BERLIN 2012 CONFERENCE

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Basic IDE what's new now (and might be new later)

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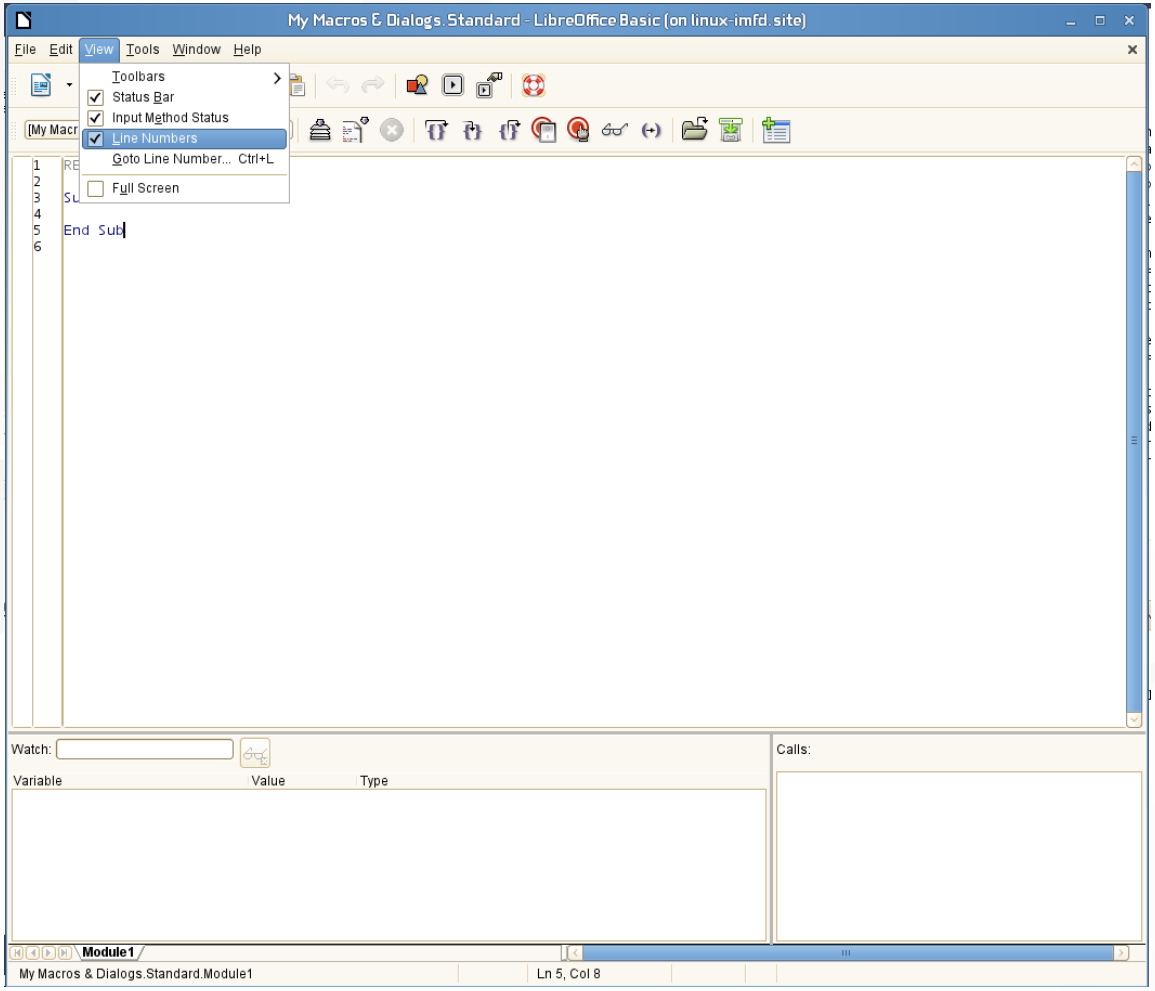
Introduction

- Working for Suse and hacking on Libreoffice (calc, filters, basic)
- Previously worked for Sun on Openoffice (before it morphed into Oracle)

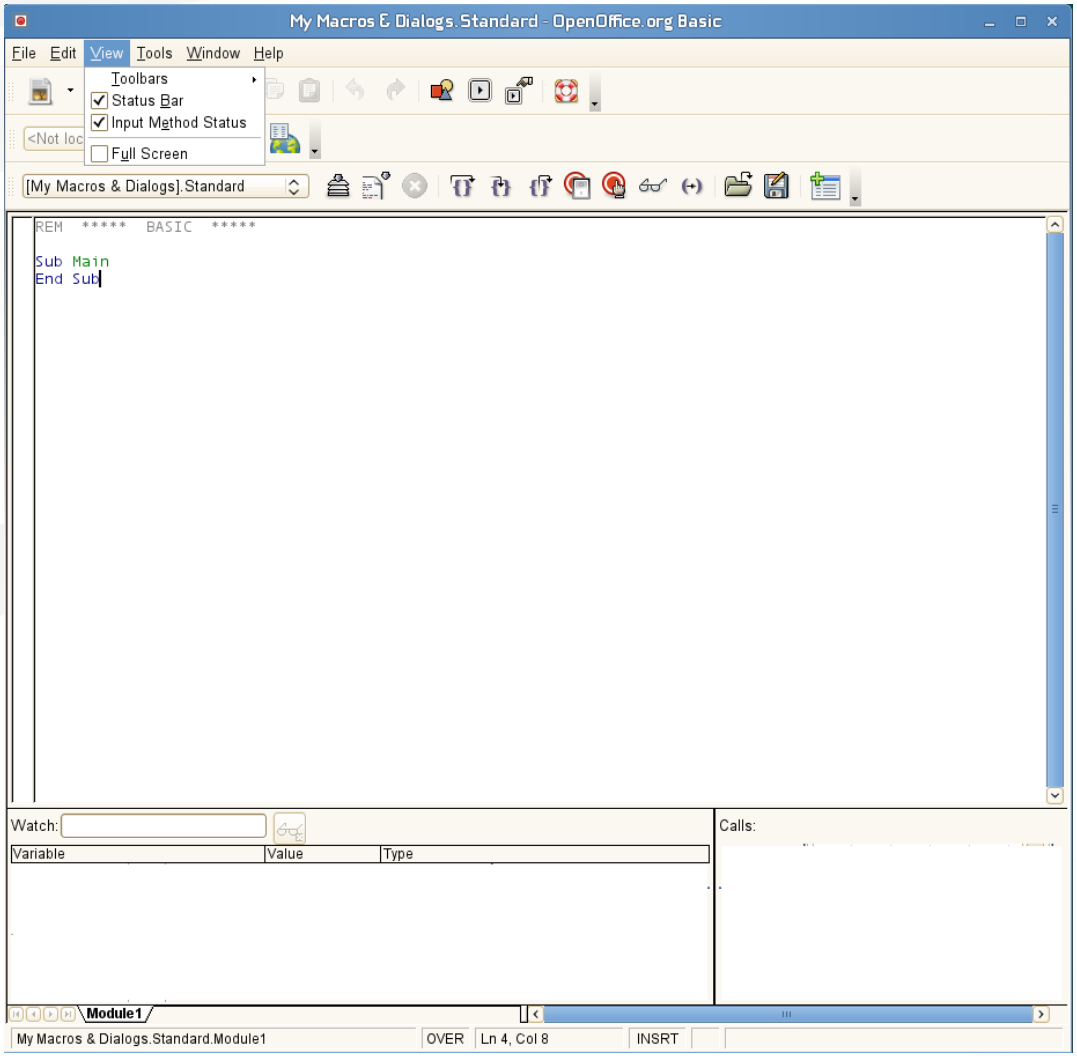
Improvements

- LineNumbers (August Sodora) since 3.5
- Goto Linenumber since 3.5
- Dockable Basic Navigator (Tomcsik Bence Tibor, János Uray) since 3.6(available 3.7 for Dialog IDE)
- Dockable Dialog Property Browser (János Uray) available 3.7
- Document specific dialog aware controls since 3.6
- Scrollable Dialog 3.7

Line Numbers



Dockable Basic navigator



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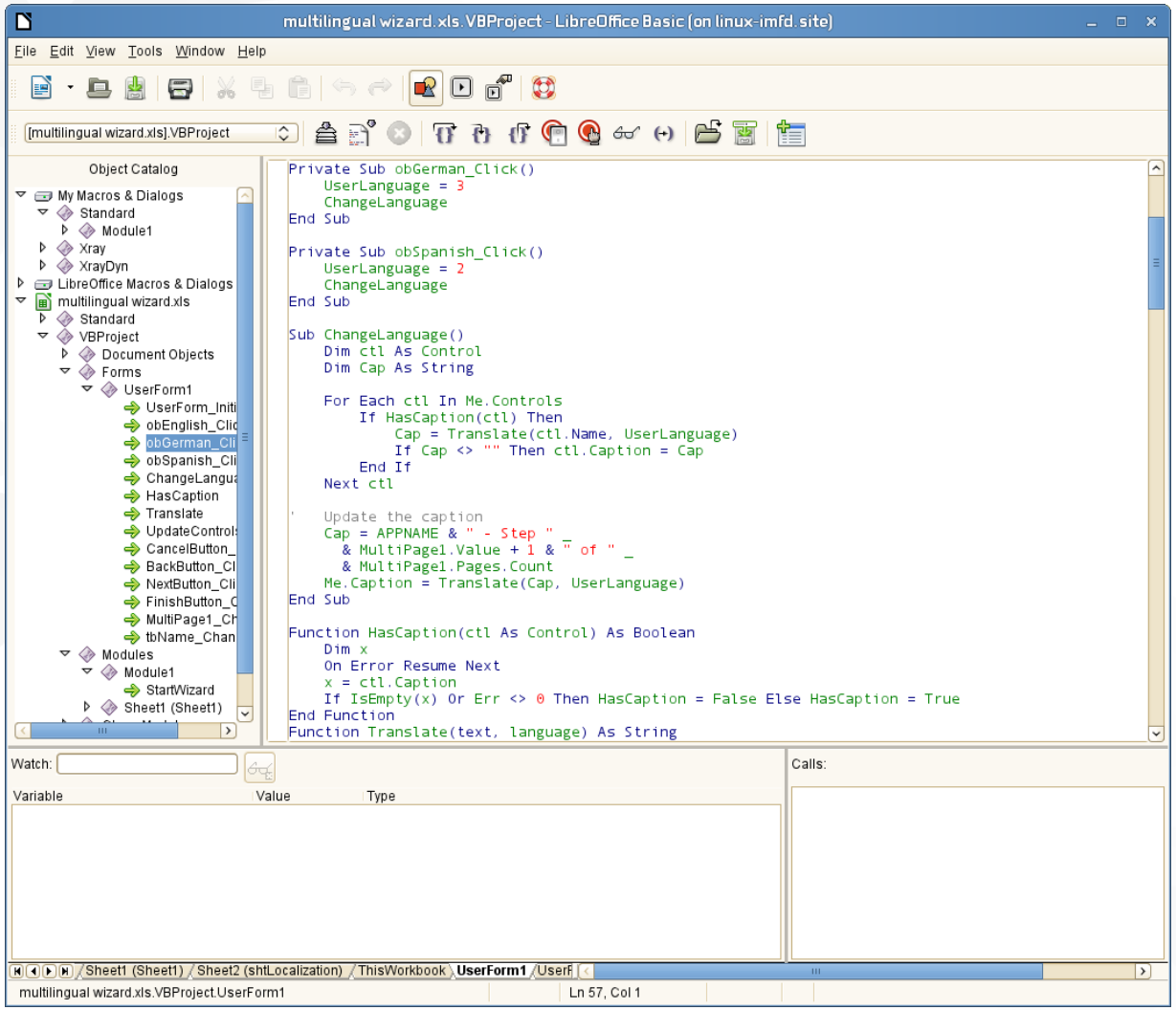
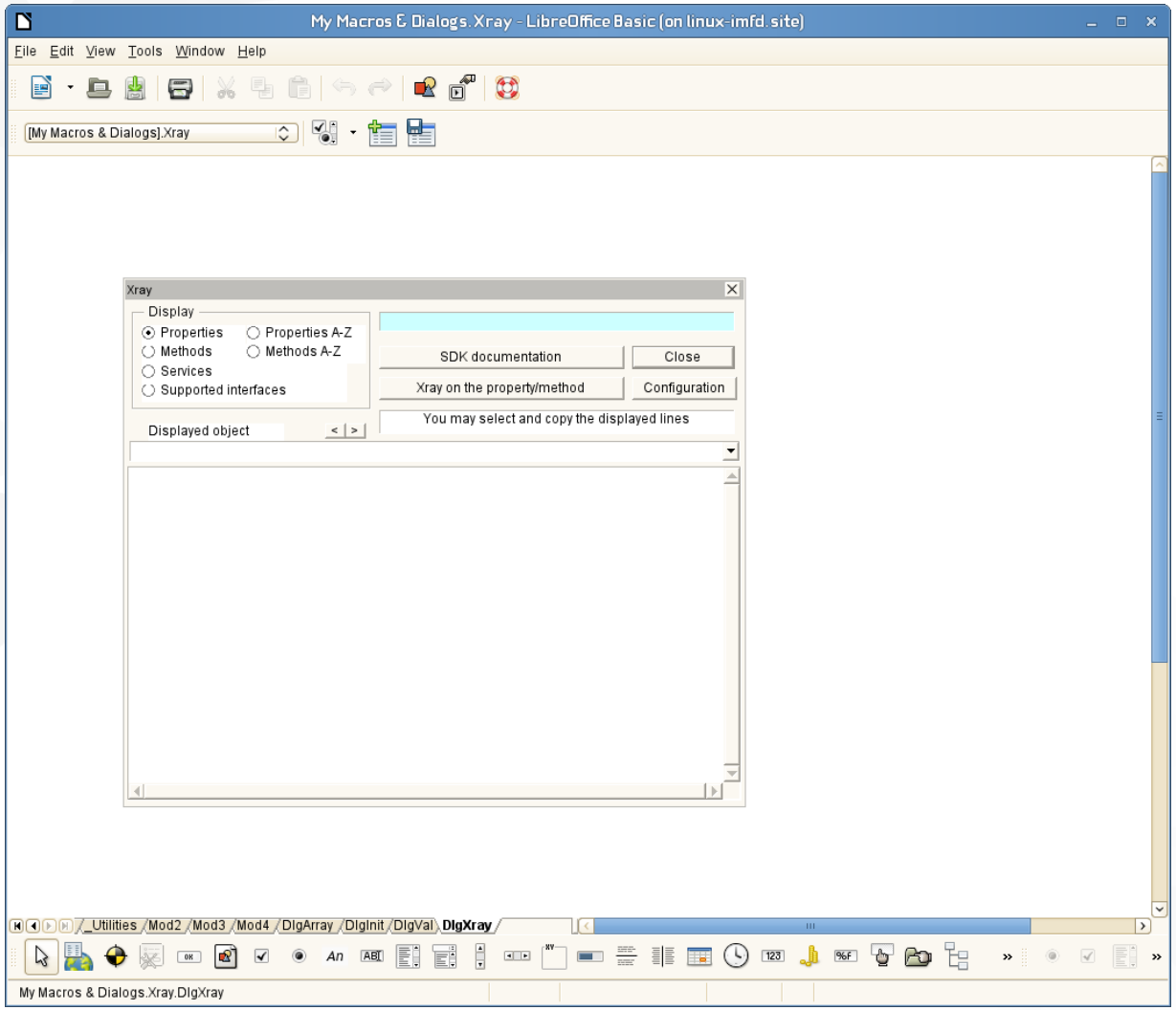


Dockable Dialog property browser



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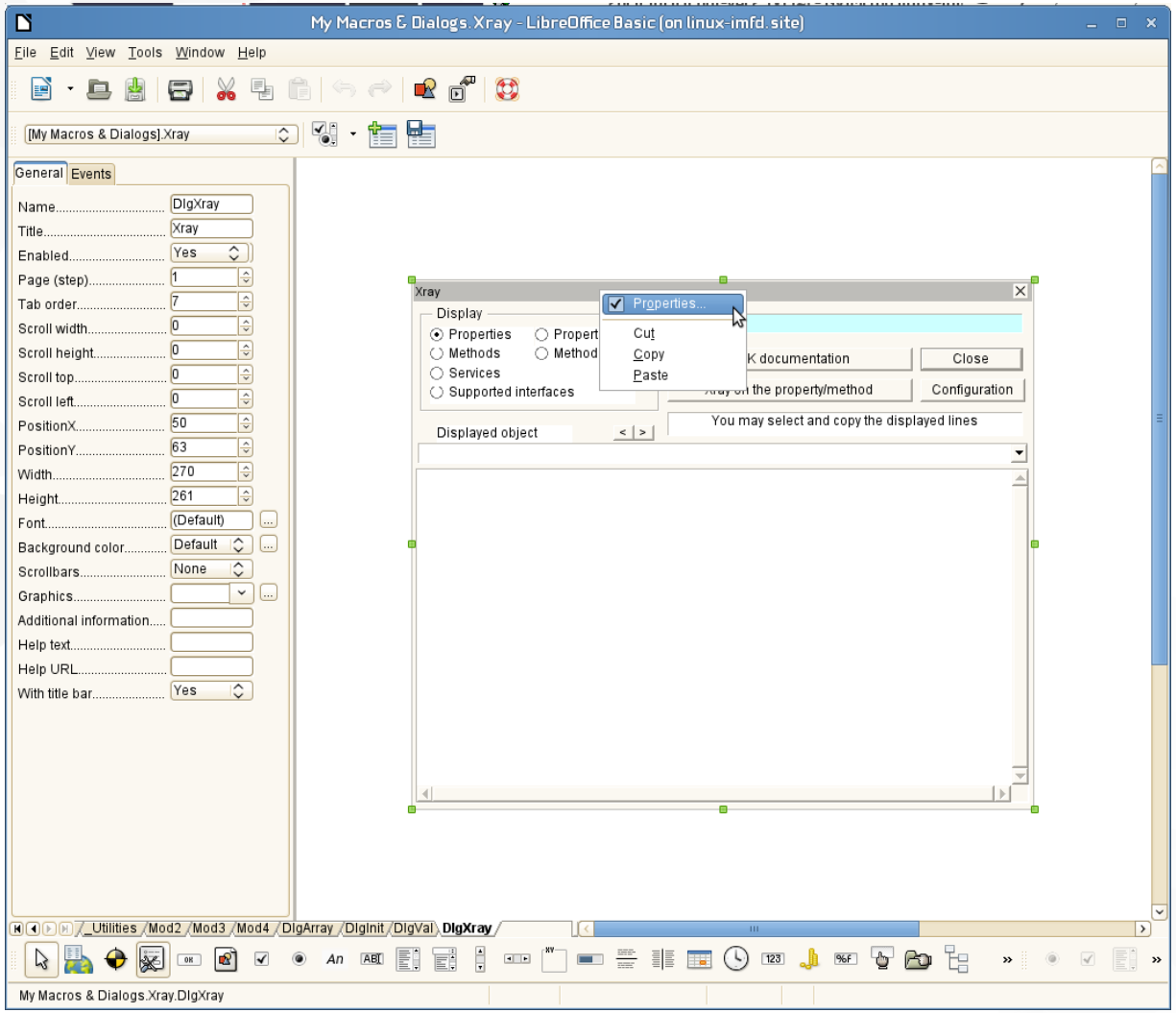

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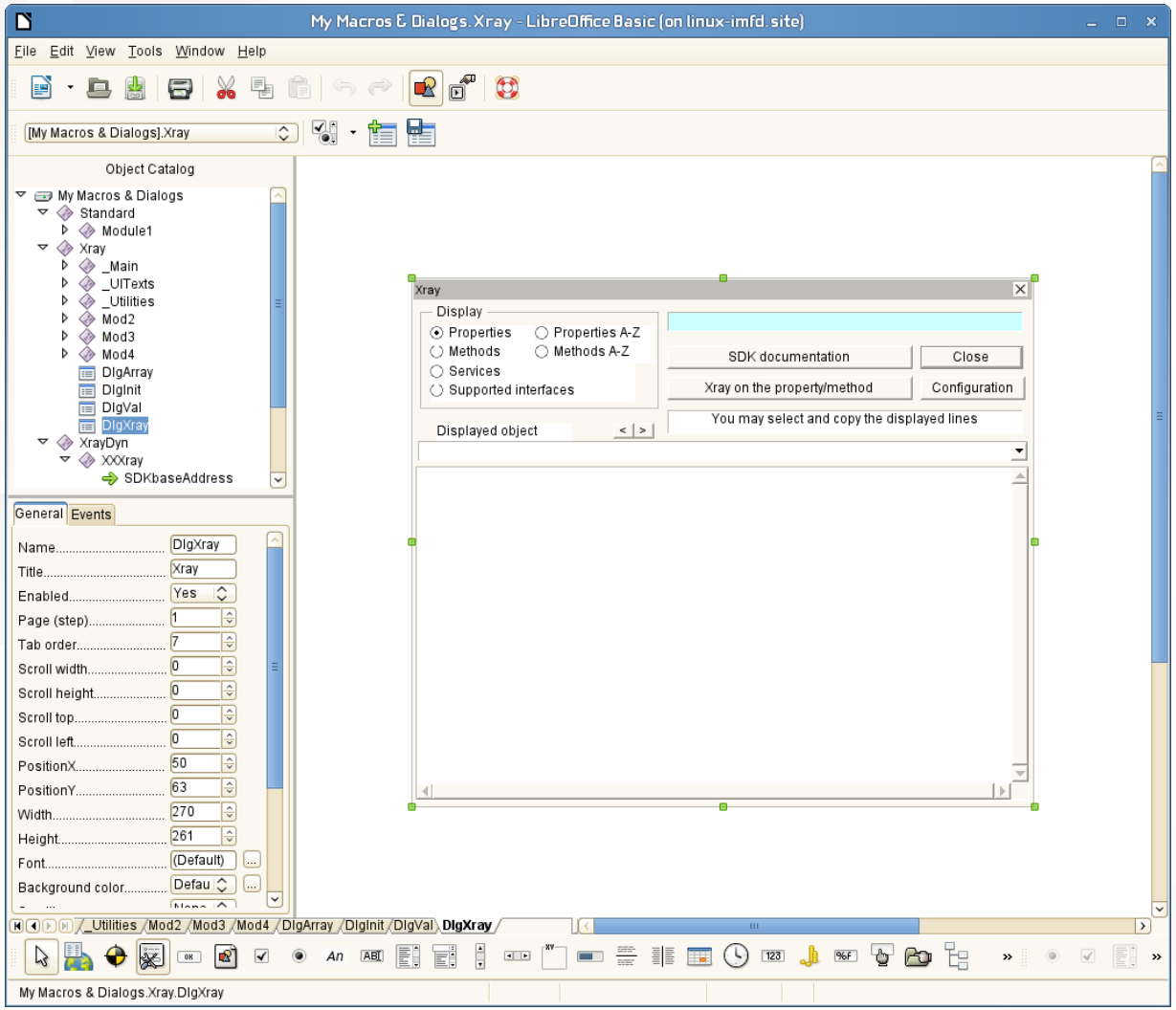
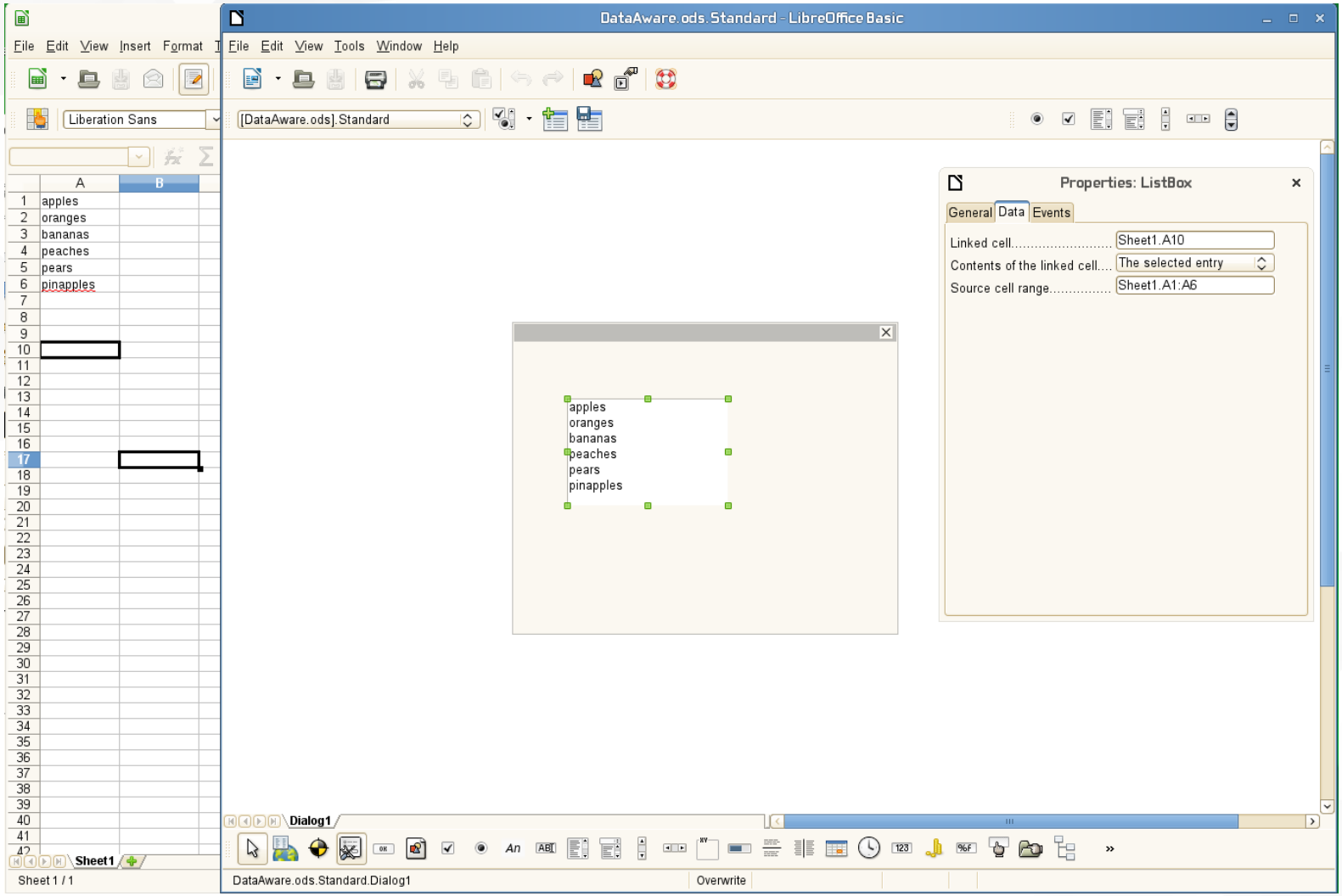


Data aware controls



Scrollable Dialog

- Demo?

A possible future

- Improvements to the improvements (lots of scope there)
- Container controls
- Dialog IDE usability improvements
- Code completion for Libreoffice basic
- More cross pollination from VBA interopt

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- Note to self: create more easy hacks

Improvements to the improvements

- Line numbers
  - Make the scrolling flicker free
  - Make the display number setting persistent (currently it's just sticky)
- Dockable Basic Navigator
  - Add context menu for basic edit support (Add/Delete etc.)
  - Possibly make docked state/position etc. persistent

Improvements to the improvements – cont'd

- General Dockablity improvements
  - allow the dockable entities to be docked anywhere.
    (currently what can be docked where is fixed)
  - allow not only an item to move to any docking area but allow arbitrary numbers of windows to be docked in an area,
  - even when say a single instance of the basic navigator window is shared between the dialog and module view we should handle that they could be docked in different positions etc when switching between dialog and module tabs

Dialog editor usability improvements

- Make dialog editor container aware

  Move dialog and the containees should move too.
- More controls such as calendar and container controls (more later about that)
- Better interaction with controls in the editor (e.g. allow a label field to be edited directly in design mode)

Container controls

- Dialog is the only container (but it can't support hierarchies of containment)
- We do have some contenders, Frame, MultiPage & Page controls exist (hidden) from VBA interoperability work
- We need to integrate those controls into the IDE.
- Adding the controls to the toolbox would be a first step. Making the Dialog builder container aware (not just for the Dialog window) is the real interesting task (being able to navigate to and selected a nested control in design mode)

Code Completion for Libreoffice Basic

- Why not sofar?
  - There is no 'language' support, need stronger typing
  - Poor API support
- Recently there has been some work to transition from 'old' style uno services to 'new' style uno services (Noel Grandin)
  - Having an object type derived from 'new' style definitions would allow us to obtain the necessary information from the type to provide code completion – still a bit blue sky, we need a more expressive api for this to be useful

Code Completion for Libreoffice Basic

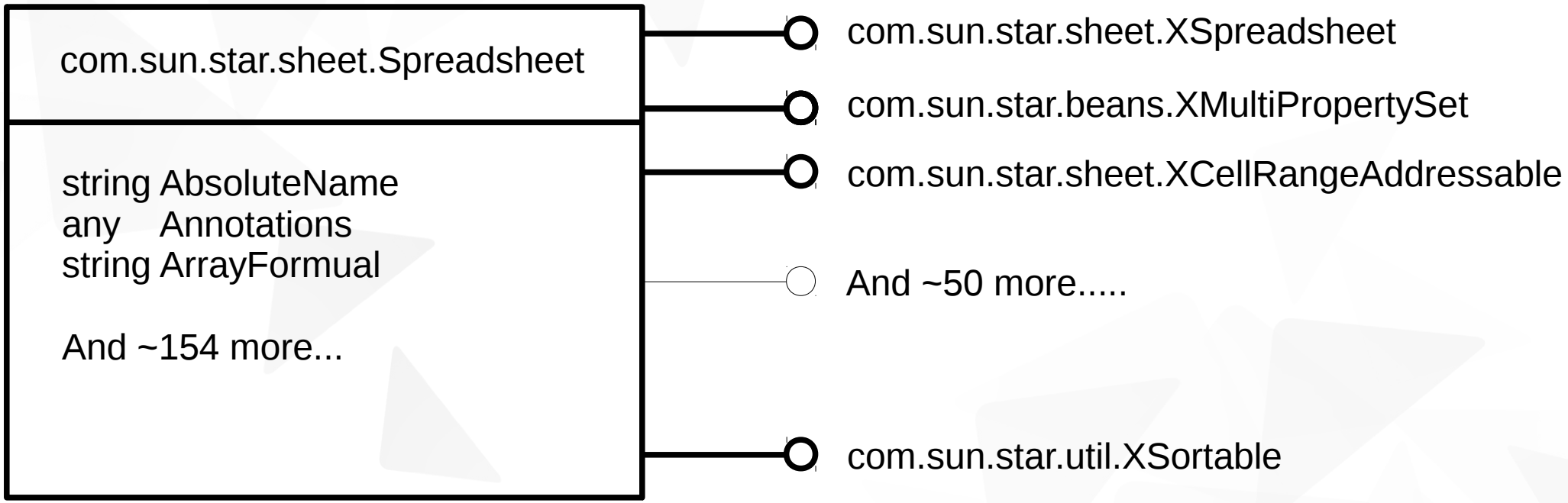
```
REM  *****  BASIC  *****

Sub Main
Dim aDoc as Object
Dim aSheet as Object

set aDoc = ThisComponent
set aSheet = aDoc.Sheets(0)

End Sub
```

Code Completion for Libreoffice Basic



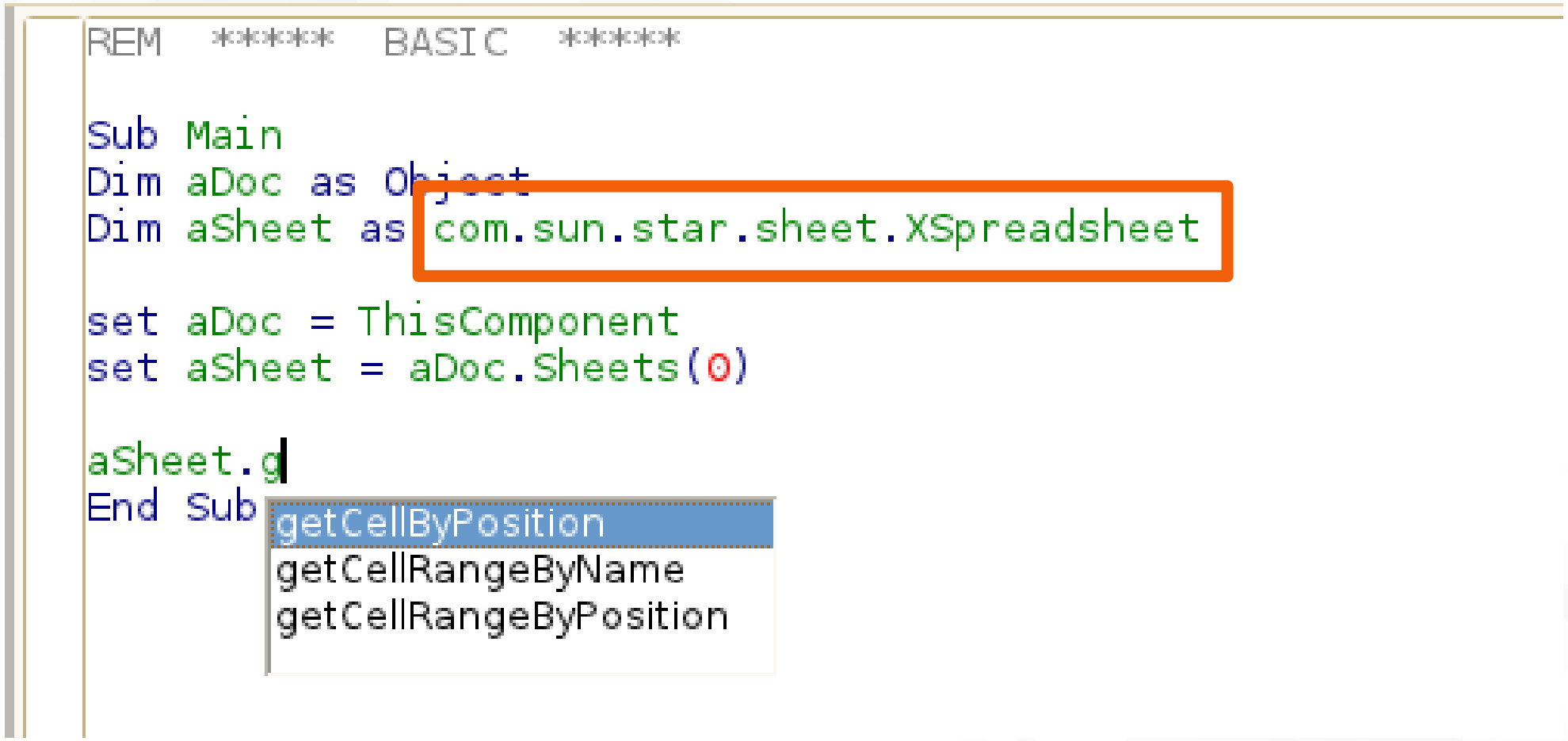
Code Completion for Libreoffice Basic

```
interface XSpreadsheet: css::sheet::XSheetCellRange
{
    css::sheet::XSheetCellCursor createCursor();
    css::sheet::XSheetCellCursor createCursorByRange(...);
}

interface XSheetCellRange: css::table::XCellRange
{
    css::sheet::XSpreadsheet getSpreadsheet();
};

interface XCellRange: css::uno::XInterface
{
    css::table::XCell getCellByPosition(...);
    css::table::XCellRange getCellRangeByPosition(...);
    css::table::XCellRange getCellRangeByName(...);
};
```

Code Completion for Libreoffice Basic (mockup)



•More cross pollination from VBA interopt

- Integrate application specific objects (similar to document objects in VBA) into the IDE for normal Libreoffice Basic
- Auto event binding from IDE

Help needed

- More than half the improvements already implemented were done by volunteers or students
- There are more ideas than people to implement them.
- You can do it, if you find these ideas interesting please think about getting involved
- Contact us on IRC, Libreoffice-dev maillng list

Thank You !!