

Adobe FrameMaker 7.2

FrameMaker 7.2 and XML Publishing

XML Smart,
Enterprise Ready

Frequently Asked Questions

Q. My company is migrating all documentation to XML, and I don't know the first thing about it. Where should I start?

- A. First, start with the Adobe white paper, *FrameMaker and XML Authoring and Publishing*, available at www.adobe.com/products/framemaker/indepth.html. Next, decide whether you want to continue learning with self-study or to involve a consultant. There are many knowledgeable FrameMaker consultants who understand XML—talk with your Adobe account manager for more information. On the self-study path, there are many options from which to choose. You can attend a FrameMaker seminar or training class, or read a third-party reference book on XML. You can order FrameMaker 7.2 and work through the *XML Cookbook* and read the *FrameMaker User Guide* and online manuals. There is a wealth of information available online, such as the World Wide Web Consortium Web site (www.w3.org) and user-to-user groups such as the one at www.frameusers.com.

Q. How do I convert my unstructured FrameMaker files to Structured FrameMaker and XML?

- A. One of the first and most important decisions you will make when migrating to structured authoring and publishing is your choice of an XML vocabulary, or set of elements, attributes used in your documents and the structure to which your documents will conform. Some organizations develop their own vocabularies, which others choose or customize industry-standard vocabularies, such as DocBook or DITA.

After you have chosen an XML vocabulary and developed a structured application, you can convert your unstructured documents to structured documents. FrameMaker software provides conversion tables to automatically wrap your document components in the appropriate elements. You can then complete the conversion process by saving your files in XML format. Another option is to use a third-party consultant to create a FrameMaker structured application for you, and to outsource the conversion of your content to XML.

For more information about migrating from unstructured to structured documents, see the white paper *Migrating from Unstructured to Structured FrameMaker*, available from www.adobe.com/products/framemaker/pdfs/migrationguide.pdf.

Q. What is structured content?

- A. Structured content has several characteristics:
- Chunks of content are wrapped in logical, labeled containers, called elements.
 - Elements can be nested.
 - Additional information can be attached to elements in the form of attributes.
 - The elements, attributes, and their hierarchy conform to a set of rules.

Most unstructured content has some sort of implicit structure. For example, a procedure normally has a title, followed by a description, followed by a series of steps. In template-based authoring tools like

FrameMaker, each of these components is tagged with a paragraph format. In general, the more closely your content follows an implicit structure, the easier it is to convert to an explicit structure.

Q. What is a conversion table?

A. A conversion table can be used to quickly apply structure to unstructured content. Conversion tables identify types of content according to their paragraph and character tags, and specifies the elements to be applied to those tagged content items. Because conversion tables work with paragraph and character tags, they are particularly helpful when these tags have been used consistently in a document. Because FrameMaker's import filters can retain paragraph and character tags from Microsoft Word documents, conversion tables can also be an effective means for structuring content that was originally created in Word.

Q. What is XML?

A. XML stands for eXtensible Markup Language. It is a *metalanguage*, in other words, a language for describing other languages—which lets you design your own customized markup languages for limitless different types of documents. XML technology appeals to a broad audience, and has attracted a large community of developers that have built leading-edge components for creating XML systems.

Q. What do XML tags look like?

A. XML tags resemble HTML tags. In other words, the element name is enclosed in angle brackets and inserted before the tagged content, and the closing tag is inserted after the tagged content and has a forward slash prepended to its name, as follows: `<procedure>How to Tag Text</procedure>`.

Q. What are elements?

A. Almost all documents have an implicit structure. In each type of document, the contents naturally consist of logical units that appear in a consistent order and with a specific hierarchy. FrameMaker software allows you to work with a document's structure explicitly by organizing the contents of the document—its sections, headings, paragraphs, tables, and so on—into logical units called *elements*. Together, the elements form the hierarchy that represents the structure.

Q. What are element attributes?

A. Element attributes contain information about the element that is not part of its contents. Attributes are optional—it is up to the developer to define them for an element. Attributes can be used for many purposes, such as to control the formatting of an element, to record descriptive information about an element, to store source and destination information for an element, and so on.

Q. What are namespaces?

A. An XML namespace is a collection of names for specific element types and attribute names within an XML document. Because a single XML document can contain elements and attributes that can be used by multiple software applications, you can use namespaces to differentiate which elements and attributes are to be used by which applications. Software applications that process XML use namespaces to recognize which tags and attributes they are designed to process.

Q. What is a DTD?

A. DTD stands for Document Type Definition. A DTD is an ASCII-format text file that contains definitions of the XML elements and attributes that are part of a structured application, including where they can be used and how they are arranged in relation to one another.

Q. Can FrameMaker 7.2 software create an XML DTD?

A. Yes. You can author DTDs by hand directly in FrameMaker and save them as ASCII text files. FrameMaker software also includes its own technology for defining a document's structure—the

Element Definition Document (EDD). You can create an EDD and output the structure definitions as a DTD.

Q. What is a schema?

A. A schema is a document that describes the set of XML elements and attributes that comprise a structured document, and their relationship to each other. Several schema languages are available. FrameMaker 7.2 supports the W3C XML Schema language, which was finalized by the World Wide Web Consortium on May 2, 2001.

Q. How does FrameMaker support the XML Schema language?

A. FrameMaker can convert a W3C XML Schema to a FrameMaker EDD. FrameMaker retains the structured defined in the Schema, but does not transfer the data type information to the EDD.

Q. Will FrameMaker validate an XML document against an XML Schema?

A. Yes. A FrameMaker structured application can specify either a DTD or XML Schema for validation. If a structured application specifies an XML Schema (instead of a DTD), FrameMaker validates documents against the XML Schema on import and export.

Q. Can FrameMaker 7.2 software create an XML Schema?

A. FrameMaker does not support saving an EDD as an XML Schema. You can purchase XML development environments and graphical programming tools for creating XML Schema documents from other vendors. Many of these tools will convert an XML DTD (which you can export from a FrameMaker EDD) to an XML Schema.

Q. What is the difference between CSS and XSL?

A. A Cascading Style Sheet (CSS) is a way to specify variations to the fonts, sizes, alignment, color, and spacing of HTML or XML displayed in a Web browser. You define the custom formatting specs in the CSS and then use HTML or XML tags with slightly modified tag names to create a custom look for your text. Extensible Style Language (XSL) covers two types of technology. XSLT (Extensible Style Language Transformations) is a scripting language for manipulating XML content. XSL-FO (Extensible Style Language-Formatting Objects) is a styling language, similar to CSS but more comprehensive and written in the XML syntax. XSL-FO is a relatively new standard, and has yet to achieve the maturity or widespread adoption of CSS.

Q. What is XSLT?

A. XSLT (Extensible Style Language Transformations) is a scripting language for manipulating XML. It has an XML syntax, which is therefore text-based and human-readable. XSLT is often used to extract specific content from an XML document, convert an XML document between two DTDs, or to create other output formats (such as HTML) from an XML source document.

Many applications for processing and viewing XML documents will apply an XSLT stylesheet automatically. For example, Microsoft Internet Explorer 6.0 or later will apply an XSLT stylesheet that is referenced within an XML document. XML created using FrameMaker 7.2 can include a stylesheet reference that links the XML to any given XSLT file.

Q. How does FrameMaker support XSLT?

A. FrameMaker 7.2 provides the capability to automatically apply an XSL transformation on import and/or export of XML. The stylesheets to be applied are specified in the structured application definitions file. Different stylesheets can be specified for import and export.

Q. How can I use XSLT with FrameMaker?

- A. XSLT is a programming language for manipulating XML documents. A structured application might specify an XSLT file to:
- Adjust a document's structure for authoring. For example, changing element names to names that are more intuitive to authors.
 - Convert an XML document to a different vocabulary for publishing.
 - Perform other common manipulations, such as changing attribute content to element content, dropping elements or attributes, or sorting content on import to FrameMaker.

XSLT provides a powerful supplement to FrameMaker software's read/write rules. Unlike read/write rules, XSLT has the capability to perform a much greater variety of manipulations on import and export.

Q. I'm currently using XSLT in my workflow outside FrameMaker. Can I continue to do this?

- A. Yes. You may choose to have FrameMaker automatically apply XSLT stylesheets. However, for some circumstances, using XSLT transformations outside FrameMaker software will continue to be appropriate. Examples of these circumstances include “on-the-fly” server-based transformations, aggregating multiple documents for publishing, or producing multiple output documents.

Q. Can FrameMaker 7.2 create XSLT?

- A. XSLT is a programming language written using an XML syntax. There are many ways to create XSLT style sheets. Developers often create XSLT using a plain text editor — you can create and edit XSLT stylesheets in FrameMaker and save them as ASCII text files. If you want additional support for creating XSLT syntax, you can purchase XSLT development environments and graphical programming tools from other vendors.

Q. Does FrameMaker 7.2 support XSL-FO?

- A. XSL-FO is a highly complex language for specifying the format of an XML document on a printed page or page-oriented output format (such as PDF). XSL-FO is usually generated via XSLT, and has many limitations with respect to technical publishing requirements.

FrameMaker 7.2 does not support XSL-FO. FrameMaker 7.2 uses a combination of a FrameMaker template and Element Definition Document (EDD) to specify the format of XML documents. This combination is more intuitive to learn and use than XSL-FO and does not require programming skills to maintain.

Q. What is the difference between well-formed XML and valid XML?

- A. Well-formed XML conforms to the general syntax rules defined by the XML specification, some of which are that all start tags must be matched with an end tag, all attribute values must be in quotes, elements must be properly nested inside each other, and that all entities must be declared. Valid XML is well-formed XML that conforms to a specific DTD or XML Schema. For most uses of XML, the XML content must be valid to ensure correct processing.

Q. What are XML entities, and does FrameMaker support them?

- A. An entity is an XML mechanism for including special characters, replacement text, or external files in an XML document. These external files are typically text files, XML files, or binary graphic files. Entities must be declared within the XML document or within the DTD. FrameMaker fully supports these XML entities.

Another type of XML entity, the parameter entity, provides a mechanism for creating modular DTDs. FrameMaker will import a DTD that uses parameter entities, but does not retain those entities when the

DTD is exported. If you are working with a DTD that is modularized via parameter entities, we suggest that you maintain the DTD outside FrameMaker and import the DTD into your EDD when necessary.

Q. What is the Structure View Window and what does it do?

A. The Structure View Window displays a hierarchy of elements for a document or text flow and identifies the element in which the insertion point is positioned at all times. This view uses “bubbles” to represent elements and their relationships to one another, and identifies validity errors as you navigate your document’s structure. You can also display attributes in the Structure View. The document window and Structure View are both editable; any actions you perform in one window are reflected in the other.

Q. What is the Element Catalog and what does it do?

A. The Element Catalog lists the elements you can use at the cursor’s current location, allows you to add and edit elements, and also can display other information about the current element, such as whether you can type text into the element. The information displayed in the Element Catalog is drawn from the definition for the element in which the cursor is positioned at all times, and shows only the elements that are valid for use at the current insertion point.

Q. What is an EDD?

A. An Element Definition Document (EDD) contains element definitions and is normally embedded in a document template. An EDD includes both structural rules for a document and styling rules that dictate how specific elements are formatted and styled. A developer generally creates an EDD from an existing DTD file, an XML Schema, or from scratch. For more information, see the *XML Cookbook* included with FrameMaker 7.2 and the *Structured FrameMaker Developer’s Guide*, located in the OnlineManuals folder in your FrameMaker installation directory.

Q. What are Read/Write rules?

A. A read/write rules document contains mapping rules that control how XML is imported into and exported from Structured FrameMaker documents. Read/Write rules are most commonly used to map XML elements to FrameMaker elements (perhaps to provide more intuitive element names in the FrameMaker authoring environment) and for mapping XML elements to special FrameMaker objects, like graphics, tables, cross-references, and markers.

Q. How can I define my own structured applications?

A. For step-by-step information on how to define your own structured applications, see the *XML Cookbook* included with FrameMaker 7.2. The white paper *Migrating from Unstructured to Structured FrameMaker*, available from www.adobe.com/products/framemaker/pdfs/migrationguide.pdf, also provides an introduction to defining a structured application.

Q. Can FrameMaker 7.2 import a DTD or XML Schema like DocBook and display the tags in the GUI as styles?

A. FrameMaker software is designed to allow users to edit structured content in XML and SGML format using a WYSIWYG interface that guides the user to conform to an associated DTD or XML Schema. DTDs and XML Schema lack any formatting information (required for WYSIWYG) or guided editing information. The FrameMaker EDD (Element Definition Document) adds formatting and guided editing information to the structure definition found in a DTD or XML Schema. You can create an EDD by importing a DTD or XML Schema into FrameMaker. Because the DTD or XML Schema and EDD share the same structure definitions, you can therefore ensure the validity of your content is valid when you open and save XML and SGML files. You can export a DTD from an EDD if you create your structured definitions in the EDD first and need a DTD to hand off to another application. To view

element tags in the FrameMaker WYSIWYG interface, simply use the View Element Boundaries as Tags command.

Q. Does FrameMaker 7.2 support XML roundtripping?

A. Yes. You can open, edit and save XML files with FrameMaker software and use the files with other applications for further processing. XML documents opened in FrameMaker 7.2 are saved back to XML by default.

Q. Can I use FrameMaker 7.2 as a robust XML editor?

A. Yes. You can open XML files in Structured FrameMaker and take advantage of an intuitive WYSIWYG interface that incorporates guided editing and real-time validation with familiar word-processing features, or open XML files as text and edit them by hand. When you are finished with your modifications, you can save your XML files, process them further with other software applications to create your desired output, and open them in FrameMaker 7.2 whenever you need to make additional modifications.

Q. How does FrameMaker 7.2 software integrate with XML repositories?

A. FrameMaker 7.2 software can save XML files that are compatible with any XML repository that accepts XML files created by other means.

Q. Does FrameMaker 7.2 support Unicode characters in XML files?

A. FrameMaker 7.2 software supports Unicode encoding for reading and writing XML in Western European and Asian languages including Chinese, Korean, and Japanese. Unicode characters that do not map to the FrameMaker internal character set are imported as FrameMaker markers and exported intact when you save your XML files. For more information on the international languages in which you can author FrameMaker documents, see the FrameMaker 7.2 FAQ at www.adobe.com/products/framemaker.