Altova® XMLSpy® 2007 – The industry standard XML development environment.



Bring your development plans to light



Altova® XMLSpy® 2007 is the industry standard XML development environment for modeling, editing, transforming, and debugging XML-related technologies. Offering the world's leading XML editor, the original graphical schema designer, a code generator, file converters, debuggers, profilers, a revolutionary new WSDL designer, support for SOAP, XSLT, and XQuery, plus Visual Studio® .NET and Eclipse integration, it's the essential tool for mastering XML.

# **Simplify and Accelerate XML Development**

Today, eXtensible Markup Language (XML) technologies play a critical role in all software development projects. XML has received widespread support and adoption in the computer industry because of its simplicity, extensibility, interoperability, and flexibility, all of which stem from its power to represent data independent of programming language, platform, or operating system. In XML-based applications, XML is used alongside complementary technologies such as XML Schema, XSLT, XQuery, Web services, and others. Today's developer needs a tool for creating, editing, and debugging these XML-related technologies in an efficient, standards-based manner.

Altova XMLSpy 2007 delivers all the power you need to create the most advanced XML applications, yet at the same time it's flexible enough to allow you to work with XML using the views and options that best suit your specific requirements and preferences. XMLSpy 2007 increases productivity by allowing you to develop higher quality, standards-conformant XML-based applications more quickly than ever before.

The powerful XMLSpy 2007 arsenal includes the features listed below, plus many others, which have made it the world's leading XML development environment and the trusted choice of over 2.5 million users around the world.

- >> XML design, editing, validation, and well-formedness checking
- >> XSLT 1.0/2.0 design, editing, and debugging
- Instant transformation of XML documents
- >> XML Schema and DTD design, editing, and documentation
- >> XPath 1.0/2.0 support and analysis
- >> XQuery design, editing, and debugging
- >> SOAP client support and debugging

- >> Support for all major relational databases
- >> Enhanced Web services design and editing
- >> Java, C++, and C# code generation based on XML Schema
- >> Integration with Microsoft Visual Studio. NET and Eclipse
- >> XML-aware file and directory differencing/merging
- >> Project management capabilities
- >> WebDAV client interface support



The powerful XMLSpy 2007 user interface

# **XML Editing**

XMLSpy 2007 abstracts away the complexity of XML and related technologies through its intuitive user interface and rich variety of editing views and options that simplify and accelerate application development. The intelligent editing features of XMLSpy 2007 include:

- >> Five powerful, synchronized editing views
  - > Text view
  - > Grid view
  - > Schema/WSDL view
  - > Authentic view
  - > Browser view
- >> Built-in templates for documents and industry standard
- dialects >> Auto-completion function for element tags and attributes
- >> Context-sensitive entry helpers

- >> Syntax checker with text coloring
- >> Element and attribute info windows
- >> Table representation of repeating elements
- >> Well-formedness checker
- >> XML validator with hyperlinks to schema and specification details
- >> XML-aware file and directory differencing utility
- >> Project management window
- >> And much more

All the XMLSpy 2007 views and editing features are designed to make working with XML documents as easy as possible. When working with XML is easy, productivity increases, saving money and decreasing time-to-market for your applications.



Advanced text view

### **DTDs and XML Schema**

DTDs and XML Schema form the foundation of any XML application, defining the content model and shaping the way data is structured. XMLSpy 2007 includes the world's leading XML Schema editor for designing, generating, converting, documenting, validating, and viewing XML Schemas and DTDs. You can create XML Schemas quickly and easily in the graphical Schema/WSDL view, which removes much of the intricacy associated with XML Schema structures, syntax, and design principles.

When you open an XML Schema in the schema design view, XMLSpy 2007 displays its global components in a simple table where you can insert, append, or delete components with ease. As each element, complexType, simpleType, or attributeGroup is selected, its details, attributes, and identity constraints are displayed and can be edited in the convenient helper window. Moreover, when you click on the tree symbol next to a component, its content model opens in the graphical schema view where relationships between





Graphical schema view

schema components and sub-elements are displayed in a clear and logical hierarchical representation. You can edit content models directly, drag and drop, or cut and paste within the graphical view.

If you want to base your content model on an existing structure, XMLSpy provides utilities to automatically infer XML Schemas from XML instance documents and relational databases or convert between XML Schema and DTD dialects with the click of a button.

XMLSpy 2007 includes a customizable code generator that can automatically generate Java, C++, or C# class files based on the data elements defined in your schema. It also incorporates a highly configurable capability to automatically generate full schema documentation, including all diagrams, source fragments, and convenient cross-references, in either HTML or Microsoft Word format.

In addition to its powerful, built-in XML Schema editing capabili-

ties, XMLSpy 2007 supports integration with Altova SchemaAgent<sup>™</sup>. SchemaAgent is a client/server based, visual tool that allows you to view any collection of schemas on your network as a pool of resources and construct complex schemas from distributed schema elements to promote component reuse and reduce development times.

Using the XMLSpy 2007 XML Schema editor as a client, you can connect to the SchemaAgent Server and gain access to all schemas in the server path. This enables you to design schemas using components from other schemas located on your network, editing them as necessary and easily building relationships between them. Through this option, XMLSpy and SchemaAgent allow you to modularize your schemas, greatly reducing the complexity associated with schema development and enabling the efficient re-use of information assets.

XMLSpy connected to SchemaAgent

# XSLT 2.0, XPath 2.0, XQuery 1.0

The power of XML is only truly realized through the application of related technologies such as XSLT, XPath, and XQuery.

In addition to supporting XSLT 1.0 and XPath 1.0, Altova XMLSpy 2007 includes support for the latest W3C XSLT 2.0 and XPath 2.0 specifications. XSLT 2.0 and XPath 2.0 are considerably more powerful than XSLT 1.0 and XPath 1.0, allowing you to manipulate XML documents in a more concise, efficient manner. XSLT 2.0 support is schema-aware, providing additional mechanisms for error isolation, simplified debugging, and enhanced code performance.

XMLSpy 2007 also supports the latest W3C specification for XQuery, an important new language for extracting information from XML documents and databases. Native support for XQuery allows you to create and edit XQuery documents using the same intelligent editing features provided for XML editing, such as syntax coloring, context sensitive entry helpers, etc., and then execute your XQuery expressions within XMLSpy 2007. XQuery support is schema-aware in XMLSpy 2007, allowing schema validation information to be used in query evaluations.

Support includes:

#### XSLT 1.0/2.0

- >> Award-winning XSLT processor
- >> Full XSLT 1.0/2.0 editing and visual transformation
- >> The world's first and most mature XSLT 1.0/2.0 debugger
- >> Schema-aware XSLT 2.0 processing

### XQuery 1.0

- >> Native XQuery 1.0 editing and execution
- >> Innovative XQuery debugger
- >> Schema-aware XQuery processing

### XPath 1.0/2.0

- >> Powerful XPath 1.0/2.0 analyzer for testing and debugging
- >> Easy-to-use XPath 1.0/2.0 builder

## **Database Integration**

Since most critical enterprise data is stored in relational databases, the importance of managing XML data in harmony with databases is paramount. XMLSpy 2007 includes comprehensive support for working with XML and relational databases to facilitate interoperability and data integration. XMLSpy 2007 interacts with the most popular relational databases in their native interface languages, supporting the ability to:

- >> Generate XML Schemas based on database schemas
- >>> Import and export data based on database schemas
- >> Generate database schemas from XML Schemas

In addition, XMLSpy 2007 supports schema extensions for Microsoft<sup>®</sup> SQLServer and Oracle<sup>®</sup> XML DB as well as integration with Software AG's Tamino XML Server.



#### XSLT Debugger



XQuery Debugger

Supported databas	es:			
>> Microsoft® Access® >> Microsoft® SQL Serve	r			
>> MySQL®	Convert			
>> Oracle® >> Sybase® >> IBM® DB2® >> Any ADO/ODBC database	ting ting ting ting	Impo Impo	rt <u>T</u> ext file rt <u>D</u> atabase data rt Microsoft <u>W</u> ord document te XML Schema from DB Structure	
ε.		DB Import based on XML Schema		
Database integration options	C B B	T <u>a</u> mir	te DB <u>S</u> tructure from XML Schema no le XML DB	•

## Web services

Standards-based XML technologies such as SOAP, WSDL, and UDDI give Web services the characteristic openness that allows them to connect business processes over the Internet. XMLSpy 2007 lets you tackle real-world Web services development on all of the major Web services platforms, including Microsoft .NET, Eclipse, and Java 2 Enterprise Edition (J2EE). XMLSpy 2007 simplifies Web services development with capabilities including:

- >> Standards-conformant XML document editing and validation
- >> New and improved graphical WSDL editor and validator
- >> Unique SOAP and WSDL client interface
- >> The world's first and most mature SOAP debugger

The XMLSpy 2007 WSDL editor, SOAP and WSDL client, and SOAP debugger are ideally suited for creation of Web services applications. The graphical WSDL editor displays the WSDL file structure as well as the WSDL elements grouped by portTypes, bindings, and services. You can drag and drop elements to build your WSDL files, and context-sensitive windows and entry helpers provide intelligent editing options. (Once you build your WSDL files with XMLSpy, you can use Altova MapForce® to visually map data sources to Web services operations then automatically generate program code to implement your Web service server side.) The SOAP and WSDL client interface in XMLSpy lets you open any existing WSDL document and immediately learn about the functions the corresponding Web service provides. You can then select one of its SOAP operations, and XMLSpy automatically creates a SOAP request message and sends it to the Web service. The SOAP response message is then received and displayed. The XMLSpy 2007 SOAP debugger allows you to interpret WSDL files, single-step through Web services transactions, inspect every request and response XML document, set breakpoints on SOAP functions, and even define conditional breakpoints based on data specified by an XPath query.

## Programming

Because XML documents must be bound to an external software application or runtime environment such as a business-to-business or Web services application, the powerful capabilities of Altova XMLSpy 2007 extend to this aspect of XML application development as well. Programming support includes:

- >> Built-in Java/C++/C# code generator
- >> Seamless Visual Studio.NET integration, including version 2005
- >> Seamless Eclipse integration, including version 3.2
- >> Java and COM APIs plus OLE and ActiveX controls
- >> Comprehensive groupware and collaboration features



### **Ordering Information**

XMLSpy 2007 is available in available in Enterprise and Professional Editions in both English and German language versions. It is supported on Windows NT, 2000, and XP.

You may download a free 30-day trial of XMLSpy 2007 at **www.altova.com/download**. To purchase a permanent license please visit the Altova Online Shop at **shop.altova.com**.



XMLSpy 2007 is also available as part of the specially priced Altova XML Suite 2007, a compelling set of the world's leading XML development tools. The Altova Enterprise XML Suite 2007 includes Enterprise Editions of Altova XMLSpy<sup>®</sup>, MapForce<sup>®</sup>, and StyleVision<sup>®</sup>, plus SemanticWorks<sup>™</sup>, SchemaAgent<sup>™</sup>, and DiffDog<sup>®</sup>. The Altova Professional XML Suite 2007 includes Professional Editions of Altova XMLSpy, MapForce, and StyleVision.

### **About Altova**

Altova accelerates application development and data management projects with software and solutions that enhance productivity and maximize results. As an innovative, customer-focused company and the creator of XMLSpy and other leading XML, data management, UML, and Web services tools, Altova is the choice of over 2.5 million clients worldwide, including virtually every Fortune 500 company. Enabling customers ranging from vast development teams in the world's largest organizations to progressive one-person shops, Altova's line of software tools fulfills a broad spectrum of business needs. Altova is an active member of the World Wide Web Consortium (W3C) and Object Management Group (OMG) and is committed to delivering standards-based platform-independent solutions that are powerful, affordable, and easy to use. Altova was founded in 1992 and has headquarters in Beverly, Massachusetts and Vienna, Austria. Visit Altova on the Web at **www.altova.com**.

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