

# Provider Candidates

**Amazon S3** (AWS S3 Standard).

**Google Cloud Storage** (Standard).

**Azure Blob Storage** (Hot / General Purpose v2).

**Backblaze B2**

**Wasabi**

## Summary

Provider	Storage \$/GB-month	Egress \$/GB (download)	Est. monthly (72GB stored + 72GB egress)
<b>AWS S3 (Standard)</b>	<b>\$0.023/GB.</b> First 50 TB tier.	~ <b>\$0.09/GB</b> (typical US first 10 TB; region/tier vary).	<b>Storage:</b> $72 \times 0.023 =$ \$1.66; <b>Egress:</b> $72 \times 0.09 =$ \$6.48 → <b>\$8.14/month</b> (est.)
<b>Google Cloud Storage (Standard )</b>	~ <b>\$0.026–\$0.044/GB</b> depending on volumes/tiers	~ <b>\$0.045–\$0.085/GB</b> for Internet egress (volume dependent).	<b>Storage:</b> $72 \times 0.026 =$ \$1.87; <b>Egress:</b> $72 \times 0.085 =$ \$6.12 → <b>\$7.99/month</b> (est.)
<b>Azure Blob (Hot)</b>	~ <b>\$0.02/GB</b>	~ <b>\$0.087/GB</b>	<b>Storage:</b> $72 \times 0.02 =$ \$1.44; <b>Egress:</b> $72 \times 0.087 =$ \$6.26 → <b>\$7.70/month</b> (est.)

<b>Backblaze B2</b>	~\$0.006/GB (pay-as-you-go).	<b>Free up to 3× average monthly storage</b> , then <b>\$0.01/GB</b> beyond that; integrations/CDN options alter cost.	If monthly average storage is 72GB, then free egress up to ~216GB. So <b>if</b> downloads $\leq 216$ GB, <b>egress ~\$0</b> . Otherwise $72 \times \$0.01 = \$0.72$ . <b>Est (one download):</b> storage $72 \times 0.006 = \$0.43$ ; egress ~\$0 → <b>\$0.43–\$1.15/month</b>
<b>Wasabi</b>	<b>\$6.99/TB <math>\approx</math> \$0.00699/GB/month</b>	<b>Claims free ingress and egress</b>	<b>Storage:</b> $72 \times 0.00699 = \$0.50$ ; <b>Egress:</b> \$0 (if within policy) → <b>\$0.50/month</b> (est.; caveats apply).

## In-Depth Pros and Cons

### 1) Amazon S3

- **Pros:** Global regions, CDN (CloudFront) integration, mature streaming + media toolchain, extremely high **durability** and **throughput**, rich IAM and access controls. Good for production **streaming** pipelines.
- **Cons:** Egress can be **by far the largest cost** for frequent downloads/large downloads — egress (~\$0.09/GB) can dominate small storage costs. **Complex** pricing (API request charges, lifecycle, tiering).
- **Overview:** If you expect frequent external downloads to many viewers (high egress), costs can quickly exceed cheaper providers. If you need very low monthly cost and mostly archival storage, S3 is overkill cost-wise

## 2) Google Cloud Storage

- **Pros:** Strong media tools (Transcoder API, Live Stream API), global infrastructure, signed URLs, easy **integration** with Google Cloud Media CDN and services. Good for workflows that use GCP video processing.
- **Cons:** Egress also significant (varies \$0.045–0.085/GB). Pricing tiers and network egress rules can be confusing.
- **Overview:** If you're trying to minimize outbound bandwidth cost to the public internet, GCP's egress still costs and you'll want CDN overlay or a cheap origin (Backblaze/Wasabi) + CDN.

## 3) Azure Blob

- **Pros:** Good media/transcoding ecosystem (Azure Media Services), SAS tokens for granular access control, **global** regions. Strong **enterprise** features.
- **Cons:** Similar to other hyperscalers, storage is cheap but egress is nontrivial. Pricing complexity per region/tier.
- **Overview:** If you need ultra-low egress costs and have no need for MS integrations, Azure may be costlier than Backblaze/Wasabi.

## 4) Backblaze B2

- **Pros:** **Very low storage cost** (~\$6/TB). Practical free egress policy up to **3× average storage** which for your ~72GB/month average gives **~216GB free egress** - likely enough for occasional downloads & repackaging. S3-compatible API available; many integrations (CDNs) supported. Ideal for cheap, always-online media storage.
- **Cons:** Fewer regions/data centres than hyperscalers (but reasonable US/EU/Canada footprint). If you exceed free-egress quota regularly (e.g., many viewers pulling 4+× storage/month), you'll pay additional egress fees (\$0.01/GB).

Also fewer built-in media services (you'll use your own transcoder/CDN).

- **Overview:** If you need turnkey live-to-VOD transcoding or tight global edge delivery without adding a CDN, Backblaze alone may not be sufficient.

## 5) Wasabi

- **Pros:** Very low storage list price (~\$7/TB/month), S3-compatible, marketed as “no egress fees” and no API request fees — great for simple, low monthly cost storage. Good for media archiving.
- **Cons / Caveats:** “Free egress” has practical limits and fair-use policies; enterprise customers may still need to review region availability and contractual terms. Fewer global regions than hyperscalers (but expanding). If you need integrated transcoding / media services, you'll need separate tools/CDN.
- **Overview:** If your workflow relies on built-in cloud media features (transcoding, low-latency global ingest), Wasabi is storage-only — you'll need to add other services.

## Integration with streaming providers

- **Hyperscalers (AWS / GCP / Azure):** Provide *end-to-end* media stacks (live ingestion/transcoding, packagers, CDN). If you want a fully managed live → VOD + global low-latency delivery system, hyperscalers are **easiest** to stitch together.
- **Backblaze & Wasabi: S3-compatible** origins — integrate easily with third-party CDNs (Cloudflare, Fastly, Bunny.net, CloudFront) and third-party transcoders. They don't provide managed transcoding, but they are **low-cost origins** and play nicely with streaming workflows. Backblaze explicitly documents CDN/partner integration and free egress to some CDN partners

## Recommendation:

**Backblaze B2** or **Wasabi** are the best cost/benefit: very low storage rates and either free egress or very cheap egress (\$0.01/GB beyond free allowance). Backblaze gives an explicit “free up to 3× average storage” policy that will likely cover your monthly download needs.

Store raw livestreams in **Backblaze B2** or **Wasabi** (cheap storage), and front them with a CDN (Cloudflare/Bunny.net/CloudFront). Use a transcoder service (e.g., GCP Transcoder, open-source pipelines, or a small VM running FFmpeg) to prepare VOD assets only when needed.