Reviewing Storage Performance Options

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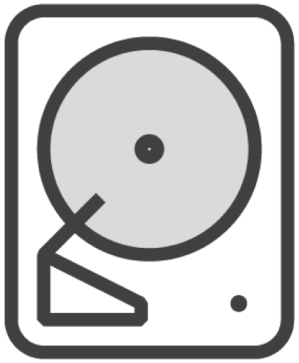
@mgerickson



Sharing

Latency

Throughput

Persistence

File size

Access Method

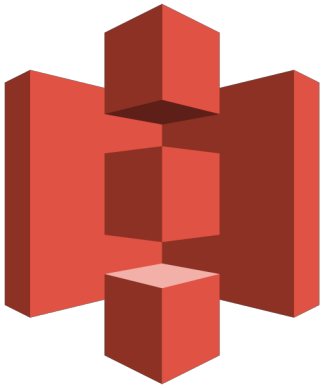
Availability

Durability

Frequency

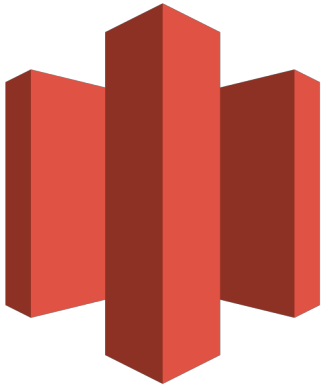
- Access
- Update

AWS Storage Options



S3

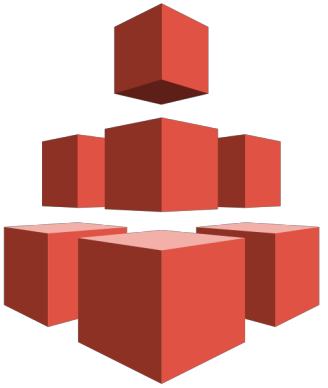
Simple Storage Service



S3 Glacier

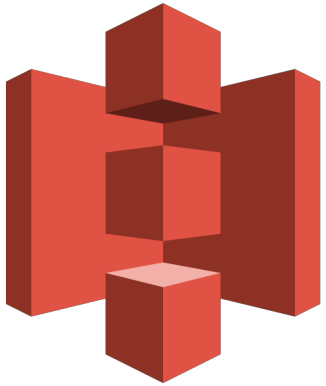
EBS

Block Storage



EFS

Elastic File System



S3

Shared access

Low latency

High throughput

High availability

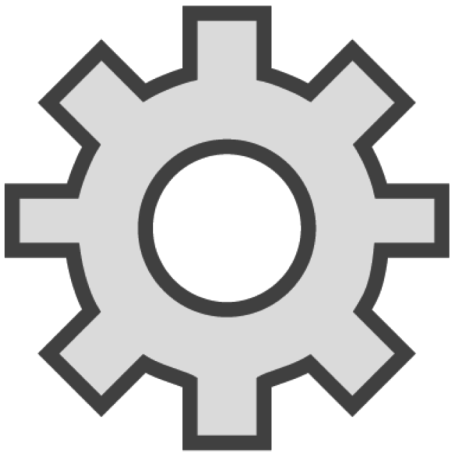
Data durability

Encryption

Access management

Lifecycle management

Query-in-place

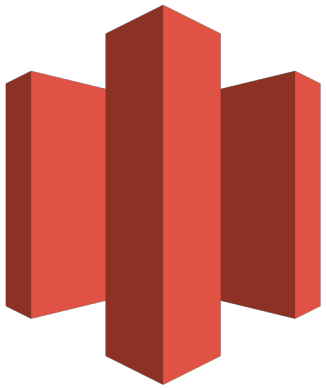


Standard

Intelligent tiering

Standard infrequent access

One-Zone infrequent access



Glacier

Archival storage

Encrypted

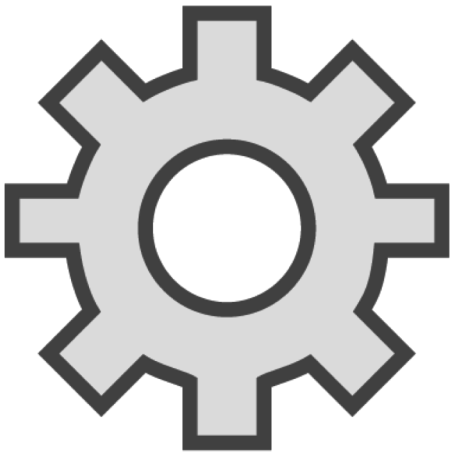
Access control

Audit logging

Immutable

Durable

Query stored data without retrieval



Latency options

- Expedited
- Standard
- Bulk

Economical

EBS

Attached

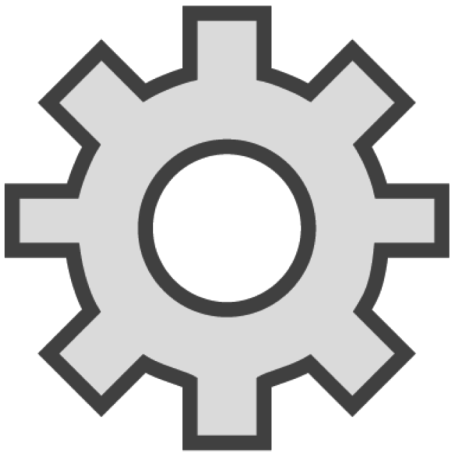
Replicated

Access control

IOPS optimized (SSD)

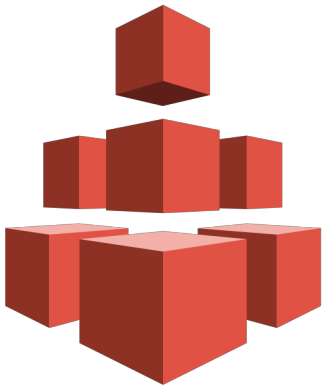
Throughput optimized (HDD)

Snapshots



Elastic volumes

Encrypt



EFS

Shared access

Elastic

Available

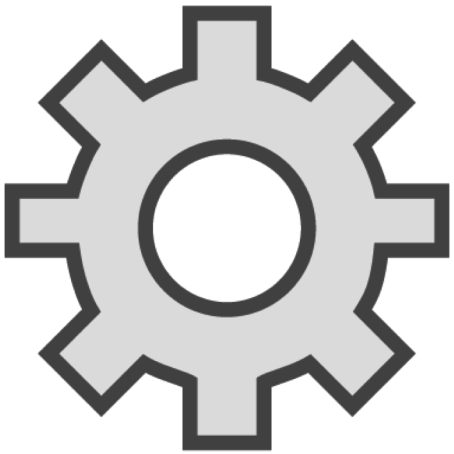
Durable

Performance

- General purpose
- Max I/O

Throughput

- Bursting
- Provisioned



Security

Encryption

Demo

Researching AWS storage options

Applying Our Knowledge

Migrating to AWS Storage

Portfolio of web applications

Global presence

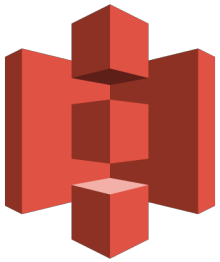
Data collection from clinical trials

Considerations for Choice

Shared access

Durability

Long term storage



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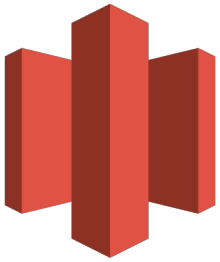


S3 Glacier

Highly durable

Access from ECS containers

Multiple access

Long term storage

Built for the Cloud

New web application

Match medical devices to needs

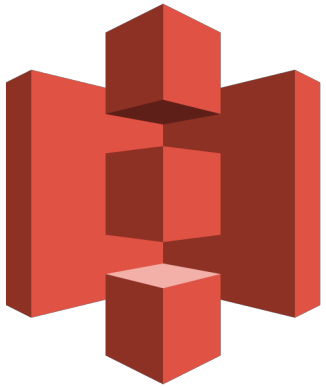
Global user base

Considerations for Choice

Lower cost

Local access

Non-critical images



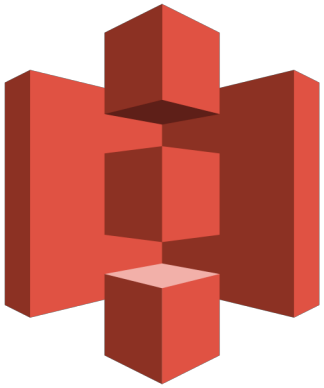
S3

Single region

Reduced Redundancy Storage (RRD)

Monitor!

AWS Storage Options



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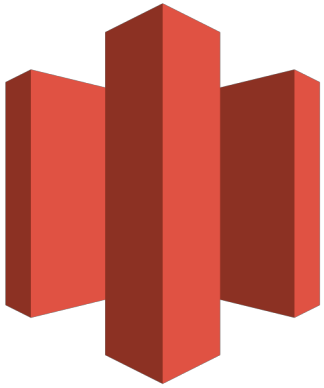

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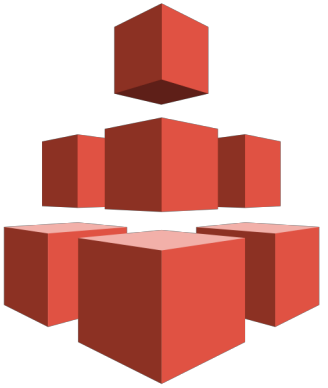

EFS

Elastic File System

Database performance