

# XML publishing 2002: state of the TOOLS



**a**lthough XML was defined in 1998, XML publishing tools have until recently been few and immature. Instead, XML's emphasis has been on data interchange and ecommerce applications development. The sheer number and pace of XML standards development are also more than any vendor can keep up with. I count over 90 of these standards, released or in progress. It is also common for tools to lag behind standards by two to four years or more. Internet Explorer 6 now boasts full support for CSS Level 1—not level 2, released in May 1998! Lastly, vendors whose market share has been built on proprietary products aren't eager to become standards-based unless pushed to do so. Even with all these barriers, I believe XML publishing is now poised for growth, and credible vendor offerings are emerging.

Let's begin by reviewing World Wide Web Consortium standards efforts that occurred from January to September. My unofficial tally shows 50 W3C standards announcements, clustering around several themes. The "Semantic Web" is designed to pave the way for information integration and reuse. Another theme is refinements to the original XML standard itself, including making content modular and accessible via applications (the "Document Object Model"), and developing richer linking. Privacy and security have also been addressed, subjects tragically on everyone's mind. Graphics and multimedia have received increased attention as well with a release and then an update to the Scalable Vector Graphic standard and several releases and updates to the Synchronous Multimedia Integration Language (SMIL). With all this to pick from in 2001 XML standards efforts, not to mention unfinished work from 1998, vendors have chosen to support a combination of old and new standards, to partner with complementary vendors, and increasingly to emphasize "Integrated Development Environments" instead of single-purpose applications.



Before you can work with XML, you need a content model. Recently, these models were built as "Document Type Definitions" (DTDs), but increasingly the more flexible schemas are required. Three vendors are offering integrated development environments for managing XML models: Tibco (formerly Extensibility), Altova (formerly XML Spy), and Excelon Corporation. Tibco and Altova offer tools for modeling, converting, authoring, and transforming XML from one model to another using the Extensible Stylesheet Transformation Language (XSLT). Tibco emphasizes total business integration and has built its Extensibility platform on Java for cross-platform use. Altova's products are designed for Windows and support Web publishing, knowledge management, and ecommerce. Considering their powerful feature sets, both are surprisingly affordable. I use both and consider them indispensable. Excelon's Stylus Studio too offers a full suite of XML tools. Among its strengths is a top-notch visual, interactive environment for building XSLT stylesheets. Stylus

Studio especially shines for transforming XML to HTML.

But what about providing XML authoring within currently used tools like MS Word? Adding XML capabilities to a word processor is a bit like adding ABS brakes and airbags to a '60s VW. If you want XML authoring tools, you have two broad choices: Hybrid tools that add XML capabilities to the likes of Word (remember air conditioning kits for VWs?), or native tools that have added familiar features like spell-checking. Several hybrid Word solutions are available, including WorX SE and S4/TEXT. Another product takes a different tack: eXtyles, designed to help editorial and production personnel clean up MS Word files to increase the likelihood of valid XML.

The best hybrid solution may be Adobe's FrameMaker+SGML. FrameMaker is the tool of choice for technical publishers, and FrameMaker+SGML combines the best of FrameMaker with the ability to deliver valid XML. However, hybrid tools nearly always require customization, and when you make one change in your document model, you can expect to expend more customization effort. If all that sounds unappealing, consider these two native XML products: Arbortext Epic and XMetaL. SoftQuad, now part of Corel Corporation, developed XMetaL and counts Microsoft among its showcase users. Arbortext Epic is an authoring tool with many characteristics of both an integrated development environment and content management system. Epic offers change tracking, inline editing of document components, and easier conversion of multiple content formats to XML. Epic also provides full XSL support for both online and print publishing.

XML Publishing eventually requires a content management solution to track and assemble all your XML assets. Solutions range from comprehensive enterprise products like Documentum 4i and XyEnterprise Content@ to Epic or even a do-it-yourself application of Visual SourceSafe. Content@ recognizes the need to keep content management simple and recently announced predefined user roles, workflows, and output tools. Documentum and Content@ both support the most popular hybrid and native authoring tools.

What about graphics and multimedia? Adobe and Corel are actively developing support for the Scalable Vector Graphic standard, which could do for graphics what XML does for text. Adobe is also working closely with RealNetworks to provide near-print-quality text in streaming video. And Oratrix GRiNS offers the RealONE editor for developing Web-streamed multimedia based on SMIL. Whether your tastes run to vintage or leading-edge tools, your choices are growing.  

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