Merge-enabled Change Tracking (MCT): Implementation on Android platform

MULTIRACIO
multitalent solutions

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Objectives

Our goal

- Multiplatform implementation of the MCT proposal
- document collaboration

We have so far:

- EuroOffice MCT: an extension for EuroOffice, LibreOffice, Apache OpenOffice suits

Under development:

- Implementation of the MCT proposal on **Android platform**

Building blocks of the code:

- Qt framework for Android
- Calligra
- Several KDE components
- Additional Java components developed by MultiRacio Ltd.

The structure of the implementation

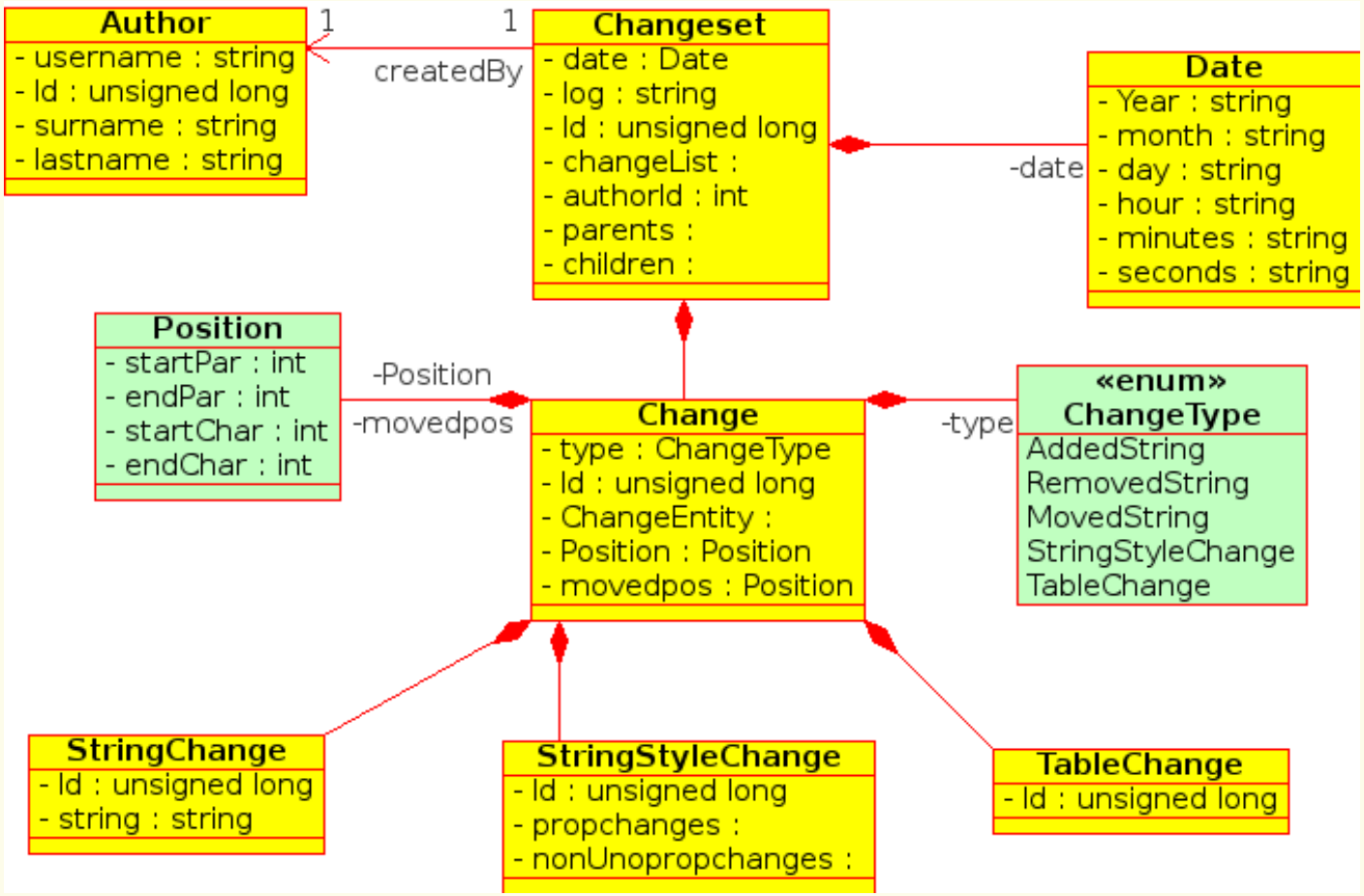
1. The model

- Changes stored in a redo/undo graph.
- Should obey the same specification in all implementation.
- XML parser to load and save the history of changes.
- Changes are grouped under changesets (revisions of the document).
- Storing other metadata of the changesets (author, date, comment).

2. Implementation of the model inside the Calligra code

- Document events are recorded through the change tracking system of Calligra.
- Dialog window in order to control the functionality of the extension.

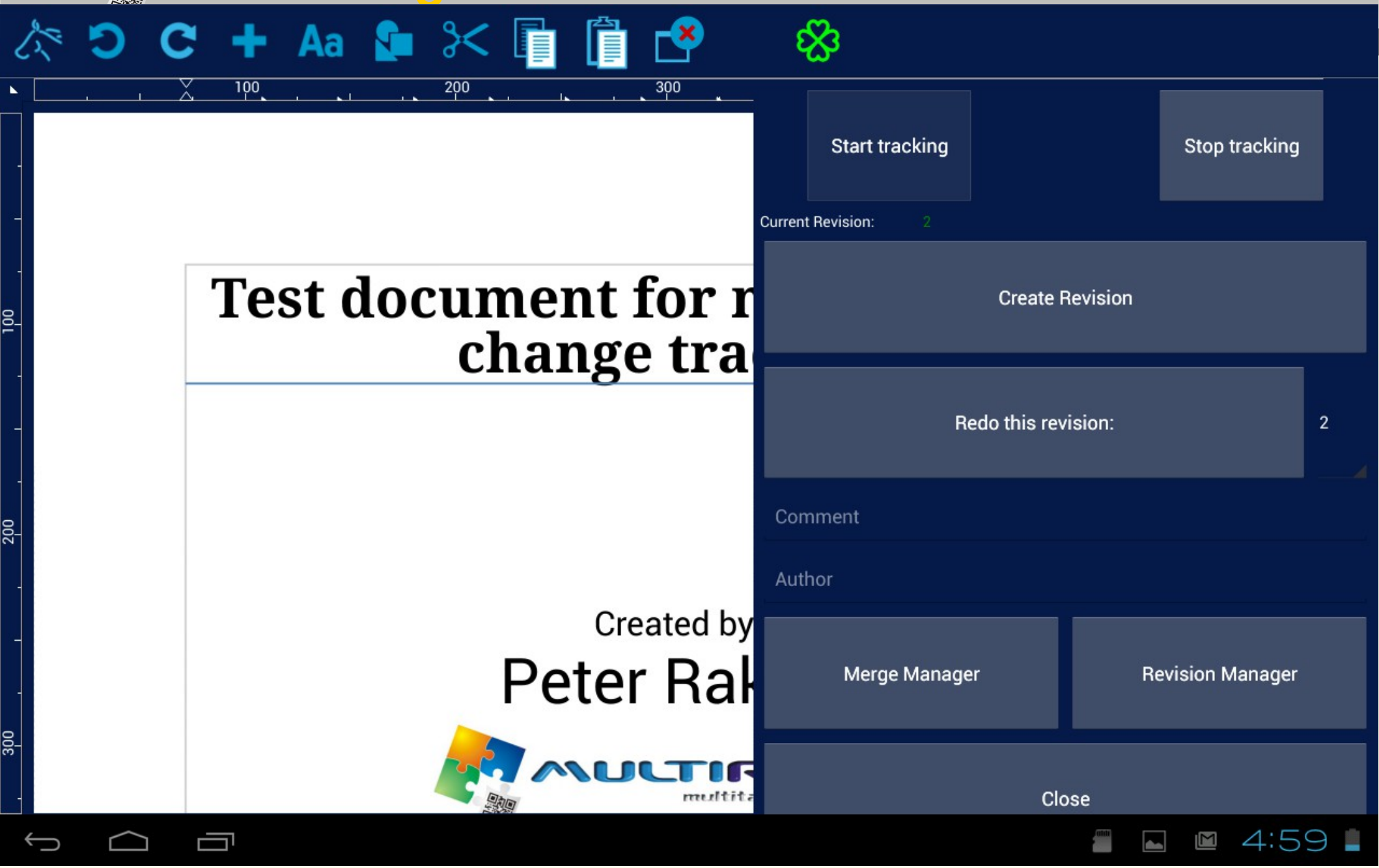
The graph of the recorded changes



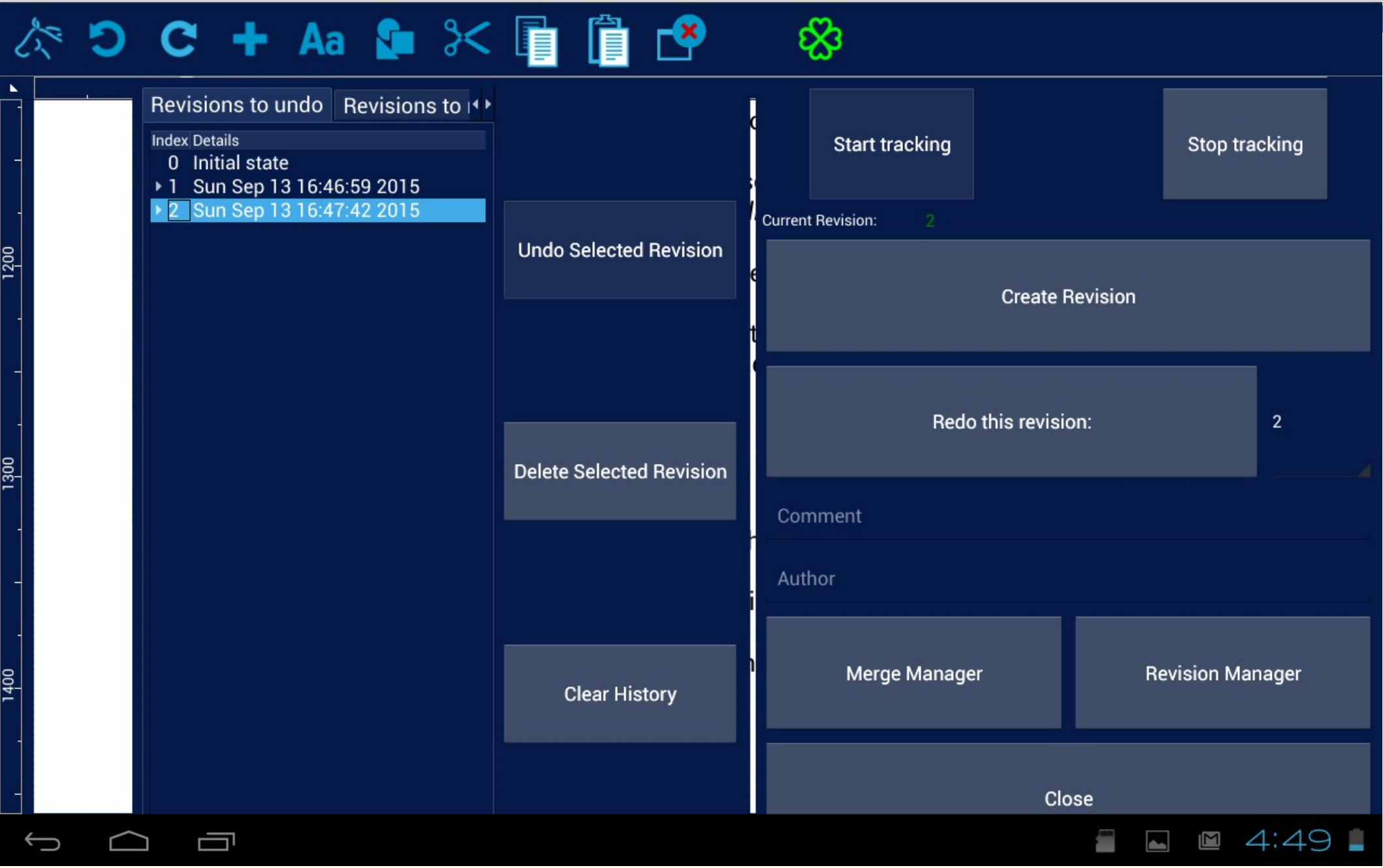
Currently supported change types

- Insertion/deletion of characters
- Insertion/deletion of paragraph breaks
- Style change of characters, paragraphs
- Insertion/deletion characters in text tables
- Insertion of text table.

Creating revisions



Managing revisions



Further developments

Extend the list of the supported changetypes:

- Other types of embedded objects
- Lists and enumerations
- Footnotes/headers
- etc.

Develop a “*tool*” to visualize the recorded changes:

- Necessary to see the changes of the collaborators.
- Necessary to manage revisions.

Change tracking in spreadsheets, etc.