

ODF testing
Experiences from ODF2XLIFF

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&

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<http://www.itaapy.com/>

- Free Software company located in Paris
- Agile and restful shop since 2003
- Library developer
- Expert in Python, RestFul Web, ODF, and Git
- ODF projects:
 - ODF Translation Converter
 - LpOD
 - ...



Luis Belmar Letelier <luis@itaapy.com> is:

- Itaapy's CEO
- Coordinator of IpOD project
- PhD in physics

J. David Ibáñez <jdavid@itaapy.com> is:

- Itaapy's CTO and founder
- Leader for several Free Software projects:
 - Itools (Python library)
 - Ikaaro (CMS)
 - Localizer (i18n/l10n suite for Zope)

Summary

Part I: Itaapy's ODF projects

- The IpOD project
- The ODF Translation Converter project

Part II: Testing ODF

- The OpenDocument Fellowship test suite
- Unit Testing the ODF Translation Converter
- Crowd Testing



Part I: Itaapy's ODF projects



- The IpOD project
- The ODF Translation Converter project

The IpOD project (1/3)

- Specify an API that fully implements ISO/IEC 26300 (OpenDocumentFormat) lead by Jean Marie Gouarné.
 - Multiple implementations of the API as a library: Python, Perl, Ruby
- Several applications built on this business oriented API will validate its fitness in high level usages:
 - BI, Mobility, CMS, ...

The IpOD participants (2/3)

Companies and Labs

- Ars Aperta
- Itaapy (coordinator)
- Talend (ETL maker)
- Pierlis
- Telecom-ParisTech
- C2RMF-CNRS
UMR171 (Musée du Louvre)
- UPMC-INSERM
(Université Pierre et Marie Curie)
- LIL (Laboratoire d'Informatique du Littoral)



The IpOD project (3/3)

- Sponsored by “Agence Nationale Recherche”
- Member of “Cap Digital” (Paris Region)
- More than 1 million euros over **2 years**
- <http://lpod-project.org/>

Why a translation toolchain is important for ODF

Operational efficiency and cost savings

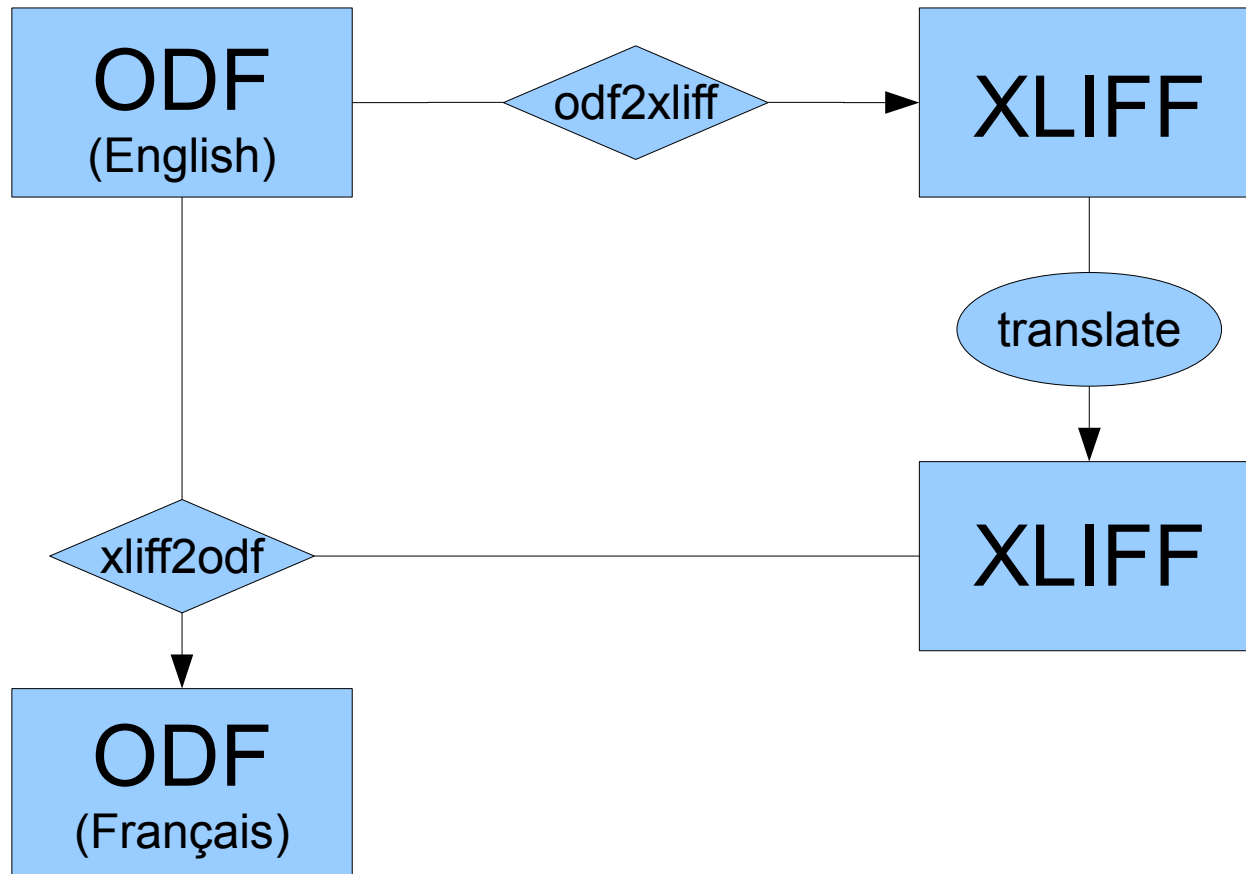
- Efficiency - Multinational institutions manage a process of document workflow across international boundaries
- Cost - Institutions utilise a variety of end-user and server based applications which use, today, a variety of document formats
- Cost & Efficiency - Translation services standardised around XLIFF

ODF Converter (1/3)

- Purpose: To develop a toolchain for the translation of ODF documents.
- Developed by Itaapy and Translate.org.za
- Sponsored by NLnet
<http://www.nlnet.nl/>
- To know more:
<http://translate.sf.net/wiki/developers/projects/od>



ODF Converter (2/3)

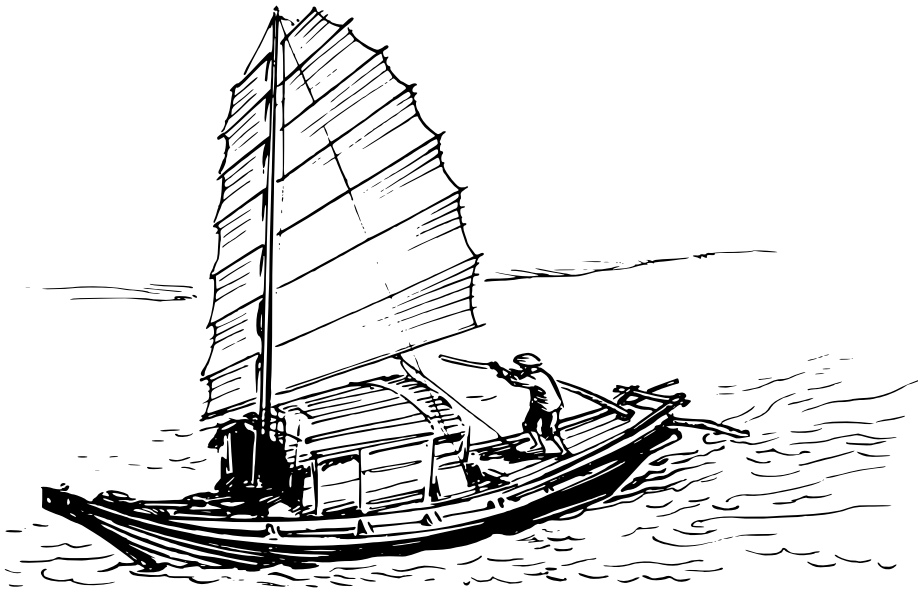


ODF Converter (3/3)

- The deliverables included:
 - Improvements to the itools library
<http://www.hforge.org/itools>
 - Improvements to the translate toolkit
<http://translate.sf.net/wiki/>
 - The test suite
<http://www.hforge.org/odf-i18n-tests/>

Part II: Testing ODF

- The OpenDocument Fellowship test suite
- Unit Testing the ODF Translation Converter
- Crowd Testing



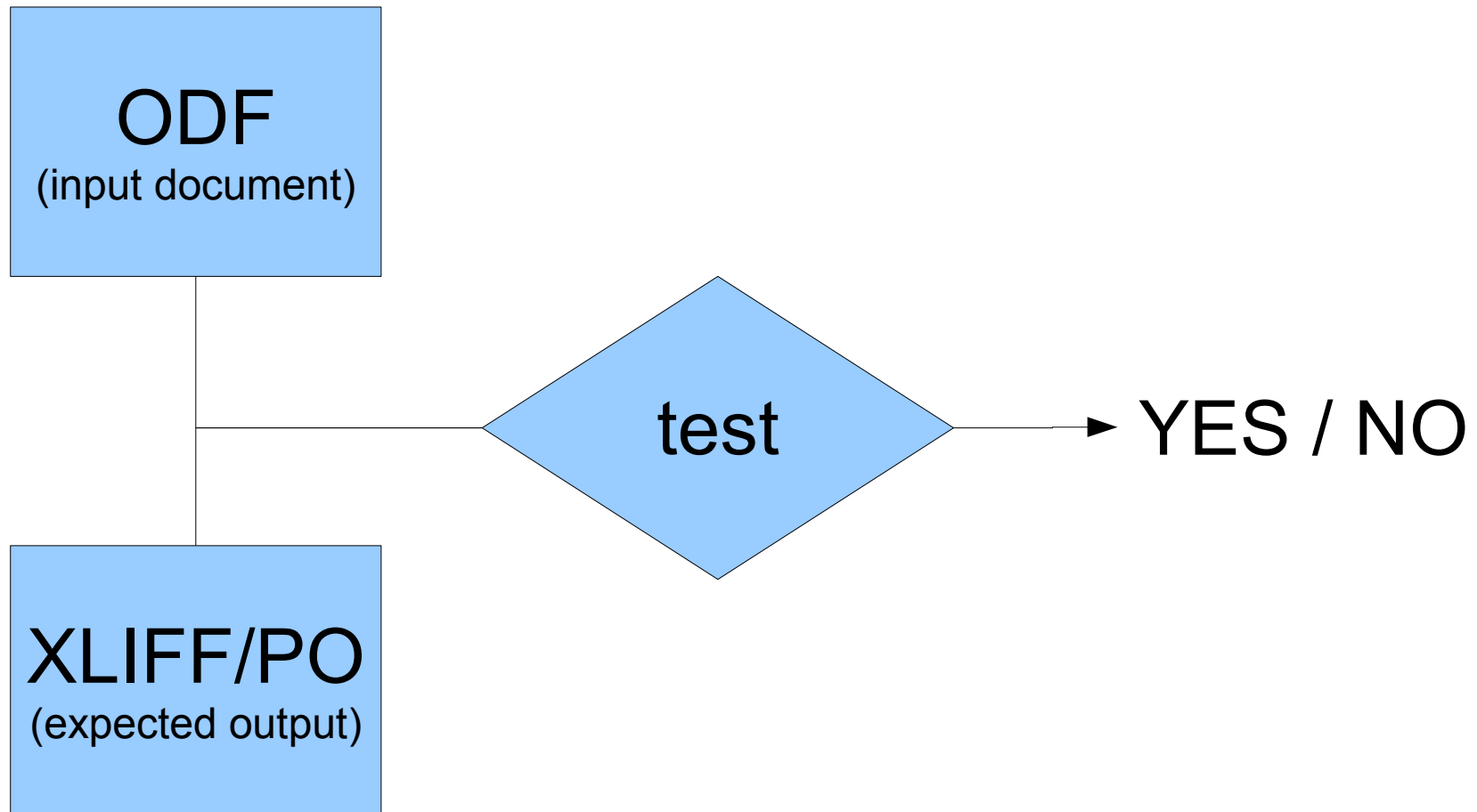
OD Fellowship Test Suite

- The purpose of the OpenDocument Fellowship test suite is to test the ODF support of office suites (like OpenOffice and Koffice)
- <http://testsuite.opendocumentfellowship.com/>

Testing ODF2XLIFF (1/4)

- The purpose of the test suite is to validate the ODF Converter toolchain
- 226 test cases
- Derived from the OpenDocument Fellowship test suite
- Available online
<http://www.hforge.org/odf-i18n-tests>

Testing ODF2XLIFF (2/4)



Testing ODF2XLIFF (3/4)

This is the procedure that was used to build the ODF Converter Test Suite:

- Choose the relevant test cases from the OpenDocument Fellowship test suite.
- Analyse the input ODF file and create, by hand, the expected translation file.

Testing ODF2XLIFF (4/4)

Shortcomings of unit testing:

- The same ODF document may produce different XLIFF (or PO) files, depending on other variables, for instance:
 - The segmentation rules used
 - The policy for context handling
- Very time consuming.

Crowd testing

- Developed a web interface to gather feedback from users.
- <http://www.hforge.org/odf-i18n-tests/;translation>

Conclusions

- ✓ Despite its inconvenients, systematic testing with test cases fullfilled its mission: to find errors in the toolset and help to improve it.
- ✓ Probably because of the lack of exposure, crowd testing did not produce the expected feedback.

The End

Drawings from

<http://commons.wikimedia.org>

