

How best to migrate to LibreOffice

With some tips from the field ...

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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

Introductions ...

What is LibreOffice

Why Migrate

How To migrate

Migration Tools & tips

Online

Solving external sharing

Migration Case Study

SEHSCT

Savings & status

Sample interop. Issues

Sample feature wins

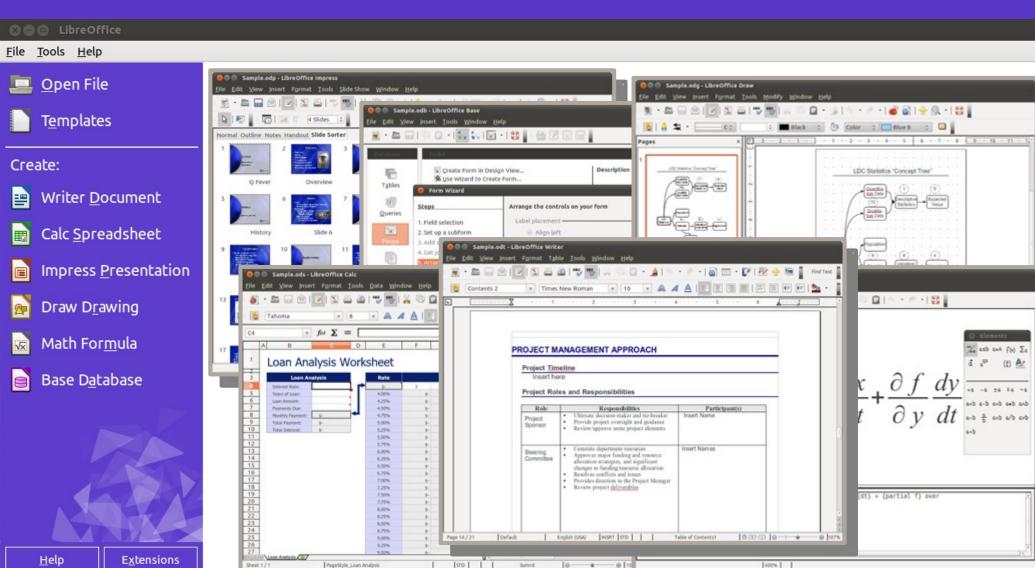
Why Training?

Conclusions

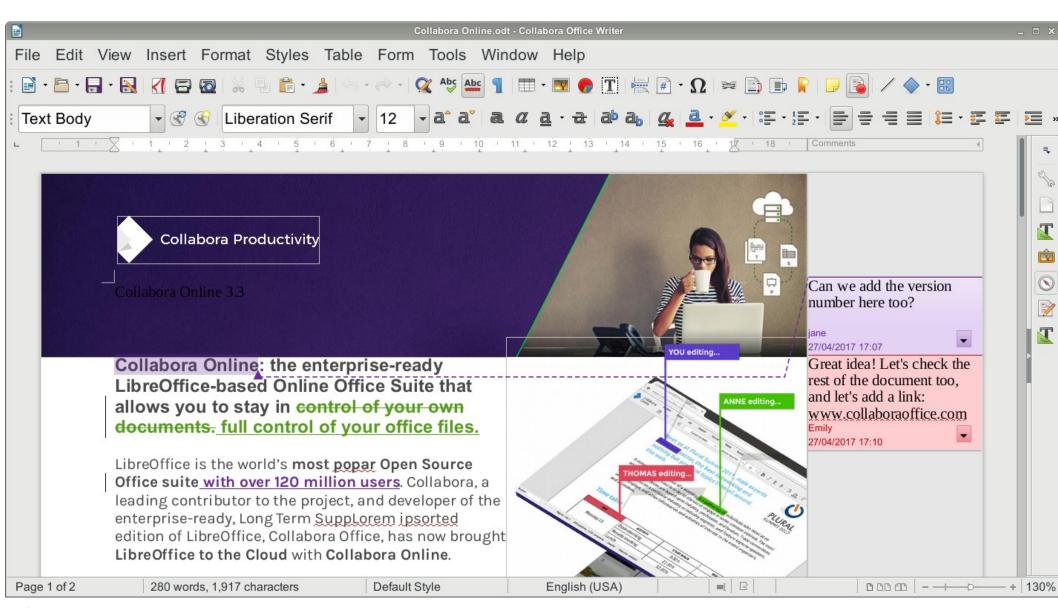


What is LibreOffice:



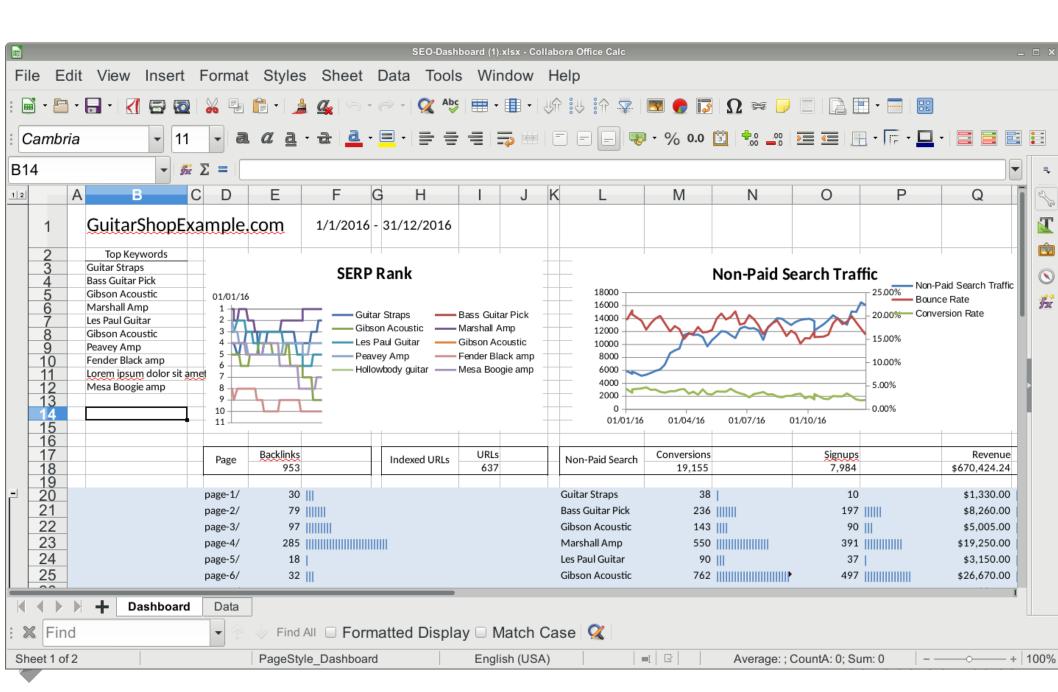


Writer - Text Documents

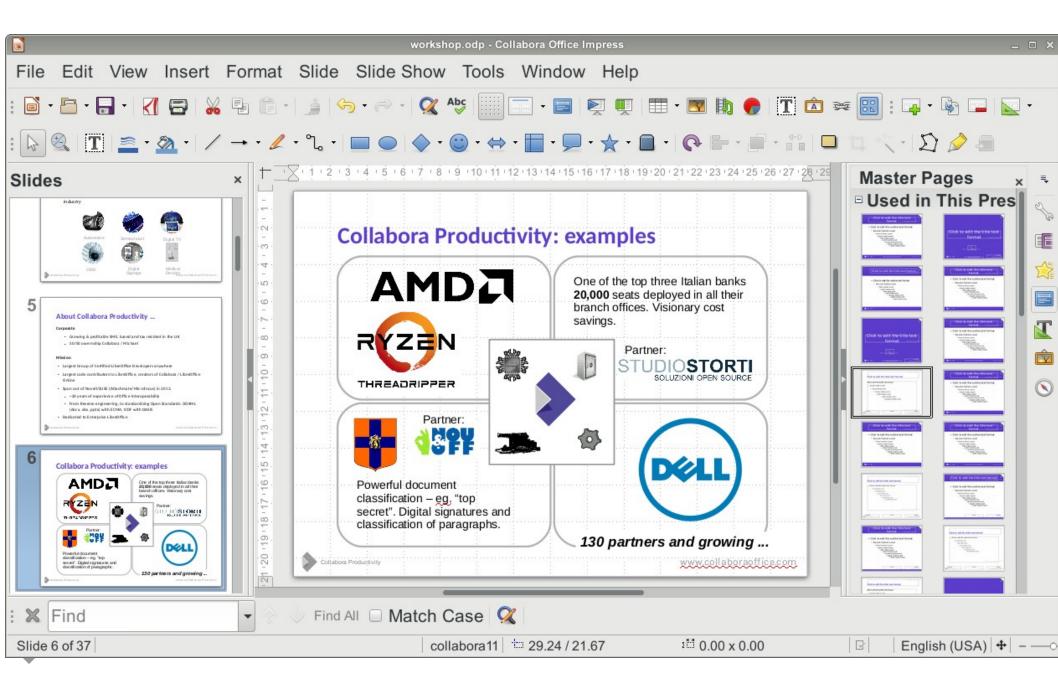




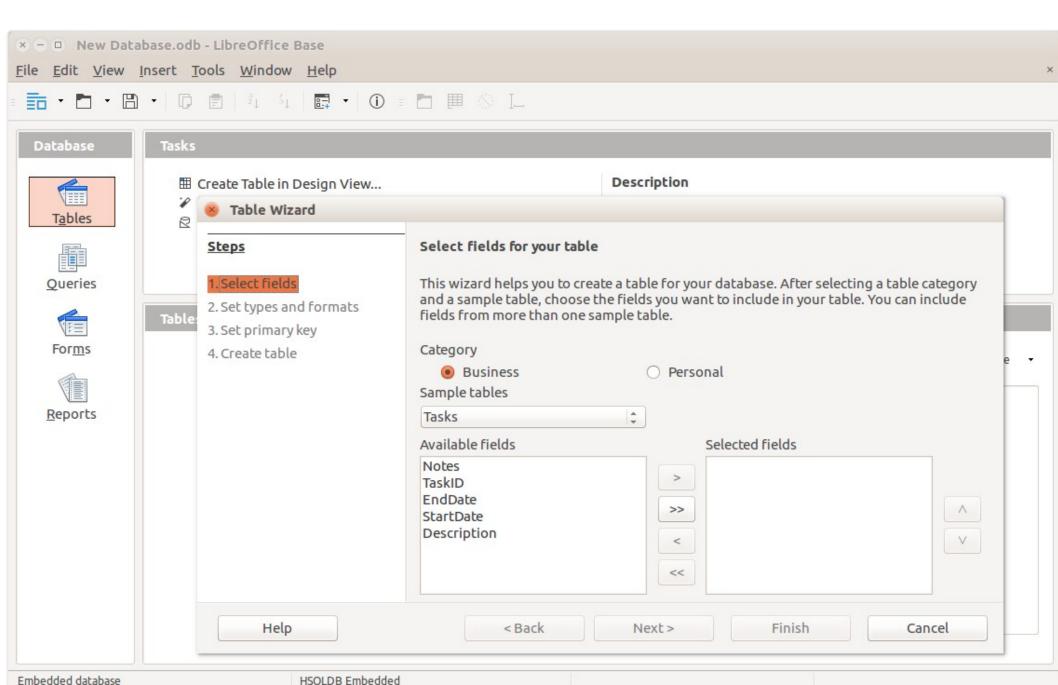
Calc - Spreadsheets



Impress - presentations ... + Drawings ...



Base - a built-in database component.



Comprehensive file importer

Collabora Online supports a huge number of binary formats

- 175+ import filters: ...
 - Office 95 to Office 2017
 - Visio, Quark Express, Publisher
 - Keynote, Numbers, Pages, Works
- Clear focus on interop. With
 - DOC, XLS, PPT
 - DOCX, XLSX, PPTX
 - RTF
 - OpenDocument ODT, ODS, ODP





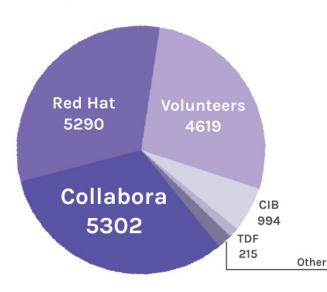
The LibreOffice community

- ~200 million LibreOffice user-base
- ~1000 people helping to develop LibreOffice
 - 100 localization teams: 62 PC, 33 Online
- ~300 individual committers in the last year
- Product developed in public.



Berlin: Federal Ministry of Economics and Technology





16,749

Code Commits between July 2017 and July 2018

Other 29

■ Pardus 50

■ Munich 138

■ SIL 102

Apache Volunteer 10



City of Rome: Capitol Hill

10

www.collaboraoffice.com



Why Migrate?

It is possible to migrate to a LibreOffice based product, saving money, future proofing documents, and using cost savings to improve staff training & productivity & business-process



Some advice from TDF

Why not just use LibreOffice for free?

"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



Recommended - use Certified Professionals

This is an OpenSource code-base: DIY is possible!

- As with Home Electrics, and/or self Gas Boiler maintenance
 - There are some risks... you may even be required to have professional supervision / sign-off ... professionals unlikely to help fix your mess for free.

Get expert help:

Certified developers with Long Term Supported versions:

https://www.documentfoundation.org/gethelp/developers/

Certified Migrators

https://www.documentfoundation.org/gethelp/migrators/

Certified Trainers

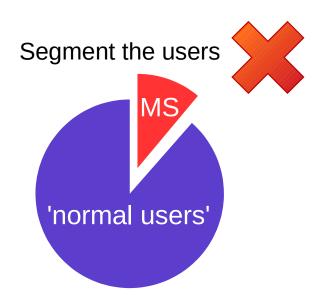
https://www.documentfoundation.org/gethelp/trainers/



How to ...

Segmenting - without format islands ...

OOXML default

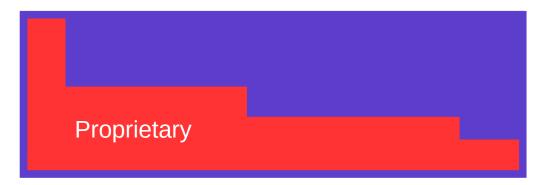


This can cause a disconnection between areas within an organization.

OpenDocument Format default

<u>Everyone</u> installs LibreOffice / Collabora Office to build in compatibility and interoperability.





Step down the use of proprietary licenses as any enterprise agreement allows.

Crucially, from day 1, all proprietary users **set ODF as their default save setting** and any proprietary format anomalies are handled as part of the migration plan.



Preparation & Piloting

Things that don't work:

• "I've installed LibreOffice as well as MS Office please try it and tell me if you have issues, we switch next month"

Instead

- Ask teams for templates & frequent documents
 - → test these for interoperability
 - Either mend documents yourself; or get interop. Fixes

Pilot inside teams

- The Technical Wizard is prolly not the best pilot target
- Add the least technically savvy person in each group too.



Cost / Benefit - Improving your documents

Templates with issues

- Large extant document set with potential problems.
- Legacy documents used regularly
- Significant win from interop. Fix
 - → File ticket
 - \rightarrow Deploy fix

Individual, not widely used documents

- Fix the templates going forward?
- Fix the existing used documents in-house.



"... the migration to LibreOffice represents an excellent opportunity to rethink the organization's processes. For example, before migrating any existing Visual Basic macros, it is better to determine if the macros are still needed in order to discard those that are no longer used, and re-engineer the remaining ones. The same applies to document templates, and to proprietary plugins which connect the office suite to proprietary enterprise applications."

LibreOffice Migration Protocol

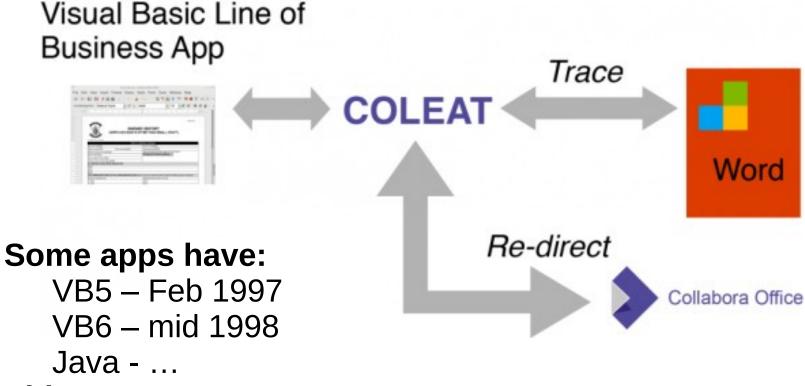


Migration tools / assistants

Collabora OLE Automation Tool

Un-blocking migrations that are stuck with old VB6 / VB macros:

https://www.collaboraoffice.com/coleat/





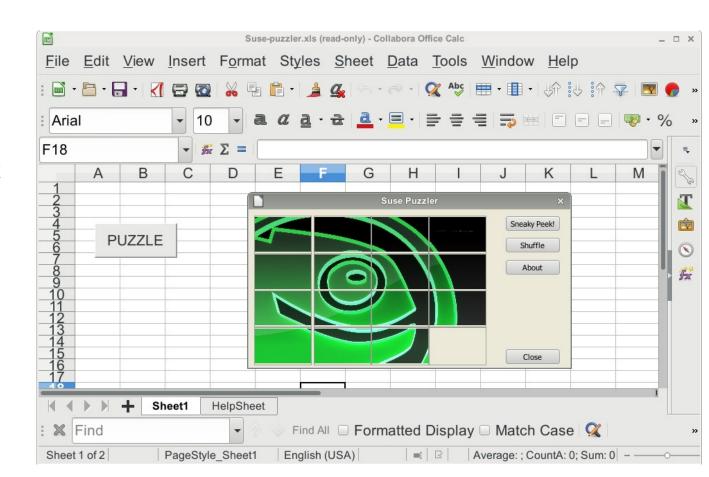
VBA macro interoperability ...

Substantial, incremental work here

- Many simple macros work out of the box ...
- Forms too.

Cost to fix

- VBA → Starbasic
 same cost as
- Improve VBA interop.
 - \rightarrow huge win.

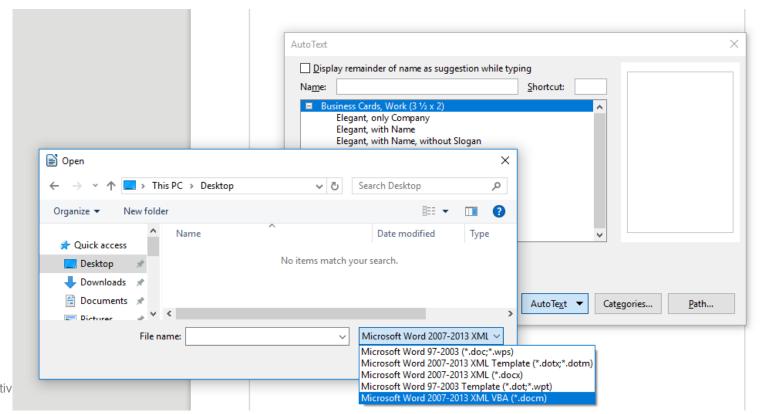




AutoText import

Originally only .DOC/.DOT format was supported

MS Word 2007 and newer saves AutoText in OOXML (.DOTM) format → now supported for import.



Open & Metric compatible fonts

Font metrics are embedded into documents

We work hard to bundle and map metric compatible fonts

Microsoft Office font	Compatible Open Font
Arial	Liberation Sans
Times New Roman	Liberation Serif
CourierNew	Liberation Mono
Arial Narrow	Liberation Sans Narrow
Cambria	Caleda
Calibri	Carlito
Symbol / Wingdings / Webdings	OpenSymbol + mappings



Windows Deployment bits ...

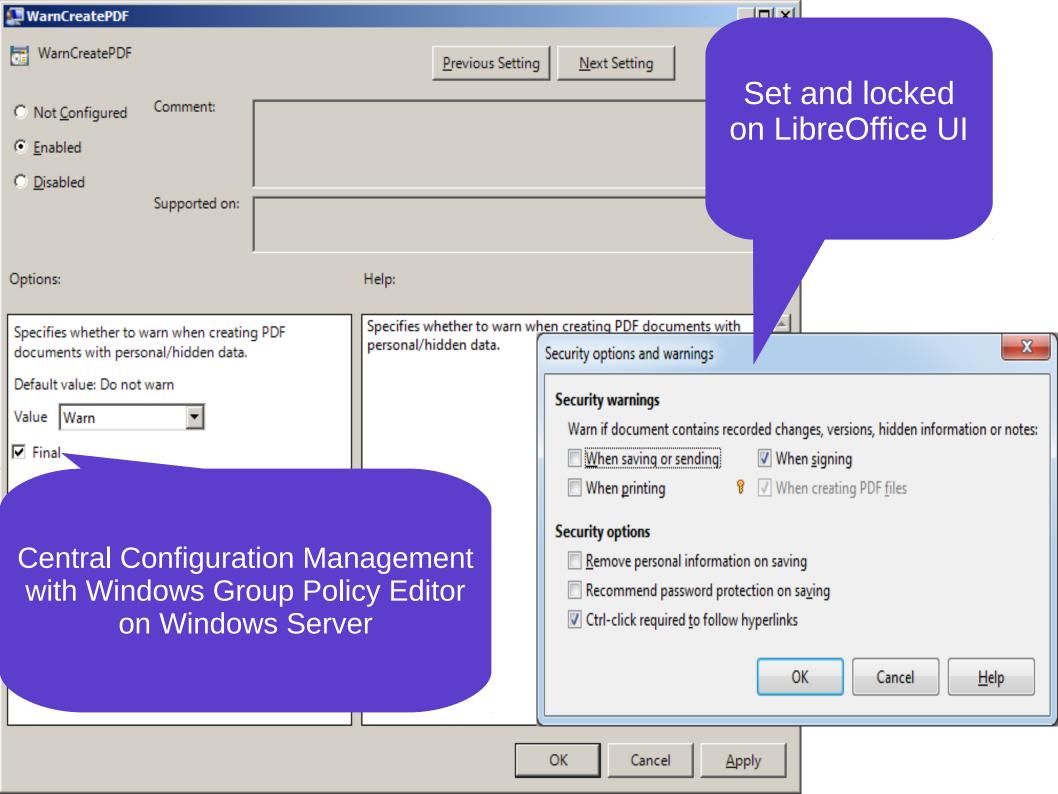
SCCM?

- Yes it works → MSI (MSP available for Collabora Office...)
- Also SMS Server, Novell ZENWorks, IBM Tivoli, Citrix, etc.

Group Policy / Management

- Yes ADMX templates available here:
 - https://www.collaboraoffice.com/windows-group-policy-admx/
- Translated but more options are most welcome
- Can change default file formats → but don't do that ...

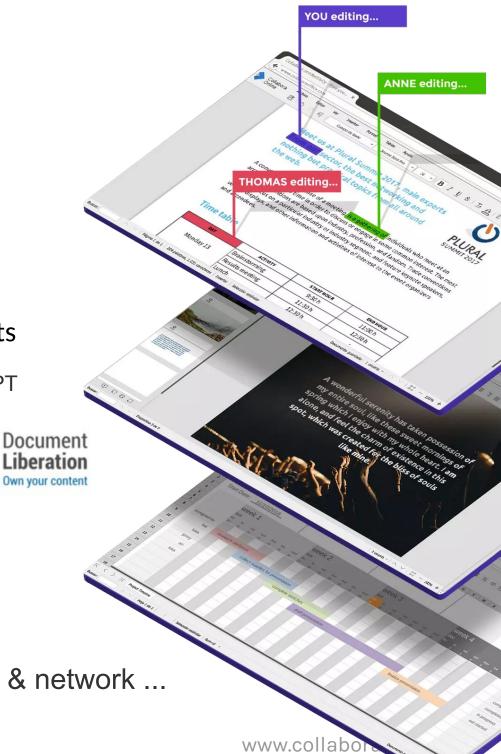




Another way: Online ...

What is Online?

- Bringing LibreOffice to the browser.
- Documents + Spreadsheets + Slides
 - Viewing and Collaborative editing
- Interoperability with Microsoft formats
 - DOCX, DOC, RTF, XLSX, XLS, PPTX, PPT
- Import filters / Viewing for
 - PDF, Visio, Publisher,
 Keynote, Numbers, Pages +many more
- Powerful WYSIWG rendering
- On-premise hosting.
- Architecture bet on CPU threads & network ...





The driving force behind putting #LibreOffice in the #Cloud.

Why online?

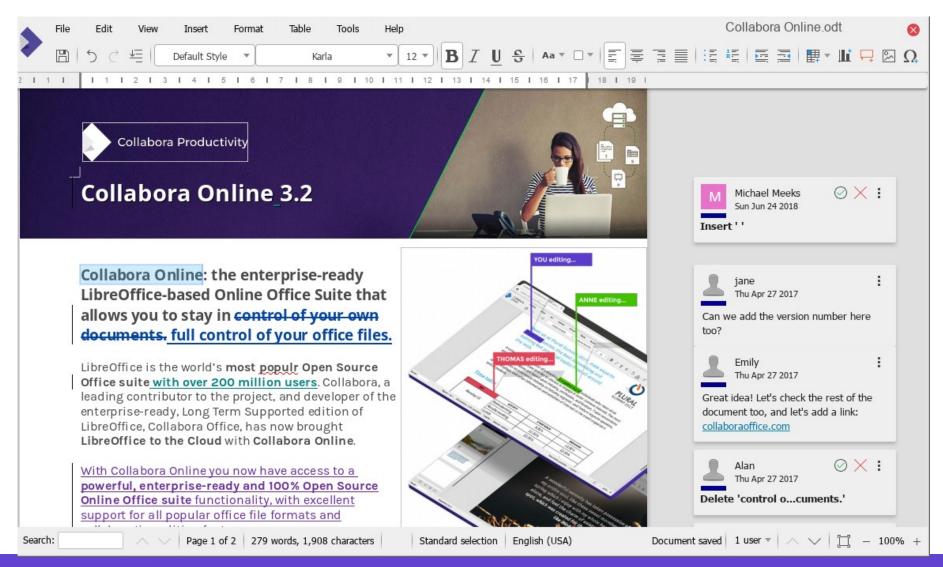
- On-premise control of your data
- On-premise control of your CPU & network

Bonus features

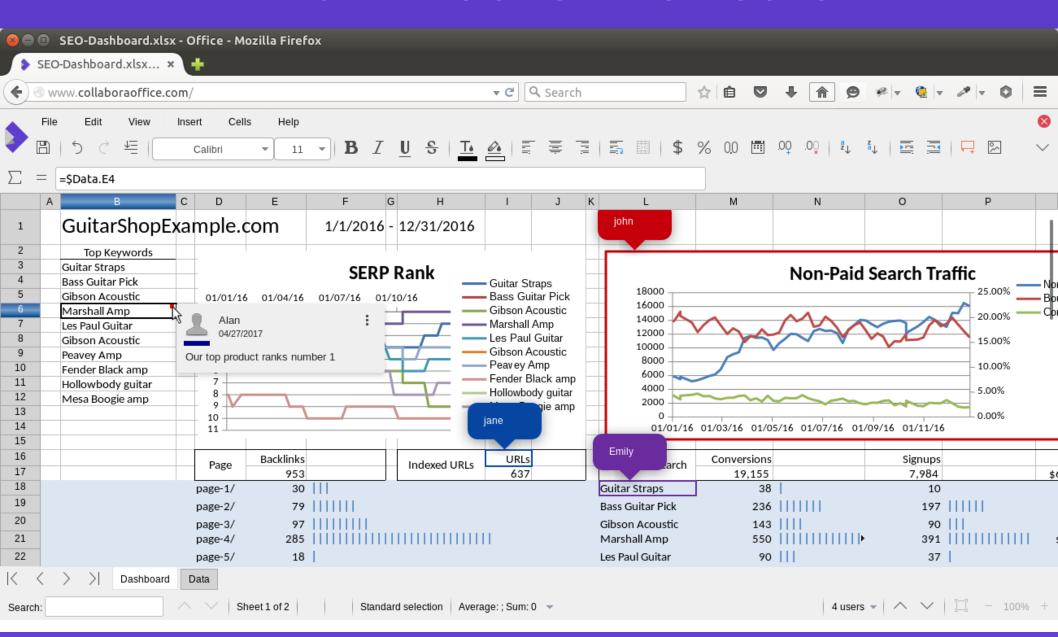
- A reduced feature-set sphere easy to win.
- Document Formats somewhat less relevant:
- Server / Certification / Revenue model ...

C'bra is investing heavily:

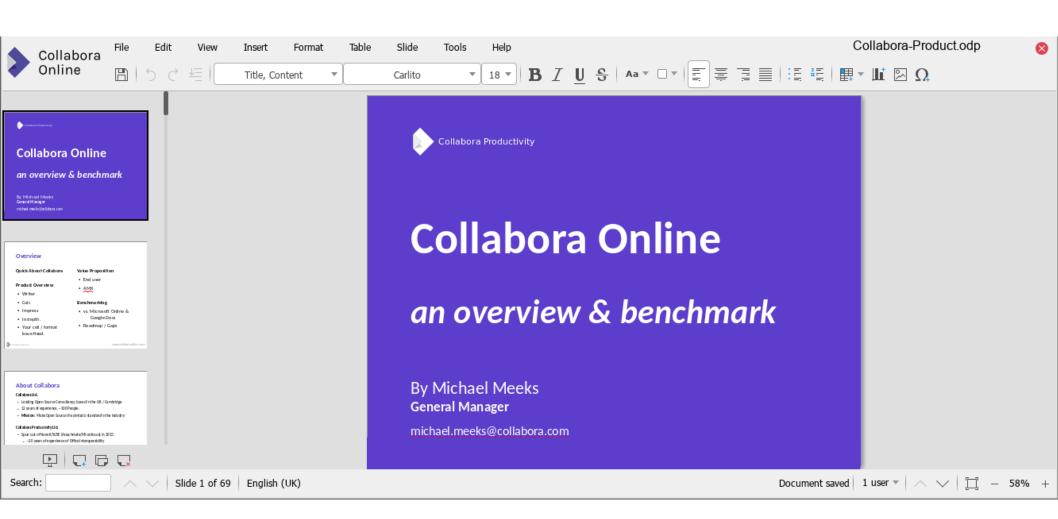
What it looks like: Writer



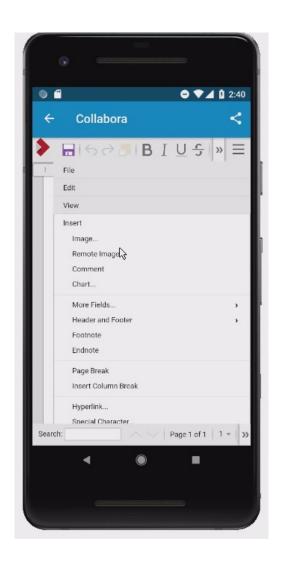
What it looks like: Calc

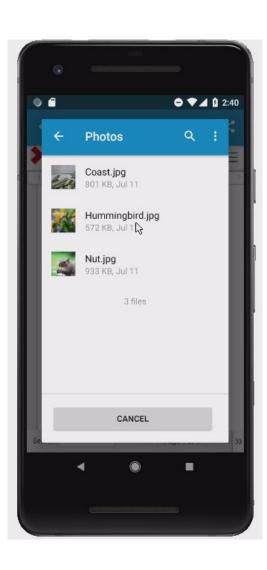


What it looks like: Impress



Mobile devices ...





- Ongoing work
- Collabora Online responsive UI
- Can we re-target this at Android and iOS?

Quick Migration case study: SEHSCT

a great team there, re-using their slides



Current Position with SEHSCT

- Feasibility phase completed end of March 2018
- Roll-out continuing
 - 1700 staff requiring office productivity software now migrated to Collabora Office
- Cost avoidance at present over £220,000
- Target at least 60% migrated by end of March 2019 (subject to the successful completion of other internal projects)
- Resulting in potential cost avoidance of over £700,000 (based on 60%)



Hardware Considerations

- VDI/Zero clients
- Chromebooks
- ipads
- PCs
- Laptops













Service Desk Calls 01/06/18-31/08/18

42 infra calls recorded in Total		42
Training Issues	24	57%
IT issues(not related to Collabora Office)	9	21%
Collabora Office-related issues	9	21%
78% of calls logged as "Collabora Office" not an issue with the software		







Communication Strategy

- Information Presentations
- Information Posters
- Collabora Office Sharepoint site
- Information video
- Information gathering meetings
- iconnect page
- Emails







Training Requirements

- Functionality similar to Microsoft Office applications
- Originally envisaged users would not encounter any great difficulties in adapting
- However skills level of staff overall very poor and so often unable to make necessary editing change to documents as required or how the documents were originally created doesn't allow successful conversion
- Training manuals and quick guides created
- Extensive range of training courses offered
- Only 18% of current Collabora users availed of advertised training yet in survey 47% stated they felt "Not so confident" or "Not at all confident" about using new applications

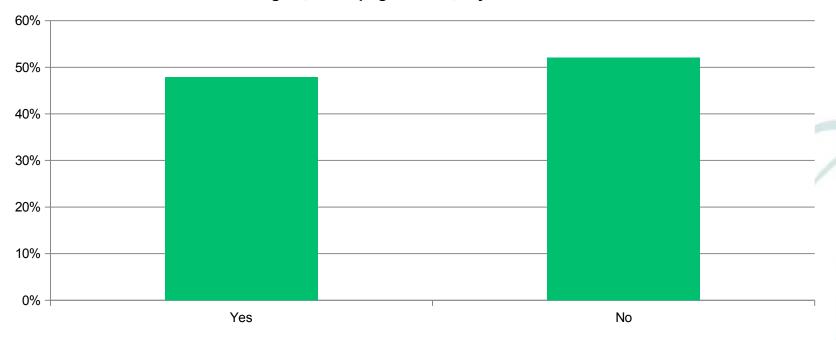






User Feedback - Survey Results

Do you feel confident in making any formatting adjustments required to existing document, eg change margins, insert page breaks, adjust columns?



Half of people don't feel confident with basic formatting ...

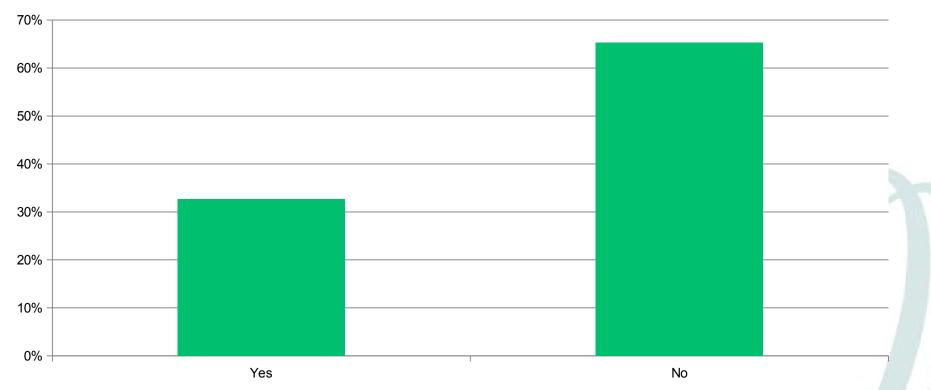






User Feedback - Survey Results

Do you feel you would need further training in GovOffice?



But also don't feel they need further training: happy as they are?







Conclusions

- Vast majority of files are compatible between Collabora Office and Microsoft (dependent on quality of original document creation)
- Extremely good partnership between SEHSCT and Collabora
- Willing to modify and enhance software
- Support required to manage change
- User-base need to be provided with sufficient skills
- Ideally team to go ahead of Collabora Office project to check quality of document and standardise processes
- Initial dip in productivity but majority should adapt without issue, if adequately supported and trained

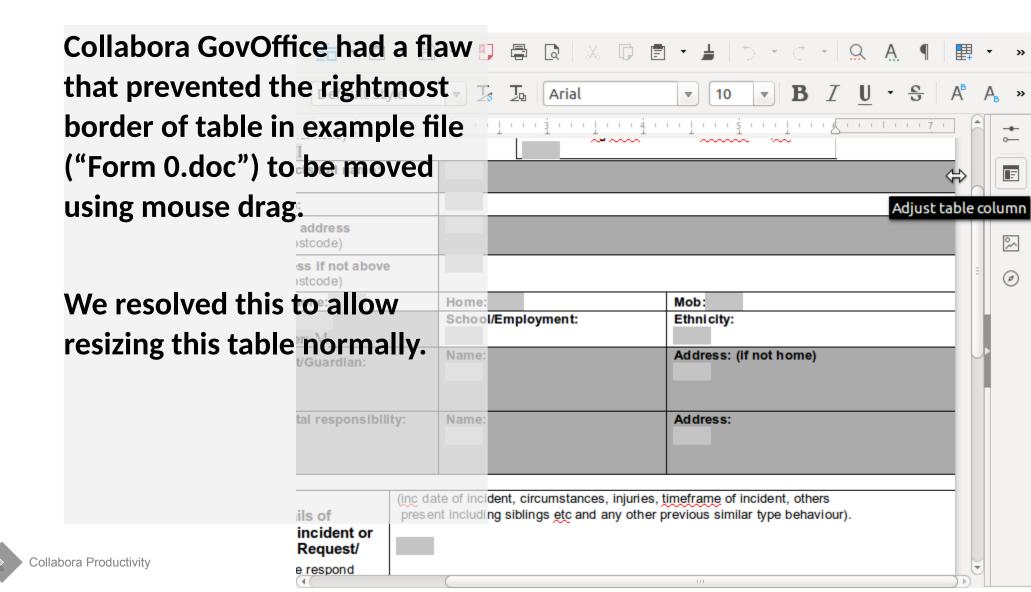




Sample fixes for SEHSCT

Interoperability corner cases you can find if you try.

Editing (moving) borders of cells



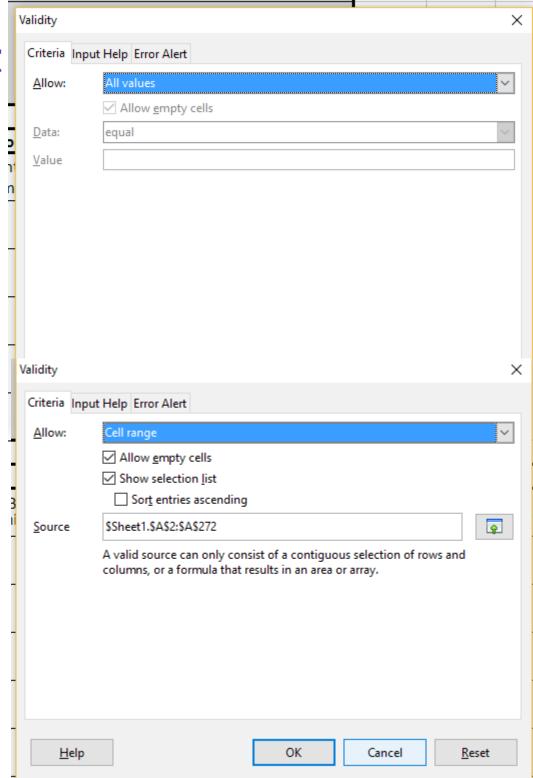
Excel Validation Sheet drop-down cells

The test document supplied to us used a rare syntax for a feature that we already had: data validity.

Amazing generated files from some internal system: fun!

Using a deprecated pre-ISO / OOXML standardization XML syntax for this.

Now it imports with all required validity criteria information and properly filled drop-down list.(bottom)



Cross-page table reflow

The test document contained a table with a cell whose minimum height was greater than page height.

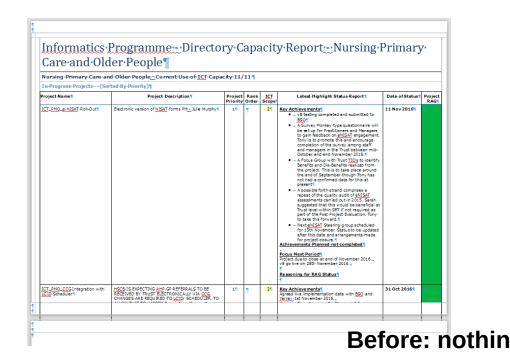
Collabora GovOffice's response

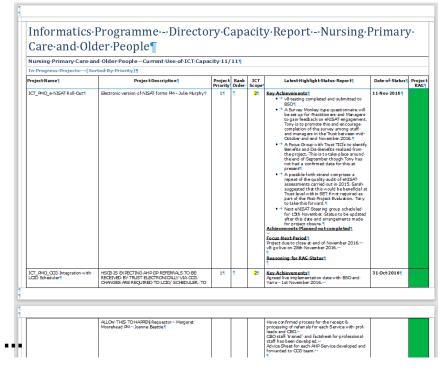
- was to do the 'obvious' thing

After:

- which is?

Now behaves in an interoperable way.







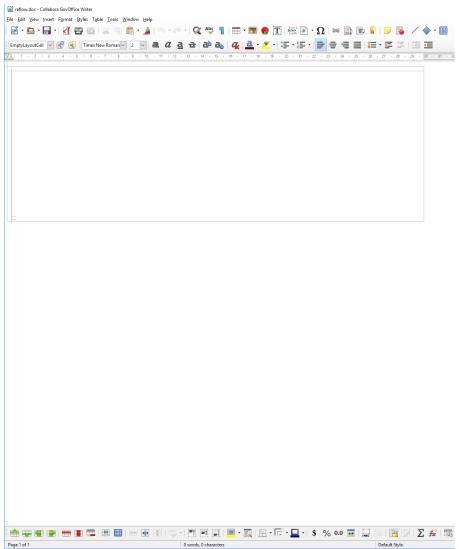
Tolerate broken OOXML - like MS Word.

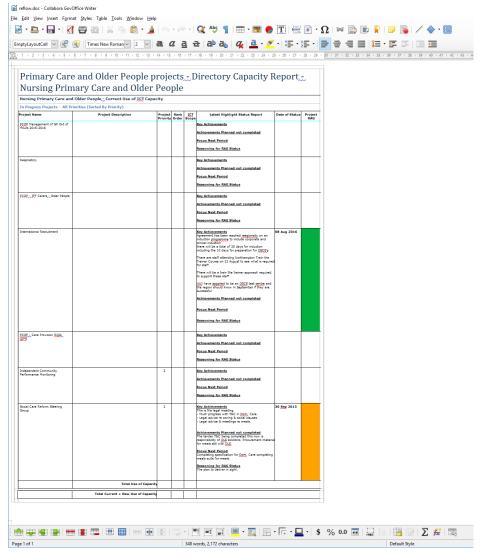
3rd party application generated a DOCX file, which was invalid OOXML (but Word somehow handled it)

- Practical definition of OOXML is MS Word's behaviour.
- Use Carlito (Calibri) as default font when default font is not specified
- Accept "pt" as measurement unit in <w:sz> element of <w:rPr> which should be interpreted as integer only (size in half-points)
- Tolerate multiple final sectPr instances (should be only one)
- Accept <w:br> element as a child of <w:body>
- Tolerate CRLF in OOXML text (convert to space on import)



Some .DOC and .DOCX with floating tables were imported incorrectly







Product Management interaction: some fruit ... "where is the roadmap"...



Time - sheet / spreadsheet issue.

Extended sheet protections UI

- What a micro-feature!
- We round-tripped this stuff silently

But ...

- This protected (time) sheet filled by hundreds of users
- Consumed by a financial system with no sense of humour ...
 - You must delete blank rows!
- Good for staff to get paid ...

Added UI options - and UI enforcement.

ODF extension too ...

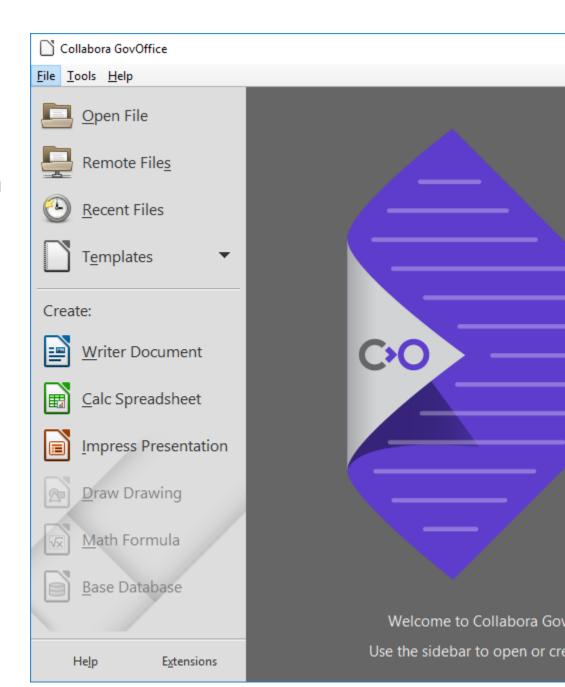




Customize Windows installer

- Disable Base, Draw, Math without loosing functionality in Writer, Calc, Impress
- Collabora provided MST

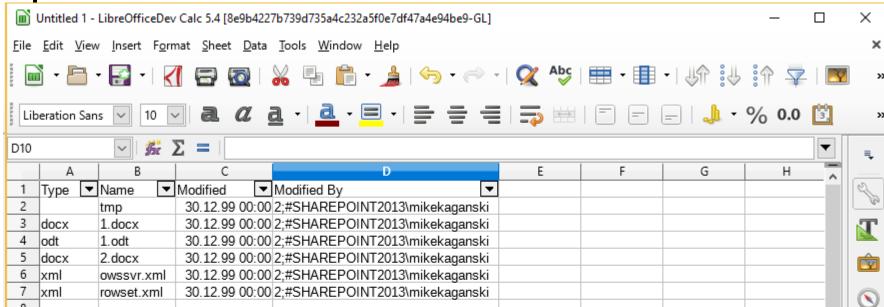
 (Microsoft Installer Transform)
 files that disable Base, Draw,
 Math user interface.





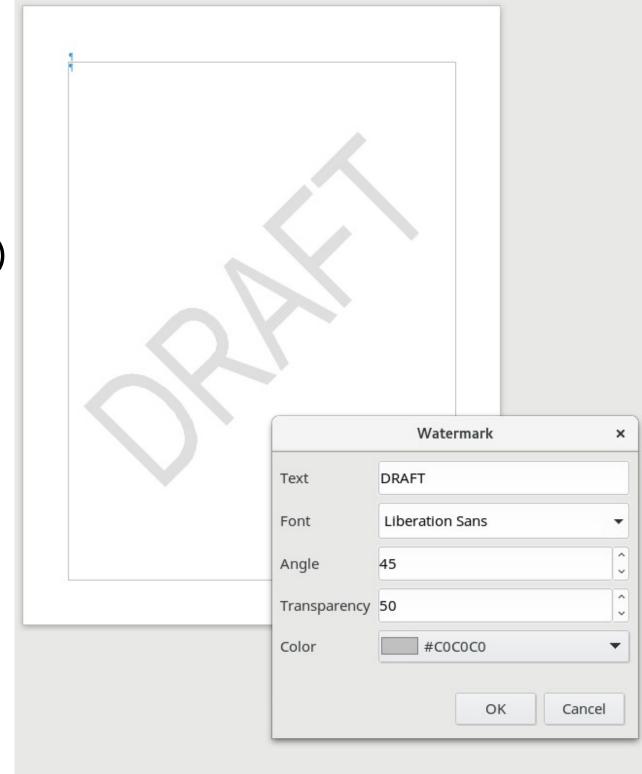
Exporting Sharepoint Lists to Calc

- Collabora GovOffice is handler of .iqy files
- Collabora GovOffice opens the actual link inside the .iqy file
- The MS ADO recordset is opened by an XSLT filter that generates spreadsheet with one sheet with data and autofilters.



Feature: Insert Watermark

- Custom shape on page background (vector graphics)
- Fully interoperable with MS
 Word watermarks

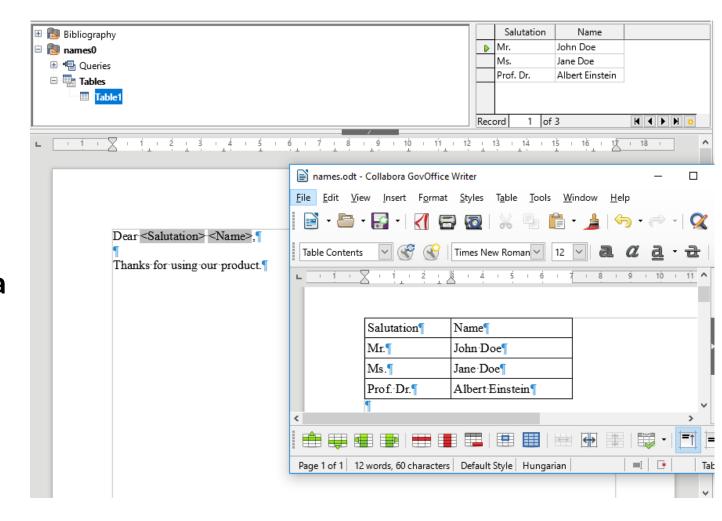




Writer table as Mail Merge Data Source

Similar feature existed in MSWord

Collabora
 developed a data
 source driver for
 Writer tables
 based on the
 driver for Calc
 tables





Many Thanks!

To South Eastern Health Trust & their team

- Everything we do is funded by our customers
- They are the real super-stars.
- It takes guts and vision to do the right thing first ...
- A pleasure to work with their team.

Thanks to to Crown Commercial Service & Cabinet Office ...



In your migration you will have troubles, don't worry – certified professionals can defeat them with you

Why training?

with your savings, invest in your staff

A typical 'bug' in the software:

Headline

He heard quiet steps behind him. That didn't bode well. Who could be following him this late at night and in this deadbeat part of town? And at this particular moment, just after he pulled off the big time and was making off with the greenbacks. Was there another crook who'd had the same idea, and was now watching him and waiting for a chance to grab the fruit of his labor? Or did the steps behind him mean

Headline He heard quiet steps behind him. That didn't bode well. Who WHEN I TYPE

HERE IT BREAKS! could be following him

this late at night and in this deadbeat part of town? And at this particular moment,

just after he pulled off the big time and was making off with the greenbacks. Was

there another crook who'd had the same idea, and was now watching him and



But I know about Tabs!...

```
Headline → He-heard-quiet-steps-behind-him.·That-didn't-bode-well.·Who-could-be-following-
him-this-late-at-night-and-in-this-deadbeat-part-of-town?·And-at-this-particular →
him-this-late-at-night-and-in-this-deadbeat-part-of-town?·And-at-this-part-of-town?·And-at-this-part-of-town?·And-at-this-part-of-town?·And-at-this-part-of-town?·And-at-this-part-of-town?·And-at-this-part-of-town?·And-at-this-part-of-town?·And-at-this-part-of-town?·And-at-this-part-of-town?·And-at-this-part-of-town?·And-at-this-part-of-town?·And-at-this-part-of-town?·And-at-this-part-of-town?·And-at-this-part-of-town?·And-at-this-part-of-town?·And-at-this-
```

```
Headline 
He heard quiet steps behind him. That didn't bode well. NOW I WRITE AND him this late at night and in this deadbeat part of town? And at this particular 
off the big time and was making off with the 
another crook who'd had the same idea, and was now 
was now 
was now 
was was there
```

Hanging indents the hard way!

This example courtesy of an experienced lawyer



And many more!...

"The key-bindings are very familiar in LibreOffice - eg. Ctrl-B to bold, Ctrl-O to open" ...

"there are keyboard accelerators!?"

"I have to fill out this long spreadsheet, but have to keep going back to the top to check I'm using the right column ..."

"I spend lots of time re-typing documents that arrive in ALLCAPS in lower case – is there an easier way?"

And so it goes on ...



Conclusions & Questions

Migrating to LibreOffice is just change management

- You should engage certified developers & migrators & trainers
- Collabora has lots of great Swiss partners eg. Adfinis
- Interact with real engineers, and see real progress on your timeline.

Interoperability to taste: ODF or OOXML

Training

Improve your staff & discover crazy business process disasters

Thanks to SEHSCT team for sharing their data ...

Contribute with us to an open future.



"Migrating to Collabora Office is no different to any other organization change I've managed"