VENERABLE®

Replatforming mainframe workloads on AWS Cloud to implement a cloud-first strategy and establish an acquisition engine.

OVERVIEW
Venerable is a business with well-established, strategic investors, experienced in successfully building and growing insurance businesses with patient, long-term capital.

CHALLENGES

- **Cloud-first strategy:** Venerable was formed as the result of a divestiture from a large US insurance business in 2018. As a new company, Venerable adopted a cloud-first strategy, which meant zero investment in establishing a mainframe infrastructure.

- **Retain business rules:** The target workload was the Agent Management System (AMS), which provided core business-critical functions for commission calculations, payment generation, license validation, supplemental compensation, accounting, and statements. It was critical that the modernized application provided exactly the same business functionality when running on AWS, as it did on the mainframe.

- **Complex and poorly documented**: AMS was 3.8 million lines of COBOL & Assembler code and 15GB of VSAM & DB2 data. The application design was extremely archaic with minimal documentation.

- **Time-constrained delivery:** The project had to be completed before expiry of a transitional services agreement with the prior company.

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heirloomcomputing.com

SOLUTION & RESULTS

CLOUD-NATIVE APPLICATION ON AWS
Once the modernization was completed, Venerable planned to use the application as an enabling capability as part of an acquisition engine. This would allow them to pursue their business objective of growth through acquisition.

To achieve this outcome, Venerable engaged Heirloom Computing and Cognizant, with Heirloom Computing providing the Heirloom® product suite to replatform AMS into a cloud-native Java application through a process known as automated refactoring.

This project ran for 16 months from beginning to end, 8 months faster than originally scheduled, which resulted in cost-saving benefits being realized earlier and positioned Venerable to be ready to engage in acquisitions faster. Post migration, OPEX costs were reduced by more than 80%.

The exceptional teamwork between Heirloom Computing and Cognizant, and the strong and active support of Venerable executives made this project a huge success.

PROCESS

DISCOVERY
Inventory analysis and understanding the application design was simplified through the use of Heirloom Computing's Probe™ discovery tool, which automatically discovered all the legacy application assets that made up the AMS application. Probe's automated mapping of the application assets was considered by the project team to be a major factor in the modernization project being delivered early for Venerable.
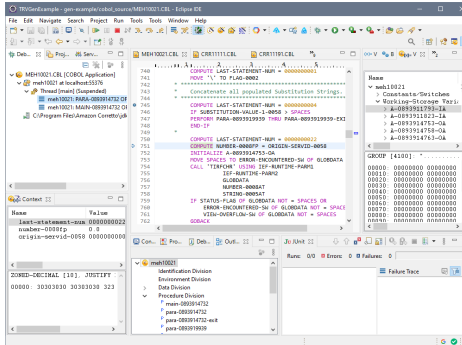
CLOUD-NATIVE DEPLOYMENT
For high-availability, a multi-zone solution was implemented, where an independent copy of the AMS application stack was available on another availability zone (Active/Passive strategy). An AWS Elastic Load Balancer was used to achieve fault tolerance without manual intervention by checking the health of the Amazon EC2 instances on which the AMS application was deployed.

This project presented a significant challenge, and according to Venerable CIO Tim Billow:

"The system was custom built in the 1980s, and the design was extremely complex. Despite the complexity and high-transaction counts, the system was successfully replatformed to AWS, where it has been in production since June 2020. This has been a hugely impressive implementation that has enabled Venerable to adhere to its cloud-first strategy".

CODE REFACTORING, DATA MIGRATION
The AMS application included 650 online screens and 250 batch jobs which were successfully re-platformed to AWS using the Heirloom product suite.

Heirloom is a unique mainframe modernization software solution that uses compiler-based technology to automatically refactor online and batch mainframe workloads as cloud-native Java applications for deployment to any industry-standard Java Application Server.