

Cloud Storage

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Object storage for companies of all sizes

Cloud Storage is a managed service for storing unstructured data. Store any amount of data and retrieve it as often as you like.

New customers get \$300 in free credits. All customers get 5 GiB of standard storage, 55,000 operations, 100 GiB of data transfer, and more for free each month.

Features

Take action with Storage Intelligence

Simplify management of your Cloud Storage at scale with [Storage Intelligence](#). Storage Intelligence eliminates manual storage management practices. This unified management product offers multiple powerful features to analyze large storage estates and easily take actions. Analyze object and bucket metadata to derive cost and security insights about your data through [Insights Datasets](#). Use Gemini Cloud Assist to generate insights with natural language conversations. Perform actions at-scale on millions of objects with zero or no code with [Batch Operations](#) and minimize application downtime by moving entire buckets with just two commands, while preserving bucket name with [Bucket Relocation](#).

Accelerate your data access

Enhance the performance of demanding applications with [Anywhere Cache](#), a fully managed, intelligent SSD-backed read cache for Region, Dual-region, or Multi-region buckets. Combined with Multi-region buckets, Anywhere Cache brings your data closer to compute resources in any zone where your TPUs/GPUs are available, giving you low latency and high throughput of up to 20 Tbps for AI/ML and data analytics workloads. Benefit from minimizing your network egress costs when accessing data across a continent without the need for provisioning or managing a separate storage tier.

Object- and bucket-level permissions

Leading analytics and ML/AI tools

Automatic storage class transitions

With features like [Object Lifecycle Management \(OLM\)](#) and [Autoclass](#) you can easily optimize costs with object placement across storage classes. You can enable, at the bucket level, policy-based automatic object movement to

colder storage classes based on the last access time. There are no early deletion or retrieval fees, nor class transition charges for object access in colder storage classes.

Continental-scale and SLA-backed replication

Industry leading [dual-region buckets](#) support an expansive number of regions. A single, continental-scale bucket offers nine regions across three continents, providing a Recovery Time Objective (RTO) of zero. In the event of an outage, applications seamlessly access the data in the alternate region. There is no failover and failback process. For organizations requiring ultra availability, [turbo replication](#) with dual-region buckets offers a 15 minute Recovery Point Objective (RPO) SLA.

Use Cloud Storage as a local filesystem

Cloud Storage is a common choice for storing training data, models, and checkpoints for machine learning projects in Cloud Storage buckets. With [Cloud Storage FUSE](#), you can take advantage of the scale, affordability, throughput, and simplicity that Cloud Storage provides, while maintaining compatibility with applications that use or require filesystem semantics. Cloud Storage FUSE also now offers caching, which provides up to 2.2x faster time to train and 2.9x higher training throughput, compared to native ML framework dataloaders.

Fast and flexible transfer services

[Storage Transfer Service](#) offers a highly performant, online pathway to Cloud Storage—both with the scalability and speed you need to simplify the data transfer process. For offline data transfer our Transfer Appliance is a [shippable storage server](#) that sits in your datacenter and then ships to an ingest location where the data is uploaded to Cloud Storage.

Default and configurable data security

Cloud Storage offers [secure-by-design](#) features to protect your data and advanced controls and capabilities to keep your data private and secure against leaks or compromises. Security features include [access control policies](#), data encryption, retention policies, retention policy locks, and signed URLs.

Object lifecycle management

[Define conditions](#) that trigger data deletion or transition to a cheaper storage class.

Object Versioning

Continue to [store](#) old copies of objects when they are deleted or overwritten.

Soft delete

[Soft delete](#) offers improved protection against accidental and malicious data deletion by providing you with a way to retain and restore recently deleted data.

Retention policies

Define minimum [retention periods](#) that objects must be stored for before they're deletable.

Object holds

Customer-managed encryption keys

Encrypt object data with [encryption keys](#) stored by the Cloud Key Management Service and managed by you.

Customer-supplied encryption keys

Uniform bucket-level access

Uniformly [control access](#) to your Cloud Storage resources by disabling object ACLs.

Requester pays

Require [accessors of your data](#) to include a project ID to bill for network charges, operation charges, and retrieval fees.

Bucket Lock

[Bucket Lock](#) allows you to configure a data retention policy for a Cloud Storage bucket that governs how long objects in the bucket must be retained.

Pub/Sub notifications for Cloud Storage

Send [notifications](#) to Pub/Sub when objects are created, updated, or deleted.

Cloud Audit Logs with Cloud Storage

[Maintain](#) admin activity logs and data access logs for your Cloud Storage resources.

Storage options

Storage type	Description	Best for
Standard storage	Storage for data that is frequently accessed ("hot" data) and/or stored for only brief periods of time.	"Hot" data, including websites, streaming videos, and mobile apps.
Nearline storage	Low cost, highly durable storage service for storing infrequently accessed data.	Data that can be stored for 30 days.

Coldline storage	A very low cost, highly durable storage service for storing infrequently accessed data.	Data that can be stored for 90 days.
Archive storage	The lowest cost, highly durable storage service for data archiving, online backup, and disaster recovery.	Data that can be stored for 365 days.

Description

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The lowest cost, highly durable storage service for data archiving, online backup, and disaster recovery.

Best for

Data that can be stored for 365 days.

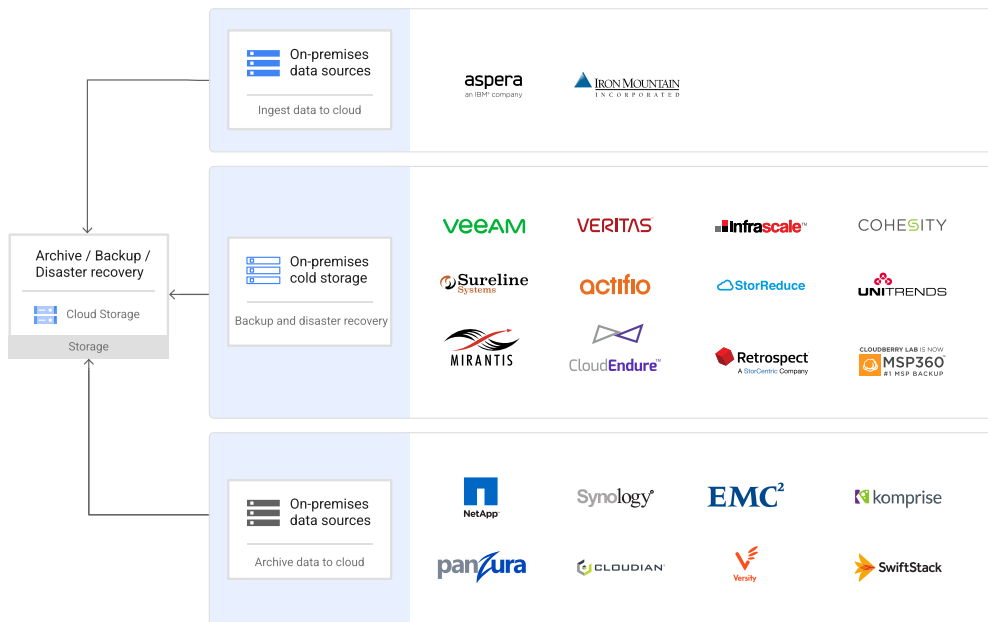
Common Uses

Backups and archives

Tutorials, quickstarts, & labs

Use Cloud Storage for backup, archives, and recovery

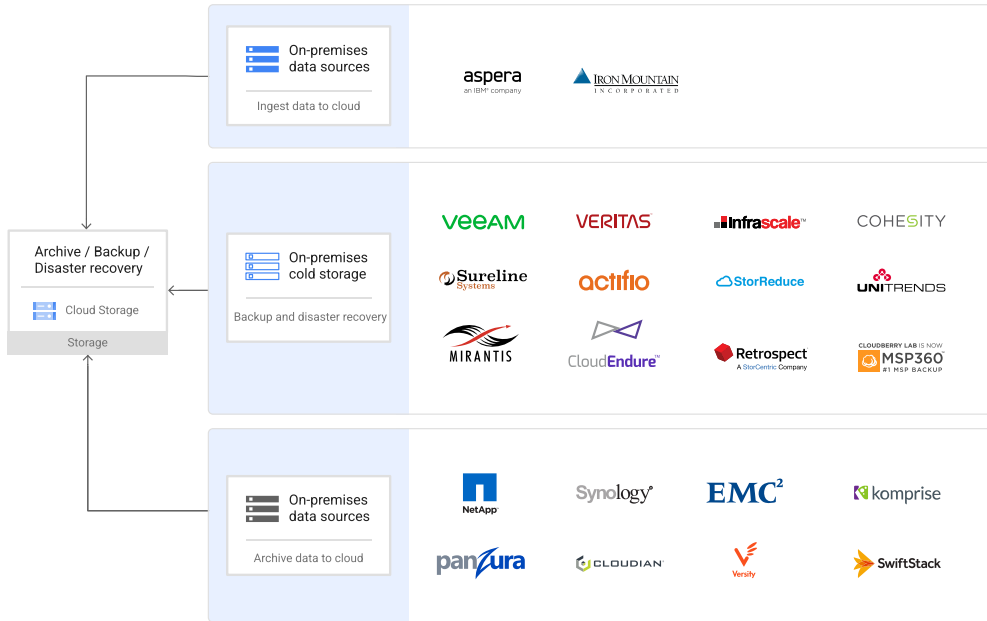
Cloud Storage's nearline storage provides fast, low-cost, highly durable storage for data accessed less than once a month, reducing the cost of backups and archives while still retaining immediate access. Backup data in Cloud Storage can be used for more than just recovery because all storage classes have ms latency and are accessed through a single API.



Tutorials, quickstarts, & labs

Use Cloud Storage for backup, archives, and recovery

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Media content storage and delivery

Tutorials, quickstarts, & labs

Learning resources

Tutorials, quickstarts, & labs

Learning resources

Data lakes and big data analytics

Tutorials, quickstarts, & labs

Tutorials, quickstarts, & labs

Machine learning and AI

Tutorials, quickstarts, & labs

Tutorials, quickstarts, & labs

Host a website

Tutorials, quickstarts, & labs

Tutorials, quickstarts, & labs

Generate a solution

What problem are you trying to solve?

What you'll get:

Step-by-step guide

Reference architecture

Available pre-built solutions

This service was built with [Vertex AI](#). You must be 18 or older to use it. Do not enter sensitive, confidential, or personal info.

Pricing

How Cloud Storage pricing works	Pricing is largely based on data storage, data processing, network usage and optional caching.	
Pricing components	Description	Price (USD)
Free tier	<p>Data storage</p> <p>5 GiB of standard storage.</p>	Free
	<p>Data processing</p> <p>5,000 Class A operations.</p> <p>50,000 Class B operations.</p> <p>Unlimited free operations.</p> <p>No retrieval fee for standard storage.</p>	Free
	<p>Network usage</p> <p>100 GiB of Data transfer from North America to each Google Cloud Data transfer destination (Australia and China excluded).</p> <p>Unlimited inbound data transfer.</p> <p>Unlimited data transfer within the same location.</p>	Free

How Cloud Storage pricing works	Pricing is largely based on data storage, data processing, network usage and optional caching.	
<p>Data storage</p> <p>The amount of data stored in your buckets.</p>	<p>Standard storage</p> <p>Best for frequently accessed ("hot" data), including websites, streaming videos, and mobile apps.</p>	<p>Starting at \$.02 per GiB per month</p>
	<p>Nearline storage</p> <p>Best for data that can be stored for 30 days.</p>	<p>Starting at \$.01 per GiB per month</p>
	<p>Coldline storage</p> <p>Best for data that can be stored for 90 days.</p>	<p>Starting at \$.004 per GiB per month</p>
	<p>Archive storage</p> <p>Best for data that can be stored for 365 days</p>	<p>Starting at \$.0012 per GiB per month</p>
<p>Data processing</p> <p>The processing done by Cloud Storage.</p>	<p>Operation charges</p> <p>For all requests made to Cloud Storage.</p>	<p>Starting at \$.0004 per 1,000 operations</p>
	<p>Retrieval fees</p> <p>For reading data stored in Nearline, Coldline and Archive storage classes.</p>	<p>Starting at \$.01 per GiB</p>

<p>How Cloud Storage pricing works</p>	<p>Pricing is largely based on data storage, data processing, network usage and optional caching.</p>	
	<p>Inter-region replication charges For data written to dual-regions and multi-regions.</p>	<p>Starting at \$.02 per GiB</p>
	<p>Autoclass management charges For buckets with Autoclass enabled.</p>	<p>\$.0025 per 1000 objects per 30 days</p>
	<p>Storage Intelligence charges For buckets with Storage Intelligence configured.</p>	<p>See pricing details.</p>
<p>Network usage The amount of data read from or moved between your buckets.</p>	<p>Data transfer within Google Cloud When data transfer is to other Cloud Storage buckets or to Google Cloud services.</p>	<p>Starting at \$.02 per GiB</p>
	<p>Specialty network services When data transfer uses certain Google Cloud network products.</p>	<p>Check your network product for pricing information.</p>
	<p>General data transfer When data transfer is out of Google Cloud or between continents.</p>	<p>Starting at \$.08 per GiB</p>

How Cloud Storage pricing works	Pricing is largely based on data storage, data processing, network usage and optional caching.	
<p>Anywhere Cache</p> <p>An optional feature to enable temporary storage layer for your buckets.</p>	<p>Cache storage</p> <p>The amount of data stored in cache.</p>	<p>Starting at \$.0003 per GiB per hour</p>
	<p>Cache ingest</p> <p>The amount of data written into the cache.</p>	<p>\$.01 per GiB</p>
	<p>Cache data transfer out</p> <p>The amount of data read from the cache.</p>	<p>\$.0008 per GiB</p>
	<p>Cache operations</p> <p>Requests entirely served by the cache.</p>	<p>\$.0002 per 1,000 operations</p>

How Cloud Storage pricing works

Pricing is largely based on data storage, data processing, network usage and optional caching.

Description

Data storage

5 GiB of standard storage.

Price (USD)

Free

Data processing

5,000 Class A operations.

50,000 Class B operations.

Unlimited free operations.

No retrieval fee for standard storage.

Description

Free

Network usage

100 GiB of Data transfer from North America to each Google Cloud Data transfer destination (Australia and China excluded).

Unlimited inbound data transfer.

Unlimited data transfer within the same location.

Description

Free

Data storage

The amount of data stored in your buckets.

Description

Standard storage

Best for frequently accessed ("hot" data), including websites, streaming videos, and mobile apps.

Price (USD)

Starting at

\$.02

per GiB per month

Nearline storage

Best for data that can be stored for 30 days.

Description

Starting at

\$.01

per GiB per month

Coldline storage

Best for data that can be stored for 90 days.

Description

Starting at

\$.004

per GiB per month

Archive storage

Best for data that can be stored for 365 days

Description

Starting at

\$.0012

per GiB per month

Data processing

The processing done by Cloud Storage.

Description

Operation charges

For all requests made to Cloud Storage.

Price (USD)

Starting at

\$.0004

per 1,000 operations

Retrieval fees

For reading data stored in Nearline, Coldline and Archive storage classes.

Description

Inter-region replication charges

For data written to dual-regions and multi-regions.

Description

Autoclass management charges

For buckets with Autoclass enabled.

Description

\$.0025

per 1000 objects per 30 days

Storage Intelligence charges

For buckets with Storage Intelligence configured.

Description

Network usage

The amount of data read from or moved between your buckets.

Description

Data transfer within Google Cloud

When data transfer is to other Cloud Storage buckets or to Google Cloud services.

Price (USD)

Specialty network services

When data transfer uses certain Google Cloud network products.

Description

General data transfer

When data transfer is out of Google Cloud or between continents.

Description

Anywhere Cache

An optional feature to enable temporary storage layer for your buckets.

Description

Cache storage

The amount of data stored in cache.

Price (USD)

Starting at

\$.0003

per GiB per hour

Cache ingest

The amount of data written into the cache.

Description

Cache data transfer out

The amount of data read from the cache.

Description

Cache operations

Requests entirely served by the cache.

Description

\$.0002

per 1,000 operations

Pricing calculator

Estimate your monthly Cloud Storage charges, including cluster management fees.

Custom quote

Connect with our sales team to get a custom quote for your organization.

Start your proof of concept

New customers get \$300 in free credits to try Cloud Storage and other Google Cloud products

Have a large project?



Learn how to get started with Cloud Storage



Introduction and best practices for Cloud Storage



How to name buckets

Business Case

Explore how companies are using Cloud Storage



Vimeo is delivering more high-quality videos than ever while reducing costs.

Vimeo replaced its servers for accepting video uploads with Cloud Storage, fronted by the Fastly edge cloud to help ensure regional routing and low-latency, high-throughput connections for Vimeo's publishers. Multi-regional Cloud Storage offers fast, resumable upload capability that helps make for better user experience.

Powering top autonomous vehicle companies [Cruise](#) and [Nuro](#).

Does Cloud Storage work for personal photos, videos, and files?

No. For personal storage options, including photos, device backup, VPN, and more, [visit Google One](#).

How does Cloud Storage differ from other types of storage?

Cloud Storage is a service for storing objects in Google Cloud. An object is an immutable piece of data consisting of a file of any format. You store objects in containers called buckets. All buckets are associated with a project, and you can group your projects under an organization. Learn more about other Google Cloud storage products, including [block storage, data transfer, and file storage](#).

Other inquiries and support

Source: <https://cloud.google.com/storage>