



Addons development

an other way to bring value to OpenOffice.org

**IRC #oonlc Speech
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Topics

- Who am I ?
- DicOOo and FontOOo Stories
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- Who can be an addon contributor ?
- What is an addon ?
- Organizing addons
- Tools for developpers
- Deploy Addons to users
- Addons that could be developped

Who am I ?

- 34 years old, married, four children
- Living near Grenoble – France
 - Grenoble is in french Alpes
 - Around 80 km from Lyon, 600 km from Paris
- Discovered OOo 2 ½ years ago
- Involved in OOo macros for 2 years
- Author of various tools
 - OOoConv, DicOOo, FontOOo, OOoWikipedia ...
- Software engineer
- In a previous life :
 - PhD of geomechanics at 3S Laboratory - Grenoble
 - « Robustness and consistency in rheological and numerical modelling in geomechanics »
- Favorite color : blue



Me

DicOOo and FontOOo Stories

- **DicOOo** is an autopilot that allow an easy installation of dictionaries for end-users.
 - Due to licence issues, french spellchecker can not be included in OOo distribution.
 - Need a tool for beginners to avoid manual file editing
 - Installs spellcheckers, hyphenation and thesauruses
 - included in OOo since 1.1.1
- **FontOOo** is an autopilot that allow adding fonts to OOo
 - When a user writes a document, he is not sure the reader will have the same font
 - OOo is shipped with beatstream familly fonts to address this issue
 - In the same spirit, FontOOo gives access to some other fonts
 - A hacked clone of DicOOo
 - included in OOo since 1.1.2
- Both have initially been built as standalone macros



Lessons

- Initially quickly developed in french community : The source code is in French !
 - This prevent other developpers to help you and modify/correct the code
 - **Do not write code in your language. Use english !**
- Tested and debugged with the help of the community
 - Once the main features are more or less stable, call for help and testers. You weel be fed up with lots of bug reports and new ideas. This process should occur as soon as possible
 - **Use OOo helpers : the community**
- OOo is multiplatform
 - The API is the same for all the supported platform and only minor problems have to be addressed to make the addon be usable on all platforms
 - **Do not break OOo multiplatform features**
- OOo is multilingual
 - A simple rough mechanism can be sufficient to translate your addon before it is necessary to use advanced tools
 - Keep it simple so even non technical translators can translate
 - Call other Native-Lang project for translators
 - **Do not break OOo multilingual feature**

Lessons

- A first version is not always perfect
 - Your addon will be upgraded : give it a versionning system
 - Try a self-update mechanism
 - **Upgrading your addon should be as straightforward as installing and using it**
- End-user do not have to guess what the addons needs to work
 - Use OOO dialogs and the nice step property
 - Only one action on each screen to make things clear to users
 - Describe clearly what is needed at the current moment
 - Give feedback to user when doing heavy process
 - **Standard design rules have to be applied and OOO gives tools for that : Use them**
- **Even if your tool is nice, if it is not enough end-user oriented, it will not be used**

Who can be an addon contributor ?

- OOo needs core developpers
 - ◆ Requires skills such as C++, Java
 - ◆ Licencing required (LGPL, JCA ...)
 - ◆ Long term involvement
- Prevents some developpers to come and bring features to OOo
- Based on UNO bridges, a lot of languages can be used, especially with the coming OOo2.0
 - ◆ User can program in their favourite languages and use OOo API for internal OOo scripting with Java, Python, Basic ...
- **Everyone that have some tools or idea simplifying end-user OOo daily experience can develop an addon and share it**

What is an addon ?

- A self-contained Zip file allowing to add functionalities to OOo
 - ◆ The source code
 - ◆ An xcu file dealing with GUI integration
 - ◆ Other needed files (icons, images ...)
- Deployable with OOo standard tools
 - ◆ 1.x : using the command line tool pkgchk
 - ◆ 2.x : unopkg command line tool, a GUI binding is provided
- Fits OOo admin model
 - ◆ For one single user, put in <oooUser>/users directory
 - ◆ For the whole OOo install (all users), put in <oooInstall>/share directory

All is explained in the developer's guide, chapter 4 (4.7.3 for add-ons)

<http://api.openoffice.org/docs/DevelopersGuide/Components/Components.htm>

Organizing addons

- Valuable productions are disseminated all over web sites
- End users do not generally know how to install addons
- Developpers need to a place to start dealing with addons

- An incubator project
 - ◆ Reactivate the scripting incubator project ?
- Tools
 - ◆ For developpers
 - ◆ For distributing to end users
- Policies & Guidelines
 - ◆ What kind of licences ?
 - ◆ Coding guidelines
- Correspondant for native-lang projects
 - ◆ Helping native-lang addon developpers submitting and joining the project
 - ◆ Call for translators
- Reviewers, testers, feedback mechanism
 - ◆ Would be marvellous ...

Tools for developers

- Guidelines document for addon developers
 - The SDK chapter
 - Some guidelines and advices
- Xray
 - Mandatory to discover OOo API – Should be included in OOo by default
 - Already exists for OOoBasic and Python
- Addon creator
 - Already exists for OooBasic in french
- Standard model in all the languages supported internally by OOo
 - A standard empty dialog with a navigation mechanism using step mechanism
 - A common interface (but only as an example ;))
 - Ready to translate

Deploy Addons to users

- Not all development have to be included in core OOo
 - Only the one that are used by all users
 - Prefer uno packages and standalone tools
 - OOoWikipedia, FitOOo, LeBoolier game ...
- New OOo features for deploying addons
 - Since 2.0, process is easy for users. The value is to be able to browse "What's new"
 - What about signing ?
- A repository that can be browsed
 - Ian did a prototype that could be a starting point
 - Define several levels to qualify addons
 - Untrusted (default)
 - Verified / Accepted : the main addons
 - Valid / very useful : additional work should perharps be done for giving it by default
 - As to be as simple as possible

Addons that could be developed

- Remote installer of
 - Templates
 - Gallery : based on OOo2 API, galleries can be created from scratch
- A deployment wizard
 - Install a user
 - Make changes
 - Create a zip file that can be deployed on other installations reproducing the changes
- ...



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