A year in LibreOffice’s RTF support
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2016-09-08
About Miklos

- From Hungary
  - More blurb: [http://vmiklos.hu/](http://vmiklos.hu/)
- Google Summer of Code 2010/2011
  - Rewrite of the Writer RTF import/export
- Writer developer since Feb 2012
- Contractor at Collabora since Sept 2013
Writer RTF filter maintenance
New features #1

- Maintenance is mostly about bug-fixing, but...
- User-defined properties:
  - Both RTF import and export
New features #2

- Classification support: copy & paste
- Provide the info on export
- Parse and limit on import
Bugfixes #1

- tdf#92521 RTF export: handle section break right after a table

Original

Before / bad

After / good
### Bugfixes #2

- **tdf#94043** RTF filter: implement column separator handling

<table>
<thead>
<tr>
<th>AAA</th>
<th>Section 1, first column, this has a separator.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BBB</td>
<td>Section 2, first column, this has no separator.</td>
</tr>
<tr>
<td>CCC</td>
<td></td>
</tr>
</tbody>
</table>

**Before / bad**

<table>
<thead>
<tr>
<th>AAA</th>
<th>Section 1, first column, this has a separator.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BBB</td>
<td>Section 1, second col</td>
</tr>
<tr>
<td>CCC</td>
<td>Section 2, first column, this has no separator.</td>
</tr>
</tbody>
</table>

**After / good**

<table>
<thead>
<tr>
<th>AAA</th>
<th>Section 1, first column, this has a separator.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BBB</td>
<td>Section 1, second col</td>
</tr>
<tr>
<td>CCC</td>
<td>Section 2, first column, this has no separator.</td>
</tr>
</tbody>
</table>

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Bugfixes #3

- tdf#94377 RTF export: support comment formatting
Bugfixes #4

- tdf#61511 RTF export: handle page background solid color fill

Original

Before / bad

After / good
Bugfixes #5

- tdf#59699 RTF import: handle INCLUDEPICTURE field

Before / bad

After / good
Bugfixes #6

- tdf#65642 RTF filter: import \pgnrestart and \pgnucltr + \pgnlcltr + \pgnucrm + \pgnlcrm + \pgndec

Before / bad

After / good
Bugfixes #7

- tdf#90097 RTF import: handle fRelFlipV property for line shapes
Bugfixes #8

- tdf#91684 RTF import: fix scaling of group shape children
Bugfixes #9

- tdf#91684 RTF import: handle fFlipH and fFlipV shape props
Bugfixes #10

- tdf#100507 RTF import: don't set default para style to the 0th character style

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### Descendants of Jacob Leffler

**Generation 1**

1. Jacob Leffler was born about 1803 in Pennsylvania. He died between 1870 and 1875 in Monday Creek Township, Perry County, Ohio. He married Mary A. Logan about 1840. She was born about 1808. She died after 1860.

   Jacob Leffler and Mary A. Logan had the following children:

   - 1. Lucia Leffler was born in 1834 in Perry County, Ohio.
   - 2. George W. Leffler was born on 3 May 1835 in Monday Creek Township, Perry County, Ohio. He married Alice Inman, daughter of William Inman and Nannas Wythe 1851 in Perry County, Ohio. She was born on 5 March 1830 in Ft. Mead, Ohio.
   - 3. Jacob A. Leffler was born on 9 April 1841 in Perry County, Ohio. He married Alice Inman, daughter of William Inman and Naomi Wythe on 26 July 1865 in Winton, Jackson County, Kansas. He married Susan E. Feick on 17 April 1862 in Jackson County, Kansas. He married Susan E. Feick on 17 April 1862 in Jackson County, Kansas.
   - 4. Mary A. Leffler was born about 1843 in Perry County, Ohio. She was born on 26 January 1843 in Winton, Jackson County, Kansas. She married Susan E. Feick on 12 July 1862 in Perry County, Ohio. She was born on 26 January 1843 in Winton, Jackson County, Kansas.
   - 5. Elizabeth Jane Leffler was born in September 1846 in Monday Creek Township, Perry County, Ohio.
   - 6. John H. Leffler was born on 12 February 1851 in Monday Creek Township, Perry County, Ohio. He died on 17 September 1873 in Monday Creek Township, Perry County, Ohio.

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Original

Before / bad

After / good
Technical details
Show me the code!

• Code is mostly at:
  • `sw/source/filter/{rtf,ww8/rtf*}` – export
  • `writerfilter/source/rtftok/` – import

• 69 commits:
  • 31 bugfixes
  • 38 new feature / refactoring
Testing

- 37 new tests
- No single bugfix without a matching unit test in the last year!
- 0 regressions in the bugzilla:
  - RTF in the summary, keywords: regression
  - And no resolution
- Sample one-liner regression test:

```cpp
CPPUNIT_ASSERT_EQUAL(static_cast<sal_Int32>(6618),
                      getroperty<sal_Int32>(getParagraph(1), "ParaLeftMargin"));
```
Refactor

- `std::lround()`
- Consistent prefixes
- Cross-directory includes
- C++11 auto

```
for (std::vector<std::pair<Id, RTFValue::Pointer_t>>::const_iterator i = m_pSprms->begin();
    i != m_pSprms->end(); ++i)
```

vs

```
for (auto& rSprm : *m_pSprms)
```
Summary

- The LibreOffice Writer RTF filter keeps improving
  - New features from time to time
  - Regular bugfixes
  - 0 known regressions
- Thanks for listening! :-)
- Slides: http://vmiklos.hu/odp