

LibreOffice: Under Development

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*“Stand at the crossroads and look; ask for the
ancient paths, ask where the good way is,
and walk in it, and you will find rest for your
souls...” - Jeremiah 6:16*

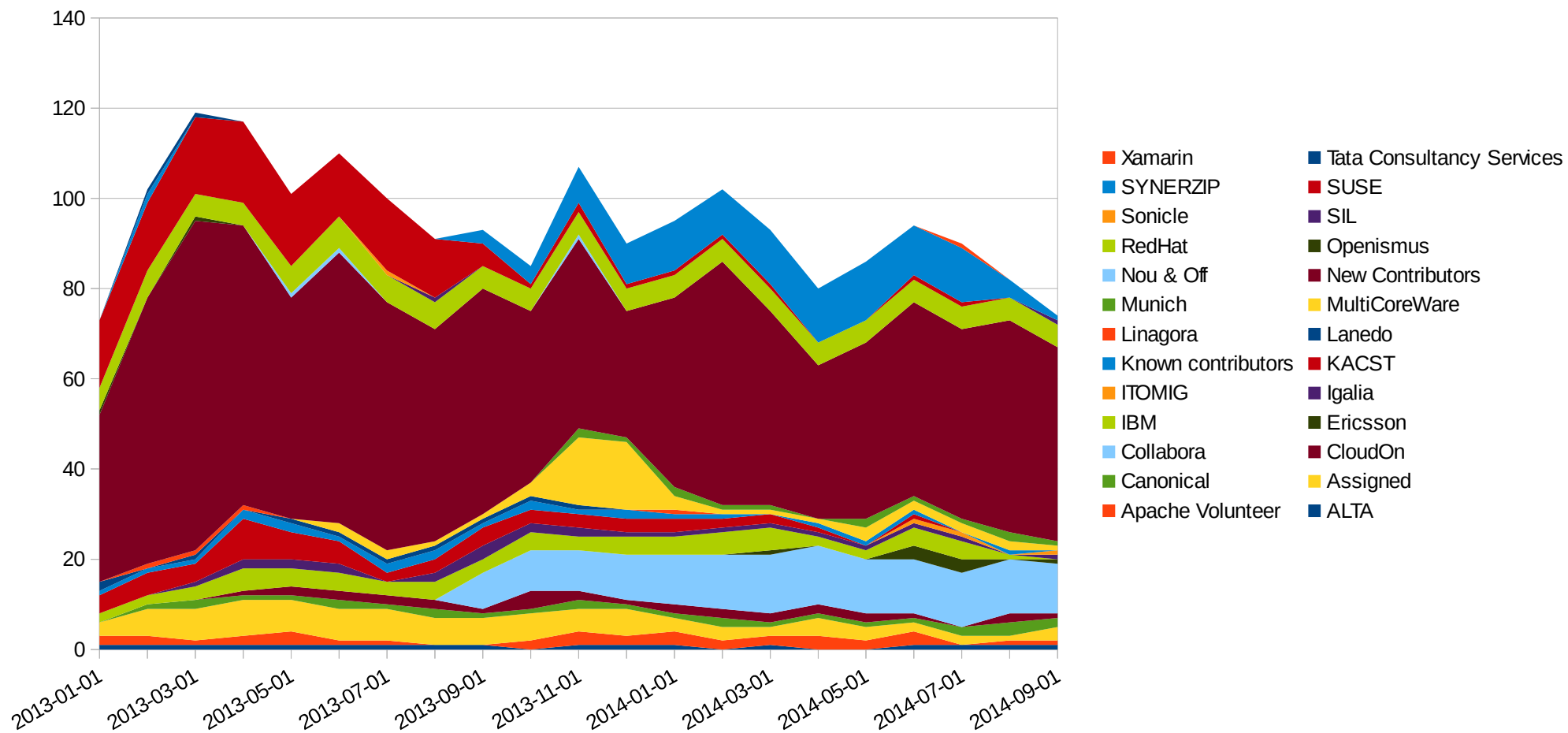
Overview

- LibreOffice is under development
 - Things we've done recently / development status.
 - Android bits ...
- How to get involved in development
- LibreOffice as an ecosystem
 - Contributing constructively
- Conclusions

Recent Developments

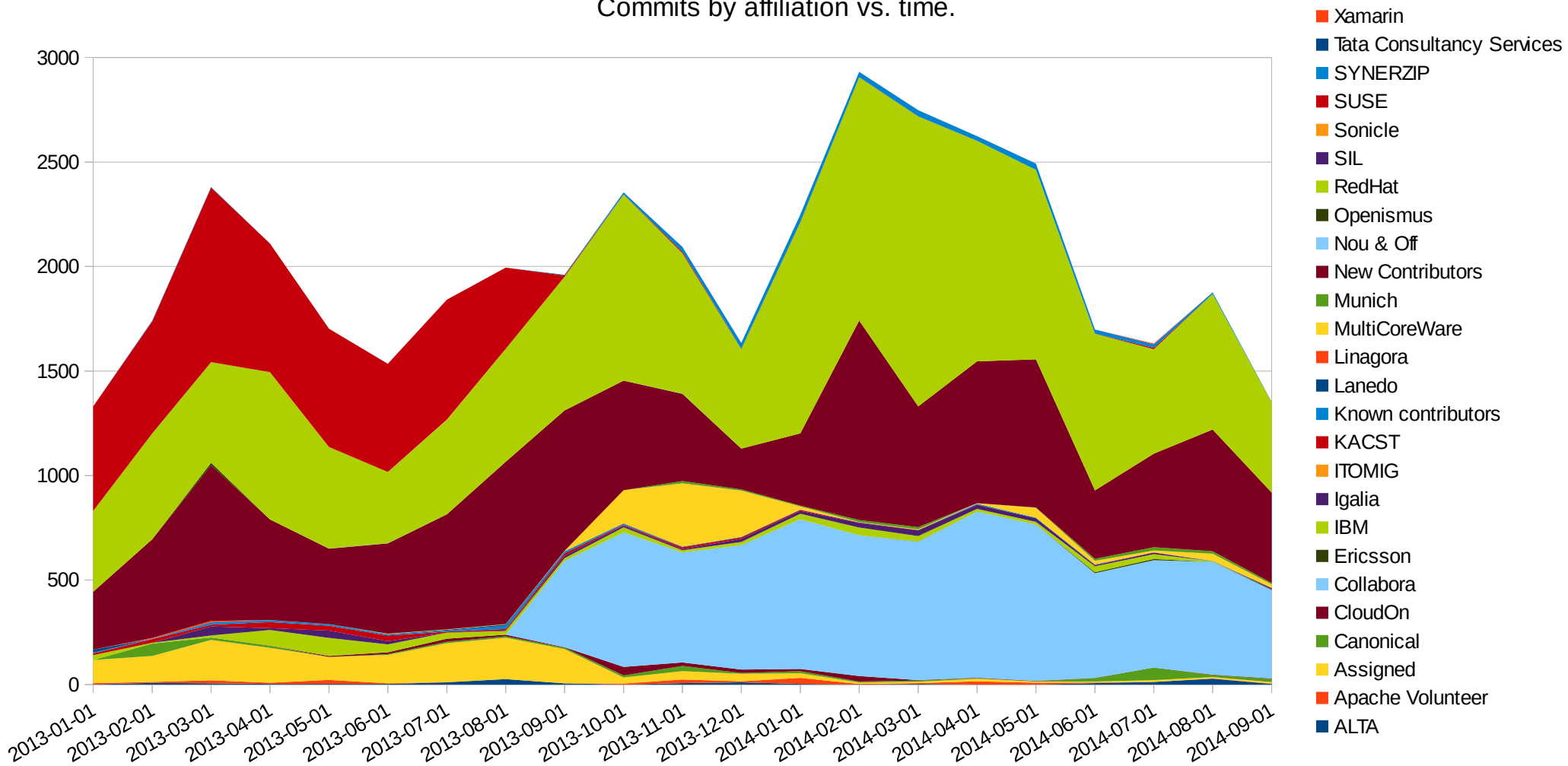
Contributors ...

Committers by affiliation vs. time.



Commits: a unit of thought

Commits by affiliation vs. time.

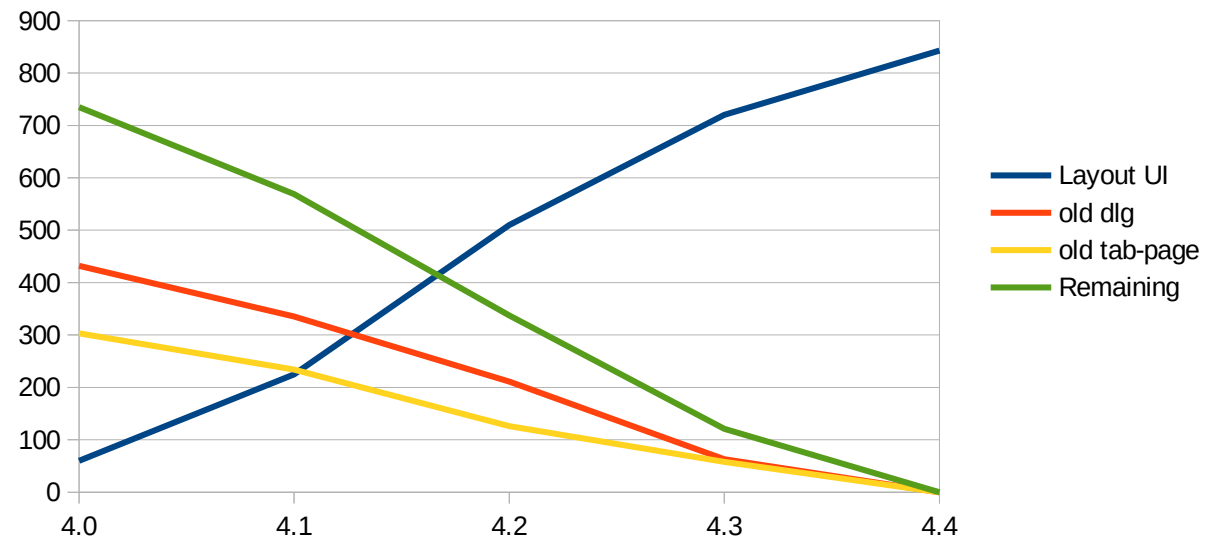


UI re-work: complete in 4.4

- A huge extremely mechanical task:



Progress on UI / dialog layout



- Clean UI
- Many thanks to:

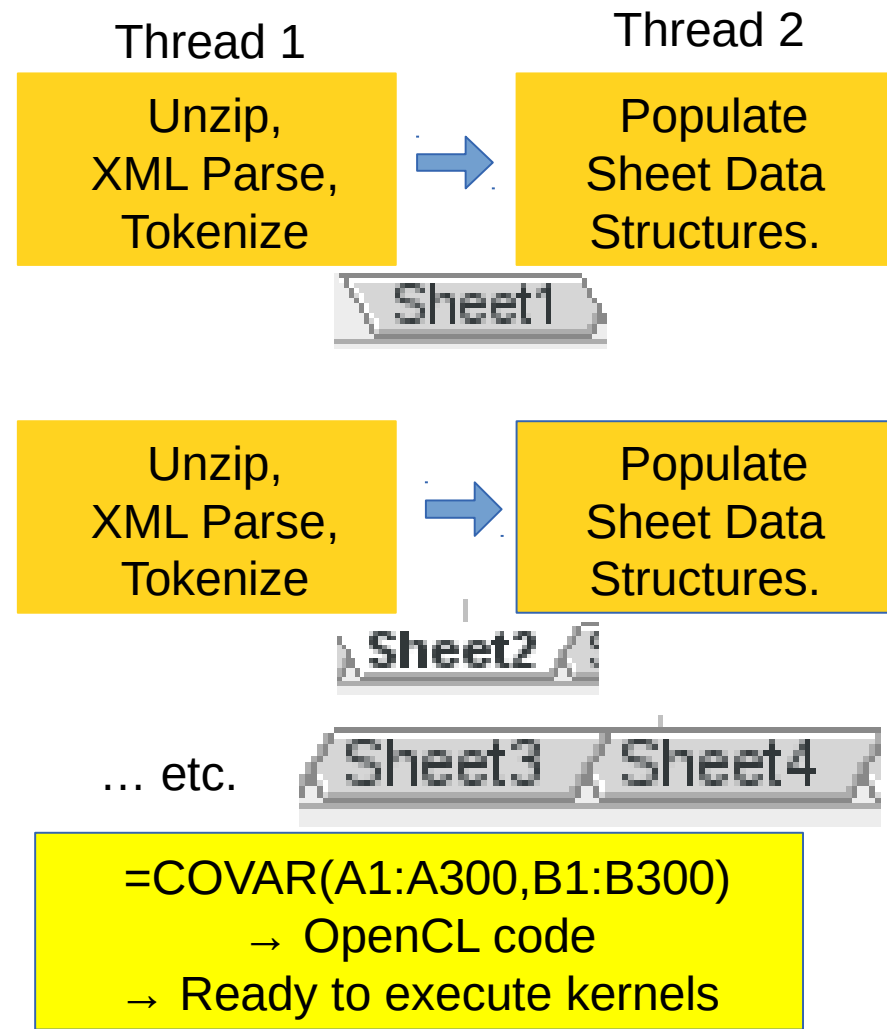
*Caolán McNamara (Red Hat) - for his incredible work here, and also Szymon Kłos, Michal Siedlaczek, **Olivier Hallot (EDX)**, Andras Timar (Collabora), Jan Holesovsky (Collabora), Katarina Behrens, Thomas Arnhold, Maxim Monastirsky, Manal Alhassoun, Palenik Mihály, and many others ...*

Parallelised XLSX loading

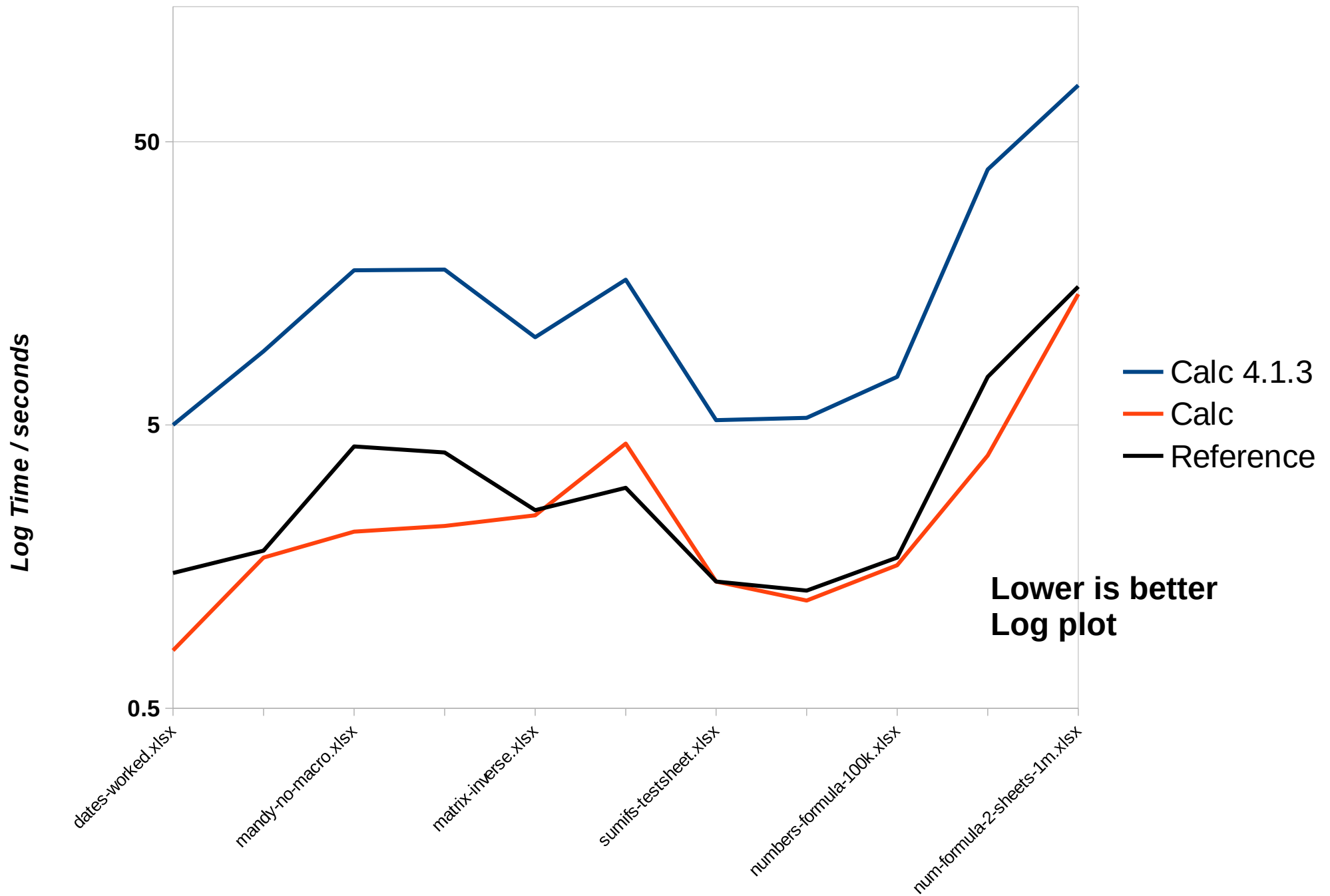
(boxes are threads).

- Split XML Parse & Sheet populate
- Parallelised Sheet Loading ...
- Parallel to GPU compilation

Progress bar thread



Wall-clock time to load set of large XLSX spreadsheets: 8 thread Intel machine



Hardware Enablement



OpenCL

*“Make large spreadsheets calculate using **OpenCL** on the GPU”*

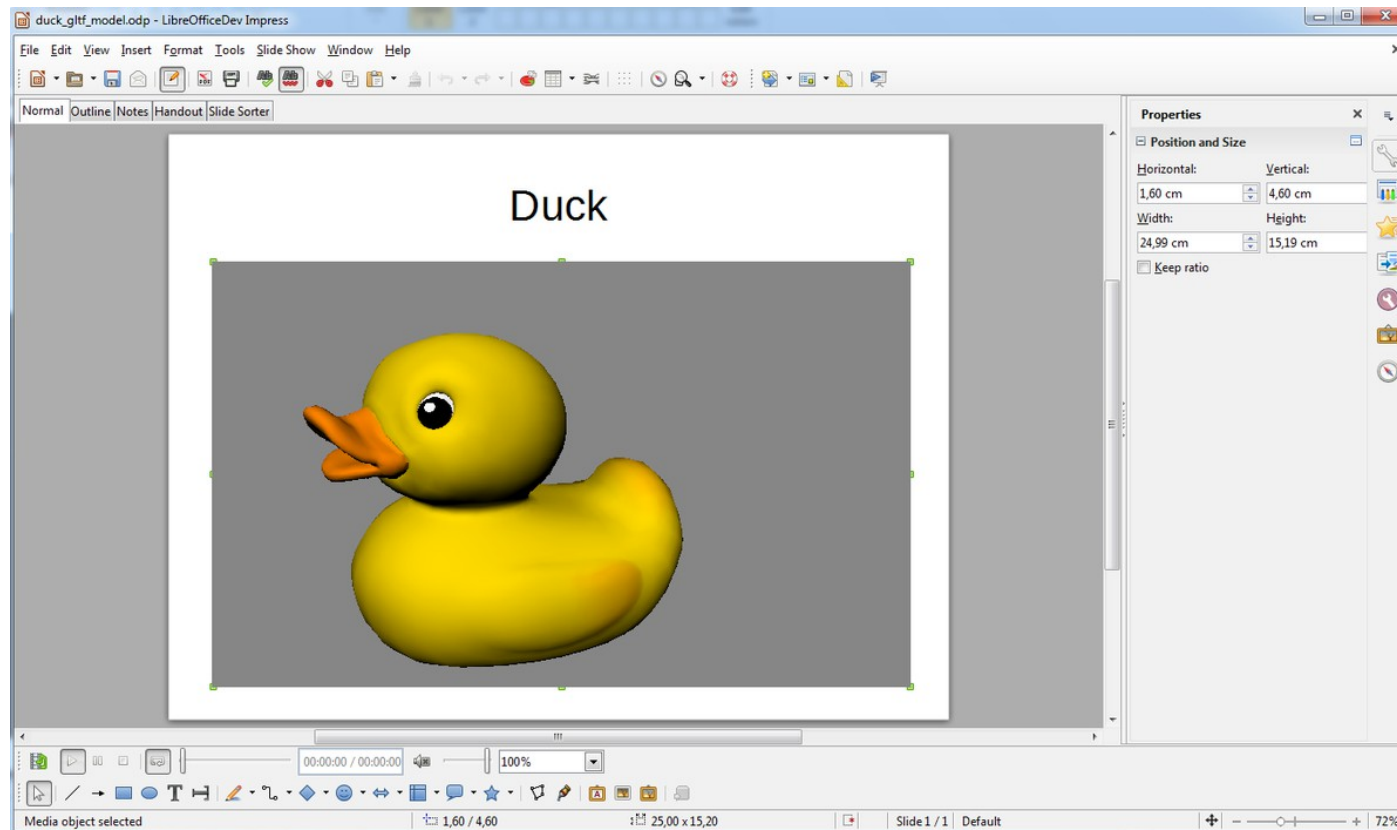
- Largest re-factor of Calc internals ever.
 - Hundreds of unit tests for calc created.
 - Exposing the internals of the Spreadsheet to your GPU – use the right Compute Unit for the job at hand.
 - **30x** → **500x** speedup for large sheets.
- Result: thanks to engineers from:



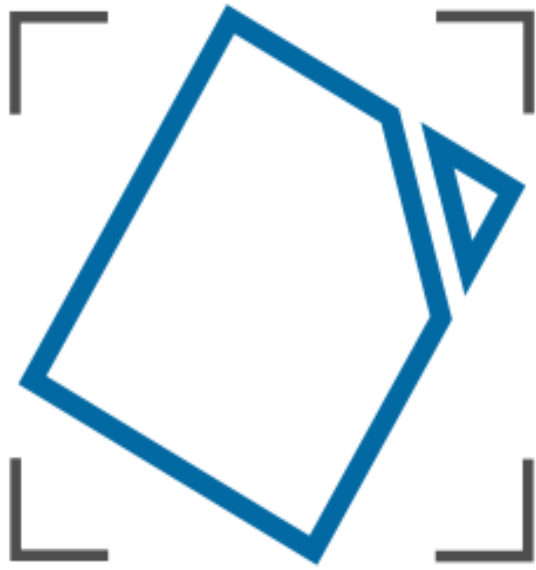
& Collabora

Using new Standards

- Importing, rendering & allow a walk-through of Khronos' Collada files:



Importing Non-standards

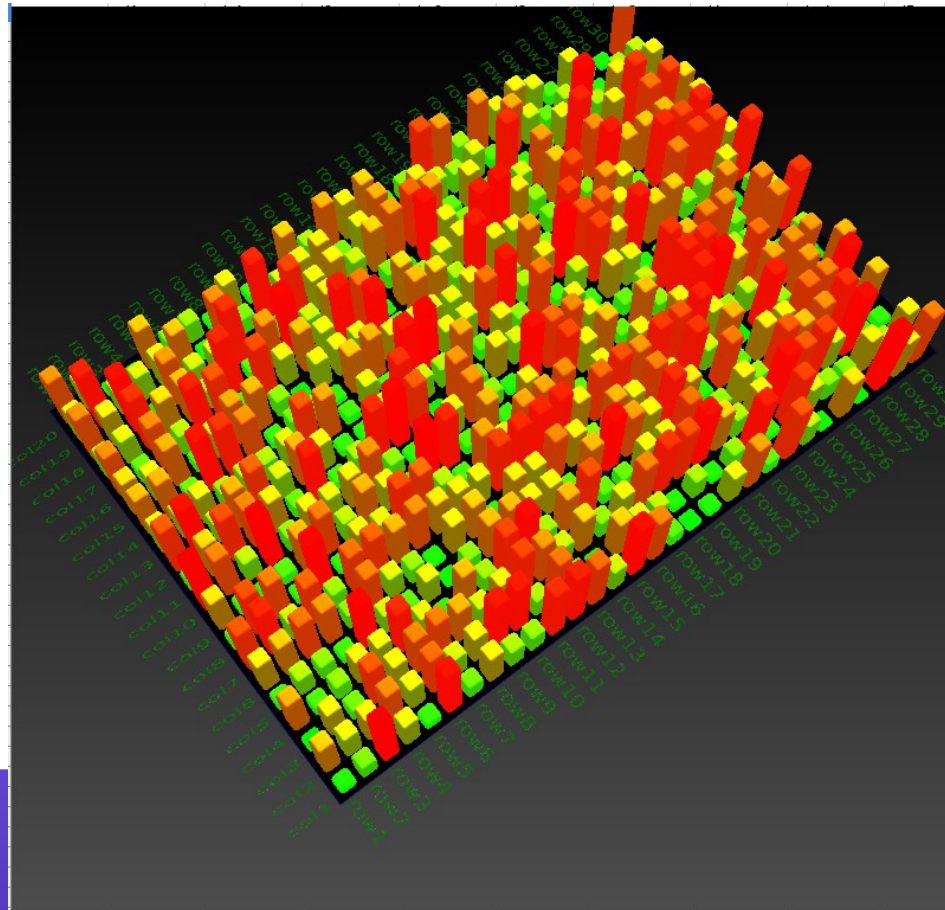


**Document
Liberation**

- A new project from April: **Document Liberation**
- Fits TDF's mission well.
- Home for re-usable, legacy un-documented proprietary file-formats
eg. Visio, Keynote, MS Publisher, MS Works, Corel Draw, Adobe Pagemaker...

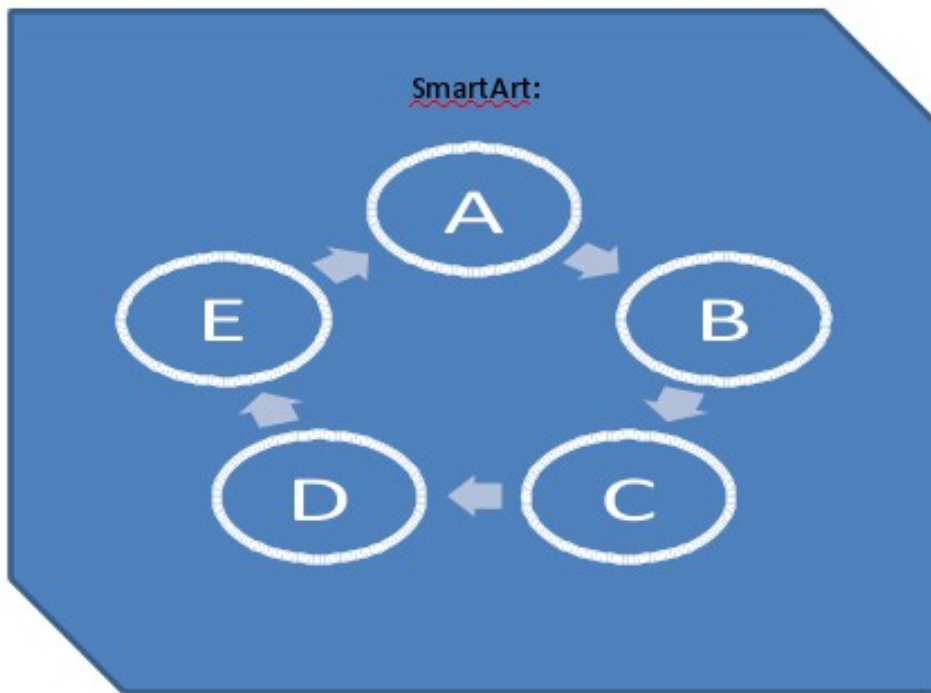
3D charting ...

- Streaming data through calc and get high FPS, attractive 3D chart rendering

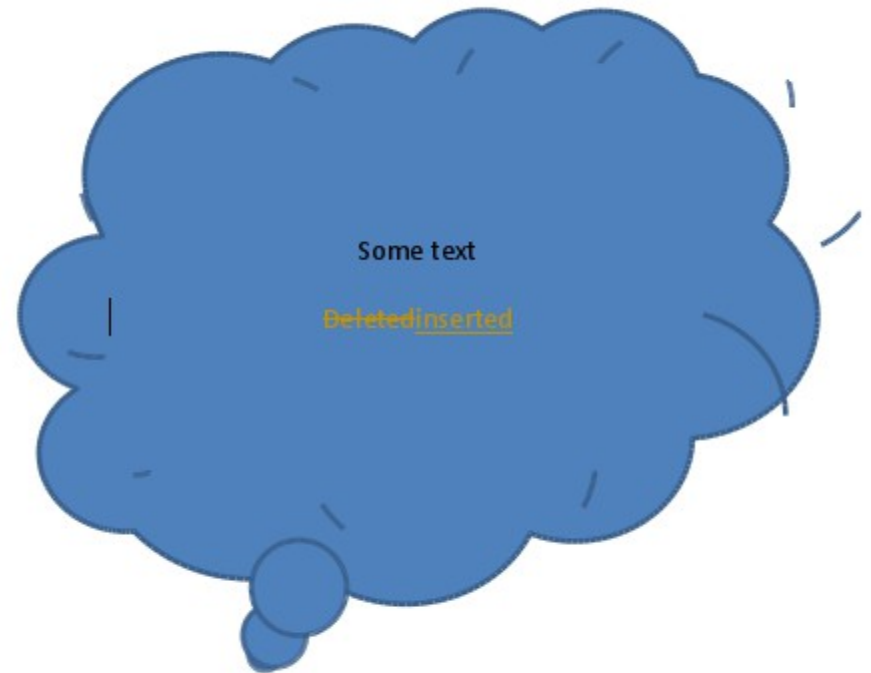


Writer / Text box shapes

“Fix Text Boxes !” - thanks to [CloudOn](#)



Embedded smart-art
object inside custom-shape



Red-lining in custom shape
text-boxes.

Fast Tiled Rendering in textures

Tablet display

*Large
Pre-rendered
area for fast
pan / zoom etc.*

LibreOffice / Android 4.x

A small table with an embedded image

This is a picture of our wedding with some nice text flow going on around it, of course you can edit a custom contour as well as having a crude ellipse, which makes for a very nice look. Below it is an alpha blended free-hand filled spline with drop shadow and gradient.



And chart of the week:

Persistent Sins

- Jealousy
- Pride
- Lust
- Idleness

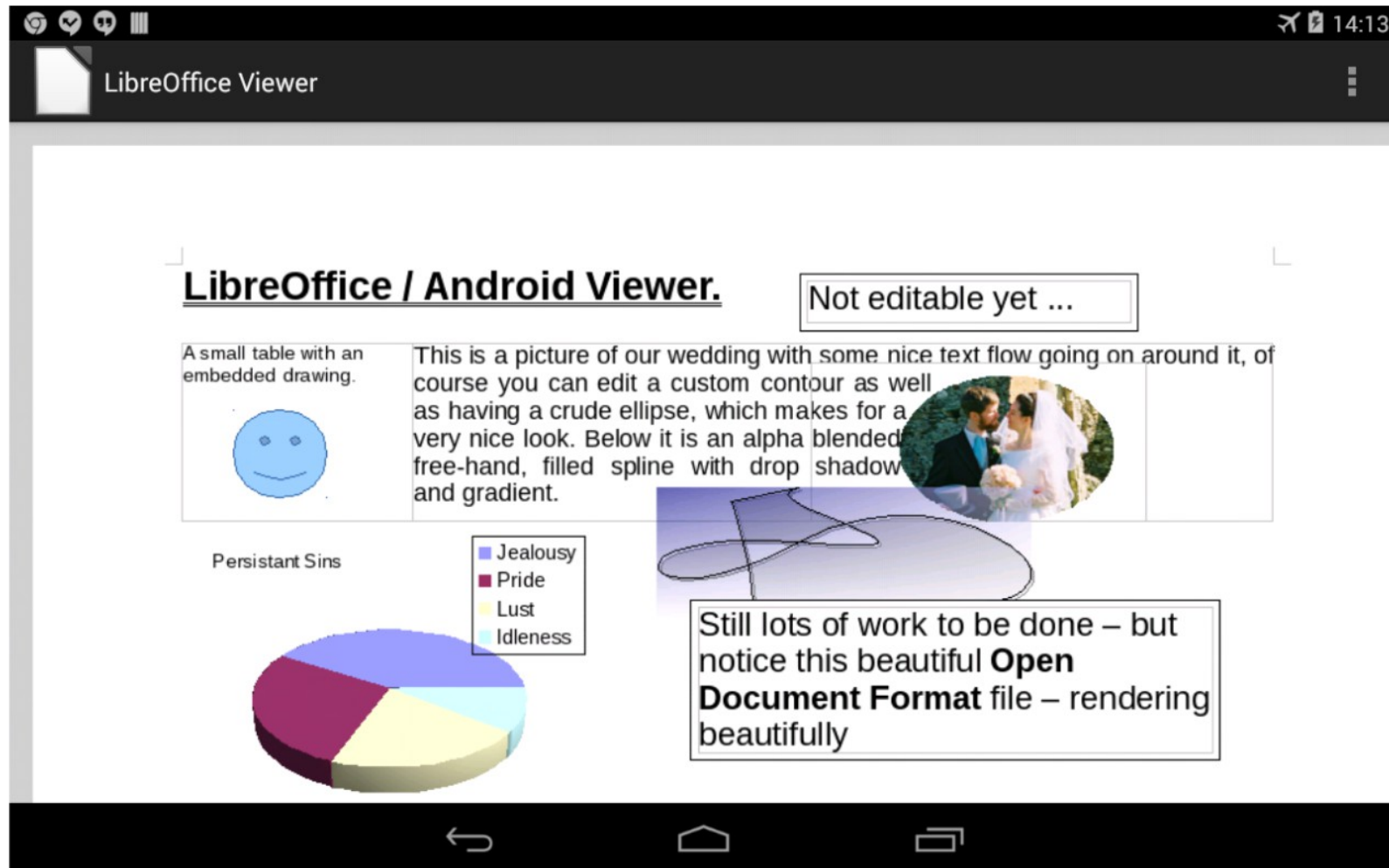


Other platforms: Android

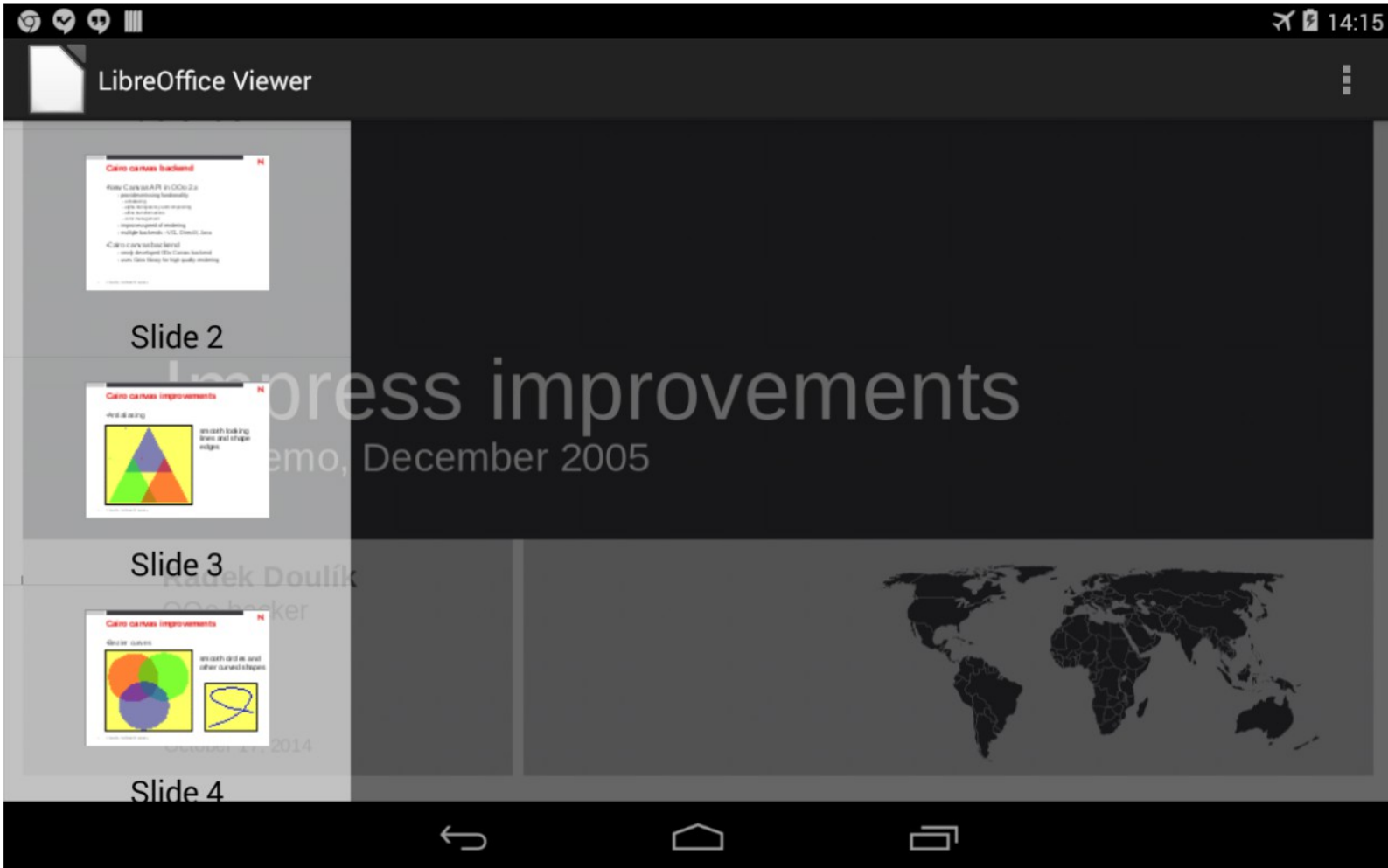
Work kindly funded by Smoose



Android: ODF documents:



Android: ODP presentations



Android: Spreadsheets ...



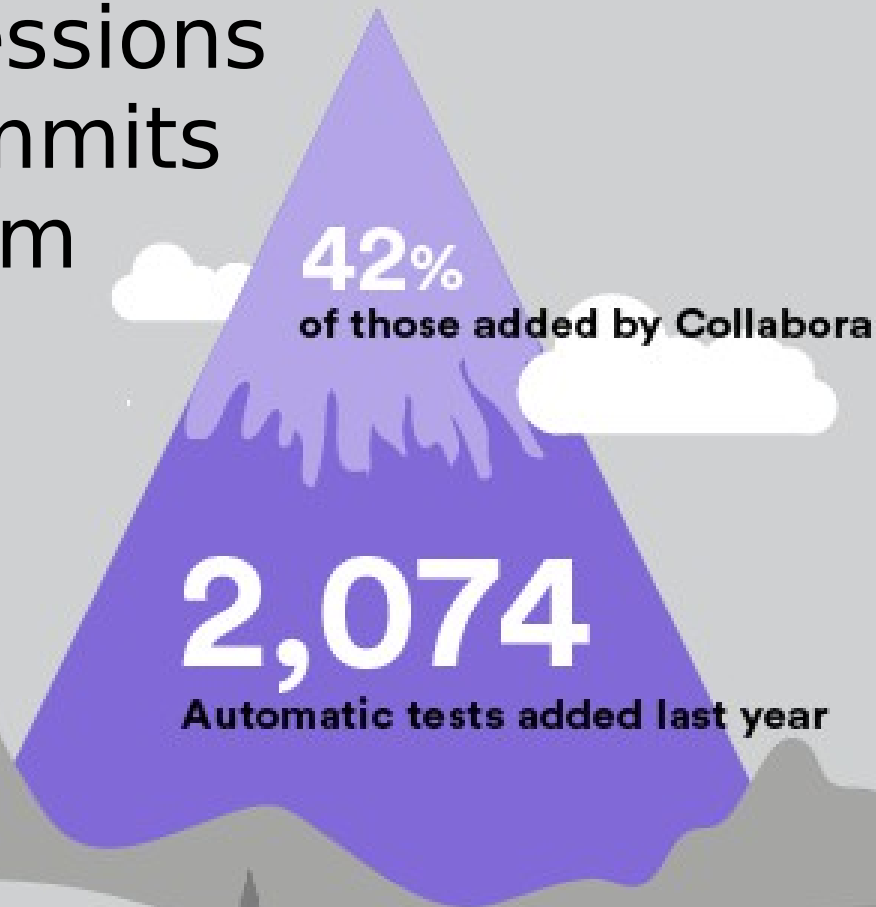
Measuring your PC ...

- PC work performance is measured with *LibreOffice* since PC Mark 8.2



Quality: Unit Tests ...

- Stopping regressions from ~14k commits per release from escaping into user's hands
- 550 test commits since 4.1



Quality: Document load/save/validate tests...

- 
- Systematic document
 - conversion testing,
 - Fixing, and improvement

55k

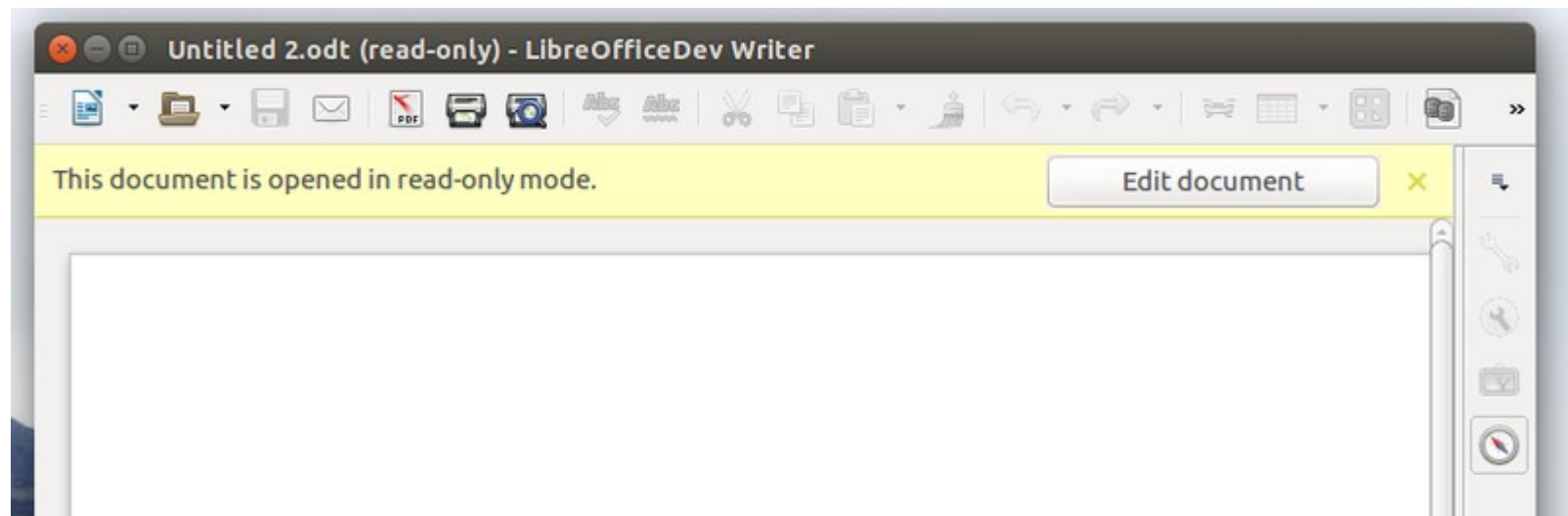
Complex documents
tested for each release

Quality: Performance Testing

- Profiling tinderbox publishing data
 - Thanks to Matus Kukan
- 40+ profiles built for first-start, startup, load, save of various key file types.
- Caught significant performance regressions before 4.3 – now fixed.

De-confusing read-only mode.

LibreOffice will now display an infobar to indicate visibly when a document is being opened in read-only mode.
(Samuel Mehrbrodt, Joren De Cuyper)



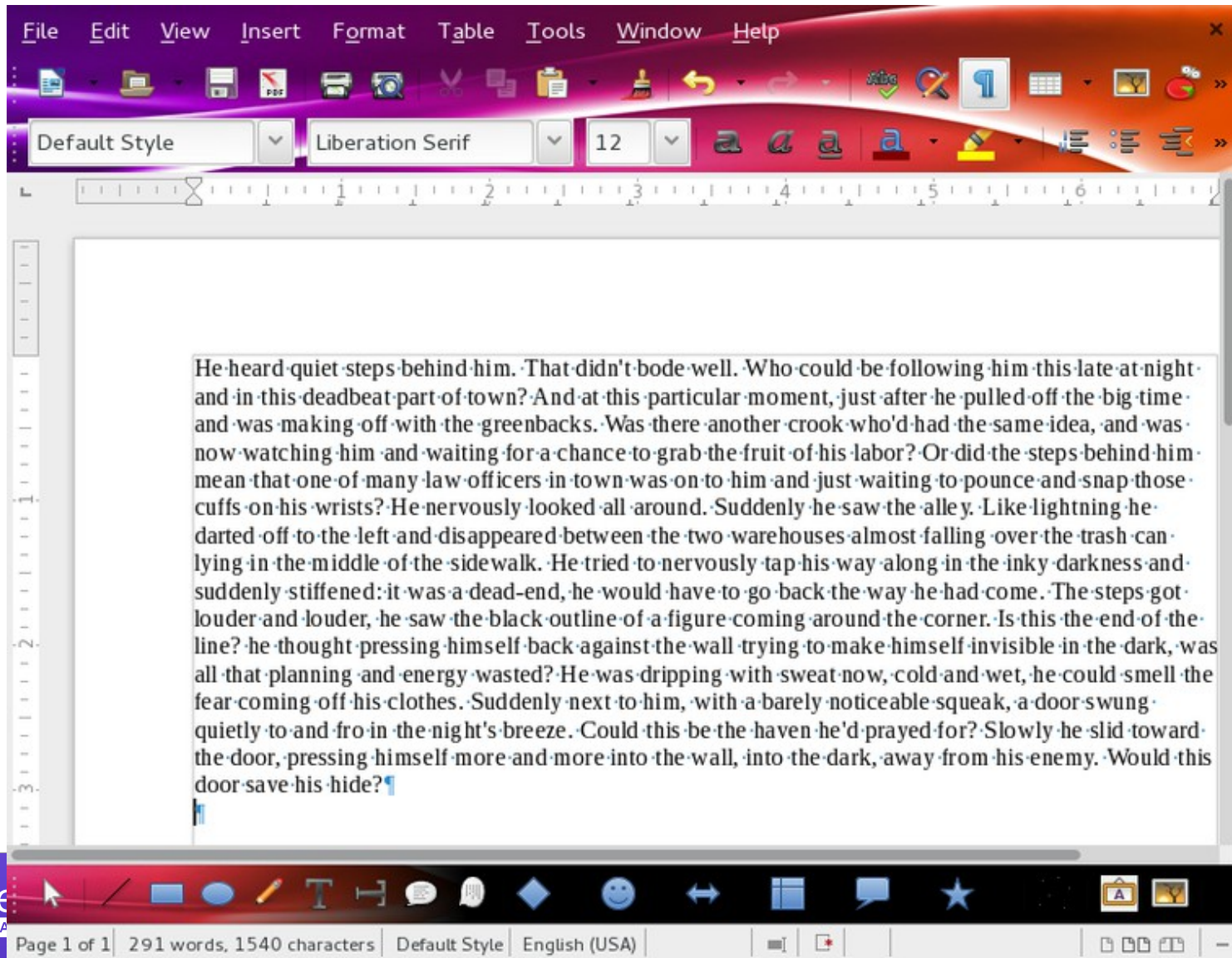
Making Prettification easier

Firefox theme browser. (Rachit Gupta, GSoC 2014)



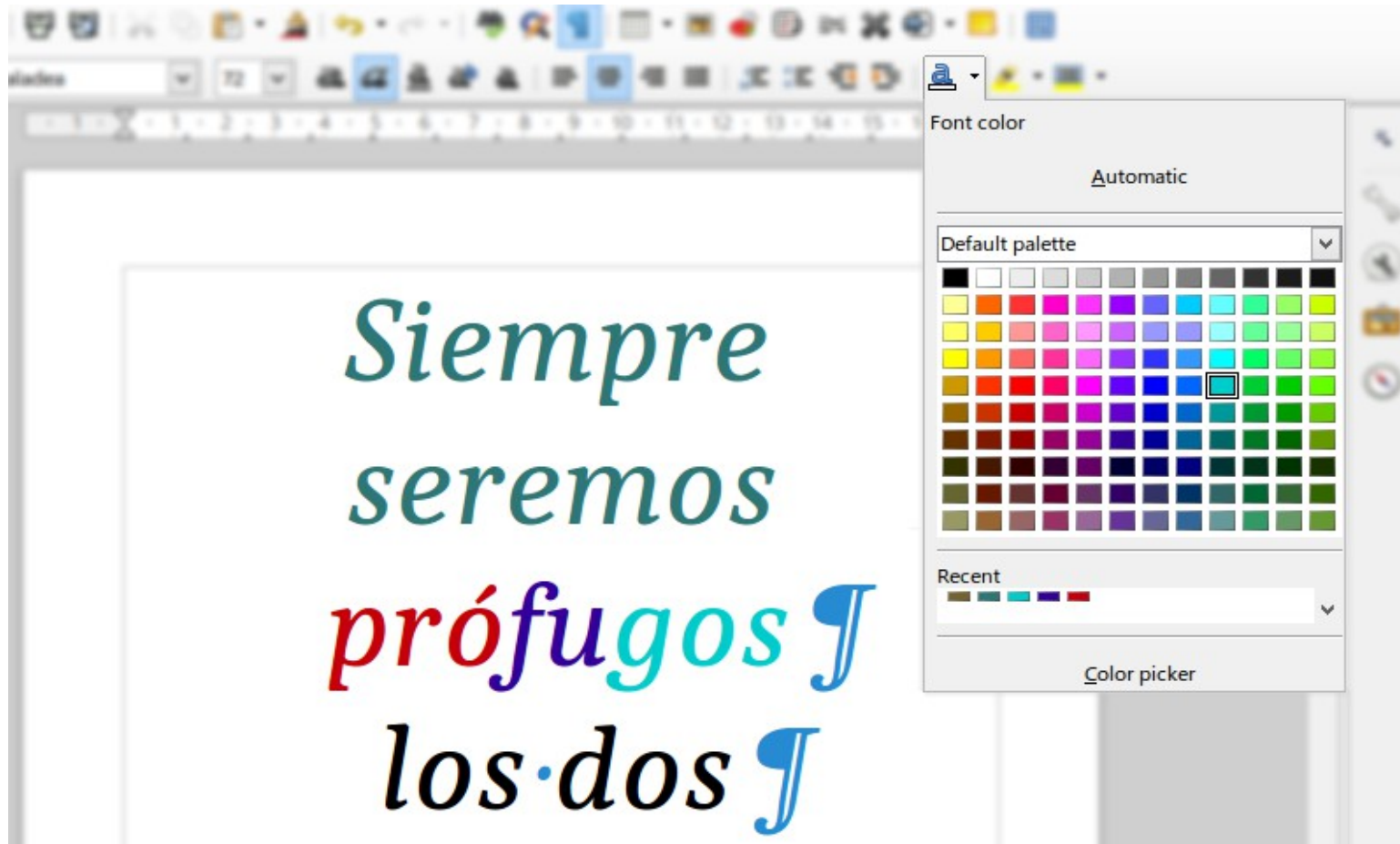
Prettier themes ...

Firefox themes now apply also to bottom toolbars. (Michael Jaumann, LHM)



Better Colour / Palette mgmt.

New Color selector (Krisztian Pinter, GSoC 2014)



UX / Design example:

Inclusion of new buttons in the Track Changes toolbar, along with a new set of icons. (*Yousuf 'Jay' Philips*)

- *Jay – a model of contribution ...*
 - Compatibility tests, to bug filing, to QA Triage, to UX work, to submitting patches in sub five months



The default behavior of the 'Accept Change' and 'Reject Change' commands has been changed so that it automatically jumps to the next change. (*Samuel Mehrbrodt*)

Becoming a core Developer ...

Why LibreOffice ?

- Some projects are beautiful and “done”
 - Little scope for radical improvement without tons of hard work
- Some projects have a tiny user-base of 5 guys
 - Little scope for glory & impact
- LibreOffice is none of these:
 - Easy to get involved via [Easy Hacks](#)
 - Leading you through your 1st contribution with code pointers etc.
 - Lots of scope for big improvements for 80m+ users
- Non-Hierarchical: lots of room at the top: ESC etc.
- Starting your 'own thing' is ultra lame & lonely.

Make a difference ...

- LibreOffice is a big project
 - But the teams are remarkably small.
 - Easy to make your mark.
 - Marcos Paulo de Souza (from Brazil)
 - A big impact on 'Math' – equation editor.
 - We're a friendly bunch.
 - Great prep. For Google Summer of Code
- Remarkably few people do much of the work in the world ...
 - You should be one of them & see the world ...

3x students: an example

Slide 3 of 12
5 minutes remaining

Slide 3 of 12
5 minutes remaining

Мышление

1

2

3

4

5

6

7

8

9

10

11

12

Рефлекторная деятельность мозга

Рефлекторная деятельность мозга

Andrzej Hunt & Artur Dryomov

Android

iOS

Carrier 9:10 PM

End Siqi Liu

PARIS2011 CONFERENCE
12th-15th October

Conference Presentation Template

LibreOffice Design Team
Version 2011-08-16 (Production)

1/5

Lecturer's Notes

I'm not sure if I'm missing something but what should be a simple task just doesn't want to work. I'm trying to add a drop shadow to a UIView in iOS 6. I'm using storyboards and auto layout. I'm drawing the

Previous Pointer Next

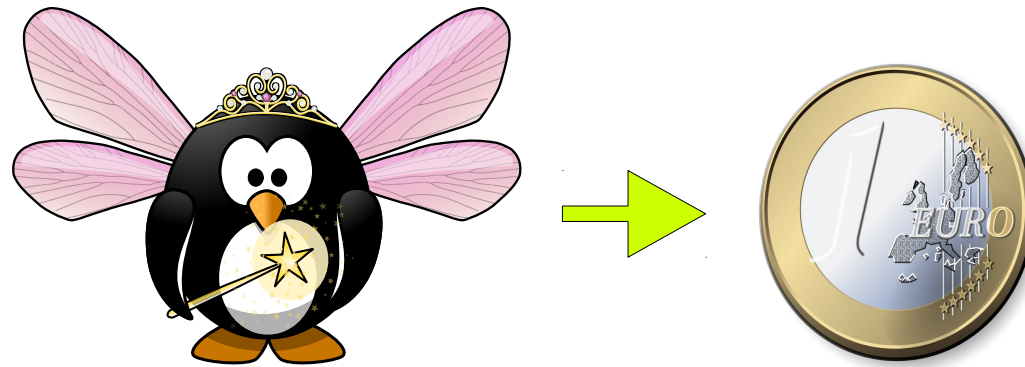
LibreOffice

Economics 101:

do it yourself;
or get someone
else to

A startling and crucial realisation

TINMF: There Is No Money Fairy



- *Some projects have them: Firefox, Ubuntu*
- So – there is no big pool of idle developers to fix your issue, urgently for you – right now !
- But what about The Document Foundation (TDF)

TDF Employees ...



Florian Effenberger
Executive Director



Christian Lohmaier
Release Engineer



Italo Vignoli
Certification



Alex Werner
Sysadmin



Robinson Tryon
QA



Sophie Gautier
*Admin, NLP,
Certification etc.*

No Developers

Some advice from TDF

*"The Document Foundation **encourages** large organizations deploying LibreOffice to do so in conjunction with a **support partner**, who can carefully assess specific requirements, help **manage migration** and **provide bespoke** fixes for identified issues. Purchasing LibreOffice support from a TDF partner also provides enterprises with an indirect means to **contribute financially** to the project, thereby **funding its development**, improving its stability, and accelerating its growth."
*cf. release-notes**

How not to do it ...

To: security@documentfoundation.org

Subject: [tdf-security] how to recover this libre office corrupted file ?

We have a big problem, in our business, many documents, created with libre office v 4.2.2 results corrupted, There is a tool to recover files ?

Here is a file that we want to recover (see email attachment)

Can you help us ?

Thank you

IT R&D – Manager

- **Diagnosis:**

- Wrong E-mail list (security bug reporting)
- User is using the wrong (too 'fresh') version of LibreOffice for an enterprise.
- Users cannot expect free community support to their timeline ...
- A rare experience – but it happens ...

Entitlement Culture

- People argue that someone else should pay for them:
 - Where is my service ?
 - Where is my training ?
 - Where is my free support ?
 - E-mail & phone & bugzilla !
 - *“We pay in bug reports”*
 - Why is my bug not fixed ?
 - Real complaints yesterday:
“Why should I pay for badges ?” Cost: sub \$1 ...



And its antidote ...

- I went to a **Charitable Boarding School** :
- On-leaving; we were given this charge:
*"I charge you **never** to **forget** the **great benefits** that you **have received** in this place, and in time to come according to your means, to do all that you can to **enable others** to enjoy the same advantage ...*
 - We do a lot to improve LibreOffice for all
 - how about you ?

Mitigating Interoperability Issues

Deployment: worst practise



First segment the users



Power users

Normal users



OOXML



The problem

Deployment: best practise



First identify problem areas.



Some users have over-complex macros / integrations and can't (yet) migrate.

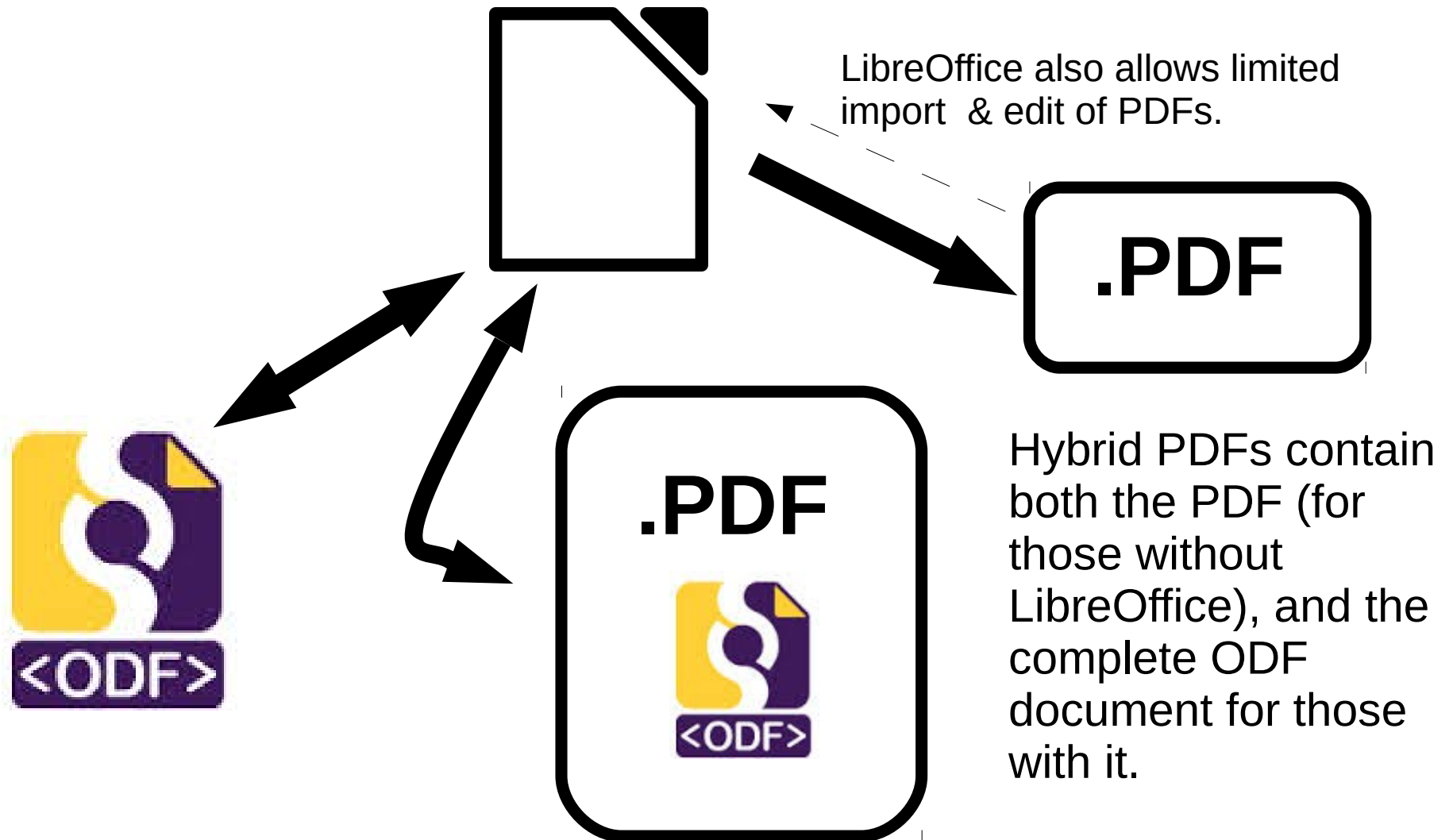
Everyone installs LibreOffice,
And use high fidelity ODF
document interchange.
Cleanup minor document import
issues once.

Power users share ODF
documents externally, and
use Microsoft Office for the
remaining tough-nut
documents.

MS

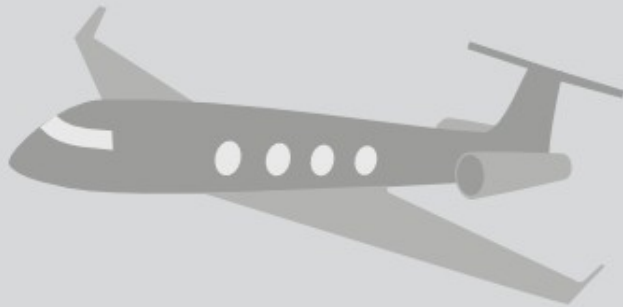
LibreOffice

Hybrid PDF



Reaching Enterprises

- There is a complete commercial support solution for you in Brazil
- There is nothing stopping you deploying LibreOffice today.



Commercial support in

21
countries



Conclusions

- LibreOffice is under development
 - Progress is fast
 - We need your help ...
 - Become part of an exciting story that is still at the beginning: our best days are ahead of us ...
 - Lots of opportunities to contribute ...
 - See me or Olivier / Eliane / visit our booth at the end
- Thanks to all who support us in the Free Software Community – we can't do it without you.
- Thanks to all who engage constructively in the ecosystem to support and fund our work.

Oh, that my words were recorded, that they were written on a scroll, that they were inscribed with an iron tool on lead, or engraved in rock for ever! I know that my Redeemer lives, and that in the end he will stand upon the earth. And though this body has been destroyed yet in my flesh I will see God, I myself will see him, with my own eyes - I and not another. How my heart yearns within me. - Job 19: 23-27