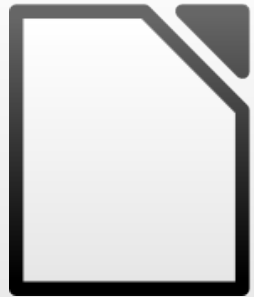


# LibreOffice On-Line (LOOL)



# LibreOffice

The Document Foundation

*The Web Office suite – with real features ...*

**Michael Meeks**

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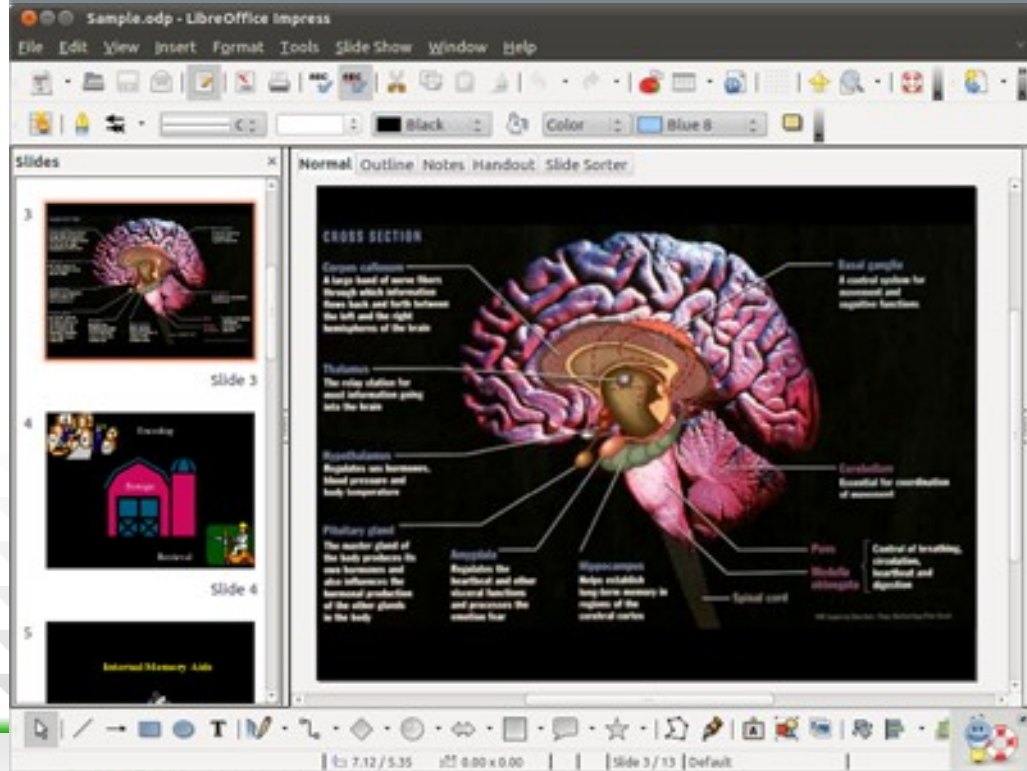
*“Stand at the crossroads and look; ask for the ancient paths, ask where the good way is, and walk in it, and you will find rest for your souls...” -  
Jeremiah 6:16*



**LibreOffice: the most powerful and viable Open Source Office suite; available cross-platform.**



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T		
1	NPC	Hero	Battle						Losses	Transports (based on logistics)												
2		attack	Archery	6	7	8	9	10		0	2	4	6	8	10	Total Resources	Food	Lumber	Stone	Iron		
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																				
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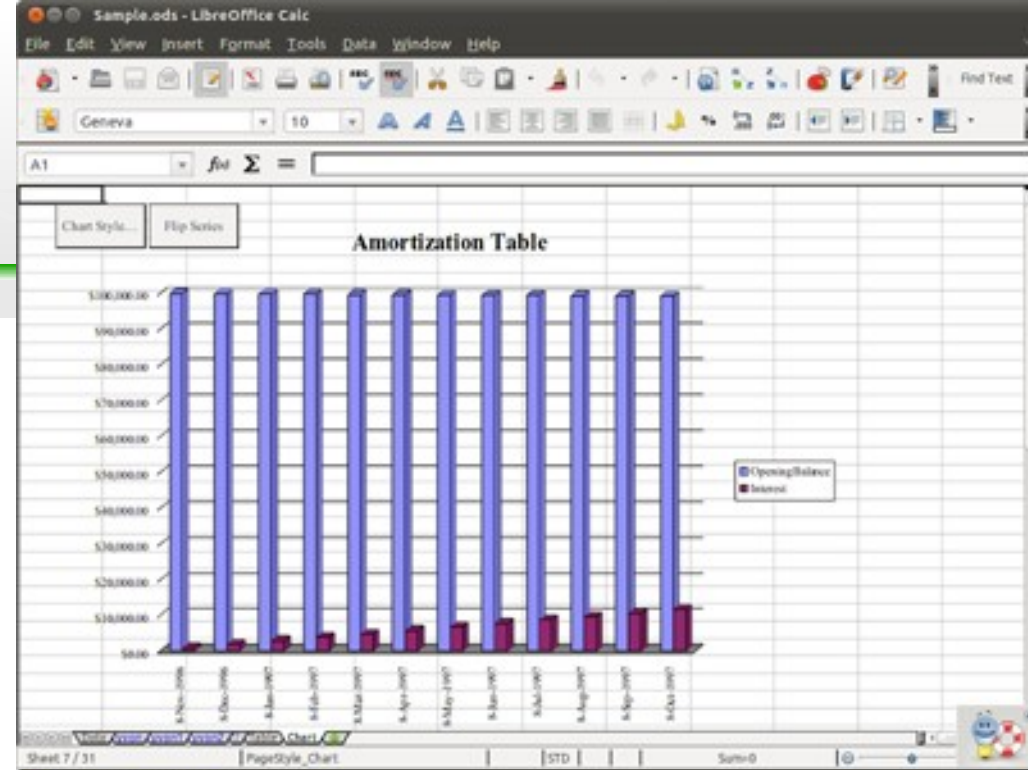


Sample.odt - LibreOffice Writer

Heading 9

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

$\frac{a}{b}$   $a \cdot b$   $f(x)$   $\Sigma a$

$a^b$   $e^x$   $(t)$

$+s$   $-s$   $sA$   $Fs$   $-s$

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

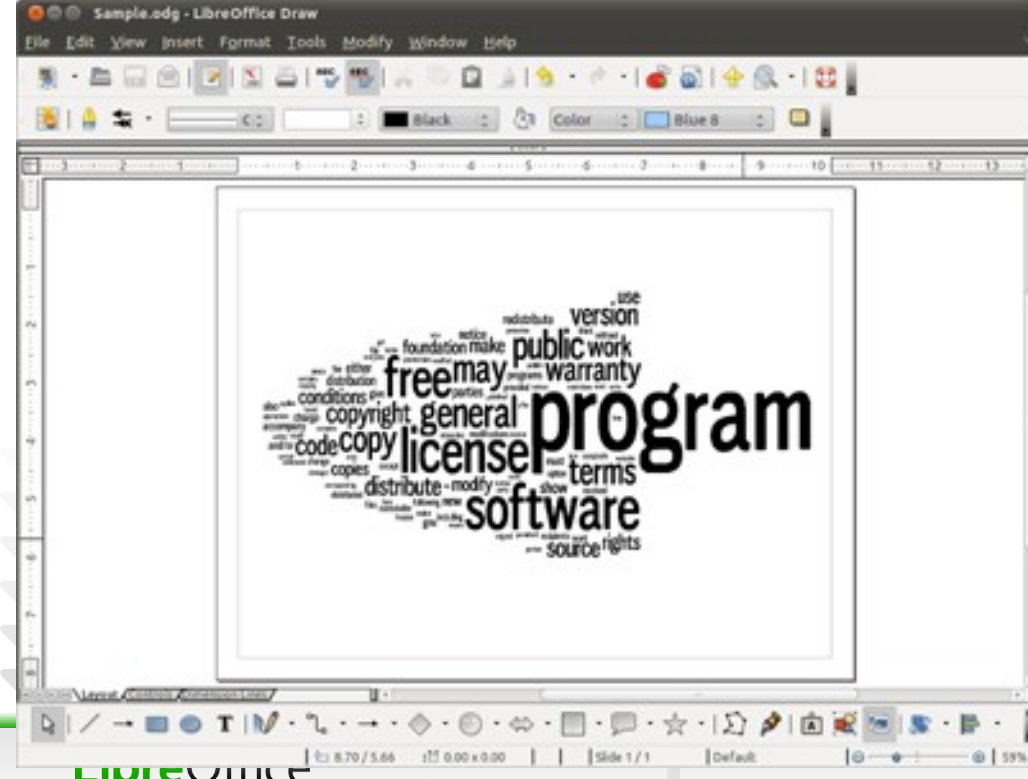
$a-b$   $\frac{a}{b}$   $a \cdot b$   $a/b$   $a \cdot b$

$a \cdot b$

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

$(a \text{ over } b) = (b \text{ over } (a + b))$

100%



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.

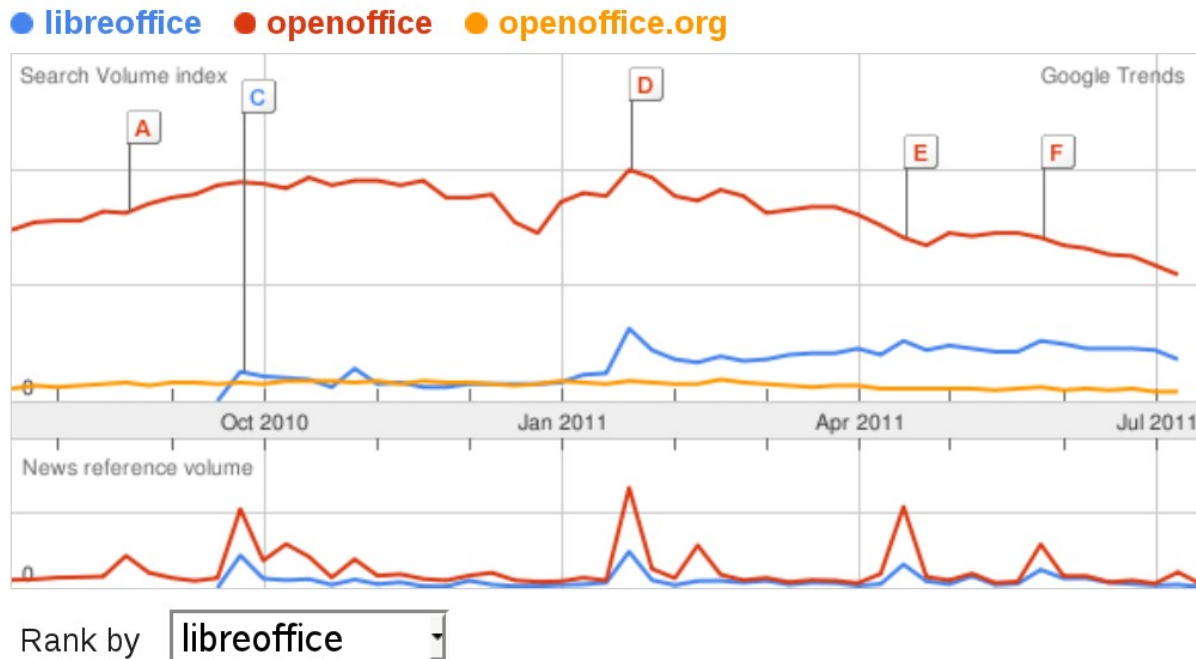
Change order: ↑ ↓

Slide Transition

Slide 1 / 1 Default 59%

# Market relevance ... vs. options

- ▶ Microsoft Office – **750m** users worldwide
- ▶ OpenOffice.org → LibreOffice → **100+m** users worldwide
- ▶ Google Docs → **~30m** active users
- ▶ Wordperfect – **20m** users (if that)
- ▶ Sum: all other Free Office suites: sub 10m users



**A** [Don't Count on Oracle to Keep OpenOffice.org Alive](#)  
PC World - Aug 23 2010

**B** [OpenOffice.org breaks from Oracle](#)  
Computerworld - Sep 28 2010

**C** ['LibreOffice' Is Good News for OpenOffice](#)  
PC World - Sep 28 2010

**D** [OpenOffice.org 3.3](#)  
ZDNet UK - Jan 28 2011

**E** [Oracle's OpenOffice Move May Be Too Little, Too Late](#)  
PC World - Apr 18 2011

**F** [FAQ: What's the future of OpenOffice.org?](#)  
Computerworld - Jun 2 2011

# Cloud Office / HTML5 prototype ...

- ▶ Rendering using the HTML5 Canvas ...
- ▶ Communication using Web-Sockets
  - ▶ very simple plain-text event / control protocol
  - ▶ compressed png for screen updates ...
- ▶ Bandwidth usage low for simple tasks:
  - ▶ We can see what is re-rendered as we type:
  - ▶ But really as we type a character: only this is sent:
  - ▶ And that tiny rectangle is png compressed ...
  - ▶ CopyArea too

Hello World this is me typi



# Cloud Office ... technologies ...



- Uses gtk+ 3's / broadway backend to render (via some javascript shims) in the browser:
  - All intelligence and rendering on the 'server' app.
  - **broadway.js - < 3k LOC ...**
- **Still a prototype**
  - rendering performance improving, but lumpy in places.
- 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:
  - Good APIs for printing 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

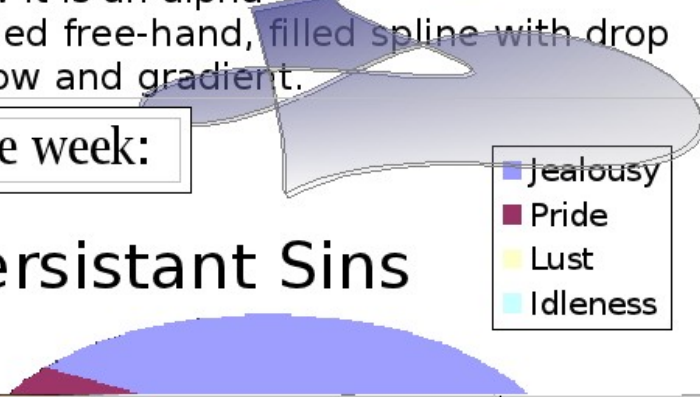
A small table with an embedded imager

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:

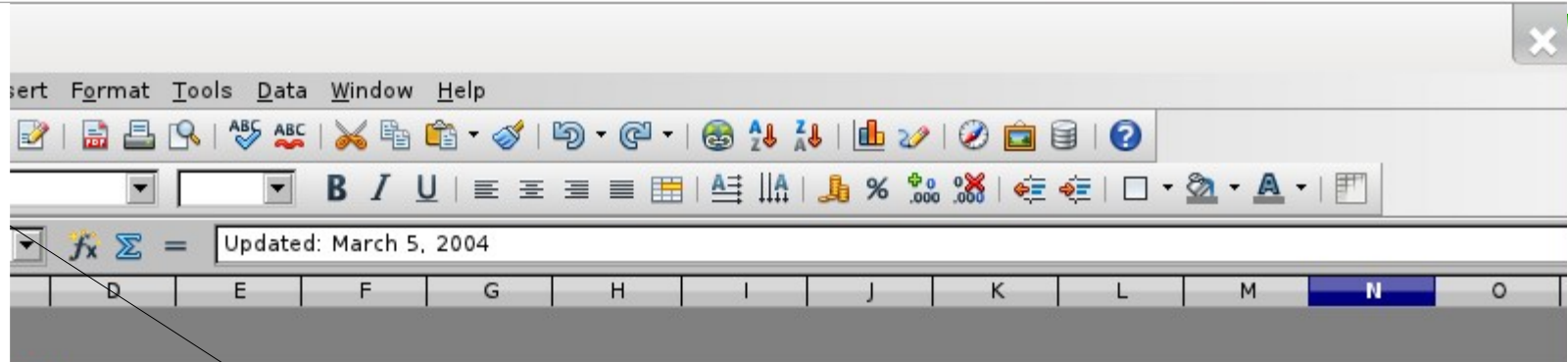
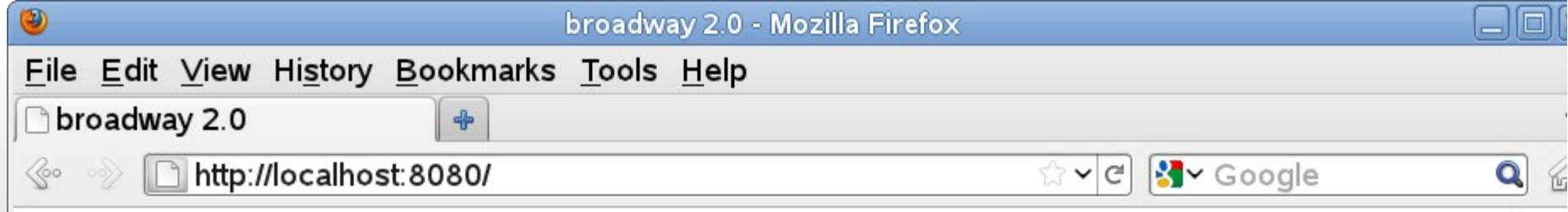
## Persistant Sins



- 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

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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.

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Updated: Marc

Hel

# Future work ... #1

- Improving web APIs ...
  - There is a lot of API surface where we have no good solution for the client
- Examples:
  - Rich printing support
  - Scanning support
  - File management: I plug my USB key and ...
- Implementation improvements
  - More LibreOffice rendering optimisation
    - more copy-area, pushing rectangles up-stream, improved clipping support
  - Much better / faster bitmap rendering

## Future work ... #2

- Server / scalability
  - Linux only on the server
  - Containers / memory limits
  - Pre-forking / pre-linking / startup redux
- Reduced CPU usage
  - more optimal spreadsheet engine
  - faster startup, more efficient layout / rendering etc.
- Improved / native HTML5 toolbar / wrapper UI work
  - substantially helped by existing framework abstraction
- **All of this** will improve the fat-client (PC) version, mobile device version, and the web office version.



**Thanks to  
all who  
make it fun  
to hack on  
LibreOffice !**

# LibreOffice On-Line conclusions ...

- ▀ It is a **prototype** ... cannot deploy it today
  - ▀ basic (prototype) functionality will be in 3.5 (Feb.)
  - ▀ server resource usage is not yet optimal, no hosted slashdot-proof PoC ...
- ▀ Code is all in public git:
  - ▀ `git clone git://anongit.freedesktop.org/libreoffice/core`
  - ▀ `git checkout feature/gtk3 ; configure ; make install`
  - ▀ `export GDK_BACKEND=broadway ...`
- ▀ Firefox 4 (with websockets enabled): grab a FF sticker !
- ▀ Thanks to **Alex Laarson** of **RedHat** for: gtk+ / broadway

*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*