



EDISPHERE

A Modern EDI & WEB SERVICES | Data Integration Suite

A complete solution for robustly automating complex supply chain comprising of several trading partners and cloud systems over Internet

EDISPHERE is a comprehensive Electronic Data Interchange (EDI) translation & Web Services Data integration system that seamlessly integrates your internal business applications with your external partners and cloud systems; mapping business messages in a variety of data formats, such as, X12, EDIFACT, XML, JSON, SAP IDOCs, Proprietary data formats (fixed length, variable length, CSV), etc., and securely exchanging the messages over internet using FTP, Web Services, etc. It also supports mapping to databases directly.

Unlike most EDI & WEB SERVICES Integration products, EDISPHERE has built-in productivity features along with rich mapping features, which helps in creating robust and maintainable data integration implementations very quickly. Besides, EDISPHERE is a high-performing scalable engine, enabled with active redundancy features; making it highly suited for 24x7 business intensive data exchange environments.

Further, EDISPHERE data integration platform is also available as a dedicated instance on the Microsoft's Azure cloud platform in both the license model and pay-per-use model that is seamlessly integrated with EDISPHERE source code in a continuous integration & deployment environment, which enables seamless upgrades to your EDISPHERE instance, thereby significantly lowering your infrastructure and operational costs.

EDISPHERE is horizontally oriented (industry-neutral), designed to accommodate the needs of vertical industries such as Automotive, Banking and Financial, Government, Healthcare, Insurance, Manufacturing, Retail, Transportation/Logistics, etc.

Our product development strategy consists of *whole-product* approach, which places strong emphasis on mapping non-standard and proprietary situations; which are mainstay of modern data integration implementation projects. The result has been the development of smart and innovative features in the product, which are certain to meet the peculiarities of your data integration requirements in a timely, reliable, and cost-effective manner.

Simply stated, EDISPHERE provides the best value for your Data Integration requirement.

Target Audience: Managerial and Technical

By

Ajay Sanghi

Founder | CEO | CTO

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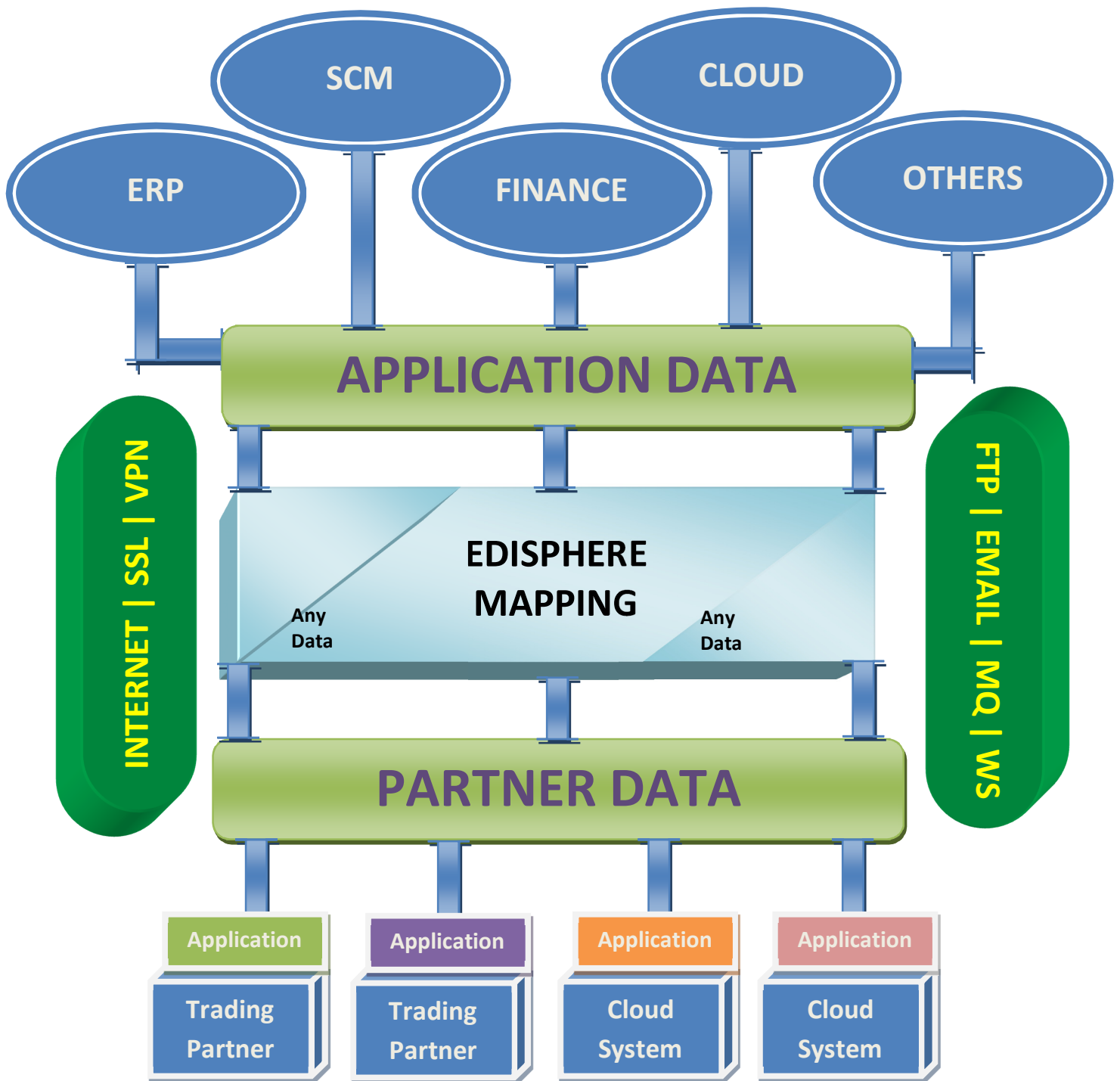
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EDISPHERE – Data Integration Suite

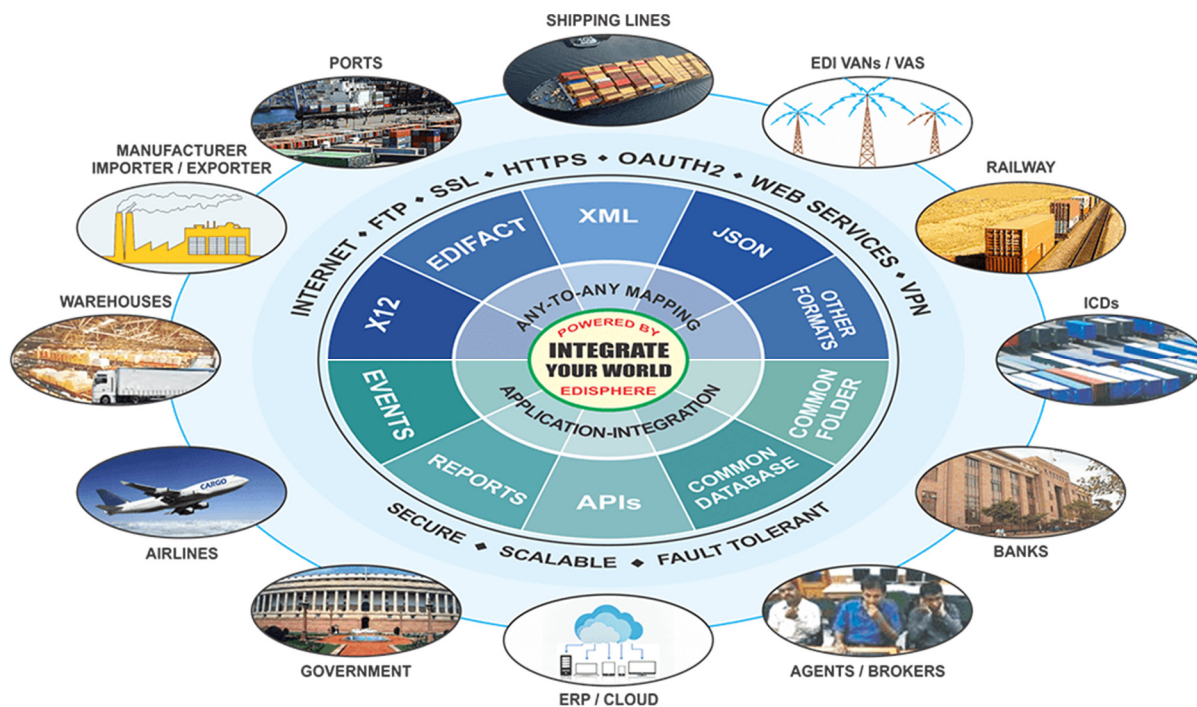


Executive Overview

The notion that Data Integration implementation is very complex; time consuming and expensive is alien to EDISPHERE users.

Business applications are developed keeping in mind organizations long-term IT plans. If the data integration platform imposes restrictions on the file formats it accepts or it is inflexible in accommodating your application's unique integration requirements for data integration, then your long-term IT plans may be affected and the gains expected using data integration solution may not be fully achieved.

In the increasingly connected world, the data integration requirement now spans seamless integration of several application silos over internet that includes, internal ERP systems, Cloud systems, and Trading Partner's ERP systems.



Traditionally, EDI has referred to X12 and EDIFACT data interchange standards, which have been in existence for over three decades, but now includes all modern data formats also.

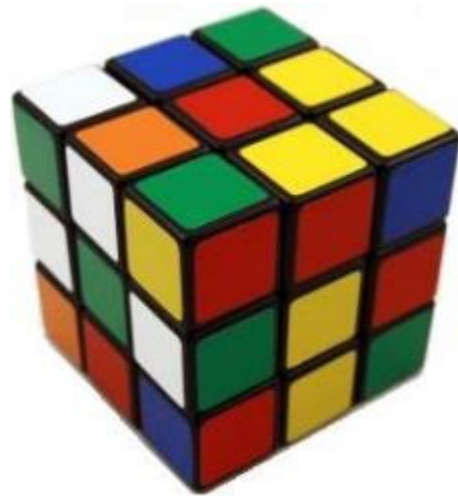
For this document, the term “EDI” will be used to refer to seamless integration of ERP systems and Cloud systems over Internet using several file formats, including X12, EDIFACT, SAP IDOCs, proprietary file formats (fixed length, variable length, comma separated value - CSV), XML, JSON, and Databases. It also includes integration using FTP and SOAP / REST based Web Services over Internet. Wherever a distinction is necessary, the same is explicitly mentioned unless it is obvious from the context.

EDI = X12, EDIFACT, SAP IDOCs, Proprietary formats, XML, JSON, Web Services

Problem Statement

Today's global economy is driven largely by Internet and web technologies, which while providing global opportunities, have made the conducting of business very competitive. Today's businesses are continuously looking for ways to be more efficient and competitive by reducing the costs of doing business.

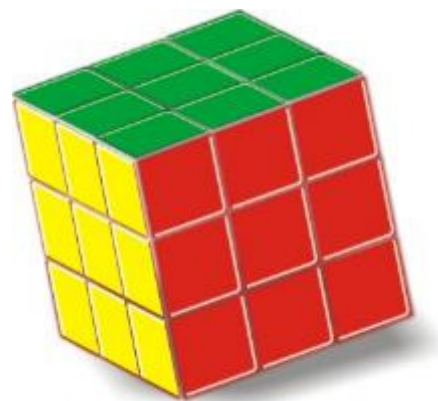
Businesses normally exchange business documents such as purchase orders, invoices, shipping notices etc., via postal mail, fax and even email. The recipient of these documents then handles the information manually, which is a slow, costly, error-prone and unreliable process. The problem becomes even more severe in the supply-chain, where, every party strives to streamline their operations in handling of these documents.



A solution is therefore desired which would seamlessly integrate the supply-chain cost-effectively.

Solution

The solution lies in integrating your business application with **data integration platform**, which enables secure interoperability between the different ERP applications and Cloud system over internet, using various EDI file formats like X12, EDIFACT, XML, JSON, SAP IDOCs, proprietary file formats etc. and integration options, like, FTP, WEB SERVICES, etc., without the need to write proprietary programs and no human intervention. **EDISPHERE is such a data integration platform.**



EDISPHERE is a modern data integration platform to seamlessly integrate Your World, supporting both the traditional EDI integration and modern XML / JSON based web services integration over Internet. Integrating your ERPs and application silos with the Cloud systems and ERPs of your trading partner systems is simple and affordable.

Unlike our competitors, the on-premise license model product, is also available in continuous integration & deployment environment over Microsoft Azure Cloud; for both the license model

and pay-per-use model, which will significantly save infrastructure costs and recurring expenses. EDISPHERE is simply The **Best Value** for your complex data integration requirement with lower cost of ownership (TCO) and faster return on investment (ROI). Besides, we are very flexible in adapting to your on demand requests.

The Organization will benefit by reducing transaction costs, human errors, improving operating efficiencies and making you much more competitive in the market. The result, of course is very satisfied customers – all at a very affordable cost.

EDISPHERE Components

EDISPHERE is a comprehensive suite of data translation system, with following components:

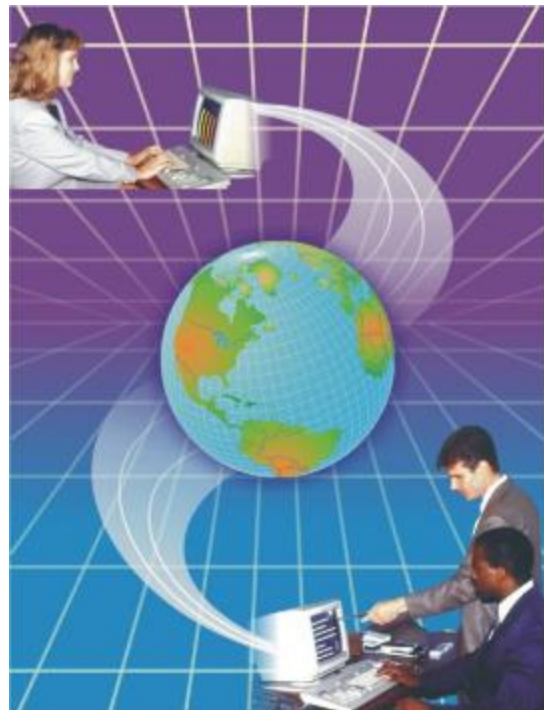
1. Translator - Runtime map execution engine

Translator **seamlessly integrates** with your business application and will translate live messages in various EDI file formats like X12, EDIFACT, XML, JSON, SAP IDOCs and proprietary formats in either direction with your trading partners. It also maps directly to databases.

Details:

Configure various servers like scheduler, sender(s), receiver(s), listener, functional acknowledgement, etc. to send and receive messages between your business application and your trading partners in an unattended mode. Translator uses the files prepared by Implementor (layouts, maps) and Collaborator (trading partner agreement) to perform the translation.

Translator's multithreaded architecture significantly boosts its performance. Its Alert and Notification feature warns you of translation failures via email.



2. Implementor - Mapper and Simulator

Implementor is a very sophisticated and feature rich component. It is used to effortlessly create the layout of your business application message and then map that message to a format agreed upon with your trading partner. Business rules may be embedded in this layout for validation and

mapping. The Simulator assists in debugging your mapping and testing your EDI implementation even before your business application and trading partners are ready assuring that you are ready to go when they are.

Details:

Create the application layout (normally - database, XML, JSON, IDOCs, proprietary file format) so that Translator can recognize and exchange messages with the business application and also validate its data.

Create the partner layout (normally - X12, EDIFACT, XML, or JSON) as agreed upon with the trading partner so that Translator can recognize and exchange messages with the trading partner and also validate the data contained therein.

Create maps correlating the data in the application layout and partner layout, so that Translator can perform the appropriate conversion between the application and partner message formats.

Implementor is packed with smart and innovative features, which significantly simplifies your EDI implementation effort. At the time of layout creation, syntax validation rules are automatically built-into the layout. Test Data Generator will rapidly generate test data to validate your layouts and maps. Analyzer and Simulator will then be used to validate your layouts and maps.

3. Collaborator – Trading Partner Manager

Collaborator is used for establishing trading partner agreement between the two partners. It takes care of determining message envelope parameters and non-message specific tasks such as communication method, output file naming convention, etc. It has features to remotely deploy and support your EDI implementation.

Details:

Create partner profiles and agreements, so that Translator can exchange messages with trading partners and also to locate the appropriate layouts and map file for conversion.

The Implementation kit is a very innovative feature in Collaborator, used for packaging your entire EDI implementation in a single file for deployment from development system to production system and for support.

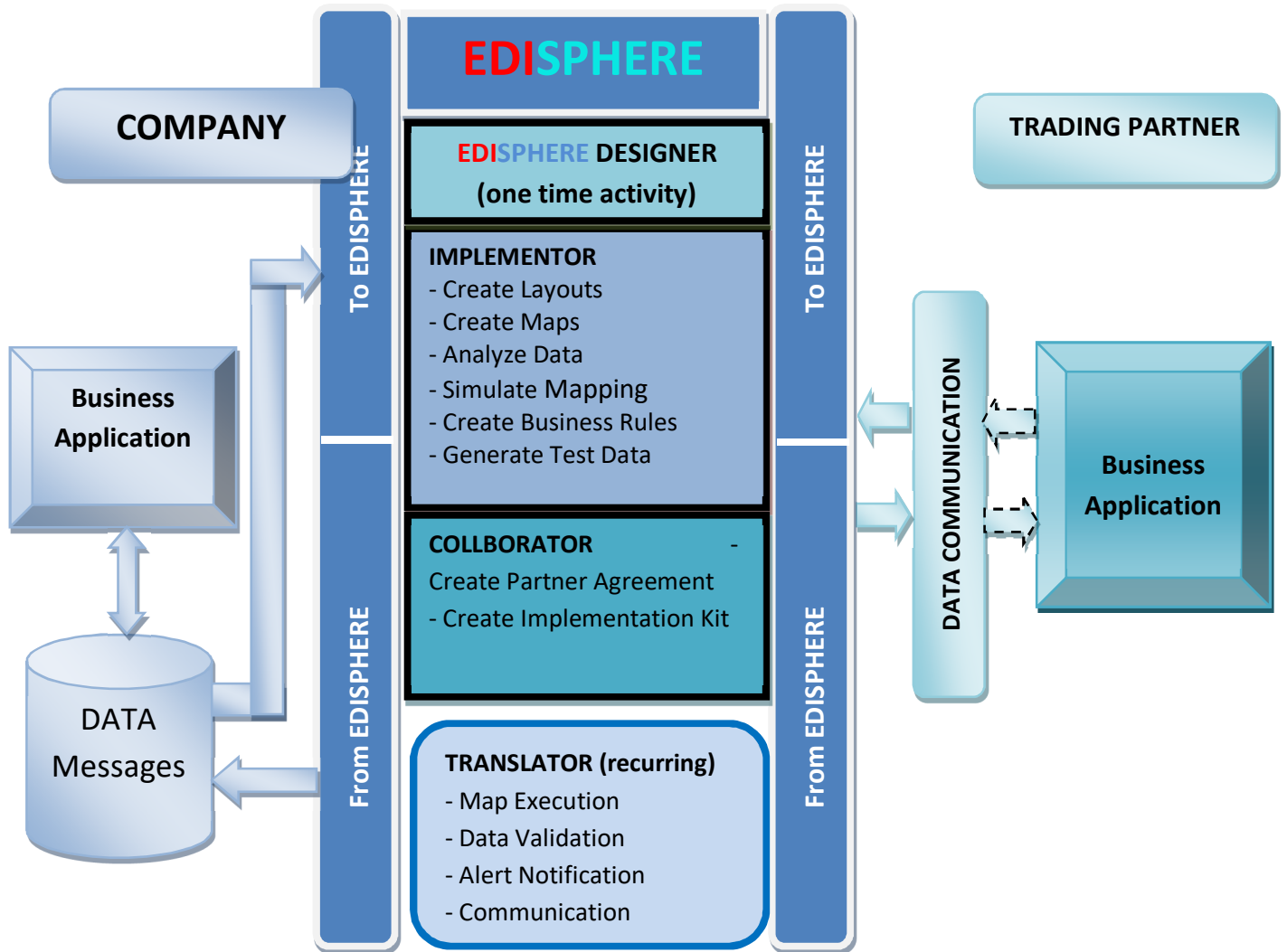
4. Web Administrator – Administration, Monitoring and Reporting

Web Administrator is used for live translator administration, monitoring and reporting (like dashboard, periodic email reports, etc.) in a multi-user single-instance multi-tenant architecture. The interface can also be used to provide access to trading partners to monitor their EDI messages. It has safeguard to ensure only partner messages are visible to the partner user.

Web Administrator can also be used to quickly search your messages based on sender, receiver, message name, filenames, date ranges, etc.; and even your data business keys!

The user interface of Web Administrator is responsive and can be used for administration and monitoring on your mobile phone.

EDISPHERE COMPONENTS



The features and benefits of EDISPHERE are detailed in data sheet *EDISPHERE – Translator, Implementor, Collaborator*. A task list for EDI implementation using EDISPHERE is detailed in a separate document – *EDI Implementation Tasks Using EDISPHERE*.

Why EDISPHERE?

1. It comprehensively meets your EDI Requirements

EDISPHERE is designed to meet your current and long-term EDI requirements. It supports various file formats, including X12, EDIFACT, XML, JSON, SAP IDOCs and proprietary messages (fixed length, variable length, CSV). It has strong support for mapping directly to databases due to most users having good resources for programming in SQL. It supports data conversion in any combination, from any one format to any other format. Its XML support enables your web-services requirements.

Our R&D department keeps track of all B2B initiatives and related technologies to ensure that EDISPHERE is current with all relevant technological advances and that your investment in EDISPHERE is safe.

2. Supports your vertical domain

EDISPHERE components are very horizontal (industry-neutral), designed to support all industry verticals like Automotive, Banking/Finance, Computers/Electronics, Defense, Government, Healthcare, Insurance, Manufacturing, Petroleum/Chemicals, Transportation/Logistics, and Utilities etc.

EDISPHERE facilitates different B2B models in Supply-Chain integration (financial, consignment, replenishment, distribution, etc.) and CPFR (*collaborative planning, forecasting and release models*).

3. Data Reliability

EDISPHERE analyzes both application and partner messages comprehensively for syntax integrity, syntactical requirements, data balancing requirements, situational requirements, validation of data against external code sets, trading partner specific data validation requirements etc. (*see the white paper – Data Reliability using EDISPHERE*).

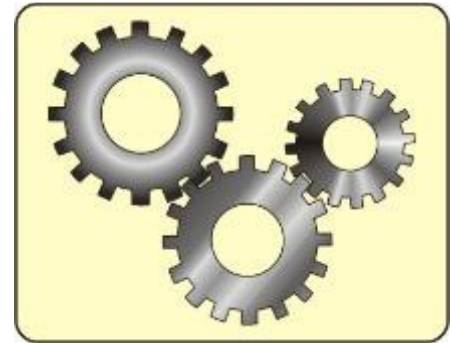
Errors in translation are reported using email alerts, wherein the offending input file is attached and the email body pinpoints to the error. This helps the EDI Administrator to identify the problem on their Laptop and take corrective action, without the need to first procure the input EDI file from the live server.

The user is thus assured that their messages exchanged are error free; and well reported.

5. Seamless Integration

EDISPHERE seamlessly integrates with your business application by adapting to the file format or database required by your business application. Your application may be on a different operating system. EDISPHERE communicates with your application using a common database, and a common directory/folder, using different communication protocols like FTP, Email, HTTP, MQ Series, etc.; as appropriate.

No programming is necessary for integrating EDISPHERE with your business application if integrated “loosely” in this manner.



EDISPHERE also exposes Application Programming Interfaces (APIs) using Web Services for “tighter” integration with your business application (*See white paper – Application Integration using EDISPHERE*).

5. Message Routing

EDISPHERE has excellent routing capabilities enabling it to route messages from your various trading partners to any of your multiple business applications. EDISPHERE uses a combination of Sender information, Receiver information and Message type to provide various options for routing messages. Each trading partner relationship can route message differently.

EDISPHERE also supports prioritization and scheduling of your messages.

6. Supports 24x7 Unattended Operation

EDISPHERE can run as a “service” in background. It’s multithreaded architecture uses separate server threads for receiving messages from different sources, sending messages to different destinations, and for scheduling translations etc., which enables the EDISPHERE to operate in 24x7 unattended mode. EDISPHERE has features to report translation failures through email-alerts, which relieves the EDI Administrator from having to constantly manually monitor the system.



EDISPHERE will warn the user if disk and memory resources fall below the warning level and suspend translation gracefully when critical resources have been depleted beyond a safe level.

7. Performance, Scalability & High Availability

EDISPHERE is designed using multithreading and thread-pooling architecture for high performance. It is designed for scalability. The performance can be scaled higher by simply adding a new EDISPHERE server to the EDISPHERE production cluster environment, which will help in load balancing and meet the desired EDI throughput. This load balancing feature also enables active redundancy and high availability architectures, making EDISPHERE suited for 24x7 mission critical high performance EDI environments.

EDISPHERE has the ability to continually maintain its availability, reliability, and performance in proportion to the load placed upon it. EDISPHERE uses separate threads from the tread-pool for translating each interchange, which lends it a significant performance boosts! It is able to support large transactions in excess of multi-megabytes.

8. Databases & Disaster Recovery

EDISPHERE supports MS SQL Server databases in production environment. EDISPHERE stores all it's configuration files and data files in the database, which helps in easily (and cost-effectively) duplicating the EDI system for disaster recovery by making best use of matured database replication and archiving technology.

EDISPHERE supports Microsoft Cluster capability for database redundancy using which MS SQL Server database can be used in a low-cost active / passive instant failover environment.

9. Tracking Transactions

EDISPHERE performs extensive transaction logging. Transaction reports can be generated based on multiple criteria, including your own internally defined business or reference key. Errors in translation are notified via email. It has native support for acknowledging the received messages and for reconciling the received acknowledgements with the messages sent. It will support your data retention requirements.

EDISPHERE web-reporting system can be used for searching transactions by defining your own filter criteria. EDISPHERE web-dashboard helps in easily monitoring transactions.

10. Low implementation effort

Owing to the extremely intuitive UI, not only does the product have a very low learning curve but also in addition, productivity features like Analyzer, Test Data Generator and Simulator significantly reduce the implementation effort besides helping in robustly testing the implementation (*see the white paper "EDISPHERE - Mapping Simplified"*). The effort needed to set up an EDI Implementation using EDISPHERE is probably among the lowest in the Industry.

11. Communicating with your partner

EDISPHERE can be easily configured to communicate with your partner over Internet and EDI VANs using Email, FTP, MQ Series, and Web Services. VPN and IP authentication may be used for security. If you wish to communicate with your partner using a different communication protocol (e.g. AS2), then use appropriate communication software from appropriate vendor and seamlessly exchange EDI files with EDISPHERE by setting up common folders.

EDISPHERE is AMS tested with USA Custom for exchanging EDI messages using MQ Series.

EDISPHERE has the capability to automatically retry sending files in case of communication failures and also to manually RESEND the files.

12. Web based administration and monitoring

EDISPHERE's web access can be used for administration and monitoring of live transactions. Multiple users can be created with different access roles. Trading Partners can also be provided view only access, wherein the trading partners will only see their messages and not the messages of other partners.

13. Centrally manage your EDI implementation and partner relationships

For multi-location companies deploying EDISPHERE in their various office locations, the "Implementation Kit" feature in EDISPHERE can be very effectively used for centrally managing your implementations and trading partner relationships. The entire EDI implementation for various locations can be carried out at one central location and using the Implementation kit feature the same can be deployed and upgraded at these locations. The feature can be used to create backup of all your implementations (kits) in a single click and to duplicate any system with ease by simply by importing these kits. This feature is highly used to provide quality support as explained below.

14. Quality Support

EDISPHERE has a number of built-in features to ensure quality support. Features such as "Implementation Kit", not only assist in the remote deployment of your EDI implementation, but the added ability to forward the Implementation kit to our technical support team helps us to reproduce your problem promptly, which in turn helps us in providing quality support.

Besides, EDISPHERE's modern helpdesk ticketing system helps keep track of all support requests and responses.

15. EDISPHERE Training – for live (production) deployment

Remote training over webex on EDISPHERE is customized to include one inbound message and one outbound message of the customer implementation that is desired to be deployed in live (production) environment, which over extended period of 1-2 weeks of training is completed to deploy two professionally robust implementations. There is no limit on number of people who wish to be trained at no additional cost.

Trainings are more useful and purposeful when the end result is a professional EDI implementation that is deployed in a Live (production) environment.

16. Suitable for Value Added Service (VAS) providers

EDISPHERE is single-instance multi-tenant architecture, which will help value added service providers (VAS) in easily isolating their subscriber (customer) data. In the database, the data is isolated using Tenant ID columns (fields) whereas files are isolated by using a separate home directory for each Tenant.

This single-instance multi-tenant capability can also be leveraged by large corporate customers to provide safe access of their EDI system to their partners, who will be able to look at their EDI transactions only.

17. Unbeatable Value

The low EDI implementation effort in EDISPHERE coupled with low product license fees and low implementation charges make your EDI implementation extremely cost-effective. Our high-quality and low-cost R&D provides unbeatable value to our customers, ensuring lowest total cost of ownership (TCO) and fastest return on investment (ROI). Besides, we are very flexible in our approach. You can always depend on us.



18. Leverage your IT investments

As the business grows, businesses invest heavily on a range of business applications for their supply chain management (SCM), enterprise resource planning (ERP), human resource (HR), customer relationship management (CRM), etc. Very soon the entire organization is connected 'internally' but through different applications which are not interconnected. Either some manual effort is required to exchange data back and forth between these applications, which is slow and error-prone; or a proprietary program has to be written for integrating internal applications. Also, when businesses acquire new businesses and wish to consolidate data between different branches, the need for integrating different applications again arises.

The problem becomes more severe when external partners are to be integrated with different internal applications and the cost of doing business with 'external' partners starts becoming a significant 'competitive' factor. The heavy investments you have made in the internal applications are highly underutilized for the lack of seamless integration between internal applications and external partners.

EDISPHERE solves these problems by acting as a central hub between these internal applications and external partners, exchanging data in the format desired by them.

19. Customer Requested Feature Development

All feature development initiated as part of customer request are never charged to the customer; and instead released as product feature in the future releases. Several advance features in EDISPHERE such as load balancing, web-based dashboard, different email alerts, communication traces, audit trail, etc. are developed based on customer requests.

20. EDISPHERE Roadmap

EDISPHERE is also available as a private instance on Azure Cloud, in both the license model as well as in pay-per-use model. This is over and above the on-premise license model that was always available.

The private EDISPHERE instance on Azure Cloud will significantly reduce customer's recurring infrastructure cost and also make the platform more robust, fault-tolerant and scalable.



EDISPHERE instance on Azure Cloud can also be continuously integrated with EDISPHERE source code so that changes in the source code is directly upgraded on the customer's EDISPHERE system, which will make the feature updates and bug fixes seamless with no human intervention.

EDISPHERE roadmap is absolutely state of the art and it ensures that your investment will never be obsolete.

Conclusion

EDISPHERE is an EDI whole-product, consisting of Productivity tools, which help you to achieve your EDI implementation faster and more robustly; and Translation components, which integrate with your business application and quietly processes transactions and integrations in the background.

EDISPHERE helps you to design your business application messages in a manner designed to assure achievements of your long-term IT goals without the added concern about future modifications required by the data formats of your new and existing trading partners.

EDISPHERE simplifies your complex mapping requirements. It helps you to beat your EDI deadlines handily and cost-effectively.

Above all, EDISPHERE is very flexible in its approach, accommodating all customer requests to ensure that our customers are happy and that their EDI integration do not suffer in any manner. Our customers rely on us.

About **EDISPHERE** Software

At EDISPHERE Software, we develop Innovative EDI products for automating supply-chain. Large companies and governments are using EDI technology to improve their operating efficiency and reduce transaction costs. But the high cost of implementing EDI technology continues to be a major barrier.

EDISPHERE is a comprehensive suite of innovative Electronic Data Interchange (EDI) products for seamlessly integrating internal business applications with external partners, which helps automate supply-chain faster, robustly and more cost-effectively. Based out of India; it's high quality R&D and low-cost support provides unbeatable value to its customers in US, UK, Singapore, Hong Kong and South Africa. Additional information about EDISPHERE can be obtained at <http://www.edisphere.com>

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It will be highly appreciated.***