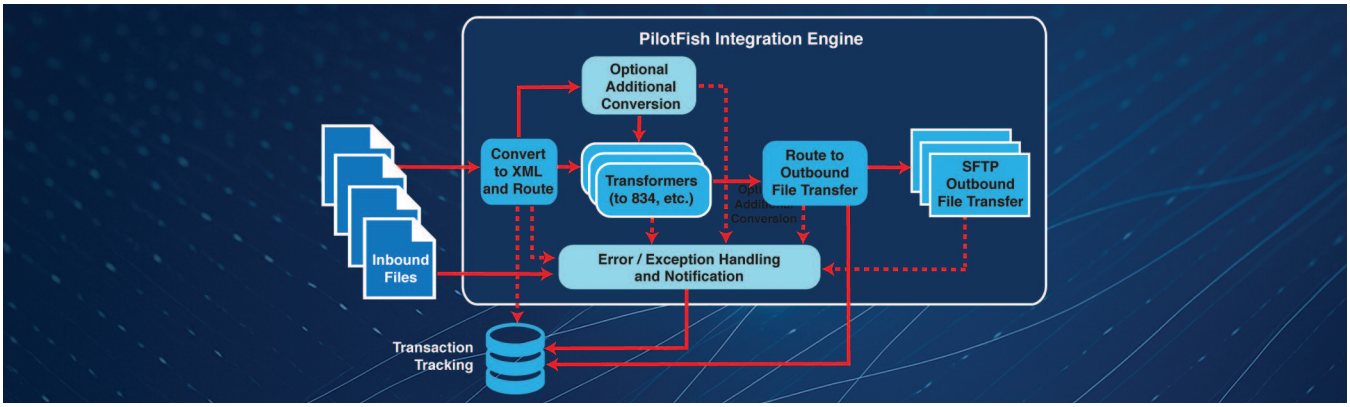
National Benefits Administrator Streamlines EDI & Payroll Integrations with PilotFish

Automating Benefits Data Exchange and Gaining Control Over Integrations



A leading national provider of payroll and benefits administration services faced increasing challenges managing complex EDI transactions and carrier connections. The organization relied on a slow vendor-managed integration platform that limited scalability and delayed carrier onboarding. Turnaround times for new implementations were long and the team lacked visibility into critical data exchanges.

With PilotFish's powerful integration suite, the company modernized its entire EDI environment. The platform automated data transformations, streamlined carrier onboarding and gave internal staff the tools to manage integrations directly. The result was faster deployment, reduced costs and complete control over mission-critical benefits data.

Summary

- Replaced a slow, vendor-managed system with PilotFish's eiPlatform and eiConsole
- Accelerated carrier onboarding with real-time validation and full internal control over integrations
- Processed 750,000 EDI 834 enrollment records in 15 min. (cutting EDI costs and deployment time)
- Gained a scalable integration foundation for future ERP and API initiatives
- Enabled team self-sufficiency with PilotFish's no-code tools and expert training

THE CLIENT

The client provides benefit administration, payroll management and account-based services for employers across the U.S. Supporting thousands of enrollment and eligibility transactions each month, they connect multiple HR systems, carriers and payroll providers through EDI 834 and related data formats. Their business focus is on health, dental, vision, COBRA and payroll data exchanges. To reduce dependence on a third-party vendor, the company's technology leadership sought a scalable integration platform that would allow them to own their EDI processes internally, eliminating the delays, costs and inefficiencies of their legacy system.

THE CHALLENGE

Vendor Lock-In and Limited Flexibility

The company's vendor-managed EDI platform had become a major bottleneck. Every change, no matter how small, required vendor intervention. Updates such as carrier feed adjustments, new file mappings or field validations could take weeks or even months.

The client's development team lacked access to configuration and testing tools, making it impossible to troubleshoot or improve performance internally. This vendor-controlled approach caused frustration and created dependency on external consultants for routine integration management.

Cumbersome Manual EDI Workflows

Managing multiple file formats and carrier requirements had become time-consuming and error prone. The team relied on custom scripts and manual field mapping to transform data between CSV, XML and X12 EDI formats.

This created an ongoing cycle of inefficiency:

- Non-standard EDI handling required custom logic for every trading partner
- Limited testing meant many issues surfaced only after deployment
- No centralized management tools led to inconsistent results across teams

Onboarding a new carrier could take weeks. Every change to existing feeds risked production issues and rework.

Scalability and Performance Constraints

The existing system struggled with high data volumes. Benefits enrollment cycles required processing hundreds of thousands of records at a time, which pushed the platform to its limits. During testing, the vendor's system could not handle large files without splitting or manual batching. Data validation occurred offline, adding hours of manual review.

By contrast, PilotFish processed 750,000 EDI 835 enrollment records in under 15 minutes during proof of concept. This proved that PilotFish could handle the company's scale and data complexity.

Integration Silos Across Systems

The company also faced integration gaps across payroll, HR and accounting systems. Each operated independently with separate scripts and interfaces.
This resulted in:

- Duplicate data entry between systems
- Difficulty reconciling data across platforms
- No shared automation framework to manage data flow

These challenges slowed operations, increased costs and introduced compliance risks when benefit data failed to synchronize properly.

High Costs and Vendor Dependence

The financial burden of outsourced EDI processing was significant, reaching tens of thousands of dollars per month. Despite high costs, service quality was poor. The vendor's slow response and limited flexibility often caused missed timelines.

Executives recognized that internal control of EDI processes would reduce expenses and transform integration into a strategic capability, rather than a cost center.

Strategic Goal: Internal Ownership and Self-Sufficiency

Leadership established a clear directive: find a flexible integration platform that allowed the internal team to build, test and deploy integrations without external help.

The platform needed to:

- Handle EDI, flat files and APIs within one framework
- Support visual mapping and testing for non-technical users
- Deliver high performance and scalability for large data volumes
- Include training and support for complete team self-sufficiency

After extensive evaluation, PilotFish was selected as the only solution that met all criteria.

THE SOLUTION

After reviewing several tools, the organization chose PilotFish's eiPlatform and eiConsole for their flexibility, performance and ease of use. The decision was based on PilotFish's ability to handle any data format, protocol or standard, along with its intuitive visual design interface.

PilotFish's integration suite provided a clear path to internal control. Developers and analysts could quickly learn to configure, test and deploy integrations on their own. This eliminated vendor delays and unified all data exchange under one architecture.

Architecture and Implementation Approach

PilotFish's deployment strategy was designed to deliver immediate results while building long-term capability within the client's team.

Technical Highlights

- **Formats Supported**: EDI 834/837/835, CSV, XML, JSON and flat files
- **Protocols:** SFTP, HTTPS, REST APIs, local file transfers
- **Environment:** On-premises Windows Server
- **Processing Performance:** 750,000 records in 15 minutes on a 4-core, 16GB instance
- **Users Trained:** 5 developers and analysts trained for complete lifecycle management
- **Deployment Model:** Hybrid professional services and internal self-sufficiency

1. Initial Implementation: Rapid Proof of Concept

The first project integrated a major vision benefits carrier.

- **Input:** CSV enrollment files
- **Output:** EDI 834 transactions (AA34 variant)
- **Transport:** Secure SFTP
- **Hosting:** On-premises Windows Server

Within days, PilotFish configured the eiPlatform runtime environment and developed the first end-to-end interface. The interface automatically transformed CSV input into EDI output, validated the transactions and transmitted them securely. The Proof of Concept (POC) demonstrated PilotFish's performance advantage, processing 750,000 records in 15 minutes.

2. Streamlined Data Mapping and Transformation

The team used PilotFish's graphical mapping tools to define Source-to-Target transformations without code. Complex mappings, such as dependent relationships, were easily managed using reusable XSLT templates. The key capabilities included:

- Handling non-standard EDI through flexible templates
- Cross-file validation for demographic and enrollment data
- Configurable business rules and dynamic field management
- Automated date population and logic-based transformations

This simplified development reduced mapping time and made maintenance efficient.

3. Testing, Validation and Automation

PilotFish's built-in Testing component enabled automated data validation before production. The client could test files against defined schemas, simulate complete transactions and identify mapping errors before deployment.

Automated error handling and alerts provided real-time feedback on file integrity and transmission, reducing manual troubleshooting and downtime.

4. Training and Knowledge Transfer

PilotFish delivered over 50 hours of live training sessions tailored to the client's team. Developers and analysts received hands-on instruction for configuration, version control and route deployment. Follow-up sessions provided guidance for maintenance and monitoring.

By completion, the internal team was fully self-sufficient and capable of managing new integrations independently.

5. Scaling for Future Integrations

After completing the first integrations, PilotFish helped the team implement an interface cloning and template management strategy. With eiConsole's modular architecture, new carrier routes could be built in hours instead of weeks.

This standardized framework supported:

- Fast onboarding using reusable templates
- Centralized configuration management in the eiPlatform dashboard
- Multiple deployment environments under a single license

The client is now expanding its use of PilotFish for ERP and API integrations to unify all enterprise data movement.

THE BENEFITS

Full Control and Cost Savings

By bringing integrations in-house, the company reduced reliance on vendors and lowered monthly EDI processing costs. Deployment timelines shortened from weeks to days.

Faster, More Reliable Processing

PilotFish's high-performance engine processes hundreds of thousands of transactions in minutes. Automated testing and validation reduce manual review and ensure accuracy.

PilotFish Studies in Integration (continued)

Scalability and Flexibility

- Reusable templates allow rapid onboarding of new carriers.
- API and SFTP support expand the platform's capability beyond EDI.
- Real-time dashboards provide full operational visibility.

Future Expansion

The company is extending PilotFish to new integration domains, including ERP systems and API workflows. This consolidation effort will create a single, flexible platform for all data exchange.

By adopting PilotFish, the organization transformed its data integration strategy, reduced costs and future-proofed its EDI operations.

Since 2001, PilotFish's sophisticated architecture and innovations have radically simplified how healthcare integration gets done. Today PilotFish offers the most flexibility and broadest support for healthcare integration of any product on the market and is system, platform and database agnostic. PilotFish's healthcare integration suite includes support for all healthcare data formats (HL7 2.x, HL7 3.x, FHIR, CCD/CCDA, JSON, XML, X12 EDI, NCPDP, etc.) and communication protocols.

PilotFish is architected to be infinitely extensible with our Open API and flexible to meet any integration requirement. PilotFish distributes Product Licenses and delivers services directly to end users, solution providers and Value-Added Resellers. To learn more, visit our Case Studies or specific solutions like HL7 Integration or X12 EDI Integration.

PilotFish Healthcare Integration will reduce your upfront investment, deliver more value and generate a higher ROI. Give us a call at 813 864 8662.