Easy DITA Authoring Tools: Introducing DITA to the Enterprise

White Paper

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Introduction

An effective content strategy rarely ends with the professional information development community. Content has always been developed throughout the enterprise but it rarely has been developed as a coherent strategy. A new set of tools promises to extend format-free, standards-based content development beyond “tech pubs.” In this review article, I’ve reviewed the newest tool set intended to make DITA authoring easy for both professional writers and casual contributors.

Some of the tools are closely coupled with content repositories, specifically component content management systems, enabling enterprise content to be collected centrally. Other tools are designed to be used by contributors who are outside the central system but need to create content that can be easily moved through the development and publishing workflow.

Several of the tools are specifically focused on users who do not want to know anything about XML-based authoring or the DITA standard. They simply want to create content in the easiest ways available while at the same time contributing to a central content strategy. Other tools bridge the needs of both professional authors and occasional contributors by making it reasonably easy to constrain the authoring environment so that casual contributors are not burdened by too much to learn.

Some of the tool set requires individual names licenses for every user while others have open licenses that allow a designated number of users to be working at the same time.

The variety of solutions, as you will see in this review, enables solutions that supports many needs and environments. Consequently, now is the time for you and your organization to broaden your reach and support an integrated strategy for enterprise content development.

Note: I want to thank the software developers who provided demonstrations and in-depth information about their systems for this article. They included Dustin Vaughn (Adobe), Ole Rom Anderson and Lene Dorman (DITA Exchange), Patrick Bosek (easyDITA), Jan Benedictus (FontoXML), Chip Gettinger (SDL), Les Burnham (Stilo), George Bina (Syncrosoft), and Doug Gorman (Simply XML). If there are others who wish to contribute to a later edition of this review article, they are welcome to contact me.

The software products are discussed here in alphabetical order.
Adobe—FrameMaker XML Author

With FrameMaker 12, Adobe has developed a standalone, XML-focused editor with strong support for the DITA standard. XML Author is available as a separate choice in your FrameMaker program. Author features a quick element insertion tool bar that is context sensitive. The elements are highlighted only when they may be inserted in the DITA topic. In fact, the tool bar can be extended with images and additional items of your choice.

XML Author includes an author view and a WYSIWYG view of the content, as well as an underlying XML view. Authors can publish through the DITA open toolkit to PDF, XHTML, HTML Help, and more, as well as through the FrameMaker publishing engine. They can even generate a QR code in their content.

The author view includes instructions for the authors. The Quick Catalog provides a list of only those elements that can be selected at the cursor insertion point. The Quick Element toolbar has grayed out the elements that cannot be selected at the insertion point.

The Smart Paste functions lets you insert an MSWord file that has used styles into XML Author and convert it to DITA. Even unstructured content like Excel files can be converted. The interface even provides visible indicators of invalid content and suggests ways to correct invalid topics after the conversion.
Because XML Author is a fully functioning DITA authoring environment, simplifying the authoring environment requires developing a set of constraints or a DITA specialization. By implementing a constrained or specialized DTD, you get exactly the environment you want.

In the Resource Manager, showing the DITA map, new topics can easily be inserted using the icons on map toolbar.
The DITA map editor also gives you quick previews of the content in Document View. This way the contributor can view a logical flow of the content with a basic rendering.

You can also package all the files in a map into a zip file, and you can also exclude some files that you do not want to include in the move.

Included as a 30-day trial is Design Science’s Math Flow Editor. XML Author has both a design and a source view of the equation editor. Adobe also has full support for the Acrolinx content quality editor. Because FrameMaker support 3D graphics, you can add them to your DITA topics as long as you publish through FrameMaker rather than the DITA Open Toolkit.

A nice feature of the interface is a listing of all the files currently open. If you have problem finding the right file to work on when you have too many open files in your editor, you can view a list of all the files and easily switch.

Pricing: The standalone XML Author is offered at $399 per license. Of course, it is also available as a product interface within FrameMaker.
DITA Exchange

The DITA Exchange editor is one of a handful of products on the market that provide a “Word-like” authoring interface for working with structured XML content. The functionality you’d expect from a fully DITA-compliant editor is present: full access to DITA markup, on-the-fly validation and cursor-aware schema enforcement, DITA-specific functionality like conrefs, ability to see tagged and non-tagged views, etc.

DITA Exchange differentiates itself by providing an interface that is only distinguishable in subtle ways from the usual Word authoring experience that SMEs and some authors are accustomed to. There are abundant examples of this approach in the product, apart from the instantly recognizable ribbons and menus that contain the familiar Word icons and lexicon. One example is the table wizard, which uses native Word controls to generate valid DITA tables. Another prominent example is the commenting capability, which appears as it would in Word when the author is in fact inserting a DITA draft comment.

The one notable exception to the aesthetic is the DITA map viewer, which is necessarily custom-built and takes on the DITA Exchange UI rather than Word’s. Word, after all, is not built for modular information development. The viewer allows the end user to see an outline rendering of the map and preview its referenced components individually.
What is DITA Exchange?

Structured information for everyone

DITA Exchange is a revolutionary information management tool that allows subject matter experts and content specialists to collaborate in creating structured and reusable content, without needing any knowledge of XML or DITA.

Tuxkey solution

You do not need specialized knowledge to use DITA Exchange. Since everything is run on our servers, you just have to open a standard Web browser and add the DITA Exchange URL as a trusted site to get started.

Of course, you can also host DITA Exchange on your own Microsoft SharePoint 2010 or 2013 servers, giving you full control of the server operations.

Standards-based

DITA Exchange is based on open standards such as XML, DITA, ANT, and common office software. This means that a wide range of workflow options and familiar tools are available.

For those who prefer to use specialized XML applications, the ability to read/edit/validate, editing in processing information as XML, and reprocessing it into DITA Exchange gives you the option to use your DITA, XML, or XML tool of choice.
CONTENT DEVELOPMENT IN THE ENTERPRISE
DITA Exchange

From this view, the user can also trigger a workflow notification or edit the topic in the DITA Exchange editor. According to the DITA Exchange product team, the map viewer is the most frequently accessed UI by SMEs and serves as a popular entryway into topic creation, review, and revision. Technically, the map viewer is not part of the DITA Exchange editor, rather it is part of DITA Exchange's larger offering, which leads to our next differentiator.

While this review is meant to concentrate on the role of the content contributor and thus focuses on the functionality and UI as it pertains to that role, it should be noted that the DITA Exchange editor is part of a more encompassing DITA Exchange content management solution. The DITA Exchange solution is built as part of the SharePoint ecosystem, and any discussion of DITA Exchange editor capabilities should be couched in implementation-specific terms, with the enterprise's SharePoint configurations and customizations as the backbone. For example, DITA Exchange editor provides a GUI for adding metadata to topics or maps. From the editor, an author can launch a “picker” that shows the enterprise’s taxonomy and allows the author to choose and apply the correct metadata value from the list. This capability relies on integrating the DITA Exchange editor with the appropriate picker and taxonomy list stored in SharePoint.

DITA Exchange leverages existing investments in Microsoft SharePoint and Word licenses and extends SharePoint to become a full DITA XML CCMS, fully integrated with the DITA OT, and available in Microsoft Office 365 (the cloud), on premise (installed on company servers), or in Microsoft Azure (private cloud). The pricing structure is based on a user-count-server-license and a client side license. The DITA Exchange solution is also available in a SaaS environment on a per-user-per-month basis.
FontoXML—DITA Authoring

FontoXML is still in the process of developing their XML authoring environment to support the DITA standard fully. The intended user is the technical expert or other large groups of users already familiar with MSWord. They have identified groups from approximately 50 users up to 2,000 to 3,000 legal experts who are contributing content and can usefully contribute that content in DITA. The intent is for the product to support the full DITA specification and allow the information architect to select the functions needed. The expected release is in October 2014.

To develop true user friendliness requires customization of the user interface, which means that the cost of customization should be amortized across large user groups. The result should be “semi-structured” content that diminishes conversion costs and reduces manual steps. Such content is generally more extensive than can be handled with a simple form-based input.

FontoXML does not require a connection to a CMS to support authoring. The editor automatically is linked to an XML schema. However, the editor can be linked to any web-based CMS such as Google Drive, Alfresco, Mark Logic, and SharePoint. A connection is required to start a new topic and to save. During editing, all schema-validation is done on the local machine.

Author assistance is provided in FontoXML for many basic functions. For example, adding an image invokes a dialog box that prompts the author to enter a title, description, and alternative text, as required by the information architect.
Adding a conref is handled similarly. The concept is to provide assistance in the interface without exposing XML functionality. For example, properties are entered using the interface.

The map manager allows users to suggest changes to the structure but not implement those changes, unless an organization explicitly wishes to place that responsibility with the subject matter expert. The implementation is handled by an information architect who understands the overall requirements. However, the map manager does show the changing TOC as items are moved around.

FontoXML supports change tracking using process instructions that can be easily stripped from the files if necessary. The “adaptive design” concept behind the FontoXML user interface helps the casual contributor to work effectively. In fact, the developers have incorporated an analytics tool so that they can measure what the authors are doing and make modifications to the user interface as they learn more.
Pricing: FontoXML gives a choice of perpetual licenses or annual subscriptions. Perpetual licenses for the DITA edition of FontoXML are $749 for a named user and $2,499 for a floating license. For perpetual licenses, a 20% maintenance and service fee applies.

The alternative subscription license is $339 per year for each named user or $1,029 per year for a floating concurrent-use license. In these subscription-licenses, maintenance and a service fee are included. Customization, training, and implementation depends on the number of hours needed.
Jorsek—easyDITA Editor

The easyDITA editor is an integral part of the easyDITA component content management system. It is built to look and feel like MSWord, incorporating many of the basic MSWord function types like Control Shift I for insert and Control Shift D for delete. The editor is intended for contributors who develop content as a significant part of their roles but are not technical publication professionals.

The easyDITA editor incorporates DITA functionality like content references (conref) and key reference (keyref), making it easy to reuse content and incorporate product- or audience-specific content into a base file. easyDITA also supports the DITA Learning and Training specialization. The developers are working to make more aspects of the DITA functionality more intuitive for casual users.

Basic drag-and-drop functions support the map editor. Progressive content loading enables you to load large maps, even maps that include thousands of topics, in just a few seconds.

The easyDITA review allows casual contributors to highlight and add comments to topics.
Customizing the interface is easy, requiring little more than editing the presentation of the topic. Rendering topics using XSLT allows information architects to create a very rich interface for casual authors. You can also create macros that use toolbar buttons to add a sequence of elements. For example, a single button can enable two code phrases, one for English values and the other for metric. The skill set to create the customizations for the casual authors includes DITA, XSLT, Web CSS, and some Java Script.

Jorsek is developing a new framework for its easyDITA map editor that will be extended to the authoring environment. The topic editor is being moved to the Google Web toolkit and will have cross-browser functionality in 2015.

Pricing: The easyDITA editor is included with the purchase of the component CMS. A typical cost is $100/month/user or $2,500/month for unlimited users. The cost for a dedicated CMS server for an organization runs roughly $4,000/month.
**SDL—LiveContent Create**

LiveContent Create is targeted to customers who are interested in creating an easy authoring and editing environment. These include subject-matter experts and casual contributors who want only to author and store content in the repository as revisions. The content they edit moves to the technical communication professional to be incorporated into final deliverables. LiveContent Create works with the LiveContent Architect component content management system. It is also available as a standalone product, XOPUS, with optional integrations with SharePoint and engineering code repositories thought SDL partners.

The Map interface allows contributors to navigate to a topic and check out the topic to their browser. Search is also available. The collaboration platform supports the DITA 1.2 standard, using constraints and Java Script to remove elements that the contributors will not need. The information architect can add instructional text to the templates and configure the tool tips for the toolbar. The architect can also create macros that set up a series of elements.

LiveContent Create supports a review platform for casual contributors who can subscribe to the stream of comments and add their own comments, as well as add new or changed content. Topics with comments can be posted to a social network.
The professional authors can accept, decline, or comment on the suggested changes. The product can be used on mobile device for review and comment.

The Quality Assistant adds integration with the Acrolinx quality language system. Users can subscribe to Acrolinx at a special price. They can also check content against translation memory.
Users can go to the repository to browse for images, shown as thumbnails. Support for the DITA Learning and Training specialization is included; optional MathML support can be added.

The table editor includes a number of ease-of-use functions because table editing is often too complex for casual contributors.

Pricing: LiveContent Create is available as part of the LiveContent CCMS and provides a concurrent user licensing model supporting typical contributing author projects that vary in time and frequency.
SimplyXML—Content Mapper™

Content Mapper is an add-on to Microsoft Word, using an interface familiar to Word users, keeping the XML hidden from the authors, and providing a subset of the DITA elements out-of-the-box.

Simply XML developers have built the editor specifically for non-technical users in an organization that understands the value of creating content in XML. They know that many potential authors work in MS Word, but the organization needs to get control of the content. They want to eliminate the rework and potential for error that accompanies standard cut-and-paste.

The content can be produced by those who don’t want to use a full XML editor. Content Mapper authors have little interest in learning DITA but are able to produce DITA content that can easily be edited by the professional authors. Simply XML finds that customers use the editor for SME input, books, consulting and hardware reports, best practices documents, policies and procedures, compliance documents, and more.

Content Mapper enables authors to create and publish content, including creating and working with DITA Maps.

It enables the track changes function that is available in MS Word. Content Mapper can also publish back to Word (DOCX) and reviewers can make changes and comments with a limited re-import and transform function.

Content Mapper only saves as valid XML and can publish to XML, HTML, DOCX, PDF, and more through the DITA Open Toolkit, its built-in Publishing Wizard, or the publishing facilities of a CMS.
Topics and Maps can be stored in a file system and folders can be zipped and emailed with all the Topics and Maps included. Content Mapper can also be linked to a content management system like SharePoint, easyDITA, Alfresco, Bluestream, Componize, and others. Points of CMS integration include open, close, save, check-in, check-out, template and reuse management, metadata, and workflow support.

Information architects can configure Content Mapper and limit the elements and the structure that are exposed to the casual contributors. The menus can also be restricted so that functions that should not be used are unavailable. Despite the restrictions you can put into place, the saved result is always compliant, valid DITA.

One nice feature is Content Mapper’s ability to import files from MS Word into a Topic or a series of Topics forming a DITA Map. The import function is a convenient way to convert basic Word content to DITA, although clean-up is typically required.

The program supports MathML and any image type or symbol supported by MS Word.

Pricing: 1-9 licenses - $750; 10-99 - various price breaks; 100-999- $300/license; 1,000+ - $200/license. The license can be set up per individual user or per simultaneous user. Content Mapper works in the Windows operating environment only.
Stilo—AuthorBridge

A new product (scheduled for release in January 2015), Stilo’s AuthorBridge is a web-based editor designed for occasional contributors, such as training, engineering, and customer support, who have no knowledge of DITA. Professional technical communicators believe that content coming into technical documentation should not require cut-and-paste or restructuring to save conversion costs and reduce potential errors. Casual contributors, however, prefer familiar tools that support DITA XML under the covers.

AuthorBridge is a server-based solution that integrates with CKEditor, a very popular HTML editing tool, which is open-source and provides, multi-lingual and mobile support. AuthorBridge actually converts the CKEditor content to DITA when a file is saved, and accesses DITA files, which are subsequently converted to HTML. The author is actually working in HTML and has no need to understand DITA.

CKEditor itself has many plugins available, including a table editor, an equation editor, spell check, and more.

An author will be able to browse a content management system for existing topics and graphics. Authors will be able to create new topics—concept, task, or reference—using a core group of 200 elements. The topics are valid, compliant DITA. The information architect can further customize the system to add DITA functionality like conref or conditional processing. The architect can provide a template with instructional text simply by setting up a DITA file.
AuthorBridge has a simplified tool bar and a WYSIWYG display, although the interface is still a work in progress. An author can enter text and make changes to existing topic while AuthorBridge converts the apparent author intention to valid DITA. The system tries to anticipate the authors intent from the styling the author uses.

Pricing: Pricing is still under review, but is likely to start at $9600 per annum for 200 users, the equivalent of $4 per month per user, plus a 25% maintenance fee. For larger groups, pricing goes down to $2.00, $1.00, and $0.50 per month for named users. A series of CCMS connectors will be available at an additional cost.
Syncro Soft—oXygen

Syncro Soft has added an easy, visually based editing to its oXygen Author, called oXygen XML Webapp. The intended author for the new easy authoring interface is someone who does not need to know anything about the DITA standard. The simplified interface is used both for authoring and reviewing and is available on mobile devices, such as the iPad.

Syncro Soft has instituted forms-based controls in the interface in preference to on-screen panels for elements and attributes. Elements can be added from the toolbar but other actions like insert are handled directly in the topic with buttons and small dialog boxes. A calendar widget is available in the prolog, making it easy to add critical dates for a topic.

The information architect can customize the toolbar with macros that implement a series of elements and attributes as a single user action.
Hints for authors are implemented using the stylesheet (CSS) and appear directly on the interface. Instructions are added inline in the document, using a different colored background.

Reviewers add comments to the topic and view each other’s comments.
The user interface in the easy Authoring application leads the authors through the topic, with the interaction designed by the information architect. The assistance comes in the form of text instruction and dialog boxes that support required actions directly in the interface with asking the author to learn the DITA functions.

Pricing: The oXygen XML Webapp begins at $1,000/concurrent user with significant discounts for larger quantities and integration partners. If users already have oXygen floating licenses, they can connect the oXygen webapp to the same floating license server.