

# PUMEX

Member Management Application Rebuild

## International Association of Ironworkers

CASE STUDY



### About the International Association of Ironworkers

The International Association of Ironworkers (IAI) union assists in to securing stronger benefits, better pay, safer working conditions, and a higher level of job security to its 120,000 members across North America. Their members have been involved in major construction projects such as the Golden Gate Bridge, the World Trade Center, and the Freedom Tower.



### Executive Summary

IAI engaged PUMEX for the redevelopment, integration, and modernization of their information system's architecture, applications, and databases. These applications run most of IAI's business processes and workflows, making the nature of our work on these systems critical to their operations.

Since 2008, IAI's legacy software applications had been under costly development, following a haphazard process and lack of task prioritization. Pumex was able to create upgraded versions of these applications.



### The Challenge

IAI was using legacy, custom software that ran critical internal business processes in a disconnected environment. Applications included their IWITS, IWATS, and WCP platforms. They relied on manual export/import processes, lived in silos, lacked functionality to properly record information, and were complex and costly to manage. It was determined that all applications would need to be re-built, due to inequities in code and database schema.





## The Solution

Pumex implemented an agile SDLC with two-week sprints. This approach followed a System Design Document that detailed system architecture, DB design, application design, security and controls. We leveraged DevOps processes including CI/CD, test automation, and Git to manage code tracking and merge. Our solution contained a database schema redesign, consolidating four separate databases, rewriting the code base with industry best practices, redesigning the UI/UX for improved user efficiencies, implementing OWASP and Cybersecurity best practices, automating workflows, and migrating to a Gold Source Database.



## Immediate Results

- **Self-Service Member Portal** - Pumex implement this portal as a user-friendly dashboard that enables IAI to gain efficiencies and save costs by significantly reducing the time needed to support members.
- **New System Design** – Our solution included a new design and development in parallel with the re□design, re-build, and integration of the legacy applications.
- **Improved Features and Functionality** – Pumex integrated and improved the applications, modernized the platform/environment through code reengineering and re-development, and implemented new code
- **In the Cloud** – Pumex implemented a cloud-based solution in Microsoft Azure along with its IaaS and PaaS solutions.

## Future Plans & Projected Results

Pumex recommended a phased roll out of the consolidated legacy systems to allow decommissioning over time while the systems continued to run in parallel through the development process. This will ensure an easier organizational onboarding and help to relieve training burdens by reducing productivity issues and employee downtime.

