Improving SmartArt import in LibreOffice Impress
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LibreOffice Impress

Szia!
Existent Basic support:
Motivation

Basic support

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- PowerPoint 2010+ writes a DrawingML fallback
Motivation

Existence Basic support:

- PowerPoint 2010+ writes a DrawingML fallback
- Some support for laying out the SmartArt
Big corpus of legacy documents without fallback
If editing is ever wanted, own layout support is needed!
Basic box, tab, rendering, lined, of bracket, table list types
Vertical box list

This is a
Vertical Box
List
Vertical tab list

And This
Is A
Tab List

And This
Is A
Tab List
Lined list

This is Lined List.
Vertical bracket list
Varying width list
Vertical table list
Basic org. chart rendering, accent of cont. block process types
Accent process
Continuous block process
Organizational Chart

Manager 1  Manager 2  Manager 3

Assistant

Employee 1  Employee 2  Employee 3
Concepts, markup

How is this code implemented?
Concepts

Layout Nodes, Algorithms

Layout Tree, Data Model Mapping

Shape Properties

Constraints, Rules, Text Properties
4 or 5 XML streams / SmartArt:
• data1.xml: defines the shape data
• quickStyle1.xml: defines styles for layout nodes
• colors1.xml: defines colors for layout nodes
• layout1.xml: the layout definition
• drawing1.xml: optional DrawingML fallback
**Code pointers**

**oox/source/drawingml/diagram/** has all the code

**SmartArt layout: import-time**

**Input:** per-diagram XML streams

**Output:** a tree of **oox::drawingml::Shape** objects

\[ \text{oox::drawingml::Shape} \rightarrow \text{XShape mapping code} \]

is shared with normal DrawingML import
Testing

Integration testing only

CppunitTest_sd_import_tests_smartart

28 tests, 147 asserts

For all recent improvements:
No functional change without a test
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Thank you.