Collabora GovOffice in SEHSCT*

* South Eastern Health and Social Care Trust

By Michael Meeks
GM Collabora Productivity
@CollaboraOffice +Libreoffice-from-collabora
Project goals and expectations
Project background

- In 2014/15 the HSC agreed a new Enterprise Agreement with Microsoft for all Trusts which covered a range of software but largely excluded Microsoft Office

- Due for renewal in 2018 and spend estimated up to £60m for HSC

- Microsoft license per user is £145 per year
Cost saving

● In June 2015 Crown Commercial Services agreed an MOU with Collabora Productivity Ltd. permitting all UK public sector organisations to install Collabora GovOffice

● Annual subscription for Collabora GovOffice: £39,000 for 6,500 users

● Annual Level 3 Code Support Contract: £20,000

● Total cost: £59,000

Compare to:

● MS licence per year: £145 × 6,500 users = £942,500

● Without Level 3 Code Support Contract
Collabora GovOffice – reducing risk

- Backed by a reputable UK company – Collabora
- Largest Group of Certified LibreOffice Developers anywhere
- Long term support
- Helpdesk / OTRS issue tracker / SLA
  - Issues are acknowledged and fixed in a timely manner
- Product management interaction
  - Weekly calls to co-ordinage
  - New features:
    - SharePoint lists, Watermarks, Writer as Mail Merge Data Source, etc.
Our migration advice: *If you only remember one thing ...*

Segment the users

Everyone installs Collabora Office / GovOffice, to build in compatibility and interoperability.

Proprietary

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.

Unfortunately – stuck with MS formats ...
Reading these recommendation: is recommended

“Migrating to LibreOffice for Enterprises and Public Administrations”


“LibreOffice Migration Protocol”

https://www.documentfoundation.org/assets/Certification/tdf-migrationprotocol.pdf
In your migration you will have troubles, don’t worry– Collabora will defeat them with you
Interoperability corner cases you can find if you try.
Copy and paste check boxes

The legacy MS Office form controls, such as check boxes, are still sometimes useful to have (although newer controls are available in menu Insert→Form Control), and have been ~always available in LibreOffice/GovOffice. Though, copy to clipboard of such control was broken, as demonstrated by sample document. So we fixed it.
Import ActiveX form controls from DOCX / export form controls as ActiveX form controls to DOCX

The title says all...

- Better interoperability with MS Word form controls
  - Previously rendering these as EMF previews not controls...
- Found the whole ActiveX control area broken:
  - Fixed – works for Impress too, unit tested → job done:
- LO form controls can be loaded and saved to DOCX format without loss of functionality
Editing (moving) borders of cells

Collabora GovOffice had a flaw that prevented the rightmost border of table in example file ("Form 0.doc") to be moved using mouse drag.

We resolved this to allow resizing this table normally.
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 re-flow

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 – which is?

Now behaves in an interoperable way.
The XLS file produced by Collabora GovOffice was examined with Microsoft BFFValidator Tool. BFFValidator identified a few issues, the XLS file produced by Collabora GovOffice deviated from the file format specification. After fixing these issues, the XLS file produced by Collabora GovOffice could be opened in Excel without warning, and the VBS script opened it without error.
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
Merging empty cells confirmation dialog

UI change was requested, because the original message was confusing.

Now:

“Should the contents of the cells be moved into the first cell?”

Crash at the end of slideshow or previews in Impress

In VDI environment Impress crashed frequently.

Before, if the device lacked Direct3D capabilities, VclPtr handling became compromised, and caused a crash. This was particularly a problem in virtualized/remote desktop connections in Windows.

Now mpWindow instance is disposed of right away if DX device creation fails.
Embedded DOC/DOCX/XLS/XLSX documents in DOC/DOCX documents

Handling of different embedded document types was inconsistent. Solution:

- Open in new window or edit in place, depending on “Display as icon” was checked when the object was embedded

- On Windows use Word/Excel if they are installed, use Collabora GovOffice for editing otherwise
Pivot tables

Ongoing work, two goals

1) Performance
   • Done: Pivot cache loading optimization, 60% win
   • Planned: parallelization of loading

2) Better interoperability
   • Done: many XLS/XLSX import and export fixes
   • Planned: implement compact form view
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 losing 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.

What happened to Sharepoint Integration in the last year ... - Mike Kaganski – later ...
Feature: Insert Watermark

- Custom shape on page background (vector graphics)
- Fully interoperable with MS Word watermarks
AutoText import from OOXML format

- Originally only .DOC/.DOT format was supported
- MS Word 2007 and newer saves AutoText in OOXML (.DOTM) format
- Clinicians – heavy users of complex AutoText
Writer table as Mail Merge Data Source

- Similar feature existed in MS Word
- Collabora developed a data source driver for Writer tables based on the driver for Calc tables
Futures
Provide a MailMerge solution for Patient Centre integration (a chunk of feature work)
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 ...
Summary

- Bug squashing
- Feature development
- Outstanding support, regular product updates.
- Product Management interaction
- Serving a great team at Ulster

“It has been a pleasure working with Collabora to fix our migration issues” - Darren Henderson - ICT Operations Manager at South Eastern Health and Social Care Trust

By Michael Meeks
Michael.Meeks@collabora.com