
AWS
re:Invent
NOV. 28 – DEC. 2, 2022 | LAS VEGAS, NV

STG322

Build cost-efficient data retention with Amazon S3

Jessie Félix (he/him)
Product Manager, Amazon S3
AWS

Hiren Chandiramani (he/him)
Storage GTM, Amazon S3
AWS

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Goals

Identify your data access patterns

Gain visibility using Amazon S3 Storage Lens

Choose the right Amazon S3 storage class

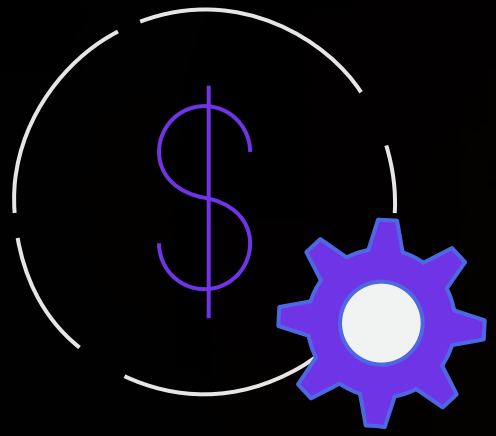
Fine tune your cost optimization strategy

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Identify your data access patterns

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

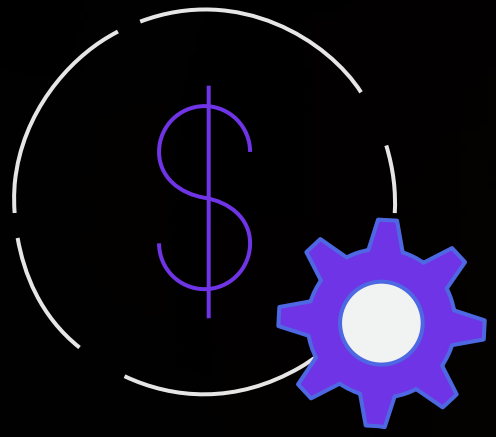
Patterns of cost optimization



1. Data with known or predictable access patterns

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Patterns of cost optimization



1. Data with known or predictable access patterns

2. Data with unknown or changing access patterns

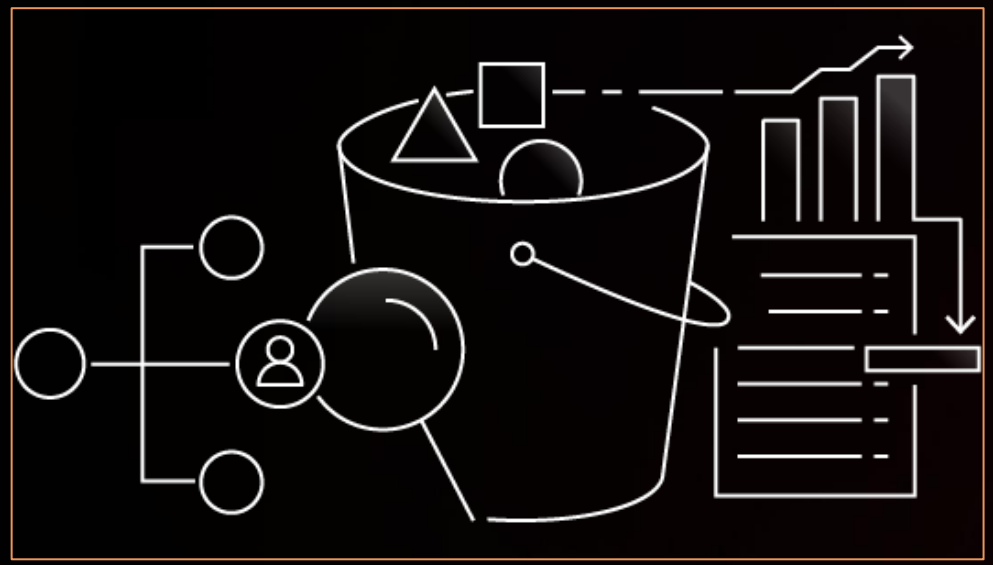
© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Amazon S3 Storage Lens

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

What is Amazon S3 Storage Lens?

A storage analytics service that provides organization-wide visibly into storage usage and activity to improve cost efficiency and data protection



- Interactive dashboard in S3 console
- Organization-wide visibility
- Drill-down by Region, storage class, bucket, and prefix
- Multiple ways to access S3 Storage Lens data
- Granular metrics across multiple categories

aws

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Find the answer with Amazon S3 Storage Lens



Free metrics
for instant visibility

What are my fastest growing buckets?

Are we using any of the lower cost S3 storage classes?

Do we have any incomplete multipart uploads > 7 days



Advanced metrics
to optimize cost

Which of my buckets are not accessed frequently?

What buckets have dynamic access patterns?

Which buckets don’t have a lifecycle policy?

aws

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Amazon S3 Storage Lens added 34 new metrics

Cost optimization



"How do I optimize my storage spend?"

Data protection



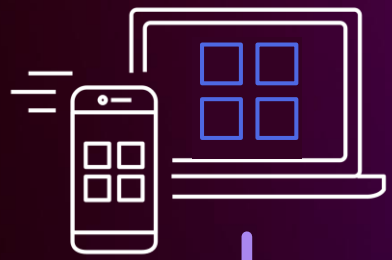
"How do I prevent accidental deletes and overwrites?"

Performance



"Am I seeing a rise in 403 authorization errors?"

Access control



"How do I audit my buckets to ensure ACLs are disabled?"

New metrics

- S3 Lifecycle rule count metrics
- Versioning metrics
- Status code metrics
- Object ownership metrics

aws

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Tutorial:

Getting started with **Amazon S3 Storage Lens**



© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Choose the right Amazon S3 storage class

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Storage class choice matters at scale

S3 Intelligent-Tiering	S3 Standard	S3 Standard-IA	S3 One Zone-IA	S3 Glacier Instant Retrieval	S3 Glacier Flexible Retrieval	S3 Glacier Deep Archive
						
Changing access patterns	Frequently accessed data	Infrequently accessed data	Re-creatable, less accessed data	Rarely accessed data	Archive data	Long-term archive data

Milliseconds access — Minutes to hours

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Fine-tune your cost optimization strategy

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Creating S3 Lifecycle configurations

S3 Lifecycle rules take action based on object age

Here's an example:

1. Move objects older than 60 days to S3 Glacier Instant Retrieval
2. Move objects older than 365 days to S3 Glacier Deep Archive



aws
© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

What is S3 Intelligent-Tiering?



Delivers **automatic storage cost savings**

Moves objects between **three access tiers designed for milliseconds access** for a small monthly monitoring and automation charge

No operational overhead, no lifecycle charges, and no retrieval charges

aws

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

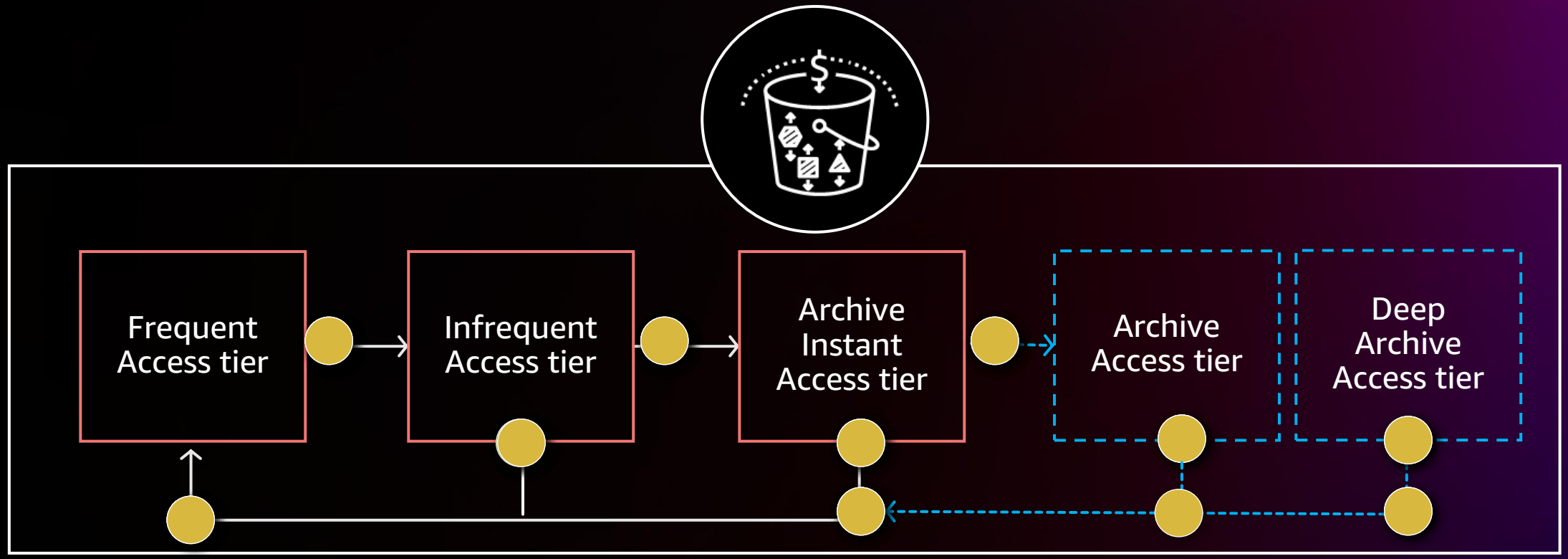
$750 million

in savings



© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Automatically optimize each and every object



Milliseconds access (automatic)

Minutes to hours (optional)

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Takeaways

Identify the access pattern of your data

Everyone should use the free version of S3 Storage Lens

Use S3 Lifecycle policies for data with predictable access patterns

Use S3 Intelligent-Tiering for data with unknown access patterns

aws

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Tutorial:

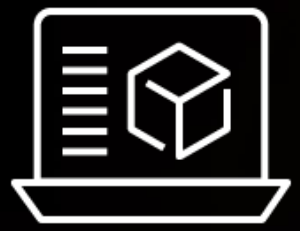
Getting started
with S3 Intelligent-Tiering



© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Continue your AWS Storage learning

Build a learning plan



Set your AWS Storage Learning Plans using **AWS Skill Builder**

Increase your knowledge



Use our **Ramp-Up Guides** to build your storage knowledge

Earn AWS Storage badges



Demonstrate your knowledge by achieving **digital badges**

aws.training/storage

aws
© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Thank you!



Please complete the session survey in the **mobile app**

© 2022, Amazon Web Services, Inc. or its affiliates. All rights reserved.