



IBM Software Group

IBM WebSphere® Data Interchange V3.3

XML Basic Concepts



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This presentation will review XML basic concepts.

Agenda

- Overview: Using WebSphere Data Interchange to transform XML data
 - ▶ Capabilities
 - ▶ Basic steps



The presentation provides an overview of how to use WebSphere Data Interchange to transform XML data. This includes the general capabilities, as well as the basic steps that you would follow.

What is XML ?

- XML is eXtensible Markup Language
- A common way of exchanging data with other parties and applications
- A W3C “Recommendation”
 - ▶ XML and related information at: <http://www.w3.org/>
- Actually a meta-markup language
 - ▶ Does not define semantics or tags
 - ▶ Specifies rules for defining and using tags to structure data
 - ▶ You define the tags!
- Many good resources on Internet for more information



XML stands for eXtensible Markup Language. It has become a common way of exchanging data between internal applications, and is becoming more frequently used between trading partners. It is a published “Recommendation” by the W3C organization, which develops specifications and guidelines for the World Wide Web. XML is actually a meta-markup language, meaning that it does not define actual semantics or tags, but instead specifies rules for defining and using the tags to structure the data. The tags and semantics are up to you. There are many good resources on the Internet for more information on XML, including numerous books and online tutorials.

Transforming XML with WDI

- WDI allows you to transform XML data to/from:
 - ▶ EDI data
 - ▶ Record-oriented Data Format
 - ▶ Other XML format
- XML definitions can be imported as:
 - ▶ XML schema
 - ▶ DTD



Using WebSphere Data Interchange (WDI), you can transform XML data to and from Electronic Data Interchange (EDI) standard transactions, such as X12, EDIFACT, and other EDI standards. You can also transform XML data to and from record-oriented Data Format definitions, such as SAP Idocs and user-defined records, or to and from other XML formats. The XML formats can be defined using either XML schemas or DTDs.

Basic steps - setup

- Import XML DTD or schema
 - ▶ Obtained from trading partner or industry group
 - ▶ Or, created by user
- Import/create definition for other document
 - ▶ Import or create the EDI standard, Data Format definition, or other DTD/schema to be used in the map
- Create the *map* using WDI Client
 - ▶ Defines how the data is converted
- Create a *rule* for the map
 - ▶ Defines when this map is used, additional options



To set up the transformation for XML documents, you typically do the following:

- 1) Import your XML DTD or schema. This can be a DTD or schema that you received from your trading partner, from an industry group, or one that you created internally.
- 2) Import or create the definition for the document you are mapping the XML data to or from. This may be an EDI standard, a record-oriented Data Format definition, or another XML DTD or schema.
- 3) Create a *map* using the WebSphere Data Interchange Client interface. The map defines how the data is to be converted.
- 4) Create a *rule* for the map, which defines when this map is used, and additional options.

Basic steps - runtime

- Run the PERFORM TRANSFORM command
 - ▶ Command file on Windows, AIX
 - ▶ MQ Adapter (trigger program) on Windows, AIX
 - ▶ JCL on z/OS batch
 - ▶ CICS transaction on CICS
 - ▶ MQ trigger program on z/OS, CICS



Once the document definitions, map, and rules have been defined, you use the WDI Server command PERFORM TRANSFORM to transform the input XML document to the new format, or to transform the input document to XML. The WDI Server program can be initiated in a variety of ways, depending on the platform.

Summary

- Provided overview of XML data transformation with WebSphere Data Interchange
 - ▶ Briefly discussed various formats that XML data can be transformed to/from
 - ▶ Described the basic steps used to transform the data.
- More detail in other presentations



This presentation provided a brief overview of using WebSphere Data Interchange to transform XML data, including both general capabilities and basic steps. The presentations that follow will provide more details on specific areas, including importing the XML schema and DTD, creating the map, and some special considerations when dealing with XML schemas and namespaces.

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