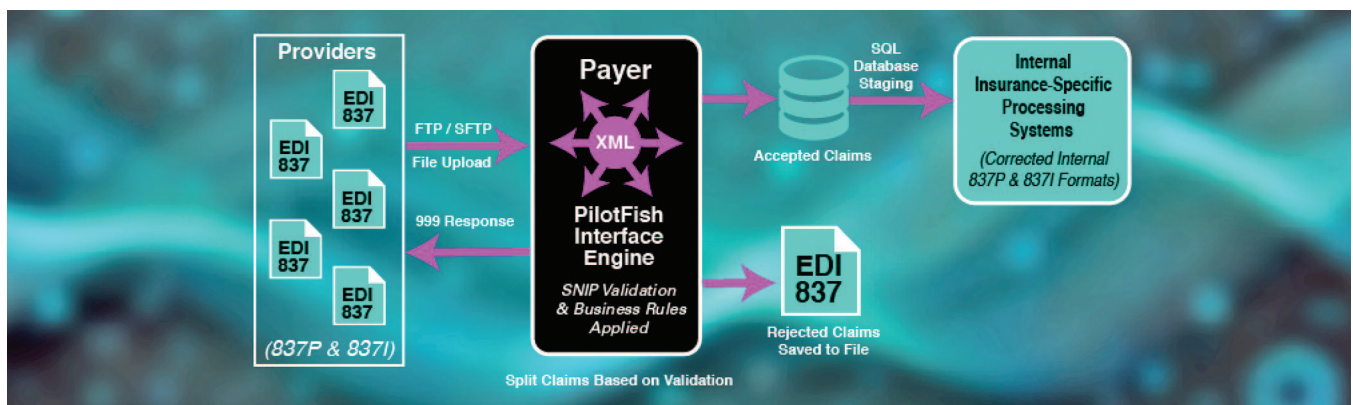


# PilotFish Studies in Integration

## Astounding Claims Processing Efficiency Achieved with PilotFish for X12 EDI 835 and 837 Transactions

A well-known insurance service provider faced significant challenges in processing high volumes of healthcare transactions, specifically X12 EDI 835 and 837 transactions, which are integral to healthcare claims processing and payment remittances. The client's existing infrastructure was inefficient, leading to delays and exceptionally long processing times that negatively impacted their client's ability to drive value from their downstream product offerings. The client and PilotFish embarked on a groundbreaking project to revolutionize data integration and management systems for the client's major health insurance customer.



### THE CLIENT

The client is a prominent figure in the insurance industry, known for delivering robust insurance technology and core system solutions. Their services are designed to streamline operations, enhance customer satisfaction and ensure compliance with industry standards. Their commitment to innovation and customer service makes them a leader in the insurance sector, constantly seeking advanced solutions to keep pace with the industry's demands.

The client operates primarily in the technology and insurance sectors, providing a range of cloud insurance software solutions. These solutions cater to the needs of property, health, general, life insurance, annuities, pension and group/voluntary benefits sectors. Their offerings include core insurance solutions, ecosystem and analytics solutions, distribution software, intelligent core software, risk and compliance solutions and digital solutions.

The company's focus on innovation and modernization in insurance processes aligns with the growing demand for digital transformation in the industry. This strategic direction is further emphasized by recent acquisitions enhancing their SaaS offerings and expanding their capabilities in delivering comprehensive insurance solutions.

PilotFish and the client's commitment to technological advancement and client support in the insurance domain made for a great partnership in this collaborative effort.



# PilotFish Studies in Integration (continued)

## THE CHALLENGE

The client's primary challenge was the inability of their existing system to efficiently handle and process the large volumes of 835 and 837 transactions. These transactions, which involve detailed payment information and claim status updates, are vital for the seamless operation of healthcare insurance claims. The existing system was not capable of handling the scale and complexity of the transactions, leading to delayed processing times and increased operational costs. Due to the existing system's slow data parsing, the goal was to reliably and rapidly parse exceptionally large volumes of 837 files into an existing relational database structure that is used by the downstream business application.

## THE SOLUTION

PilotFish embarked on a discovery process to analyze the client's requirements and to create a comprehensive solution. The technical lead from PilotFish, who joined the initial discussions even during his vacation, underscored the dedication to getting the project off on the right foot. This proactive involvement ensured that the project team had a comprehensive understanding of the technical landscape and client expectations from day one. The team setup was meticulously planned to include key personnel from both PilotFish and the client, ensuring a blend of technical prowess and project management acumen. PilotFish addressed the client's challenges by implementing its state-of-the-art Integration Engine Solution specifically designed to manage and streamline EDI 835 and 837 transactions. The solution consists of 2 components of a PilotFish suite.

- eiConsole for X12 EDI (a graphical IDE for configuring, managing and maintaining interfaces)
- eiPlatform (Java runtime)

The solution offered several key capabilities that were integral to the project's success:

- **High-Volume Data Handling:** PilotFish was engineered to handle large volumes of data efficiently, reducing processing time and minimizing system overloads.
- **Advanced Data Parsing and Integration:** With enhanced parsing capabilities, PilotFish's parsing tool could quickly translate complex data formats into usable information that was easily integrated into the client's SQL database.
- **Robust Validation Protocols:** PilotFish's integration suite incorporates comprehensive validation rules up to X12 SNIP Level 7, ensuring that all data meets industry standards and reduces the risk of error.
- **User-Friendly Interface:** PilotFish provides a user-friendly eiConsole IDE, which offers a graphical Assembly Line process, allowing client staff to manage data flows seamlessly. PilotFish's eiDashboard allows users to monitor transactions in real-time.



## PilotFish Studies in Integration (continued)

After detailed analysis, PilotFish introduced an advanced integration architecture tailored to the client's needs. The planning phase included detailed discussions about infrastructure requirements and technical strategies to ensure scalability and performance. The team proposed a dual-server production architecture, allowing for robust handling of large data volumes while maintaining high throughput and reliability. The client provided information gleaned from their existing, underperforming parsing solution, which the PilotFish team leveraged to quickly develop a PilotFish-equivalent mapping in its XSLT-based, drag & drop data mapper. A feature equivalent mapping of hundreds of fields was completed and ready for parallel testing within weeks. Using PilotFish's Enterprise Integration Suite, PilotFish's service team embarked on an 8-week effort to implement its solution. Interfaces were configured, and mapping was created.

### THE BENEFITS

The client lauded the team collaboration and highlighted the seamless communication and problem-solving expertise of the PilotFish team. PilotFish's commitment to understanding and addressing the nuanced challenges of EDI X12 and the insurance domain was evident throughout the project's phases. Integrating PilotFish's Enterprise Integration Suite into the client's system architecture brought transformative benefits. Foremost was increased processing speed made possible. The enhanced system dramatically reduced the time needed to process transactions. Early returns from the production implementation show an even greater lift in throughput than anticipated, with even less hardware than expected. Processing times on problematic large files have improved by more than 1000% (better than 10 to 1). What previously took the client 14 hours to process could now be done in just 45 minutes! The increased processing speed enabled quicker turnarounds for claims processing and allowed for more timely payments.

With PilotFish's improved validation and error-checking mechanisms, data accuracy increased. The incidence of data errors decreased significantly, leading to more reliable data processing.

PilotFish's highly scalable architecture positions the client to reap future benefits. Architected for scalability, the new system can grow to adapt to the client's needs, ensuring that increased transaction volumes can be handled smoothly without additional system strain.

For the future, the success of this implementation has also demonstrated the client's ability to deliver markedly improved operational efficiency and performance in critical, high-volume processing of claims data. This has not gone unnoticed by the client's end users, who have been ecstatic with the results and have, in turn, expressed an appetite to expand the range of feeds and processes they would like the client to process on their behalf. This has opened up new potential revenue channels for the client and value generation for their end clients.



## PilotFish Studies in Integration (continued)

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.

