Wide range of storage classes

S3 Standard	S3 Intelligent-Tiering	S3 Standard -IA	S3 One Zone -IA	S3 Glacier Instant Retrieval	S3 Glacier Flexible Retrieval	S3 Glacier Deep Archive
Access frequency	Frequently accessed data	Unknown or changing access patterns	Infrequently accessed data	Infrequently accessed data Re-creatable data	Long term data archive digital preservation	
Time to access	msec access	msec access	msec access	msec access	msec access	mins Free bulk retrievals: 5-12 hours	12-48 hours retrieval

Management tools for granular data control

S3 Storage Class Analysis

Discover data

Data transfer

Based on access patterns

Lower-cost storage class

S3 Lifecycle Policy

Lifecycle Policy

when?

when?

Transition to another storage class

when?

Expire

S3 Cross-Region Replication (CRR)

Region A

Region B

Region C

S3 Same Region Replication

Region A

Replica

S3 Object Lock

CALENDAR

No deletion

Retention period

Enforce write-once-read-many (WORM) policies

S3 Inventory

List of objects

Encryption status

+ metadata

API request

Or

S3

AWS Management Console

Billions of objects

Batch operations such as

Copy

Object tag sets

Restore

Modify access controls

Archived objects

Works with

Amazon Simple Storage Service

AWS Lambda

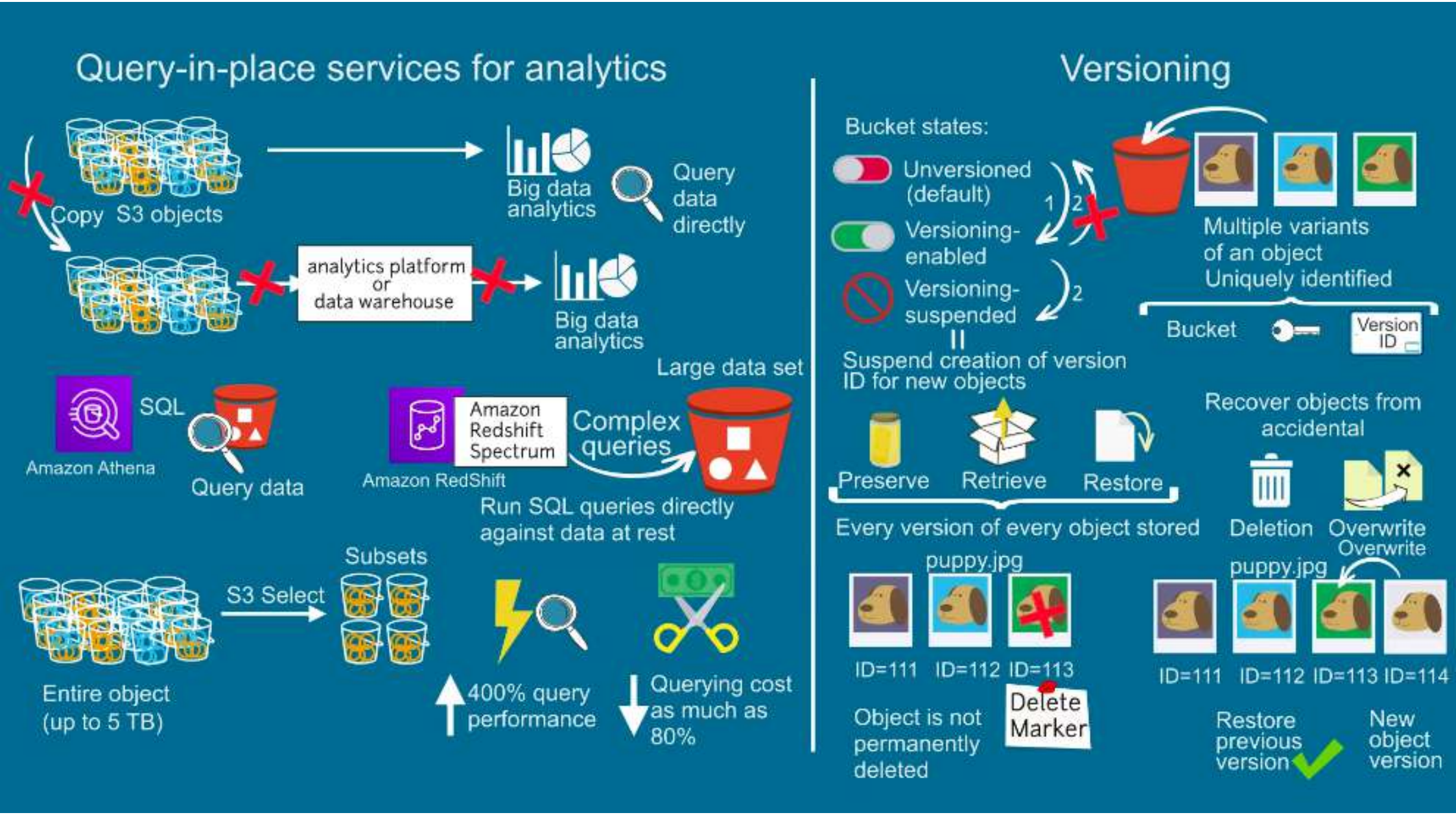
LOG

Activities

Alert

Automate workflow

Without managing additional infrastructure


Query-in-place services for analytics
Copy S3 objects
Big data analytics
Query data directly
analytics platform or data warehouse
Big data analytics
Large data set
SQL
Amazon Athena
Query data
Amazon Redshift Spectrum
Amazon RedShift
Complex queries
Run SQL queries directly against data at rest
Subsets
S3 Select
Entire object (up to 5 TB)
400% query performance
Querying cost as much as 80%
Versioning
Bucket states:
Unversioned (default)
Versioning-enabled
Versioning-suspended
Suspend creation of version ID for new objects
Multiple variants of an object Uniquely identified
Bucket
Version ID
Recover objects from accidental
Preserve
Retrieve
Restore
Every version of every object stored
Deletion
Overwrite
Overwrite
puppy.jpg
puppy.jpg
ID=111
ID=112
ID=113
ID=111
ID=112
ID=113
ID=114
Delete Marker
Object is not permanently deleted
Restore previous version
New object version