



wasabi[™]
hot cloud storage

The New Economics of Cloud Storage

How Wasabi Hot Cloud Storage Pricing Compares
with the Economics of Amazon Web Services,
Microsoft Azure and Google Cloud Platform

Executive Overview

Wasabi is fundamentally transforming cloud storage with the industry's most affordable and highest-performing storage solution.

Based in Boston, MA, Wasabi is no ordinary startup. Our founders are David Friend and Jeff Flowers, the founders of Carbonite, recognized pioneers in cloud storage. Our mantra is open standards, an end to vendor lock-in, and a new benchmark for price, performance, and protection for all the world's data.

At Wasabi, we believe in keeping storage simple. Unlike legacy cloud storage services from Amazon, Microsoft and Google, which all have confusing storage tiers and complex pricing schemes, we provide a single product, with predictable and straightforward pricing that satisfies nearly all cloud storage requirements.

Wasabi hot cloud storage costs a flat \$.0059 per GB/month (\$5.99 per TB/month). That's it. Unlike Amazon Web Services (AWS), Microsoft Azure and Google Cloud Platform (GCP) we don't impose extra fees for transferring data out of Wasabi (no egress fees). And we don't charge extra for API requests.

Beware of Tiered Storage Services

First-generation cloud storage providers offer confusing tiered storage services. Each storage tier is intended for a specific type of data, and has distinct performance characteristics, SLAs and pricing plans (with complex fee structures).

While each vendor's portfolio is slightly different, these tiered services are generally optimized for three distinct classes of data.

Active Data – Live data that is readily accessible by the operating system,

an application or users. Active data is frequently accessed and has stringent read/write performance requirements.

Active Archive – Occasionally accessed data that is available instantly online

(not restored and rehydrated from an offline or remote source). Examples include backup data for rapid disaster recovery or large video files that might be accessed from time-to-time on short notice.

Inactive Archive – Infrequently accessed data. Examples include data maintained

long-term for regulatory compliance. Historically, inactive data is archived to tape and stored offsite.

Wasabi Hot Cloud Storage Overview

Wasabi hot cloud storage is extremely affordable, fast and reliable cloud object storage—for any purpose. The best of both worlds, Wasabi's universal storage service is significantly less expensive and markedly faster than “frequent-access storage” services like Amazon S3 Standard, Microsoft Azure Hot and Google Cloud Multi Regional.

Hot cloud storage

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noun

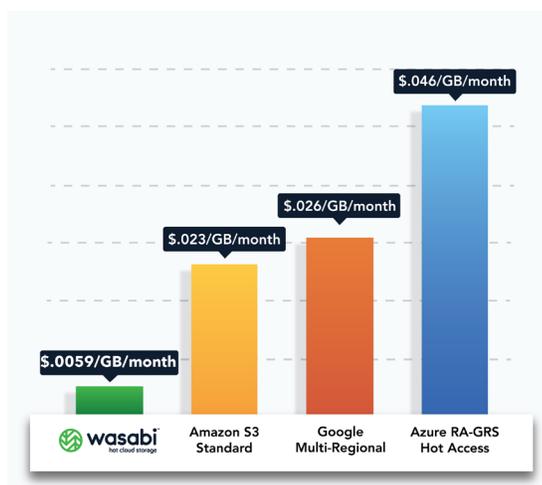
A universal, one size fits all cloud storage service that eliminates confusing storage service tiers and satisfies nearly all storage performance requirements. Hot cloud storage is significantly faster than traditional frequent-access storage services.

Engineered for extreme data durability, integrity and security, Wasabi provides eleven 9s (99.999999999%) of object durability and supports configurable immutability to protect against accidental deletions, malware and viruses. The Wasabi service is fully compatible with the AWS S3 API so it works seamlessly with existing storage management applications like backup and recovery tools.

Wasabi's mission is to make cloud storage a simple, open-standard commodity and utility, just like electricity. To that end we offer a single product that is easy to understand, easy to order and cost-effective to scale. With Wasabi there are no confusing storage tiers to decipher and no complicated fee structures to decode.

Wasabi hot cloud storage costs a flat \$.0059/GB/month. Compare that to \$.023/GB/month for S3 Standard, \$.046/GB/month for Azure RA-GRS Hot and \$.026/GB/month for Google Multi-Regional.

Unlike Amazon, Google and Azure there are no charges for egress or for API requests.



Amazon Simple Storage Service (AWS S3)

Amazon S3 is a cloud-based object store service from AWS. Amazon offers four different storage tiers, each with distinct performance and resiliency characteristics and pricing schedules:

- **Amazon S3 Standard** - a general-purpose object storage service for frequently accessed data.
- **Amazon S3 Intelligent-Tiering** - a dynamic object storage service that automatically distributes data across frequent access and infrequent access tiers.
- **Amazon S3 Standard Infrequent Access (IA)** - a lower-cost storage service for less frequently accessed data
- **Amazon S3 One Zone-Infrequent Access (IA)** - a lower-cost storage service for less frequently accessed data, with data stored in multiple availability zones
- **Amazon S3 Glacier** - a long-term data archival service for rarely accessed data.
- **Amazon S3 Glacier Deep Archive** - a lower-priced long-term data archival service for rarely accessed data, with longer retrieval times

Amazon S3 Pricing

Amazon's pricing model includes separate usage-based data storage, request and transfer fees, which vary from region to region. **Unlike Wasabi, Amazon's monthly fee structure is complex and involves a number of variables (many of which are often difficult to predict).**

Storage Fees

Amazon monthly storage fees are based on:

- **Baseline storage fees** – per GB storage fees based on a tiered pricing model with graduated schedules. Amazon charges a fixed per GB fee for the first 50 TB of data, a slightly lower per GB fee for the next 450 TB of data, and a slightly lower per GB fee for over 500 TB of data.
- **Storage tier** – each storage class (S3 Standard, S3 Intelligent-Tiering, S3 Standard Infrequent Access, S3 One Zone-Infrequent Access, S3 Glacier, S3 Glacier Deep and S3 RRS) is covered by a different pricing schedule.
- **Location where data is stored** – Amazon S3 pricing varies from region to region.

Request Fees

Amazon charges separately for:

- **Data request fees** – separate transactional fees for accessing cloud storage (PUT, COPY, GET, POST, LIST, etc.), which vary by tier and region.
- **Data transfer fees** – separate, individual fees for transferring data:
 - From the internet into S3.
 - From S3 to other Amazon sites.
 - From S3 to the internet.

Wasabi Hot Cloud Storage versus Amazon S3 Storage

The table below compares Wasabi's hot cloud storage service with Amazon's various cloud storage offerings.



GENERAL		
One, universal storage service (hot cloud storage)	Yes	No. Four different storage tiers with distinct price, performance and resiliency characteristics
Predictable, easy-to-understand pricing	Yes. Flat GB/month storage fees.	No. Many pricing variables.
DATA STORAGE PRICING		
Baseline storage fees	\$.0059/GB/month	\$.023/GB/month (for Standard)
Flat fee structure	Yes	No. Tiered pricing with graduated schedule based on monthly volume.
DATA ACCESS PRICING		
Data transfer out (egress) fees	No additional fees	Up to \$.09/GB
Data transfer in (ingress) fees	No additional fees	No
Additional transaction fees	No additional fees	Yes. Additional per-instance fees for certain operations including PUT, COPY, GET, POST and LIST
Cross-region transfer fees	No additional fees	Yes. Additional fees for transferring data between regions

Microsoft Azure Blob Storage

Microsoft offers a cloud-based object store service called Azure Blob storage that is available in four different classes, each with distinct performance and resiliency characteristics and pricing schedules:

- **Premium Storage Tier** – for frequently accessed, latency-sensitive data.
- **Hot Tier** – for frequently accessed data.
- **Cool Tier** – for less frequently accessed data stored for at least 30 days.
- **Archive Tier** – for rarely accessed data stored for at least 180 days.

Azure Blob Storage Pricing

Azure Blob storage pricing model includes separate usage-based data storage, transfer and operations fees plus additional early deletion fees for the Archive tier). **Unlike Wasabi, Microsoft's monthly fee structure is complex and involves a number of variables (many of which are often difficult to predict).**

Data Storage Fees

Azure Blob monthly storage fees are based on volume, storage tier, redundancy and region:

- **Storage tier** – Microsoft charges a fixed per GB fee for cool and archive storage. Hot storage is covered by a separate, volume-sensitive graduated pricing schedule. Microsoft charges a fixed per GB fee for the first 50 TB of data stored, a slightly lower per GB fee for the next 450 TB of data, a slightly lower per GB fee after 500 TB.
- **Redundancy** – Microsoft supports four levels of redundancy: locally redundant storage (LRS), zone redundant storage (ZRS), geo-redundant storage (GRS) and read-access geo-redundant storage (RA-GRS). Hot, cool and archive storage prices vary based on redundancy level.
- **Location where data is stored** – storage pricing varies from region to region.

Data Transfer Fees

Microsoft charges additional outbound data transfer fees for transferring data from Azure data centers to the internet (and for replicating data to another region).

Data Operations Fees

Microsoft charges additional fees for HTTP operations, reads and writes. Fees vary based on storage tier, redundancy level and region. Fees include:

- **Put, list, create container operations fees** – separate transactional fees for a specific set of storage operations (more expensive operations).
- **Other operations fees** – separate transactional fees for other storage operations (less expensive operations).
- **Data retrieval fees** – separate transactional fees for reading cloud storage.
- **Data write fees** – separate transactional fees for writing cloud storage.

Early Deletion Fees (Archive tier only)

Penalty fees for deleting archived blobs before 180 days.

Wasabi Hot Cloud Storage versus Azure Blob Storage

The table below compares Wasabi's hot cloud storage service with Azure Blob storage.



GENERAL

One, universal storage service (hot cloud storage)

Yes

No. Four different storage tiers, each with multiple resiliency options and distinct pricing and performance characteristics.

Predictable, easy-to-understand pricing

Yes. Flat GB/month storage fees.

No. Many pricing variables.

DATA STORAGE PRICING

Baseline storage fees

\$.0059/GB/month

\$.0184/GB/month (for LRS hot tier)

Flat fee structure

Yes

No. Tiered pricing, with volume-based graduate schedule for hot tier

Geo-independent pricing

Yes

No. Pricing varies per region.

DATA TRANSFER AND OPERATIONS PRICING

Data transfer out (egress) fees

No additional fees

Up to \$.02/GB

Data transfer in (ingress) fees

No additional fees

Yes. Extra fees.

Cross-region transfer fee

No additional fees

Yes. Additional fees for transferring data between regions.

Google Cloud Platform Storage

Google Cloud Platform offers a cloud-based object store service, available in four different classes, each with distinct performance and resiliency characteristics and pricing schedules:

- **Regional** - a general purpose object storage service for frequently accessed data, with resiliency restricted to a single region.
- **Multi-Regional** - a general purpose object storage service for frequently accessed data, with geo-redundancy.
- **Nearline** - a lower cost, intermediary-term storage service for data accessed less than once a month.
- **Coldline** - a long-term, low-cost option for data accessed less than once a year.

Google Cloud Storage Pricing

Google's pricing model includes usage-based data storage, network and operations fees plus additional data retrieval and early deletion fees (for Nearline and Coldline). **Unlike Wasabi, Google's monthly fee structure is complex and involves a number of variables (many of which are often difficult to predict).**

Data Storage Fees

Google's monthly storage fees are based on:

- **Baseline storage fees** - flat per GB storage fees.
- **Storage tier** - each tier has a different per GB fee.
- **Location where data is stored** - Google pricing varies from region to region.

Network Fees

Separate tiered pricing fees, which vary by region, and are assessed when transferring data out of Google Cloud storage (egress fees) or when performing bucket-to-bucket transfers across regions.

Operations Fees

Separate transaction fees, which vary per tier and operation, for accessing cloud storage (PUT, GET, POST, etc.).

Retrieval and Early Deletion Fees (Nearline and Coldline tiers only)

Separate transactional fees for retrieving data from storage and for separate penalty fees for retrieving data from storage in advance of the minimum storage duration.

Wasabi Hot Cloud Storage versus Google Cloud Platform Storage

The table below compares Wasabi's hot cloud storage service with Google's various cloud storage offerings.



GENERAL		
One, universal storage service (hot cloud storage)	Yes	No. Four different storage tiers with distinct price, performance and resiliency characteristics
Predictable, easy-to-understand pricing	Yes. Flat GB/month storage fees.	No. Many pricing variables.
DATA STORAGE PRICING		
Baseline storage fees	\$.0059/GB/month	\$.0260/GB/month (for Multi-Regional)
Flat fee structure	Yes	No. Four different storage tiers each with distinct flat pricing.
Geo-independent pricing	Yes	No. Pricing varies per region.
DATA ACCESS PRICING		
Data transfer out (egress) fees	No additional fees	Up to \$.23/GB
Additional data read fees	No additional fees	Yes. Additional per-instance fees (Nearline and Coldline)
Additional transaction fees	No additional fees	Yes. Additional per-instance fees for certain operations including PUT, GET and POST
Cross-region transfer fees	No additional fees	Yes. Additional fees for transferring data between regions

Summary

At Wasabi, we don't believe in the need for multiple, complex storage tiers. By its own definition, we've created hot cloud storage as a way to remove storage complexity and cost, with one product that satisfies nearly all cloud storage performance requirements. The best of both worlds, Wasabi hot cloud storage is significantly less expensive than traditional cold storage services and significantly faster than traditional frequent-access storage services.

Say goodbye to legacy cloud storage services with confusing storage tiers and complicated pricing schemes. Slash costs, boost performance and eliminate complexity with Wasabi hot cloud storage.

Next Steps

- **CONTACT WASABI TODAY.** Learn more about our price, performance and protection benefits.
- **TRY WASABI FOR FREE.** Get up to 1 TB for 30 days.

About Wasabi

Wasabi is the hot cloud storage company delivering low-cost, fast, and reliable cloud storage. Wasabi is 80% cheaper and up to 6x faster than Amazon S3, with 100% data immutability protection and unlimited free data egress.

Created by Carbonite co-founders and cloud storage pioneers David Friend and Jeff Flowers, Wasabi is on a mission to commoditize the storage industry. Wasabi is a privately held company based in Boston, MA.



Note: All pricing information presented in this paper was retrieved from cloud service provider websites and was accurate as of February 2019.

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