



Card Processor Accelerates Journey to Cloud with CloudFrame *Renovate*

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Customer Challenges

GDPR and data sovereignty laws required this Mainframe COBOL Merchant Clearing application to purchase a Windows-based COBOL vendor platform to distribute the application to over 500 customers globally. Complexity, stability and total cost of ownership drove the business case to modernize and simplify the technology stack. A Cloud native strategy based on Java microservices and Pivotal Cloud Foundry was decided. The system was comprised of over 2000 applications and 15 million lines of COBOL. Multiple vendor products were evaluated to determine the optimal path forward, with the goal of achieving at least 90% automated code refactoring to Java and backward compatibility with mainframe data.

CloudFrame Solution

CloudFrame Renovate™ accelerated time to market 75%. Renovate fully automated the refactoring from COBOL to Java Spring Boot services, with no manual post-conversion code changes. The generated code earned a SonarQube “A” rating using the in-house quality gates. Renovate also generated Junit test cases yielding 80% coverage as required by DevOps change controls. Regression testing demonstrated 100% identical functional and data results.

CloudFrame was selected due to their alignment with the 12 Factor Modern Application Principles and Cloud neutrality using the Java Spring Boot framework. Renovate™ was piloted to eliminate the Windows-based COBOL Platform and begin the Cloud native journey with a scope of 775 programs and 6.2 million lines of COBOL code. CloudFrame’s Backward Compatibility features, emulating mainframe file systems and data, de-risked the gradual migration to UTF-8. Their innovation and responsiveness automatically refactoring file-based processing to be event-driven using Kafka, as well as provide Cloud native replacements for JCL and SORT was a game changer.

Customer Benefits

Cost Savings	Automation & Backward Compatibility
<ul style="list-style-type: none"> Avoid \$3.25M in application rewrite costs. On target to eliminate Windows-based COBOL platform vendor costs. 	<ul style="list-style-type: none"> 100% automated code conversion. No post-conversion manual refactoring required. 100% data precision accelerated testing and reduced project risk by supporting both Mainframe and Windows data sets. Major COBOL vs. Java differences resolved with CloudFrame’s proprietary techniques.

High Quality Modern Java Application

- Agile to Meet Modern Business Requirements
- Adheres to 12 Factor Modern Application Principles

“Amazing tool to migrate COBOL to Java.”

- Sr. Modernization Appl. Developer

Reduced Business Risk and Increase Project Success

- 100% Function and Data Precision
- Automated conversion removes manual changes