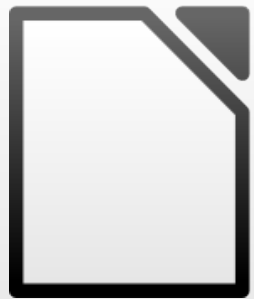


Liberating Open Office development



LibreOffice
The Document Foundation

Or – How we will fix your office suite

Michael Meeks

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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*



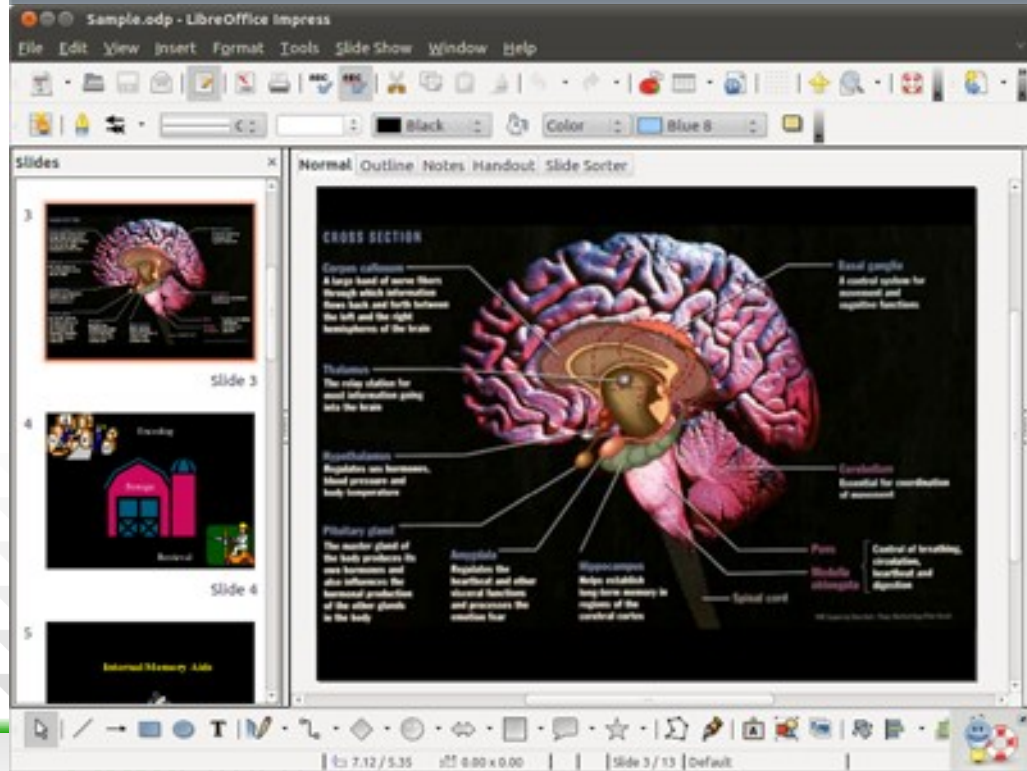
Overview & disclaimer ...

- I am not speaking for the Document Foundation
 - These views are mine, but you're welcome to borrow them.
- LibreOffice is better, and fun too
 - How is it going ?
 - What are we doing ?
 - Progress so far
 - Release process
- Check the license applies to **everyone**
- LibreOffice appreciates your help
 - and/or ways to get involved
- Conclusions

What / Why of LibreOffice

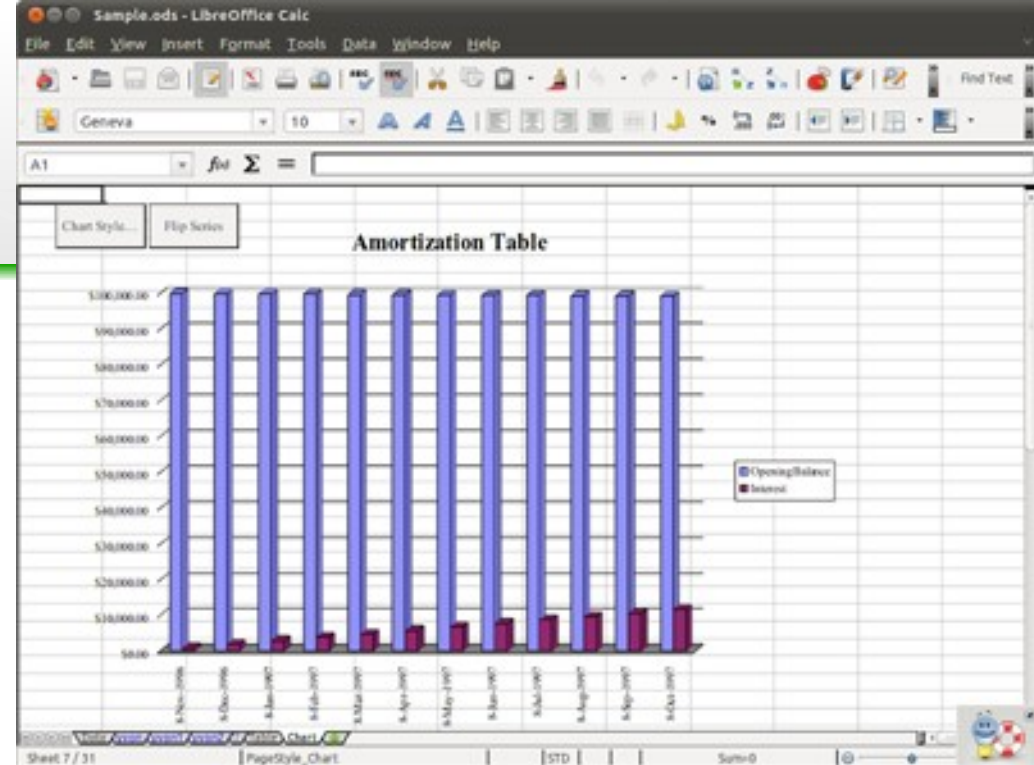


	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	WPC	Here	Battle						Losses	Transports (based on logistics)						Total Resources	Food	Lumber	Stone	Iron
2		attack	Archery	6	7	8	9	10		0	2	4	6	8	10					
3			HR	4	5	6	8	9												
4	1	40		50	12	12	10	10	0	43	36	31	27	24	22	215,000	100,000	20,000	20,000	20,000
5		125																		
6	2	60		100	100	50	25	25	0	71	59	51	44	39	36	305,000	200,000	30,000	30,000	30,000
7	3	70		150	140	135	125	125	0	240	200	171	150	133	120	1,200,000	900,000	75,000	75,000	75,000
8		125				130	125	125												
9	4	70		300	275	225	200		0	452	377	323	283	251	224	2,260,000	1,600,000	120,000	120,000	120,000
10		125				250	225	200	0											
11	5	70		1,000	500	425			0	758	665	570	499	443	399	3,990,000	3,000,000	180,000	180,000	180,000
12		125				995	490	350												
13	6	100						3,000	275	1,040	867	743	650	578	520	5,200,000	4,000,000	200,000	200,000	200,000
14		7								900	750	643	563	500	450	4,500,000	3,000,000	500,000	500,000	500,000
15	8									2,280	1,900	1,629	1,425	1,267	1,140	11,400,000	8,000,000	800,000	800,000	800,000
16		9								3,370	2,808	2,407	2,108	1,872	1,685	18,850,000	14,000,000	550,000	550,000	550,000
17		10								4,460	3,717	3,186	2,788	2,478	2,230	22,300,000	18,000,000	600,000	600,000	600,000
18		HR																		
19																				
20																				
21																				
22																				
23																				
24																				
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27																				
28																				
29																				



project progresses. While change is both certain and required, it is important to note that any changes to the Project Plan will impact at least one of three critical success factors: Available Time, Available Resources (Financial, Personnel), or Project Quality. The decision by which to make modifications to the Project Plan (including project scope and resources) should be coordinated using the following process:

- Step 1:** As soon as a change which impacts project scope, schedule, staffing or spending is identified, the Project Manager will document the issue.
- Step 2:** The Project Manager will review the change and determine the associated impact to the project and will forward the issue, along with a recommendation, to the Steering Committee for review and decision.
- Step 3:** Upon receipt, the Steering Committee should reach a consensus opinion on whether to approve, reject or modify the request based upon the information contained within the project website, the Project Manager's recommendation and their own judgment. Should the Steering Committee be unable to reach consensus on the approval or denial of a change, the issue will be forwarded to the Project Sponsor, with a written summation of the issue, for ultimate resolution.
- Step 4:** If required under the decision matrix or due to a lack of consensus, the Project Sponsor shall review the issue(s) and render a final decision on the approval or denial of a change.
- Step 5:** Following an approval or denial (by the Steering Committee or



Sample.ods - LibreOffice Math

File Edit View Format Tools Window Help

Elements

- $\frac{a}{b}$ $\frac{a+b}{c}$ $f(x)$ Σa
- d e^x (t) $\frac{a}{b}$

$+$ $-$ \cdot $^$ $\sqrt{\quad}$ $\frac{\quad}{\quad}$ \rightarrow

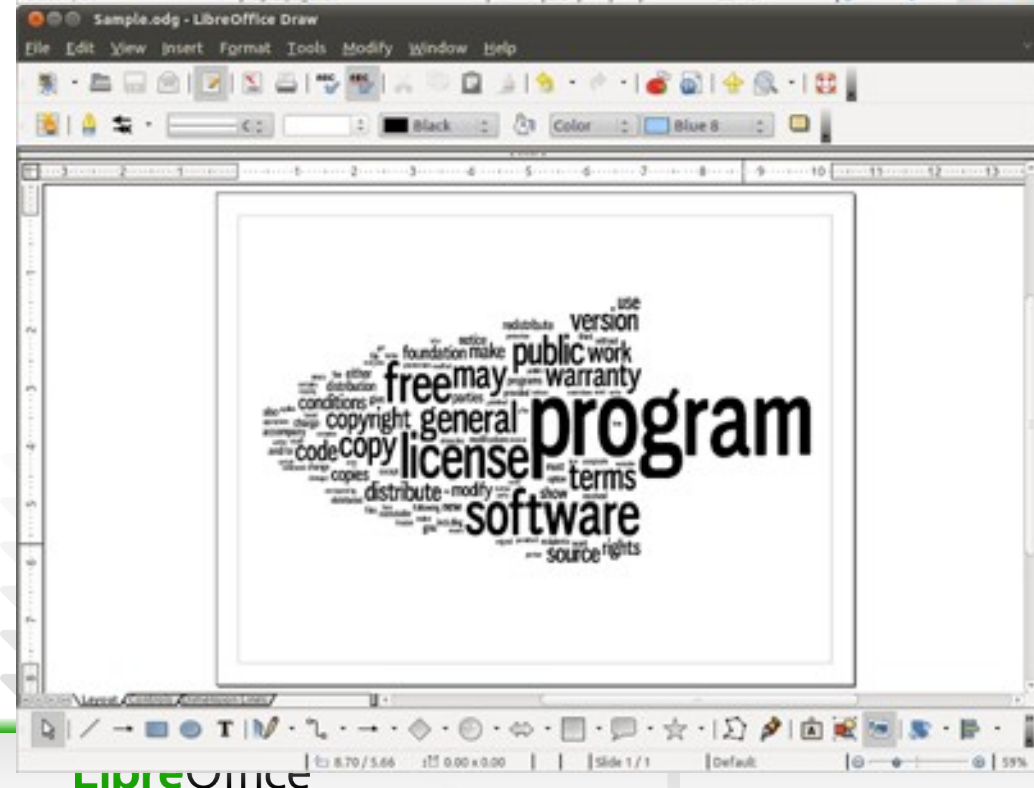
$a+b$ $a-b$ $a \cdot b$ a/b a/b

$a-b$ $\frac{a}{b}$ a/b a/b a/b

$a \cdot b$

$$\frac{a}{b} = \frac{b}{a+b}$$

(a) over (b) = (b) over (a + b)



Sample.ods - LibreOffice Impress

File Edit View Insert Format Tools Slide Show Window Help

4 Slides

Normal Outline Notes Handout Slide Sorter

- Q Fever
- Overview
- Organism
- The Org...
- History
- Slide 6
- Transmis...
- Slide 8
- Slide 9
- Epidemi...
- Slide 11
- Slide 12
- Q Fever L...
- Disease L...
- Human ...
- Acute In...
-
-
-
-

Tasks

- Master Pages
- Layouts
- Table Design
- Custom Animation

Modify effect

Add... Change...

Remove

Effect

Start

Property

Speed

First select the slide element and then click "Add..." to add an animation effect.

Change order: ↑ ↓

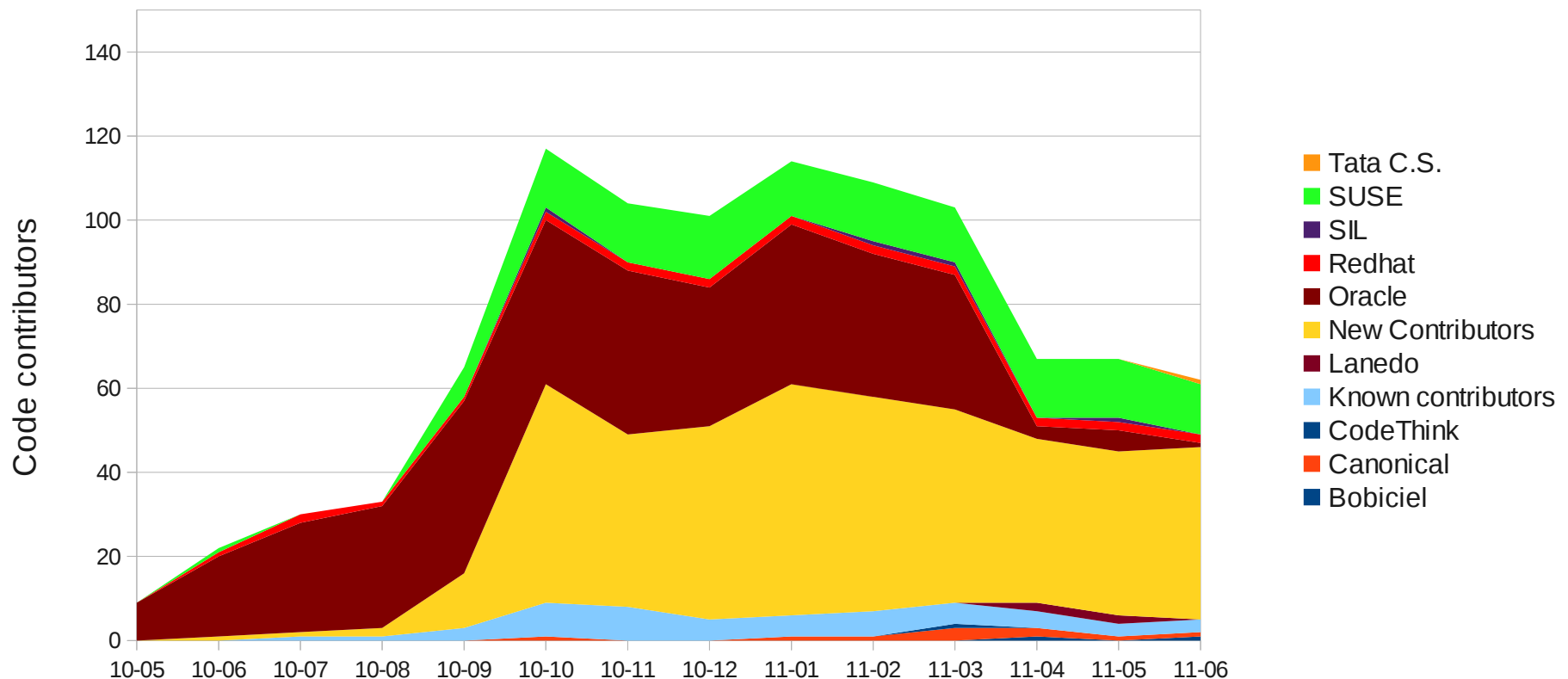
Slide Transition

What is LibreOffice / The Document Foundation

- ▼ Finally “doing it right”
 - ▼ vendor neutral, no code ownership aggregation
 - ▼ a real Free Software / hackers project
 - ▼ Volunteers + RedHat + Novell + Debian + Canonical + Google ...
 - ▼ **FSF** + OSI support, boycott + Novell support etc.
 - ▼ *Freedesktop* hosting
 - ▼ **LGPLv3+ / MPL for new code ...**
- ▼ An idea – whose time has finally come ...
 - ▼ a beautiful, Office suite we can be proud of (in due course) backed by a real, open community
- ▼ Shipping now on Windows, Mac, GNU / Linux, *BSD etc.
- ▼ ODF enables trivial migration with your data ...

11 months in: how is it going ? - extremely well

- ▶ 205+ entirely new code contributors with included patches
- ▶ 200+ active translators, for ~100 languages (in Pootle)
- ▶ Two stable branches: 3.3.3 and 3.4.2 – 7 stable releases in 10 months
 - ▶ Development continues apace: 3.5.0 due early Feb 2012



A taste of what we're doing:

- ▼ Translating the source code:

- ▼ 100k+ LOC of German comments, after 10 years of 'open'

- ▼ *Some virtually useless: (CUPS style)*

- ```
// Beschreibung: textuelle Beschreibung ermittel
String SwDocStyleSheet::GetDescription(SfxMapUnit eUnit)
```

- ▼ *Others somewhat more useful:*

- ```
|*      Wenn bereits ein passendes Format existiert, so wird dies  
|*      zurueckgeliefert.  
|* Ersterstellung      MA 22. Sep. 92  
|* Letzte Aenderung JP 08.05.98
```

- ▼ *And more that are useful (we think)*

- ▼ Fantastic “German comment detector” from Miklos

- ▼ Re-uses existing LO code for language detection :-)

- ▼ **Are you German ? can you read this ? ⇒ we need your skills !**

What are we doing ? #2

- ▼ Making it easy to contribute: we welcome change ...
 - ▼ Google search: *libreoffice easy hacks*
 - ▼ Post a patch to our (open) mailing list and discuss it
- ▼ Creating unit tests (run during build)
- ▼ Removing deprecated cruft:
 - ▼ VOS library (deprecated for a decade), OS/2 support, use c++ templates not macros, cppcheck bug fixing etc.
 - ▼ wasting fewer resources: icons duplication etc.
- ▼ ~done merging outstanding vendor patch-sets
- ▼ Smaller, faster release process:
 - ▼ A single 180Mb download (for Windows) with all langs
 - ▼ plus on-line help, (in place of a copy per lang)

An example in practise ...

▸ John Lee Castle

- arrives on list to help debug a (star)basic crash
- 2 days later – first set of 'warning' patches merged
- Sadly beaten to the word-count feature, but ...
- digs in bugzilla to find & 1 week later fixes Issue 76852:

Opened: Wed May 2 12:28:00 +0000 2007

Run this Basic macro:

```
Dim s as single
```

```
s = 999999
```

```
print s ' display : 999999
```

```
s = s+1
```

```
print s ' display : 1 ***** incorrect ***
```

```
s = s+1
```

```
print s ' display : 1.000001E6
```

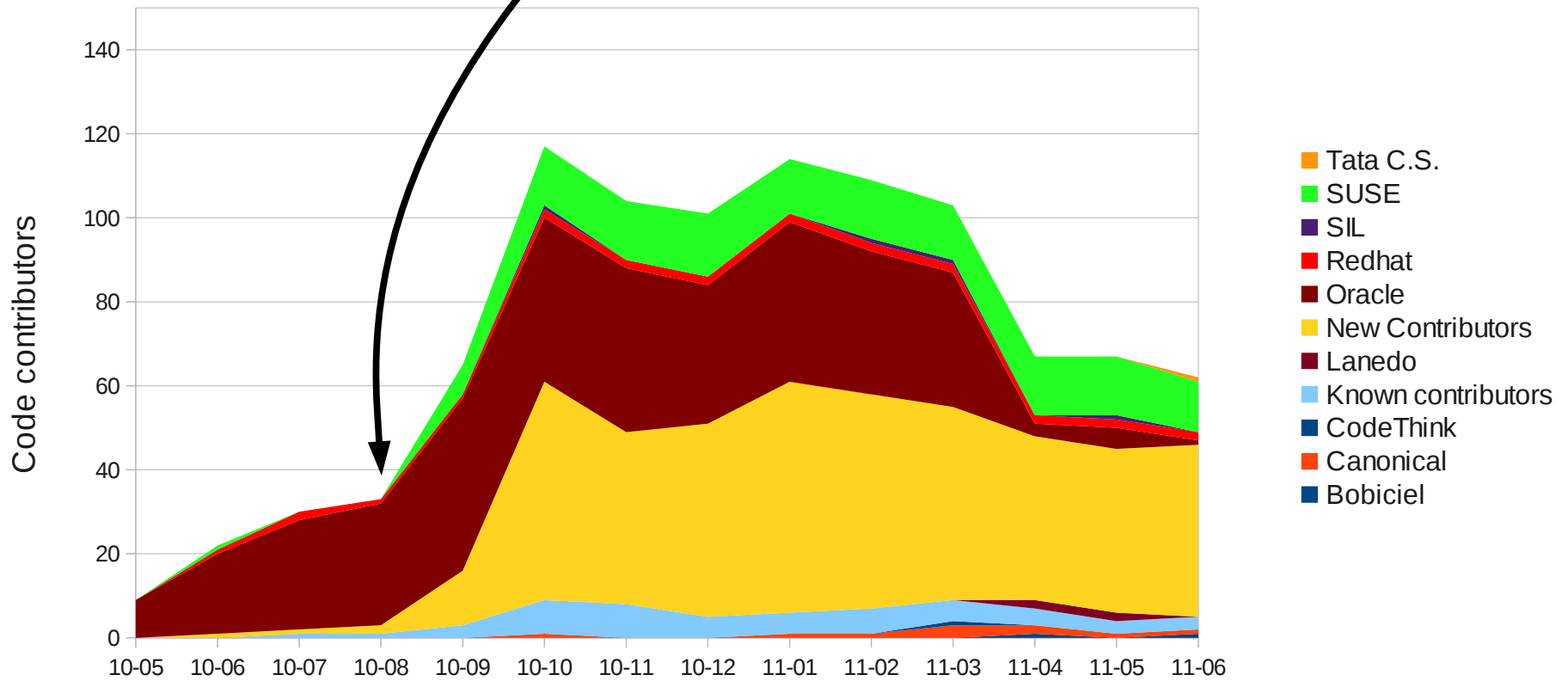
A one line fix !

What are others doing ?

- ▼ Oracle + IBM
 - ▼ Contributed OpenOffice.org : brand etc. to Apache
- ▼ Apache: (*a reasonable home for new projects ...*)
 - ▼ Announced intention June 1st
 - ▼ Agreed to form incubator project: June 13th
- ▼ Progress:
 - ▼ much promised code available soon ...
 - ▼ mailing list / web-site up / intense discussion ...
 - ▼ 70+ *committers*, some of whom have written code.
 - ▼ re-write copy-left bits, svn not git, abandon freedom lovers, reply-to-mangling, submit to 'mentoring' etc.

Spot the launch date ...

*Day #1 nearly same code
Is it just an 'easy hacks' page ?*





LibreOffice needs your help ...

Features, distinctive to LibreOffice ...

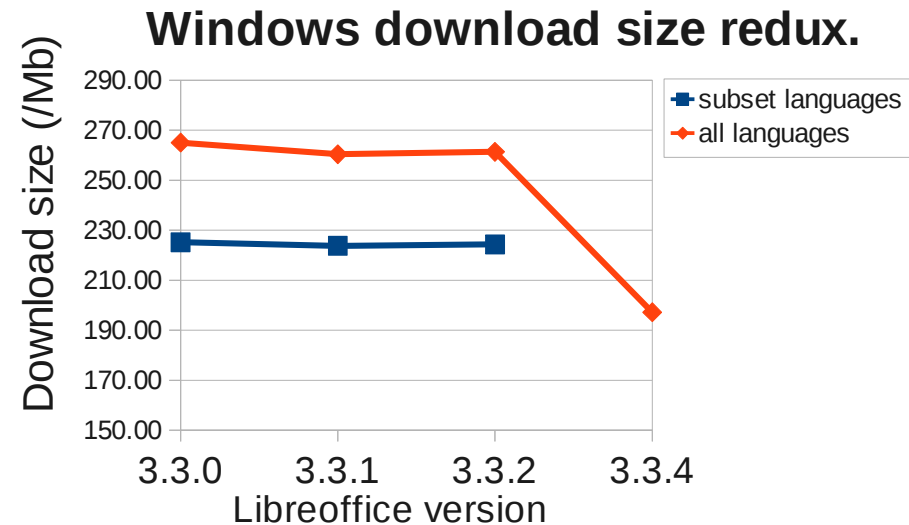
Migration – sadly much of the corporate world is infected with VBA ...

The screenshot shows the OpenOffice.org Calc application window titled "hypocycloid-demo - OpenOffice.org Calc". The interface includes a menu bar (File, Edit, View, Insert, Format, Tools, Data, Window, Help), a toolbar with various icons, and a status bar at the bottom. The main workspace displays a plot of a hypocycloid, a complex geometric shape with three-fold symmetry, rendered in green lines on a black background. To the left of the plot is a control panel with buttons for "Next >", "< Previous", "More Info", "Random", and "Add to Favorites". Below these buttons are three input fields for parameters: "a: 243", "b: 973", and "t: 963". To the right of the plot is a data table with 20 rows of numerical values. The status bar at the bottom shows "Sheet 2 / 3", "PageStyle_Chart", "125%", "STD", and "Sum=0".

242.82
704.31
459.64
562.70
834.68
750.31
546.95
498.77
357.19
829.18
116.37
29.14
456.90
425.81
804.95
217.15
110.68
656.53
847.51
882.17
427.04
518.03
607.40
695.72
986.09
938.55
459.64
185.40
99.41
705.55
50.05
575.87
824.58
771.60
650.00

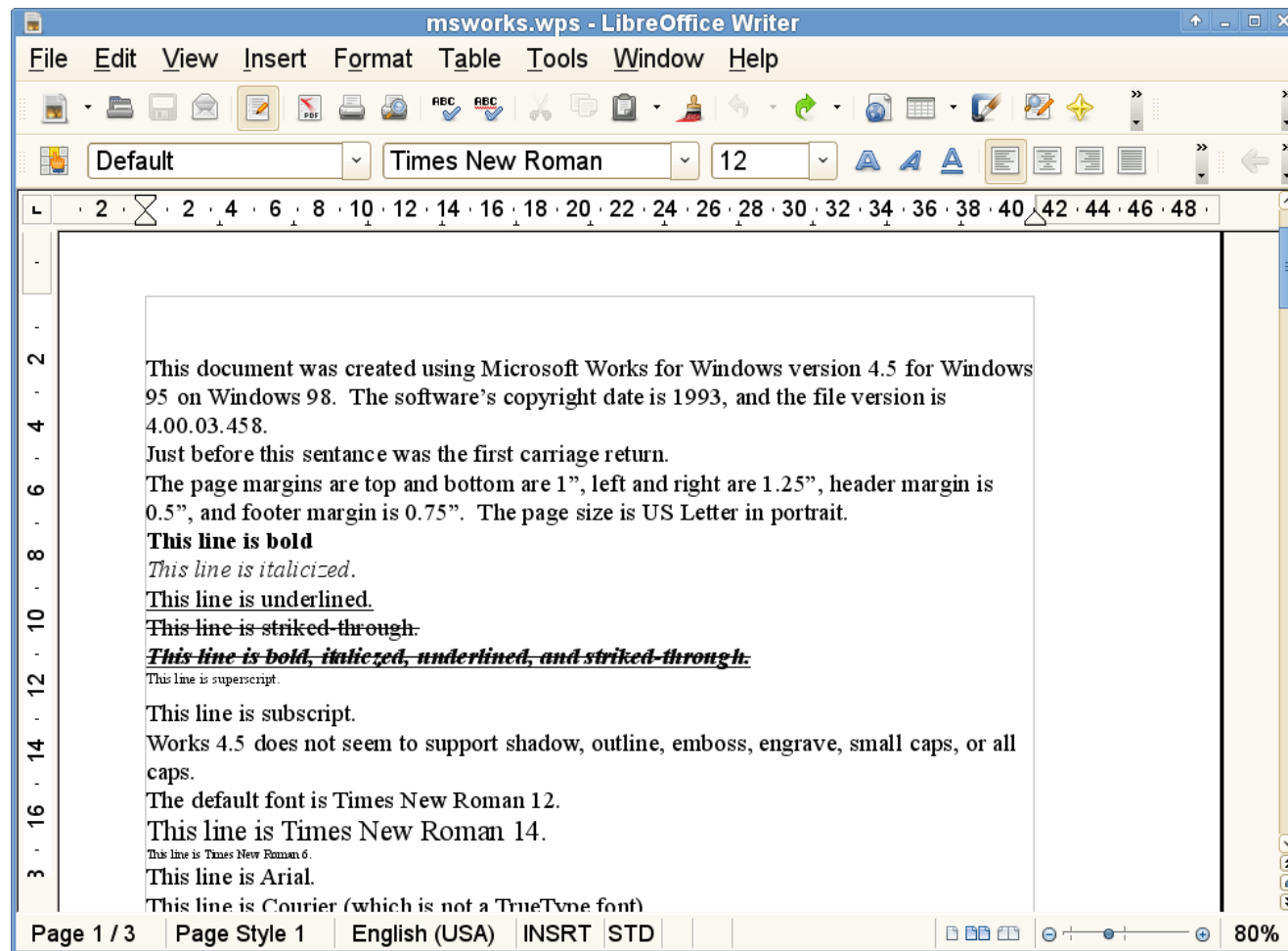
Can you: mirror / translate ...

- ▶ Mirrors: always room for more...
 - ▶ mirrors@documentfoundation.org
 - ▶ We are small: sub 10Gb per release vs. 76Gb
 - ▶ and getting smaller
 - ▶ free up 65Gb on your server ?
 - ▶ We use (the excellent) mirrorbrain
- ▶ Translators: l10n@libreoffice.org
 - ▶ we have a no-language-favoritism policy
 - ▶ we bundle all active and completeish translations
 - ▶ quick release: see the result of your labour in your own lifetime



Copy-left Features, distinctive to LibreOffice ... #5

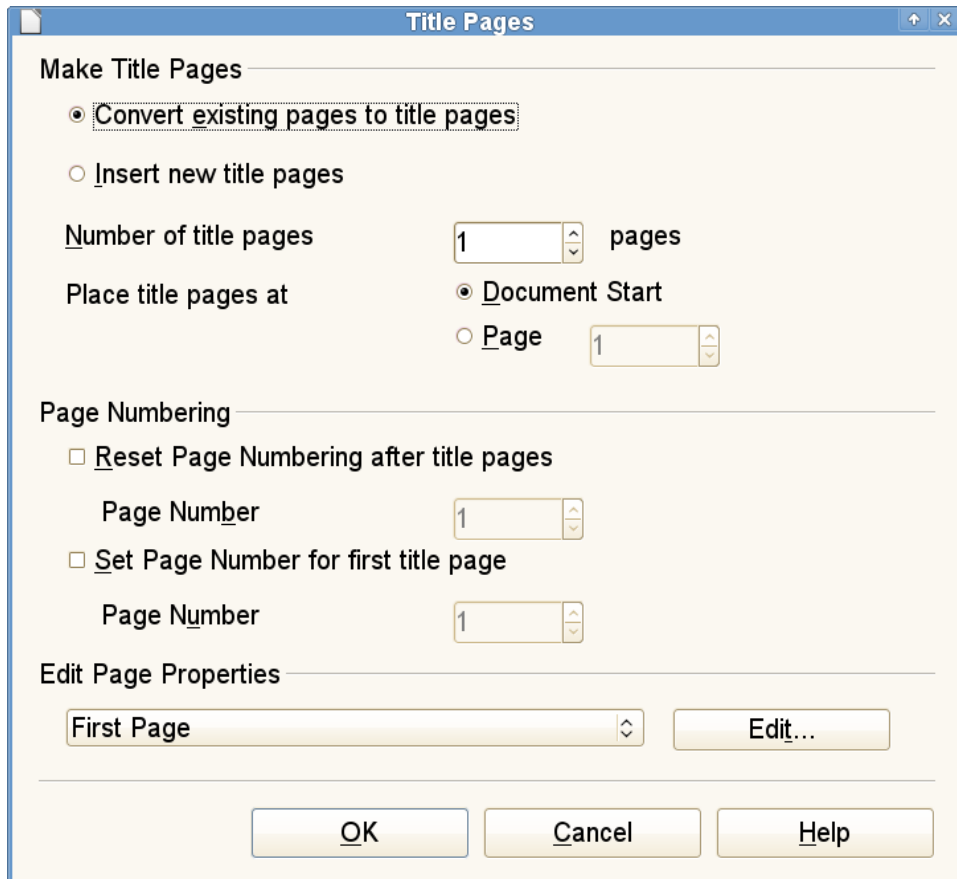
Import your legacy Microsoft Works files – and move to ODF ...



Can you: hack ? libreoffice@lists.freedesktop.org

- ▶ Ultra elite programming skill not necessary
 - ▶ Plenty of entry level problems; cf. [Easy Hacks](#) page
- ▶ A language you can help with is there:
 - ▶ C, C++, Java, Python, Perl, Basic, shell, XSLT, Web* ...
- ▶ Tons of new simple tasks, and heavy lifting too
- ▶ Lots of easy hacks: (a tiny sample):
 - ▶ removing pointless comments
 - ▶ porting from Java → python and Java → C++
 - ▶ kill 3 of 4 duplicate base64 impls.
 - ▶ remove dead / un-called code
 - ▶ fix cppcheck warnings
 - ▶ remove obsolete macros
 - ▶ remove thousands of multi-second sleeps from QA tooling
 - ▶ help thread the spreadsheet recalculation engine
 - ▶ write unit tests
 - ▶ stop battery sapping timer leaks
 - ▶ improve localisation tooling

New Features, distinctive to LibreOffice ... #?



- ▶ Styles are a wonderful, clean way of document markup
- ▶ Getting a title page and correct numbering right, was a top writer UI disaster – but then ...

More easy hacks, and something for Germans

▸ Easy Hacks

- add a character count (without spaces)
- find and contribute old Word 1 to Word 5 documents
- run copy and paste detector and act on results
 - and many many more ...

▸ **For Germans ...** *(even with no prior programming experience)*

- We have major source code translation problems

// CebIT Hack – muss noch optimiert werden!

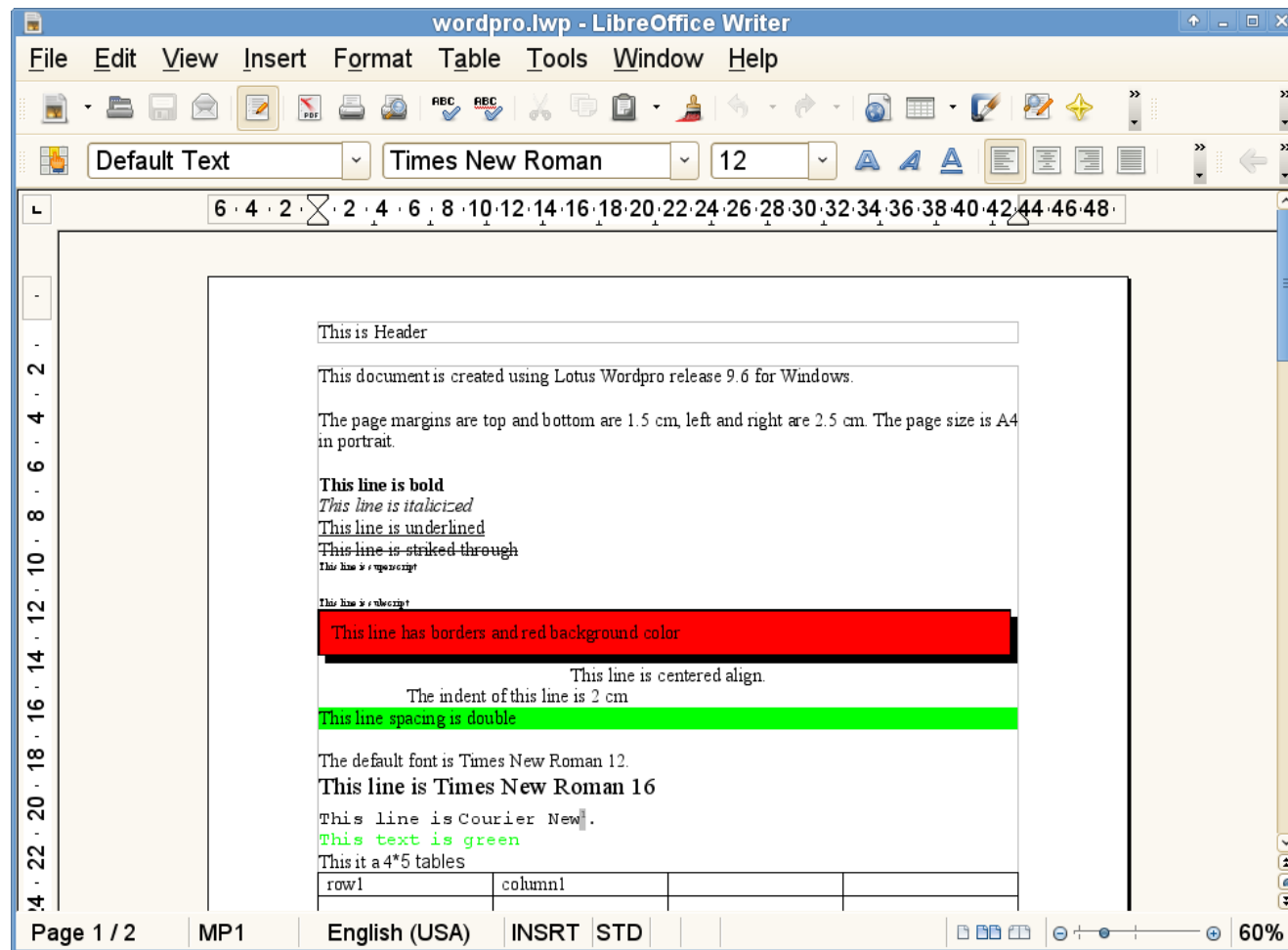
// Wenn Sie das lesen koennen, dann haben Sie eine Waschmaschine gewonnen!

// Alles hat ein ende, nur die wurst hat zwei – cf. impl_getMehrWurst

// Manta-Hack:

Features, distinctive to LibreOffice ... (for now)

Import your legacy Lotus Word Pro files – and move to ODF ...

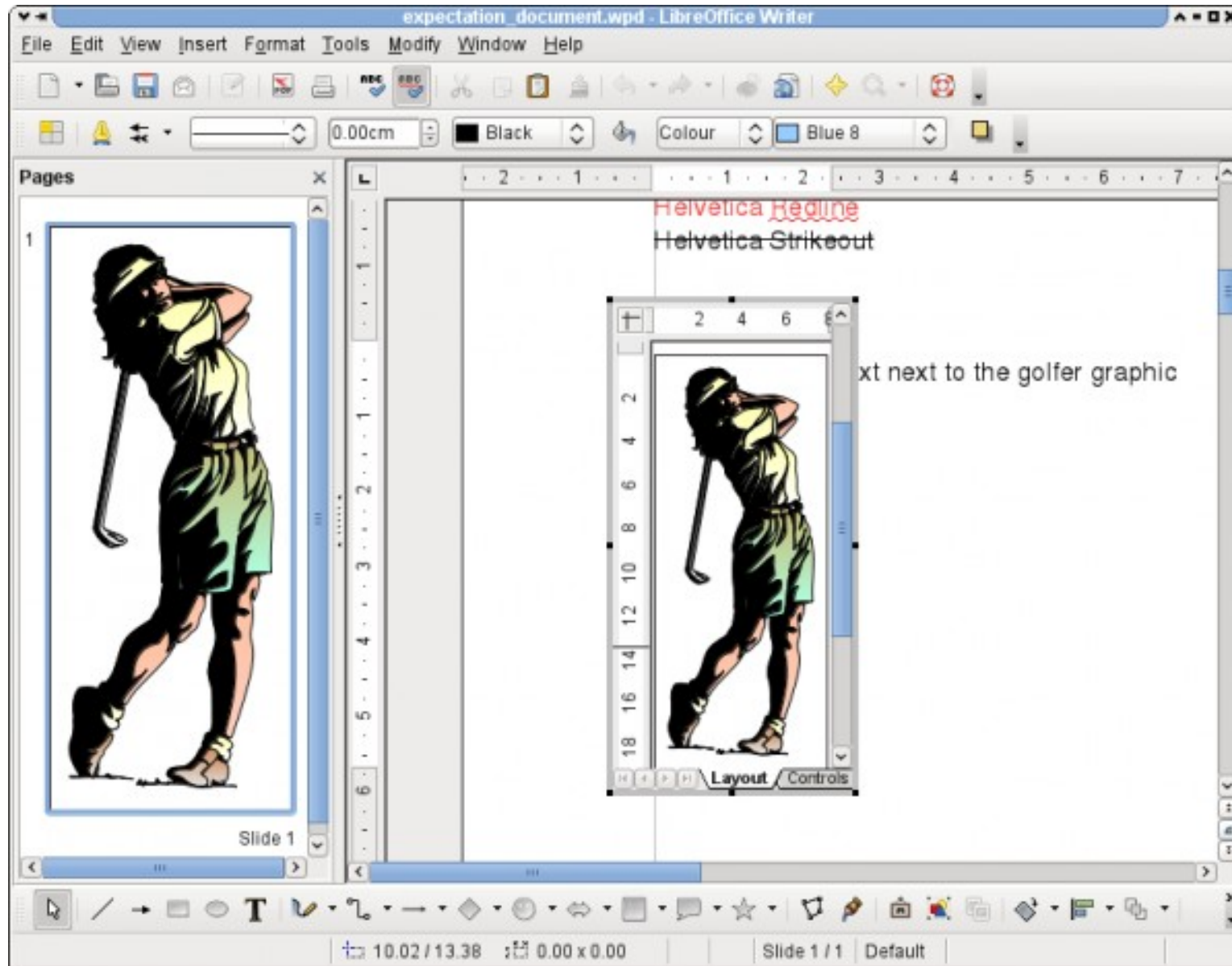


Are you: A user ? room for you too ...

- File good bugs
 - Clear description; not - *it doesn't work*
 - Things that are obvious to you are not to everyone
 - We have to *find* the feature ourselves.
 - Sample documents: should exist, and be *minimal*
 - ie. what is the smallest possible bug document
- Bug triage – hunting duplicates, poking 'bad' bugs
 - Help us out – we have some wonderful QA guys
- Test team
 - Downloading and testing release candidates
 - Using the latest snapshots, running QA testtool...

Copy-left Features, distinctive to LibreOffice ... #7

Import much more of your legacy Wordperfect files – and move to ODF ...



A roadmap to the future ...

- ▶ A **time based, six-monthly** release train ...
 - ▶ **synchronized** with the Linux distributions cadence
 - ▶ ie. a normal Free Software project
 - ▶ rapid fire, (monthly) bug-fix release on stable branch

LibreOffice Releases

By using a time-based release schedule and maintaining two parallel branches, LibreOffice will always be available both for early adopters and conservative users, with the most appropriate version for each group's specific needs and habits.

3.3 Family	3.3.2		3.3.3			3.3.4				
3.4 Family		3.4.0		3.4.1	3.4.2		3.4.3		3.4.4	
3.5 Family								3.5.0		3.5.1 3.5.2
Developers	daily snapshots of master / self-built versions									
Bleeding Edge	3.3.2	3.4.0		3.4.1		3.4.3	3.5.0		3.5.1	
Stable			3.3.3		3.4.2			3.4.4		3.5.2
Very Stable	3.3.2		3.3.3				3.4.3	3.4.4		
Rock Solid			3.3.3		3.3.3	3.3.4			3.4.4	3.4.4

New in 3.4 ...

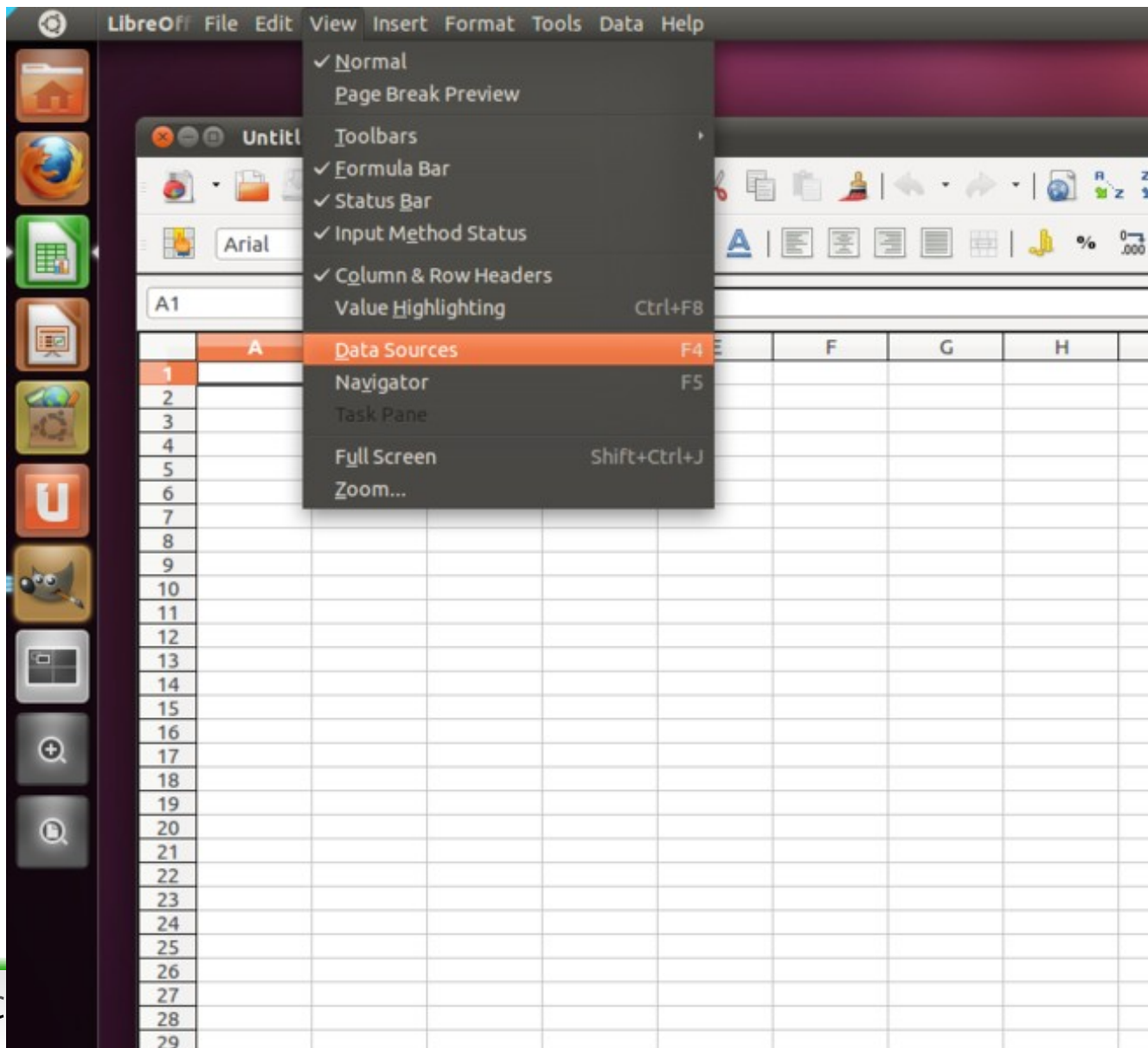
What's new in 3.4 (latest stable)

A tiny sampling of a big set of improvements ... that are LibreOffice specific.

- ▼ ***.po based translation & pootle***
- ▼ Yet smaller (minus 30Mb) downloads (*Kálmán „KAMI” Szalai*)
- ▼ Prettier – document surround shadows (*Sébastien Le Ray*)
- ▼ Graphite2 smart font rendering (*Keith Stribley*)
- ▼ Many calc improvements (mostly *Kohei Yoshida*)
 - ▼ external reference handling, move/copy/sheet dlg (*Joost Eekhoorn, Christoph Noack*), autofilter per sheet (*Markus Mohrhard*), sheet local named ranges, multiple subtotal ranges, OLE2 links, many DataPilot fixes, precision drawing objects (*Caolán McNamara*)
- ▼ Improved slide / HTML export (*Julien Nabet*)
- ▼ Unity / menu integration (*CodeThink for Canonical: Alberto Ruiz*)
- ▼ High-speed (C++) flat-ODF support (*Peter Jentsch*)
- ▼ Improved native theme integration (*Lucas Baudin*)
- ▼ Bug fixing and dead code removal and much more (*Takeshi Abe*)
- ▼ Lari (ldi), Mbochi (mdw), Teke-Ibali (tek), Teke-Tyee (tyx), and Vili (vif) languages (Republic of Congo)

New Features, distinctive to LibreOffice 3.4 ...

Unity / out of process menu integration ... thanks to CodeThink & Canonical.



What's new in 3.4 (latest stable) #2 ...

A tiny sampling of a big set of improvements ... that are LibreOffice specific.

- ▶ Remove export from binfilter (*Pierre-André Jacquod*)
- ▶ Nicer mozilla-like ctrl-f 'Find' dialog (*Jan Holesovsky*)
- ▶ Color Chart editing (*Rob Snelders*)
- ▶ Rotate through case changes (*Bálint Dózsa*)
- ▶ Smoother splash/startup/2nd start on Linux (*Michael Meeks*)
- ▶ Cleanup inefficient accessible theming (*Chris 'mordocai' Carpenter, Sebastian Spaeth*)
- ▶ Remove 150 duplicated redundant 'missing icon' icons to reduce bloat (*Joachim Trémouroux, Andrew C. E. Dent*)
- ▶ Remove 624 localized palette files: localize at run-time (*Andras Timar*)
- ▶ Bin compatibility layer for old Windows 9x non-unicode APIs (*Jesús Corrius*)
- ▶ Cleanup to use STL and boost containers. (*Joseph Powers, Rafael Dominguez*)
- ▶ Thousand of incorrectly 'executable' files fixed (*Francisco Saito*)
- ▶ Thousands of lines of dead code removed [Writer/Calc/Impress] (*Kayo Hamid*)
- ▶ **Apologies to many more that I omitted for reasons of space etc.**



Coming in 3.5 ...

Give up now !?!?? – the web will swallow us all ...

- The proliferation of web developers is amazing:
 - full function off-line == re-write all in Javascript
 - Best of luck with this project: 8 million lines later
 - eg. Conference WiFi & 3G is extremely cluttered
 - I would like to show you these slides today
 - but they are on a server I can't get to, *no DNS, no signal, no ...*
 - Rent vs. Buy - cloudness ? – *Buy Furcate, Rent Collectors ?*
- My Phone is an 80's super-computer anyway ...
 - *seen my vt220 app ?*
- WYSIWYG, page layout ~impossible in a CSS world
 - HTML5 / the Canvas may change this ... VNC/web etc.

Cloud Office / HTML5 prototype ...

- Uses gtk+ 3's / broadway backend to render (via some javascript shims) in the browser:
 - All intelligence and rendering on the 'server' app.
- Still a prototype, rendering performance improving
- This approach allows a full-feature experience
 - ie. complex text-layout, large, complex spreadsheets, WYSIWYG (eg. edit your footnotes on the page), VBA macros, Pivot Tables etc.
- Also a number of challenges:
 - Lots of missing pieces in Web APIs that need work ...
 - Printing, scanning, file management, etc. etc.

Example:

Custom contoured picture, with text fill

broadway 2.0 - Mozilla Firefox

File Edit View History Bookmarks Tools Help

broadway 2.0

http://localhost:8080/

Google


File Edit View Insert Format Table Tools Window Help

Default

Gnome/OpenOffice 1.1

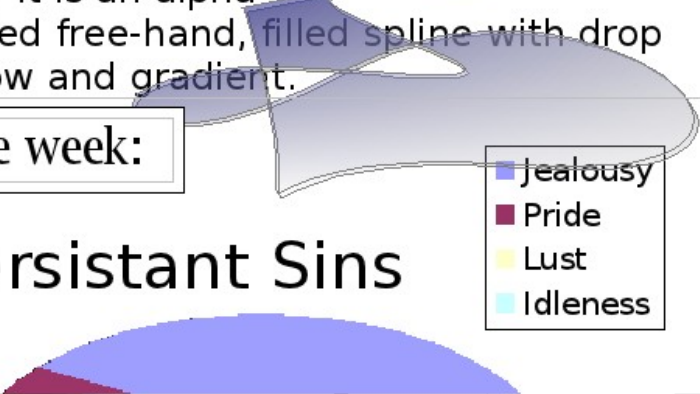
A small table with an embedded imager

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.



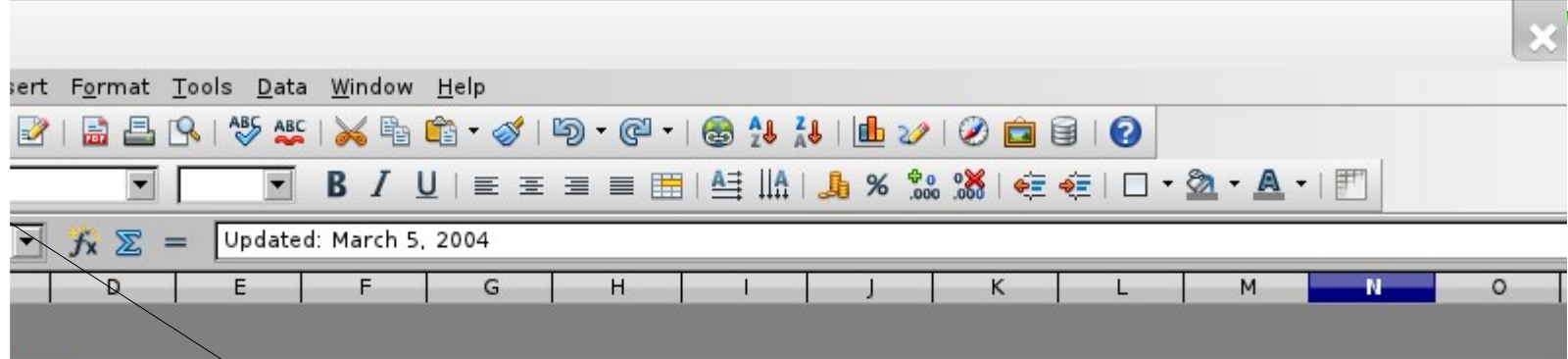
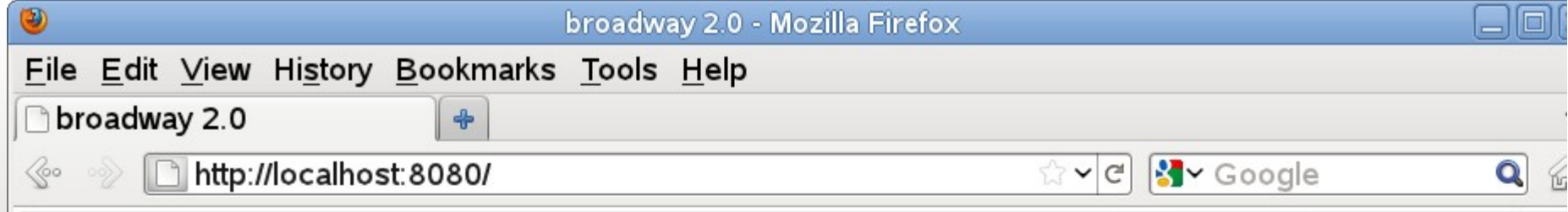
And chart of the week:

Persistant Sins



- Jealousy
- Pride
- Lust
- Idleness

LibreOffice



Example:

VBA macro driven spreadsheet button workflow that proves Novell costs you less :-)

2	Novell.
3	
4	
5	
6	return on investment (ROI)
7	calculator for Novell® Nsure™
8	secure identity management solutions
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	Gartner Consulting was commissioned by Novell to conduct an unbiased, third-party assessment of the ROI of Novell Nsure secure identity management solutions. The objective of the study was to assess organizations who have demonstrated thought leadership, a positive impact on the business, and potential quantifiable financial savings as the result of a secure identity management deployment. This case study applied the Total Value of Opportunity (TVO) ROI methodology, designed by Gartner, to develop the results. The methodology-based results and their use by Novell should not be deemed an endorsement of any Novell product or service, data, or sales technique. Gartner disclaims all warranties, expressed or implied, of the fitness of results for a particular purpose. Methodology results should not be deemed as an industry average and may vary from published Gartner research.
19	
20	
21	
22	
23	Novell, the Novell logo and BorderManager are registered trademarks, and eDirectory, the N logo, NMAS and Nsure are trademarks of Novell, Inc. in the United States and other countries. All third-party trademarks are the property of their respective owners.
24	
25	

What we're working on now:

- ▼ Code: *one-git* ...
 - ▼ **Bug fixing & Polish**
 - ▼ gnu-make completion & cross-compile for Windows
 - ▼ during-build unit tests & improved QA process
 - ▼ new features: SmartArt, improved interop, layout
 - ▼ bottom up ... clean code → clean UI → features
- ▼ Governance:
 - ▼ Incorporation – raised Eur100k for foundation
 - ▼ <http://wiki.documentfoundation.org/CommunityBylaws>
 - ▼ 100+ Memberships bootstrapped, ESC / MC setup, etc.
 - ▼ **Conference a Paris: 12th – 15th October ...**

Conclusions ...

LibreOffice conclusions ...

- ▶ Aspire to a big, diverse, vigorous, vendor neutral, Linux (kernel) like community – *four months to end of 1st year*
- ▶ Be ungrateful to corporate controlled projects:
 - ▶ positively discriminate, and assist others ...
- ▶ Strike a **dis-proportionate** blow for freedom
 - ▶ LibreOffice will have a **hundred million users**
 - ▶ get people **excited** about Free Software they use ...
 - ▶ Try an '**Easy Hack**' - get stuck to the tar-baby ...
- ▶ Thanks for all of your help and support !
 - ▶ **we rely on you**, to prove the power of Freedom with us.

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