

Entertainment Leader Leverages Amazon Redshift to Convert 60+ Years of Media Assets into Actionable Analytics

Summary

A global media & entertainment company needed to maximize the value of their legacy data by turning their unstructured data into usable information.

With 60+ years of millions of video materials, movies, commercials, television series, and more, the company needed a way to analyze this unstructured data, which was currently stored in MongoDB, to gain business insights and track consumer behavior.

Technologies Used

- MongoDB
- AWS Redshift Provisioned & Serverless
- AWS Glue & Glue Streaming
- Amazon Kinesis Data Streams
- AWS Lambda
- Amazon QuickSight

Challenges

At the time, no existing "out-of-the-box" solutions were available for converting their legacy MongoDB unstructured data into analyzable formats, especially at the scale they required. The project was further complicated by the need to handle near real-time streaming data while maintaining robust security protocols. The customer also needed to make these datasets accessible to their own clients and customers while ensuring proper security measures. Finally, the solution needed to be both SaaS-based and scalable to accommodate future growth and additional data transformation needs.



Solution

Datavail developed several Proof of Concepts (PoCs) to replicate the customer's MongoDB collections into an Amazon Redshift data warehouse.

Both Redshift Provisioned and Redshift Serverless were explored as part of this engagement. Combining serverless and provisioned clusters in a data mesh architecture allowed the organization to balance scalability, cost, and performance based on workload needs—serverless clusters handle variable workloads efficiently, while provisioned clusters ensure consistent performance for steady, high-volume tasks. This hybrid approach, supported by Redshift's data sharing and monitoring tools, enabled secure data access and effective resource management across data marts.

Amazon Kinesis Data Streams, AWS Glue, and AWS Glue Streaming were used to handle the near-real time streaming requirements between MongoDB and AWS Redshift data warehouses. In addition to transforming the unstructured data into structured, the solution also created a secure read-only cross-account dataset to enable secure client access. Amazon QuickSight was then used to analyze this data and help the customer explore the insights that had been trapped in this massive data set.

Results



Created a secure data sharing capability for millions of customers.



Established a scalable process for migrating 100,000s of additional MongoDB collections.



Created a strong data foundation for any future analytics requirements.



Enabled near real-time analytics on streaming data with Amazon Kinesis Data Streams and Amazon QuickSight.



Successfully converted unstructured MongoDB data into analyzable format in AWS Redshift Provisioned and Serverless.

Why Datavail?

With a dedicated team of more than 1200 consultants focused on cloud deployments and managed services, Datavail has completed over 1000 implementations. Our broad industry reach and strategic partnerships across all leading technologies positions us as the ideal partner to deliver comprehensive cloud solutions. Whether you're migrating to the cloud for the first time or in need of a hybrid solution, Datavail can help.

