



Amazon Glacier

Why to use it, When to use it, and What it will cost you

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What is Glacier

- Cloud storage service
- Provided by Amazon Web Services
- Designed for:
 - Low cost
 - Low access rates
 - Long retention periods



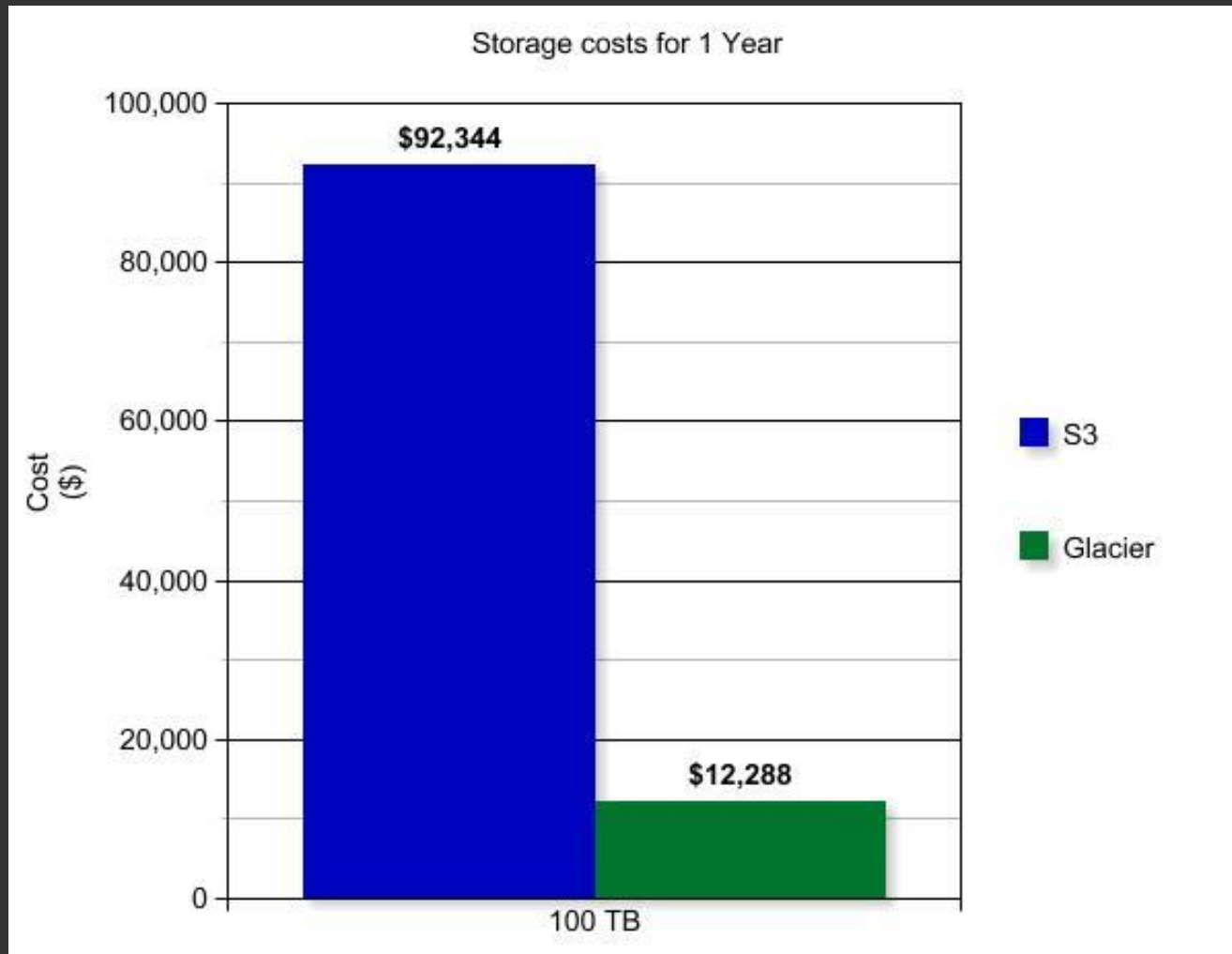
Why Glacier?

- Scalable
 - Virtually unlimited storage capacity
- Flexible
 - Use (and pay for) as much as you need
- Secure
 - Claimed durability of 99.9999999999%
 - Auto data integrity checks and self-healing
 - SSL transfer, encrypted at rest
- CHEAP: \$0.01 per GB per month



Storage Fee

\$0.01 per GB per month



Transfer Fee

- Same as S3
- Only for outbound transfer
- Tiered:

Up to 10 TB	\$0.12
10 to 40 TB	\$0.09
40 to 100 TB	\$0.07
100 to 350 TB	\$0.05

Transferring out all content one time is always \leq 1 year storage fee



Retrieval Fee

$$(R/T - (S * 0.05/30/\text{min}[T, 24])) * 0.01 * 720$$

S = Total amount of data stored (GB)

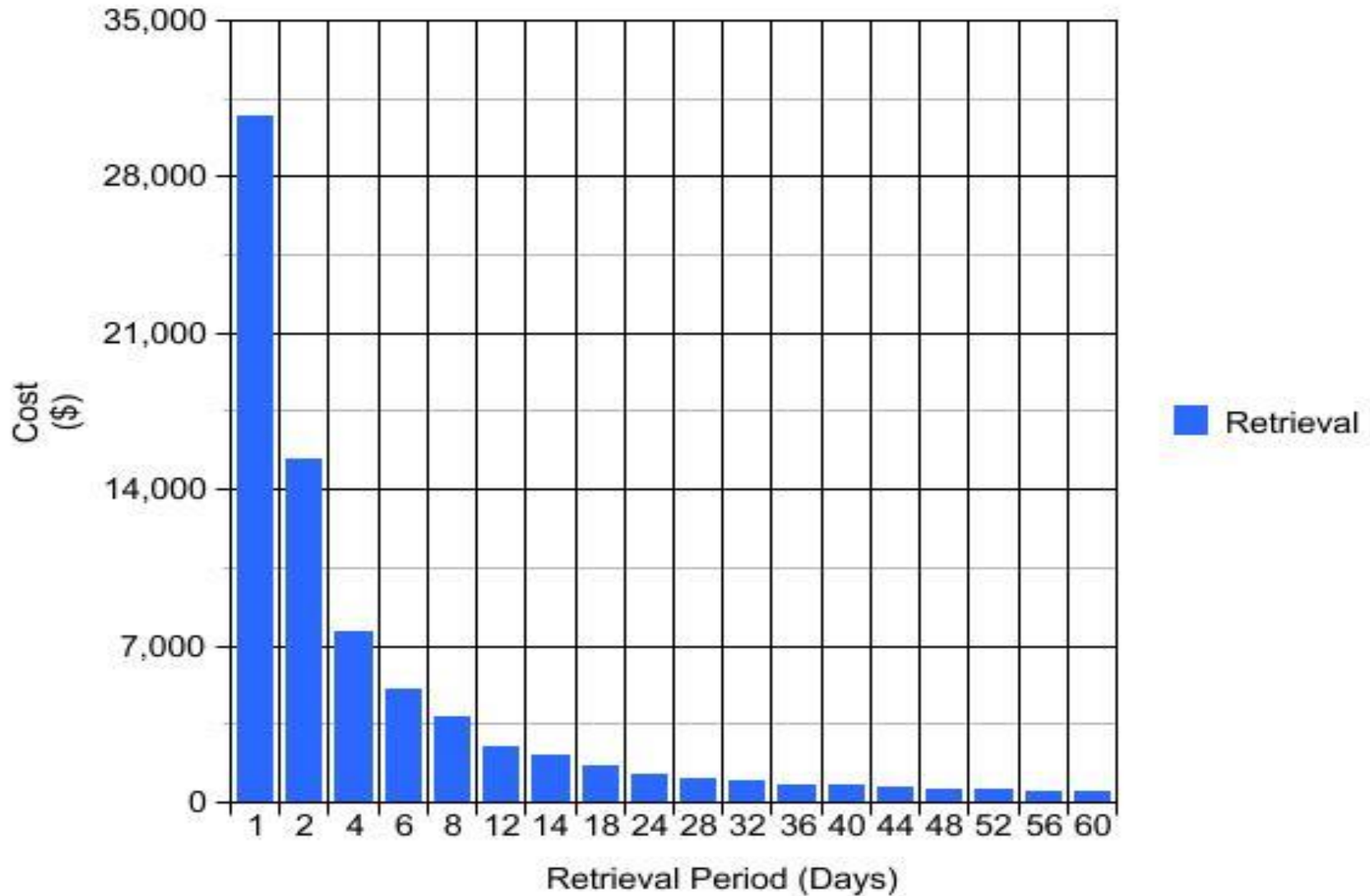
R = Total amount of data retrieved (GB)

T = Time period over which data is retrieved (hours)



Time Matters

Full Restore of 100 TB



When NOT To Use Glacier

- Data that you may need immediately
 - Retrieval delay of 3-5 hours
- Data that needs to be accessed often
- Data which will be deleted quickly
 - Fees for deletion of files stored < 90 days



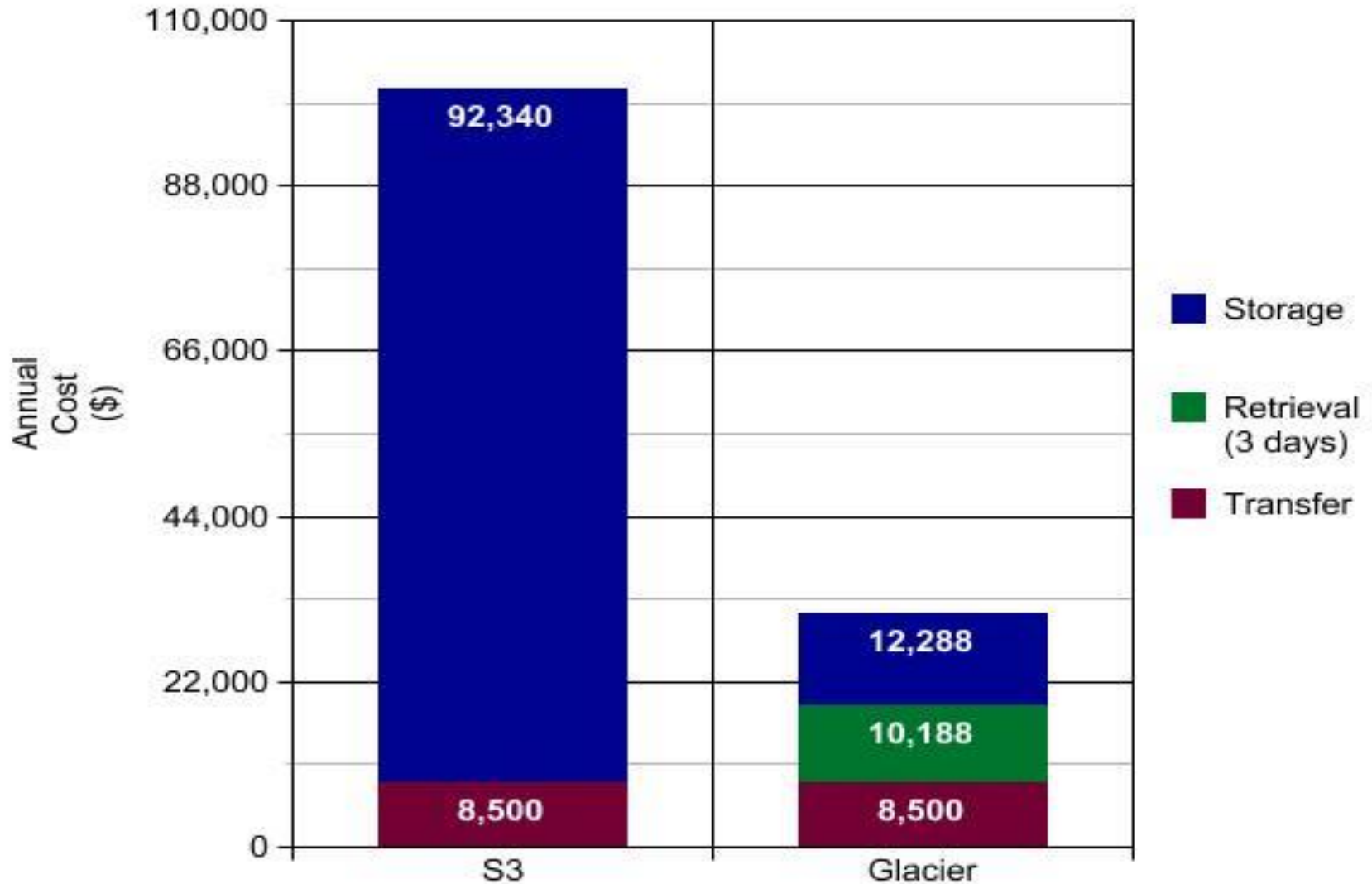
When To Use Glacier

- Archival data
 - Write once, read rarely
- Disaster recovery
 - Budget 3x annual storage cost
- Tape replacement



Total Cost

100 TB Stored - Full Retrieval Once per Year



How To Use Glacier

- Direct via APIs
 - Vaults and Archives
- Amazon S3 integration
 - Lifecycle policies
- DuraCloud integration
 - Automatic duplication
 - Assistance with retrieval



Thanks!

Questions?

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