

## Single-Sourcing with XSL in FrameMaker 7.2

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## Agenda

- ▶ XSL in FrameMaker 7.2 overview
- ▶ How it works
- ▶ Problems, Challenges and "issues"



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## FrameMaker & me

- ▶ User since 1994
- ▶ Author, *FrameMaker for Dummies*
- ▶ Coauthor, *FrameMaker 7: The Complete Reference* and *FrameMaker 7 Workbook Series*
- ▶ Author, "Unstructured to Structured FrameMaker Migration Guide"
- ▶ FrameMaker trainer



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## And a few XML items...

- ▶ Author, "InDesign & XML: A Technical Reference," available at adobe.com
- ▶ Coauthor, Scriptorium white papers
  - ▶ Structured Authoring and XML
  - ▶ Managing Implementation of Structured Authoring
  - ▶ Integrating FrameMaker and XML
  - ▶ and others...



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## XSL support opens up new possibilities.

- ▶ Generate HTML and other output
  - ▶ Better than "Save As HTML" and WWP SE
  - ▶ Comparable to power of WWP Pro or MIF2GO
- ▶ Sort content
  - ▶ Even when it's not in a table!
- ▶ Filter content
  - ▶ Without conditional text tags



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## Less talking, more demos



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## Demo: Generating HTML and other output

- Create multiple files for output and control output file names
- Publish directly from FrameMaker without add-on software
- Batch Publish utility
  - Publish all output formats with one command
  - Uses FDK client



## Generating HTML

- Select the output(s) you want
- Change options as appropriate
- Publish all in one step



## Demo: Sorting content

- Open unsorted XML file.
- XSL transformation file includes sort command.
- FrameMaker content is sorted.
- You can also sort when you output XML.



## Basic sort for a glossary

```
<xsl:template match="Glossary">
  <xsl:copy>
    <xsl:apply-templates select="Title" />
    <xsl:apply-templates select="GlossEntry">
      <xsl:sort select="Term" />
    </xsl:apply-templates>
  </xsl:copy>
</xsl:template>
```



## Demo: Filtering content

- Save As XML
- XSL transformation file specifies what to filter
  - Hard-coded in XSL file
  - or
  - Specified via parameter in structured application configuration (structapps.fm)
- Based on attributes, not conditional text



## FrameMaker 7.2 supports XSL processing.

- Xalan processor is built in.
  - Open source
  - apache.org
- Can pre- and post-process XML files.
- Structured FrameMaker only; XSL processor is not available for unstructured files.
- Specify XSL file in structured application.



## Another processing layer

- XSL processing is in addition to read/write rules.
- On import:
  - XSL, then read/write rules.
- On export:
  - Read/write rules, then XSL.
- XSL is always closest to XML.



## FrameMaker can output any markup format.

- Send output to XML.
- Transform XML with XSL to produce:
  - HTML
  - HTML Help component files (must compile)
  - JavaHelp
  - Others...rearranged XML, man pages, troff?
  - RTF (gulp)



## HTML creation details

- Choose Save As XML.
- First, read/write rules run.
- Second, XSL transformation runs.



## XSL filtering goes beyond conditional text functionality.

- Can filter on multiple attributes.
  - Platform = "windows" AND client = "Acme" AND userlevel = "admin"
  - Conditional tags are always combined as OR.
  - Excellent approach for content with numerous conditions.
- XSL filtering occurs during import or export of XML.



## Advantage: Conditional text

- Cannot use attributes to show/hide content.
- Unless you add on to FrameMaker:
  - Sourcerer
  - Custom FDK client
  - FrameScript
- Attributes and filtering available for structured FrameMaker only.



## The fine print

- Structured FrameMaker files only.
- Only Xalan processor is supported.
- Entities are removed during transformation.
- One stylesheet per Save As command.
- Usability problem: Save as XML command to produce HTML output is confusing.



## Structured FrameMaker only.

- XSL transformation is part of structured application.
- No equivalent available for unstructured files.
- Reason to upgrade to structure?



## Xalan processor only.

- v7.2 includes Xalan processor.
- If your stylesheets use proprietary extensions (such as Saxon or MSXML), you must rewrite for Xalan to use in FrameMaker.
- You cannot choose a different processor.

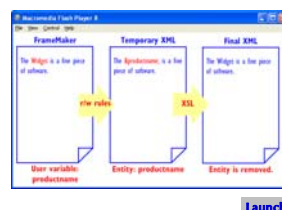


## Entities are removed during transformation.

- FrameMaker translates variables and text insets into entities.
- Entities are preserved in XML output when XSL stylesheet is not specified.
- XSL processor expands entities, so they are stripped from final output.
- Graphic references (unparsed entities) are preserved.



## Disappearing entities are a big round-tripping problem.



## One stylesheet per Save As command.

- One form of output per Save As command.
- Workarounds
  - Use "container" stylesheet?
  - Create custom client with FDK or FrameScript.
  - Use Xalan pipeDocument command to run stylesheets in parallel?
- Intermediate XML content is not preserved after processing.



## Default processing for multiple output formats



## Improving the user experience

- Work around single-output limitation with custom coding.
- For DITA implementations:
  - Embed DITA transformations into FrameMaker-based DITA workflow.
  - Author could publish from FrameMaker directly to DITA-supported output.



## Do I have to learn XSL?

- *Someone* does (got a minion??).
- Very little support out of the box.
  - DITA, DocBook, DocFrame provide stylesheets.
  - If you customize structure (or build from scratch), you will need to create your own transformations.
  - XSL is a technology, not an application.
  - In other words, yes.



## XSL versus WWP/MIF2GO

- You can create the same output in either tool.
- Base decision on your workflow requirements.



## Advantage: WWP/MIF2GO

- Supports unstructured FrameMaker.
- Provides templates.
- Provides interface.
- Less coding; less effort to configure.
- Less complex.



## Advantage: XSL

- Processing is available for import and export.
- Can filter content based on attributes or conditional text.
- XSL files are portable; not tied to FrameMaker.
- XSL is W3C standard.
- No licensing cost for XSL.



## 1995 flashback

- Remember using early versions of WebWorks Publisher?
- Remember hand-coding macros?
- You'll feel right at home in XSL.
- Small consolation: Many developers already know XSL.



## Opinions

- XSL support is a huge asset to structured FrameMaker users.
- XSL implementation effort is significant.
- Portability of XSL stylesheets is appealing.
- By far the most important new feature in v7.2.



## More opinions

- XSL support could eliminate need for (expensive) third-party tool for single sourcing.
- Lack of cross-browser, cross-platform help system an issue – may need WWP for this one.
- Learn XSL soon – it's not going away.



## My questions

- What happens with XSL 2.0?
- Is FrameMaker structure implementation too esoteric?
- Does batch publishing dialog box appeal to you?
- What output formats do you need?



## Your questions



## Resources

- *XSLT Programmer's Reference*, Michael Kay
- Look for XSL classes that focus on publishing, not data transformation (Scriptorium has one)
- w3.org for XSL specification
- Xalan: apache.org



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