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What's New with AWS Storage

November 2019

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AWS Storage Team

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Amazon EBS

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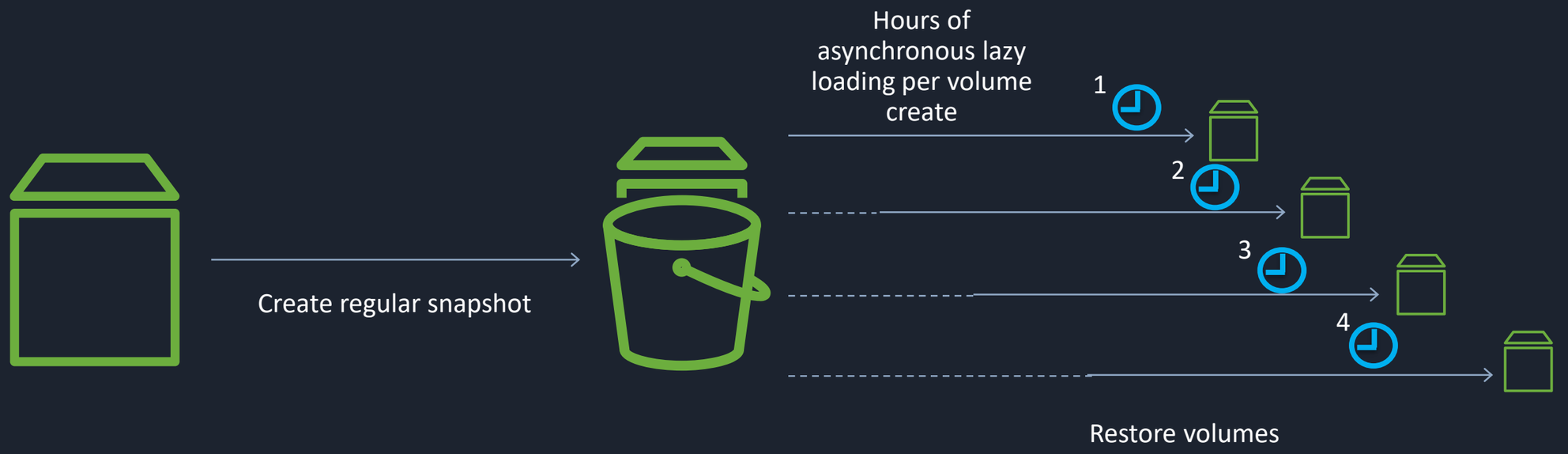
Previously …



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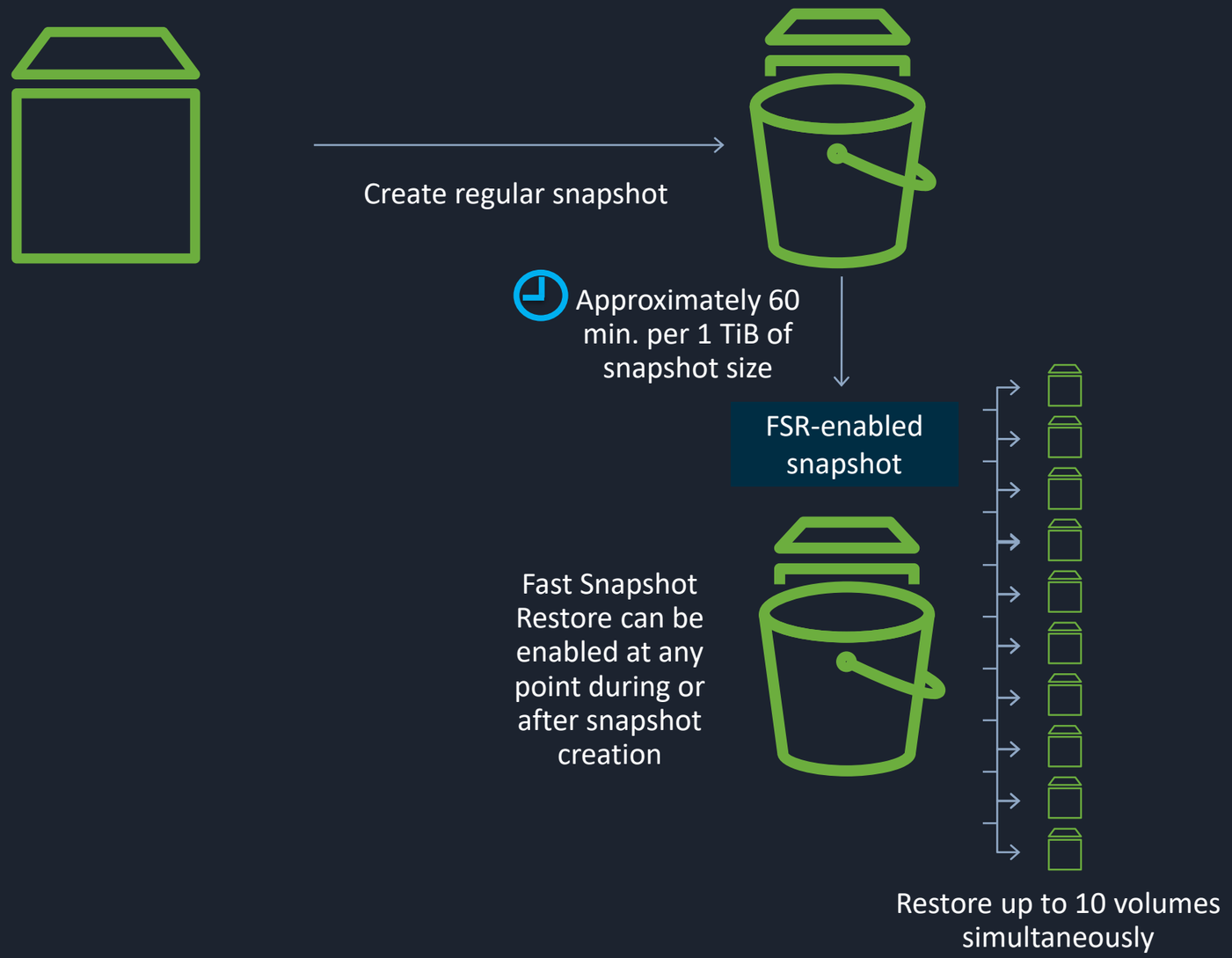
Now...



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Benefits

Speed: No need to wait for lazy loading of data from snapshots for fully performant volumes

Predictability: Enabling FSR takes approximately 60 minutes for each 1 TiB of snapshot size – after this, restored volumes have maximum performance

Lower cost and overhead: No need to purchase & attach additional EC2 instances to more quickly pull data blocks from snapshots

Parallel volume creation: Up to 10 simultaneous volume restores

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Use Cases

Virtual Desktop Infrastructure (VDI)

Backup & Restore

Test/Dev Volume Copies

Booting from Custom AMIs

Learn more at aws.amazon.com/ebs

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Amazon EFS

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Amazon EFS

Now available in more regions

Regions
Coming Soon

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Amazon FSx for Windows File Server

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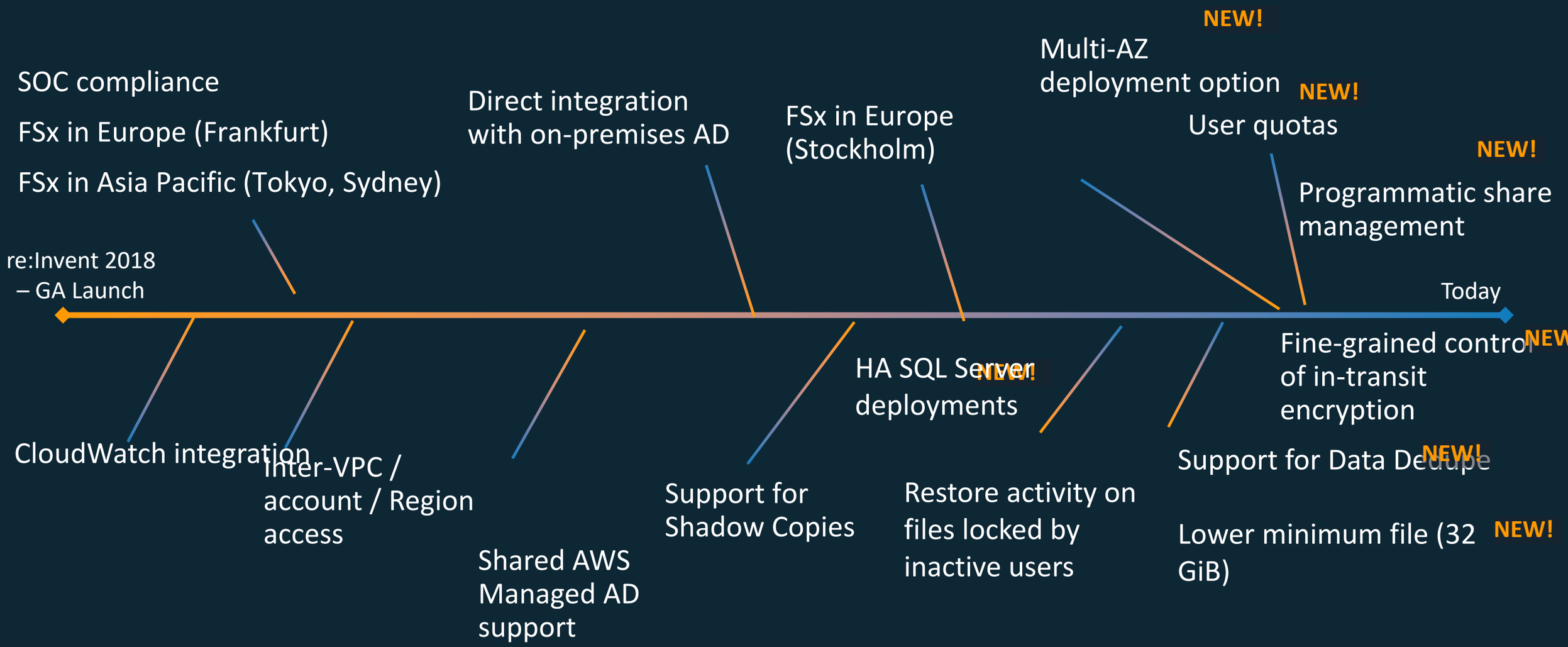
FSx for Windows File Server Pace of Innovation



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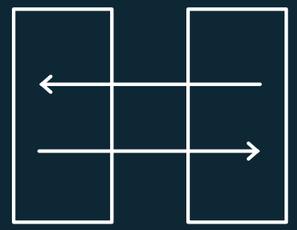
Enterprise-ready: Multi-AZ file systems

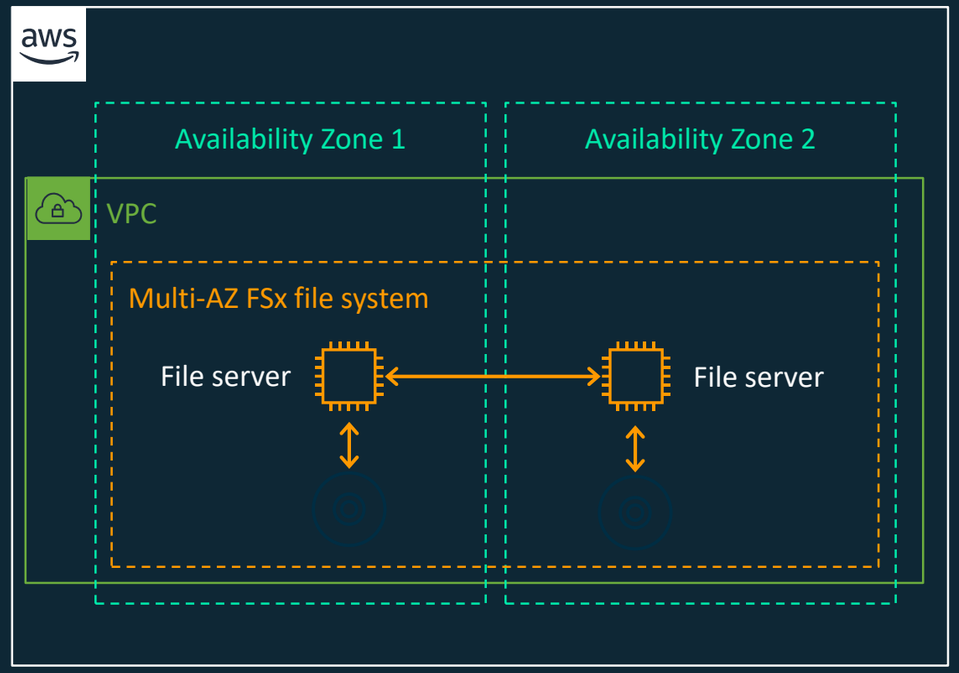
NEW!

FSx

Continually monitors and fails over across AZs



Replicates data across AZs



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Enterprise ready: Secure, Compliant, & Easy Management

FSx

Data encrypted at-rest and in-transit

NEW!

User quotas

Integrates with customer managed AD and supports Windows ACLs

NEW!

Fine-grained control of in-transit encryption and storage space

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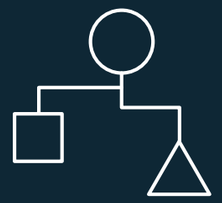
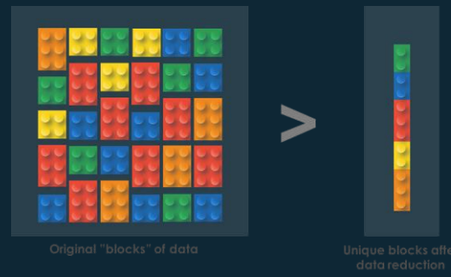
Reduce Costs of Windows Workloads



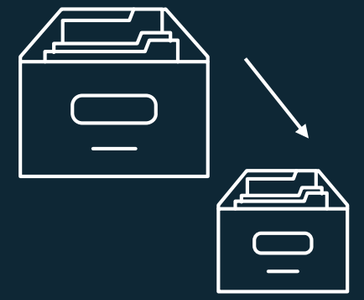
Independently choose storage and throughput

NEW!



Up to 50% storage costs using Data Deduplication

NEW!



Minimum file size reduced to 32 GiB

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AWS DataSync

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AWS DataSync

Easily and efficiently transfer hundreds of terabytes and millions of files

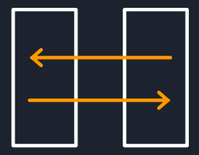
Fast

Parallelized transfer, 10Gbps per agent, scale-out with multiple agents

Automated

No scripts, does validation, filtering, throttling, scheduling

One-time migrations or on-going transfers



Flexible

Multiple protocols (NFS, SMB) & destinations (S3 & EFS)

AWS Integrated

Secure and compliant

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AWS DataSync Launches

Reduced pricing, global availability, task scheduling

68% price reduction

Simple predictable pay-per-use pricing $0.0125 per GB transferred

Available in 20 AWS Regions globally

Task scheduling

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AWS Storage Gateway

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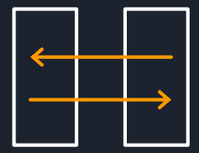
AWS Storage Gateway

On-premises access to virtually unlimited cloud storage



Multiple protocols
No changes to existing apps

Local caching
Low-latency access to frequently-used data

Optimized data transfers
Minimize network traffic

Secure and compliant

Cost-effective

AWS integrated
Management, monitoring, and in-cloud workloads

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AWS Storage Gateway Launches

Customers asked to	Feature we delivered
Run applications uninterrupted to meet internal SLAs	High availability for VMware-based gateways
Provide visibility into gateway metrics optimize resources	Increased visibility and insights into gateway performance
Align gateway software updates with company maintenance windows & IT policies	New maintenance options for granular control over software updates

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Amazon S3

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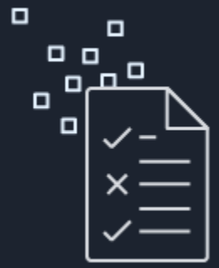
Why should you care about replicating your data?

Meet compliance requirements

Increase operational efficiency

Configure live replication between production and test accounts

Minimize latency



Aggregate logs into a single bucket

Abide by data sovereignty laws

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Amazon S3 Replication

Same-Region Replication - New in 2019

Replicate within the same AWS Region

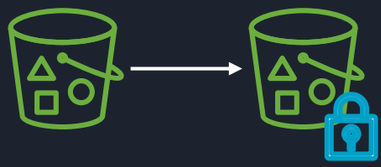
Cross-Region Replication

Replicate to a different AWS Region

Amazon Simple Storage Service

New in 2019

Replicate to a bucket with retention controls (in the same or different AWS Region)



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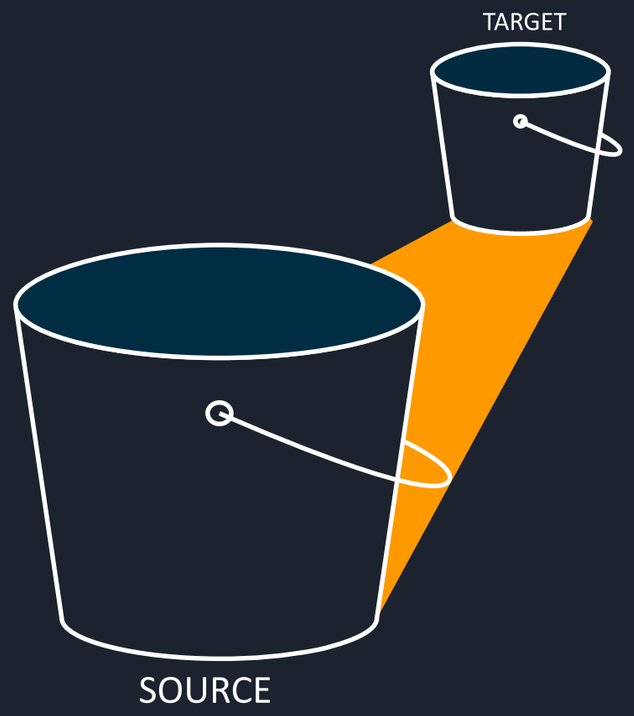
Amazon S3 Replication



SELECT

Select Data

Replicate the Whole Bucket
.. or based on a Prefix
.. or based on Object Tags

PROTECT

Select a Region

Replicate any second AWS Region.
Continuous replication as your data changes.
Satisfy distance and residency requirements

Change Ownership

Automatically change ACLs on replica objects.
Reset object-level permissions.
Protect against bad actors & IAM account compromise

Cross Account

Replicate into a second account.
Often this is a locked down “Archive” account.
Protect against AWS root account compromise.

OPTIMIZE

Set Storage Class

Maintain production access characteristics
.. or Land and Lifecycle
.. or replicate straight to S3 Glacier

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New in 2019

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Amazon Simple Storage Service

Cross-Region Replication

Replicate to a different AWS Region

New Replication Time Control

Replicate faster to a different AWS Region, backed by an SLA + replication metrics

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Amazon S3 Replication Time Control

Designed to replicate 99.99% of data in <15 minutes

Amazon S3 Replication with the benefits of..

Predictable
replication time

Backed by an Amazon S3
Service Level Agreement
(SLA)

Monitor replication using
Amazon CloudWatch
metrics and event
notifications

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Amazon S3 Replication Time Control SLA

New!

S3 Replication Time Control replicates:

- **Most objects in seconds**
- **99% of objects within 5 minutes**
- **99.99% of objects within 15 minutes**

The SLA covers the percentage of objects that replicate in 15 minutes per region pair in a billing month

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Q&A

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