

Cost Management



Primary Costs of Amazon S3



Storage

The data you are storing in your buckets



Data Transfer

Transferring between storage classes and any outbound



APIs

The number of API calls you make (GETs, PUTs, etc.)



Monitoring

Monitoring costs, such as Intelligent Tiering or Storage Lens



Amazon S3 – Storage Classes

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S3 Standard



S3 Intelligent-Tiering



S3 Standard - IA



S3 One Zone - IA



S3 Glacier Instant Retrieval



S3 Glacier Flexible Retrieval



S3 Glacier Deep Archive



Milliseconds to Access

Minutes to Hours to Access

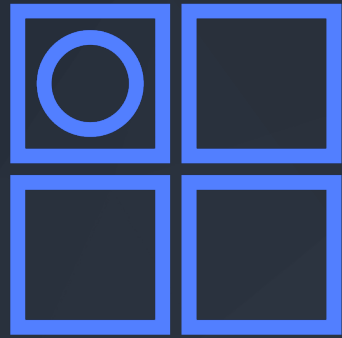


Considerations for Cost



Access Rates

How often are you accessing your data?



Object Size

Minimum charges may apply for objects smaller than 128KB



Object Count

More objects can increase costs for monitoring, analytics, and increase storage size



Duration

Some storage classes charge a minimum duration fee if you retrieve before



Move Your Data to the Right Storage Class!



Intelligent
Tiering



Lifecycle
Rules



Direct PUTs
To Storage Tiers



Using the Right Retrieval Mode



S3 Bucket

GET Object →






AWS Storage Admin


Data Retrieval Costs

Storage Class	Retrieval Cost
S3 Standard	n/a
S3 – Standard IA	\$0.01/GB
S3 – One Zone IA	\$0.01/GB
S3 Glacier Instant	\$0.03/GB
S3 Glacier Flexible	Expedited - \$0.039 Standard - \$0.013 Bulk - n/a
S3 Glacier Deep Arc	Standard - \$0.026 Bulk - \$0.0034



Version-Enabled Buckets

-  You are paying for every version of your object
-  Use Storage Lens to determine where you are keeping extra copies (versions) of data
-  Use Lifecycle Rules to delete unneeded data

	robot.jpg	ID: 88888
	robot.jpg	ID: 77777
	robot.jpg	ID: 66666
	robot.jpg	ID: 55555
	robot.jpg	ID: 44444
	robot.jpg	ID: 33333
	robot.jpg	ID: 22222
	robot.jpg	ID: 11111



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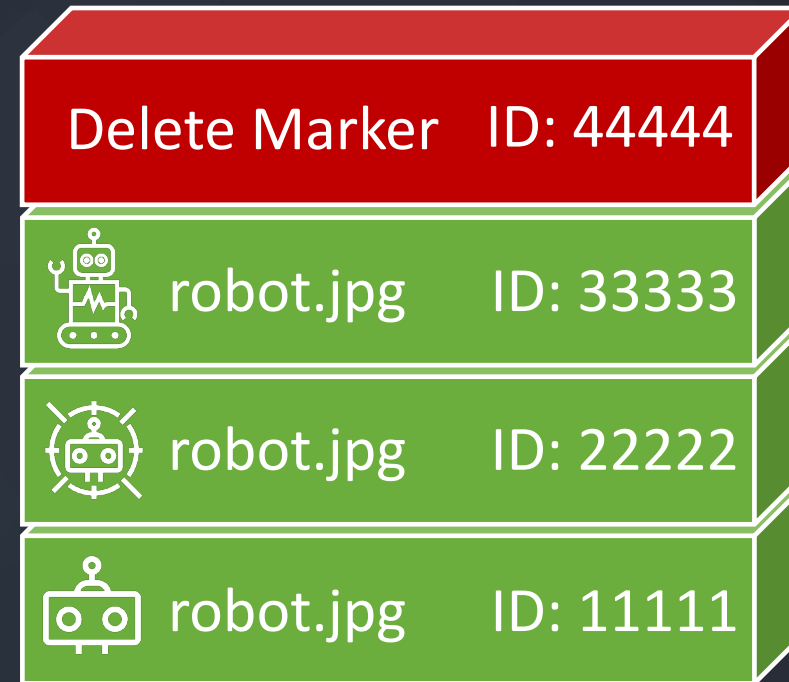


Deleting Objects in Versioned Buckets

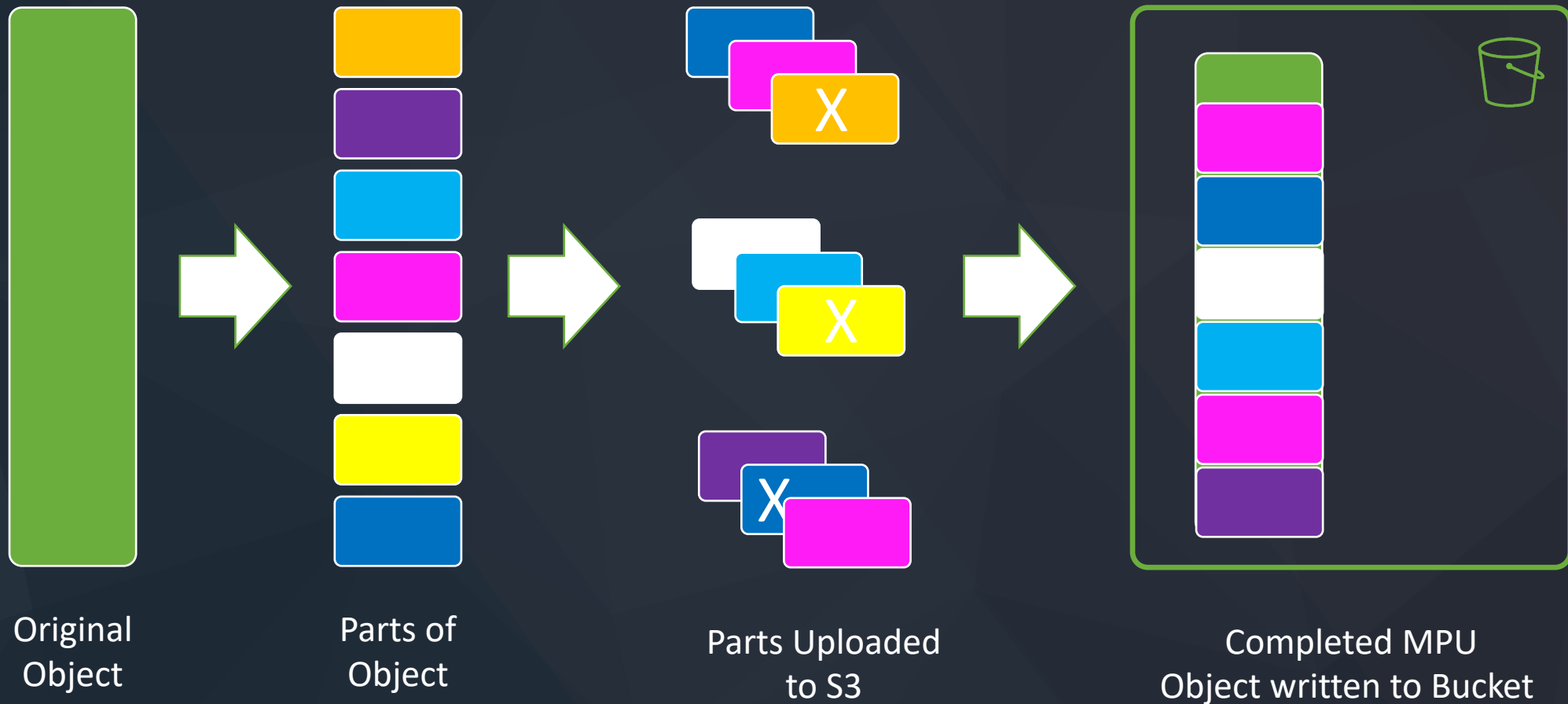


AWS Architect

DELETE Object



Incomplete Multipart Uploads



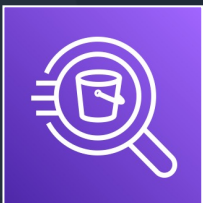
Other Ways to Save on S3 Costs



Move data to a different region with a lower price



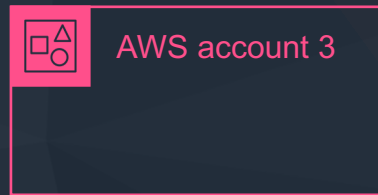
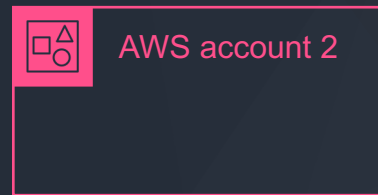
Look at your replication to see if you need all your data replicated or not since it costs \$ to move data between regions



Use native tools to query data rather than downloading contents to import to another tool



Consolidated Billing



Account 1 = 100 TB = \$2,304.00

Account 2 = n/a = \$0.00

Account 3 = 10 TB = \$235.52

Account 4 = 30 TB = \$706.56

Account 5 = 250 TB = \$5,683.00

Account 6 = 500 TB = \$11,315.20

Account 7 = 400 TB = \$9,062.00

Account 8 = 10 TB = 235.52

\$29,541.80/month



Consolidated Billing



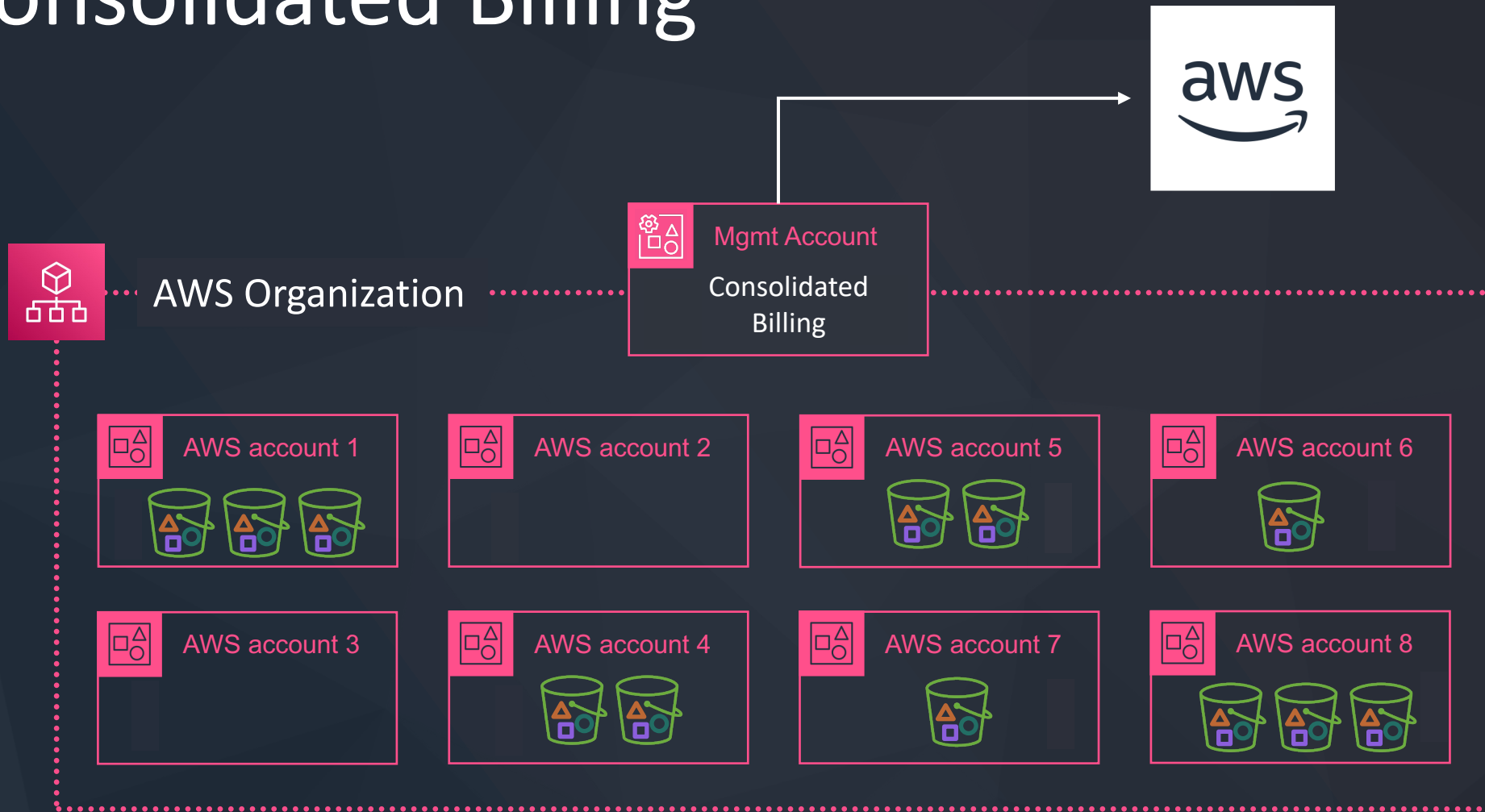
<u>Account</u>	<u>Storage</u>	<u>Monthly Cost</u>	<u>Per GB Cost</u>
Account 1 =	100 TB	= \$2,304.00	= \$0.037/GB
Account 2 =	n/a	= \$0.00	= \$0.00/GB
Account 3 =	10 TB	= \$235.52	= \$0.039/GB
Account 4 =	30 TB	= \$706.56	= \$0.039/GB
Account 5 =	250 TB	= \$5,683.00	= \$0.037/GB
Account 6 =	500 TB	= \$11,315.20	= \$0.0355/GB
Account 7 =	400 TB	= \$9,062.00	= \$0.037/GB
Account 8 =	10 TB	= 235.52	= \$0.039/GB

Ideal Cost Rate

\$ 29,541.80/month



Consolidated Billing



Consolidated Billing



	<u>Per GB Cost</u>
Account 1 = 100 TB	= \$0.037/GB
Account 2 = n/a	= \$0.00/GB
Account 3 = 10 TB	= \$0.039/GB
Account 4 = 30 TB	= \$0.039/GB
Account 5 = 250 TB	= \$0.037/GB
Account 6 = 500 TB	= \$0.0355/GB
Account 7 = 400 TB	= \$0.037/GB
Account 8 = 10 TB	= \$0.039/GB
Consolidated Billing	
Account	
= 1300TB = \$0.0355/GB	
\$28,518.40/month	

New Bill

\$ 29,541.80/month



Native Cost Management Tools

