

# DB2 Universal Database XML Extender: Web-enabling your data with XML

### Highlights

**Supports business-to-business data interchange** 

**Enables the next generation of Web content** 

Ensures scalability and performance

Companies of all sizes, in every industry, are leveraging the enormous poten-

tial of Internet technologies to reach out to customers, partners, and employees. But successful e-business applications require more than Web browser interfaces and IP networks. That's why there is IBM DB2 Universal Database XML Extender. Web-ready, scalable, and secure, DB2 allows you to leverage the power of XML in your e-business applications.

DB2's XML Extender provides new data types that let you store XML documents in DB2 databases and new functions

that assist you in working with these structured documents. Entire XML documents can be stored in DB2 databases as character data or stored as external files, but still managed by DB2. Retrieval functions allow you to retrieve either the entire XML document or individual elements or attributes. Take a look at how DB2 XML Extender helps you to use XML to leverage your valuable business data.

## For business-to-business e-commerce

XML is the standard for data interchange for the next generation of business-to-business e-commerce solutions. With the XML Extender for DB2, it is easy to leverage your critical business information in DB2 databases to engage in business-to-business solutions using XML-based interchange formats.

#### For Web publishing

XML documents can be stored in DB2 in a single column or as a collection of data items, in multiple columns and tables. The Text Extender in DB2 supports structured documents like XML. Its powerful search functions can now be applied to a section or a list of sections within a set of XML documents to significantly improve the effectiveness of the search. In addition, specific XML elements or attributes can be automatically extracted into traditional SQL data types to leverage DB2's sophisticated indexing and SQL query capabilities.



## DB2 and XML-the right choice for B2B data interchange

# Flexible mapping of XML data to DB2 table columns

XML Extender uses a document access definition (DAD) to map XML elements and attributes to DB2 tables. The DAD can be used for indexing elements and attributes for fast structural search, or for creating XML documents from DB2 data or shredding and storing XML data in DB2.

#### **Easy Administration**

XML Extender comes with an administration wizard to assist you in setting up DB2 to handle XML documents, including the mapping of XML elements and attributes to SQL datatypes in specific tables and columns. Also, you can specify a DTD that will be used to validate the XML data before it is inserted into DB2. These DTDs are stored in a repository table in DB2 for easier management.

#### **Product features**

#### Storing XML documents as column data

- Create an XML document repository (storage and retrieval), using XML Extender UDTs and UDFs to store and access entire XML documents in DB2 tables as column data
- Extract XML elements or attributes to indexed columns in side tables for fast search
- Access XML documents using XPATHcompliant extraction UDFs

XML Extender provides a document repository for intact XML documents.

When an XML document is inserted into a column of XML data type (an XML column), important elements specified in the DAD are automatically extracted from the XML document and loaded into the specified columns and tables, eliminating the need for the load application to handle this parsing, extraction, and insertion. You then index these columns for fast search.

Additionally, provided UDFs simplify the load process. When the contents of an XML column are updated, the elements that were extracted and stored in side tables are automatically updated.

# Composing or decomposing XML documents with DB2 data

- Compose XML documents from data in existing DB2 tables, using a DAD
- Generate XML using either an SQL or XML model
- Shred (decompose) untagged XML data into existing or new DB2 tables using a DAD
- Dynamically customize the generation of XML documents without modifying the DAD

XML Extender provides stored procedures to compose XML documents from data stored in DB2 tables. The resulting XML document can be stored in DB2, distributed over the Internet, or used with other applications.

Additionally, you can use stored procedures to decompose XML documents; untagged data is stored in DB2 tables that you specify using the DAD.

#### Web site

Visit us at http://www.ibm.com/software/data/db2/extenders/xmlext



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