Unisys COBOL to Java Federal Housing Authority CHUMS/CAIVRS/LOCCS Applications



LANGUAGE PAIRING
Unisys COBOL to Java

COMPLETION TIME 8 months

CLIENTFederal Housing Authority

SOFTWARE CHUMS/CAIVRS/LOCCS

OVERVIEW

Using money from the Modernizing Government Technology Act's Technology Modernization Fund (TMF), a federal housing authority sought to modernize several of its remaining critical systems on a legacy Unisys mainframe. Salient CRGT engaged The Software Revolution, Inc. (TSRI) to provide automated code conversion of more than 1.3 million lines of the client's COBOL applications, with hierarchical DMS and relational RDMS databases, to the Microsoft Azure cloud. TSRI implemented Java as the target language and Microsoft SQL Server as the target relational database at 99.67% automation.

HIGHLIGHTS



99.67% Automation



Low Technical Risk



Minimal Code Freeze

WHY SALIENT CRGT CHOSE TSRI

Despite incremental upgrades or patches to the agency's decades-old mainframe applications, a dwindling supply of programmers made it increasingly difficult to maintain them. In addition, cloud computing would improve these mission-critical applications' reliability and security posture. TSRI modernized multiple applications for the agency that ranged from home underwriting management to a loan-delinquency reporting system. TSRI's automated approach to modernization meant they could provide high levels of accuracy with minimal disruption to the client's daily operations.

The federal government required adherence to quality and maintainability standards, so TSRI tuned its *JANUS* Studio® transformation and refactoring engine to generate the production-ready Java code. Finally, because TSRI could test the Java application alongside the mainframe still in production, when the client shut down the legacy system during an extended federal holiday weekend, the Java application went live—in 14 hours— with almost zero code freeze.

PROJECT RESULTS

TSRI was able to show that a rapid, highly accurate modernization from mainframe COBOL to Java is possible on even critical, complex projects such as this, and that they can be completed and brought into production within the budget and timeframe constraints. With the implementation of a Software Maintenance Agreement, TSRI continues to ensure the updated systems run smoothly while the client can take advantage of framework updates and maintenance, as well as many other software support services.