



soft|care

AS2 for EDI Hubs – The Value Proposition

Prepared by Mike Cobban
Director of Business Analysis
SoftCare EC Inc.
July 2007



softcare

I would like to move all of our EDI business documents, which represent 90% of our business, from our reliable EDI VAN for communications to communicating these business documents using the Internet? In 1999, if an MIS Director had gone to his executive with such a proposal, he would have been laughed at or more likely fired. In the year 2007, many large EDI Hubs such as Wal-Mart, Hyundai, Covisint, GMAC Lowes, Meijers, Michaels, Food Lion, Kohls, Winn-Dixie etc. have switched from VAN communications to using the Internet for the transmission of business critical documents. “Internet EDI transaction volume has been increasing steadily during the past six quarters at a 50%-60% growth rate,” said Carl Lehmann, vice president of technology research services at META Group.

Why did they switch? Cost is one reason. Hubs are constantly trying to find ways to reduce costs. Companies such as Do-It-Best have found that cost of EDI via a VAN is expensive, with a charge reaching \$15,000 per month. Piggly Wiggly Carolina Co. has cut their costs by 70% since going from a VAN to AS2 with 20 of its 600 trading partners, according to Kathy Davis, a lead systems analyst at the Charleston-based grocer. In addition, the use of EDI is increasing. Ken Vollmer, an analyst at Cambridge Mass.-based Forrester Research, estimated that EDI represents 80% – 90% of the total business to business traffic, and the number and cost of EDI transactions is growing at 3 – 5% per year. At J.C. Penney, the growth rate was 17% from May of 2003 to May of 2004 as EDI was expanded into the logistics and transportation processes. For a supplier such as Coty to conduct business with a typical midrange customer over a VAN costs about \$300 per month. “There seems to be a constant flow of requests for internal business owners as well as customers to increase the amount and type of electronic information exchanged using EDI and everyone wants automated, seamless interfacing of data” says Cynthia Wilson, EDI co-ordinator at Dallas based Morningstar Foods,. As retailers expand to EDI intensive initiatives such as VMI, CFPR and Scan based trading, the flow of business documents transmitted will expand even further in the future.

Another reason for the switch from VAN to Edi over the Internet using AS2 was for the speed and security of transmission. While EDI VAN’s employ a “store and forward” mailbox approach, which requires that trading partners sign on to a mailbox to receive their documents, direct connections using the Internet immediately transfer the document to your trading partner. When the Internet Engineering Task Force (IETF) defined the standard for EDI over the Internet (EDIINT) AS2, it allowed for direct connections that transfer securely (using HTTPS). The AS2 standard is a specification that describes how to create a



softcare

connection and securely transport an EDI file over the Internet. AS2 provides security for the transport of HTTP packets through digital signatures and data encryption. AS2 also provides for non-repudiation - proof that a transaction was performed at a certain time and by legitimate parties - through the use of Message Delivery Notifications (MDN).

Another key reason that many retailers have come on board with AS2 is the critical mass of suppliers using AS2 to communicate. Driving the trend to Internet EDI were mandates from influential companies - including Wal-Mart which has required that all of their 14,000 suppliers communicate their EDI documents via AS2. The following is a partial list of large companies who are communicating via AS2 today:

- 3M
 - ACE Hardware
 - Army / Air Force (AAFES)
 - ASDA
 - Cardinal Heath
 - Covisint
 - Food Lion
 - General Mills
 - GMAC
 - Giant Eagle
 - Gottschalks
 - Hannaford
 - Hyundai
 - Home Depot
 - KB Toys
 - Kohl's
 - Kraft
 - Lowe's
 - Microsoft
 - McKessen Drugs
 - McLane
 - Meijer
 - Procter & Gamble
 - Target
 - Toys R Us
 - Wal*Mart
 - Winn-Dixie
-



softcare

Another reason for the move to AS2 was to be able to manage the movement of any business documents (not just EDI formatted documents). Although the AS2 standard has come from the EDI world, it is in fact payload agnostic and the message could be anything. It could be a private message format or could be one of the many XML based standards. The message could be a financial transaction between clients and brokers or banks and their clients; it could be confidential data between health care companies and insurance companies, it could be inter-store sales data or merchandize transfers. Spawned by major retailers' endorsement of EDI-INT AS2 Internet transport technology and the recommendation that its suppliers move toward UCCnet's GlobalRegistry for product item synchronization, most consumer packaged goods (CPG) organizations and retailers are seeking improvement in their B2Bi (Business to Business via internet) strategies and techniques. All of these documents which can not be transferred via traditional EDI VAN's can be communicated via AS2. Companies are also starting to use AS2 to secure data as it moves within corporate boundaries - such as between legacy processing platforms.

Switching to an Internet based infrastructure for communications requires that a company have a solution that can duplicate the "management/audit" functionality of VAN's. To understand this need, one must go back to the advent of EDI to understand the value proposition that EDI VAN's made for their existence. At that time, there was a need for an infrastructure to communicate EDI documents (there was no Internet), plus they needed a way to manage the flow of EDI standard business documents between trading partners. In essence, the VAN provided the universal access to trading partners and a way for the retailer and supplier to exchange EDI only business documents and be confident that the EDI business document:

- Had been sent once and only once
- Had not been intercepted and viewed on route
- Had not been altered on route
- Had been delivered to the intended recipient and no one else
- Had delivery confirmed to the sender
- Had been re-queued if the document was lost or partially sent to the supplier



softcare

The immediate value proposition of moving away from VAN's is to

- ✓ Eliminate monthly VAN fees currently being paid by both parties of the transaction (sender/receiver) generating an immediate cost savings and hard ROI.
- ✓ Automate business processes by enabling dynamic data interchange, generating substantial efficiency gains for mid-market companies and their trading partner community.
- ✓ Reduce costs to monitor, audit and manage the movement of business information between a company's internal systems and their trading partner community no matter how the documents are formatted.
- ✓ Increase the speed of the flow of business information to a companies supply chain.
- ✓ Reduce the time and effort to identify "problem" business documents.
- ✓ Eliminate "lost" transactions by the use of Message Delivery Notifications reconciliation.

Companies are making the switch to EDI over the Internet using products such as SoftCare's TradeLink because they can integrate and manage electronic business document processes internally, and among trading communities while combining e-business process integration, trading community management, network configuration and management tools, and secure multi-protocol Internet communications required for hundreds and thousands of trading partners and customers while reducing their bottom line costs of doing business.

About SoftCare

Founded in 1989 SoftCare EC Inc. develops e-business software. Our OpenEC® product suite allows companies to conduct business-to-business e-commerce. Our e-business software is open and scalable allowing for integration with existing and future technologies, lowering operating costs and streamlining the business process while delivering benefits to all electronic trading relationships.

To learn more about EDI, Scan Based Trading, B2B Commerce and eCatalogs for Retailers, Suppliers & Manufacturers, see the numerous company case studies at www.softcare.com/whitepapers.
