

What is XML Used For?

XML has created a quite revolution on the Internet. It is the first truly portable data format that was designed for Internet and multi-language support.

The number of applications for XML are limitless. Here are just a few of the areas that XML has gained momentum.

Business to Business E-Commerce

This is one of the areas that XML has moved most rapidly. Getting businesses to talk the same data “language” has always been difficult. Differences in software and hardware platforms have always been big issues for companies that want to communicate electronically.

XML Vs. EDI

The first initiative to solve this problem was a standard called *Electronic Data Interchange*, or EDI. While the goals of EDI were lofty, the implementation was less than perfect. For many companies, implementing EDI in their processes was not something that yielded much in the way of results. The same issues of differences in hardware and software still existed. Differences in data representation between organizations was another major hurdle. Having a standard for content modeling that could be interrogated by software was not part of the EDI model. This required that the software that would use the EDI output would have to understand its content model inherently. Each company had one or more content models that it would create for different things (e.g. purchase orders, proposals, etc.) . Things got real complicated real fast. A good analogy is that of the telephone. The problem with EDI was that each company that wanted to talk to each other had to reinvent the telephone for each type of discussion they wanted to have. Needless to say, EDI was not the panacea that many envisioned it to be.

XML addresses these issues in the way that it was designed. It is platform independent, it is structured, and it has a mechanism for strict content modeling that can be interrogated by any software using a standard XML processor. The result is that companies can communicate

with each other using XML and engage in business to business e-commerce without having to worry about hardware and software platform issues, or content modeling issues.

Many large organizations are now using XML for such things as requests for proposals, purchase orders and transaction records to name a few. Since XML is designed for use with Internet protocols, the Internet has become the medium for transferring this XML data back and forth. The Internet is becoming the ideal place to do business to business e-commerce.

Catalogs

XML makes the perfect storage and transfer mechanism for information such as catalogs. This includes not only catalogs like those used for e-commerce, but also things like parts and inventory. Companies can use XML to keep lists of information (catalogs) that can be shared and transferred between multiple departments, managers, outside vendors, etc.

Data Wherehousing and Archiving

Storing large amounts of information for access by multiple applications is known as Data Wherehousing. XML can be used to store such information in usable chunks (documents) that can be retrieved from anywhere on the network or Internet, allowing users to get the information from anywhere. This is especially useful when sales teams who travel need to get at pertinent information.

Another use of XML is that of data archiving. A good example is the archiving of relational database data. Relational databases are extremely effective at storing and retrieving information (data) quickly. However, lots of infrequently used data can slow them down. Why not store such data in XML documents, leaving only the data that is commonly used within the relational database? This allows the database server to do what it does best while making the older data still available.

Data Migration

Migrating data from one system to another has been the bane of application programmers for years. Developers have often resorted to creating custom file formats that can be used to exchange data between systems. The problem however is that each system must understand the format of the data if they are going to be able to share such information.

XML is the perfect mechanism to be used for data migration. By storing application data in XML, other applications can interrogate and query such information using XML's open standards. Each application needs to know how to read one type of data storage, namely XML. This makes it much easier for application developers as they can use XML to export and import data.

A good example of this is migrating data from one database type to another (e.g. SQL Server to Oracle). By outputting the data to XML, it can be accessed by an application that knows how to process XML and put import the data into the target application or software.