Recent Mac-specific bug fixing

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About us

Collabora Ltd.

- Leading Open Source Consultancy
- 10 years of experience. 100+ People.

Collabora Productivity Ltd.

- Dedicated to Enterprise LibreOffice
- Provides Level-3 support (code issues) to all SUSE LibreOffice clients
- Architects of OpenXML filters in LibreOffice
LibreOffice Vanilla: A reasonably recent version sold in the Mac App Store

- As all Mac App Store apps, runs sandboxed, thus can’t access things it shouldn’t, etc
- Generates a (smallish) revenue stream that enables some paid work on Mac-specific bug fixing
- Part of proceeds donated to TDF.
LibreOffice was quite slow to start on the Mac, and there was also quite some delay after typing the first character in a Writer session.

Part of that was caused by doing thousands of pointless checks whether a file is an “alias” (a kind of “smart” symlink) even for files inside the app bundle (installation), that never would be aliases.

Just don’t do it for such files.

Actually questionable how useful checking for aliases is in general. Would love to get some insightful input on how common aliases are on real-world Macs.

On some systems, macOS sends a notification about changed screen parameters as soon as such notifications are enabled.

LibreOffice asked for such notifications early on, before VCL has been initialised.

The handler for the notification required VCL to have been initialised, though.

Thus fix was simple: Don’t ask for these notifications until VCL has been initialised.
tdf#103571 100% CPU usage when minimizing if multiple documents are opened

- Similar to previous bug
- On some systems, macOS sends that `NSApplicationDidChangeScreenParametersNotification` very often even if nothing is changing
- The handler for that notification used to do some very heavy re-layout of text in all open documents
- If nothing has actually changed, reacting to the notification like that is silly
- Thus fix was simple: Check if actually anything has changed. If not, ignore the notification.
tdf#117872 On macOS Impress slide show does not run full screen

Also known as “the full-screen mess”

- There are (at least) two separate “full-screen” concepts in LibreOffice on macOS: The LibreOffice one and the system one
- For many years LibreOffice allowed the user to put a window in the system full-screen state (click green bubble in title bar)
- But that has lead to possible confusion, with the application being in full-screen state from one point of view, but not another
- So, in May I attempted to unify these two concepts, so that they would be in sync. Was easier than expected. And it seemed to work fine
- But...
The full-screen mess, continued

- But then this bug was filed, showing one unintentional bad side-effect
- So I reverted the unification, and also...
- Removed the participation in system full-screen mode
- Of course, not an ideal solution
- Typical childish reaction in Bugzilla: “Getting rid of a feature is the new way to fix things in the Open Source world now? (See Gnome devs.) A feature that ALL MacOS Apps have. Ever thought to ask Apple for some help?”
- Just ignore the haters, patches welcome.
tdf#117850 Quitting LibreOffice on macOS while About dialog is open causes process to get stuck consuming CPU

- Quick and dirty fix:
  - Just call _Exit() when we are about to terminate, bypassing global object destructors or whatever it was that got stuck.
Opening document by double-click waits a long time

- When double-clicking a file, the system causes a callback to an openFiles: method of one of our Objective-C classes.
- That method just recorded the request in a list, and didn’t do anything else.
- The list used to be inspected only in a ten-second timer handler, and then actual document loading started.
- Solution was to call a "TriggerUserEventProcessing()" function right in the openFiles: method.
tdf#53282 Missing menu bar after closing fullscreen document

- The “full-screen” here means LibreOffice’s own such, not the system one
- Thus present even after LO stopped participating in the system full-screen state
- Fix was quite simple in the end: Leave the own full-screen state before allowing the document window to close.
tdf#69460 Copy/Paste of a column in Calc file followed by Cmd-Q causes soffice process to consume all resources

- Problem caused by LibreOffice storing its clipboard in the system clipboard when exiting
- For spreadsheets, LibreOffice attempted to store whole columns (that were not completely empty). All one million rows. In multiple clipboard formats
- That was very slow for at least BITMAP and PNG
- Solution was to only store those cells in a column that would be printed, and skip empty ones at the top or bottom of the column.
tdf#104332 Thesaurus in the Tools menu causes it to open slowly the first time

- Also know as (one aspect of) the “long delay after first character typed into Writer” bug
- Root cause was slow initialisation of LightProof (Python) spell checker for Brazilian Portuguese, which required loading a very large Python module (with spell checking data)
- Solution was to delay the import of that heavyweight module until actually needed.
tdf#112442 The language drop-down list in the character dialog contains a lot of entries in brackets (for example {en-BR})

- We asked for the list of locales known to the system, not the list of system spelling dictionaries
- macOS has lots of system locales (language-country combinations), not all of which that make much sense, like en-BR
- The number of system spelling dictionaries is much smaller
- Follow-up bug and fix: tdf#118647: Needed to map some generic system spelling dictionaries (language only) to what LibreOffice expects (language-country), like “da” to “da-DK”, and “de” to the list of “de-AT,” “de-CH,” “de-DE” etc.
Volunteers working on Mac-specific bits, too

- Jan-Marek is doing re-factoring of VCL that makes some of the Mac code much cleaner
- Heiko has done some fixes
- Telesto (QA) too
- Surely forgot some, thanks to them, too.
Known remaining bigger Mac-specific problem areas

- Would be nice to re-enable a unified system+LibreOffice full-screen mode, but this time without regressions...
- Font style mess: more and more typefaces come with more than the traditional R, I, B, BI styles. Handling of that is very suboptimal in LibreOffice (on all platforms?)
- QuickLook (quick preview of document contents in Finder) support for file formats that the system doesn’t provide such for
- Spotlight (indexing) support probably could do with enhancements, too
- Performance.
Thank you

... and Keep Calm and Crush the Patriarchy

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