

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



MULTIRĂCIŌ
multitalent solutions

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Objectives

EuroOffice – Latest Developments

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**



MCT in EuroOffice Words for Android

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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

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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).

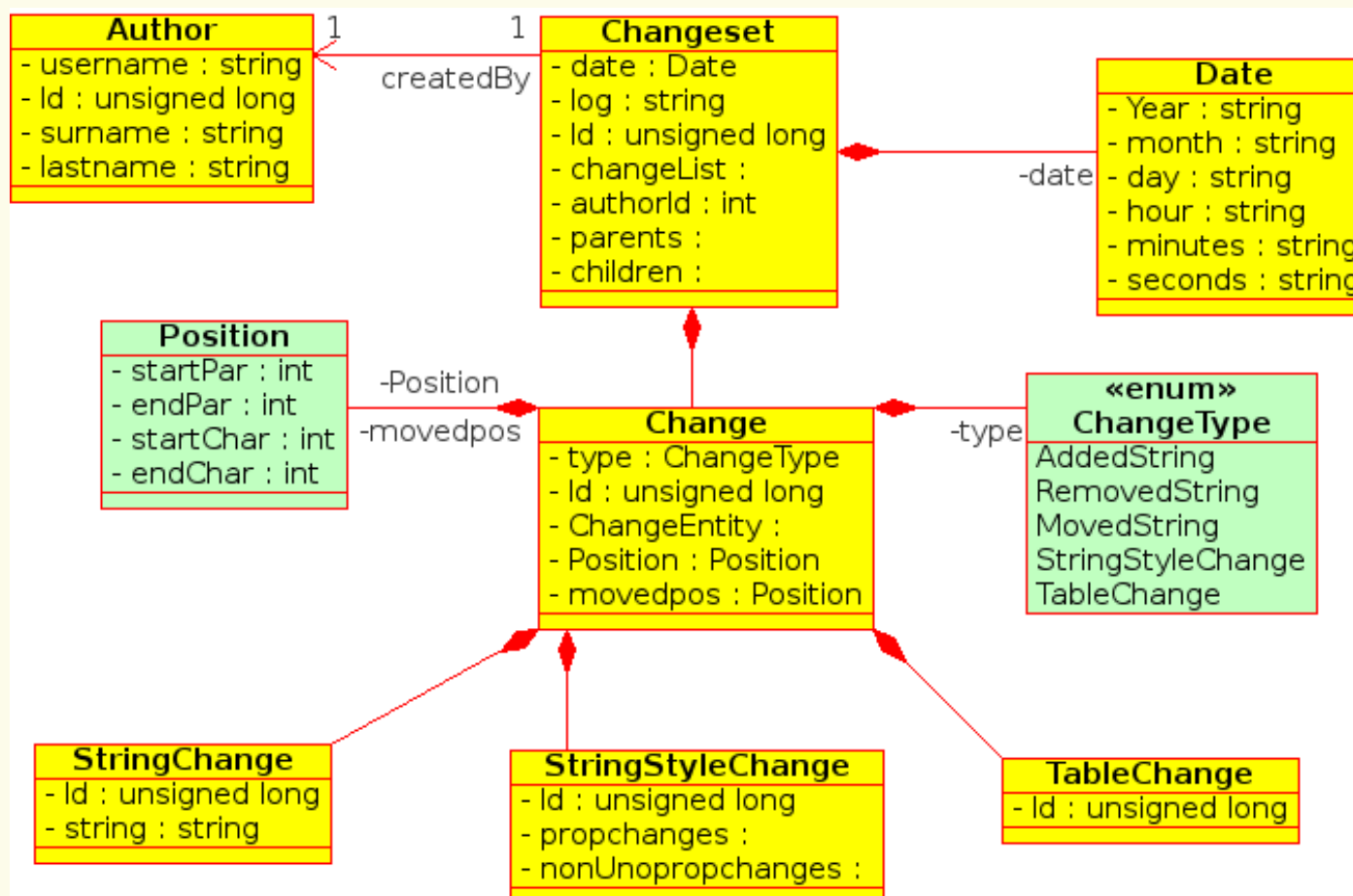
2. Implementation of the model inside the Calligra code

- 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

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Currently supported change types

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- 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



100 200 300


100

200

300

**Test document for r
change tra**

Created by
Peter Rak



MULTIR
multit

Start tracking

Stop tracking

Current Revision: 2

Create Revision

Redo this revision: 2

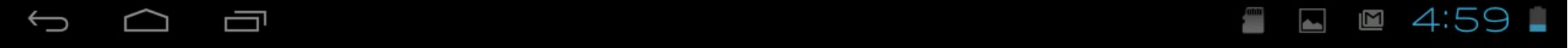
Comment

Author

Merge Manager

Revision Manager

Close





Managing revisions



Revisions to undo | Revisions to redo

Index Details

- 0 Initial state
- ▶ 1 Sun Sep 13 16:46:59 2015
- ▶ 2 Sun Sep 13 16:47:42 2015

Undo Selected Revision

Delete Selected Revision

Clear History

Start tracking

Stop tracking

Current Revision: 2

Create Revision

Redo this revision: 2

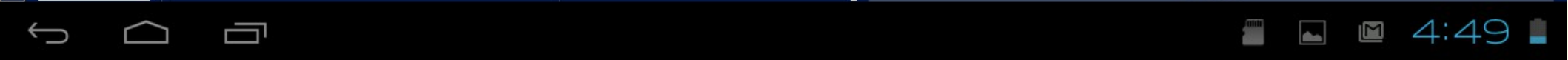
Comment

Author

Merge Manager

Revision Manager

Close





Further developments

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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.