Glacier

AWS

QUALITY THOUGHT

INFO SYSTEMS (INDIA) PVT. LTD

Backup vs. Archival

Backup

Short-term value
Latency is important

Archival

Value maintained in the long term
Latency is not important

AWS Glacier Features

Scalable

Grows with your needs

Durability

Multiple copies in multiple facilities

Secure

Non-optional AES 256 encryption

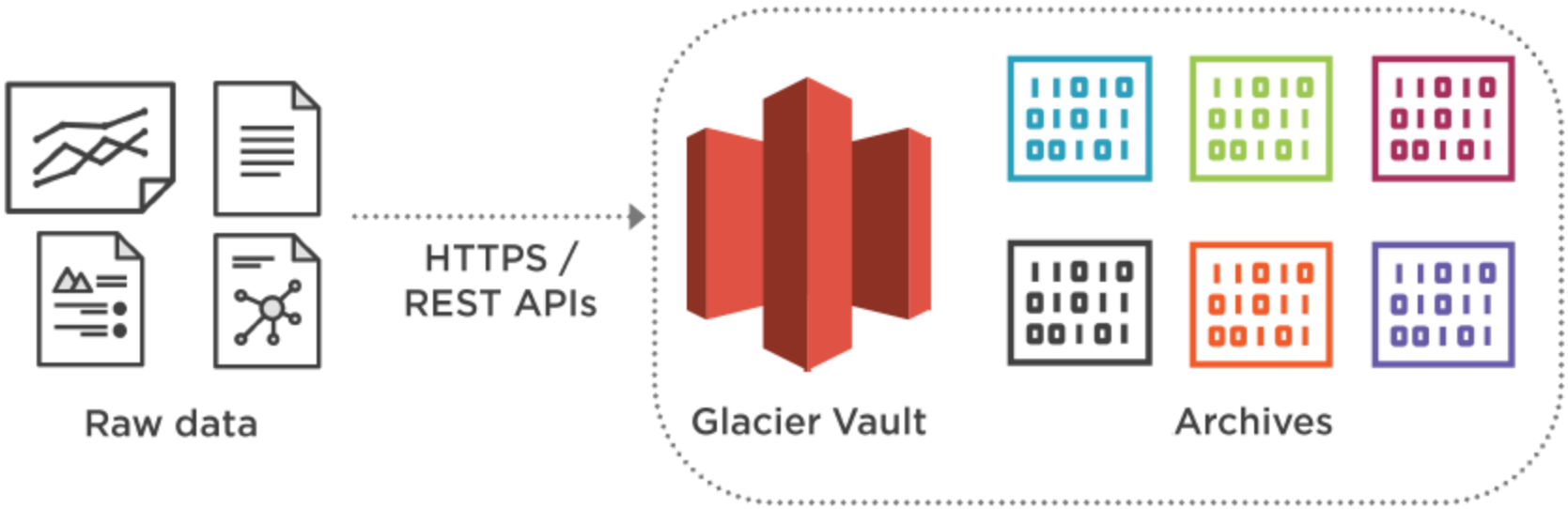
Cost effective

$0.01/GB/month on average

Asynchronous

3 to 5 hours latency for retrieval

Using Glacier Directly



Using S3 Lifecycle Policies

Demo

Creating a Glacier vault from the AWS web console

Storing Archives in Glacier

32KB Archive Size Overhead

Average archive size of 1KB

97%

Average archive size of 3.2MB

1%

Understanding Glacier's Retrieval Pricing

Free Tier

75TB * 5% / 30 days = 128GB per day

The retrieval fee is determined by the peak billable retrieval rate.

Hourly Peak Retrieval Rate

Highest amount of data retrieved in an hour

The retrieval rates of simultaneous jobs add up

Each job is assumed to complete in 4 hours

Free Tier

Hourly Peak Retrieval Rate

140GB

/

4 hours

=

35GB per hour

Peak Billable Retrieval Rate

128GB

/

4 hours

=

32GB per hour

35GB per hour

Hourly peak retrieval rate

—

32GB per hour

Free tier allowance

=

3GB per hour

Peak billable retrieval rate

Billable Retrieval Fee

3GB per hour

Peak billable retrieval rate

*

720 hours

*

$0.01 per GB per hour

Hourly retrieval fee

=

$21.60

Final fee

Billable Retrieval Fee

1.5GB per hour

17.5GB per hour – 16 GB per hour (free tier)

*

720 hours

*

$0.01 per GB per hour

Hourly retrieval fee

=

$10.80

Final fee

Summary

Glacier is designed for long term archival

Setting good archive descriptions at upload time is important as they can't be changed

Glacier's pricing is based on the hourly peak retrieval rate

Job processing is asynchronous and takes around 4 hours per job