

CASE STUDY: Modernizing Wire Transfers: ISO 20022 Enablement for PCBB

Client: Pacific Coast Bankers' Bank (PCBB), United States

Industry: Banking & Financial Services

Engagement Overview

PCBB partnered with us to modernize its wire transfer system in compliance with the ISO 20022 global messaging standards. The objective was to streamline high-value payment processing, ensure regulatory compliance, and deliver a secure, scalable, and user-friendly solution that integrates seamlessly with the Federal Reserve's Fedwire Funds Service.

Business Challenges

With the upcoming ISO 20022 migration timelines and increasing scrutiny on compliance and fraud prevention, PCBB needed:

- A future-proof wire transfer solution
- Secure integration with Fedwire using ISO 20022 message types (pacs.008, pacs.009, pain.013, camt.056, camt.110)
- Real-time and batch processing capabilities
- Full auditability, compliance with OFAC screening, and operational transparency

Our Solution

We delivered a robust end-to-end ISO 20022 Wire Transfer System built on a modern event-driven architecture, including:

✔ **Multi-Channel Initiation:**

Wires can be initiated via UI, API, or file uploads in XML format, catering to varied user preferences and integration needs.

✔ **Approval Workflow:**

Secure, role-based approval with PIN authentication, transaction thresholds, and prevention of self-approval.

✔ **Real-Time Compliance Checks:**

Automated OFAC screening for every batch, both for outgoing and incoming wires.

✔ **Batch Management & Fedwire Integration:**

Batches are auto-generated or manually created, converted into ISO 20022 XML messages, and securely transmitted to Fedwire via Message Queue (MQ) protocols.

✔ **Acknowledgment & Return Handling:**

Support for real-time message types like pacs.002 (ack), pacs.004 (returns), camt.056 (cancellation), and camt.110 (investigation), with user notifications and dashboards.

✔ **Notice Generation:**

Automated generation and publishing of notices for outgoing and incoming wires, improving customer transparency.

✔ **Template Conversion Tool:**

Migration support from legacy FAIM templates to ISO 20022 message structure to ensure continuity.

Business Outcomes

ISO 20022-Ready

Enabled PCBB to meet ISO 20022 adoption requirements ahead of schedule, ensuring operational continuity with Fedwire.

Enhanced Compliance & Security

Strengthened internal controls, audit trails, and regulatory adherence, reducing compliance risk.

Operational Efficiency

Enabled bulk processing of wires with automation, reducing turnaround times and manual effort.

Superior Client Experience

Clients now benefit from timely updates, transparent notices, and faster transaction resolutions.

Future-Ready Platform

A modular architecture that supports easy extensibility for additional message types and integrations.

Key Technologies Used

Java, JAXB/XJC for XML handling, MQ (JMS), REST APIs, Role-Based Access Controls (RBAC), SQL Server backend