



XML Based Filters

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About the Speaker

- Since 1999 working for Sun Microsystems on StarOffice
- Wrote XSLT based XHTML export
- Wrote XSLT based spreadsheetml export
- Since 2006 co-lead of OpenOffice XML project
- Responsible for all xml based filters
- Participates in W3C Compound Document Formats CDF WG
- Editor of W3C CSS Mobile Profile 2.0 (CSS WG)
- Participates in OASIS Meta Data SC

XML Based Filters

Fundamentals

- What is a filter?
 - > Software that works on a input stream
 - > Software that transforms one file format into another
- What is a XML based filter?
 - > A filter that depends solely on the XML fileformat of OpenOffice.org
 - > Since OpenOffice.org 2.0 the default XML file format is the new OpenDocument ISO Standard

XML Based Filters

Technical Requirements on Office Filters

- Support of the XFilter (XImporter / XExporter) UNO interface
- Import Filter needs a TypeDetection (Without filter chose by suffix)

XML Based Filters

Existing Framework for Java Filters

- Stand-alone filter
XMerge Framework capsulate the XFilter UNO interface
- Build for small devices
 - > For Palm: AportisDoc & MiniCalc
 - > For PocketPC: PocketWord & PocketExcel
 - > Most recently: LaTeX and BibTeX export (Hendrik Just)
- Only supports earlier OpenOffice.org XML format

XML Based Filters

Existing Framework for XSLT Filters

- Behind the Scenes:
 - > Bundled Apache's XSLT processor Xalan 2.7
 - > Usage of Java TRAX / JAXP API
 - > Generic XSLT Filter implementation
- GUI aid in the Office: 'XML Filter Settings' dialog

XML Based Filters

Possible Enhancements for XSLT Filters (1 / 2)

- Change of Deployment Package:
Using UNO Component Packages instead of JAR
 - > Versioning and Remote Update mechanism
 - > Signature / Authentication
 - > Admin Level / All Users Installation
- Separating Office configuration from XML Filter configuration
 - > Sharing of OpenDocument based filters across ODF enabled applications (using SAX)

XML Based Filters

Possible Enhancements for XSLT Filters (2 / 2)

- Bundling whole directory to a XML based filter package
 - > Easy include of various stylesheets in subfolders
 - > Bundling filter dependencies (e.g. graphics, XML templates with content even for export)
- Validation during import & export
 - > Based on various Schemas (Schema Tool)
 - > ISO Schematron checking XPATH conditions

XML Based Filters

Required Enhancements for XML Based Filters

- Documentation:
Ease the access for community developers
 - > Link from 'Contribute' start tabulator to xml.openoffice.org
 - > Give more detailed starting info for Developer
 - > Show up requirements: How may I add a XML based filter to OpenOffice.org
 - > Collecting new requirements possibly resulting into enhancements (Wiki)

XML Based Filters

Frequent User Request: Using OpenOffice.org to edit XML

- Book Author have to provide raw XML data to Book seller
- Data of Website for ContentManagement in XML
- Use of Universal Business Data in the Office



Questions & Answers

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