Agenda

- Introduction
- Overview of Altova
- Altova tools enhanced to support DB2® pureXML™
- What’s New?
- Advanced Topics
  - Special support for DB2
  - XQuery Profiler
  - Migrating from Relational Data to XML
- Resources to get started
Altova Corporate Overview

Profile: Altova® is the creator of XMLSpy® and other leading XML, database, and UML tools.

Founded in 1992, Altova is headquartered in Beverly, Massachusetts and Vienna, Austria.

An innovative, customer-focused company, Altova offers a product line that fulfills a broad spectrum of business needs for development teams in the world’s largest organizations to growing one-person shops.

The Altova® MissionKit® 2010 is a cost-effective, integrated suite of XML, database, and UML tools designed to meet the diverse development and data management needs of today’s software architects and XML developers.

An active member of the World Wide Web Consortium (W3C) and Object Management Group (OMG), Altova is committed to delivering standards-based, platform-independent solutions that are powerful, affordable, and easy–to–use.
Our Customers

- The leading choice of over 3.5 million registered users and more than 100,000 companies worldwide
- Include 91 percent of the *Fortune* 500 companies across the globe
- Range from vast development teams to progressive one-person shops
- Use Altova products for a variety of application development projects such as:
  - Business process automation
  - Data integration
  - Database management
  - Document management
  - Web services and Web 2.0 development
Altova Corporate Overview

**Milestones:**

- 1992 – Altova GmbH founded in Vienna, Austria
- 1999 – Altova® XMLSpy® introduced
- 2000 – XMLSpy 3.0 IDE became the de-facto standard for XML developer products
- 2001 – US subsidiary Altova, Inc. established in Beverly, Massachusetts
- 2007 – Altova products reached 3 million user mark
- 2007 – Altova version 2007 supports special features of pureXML in DB2 9
- 2009 – Altova MissionKit tool suite received prestigious Jolt Product Excellence Award
Altova Products for DB2 pureXML

- **Altova XMLSpy®** – the industry leading XML editor
- **Altova MapForce®** – a graphical data mapping, conversion, and integration tool
- **Altova StyleVision®** – a graphical stylesheet designer & electronic forms design tool
- **Altova DatabaseSpy®** – a multi-database query, design, and database comparison tool
- **The Altova MissionKit®** – an integrated suite of XML, database, and UML tools

All Altova tools are available for a 30-day, fully functional free-trial
Altova XMLSpy

- The industry’s best selling XML editor
- Compliance with the latest industry standards including XSLT 2.0, XQuery 1.0, XBRL, WSDL 2.0, OOXML
- Database integration with DB2® and other major relational databases
- Integration with Eclipse and Visual Studio
- Graphical and text-based editing views
- XML Schema & DTD tools
  - Graphical XML Schema editor
  - Schema-based code generation in Java, C++, and C#
- XSLT & XQuery tools
  - XSLT & XQuery editors, debuggers, and profilers
  - XPath autocompletion
- Web Services tools
  - Graphic WSDL editor
  - SOAP debugger

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Altova MapForce

- Graphical data mapping, conversion, and integration tool for:
  - XML, databases, flat files, EDI, Excel 2007+ (OOXML), XBRL, and Web services
- Drag-and-drop data mapping
- Support for migrating legacy EDI formats including: EDIFACT, X12, HL7, and SAP IDoc messages
- Supports DB2® and other major relational databases
- Instant data transformation
- Autogeneration of royalty-free code in:
  - XSLT 1.0/2.0 & XQuery
  - Java, C#, C++
- Integration with Eclipse and Visual Studio
Altova StyleVision

- Graphical stylesheet and electronic forms design tool
- Transforms XML, XBRL, and database content into HTML, Word, PDF, and Authentic® formats
- Visual, drag-and-drop stylesheet design
- Multi-channel publishing of data from XML Schema, DTD, XBRL, and database sources
- Supports DB2® and other major relational databases
- True electronic forms design through absolute positioning
- Supports XSLT 1.0/2.0, XSL: FO, CSS, JavaScript
- Integration with Eclipse and Visual Studio IDEs
Altova DatabaseSpy

- Affordable, multi-database query, design, and comparison tool
- Connects to DB2® and all other major databases
- SQL editor with autocompletion
- Graphical database design
- Database content editor
- Database compare & merge:
  - Database table content
  - Database schemas
  - Database structure conversion
The Altova MissionKit 2010

- An integrated suite of XML, database, and UML tools for software architects and XML developers

- All Altova tools are available separately or as part of the value-priced Altova MissionKit tool suite
  - **The MissionKit for Software Architects includes 8 tools for the price of 2***
    - XMLSpy, MapForce, StyleVision, UModel, DiffDog, DatabaseSpy, SchemaAgent, SemanticWorks
  - **The MissionKit for XML Developers includes 6 tools for the price of 2***
    - XMLSpy, MapForce, StyleVision, DiffDog, SchemaAgent, SemanticWorks

- Winner of the 2009 Jolt Product Excellence Award in the “Development Environment” category

*Pricing comparison is edition-specific and based on Altova MissionKit vs. two individual licenses of XMLSpy and MapForce.*
Altova Supports Industry Standards

- Altova tools are compatible with Windows 7, Windows Vista, Windows XP, and Windows Server 2003-2008r2

- Altova tools include deep integration with IBM DB2 pureXML, and connect to IBM DB2 8, 9 (LUW), and IBM DB2 for iSeries v5.4, 6.1

- Altova tools support all XML Schema-based industry standards like NIEM, DocBook, SCORM, ACORD, FIXML, cXML, and XBRL that promote data integration and accessibility

- XMLSpy supports a subset of the OASIS XML catalogs mechanism
# The Altova MissionKit 2010 – Product Editions

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Highlights of New Features Since 2007

- **Comprehensive XBRL support** – view and edit XBRL taxonomies, validate XBRL documents, map to and from XBRL taxonomies, XBRL report design with table wizard

- **Support for HL7** – support for HL7 v2 EDI allows healthcare organizations to comply with international mandates, support for HL7 v3 XML enables HL7 users to update to the latest version of the standard

- **New, native 64-bit product versions** – Allowing Altova tools to capitalize on the benefits of 64-bit operating systems

- **Numerous optimizations for working with large files** – In both 32-bit and 64-bit product versions

- **New e-forms design paradigm** – True electronic forms design through absolute positioning in design layouts

- **Database differencing & conversion** – Diff/merge of database schemas and conversion between databases of different types

- **Data editing support in the Database Query Window** – allows users to edit database data in the results window and commit changes back to the database
XBRL Features Illustrate the Complementary Nature of Altova Tools

- **XMLSpy** – View, edit, and extend XBRL taxonomies, generate comprehensive XBRL documentation in HTML, Microsoft® Word, or RTF, validate XBRL documents

- **MapForce** – Map from native financial data to XBRL instance documents on demand

- **StyleVision** – Render XBRL reports in HTML, RTF, PDF, and Word 2007+ (OOXML) based on XML, databases, and XBRL taxonomies
Altova MapForce HL7 Support

- Visually map to and from HL7 messages both in their legacy EDI format, and the newer XML-based version (3.x)
- Visually map to and from all of the different ANSI X12 transaction sets that are required to comply with HIPAA regulations
Altova XMLSpy Support for DB2

- Connects to DB2 pureXML databases
- Provides user-friendly features for managing XML Schemas
- Allows direct querying of DB2 databases using SQL, SQL/XML, and XQuery
- Supports special IBM operators `xmlcolumn` and `sqlquery`  
- Includes a full-featured XQuery development environment with an XQuery profiler and XQuery debugger
Why use an XML editor?
Why use an XML editor?
Altova XMLSpy

Why use an XML editor?
Altova XMLSpy

Connect to DB2 for XML Schema management
Altova XMLSpy

Manage XML Schemas
Altova XMLSpy

- Directly edit DB2 databases
Altova DatabaseSpy

Graphical database design
Altova XMLSpy XQuery Tool

- Supports DB2 `xmlcolumn` operator

```xml
declare default element namespace "http://www.altova.com/xquerydatabases/db2";

<x> (db2:xmlcolumn("CUSTOMER INFO")) </x>
```
Altova XMLSpy XQuery Tool

- Supports DB2 xmlcolumn operator
Altova XMLSpy XQuery Tool

- Supports DB2 sqlquery operator
Altova XMLSpy XQuery Tool

Supports DB2 SQLquery operator
Altova XMLSpy XQuery Profiler and Debugger

- Monitors and records detailed metrics for each processing instruction
Altova XMLSpy – Migrate Relational Data to XML

- Infer an XML Schema from an existing relational database table
- Convert the existing relational data to XML
- Create a new table for the XML data
- Import the XML data into the table
Altova XMLSpy – Migrate Relational Data to XML

Infer an XML Schema from an existing relational database table
Altova XMLSpy – Migrate Relational Data to XML

> Infer an XML Schema from an existing relational database table
Convert the existing relational data to XML through DB import based on XML Schema
Altova XMLSpy – Migrate Relational Data to XML

- Convert the existing relational data to XML through DB import based on XML Schema

Convert the existing relational data to XML through DB import based on XML Schema
Altova XMLSpy – Migrate Relational Data to XML

**Final Steps:**

- Create a new table with an XML column to contain the XML data
- Add the new XML Schema to the database
- Import the XML data
Summary

- Overview of Altova
- Relationship between Altova and IBM to provide support for DB2® pureXML™
- Descriptions of Altova tools
- Demonstration of just a few special features for working with DB2
- Exercise in conversion from legacy relational data to XML
- Resources to get started
Resources

Altova / IBM Technical Whitepaper

- Real-world example of the Online Brokerage Application Scenario demonstrates some of the business problems that can be solved through the integration of Altova tools with IBM DB2 9 (29 pages)

Using the Altova Tools with IBM DB2 pureXML / IBM Developerworks Library

- Shows a variety of pureXML features in DB2 and how the Altova tools can help the user to work with them (71 pages)

Take control of your XML data with IBM® DB2® pureXML™ and Altova tools (4 pages)

Resources (continued)

- Altova Web Site
  - http://www.altova.com

- Altova Flash Demos

- Altova Online Training

- Download Free Trials

- Further questions?
  - Email to: DB2@altova.com
Thank you

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