Enhancing Enterprise Integrations at Con Edison with Event-Driven Logging & Monitoring

AT A GLANCE

Challenges

- Limited unified tracking across integrations
- End-users relied on the integration team for visibility into the process
- No codified reference of ripple effects from failures

Methods

- Real-time message processing using Azure Service Bus & SQL locking
- · Centralized, real-time data visualization
- Email notifications and scheduled reports for monitoring

OBJECTIVES

The integration team needed a scalable, high-visibility solution to monitor business-critical interfaces and ensure data integrity across a hybrid cloud. IntelliTect was tasked to develop an event-driven logging and monitoring system for early failure detection, faster response times, and real-time insights, all while being cost-effective and seamlessly integrated.

SOLUTIONS

IntelliTect implemented a highly available, asynchronous, durable and distributed event-driven logging system using Azure Service Bus and Azure Functions to create a pub-sub model to ensure minimal performance impact on the existing integration interfaces. A Message Processing Engine transformed simple messages into structured, hierarchical data designed to showcase the various checkpoints of a single run of a workflow, while the Flight Status Board provided search screens to view the data, trend visualizations, and configurable alerts. The system also provided email notifications and reports to keep stakeholders informed of critical events.



BENEFITS



Improved System Visibility

The Flight Status Board centralized data for tracking interface performance and failures.



Faster Issue Resolution

Message correlation enabled quick failure detection, reducing downtime and boosting efficiency.



Scalability & Future Growth

Cloud-based architecture scales efficiently, ensuring accurate, bottleneck-free data processing.



IntelliTect's expertise gave us real-time visibility into our integrations, drastically reducing response times and improving efficiency. The Flight Status Board is now an essential tool across our organization.



