



# Brillio Data Lake on AWS

Store all your data in one centralized repository at any scale

- A data lake is a centralized repository that allows you to store all your structured and unstructured data at any scale. You can store your data as-is, without having to first structure the data, and run different types of analytics—from dashboards and visualizations to big data processing, real-time analytics, and machine learning to guide better decisions.
- Data Lakes allows you to import any amount of data that can come in real-time. Data is collected from multiple sources and moved into the data lake in its original format. This process allows you to scale to data of any size, while saving time of defining data structures, schema, and transformations.
- AWS delivers an integrated suite of services that provide everything needed to quickly and easily build and manage a data lake for analytics. AWS-powered data lakes can handle the scale, agility, and flexibility required to combine different types of data and analytics approaches to gain deeper insights, in ways that traditional data silos and data warehouses cannot.
- Brillio solution is unique and the tool is coupled with our expertise to support clients to manage their data, and harvest insights in a quick and cost-effective way on AWS



## Benefits of Brillio Data Lake on AWS

- Brillio has end to end solution for consulting, migrating and managing data on AWS
- Unify data from more sources and formats: Deploy, integrate and analyze massive volumes of structured, semi-structured and unstructured data from multiple sources
- Federate and query virtually any data: Brillio solution helps establish backend connection using a single query that reduces latency and supports ad hoc and complex queries.



## Features of Data Lake on AWS

### Data lake reference implementation

- Leverage this data lake solution outof-the-box, or as a reference implementation that you can customize to meet unique data management, search, and processing needs.

### Data access flexibility

- Leverage pre-signed Amazon S3 URLs, or use an appropriate AWS Identity and Access Management (IAM) role for controlled yet direct access to datasets in Amazon S3.

### Managed storage layer

- Secure and manage the storage and retrieval of data in a managed Amazon S3 bucket, and use a solution-specific AWS Key Management Service (KMS) key to encrypt data at rest.

### User interface

- The solution automatically creates an intuitive, web-based console UI hosted on Amazon S3 and delivered by Amazon CloudFront. Access the console to easily manage data lake users, data lake policies, add or remove data packages, search data packages, and create manifests of datasets for additional analysis.



## Data Lake Adoption for Leading US Technology Company

About the client: One of the leaders in technology industry, the client is a multi-national corporation employing over 20,000 people.

### Objective:

To migrate customer applications and storage to AWS to reduce the bottleneck, cost and resource dependency associated with on-premise infrastructure and application management and to achieve high availability, better disaster recovery and scalability

### Solution highlights:

- Performed SQL Server DW migration onto AWS including associated components like ETL, Cubes
- Automated the deployment process using AWS data lake services
- Implementation of Hybrid Cloud by establishing site-to-site VPN using express route

### Impact:

- In-built VM Diagnostics which can be used for detailed analysis
- Disaster recovery using AWS backup services

## Governed data lake for a Financial Services customer

About the client: One of the leaders in financial vertical

### Objective:

To implement end to end solution for data lake which have advanced analytical tools for insight generation, self service for BI and fully adhere to GDPR compliances covering aspects of Data management, data quality, data security and data governance.

### Solution highlights:

- Brillio recommended a cloud-based Data lake solution with covering dimensions of Infra, DM, DQ, Security, Compliance, Governance & CCB.
- The roadmap ensured that the client progressed to a higher maturity index with efficient governance.
- All the solution options were designed adhering to GDPR, security and compliance requirements of DACH region

### Impact:

- 70% cost reduction for data storage with Data Lake Store
- 50% faster new data source on-boarding provisioned by ADF, Logic Apps & automated ETL framework
- 40% reduction in time to market for analytical models provided by AWS

### AWS services:

#### Date Lake:

Object storage: S3

Backup & archive:  
Amazon Glacier

Data Catalog: AWS  
Glue

#### Analytics:

Interactive Analytics  
Amazon Athena

Big Data Processing  
Amazon EMR

Data Warehousing  
Amazon Redshift

Real-Time Analytics  
Amazon Kinesis

Dashboards and Visualizations  
Amazon QuickSight

Operational Analytics  
Amazon Elasticsearch  
Service

### Reference Customers of Brillio:

US based technology company

## Why Brillio ?

Brillio is an APN Advanced Consulting Partner and a leader in global digital business transformation. Brillio accelerates the enterprise transition journey to 'digital first' business with a suite of proprietary IPs and accelerators that leverage advanced technological capabilities of Intelligent Automation, Artificial Intelligence, and Cloud Analytics. Brillio's experience of enterprise digital endeavors on AWS spans across Internet of Things (IoT), App modernization, Data lakes, SAP migration, Advanced Analytics, Modern Workspaces, and Data Center Migration.

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## About Brillio :

Brillio specializes in leveraging emerging technologies like analytics, security, cloud, mobile, and machine learning. It uses this technology to create "sticky" new customer experiences, to achieve surprising cost efficiencies, and to quickly deliver innovative solutions. Working across different industries, Brillio has helped define digital transformation objectives and turn them into actionable market strategies.