# PDFs from DITA using WYSIWYG Tools

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Scott Prentice, Leximation, Inc.

### Introduction

- Scott Prentice, President of Leximation, Inc.
  - Specializing in FrameMaker plugin development as well as structured FrameMaker conversions, consulting, and development. FrameMaker user/developer since 1991.
  - Developed DITA-FMx, a FrameMaker plugin for efficient DITA authoring and publishing.
  - Consulting for custom Help systems, creative/functional web applications, and EPUB solutions.

#### Disclaimer

- lama..
  - FrameMaker developer
  - Creator of the FrameMaker DITA-FMx plugin
  - Reseller for Miramo
- All tools are discussed in this presentation

#### Basics

- PDF Portable Document Format
  - Very popular documentation format (not dead yet!)
  - DITA Darwin Information Typing Architecture
    - XML format for authoring in a topic oriented structure
    - WYSIWYG What You See Is What You Get
  - Lets you work in a "rendered" environment, not in code

## XML-PDF publishing process

Define templates for content

Pour" content into templates to create pages

Apply formatting to elements and contexts

Render pages to PDF format

## XML-PDF publishing tools

- Coded (XSL-FO or CSS)
- Stylesheets define page layouts and element formatting
- Typically requires programmers to do coding
  - WYSIWYG
- Templates define page layouts and element formatting
- Templates maintained by page-layout experts

#### XSL-FO basics

- XSL-FO (XSL Formatting Objects) is a markup language for formatting XML documents
  - Part of the W3C's XSL specification (also XSLT and XPath)
  - Typical workflow for converting XML to PDF using XSL-FO:
  - Write content in XML (DITA or other format)
  - XSLT transformation generates the XSL-FO
  - XSL-FO is passed to the FO processor to generate PDF

#### Benefits of XSL-FO

Low entry cost (free?)
 XSL-FO is an XML language
 FO markup language is largely based on CSS
 Designed to work for all written human languages
 Great if you have XSL-FO developer on staff

### Limitations of XSL-FO

- XSL-FO development (coding) is expensive and complicated Tables that span pages may not break as expected No way (?) to render elements on one page in relation to another page Difficult to apply balanced vertical spacing on a page
  - Processors may use extensions to implement features, so FO stylesheets may not be portable between processors

#### Benefits of WYSIWYG tools

Can produce "nicer" output Easier to maintain Allows for more frequent modification to layouts Some tools allow modification of "intermediate" files Through APIs, some tools allow analysis of rendered page Often costs more initially, but less in the long run

#### Limitations of WYSIWYG tools

—— Hmm...

Some tools may not have the throughput of XSL-FO engines

Some tools may not support all languages

Choose your tools wisely

#### WYSIWYG tools

Adobe FrameMaker

Adobe FrameMaker + DITA-FMx

Arbortext Styler

**DITA InPrint** 

MadCap Flare

Datazone MiramoPlus

Quadralay ePublisher

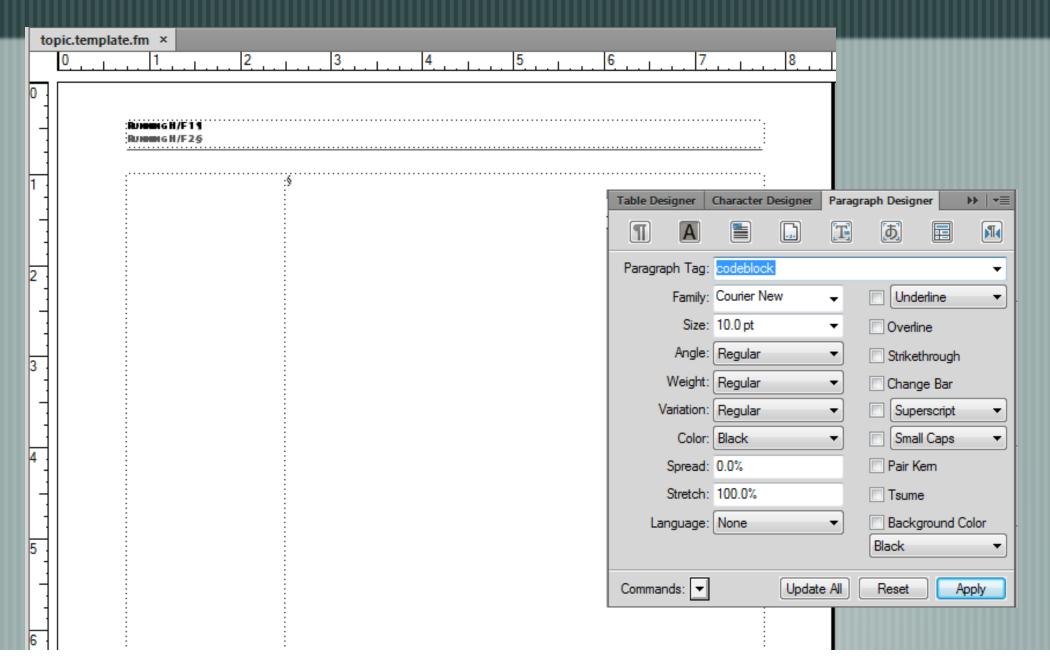
TopLeaf XML Publisher

#### Adobe FrameMaker

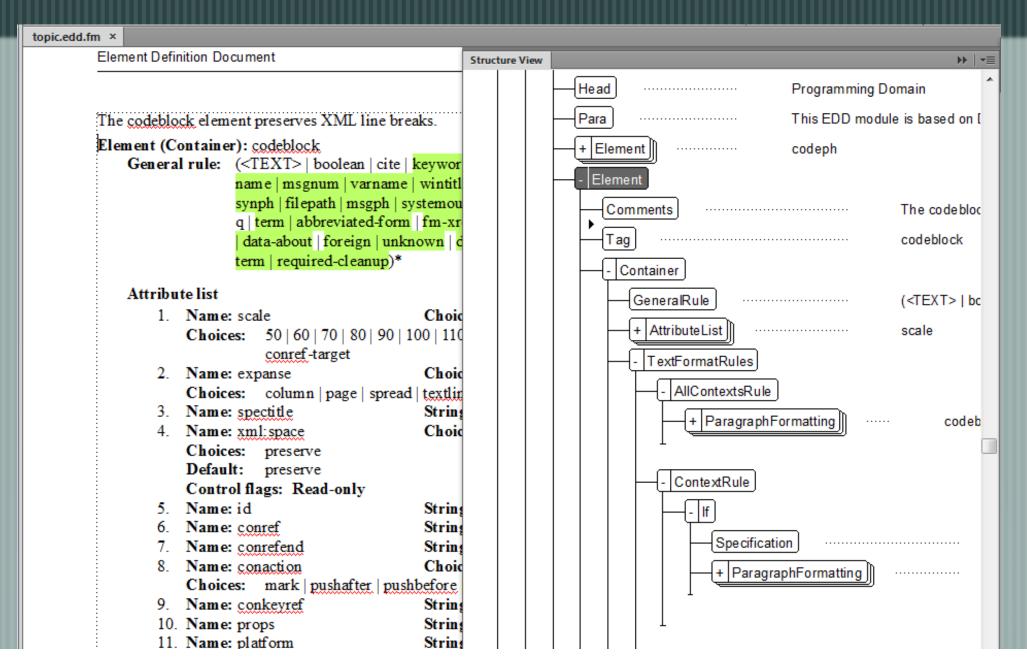
Adobe Systems - Windows. \$999

Allows editing of source documents Page layout and styles defined in FM file (template) Formatting applied by EDD (embedded within template) Supports contextual formatting (element and attrib. based) Supports generated lists (TOC, Index, etc.) Generates intermediate FM/BOOK files, saved to PDF Automated publishing via FM Server, FDK, ExtendScript

#### FrameMaker



#### FrameMaker

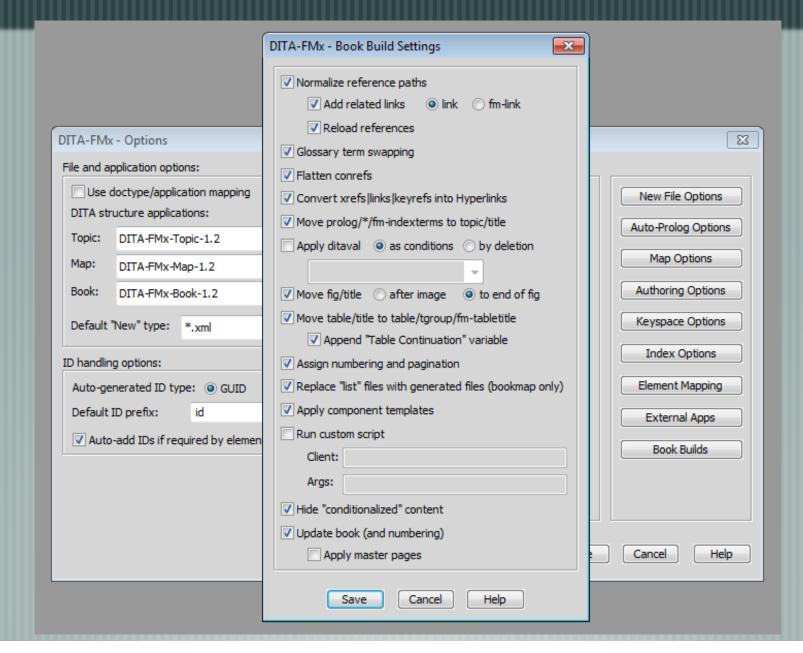


#### FrameMaker + DITA-FMx

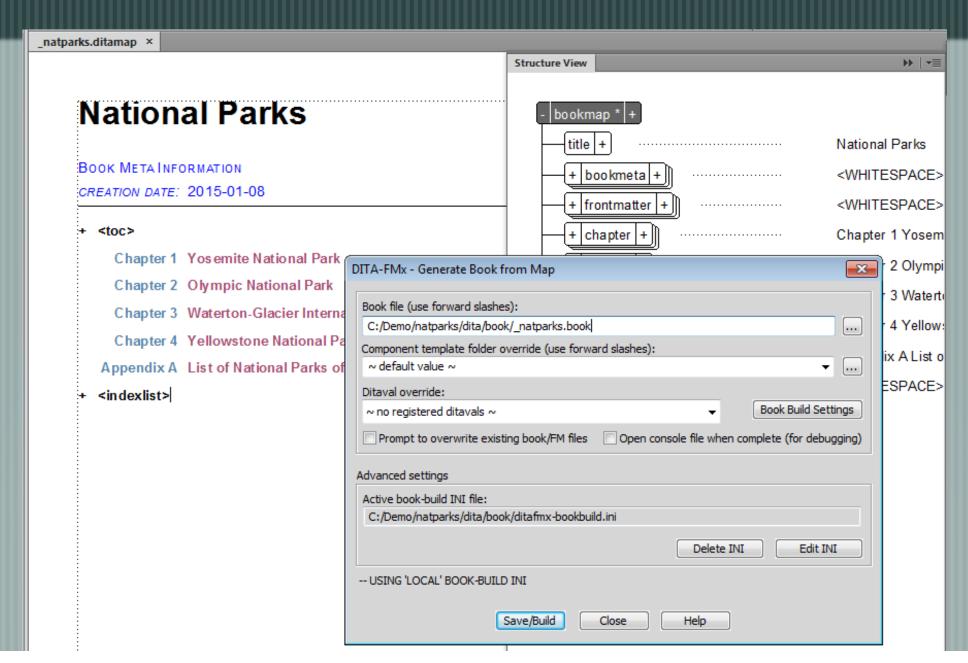
Adobe Systems, Leximation - Windows. \$999 + \$235

Allows everything from default FrameMaker Stores separate project settings for each deliverable Apply separate templates for each book component Easily integrate additional publishing plugins/scripts Supports versions back to FM 7.2 Automated publishing via FMx-Auto, FM Server, FDK, **ExtendScript** 

#### DITA-FMx



#### DITA-FMx



PTC - Windows. Pricing not available

Allows editing of source documents

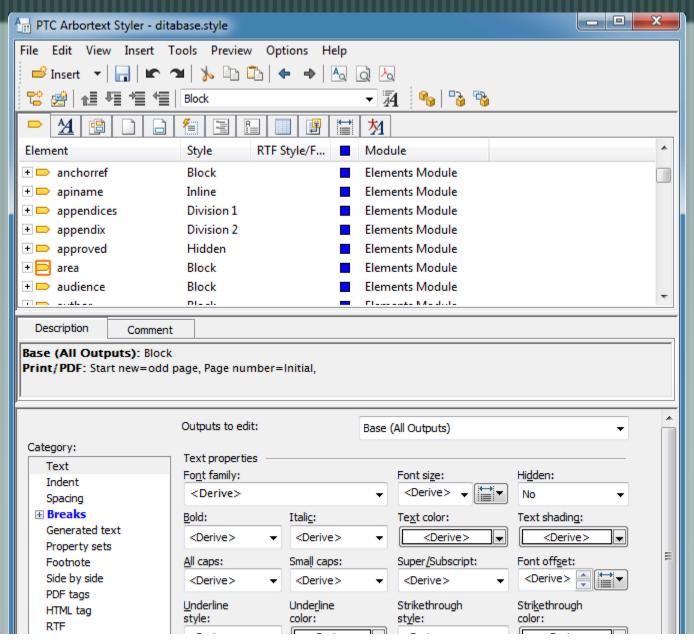
GUI for creating layout/formatting stylesheets

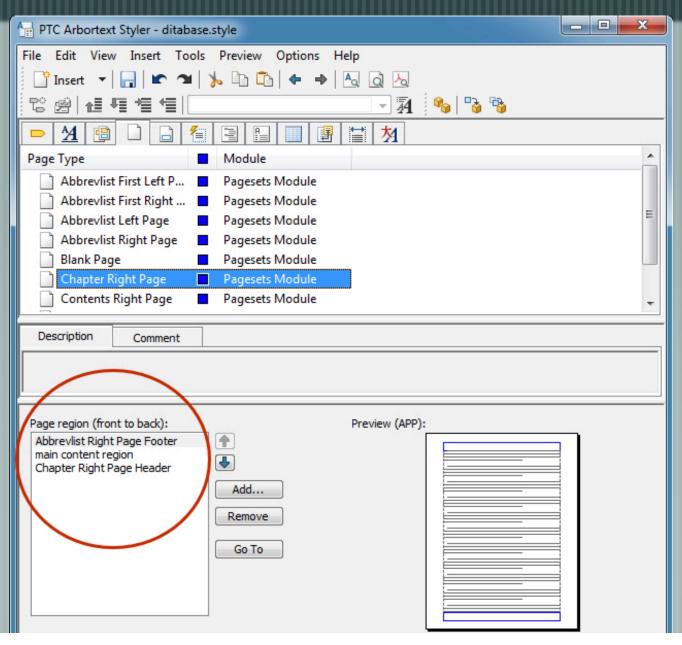
Maps elements, attributes, and contexts to styles and objects

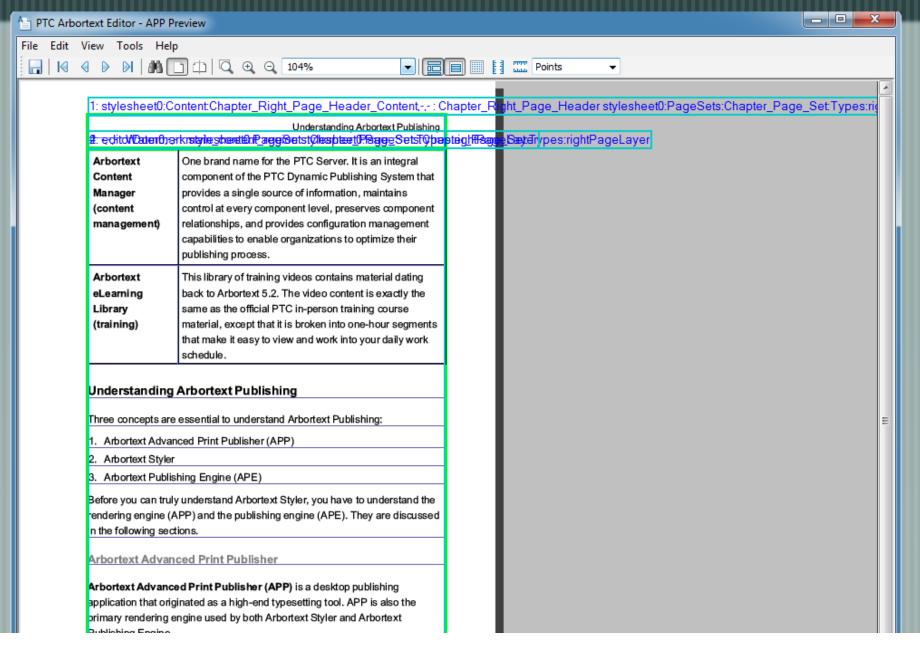
Supports generated lists (TOC, Index, etc.)

**Exports directly to PDF** 

Stylesheets can be used with Arbortext Publishing Engine (APE) for automated publishing







#### DITA InPrint

DITA InPrint - Windows, Mac, Linux. \$995/year, \$1995 (perpetual)

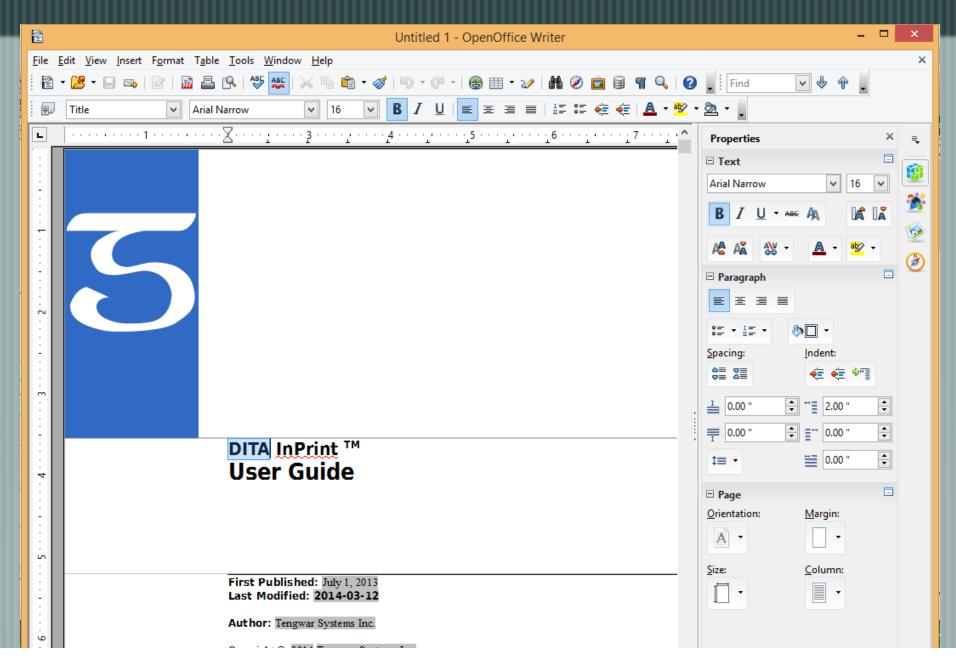
- Templates developed in OpenOffice Writer

  DITA resolved by OT, passed to OO Writer for rendering

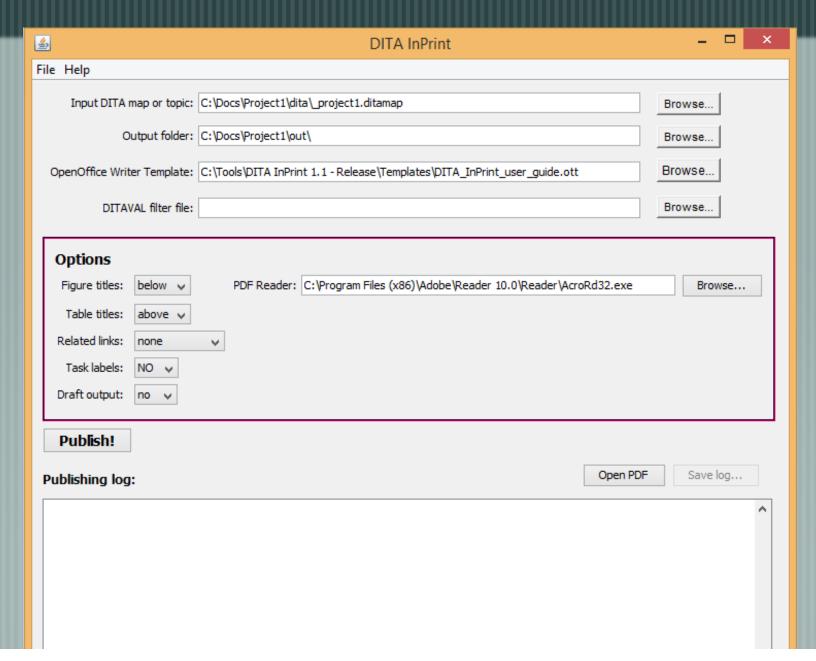
  TOC and Index generated by OT preprocess

  Intermediate files can be edited in OO Writer
  - PDF exported from 00 Writer
  - Standalone or integrates with Oxygen XML Editor
    - Limited support for DITA 1.2

#### DITA InPrint



#### DITA InPrint



### MadCap Flare

MadCap Software - Windows. \$1448

Import DITA into Flare project

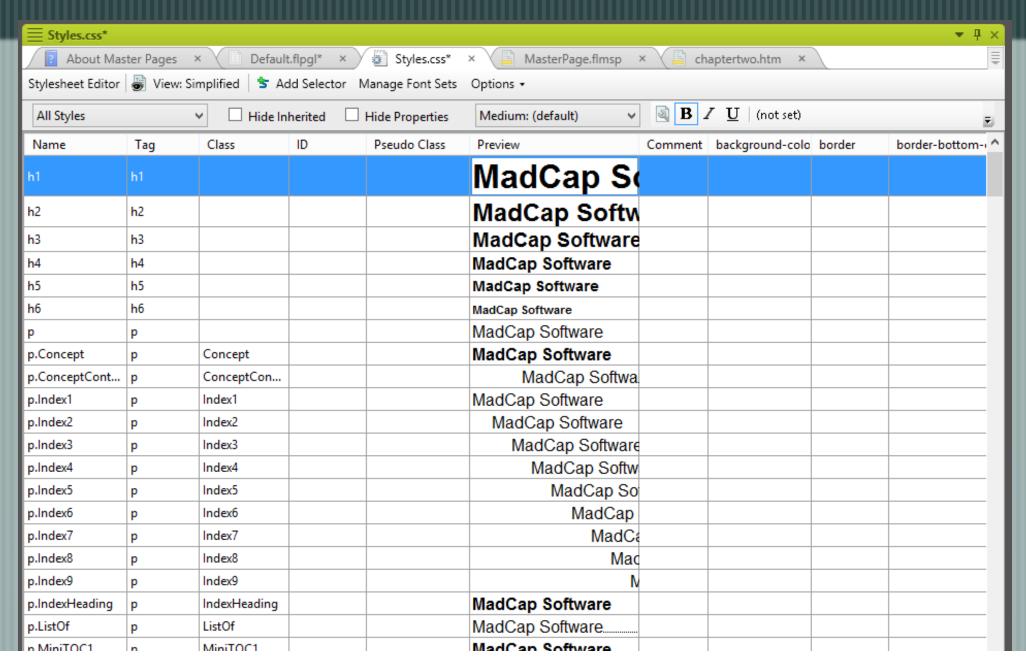
Allows editing of source content

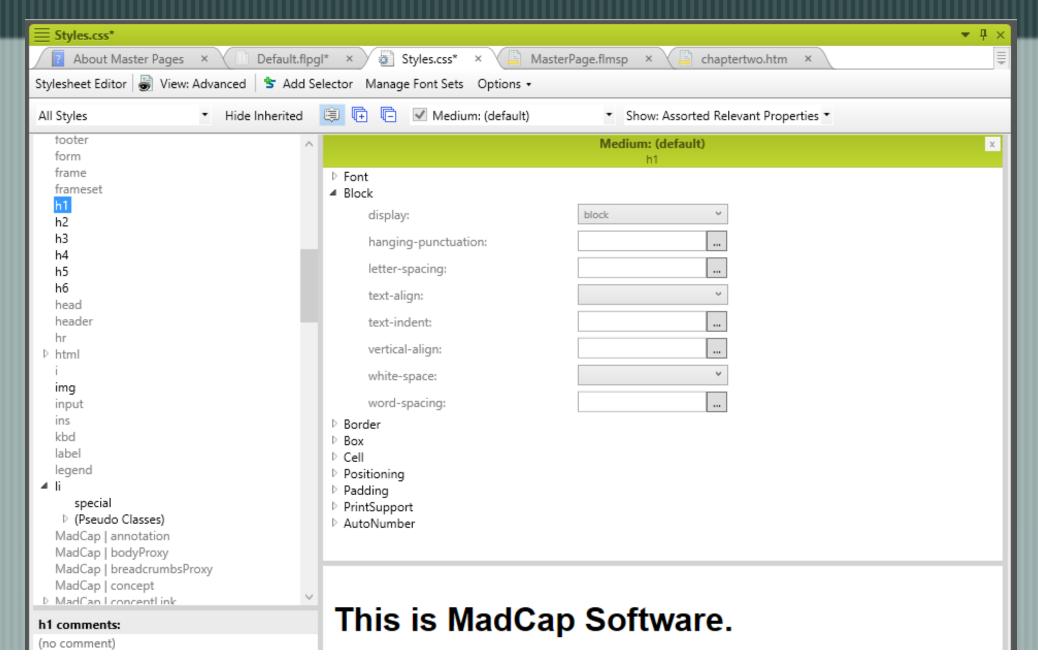
GUI provides page layout and element formatting via CSS to define output target properties

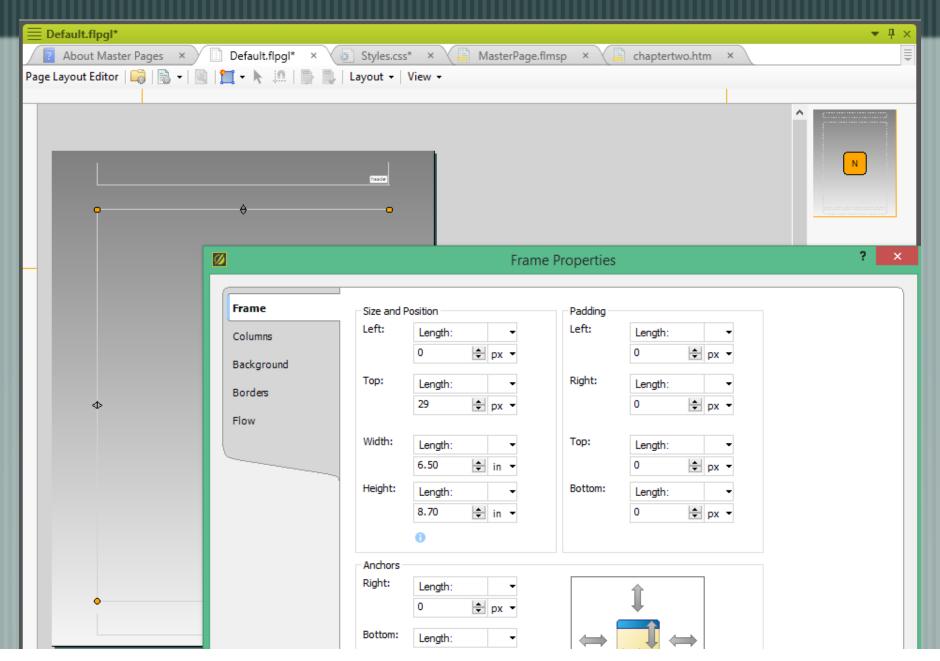
Supports generated lists (TOC, Index, etc.)

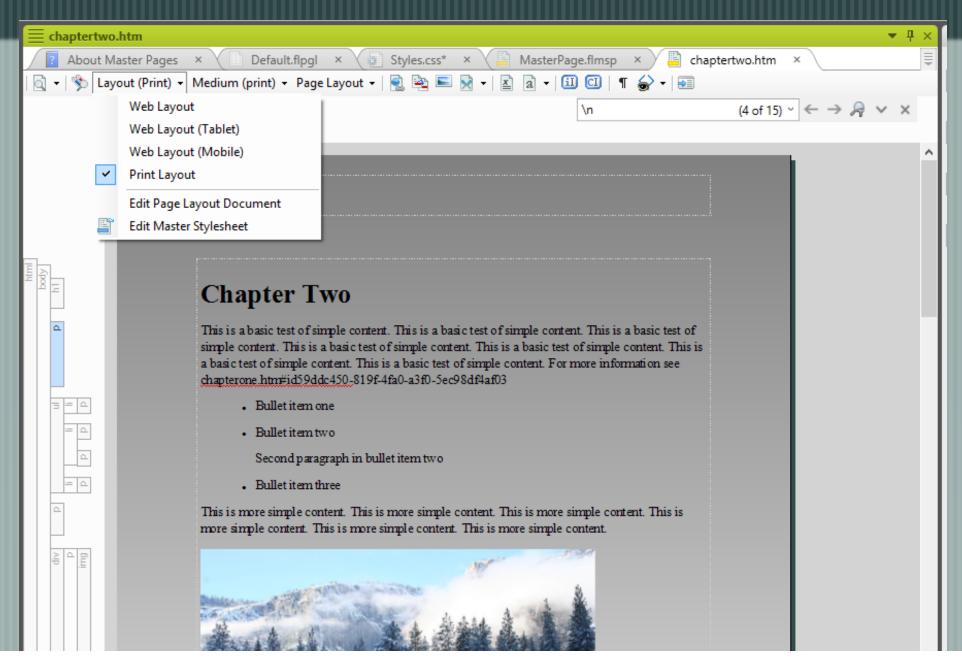
Exports directly to PDF

Automated publishing via command line interface



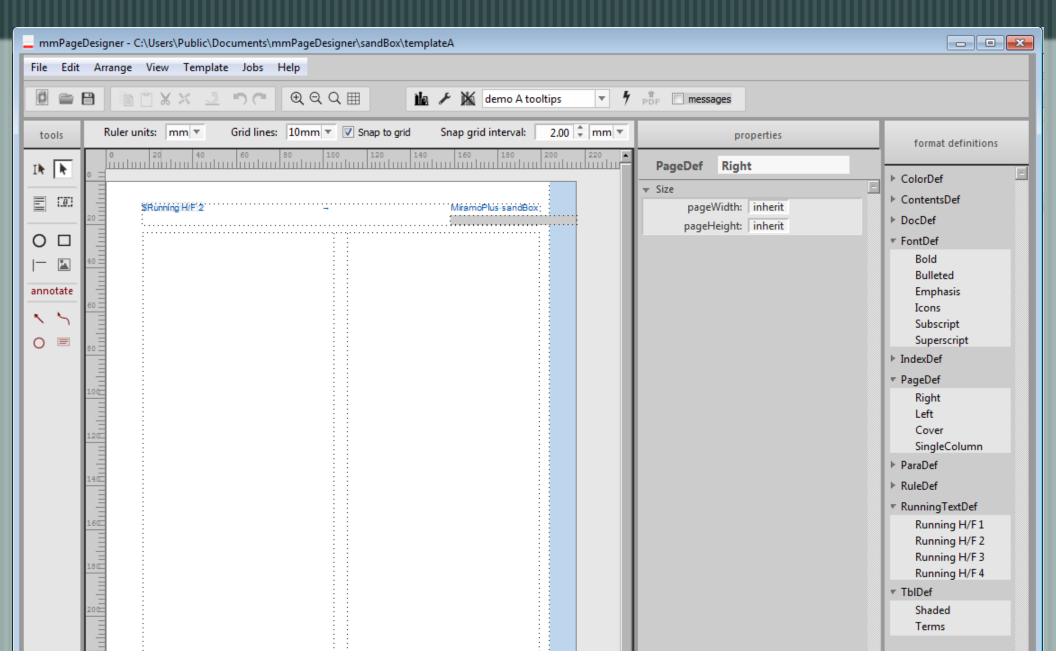


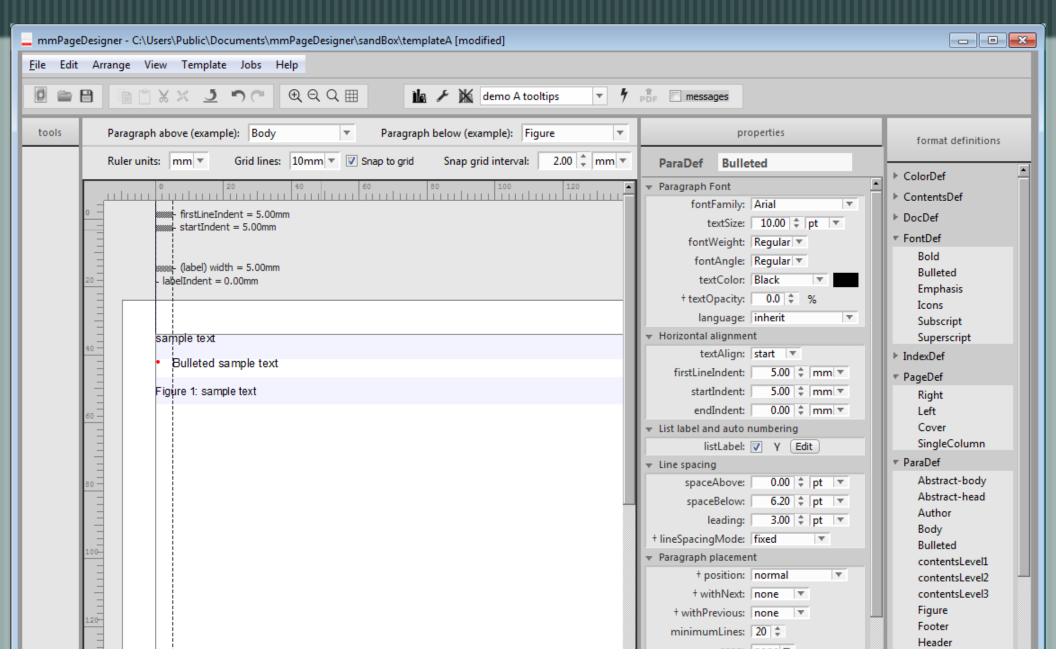


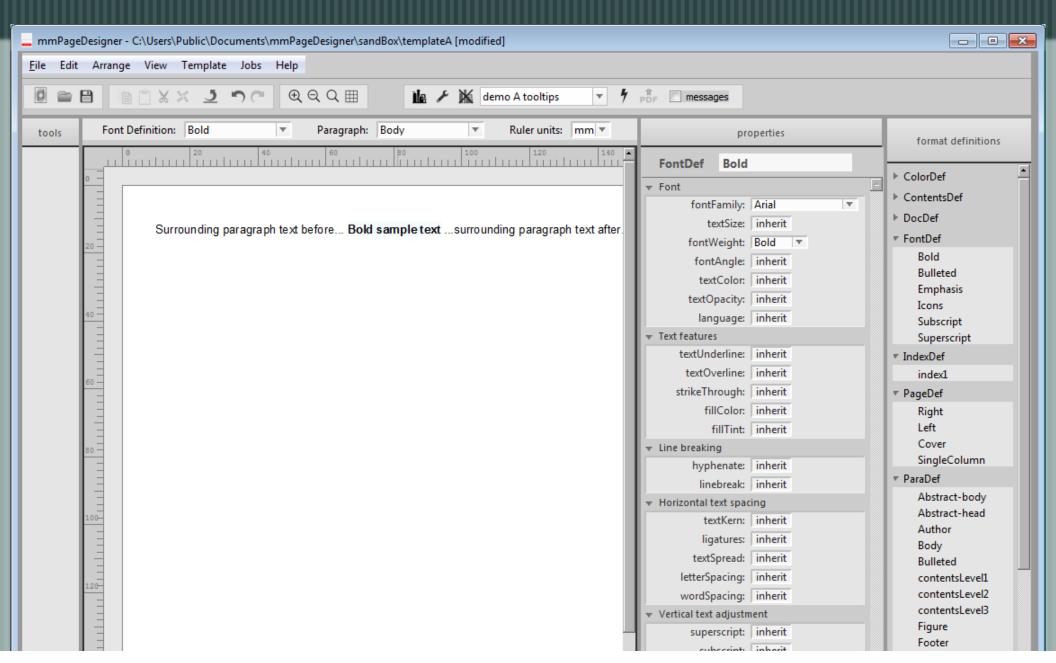


Datazone - Windows. FREE (personal), \$5750+ (enterprise)

DITA-OT plugin maps from DITA to MiramoXML Custom element to style mapping via MiramoXML Use Page Designer (or FM) to edit formatting templates Supports generated lists (TOC, Index, etc.) Exports directly to PDF from Page Designer Automated publishing via DITA-OT and Miramo Composer Full APIs provide complete control over publishing







### Quadralay ePublisher

Quadralay - Windows. \$795/year

Designer GUI creates/edits FO stylesheets

Uses XSL-FO with Apache FOP (or other engine) for rendering

Custom element to style mapping via XSL

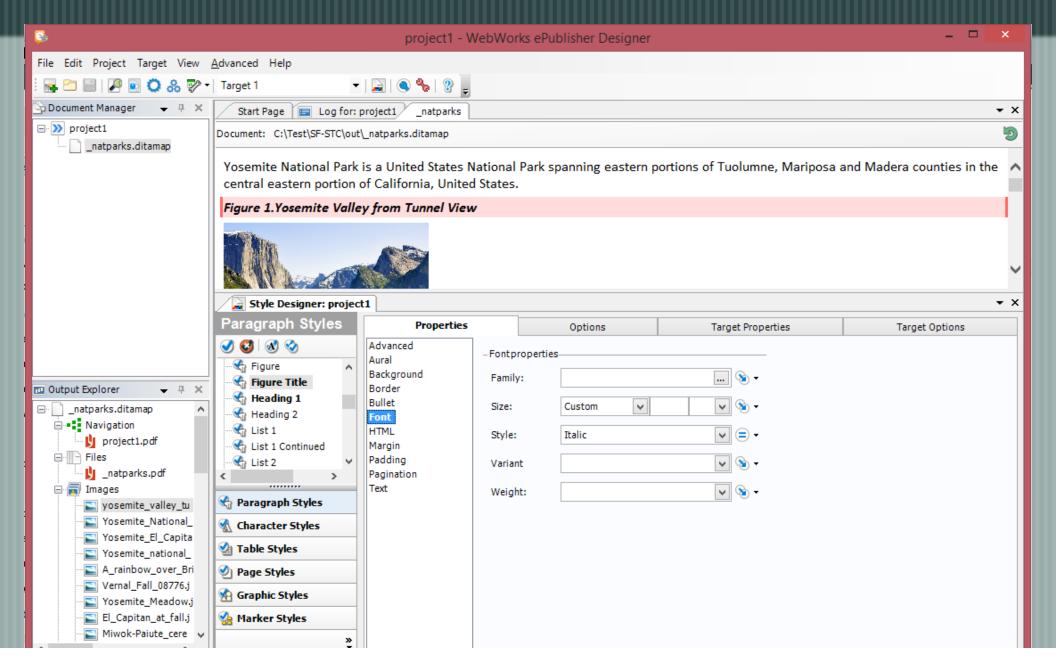
Supports generated lists (TOC, Index, etc.) and miniTOC

Provides preview of styling

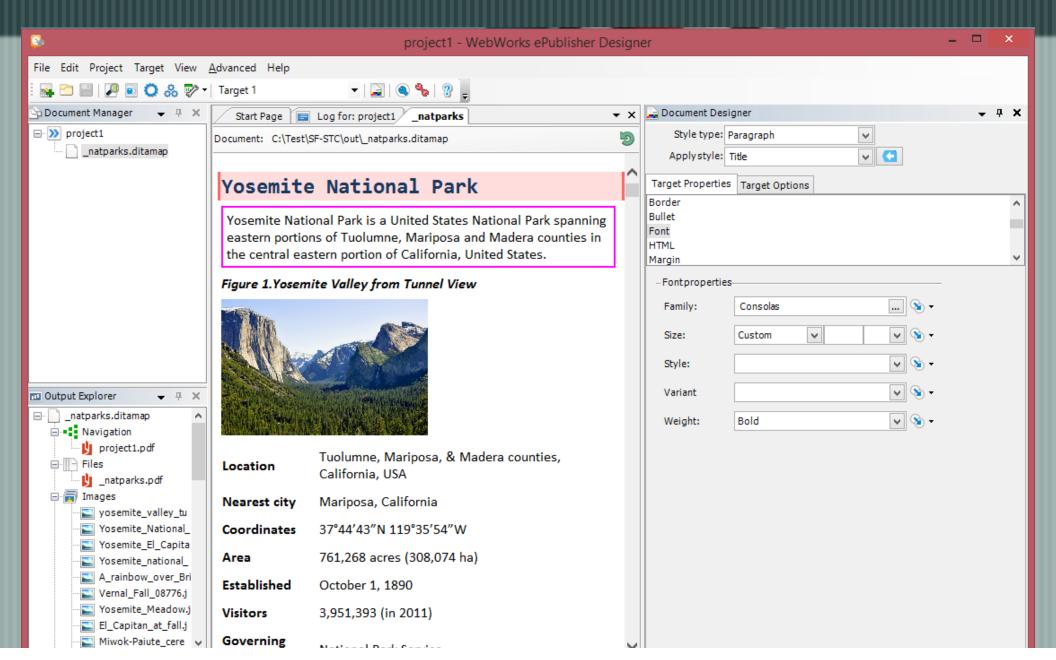
**Exports directly to PDF** 

Automated publishing via Automap

#### ePublisher



#### ePublisher



### TopLeaf XML Publisher

Turn-Key Systems - Windows, Linux. \$799+

Integrates with Oxygen, XMetaL, and DITA-OT

GUI stylesheet development toolkit allows mapping of formatting to elements/attributes and contexts

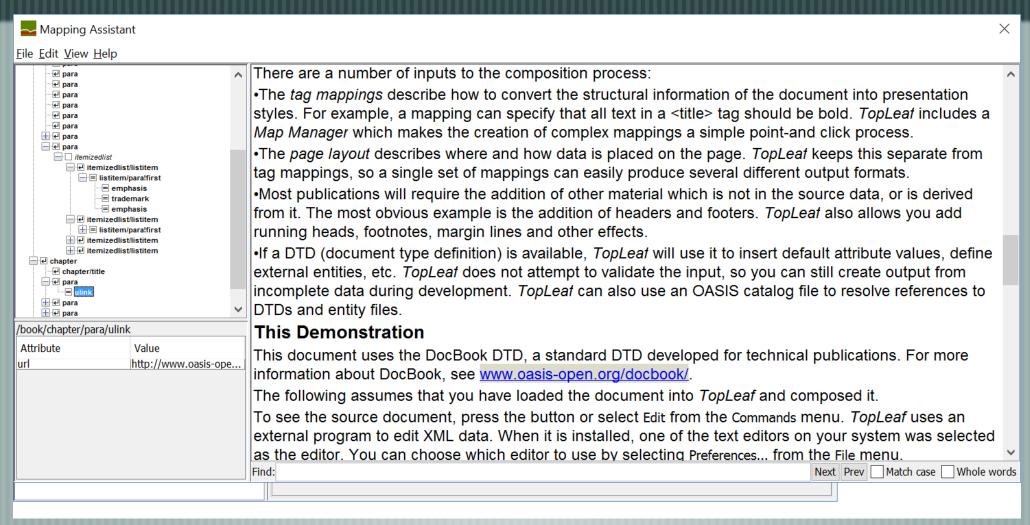
Proprietary engine for rendering

Supports generated lists (TOC, Index, etc.)

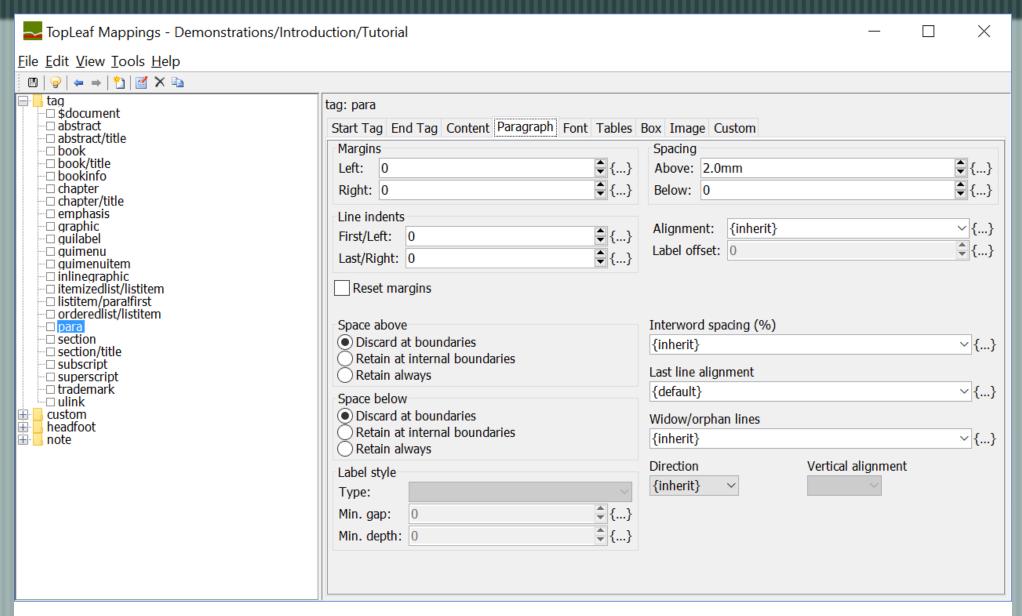
Export directly to PDF

API integrates with CMS and publishing workflows

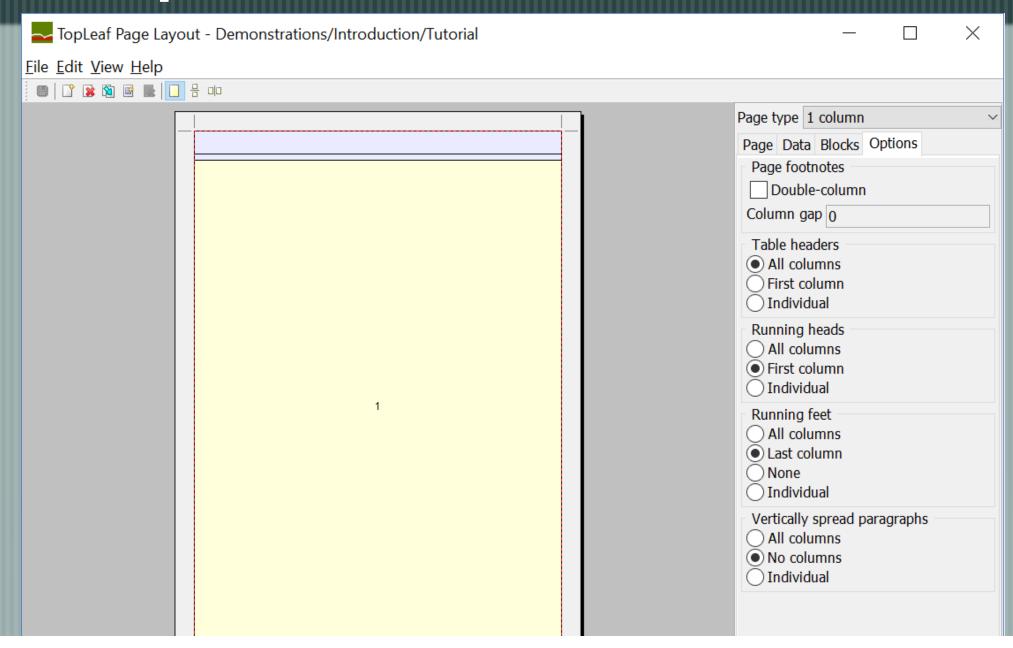
### TopLeaf



### TopLeaf



### TopLeaf



#### Review

- What features are important to you?
  - Easily modify templates
  - Edit intermediate files
  - Scripted cleanup of rendered pages
- High throughput
- Use your real content to test tools

#### Resources

```
FrameMaker - www.adobe.com/products/framemaker
     DITA-FMx - www.leximation.com/dita-fmx
     Styler - amzn.to/2dg5xSN
     DITA InPrint - www.ditainprint.com
     Flare - www.madcapsoftware.com/products/flare
     MiramoPlus - miramo.com/english/overview/dp_download.html
    ePublisher - www.webworks.com/Products/ePublisher
    TopLeaf - www.turnkey.com.au/dita.html
Scott Prentice <scott AT leximation.com> - www.leximation.com
```

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http://ta04.honestly.de

The feedback tool will be available even after the conference!