



What Is S3?



Object Storage

S3 provides secure, durable, highly scalable object storage.



Scalable

S3 allows you to store and retrieve any amount of data from anywhere on the web at a very low cost.



Simple

Amazon S3 is easy to use, with a simple web service interface.



S3 Basics



Unlimited Storage

The total volume of data and the number of objects you can store is unlimited.



Objects up to 5 TB in Size

S3 objects can range in size from a minimum of 0 bytes to a maximum of 5 terabytes.



S3 Buckets

Store files in buckets (similar to folders).



Working with S3 Buckets

1

Universal Namespace

All AWS accounts share the S3 namespace.
Each S3 bucket name is globally unique.

2

Example S3 URLs

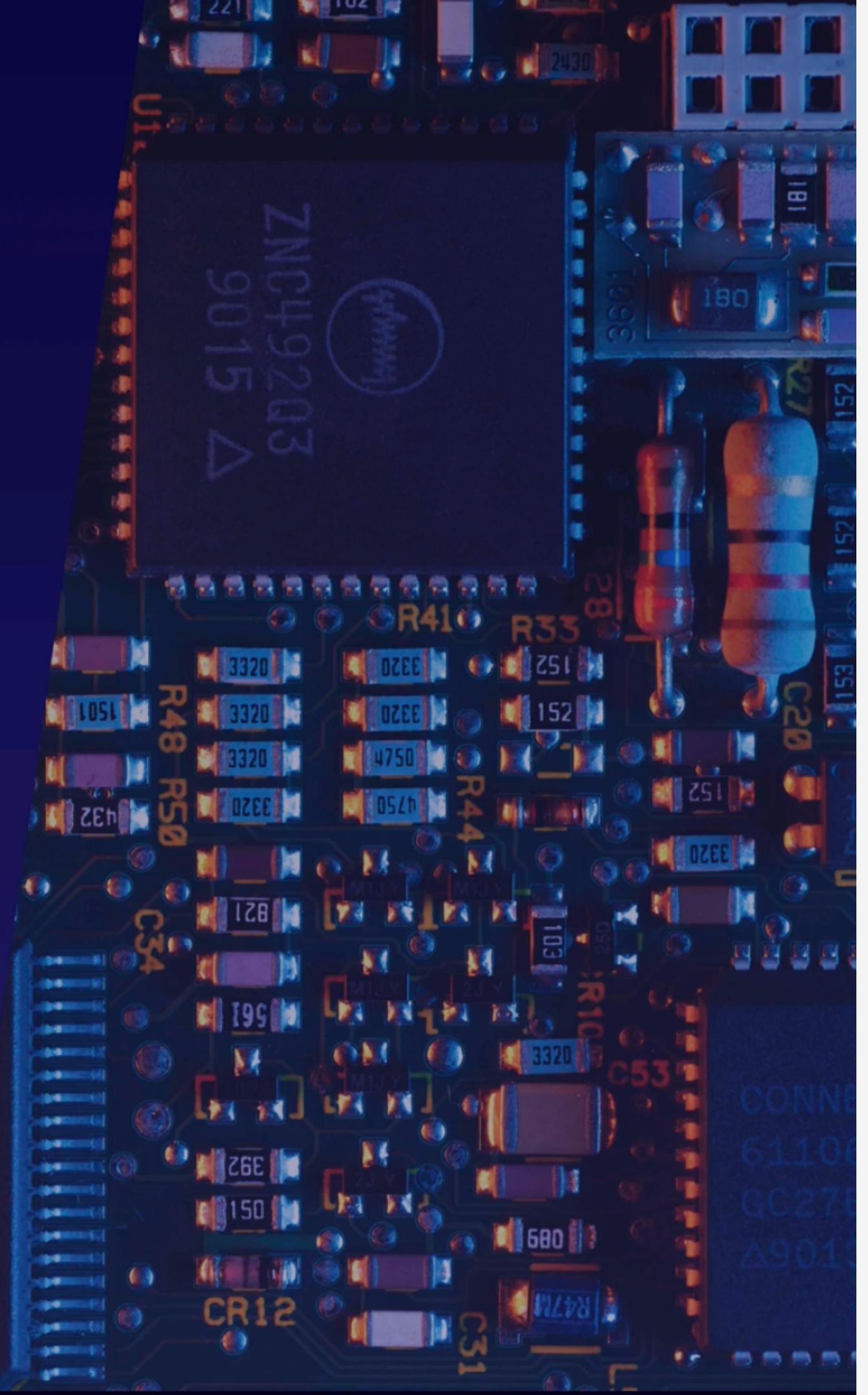
<https://bucket-name.s3.Region.amazonaws.com/key-name>

<https://acloudguru.s3.us-east-1.amazonaws.com/Ralphie.jpg>

3

Uploading Files

When you upload a file to an S3 bucket, you will receive an HTTP 200 code if the upload was successful.





Key

The name of the object
(e.g., `Ralphie.jpg`)



Value

The data itself, which is made up of a sequence of bytes



Version ID

Important for storing multiple versions of the same object



Metadata

Data about the data you are storing (e.g., `content-type`, `last-modified`, etc.)

Highly Available and Highly Durable



Built for Availability

Built for 99.95% – 99.99% **service availability**, depending on the S3 tier.



Designed for Durability

Designed for 99.99999999% (9 decimal places) durability for **data stored** in S3.

Performance across the S3 Storage Classes

	S3 Standard	S3 Intelligent-Tiering*	S3 Standard-IA	S3 One Zone-IA+	S3 Glacier	S3 Glacier Deep Archive
Designed for Durability	99.999999999% (11 9's)	99.999999999% (11 9's)	99.999999999% (11 9's)	99.999999999% (11 9's)	99.999999999% (11 9's)	99.999999999% (11 9's)
Designed for Availability	99.99%	99.9%	99.9%	99.5%	99.99%	99.99%
Availability SLA	99.9%	99%	99%	99%	99.9%	99.9%
Availability Zone(s)	≥3	≥3	≥3	1	≥3	≥3
Min Capacity Charge per Object	N/A	N/A	128KB	128KB	40KB	40KB
Minimum Storage Duration Charge	N/A	30 days	30 days	30 days	90 days	180 days
Retrieval Fee	N/A	N/A	Per GB retrieved	Per GB retrieved	Per GB retrieved	Per GB retrieved
Storage Type	Object	Object	Object	Object	Object	Object
Lifecycle Transitions	Yes	Yes	Yes	Yes	Yes	Yes

