eiplatform

EDI X12 Integration Poses Complex Challenges

Extensive exchange of complex HIPAA X12 transactions is a rising trend across the healthcare industry. The surge in the number of end-users such as payers, providers, HIEs, state agencies and others is anticipated to fuel the demand for EDI services or solutions. Companies find themselves faced with the challenges of building, managing and maintaining a daunting array of EDI X12, XML and proprietary interfaces. The difficulties and pain points are numerous.

Middleware Bridges the Gap Between Old and New

Onboarding trading partners is time consuming and costly. Organizations have to contend with a multitude of operating systems, databases, data formats and communication protocols. Plus, Healthcare EDI X12 transactions come in hundreds of versions and sub-versions. The reality is that organizations must be able to work around these constraints, supporting both the old and the new. Middleware that sits alongside these systems allows you to develop, innovate and connect with the technology that is currently in place and with new systems, too.

Loosely Coupling Systems is Key

The PilotFish eiPlatform integration engine is the middleware that enables an organization to "loosely couple" all of its systems. Connecting offerings from various vendors with systems of different ages and technologies is no problem. The result is that PilotFish offers the flexibility and maintainability that is impossible to achieve by hard-wiring integrations directly into each application. Whether you are using a home-grown solution or a legacy product, PilotFish users quickly recoup their investment with huge productivity gains.

The Flexibility to Connect Anything with Anything

As a select distribution partner of X12 and with access to X12 standards artifacts, PilotFish is able to deliver the industry's most robust solution for rapid and efficient parsing, mapping, validation and/or production of any X12 standards message. PilotFish's EDI-specific, productivity-boosting components automate and strip away the technical complexities of exchanging EDI X12 messages. Out of the box, PilotFish effortlessly handles trading partner versions of the X12 transactions, HIPAA X12 data formats and rules, conversion to XML, output in any format and any communication protocol required. By using PilotFish's simple graphical automated interface "assembly line", implementers can connect anything to anything – including legacy and new technology that may have been developed using different data models, designs or architecture.
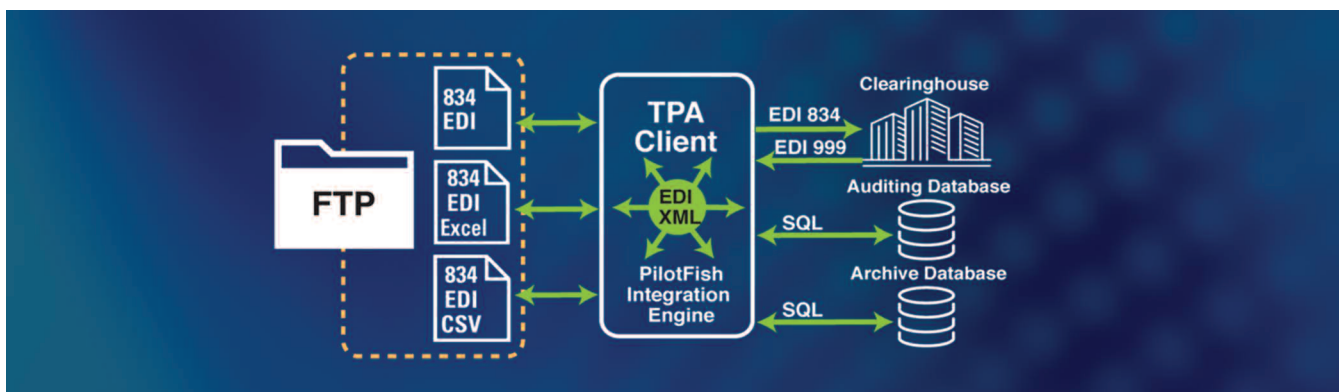
PilotFish users can reap these additional benefits:

- By following the PilotFish assembly line process, users can map data and configure, maintain, manage and test their interfaces – thereby reducing the number of tools and technologies staff must master and maintain.

- PilotFish facilitates connectivity between systems and the aggregation and synthesis of data so that it can be standardized and easily consumed.

- PilotFish simplifies the implementation of newer industry XML standards such as HL7 3.x, CCDA, CCD and FHIR, while still supporting the older standards such as HL7 2.x, ANSI X12, CSV, XLS and the proprietary formats of internal and external applications and services.
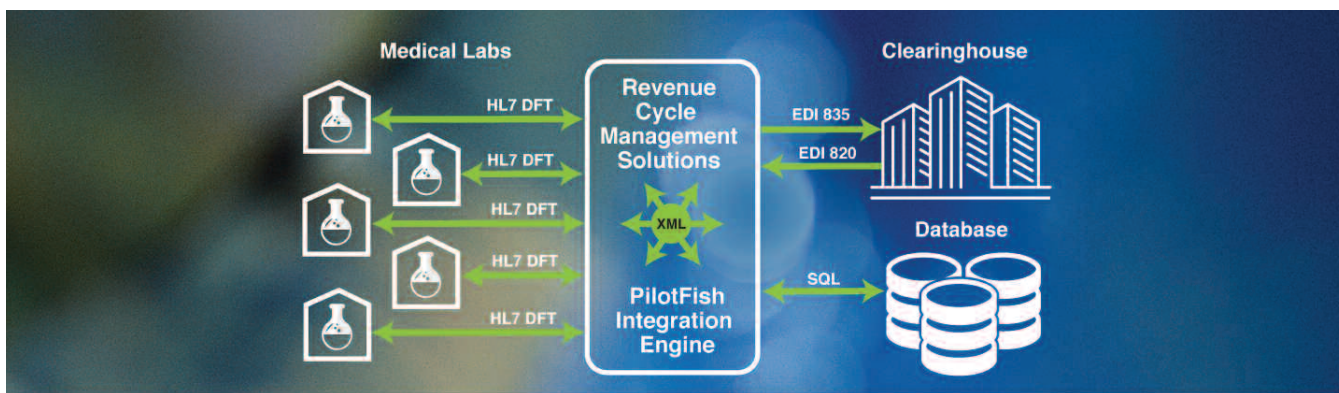
PilotFish – Facilitating EDI X12 Integration

The EDI integration requirements of entities within healthcare are as varied as the entities themselves. Whether it is a solution or service provider, HIE, payer, provider, software vendor, state or government entity, PilotFish's EDI Integration Solution meets their needs with an architecture that is extensible and a design that is flexible. Users can extend the product using Open Source components. Custom EDI implementations are easily handled with PilotFish's Lenient EDI Parser, where even non-standards compliant EDI can be handled with ease.

Use Case: Benefit Enrollment and Claims Processing

TPA Delivers Rapid Integration while also Ensuring Data Quality – Strategic use of data and analytics by a leading third-party administrator (TPA) is critical to delivering value and innovation to its growing employer client base, which is seeking new ways to manage rising healthcare costs and improve employee health. To help this TPA meet this end, PilotFish's EDI solution delivers features and modules that strip away the technical complexity of parsing, validating, mapping and producing HIPAA EDI files. In this case, it streamlined and automated the handling and processing of member EDI 834 Enrollment and Maintenance data at scale, thereby giving this TPA a competitive edge to deliver big benefits.
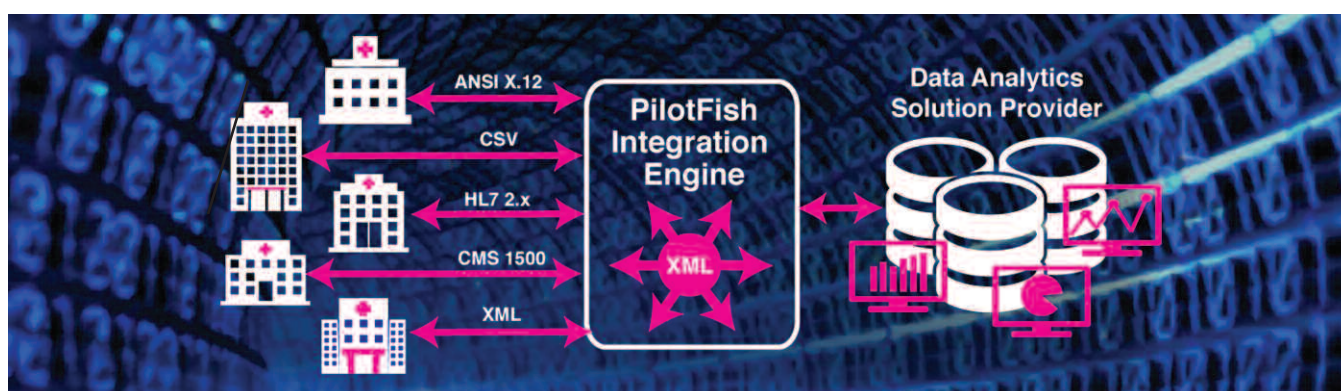
Use Case: Revenue Cycle Management

Clinical Lab Billing and Collection Company Maximizes Profitability for its Lab Clients – Through optimization of the revenue cycle and reimbursement process, this cloud-based provider of clinical laboratory billing enables client laboratories to maximize profitability. By leveraging PilotFish, this revenue cycle management company was able to reduce its dependency on scarce human resources, which threatened to put a cap on their growth. By automating claims entry, end-to-end processing time was reduced to 7 minutes, a 360% improvement.
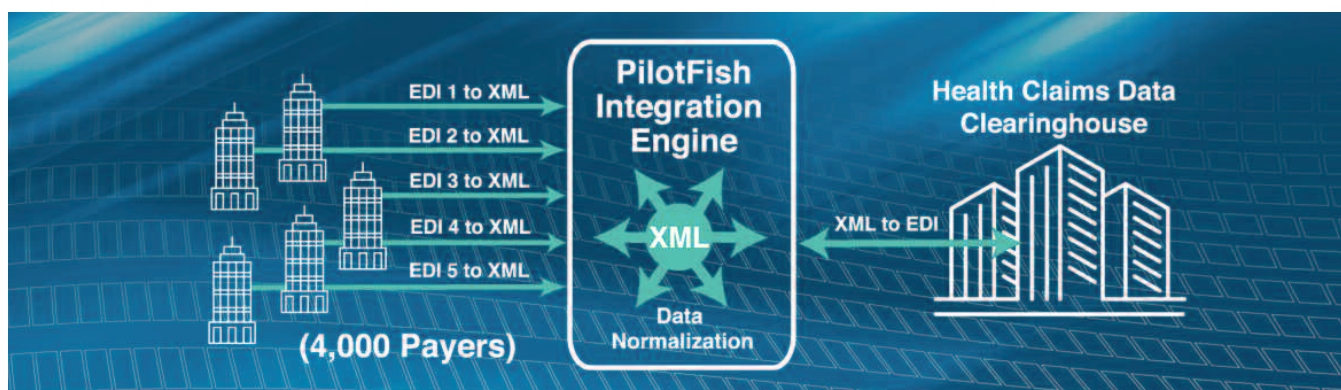
Across the Entire Healthcare Ecosystem

Built-in format readers allow users to instantly read in and convert HIPAA EDI X12, flat files, XLS, CSV, JSON, NCPDP, etc. into an XML representation that is then readily mapped to the format required by a target system. All HIPAA EDI 12 transactions for claims, benefit enrollments, authorizations, eligibility requirements, acknowledgements, etc. are easily processed, as well. PilotFish offers users an all-in-one EDI solution to easily map data and rapidly configure, manage, maintain and test interfaces end-to-end.

Use Case: Reporting and Analytics

Market Leader Delivers High-Quality Metrics and Actionable Reporting – The client provides strategic consulting, research and cloud-based software solutions to health systems and physician clinics across the US. The firm leverages PilotFish for its architectural flexibility to adapt to the diverse data flavors and format requirements of its healthcare provider members. To support this, PilotFish integration engine solution offers a combination of out-of-the-box parsers, finely tuned custom components and the ability to work with any data format so that this market leader can deliver higher-quality analytics in less time and with an improved level of customer service.

Use Case: Payer Claims Clearinghouse Integration and HIE

Re-engineered Claims Processing Architecture – With a team of just 2, this Healthcare Claims Clearinghouse and HIE utilized PilotFish to re-engineer and transition its claims processing architecture. Utilizing PilotFish, the team created a framework capable of handling the connectivity, data manipulation and data validation required to effectively replace and enhance their legacy implementation. The effort included the implementation of several hundred unique data flows and provided a secure gateway for the electronic exchange of data connecting to over 4,000 payers nationwide.

Visit www.Healthcare.PilotFishTechnology.com/ to view the full case studies

SUPPORTED PLATFORMS
Windows
Linux / Unix / AIX / HP-UX
Mac OSX

SUPPORTED APPLICATION SERVERS
Windows Service
Apache Tomcat
JBoss / WildFly
WebSphere Application Server (WAS)
Glassfish
WebLogic
Any Other Java Container

SUPPORTED DATABASES
Any JDBC DB
    (MS SQL Server / Oracle / DB2 / Postgresql /
    MySQL / MariaDB / Java DB / Derby / H2)
MS Access
MongoDB

SUPPORTED FORMATS
HL7 2.x / 3.x / FHIR
CCD / CDA
EDI X12
Positional Flat Files
Delimited Files (CSV / Custom)
Key / Value
XLS / XLSX
DICOM
XML
JSON
PDF
NCPDP
Binary (.wav / .jpg)

SUPPORTED PROTOCOLS
Database (JDBC)
Email (IMAP / POP3 / SMTP)
Local / Network File System
FTP / SFTP / FTPS
TCP / UDP Sockets
HL7 LLP
HTTP/S
OAuth2 (JWT / Token Introspection)
Messaging (JMS / MQ / MSMQ / RabbitMQ / Kafka)
EMR API Call
Web Services (SOAP / RESTful)
Command-Line Invocation (CLI)
Active Directory / LDAP
Custom Connectors
IoT (Serial / MQTT)
VistA RPC
AS2
Cloud Storage (S3 / Google / Azure)

ARCHITECTURE
Consistent "Assembly Line" Pattern
Configuration Over Code
Component Driven
Extensible Via Open APIs

HL7 FEATURES
HL7 Differencing Engine (Mediate Differences Between
    HL7 Message Versions)
HL7 Friendly Name Option
HL7 Lenient Parser
Ability to Read Any Version of HL7
Inline HL7 Documentation
Transaction Templates for HL7, FHIR and CDA

EDI X12 FEATURES
Parse any EDI X12 Transaction
EDI Friendly Name Option
SNIP Validation (Types 1-3)
Inline Code Set Definitions
Transaction Templates for EDI

DATA TRANSFORMATIONS
Graphical, Drag & Drop Data Mapping
No Coding or Custom Scripting Required
Standards Compliant (W3C XSLT)
Computationally Complete

WORKFLOW PATTERNS SUPPORT
Sequencing
Splitting / Merging
Process Orchestration
Branching
Conditional Logic
Iteration

ERROR HANDLING
Easy, Hook-Based Customized Error Handling
Configurable Text-Based Logging
Flexible Proactive Notifications
Extensive Operational Visibility Framework

VALIDATION
Schema (XSD)
Structural Format Conformance (HL7, EDI, etc.)
Business Rules
External Lookups

TESTING
Instant (No Compilation or Deployment)
Graphical, Step-By-Step Debugging
End-to-End or Stage-by-Stage
IDE-Resident Server Emulation

ANALYTICS
Robust Real-Time REST API
Flexible Reporting
On-the-Fly Break-Fix
eiDashboard Multi-Instance Monitoring
Splunk Integration

DEPLOYMENT MODELS
On-Premises
AWS / GCE / Azure
Lightweight / Bundled
Docker / Containerization

LICENSING MODELS
End-User Licenses
Product Bundling Licenses
Reseller Licenses

(Licenses include an unlimited number of dev, test and cold back up)

APPLIED
PilotFish
Healthcare Integration™

860.632-9900
www.Healthcare.PilotFishTechnology.com
info@pilotfishtechnology.com