

CASE STUDY

JAPANESE INSURANCE PROVIDER ACHIEVES TOTAL DATA SECURITY

Client Overview

A leading Japanese insurance provider manages a vast portfolio of life, medical, property and casualty insurance solutions serving over 2 million policy holders. They faced a pressing challenge to secure sensitive policy information while operating a fast paced quality engineering environment to continuously deliver enhanced software functionality to the marketplace. This challenge centered around their Guidewire system — a robust, scalable platform that integrates policy, billing, and claims data for enhanced operational efficiency and data integrity.



Designed to streamline complex insurance workflows, Guidewire provides a comprehensive suite of interrelated modules to manage diverse insurance transactions. It allows insurers to manage the full lifecycle of insurance processes. Guidewire also offers advanced features for real-time data analytics, extensive configurability, and an ecosystem that enables rapid time-to-market for new offerings.

The company required a Test Data Management solution that could efficiently perform data masking operations and maintain data integrity across a complex data environment for their auto insurance products while ensuring compliance with strict data security standards.

GenRocket was selected for its ability to support the Guidewire ecosystem while delivering significant cost savings and assured data privacy. This case study outlines how GenRocket's solution enabled the fast and accurate provisioning of production data masking while offering a pathway to a synthetic data generation with a fully automated test data delivery system.

Guidewire's Complex Data Environment

Guidewire's InsuranceSuite operates a complex data environment, where diverse capabilities across interconnected modules—such as PolicyCenter, ClaimCenter, BillingCenter, and ContactManager—create a cohesive yet intricate system for managing all aspects of the insurance lifecycle. Testing new software enhancements that interact across the platform demands a high level of data integrity and referential integrity.



Guidewire also connects with various downstream systems, including those used for analytics, customer relationship management, and regulatory reporting. This enables the insurer's ability to make data-driven decisions with confidence, ultimately enhancing the end-to-end customer experience.



Ensuring referential integrity for all interconnected data—like customer information, policy details, and claims history—contained in these various transaction flows is equally critical to successfully perform comprehensive testing without introducing errors.

Test Data Challenges & Solutions

The company's Guidewire database, spanning up to 12,000 tables, presented significant complexity for secure data management. An analysis performed by the customer and their GenRocket systems integration partner identified 200 tables with sensitive data requiring in-place masking, where maintaining data integrity across these interconnected tables was critical.

The project's technical requirements included:

In-Place Masking: To secure sensitive data extracted from the production environment, minimizing security risks and infrastructure costs by eliminating the duplicate databases required by conventional subsetting and masking procedures.

Complex Data Structures: Guidewire's interconnected environment across PolicyCenter, ClaimCenter, and BillingCenter required careful management to uphold referential integrity.

Japanese Character Set Support: Compatibility with Japanese Kanji and Kana character sets was essential for testing applications serving the Japanese marketplace.

Seamless Integration: The solution needed to integrate with Guidewire's Test Framework (GTF), aligning with Guidewire's data models and schemas to support comprehensive testing of cross-module transactions.

Workflow Accuracy: Ensuring precise transaction workflows across Guidewire's complex data environment was vital for testing accuracy with total data security.

GenRocket was chosen to address these challenges:

Guidewire Environment Support: GenRocket maintained referential integrity across core modules, crucial for integration testing and workflow validation.

In-Place Masking: GenRocket's solution enabled masking of all sensitive data contained in production databases, securing policyholder information, enhancing security and cutting costs by avoiding duplicate databases.

And unlike the use of conventional masking algorithms, GenRocket performs *synthetic data replacement*, an approach that replaces sensitive data with generated synthetic data. This eliminates the possibility of reverse engineering any sensitive production data values.

Cost Efficiency: GenRocket offered notable savings, allowing resource reallocation for future synthetic data and test data initiatives.

Japanese Character Support: GenRocket adapted its platform for Japanese character requirements at no extra cost.

Streamlined Deployment: GenRocket's deployment aligned with client quality standards, providing technical support and collaborating with the client and their systems integration partner to ensure accuracy and effectiveness.

Results & Benefits

The collaboration between GenRocket, its systems integration partner, and the Japanese insurance provider yielded significant benefits:



Enhanced Data Privacy: In-place masking ensured sensitive information was secured directly within the production environment, protecting policyholder data while adhering to strict compliance standards.



High Volume Test Data: The company was able to provision extremely high volumes of data to facilitate performance testing and made the analysis of software defects in production faster and easier to remediate.



Infrastructure Cost Reduction: The elimination of duplicate datasets in lower environments and the efficiency of GenRocket's solution provided substantial cost savings, freeing up resources for other strategic projects.



Accurate & Reliable Testing: By maintaining referential integrity and integrating seamlessly with Guidewire's Test Framework, GenRocket supported comprehensive integration and workflow testing, crucial for the insurance provider's operations.



Custom Support: GenRocket's ability to handle Japanese characters and provide tailored technical assistance was invaluable, demonstrating their commitment to customer satisfaction and adaptability.

Conclusion

The case study illustrates how a major Japanese insurance provider successfully overcame complex data management challenges with GenRocket's Test Data Automation platform. With the ability to secure sensitive data in a production environment, maintain referential integrity across interconnected modules, and accommodate specific technical requirements, GenRocket's solution proved not only effective but also forward-looking. The insurance provider now enjoys a robust platform capable of scaling with future demands, including synthetic data generation, setting a benchmark for data security and efficiency.