Reviewing Storage Performance Options



Kien Bui DevOps & Platform Engineer





Sharing

Latency

Throughput

Persistence

File size





Access Method

Availability

Durability

Frequency

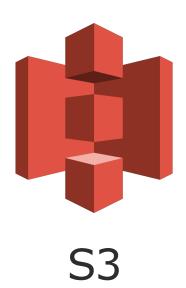
- Access
- Update



AWS Storage Options



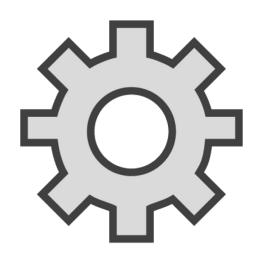




Shared access
Low latency
High throughput
High availability
Data durability



Encryption
Access management
Lifecycle management
Query-in-place

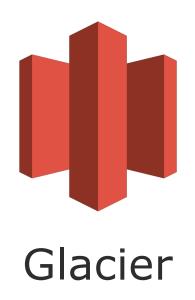


Standard

Intelligent tiering
Standard infrequent access

One-Zone infrequent access





Archival storage

Encrypted

Access control

Audit logging



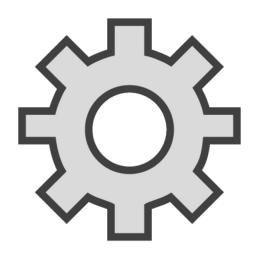


Immutable

Durable

Query stored data without retrieval





Latency options

- Expedited
- Standard
- Bulk

Economical





EBS

Attached

Replicated

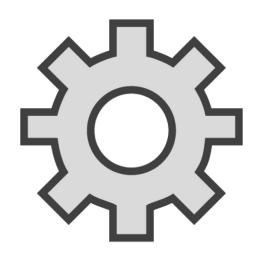
Access control





IOPS optimized (SSD)
Throughput optimized (HDD)
Snapshots

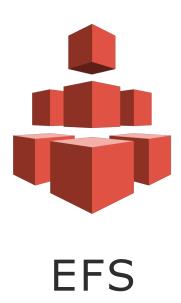




Elastic volumes

Encrypt





Shared access

Elastic

Available

Durable





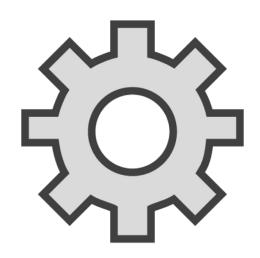
Performance

- General purpose
- Max I/O

Throughput

- Bursting
- Provisioned





Security

Encryption







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

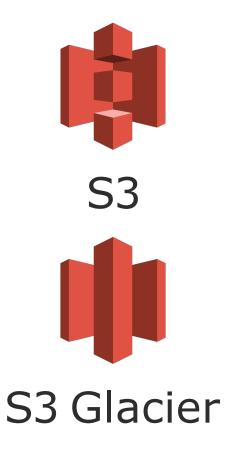


Durability



Long term storage





Highly durable
Access from ECS containers
Multiple access
Long term storage



Built for the Cloud



New web application

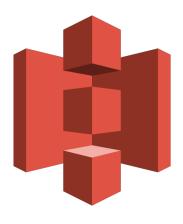
Match medical devices toneeds

Global user base

Considerations for Choice







S3

Single region
Reduced Redundancy Storage (RRD)
Monitor!



AWS Storage Options







Database performance

