

**INFOSYS EDI
TESTING SOLUTION
– A SCALABLE AND
CONFIGURABLE
SOLUTION**



As organizations undergo digital transformation, there is an increasing emphasis on electronic B2B transactions. Electronic Data Interchange (EDI) is a key enabler towards electronic transactions and is used by different industry segments. It is quite a complex activity to generate

EDI transactions for different client / trading partners ensuring data accuracy, standardization and compliance. Manual mockup of transactional files covering hundreds of attributes is error prone and requires SME experience to know the dependencies and compliance

guidelines. Hence it is imperative to have a one-stop solution that can generate variety of test data in a faster and smarter manner for testers, developers and business team to perform their unit testing, integration testing, system testing and end-to-end testing.

Key challenges

EDI compliance: Converting various EDI file formats from multiple providers or partners to a standard format that is used by organizations (e.g. Insurer in Healthcare Industry) is one of the biggest challenges. Meeting all the EDI requirements is essential for an organization to become EDI compliant.

Validation of EDI transactions: When testing EDI-based applications, validating each transaction result manually can be cumbersome and error-prone. This becomes even worse when the SME / tester fails to cover a wide range of test cases accurately.

Manual testing is strenuous and time consuming: EDI-based application testing consumes a lot of manual effort as it involves complex workflows and generation of large test sets.

Infosys solution

EDI X12 is a commonly used ANSI format in multiple industry segments like healthcare, retail, shipping etc. Several legacy automation techniques were used in the past to test EDI file generation and validation of database. Infosys EDI Testing Solution is a multiplayer portal which can harness electronic transactions

of ANSI X12 test files and structure related to healthcare, retail, automobile, transportation and manufacturing business. The solution involves incremental approach to automate the creation and validation of secured X12 transactions, for various business scenarios as per ANSI standards. It prepares business transactions in EDI X12 format for secured and federal

compliant transactions without SME inputs and aids in early testing by creating files with one click of a button.

This solution is visualized below in Figure 1, depicting the configurable one-stop web interface and how EDI scenarios and data sets are mapped through this UI and stored as reusable test assets.

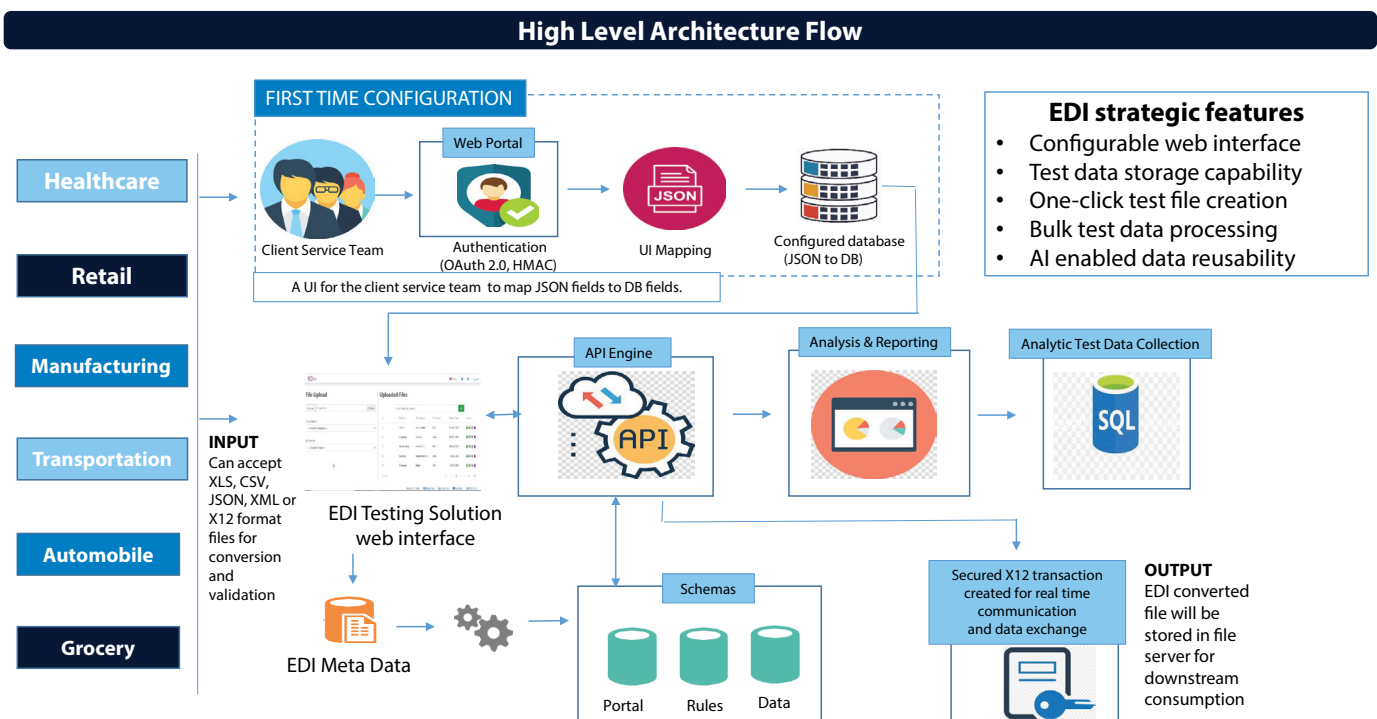


Figure 1: Infosys EDI Testing Solution architecture

Solution features:

- **One-stop web interface with real-time data interaction** – A one-stop configurable solution for EDI Test data onboarding, processing, validation and reconciliation, with a single real time console covering all industry verticals. The business transactions can be created by users without EDI X12 knowledge.
- **Data storage capability enablement along with smart data search** – Ability to store EDI data files in JSON or XML format and reuse the data sets and patterns to generate new sets of data. Additionally, it has the capability to integrate with Infosys Test Data management (TDM) solution or any other market leading TDM solutions to enable seamless data import and export for users.
- **One click file creation for all possible business scenarios and bulk processing** – Reconciles transactions and offers real-time information on transaction status and HIPAA compliance. Transactions are ingested from both UI and batch mode to ensure all relevant data is included and supplemental data is used to correct and append to original submissions.
- **AI-enabled data reusability** – Ability to recognize patterns from current and historical data and advise users to quickly reuse the data sets from database. Additionally, capable of performing on-demand test data generation with multiple scenario patterns at a rate of 1,000 rows per second.
- **Pay per use:** Client can pay based on type and volume of transactions to be tested without worrying about the industry segment, EDI mapping rule changes and effort needed to validate the quality of files.

Why Infosys?

With significant experience and knowledge across verticals like Automobile, Manufacturing, Healthcare, Grocery, Transportation and Retail sectors, we believe in staying ahead of the game. The solution will help our clients who are widely using EDI files in their environment and experiencing challenges in Testing

EDI solution. The solution gives an ability to store wide range reusable EDI scenarios as test factory, which can be used while implementation across various industries.

Below is a snapshot of our capabilities in different EDI X12 file transactions across industries:



Retail

- 810 Invoice
- 820 Payment Remittance Advice
- 830 Planning Schedule
- 850 PO
- 855 PO Ack
- 856 Adv. Ship notice
- 860 PO Change
- 997 Functional Ack



Healthcare

- 270/271 Eligibility
- 276/277 Claim Inquiry
- 278 Pre-Authorization
- 837 Claims Intake
- 278 Claims Status
- 834 Enrollment
- 835 EOB
- NCPDP Rx Claim



Manufacturing

- 810 Invoice
- 820 Payment Remittance Advice
- 830 Planning Schedule
- 850 PO
- 855 PO Ack
- 856 Adv. Ship notice
- 860 PO Change
- 997 Functional Ack



Transportation

- 204 Carrier Load tender
- 210 Carrier Invoice
- 214 Shipment status
- 990 Tender response
- 997 Functional Ack.



Grocery

- 850 PO
- 880 Products Invoice
- 894 Delivery/Return Record



Automobile

- 810 Invoice
- 820 Payment Remittance Advice
- 830 Planning Schedule
- 856 Adv. Ship notice
- 862 Ship schedule
- 997 Functional Ack

Our solution ensures shorter test cycle time in EDI testing and brings in cost savings in business operations.

Benefits

The Infosys EDI Testing Solution can bring in below benefits:

- Up to 1M USD business value savings on case-to-case basis
- ~ 40% effort savings in EDI test data setup and testing
- > 95%+ test coverage and 100% compliance
- ~ 50% reduction in turn-around time in end-to-end and UAT testing

A success story

A Global healthcare client saved 200KUSD per year through Infosys EDI Testing Solution – To help a leading global healthcare payor overcome test data limitations in their EDI system, Infosys implemented the EDI Testing solution that helped create test sets with customization across segments like Plan, Benefit, Pre-authorization, claims etc. and files ensuring HIPPA standardization and compliance. This helped to reduce the test cycle time by 50% leading to faster UAT Testing and 80% reduction in manual error leads resulting in an overall savings of 200 KUSD per year.



Discover how Infosys can help you improve cycle time and quality through a smarter and faster EDI solution.

Connect with us at IVS_Marketing@infosys.com

For more information, contact askus@infosys.com

Infosys[®]
Navigate your next

© 2021 Infosys Limited, Bengaluru, India. All Rights Reserved. Infosys believes the information in this document is accurate as of its publication date; such information is subject to change without notice. Infosys acknowledges the proprietary rights of other companies to the trademarks, product names and such other intellectual property rights mentioned in this document. Except as expressly permitted, neither this documentation nor any part of it may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, printing, photocopying, recording or otherwise, without the prior permission of Infosys Limited and/ or any named intellectual property rights holders under this document.

Infosys.com | NYSE: INFY

Stay Connected   