Good things come to those who wait - BorderFrames and WriterGraphics
Agenda

- Motivation
- BorderFrames
  - Better: Frames for Cells in Tables in the Office
  - Live Examples / Pictures (fallback)
  - Development Internals
- WriterGraphics
  - Better: Make Writer Graphic FlyFrames freely rotatable
  - Live Example with current Master...
  - Development Internals
Motivation

- Show ongoing changes in LibreOffice
- Results from work for CIB Customers
- Possibility to do quite some important, deep changes
  - Thanks for supporting this, it will be for all users!
- Hard to decide → Show the two most important
  - Will use examples
  - Maybe try to use live LibreOffice for Demonstration :-)

BorderFrames

> Better: Frames for Cells in Tables in the Office
  
  - Used in various places
    
    • Calc (obvious)
    • Tables in Writer
    • Tables in Draw/Impress
    • In the UI/Border-Defining CustomWidget
  
  - All use their own Model-Implementation
  
  - All use their own Visualization Processing
  
  - All looked bad and were somewhat broken

> Live Examples comparing LO52 and current Master...
BorderFrames

TableExampleCalc:

<table>
<thead>
<tr>
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<th>A</th>
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BorderFrames

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BorderFrames

> TableExampleWriter:
BorderFrames

> TableExampleDrawImpress:
BorderFrames

> TableExampleUI:

Standard:

Benutzerdefiniert:

Entfernt auch die Umrandung von benachbarten Zellen

Presets:

User-defined:

Adjacent Cells:

Remove border
So... What was changed...? Development Internals:

- No change to ModelData: Too expensive to unify
- Adapted all Visualization Processings in Apps/UI
- Using Primitives now AFAP
  - LineMatching solved on ModelGeometry-Level
- Use same Tooling (svx::frame::Array)
- Extended Tooling to handle Rotated/Crossed for Calc
- Unified Line End Matching:
  - Primitives are prepared to handle more than three line patterns
  - Maybe useful when we want to offer Frames e.g. for Multi-Line Polygons...
WriterGraphics

> Better: Make Writer Graphic FlyFrames freely rotatable
  - Requested since ... Ages, see Bugzilla :-)  
  - Thanks to Miklos Vajna: Already added 90-Degree-Rotations

> Done in multiple steps due to complexity/discussion
  - Core/UI/ODF Format  
  - 1st version shown as preview at Rome LibreOffice Conference, collected feedback (thanks!)
  - Added persistence, UI elements  
  - No longer 'modify' Graphic – preserve unchanged original
  - 1st version Still rotated Graphic 'inside' not-changing frame
  - Not acceptable as final solution, thinking/digging deeper
> Continued internal development:

- Isolated all places which needed to be adapted to make the Frame ‘expand’ on the Image rotating around it’s Center
- Rotation limited to ‘Around Center’ due to simplicity for the User
- Made that version work, including Print/PDF/...
WriterGraphics

> Live Example with current Master...
He heard quiet steps behind him. That didn’t bode well. Who could be following him this late at night in this deadbeat part of town? And at this particular moment, just after he pulled off the big time and was making off with the greenbacks, didn’t he know the steps behind him were on those cuffs on his wrists? Suddenly he saw the two warehouses almost in the middle of the tap his way along in the stiffened: it was a dead-end he had come. The steps outline of a figure coming forward. Was there another crook who’d had the same idea, and was now waiting for a chance to grab the fruit of his labor? Or was he one of many law officers in waiting to pounce and snap up his money as he nervously looked all around the corner. Is this the end of the line? he thought pressing himself back against the wall trying to make himself invisible in the dark, was all that planning and energy wasted? He was dripping with sweat now, cold and wet, he could smell the fear coming off his clothes. Suddenly he saw the alley. Like the left and two warehouses can lying in the inky darkness and was a dead-end, he had come. Louder, he saw the coming around the corner. Is this the end of the line? He tried to make himself invisible in the dark, was all that planning and energy wasted? He was dripping with sweat now, cold and wet, he could smell the fear coming off his clothes. Suddenly he saw the alley. Like the left and two warehouses can lying in the inky darkness and was a dead-end, he had come. Louder, he saw the coming around the corner. Is this the end of the line? He tried to make himself invisible in the dark, was all that planning and energy wasted?
So... What was changed...? Development Internals:

- Huge changes to isolate Writer Frame-Geometry what is precondition to gain control → go to Homogen Transformations
- Use of (this time) already existing Primitives for visualization (!)
- Providing alternatively Transformations at each Writer FlyFrame, no need to adapt all places (impossible), but please use when adding future changes to this Area
Thats it! Thanks for your interest!

And Thanks to Everyone supporting and sponsoring continued Work on the Office!