

Loan and Behold: GLBA Compliance With AWS

A major U.S. mortgage lender works with TEKsystems Global Services to achieve GLBA compliance with AWS.





Safeguarding Customer Data

Processing hundreds of thousands of loan applications annually and safeguarding vast amounts of sensitive financial data is no small task—especially with 20,000-plus employees operating in a highly regulated financial services environment. To achieve 100% GLBA compliance, our customer needed to de-identify customer data to protect against unauthorized access, destruction and loss.

A high-stakes, time-sensitive endeavor—ensuring business continuity and avoiding regulatory penalties.



What We Did

AI/ML
Data analytics



Industry

Financial services



Results

Reduced regulatory risk
Improved operational efficiency



Key Integrations

AWS

The Challenge

Partners in Comprehensive GLBA Data Anonymizer Solution Experts in AI/ML and Data Analytics

To meet GLBA compliance, our customer recognized that an AWS-based data anonymization solution could be the answer. For a Premier Tier Services Partner capable of providing scalable, secure solutions, they turned to TEKsystems Global Services (TGS).

Our experts provided not only technical excellence but also strategic execution, which was essential, given the project's massive scope: 1.3 petabytes and 13.5 billion objects of complex, semi-structured and unstructured files. In a collaborative approach, our customer set the project direction and prioritized the backlog, while our team brought deep AWS, AI / machine learning (ML) and data analytics expertise to provide:

- Solution architecture advisement
- ML / data engineering
- Project management and reporting

To accelerate delivery and performance, TGS integrated agile data engineering capacity and organized the solution into three parts:

- **Raw data classification:** examined loan business identifiers and PII columns in structured and semi-structured data using Bedrock LLM
- **Semi-structured loan master inventory generation program:** Used Bedrock LLM to identify and store loan numbers with corresponding locations
- **Semi-structured de-identification program:** Merged qualified data sets with retention data to identify and anonymize specific loans

Implementation Highlights

- **Technology stack:** leveraging cutting-edge tools to drive intelligent automation and scalable data processing, including AWS Bedrock LLM, Lambda, Glue, Step Functions, Athena and Python/PySpark
- **Architecture:** a codeveloped reference architecture designed in partnership with the customer to ensure alignment with business and compliance goals
- **Delivery model:** agile and outcome-driven—direction set by customer and execution led by TGS with precision and flexibility

Real-World Results

By implementing this solution, our customer achieved full GLBA compliance for 1.3 petabytes of raw data while also establishing a scalable framework capable of handling massive data volumes with minimal operational overhead.

At a Glance

- 15TB of data processing velocity per day—a 75x improvement over the previous manual process
- Scalable anonymization across 13.5B data objects
- 97.5% accuracy in PII/PIFI detection, exceeding the 95% target

Through close collaboration, we ensured compliance and strengthened the customer's data security posture, enabling safer data consumption and laying the foundation for future AI/ML innovation.



Increased data processing velocity from
200GB/day (legacy) to 15TB/day



Exceeded target accuracy goal by 2.5%



About TEKsystems and TEKsystems Global Services®

We're a leading provider of business and technology services. We accelerate business transformation for our customers. Our expertise in strategy, design, execution and operations unlocks business value through a range of solutions. We're a team of 80,000 strong, working with over 6,000 customers—including 80% of the Fortune 500—across North America, Europe and Asia, who partner with us for our scale, full-stack capabilities and speed. We're strategic thinkers, hands-on collaborators, helping customers capitalize on change and master the momentum of technology. We're building tomorrow by delivering business outcomes and making positive impacts in our global communities. TEKsystems and TEKsystems Global Services are Allegis Group companies. Learn more at [TEKsystems.com](https://www.teksystems.com).

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