

VALENZ CASE STUDY

GenRocket Produces Accurate Testing Data Approximately 50 Times Faster Than Manual Methods for Vālenz®, a tech-enabled healthcare ecosystem optimization platform for the self-insured industry

Highlights

- Industry
 - Healthcare/Health Insurance
- GenRocket Products
 - Synthetic data automation
 - X.12 EDI transaction data

Challenges

- Sensitive patient health information (PHI) and billing data needed to be scrubbed to test a new platform.
- Approximately 833 hours would be necessary to manually scrub 300,000 records.

Solution

 GenRocket's solution to deploy synthetic testing data that accurately mimicked actual data resulted in a time savings of 813 hours, approximately 50 times faster than the company's original manual data scrub.

Summary

Vālenz, a tech-enabled healthcare ecosystem optimization platform for the self-insured industry, relied on GenRocket's synthetic test data to test its next-generation claims processing platform. The company originally planned to perform a manual data scrub, but it was time prohibitive to effectively scrub 300,000 records. GenRocket's automated synthetic test data solution was approximately 50 times faster than the original plan to manually scrub and test patient data.

About Vālenz

<u>Vālenz</u> simplifies the complexities of self-insurance for employers through a steadfast commitment to data transparency and decision enablement powered by its Healthcare Ecosystem Optimization Platform. To balance the relationship between healthcare quality, advocacy and cost, the Valenz approach aligns the member, provider and payer. The company delivers this synergy through a strong foundation with deep roots in clinical and member advocacy, alongside decades-long expertise in claim reimbursement and payment validity, integrity and accuracy. By establishing "true transparency" and offering data-driven solutions that improve cost, quality and outcomes for employers and their members, Valenz engages early and often for smarter, better, faster healthcare.

The Problem

Administrative complexity is one of the top contributors to the high cost of healthcare in the United States. According to an analysis by Humana and the University of Pittsburgh, \$265.6 billion of annual healthcare spend stems from administrative complexity, while another \$230.7 billion can be attributed to errors in pricing for healthcare services.

Specifically, software testing requirements for healthcare industry applications are particularly complex, with strict data privacy regulations along with complex data sets to manage. With the adoption of Electronic Health Records (EHR) and Electronic Medical Records (EMR), the variety and volume of available healthcare data also continues to expand. Add to that HIPAA compliance, and the industry faces overly complex data interchange challenges.

Vālenz needed safe, accurate data with which to test the next generation of its claims processing platform. Using real data posed an unacceptable privacy and security risk, but manually creating the necessary test data posed undesirable time constraints. The company needed a solution to create accurate synthetic data to lower testing time and comply with HIPAA regulations to safeguard patient privacy.

The Solution

Vālenz leveraged GenRocket's test data automation and EDI accelerator to test the next generation of their claims processing platform. The goal was to lower testing time and significantly expand test coverage, while remaining HIPAA compliant.

Vālenz replaced PHI in their production databases with synthetic data for testing EDI insurance claims transactions. They planned to use it for performance and stress testing after completing their first project milestone.

Outcomes

Using GenRocket to replace production data with synthetic data for EDI claims transaction data achieved excellent results.

The Project	Manual Method	GenRocket
Scrub 300,000 claims records linked to corresponding patient records and replace PHI with synthetic data.	300,000 records x 10 seconds per record = 833 hours	300,000 records < 20 hours
	Assumes 10 seconds per patient record	813 hours saved or approx. 50 times faster than manual method

Vālenz leveraged one of GenRocket's software development partners to digitally transform its claims engine. GenRocket's synthetic data automation platform replicated the data model from the claims application to generate realistic and accurate synthetic data, enabling highly efficient collaboration between the two organizations, without the use of any PHI during testing and development.

Scripts were run several times to generate controlled, accurate synthetic data sets during the project.

Conclusion

Modernizing health IT and analytics systems faces a difficult challenge: Provisioning quality test data without putting sensitive information at risk. To accomplish this task, synthetic test data automation comes into play. With synthetic test data automation, healthcare software teams can rapidly generate test data that meets FHIR or EDI standards and maintains HIPAA compliance. Using GenRocket's synthetic test data automation platform, Vālenz was able to produce 300,000 claim records approximately 50 times faster than their manual method of scrubbing data to produce the required test data for building and testing the next generation of their platform.



With GenRocket, we accelerated our time to market by 5 months, allowing Valenz to re-direct staff to other time-sensitive tasks required for us to deliver a more automated and scalable claims processing platform to better support our customer needs

- Edward Zwicker, Chief Information Officer for Valenz

