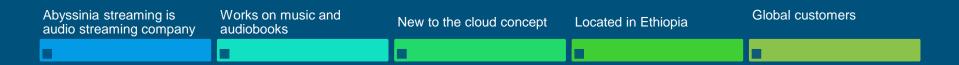
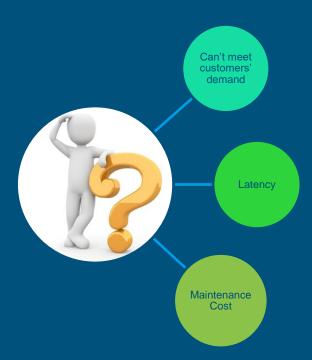


Company overview



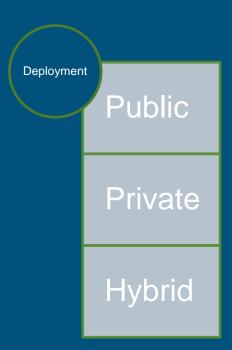
problems

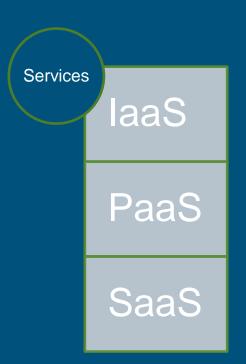


Cloud computing

Cloud computing

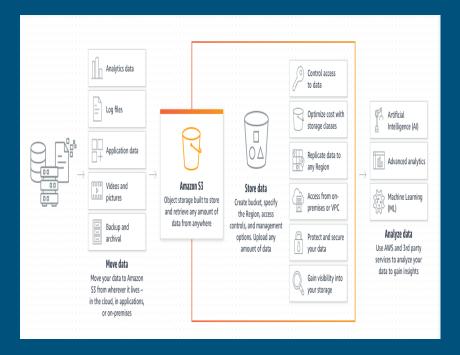
 Delivering network, computing, storage, and other services to the user via the internet.





Amazon S3

- Is an object storage service offering industry-leading scalability, data availability, security, and performance.
 Customers of all sizes and industries can store and protect any amount of data for virtually any use case
- Helps to improve ingestion speed



Amazon S3 Glacier

- Is used as a data archive, largely for the files' metadata.
- The combined benefit of Amazon S3 and Amazon S3 Glacier is that it provides a lowcost way for retrieving the metadata which contains information about the artist and the track.

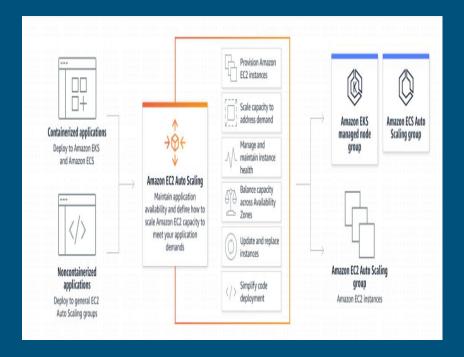


An Amazon S3 pricing comparison

| TIER | PURPOSE | COST PER GB PER MONTH |
|---|---|--|
| S3 Standard | General-purpose storage | \$0.023 |
| S3 Intelligent-Tiering monitoring and automation | Data with unknown or changing access patterns | \$0.0025 per 1,000 objects plus monthly storage fee |
| S3 Intelligent-Tiering Frequent Access tier | Frequently used data with unknown or changing data access patterns | \$0.023 |
| S3 Intelligent-Tiering Infrequent Access tier | Infrequently used data with unknown or changing data access patterns | \$0.0125 |
| S3 Intelligent-Tiering Archive Instant Access tier | Archived or frequently used data with unknown or changing data access patterns | \$0.004 |
| S3 Standard-IA (Infrequent Access) | Infrequently accessed data that needs on-demand millisecond access | \$0.0125 |
| S3 One Zone-IA | Data that can be recreated if necessary, but that is accessed infrequently and needs millisecond access | \$0.01 |
| S3 Glacier Instant Retrieval | Data that needs to be accessed once a quarter with millisecond access speeds | \$0.004 |
| S3 Glacier Flexible Retrieval (Previously known as S3 Glacier) | Long-term backup and archive with retrieval times ranging from 1 minute to 12 hours | \$0.0036 |
| S3 Glacier Deep Archive | Long-term data storage that can be accessed within 12 hours | \$0.00099 |

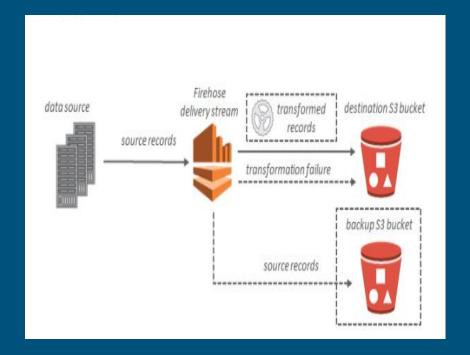
Amazon EC2 Auto Scaling

- It automatically adds or removes compute instances to maximize the performance of the streaming service
- Amazon EC2 Auto Scaling features have no additional fees beyond the service fees for Amazon EC2, CloudWatch (for scaling policies), and the other AWS resources that you use.



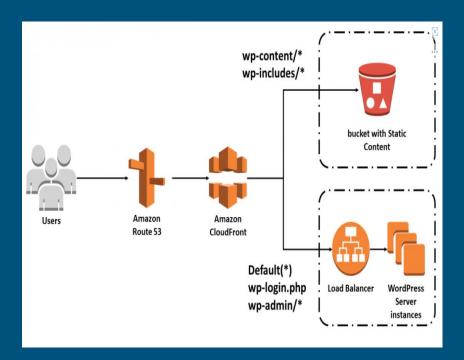
Amazon Kinesis Data Firehose

- Ingest data from music streamed to listeners' devices. streams the data into an Amazon S3 bucket
- Amazon Kinesis Firehose data ingestion costs At a \$0.029 per GB per month for the first 500TB,

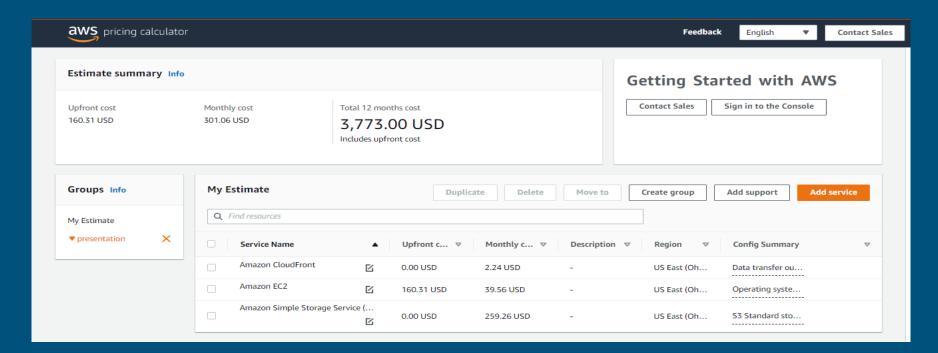


AWS CloudFront

- Collaborating with edge locations, contents are delivered to customers with low latency
- Amazon CloudFront is available for free and on on-demand pricing starting at \$0.085/month (First 10TB).



TCO calculation



summary

Problem

- Latency
- Cost
- High demand

Solution

- Cloud Front
- EC2 Autoscale
- Amazon s3 and s3 Glacier

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