Whirlpool

Electronic Data Interchange

EDI

" Supply Chain Integration "
Whirlpool

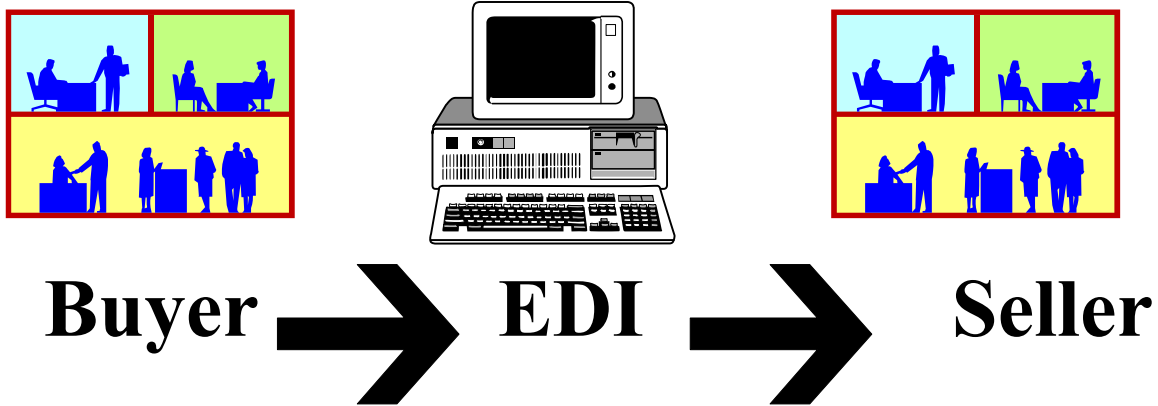Supplier   Trade Partner
" through Electronic Commerce"

Contact for Assistance

Whirlpool Electronic Commerce
Phone: 888-645-2500
FAX: 616-923-5768
Address: 150 Hilltop Road, Mail Drop 7574
           St. Joseph, MI 49085

Buyer → EDI → Seller

Electronic Commerce:

Combination of:
o Business strategies;
o Business processes;
o People and technology
  required to achieve supply chain integration

EDI Definition

Electronic Data Interchange (EDI) is, in simplest terms, computer to computer transmission of business documents such as purchase orders, material releases and invoices, in a format easily recognizable by different companies.

EDI is not:

A real time on-line system where you can directly connect to your supplier's computer to inquire about purchase order and inventory status.

Why use EDI?

EDI enables companies to complete business transactions faster with less expense and fewer errors. There are many other indirect benefits that derive from this increased control and efficiency, such as faster transaction processing, increased accuracy and better information access, among others.

How does EDI work?

EDI isn't really very complicated or highly technical. It's just an extension of what most companies are doing already. That is, businesses today commonly use computers to hold and process information used in the management of various business functions such as purchasing, inventory management, payables and receivables and so forth. The computer is the repository of all information that will be included in business transaction documents. EDI simply takes these computer system capabilities one step further by adding the transmission of the business documents themselves. Purchase orders, invoices and the like are transmitted between trading partners over telephone lines in computer readable form.

EDI thereby makes it possible to exchange data, without ever rekeying the original transaction, information stored in the sender's internal computer files. Sending business documents computer to computer is more efficient than printing the data stored in internal computer files, mailing paper documents, and having a trading partner's clerical staff enter the same document data into it's own computer system. The elimination of paper documents reduces paper processing costs and clerical labor. Reducing document processing results in fewer mistakes and better and faster customer service.

What do I need to do EDI?

In order to communicate with Whirlpool using EDI, you need a computer, modem, phone line and EDI translation/communication software. In addition, an interface program will have to be written between the EDI software and the computer application with which you wish to exchange documents. EDI software is available for PC's (and LAN's), mid-range computers and mainframes. As an alternate to EDI, you could use a conversion service which changes a flat file to or from EDI standards. Shown below are some representative vendors (not suggested or endorsed by Whirlpool) who can provide these services:

Service	Company	Contact	Phone
All Platforms	Harbinger/Supply Tech	Ralph Becker	313-998-4040
Mid-range software	Radley	Will Soutar	810-559-6858
UNIX	Trinary Systems	Tom Carrol	800-377-9120
PC software	EDICT Systems	Ed Olsen	937-429-4288
Bar Code/EDI	User-Friendly Software	Len Kruger	732-681-4833
Mid-range software	Aalstec (Aztech)	Ed Grey	616-727-8300
All platforms	Sterling Commerce	Help Desk	800-678-7719
Bar code	Sierra Consultants	Laurie Goetcheus	616-530-9393
All platforms	Future3	Amy Hammill	248-697-3214
Bar code interface	Connectware	Sales	514-287-1854
File conversions/VAN	Kleinschmidt	Tim Langner	513-831-8709

How are computers able to exchange business documents?

Standard message formats have been adopted by specific industries which allow computers to exchange common business documents. For example, formats have been programmed to arrange purchase order or invoice data in a completely predictable form, a form that computers can process. Translating documents from a company's internal format to an industry accepted EDI format is done with the help of software, available commercially, or through programming completed by a company's own data processing staff.

In order for the sender and receiver to communicate electronically, both must use the same industry standard format. Once a business document has been formatted for EDI, it can be sent to a trading partner's computer where it can be converted back to human-readable form as well as stored for further computer processing.

What is an EDI Value Added Network?

EDI trading partners usually find it more practical to use EDI Value Added Networks, commonly referred to as VAN's, rather than transmit data directly to each other. The EDI VAN acts as a clearinghouse and offers a variety of services that make EDI more accessible and cost-effective.

How does a VAN improve EDI communications?

The role of the VAN includes maintaining the systems and equipment that allow incompatible sender and receiver equipment to "speak" with each other.

Also, VAN's make it possible to complete all of a company's communications in a single transmission, thus freeing the sender from transmitting documents one by one to each trading partner, a process which could prove far too costly if done in-house.

The EDI network can also provide many additional services, including development of EDI implementation plans, programs to assist a company's trading partners to also become EDI active, in-network translation from one EDI standard to another, conversion of EDI data to readable format and subsequent mailing or facsimile transmission to a company's non-EDI trading partners, and much more.

What is an EDI mailbox?

The term mailbox is used to refer to a unique identified area of information storage within a computer, a point of private user access and data consolidation to which EDI transmissions are sent and held until retrieved by the individual EDI VAN customer. Each VAN participant can retrieve documents from its assigned mailbox whenever convenient to it's own operations.

Which VAN does Whirlpool use?

Our primary VAN provider is Advantis (IBM), based in Tampa, Florida. They can be reached at (800) 727-2222.

Do you have to use Advantis to communicate with Whirlpool?

No, all major VAN's communicate with each other via an interconnect to transmit data from one network to another. Before signing up with any VAN, verify that they provide this service and how often they interconnect with other VAN's. A VAN should not hold data that is to be transmitted to your trading partner for more than one hour.

What EDI Documents does Whirlpool Use?

The objective of Whirlpool's EDI program: **ISM** (Integrated Supplier Management) is to reduce total system cost throughout the entire enterprise (within both Whirlpool and the supplier's operations). The benefits of this initiative focus on the redesign of the Whirlpool and supplier order requirements process, and the implications of continuous daily production requirements. Knowledge of how inventory is to arrive and be delivered to the point-of-use on the assembly line is crucial. The process views suppliers as an extension of the business process.

Whirlpool's goal is to implement the Integrated Supplier Management Material Delivery Process across as wide a supplier base as possible. The improvements made by the project can be broken down into four categories for purpose of implementation: (1) Weekly, Daily and JIT Releases; (2) Message Text; (3) Advanced Shipping Notice; and (4) Evaluated Receipts Settlement. The **Advanced Shipping Notice (ASN)** is an EDI transaction that selected vendors send to Whirlpool. The transaction is a means of communicating the specifics of a shipment in advance of receiving it. ASN's will be made available to the Whirlpool manufacturing divisions hourly. Part number, vendor number and P/O number will be edited with any necessary discrepancy notices generated daily. The **JIT Shipping Schedule** requires the participation of the materials managers at the manufacturing plant sites. Analysis and effort by the suppliers is required to implement the **Daily 10-Day Release**. It cannot overlay the weekly release that contains forecast data. **Discrepancy Notices** are transmitted as message text.

830 Planning Schedule with Release Capability

This standard provides the forecasting/material release information from Whirlpool to its suppliers. It is a forecast with authorization to commit to resources. It acts as an order release mechanism and includes period-to-date cumulative quantities, and specific ship/delivery patterns for requirements that have been represented in "buckets", such as weekly. It will contain all data related to purchase orders, as required, because the order release capability eliminates the need for discrete generation of purchase orders.

864 Text Message

This standard provides the format and establishes the data contents of a text message transaction set. This text message is used to:

- Communicate discrepancy notices to suppliers when shipments do not contain the expected materials.
- Broadcast division specific information regarding plant closings, etc.
- Broadcast EDI releasing system problems and work-arounds.

862 Just in Time Release

This standard provides the format and establishes the data contents of a shipping schedule transaction set. This shipping schedule transaction set provides the ability for a Whirlpool manufacturing division to convey precise shipping schedule requirements to a supplier, and is intended to supplement the ANSI X.12 Planning Schedule with Release Capability (830). The shipping schedule transaction set will supersede certain shipping and delivery information transmitted in a previous planning schedule transaction, but it does not replace the 830. The shipping schedule transaction set shall not be used to authorize labor, materials or other resources. The use of this transaction set will facilitate the practice of Just In Time (JIT) manufacturing by providing Whirlpool with a mechanism to issue precise shipping schedule requirements on a more frequent basis than with the issuance of a planning schedule transaction, e.g., hourly shipping requirements versus daily shipping or weekly planning schedules. The shipping schedule transaction

also provides the ability for a Whirlpool manufacturing division to issue shipping requirements independent of other Whirlpool divisions. This document is transmitted once per day and requires that materials in transit are netted out of the requirements.

856 Advanced Shipping Notice

This standard provides the format and establishes the data contents of a ship notice/manifest transaction set. A ship notice/manifest lists the contents of a shipment of goods as well as additional information relating to the shipment, such as order information, product description, physical characteristics, type of packaging, marking, carrier information, and configuration of goods within the transportation equipment. The transaction set enables the sender to describe the contents and configuration of a shipment in various levels of detail and provides an ordered flexibility to convey information. The sender of this transaction is the organization responsible for detailing and communicating the content of a shipment, or shipments, to one or more receivers of the transaction set. The receiver of this transaction set can be any organization having an interest in the contents of a shipment or information about the contents of a shipment.
This transaction set includes a set of hierarchical loops that describe various levels of shipment detail. These levels are: (1) shipment; (2) order; and (3) item.

Daily Releases (830)

This daily communication reflects the modified requirements of individual vendors by division and part number for 10 days only. The daily release communication is very limited and is intended to be used as a supplement to the weekly release, highlighting current changes to critical suppliers.

Receiving Advice (861)

A daily communication, detailing by packing slip and part, the receipts into a Whirlpool facility. It is primarily intended to notify suppliers of parts pulled from a consignment warehouse.

Start-Up Checklist:

- Network availability
- Obtain required EDI documents
    - *Whirlpool's Supplier Electronic Commerce Helpline is 1-888-645-2500 (616-923-4922)*
- Communications - Line Type and Speed
- Line protocol, Transmission Mode
- Transmission Initiation
    Whirlpool's VAN will conduct a communications test with you
- Install hardware and translation software
- Test translation software with existing data
    - *Whirlpool will be sending releases against purchase orders*
- Develop internal edits and controls
- Establish "Go-Live" date
    - *When you are ready to test, call Whirlpool's Supplier Electronic Commerce Helpline at 1-888-645-2500 (616-923-4922)*
- Determine length of parallel mode operations
- Document "Trouble-Shooting" procedures
- Fine tune existing system/procedures
- Add other applications, standards, users