Mail merge embedding in LibreOffice Writer

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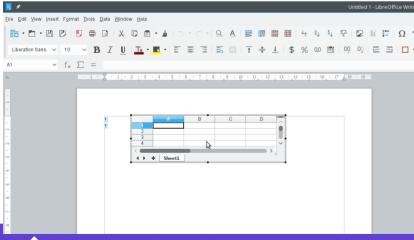
2016-01-30

MERGE AHEAD

About Miklos

- From Hungary

  - More blurb: http://vmiklos.hu/

- Google Summer of Code 2010/2011

  - Rewrite of the Writer RTF import/export

- Writer developer since Feb 2012

- Contractor at Collabora since Sept 2013
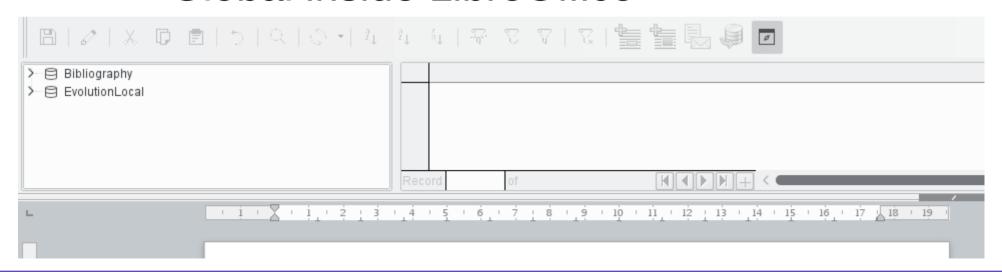
Embedding a mail merge data source definition

Embedded objects

- Cross-platform for native data models

- Windows-only: OLE

- Bitmap (replacement image) + native data

- In Writer: text embedded object

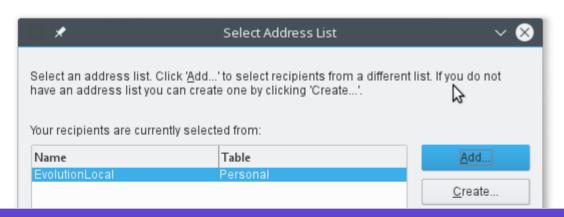 - Part of the document body (anchored, etc.)
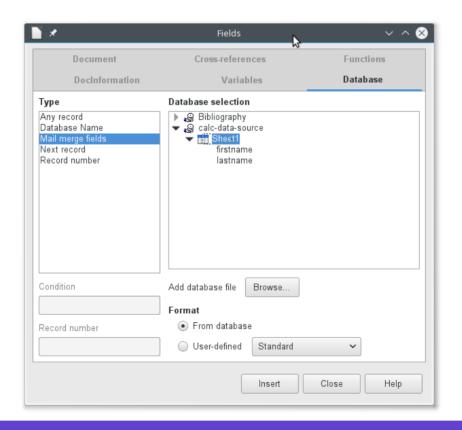
Mail merge
data source definition

- Typical use-case:

  - Real data source

  - Base document (wrapper): data source definition
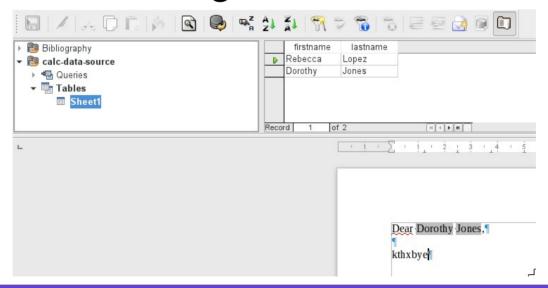
- Global inside LibreOffice

Results #1

- Save your document template

- Tools → Mail Merge Wizard

- Select Address list → e.g. a .ods file
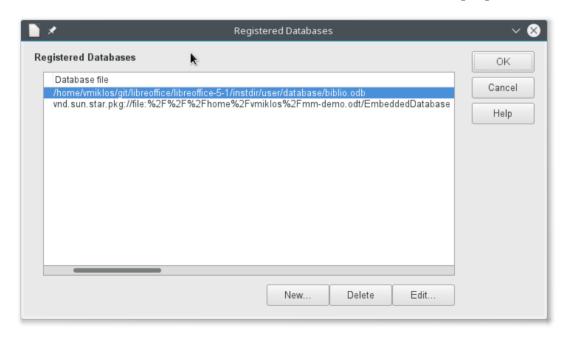
- Edit document

Results #2

- Insert mail merge fields
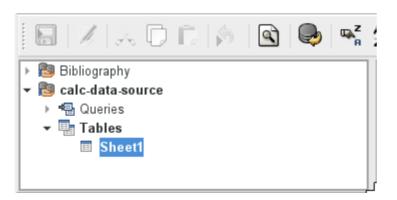- Return to the wizard

Results #3

- Save merged document
- Save as single document
- Click on save document
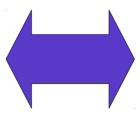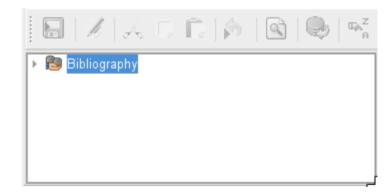- Close the merged result, no need to save

Results #4

- Embedded data source is registered

- Close the mail template

- Data source definition disappears

Results #5

- Open the mail template
- Embedded data source definition is registered again

How is this implemented?

Embedding a Base document

- dbaccess::ODatabaseDocument

  - Does not inherit from SfxBaseModel

- dbaccess::ODatabaseContext is the global manager

- No SwOLENode, just OCommonEmbeddedObject

- SwDBManager's StoreEmbeddedDataSource() is the implementation

ODF filter

- Newly handled parameters:
  - TargetStorage
  - StreamRelPath
  - BaseURI
- dbaxml::ODBFilter is the importer
- dbaxml::ODBExport is the export
- loadFromStorage() not implemented, storeToStorage() needed fixing

Embedding
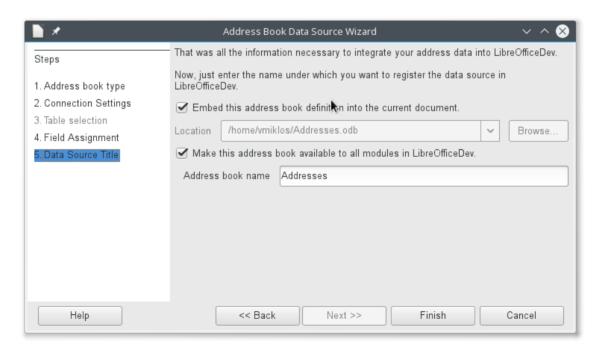# without a text embedded object

- ODatabaseContext owns the doc model

- In ODF, settings.xml refers the storage of the XML streams

- It gets registered on load

- It gets removed on close

Mail merge wizard

- SwDBManager's LoadAndRegisterDataSource() does the creation

- The Writer document has to be saved, so it has a storage

  - The embedded model then can be a sub-storage

Address book wizard

- Another user interface to create data source definitions

- Code in extensions/source/abpilot/

Relative references, testing

- Feature: relative references

  - So .odt and .ods can travel together

- But ../ would refer to the non-embedded parent model

- Have to support even ../../

- If the parent doc moves → need to re-save the embedded doc

- SwUiWriterTest's testEmbeddedDataSource()

Thanks

- Collabora is an open source consulting company
  - What we do and share with the community has to be paid by someone
- LHM sponsored this work

Summary

- Mail merge embedding allows mail merge with just two (ODT and e.g. ODS) documents

  - Available in LibreOffice 5.1

  - Improves experience for those who migrate from Microsoft Office

  - One more long-standing problem solved

- Thanks for listening! :-)

- Slides: http://vmiklos.hu/odp