. You can use the forum to report issues with the service or the API. For more information, go to [Discussion Forum](#).

- **Case Studies** – To see code for applications that combine multiple Amazon products, including Amazon S3, go to [Customer Apps: Amazon Simple Storage Service](#).

## Reference Resources

The following list shows additional resources you can use to further your understanding of Amazon S3.

- The [Amazon Simple Storage Service Console User Guide](#) describes all of the AWS Management Console functions related to Amazon S3.
- The [Amazon Simple Storage Service Developer Guide](#) provides a detailed discussion of the service.

It includes an architectural overview, detailed concept descriptions, and procedures for using the API.

- The [Amazon Simple Storage Service API Reference](#) provides a detailed discussion of the actions and parameters in Amazon S3.
- The [Amazon Simple Storage Service Quick Reference Card](#) provides quick access to important Amazon S3 API operations and functionality.
- The AWS Developer Resource Center is the landing page for Amazon S3 code samples, tutorials, documentation, links to customer forums, pricing policies, and other information to help you build innovative applications with Amazon S3.

For more information, go to [the AWS home page](#).

- The Service Health Dashboard shows you the status of the Amazon S3 web service.

The dashboard shows you whether Amazon S3 (and all other AWS products) are functioning properly. For more information, go to [Service Health Dashboard](#).

# About This Guide

This is the *Amazon Simple Storage Service Getting Started Guide*.

Amazon Simple Storage Service is frequently referred to within this guide as "Amazon S3." All copyrights and legal protections still apply.