



Extending OOo

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Agenda

- About Me ...
- About OpenOffice.org ...
- A Dream - The Coral Reef ...
- Extensions
 - > Overview ...
 - > Requirements ...
 - > Current State ...
- An Outlook ...

About Me

- UNO (Universal Network Objects) project lead
- With StarOffice / OpenOffice.org for ~9 years.
- Started as an engineer at StarDivision – now working for Sun as a software architect.
- Masters degree in computer science (Hamburg University).
- Actually started to learn programming on CBM Pet ~26 years

OpenOffice.org – Brief History

- Started as StarWriter in 1985 (DOS)
- Became StarOffice in 1995 (Win16, Win95, OS/2)
- Acquired by Sun in 1999 (StarOffice 5.2a)
- Went Open Source in 2000
- Latest released versions are StarOffice 8 and OOo 2.0 .

OpenOffice.org - Some Numbers

- > 100 languages / localizations
- > 70 million accumulated downloads
- > 37.000 people subscribed to mailing lists
- > 800 signed JCA (Joint Copyright Agreements)
- > 181.000 completed user surveys since OOo 2.0
- > 10 million lines of code
- > 20 years old

OpenOffice.org - Some Details

- OpenOffice.org is organized in projects,
 - > accepted projects (23),
 - > incubator projects - things wanting to become an accepted project, and
 - > localization projects (68).
- The accepted projects are mostly the “coding” projects.
- Examples
 - > Writer - the word processor
 - > Calc - spreadsheet calculations
 - > Uno - the component model

A Dream - The Coral Reef

- Allow / enable basically everybody to contribute to and to work with OpenOffice.org, including, but not limited to,
 - > Open Source advocates,
 - > commercial entities,
 - > developers,
 - > users,
 - > scripters and more.

A Dream - The Coral Reef continued

- To extend the available
 - > functionality,
 - > content,
 - > localizations and
 - > Platforms,
 - > ...
- While providing ways
 - > to publish it,
 - > allowing for update notifications,
 - > and more ...

Extensions – Requirements

- What users want ...
- What developers want ...
- What commercial parties want ...
- What architects want ...
- What others do ...
- What all fear ...

What Users want ...

- Adjust an application to their personal needs
 - > downsizing
 - > install what is needed only
- Get new and extend the available functionality.
- Simple to install&update and remove.
- Free choice of vendors.

What Developers want ...

- Easy entrance / low barrier to development.
- Early feeling of success.
- A (simple to use) distribution channel.
- Support for various flavours of add-ons, add-ins etc.
- A bunch of documentation.
- A simple and complete API .

What Commercial Parties want ...

- Licensing support, e.g.
 - > per user,
 - > per installation, or
 - > custom.
- A distribution channel as well.
- Basically, a way to earn money ;-)

What Architects want ...

- A simple and modular (hierarchical, layered) architecture.
- A few repeating patterns (e.g. MVC, SOA).
- Small, independent parts, being freely combinable.

What Others do ...



- Mozilla, Thunderbird, Firefox and Co.
 - > Many extensions available
 - > Simple to install and update



- NetBeans
 - > Originally focused on developers.
 - > Now an application framework.
 - > Many extensions available.



- Eclipse
 - > Originally focused on

What all fear :-)

- A big, non understandable software monolith.
- High learning curve.
- Software bloat
(see http://en.wikipedia.org/wiki/Software_bloat for details)

Extensions – Requirements

Summary

- Versioning
 - > version number and unique identifiers
- Dependencies
 - > to a specific application version
 - > to other extensions or modules/plugins
- Dynamic updates
 - > manual checks
 - > automatical checks
- Licensing
- Seamless Integration (help, locale, customization)

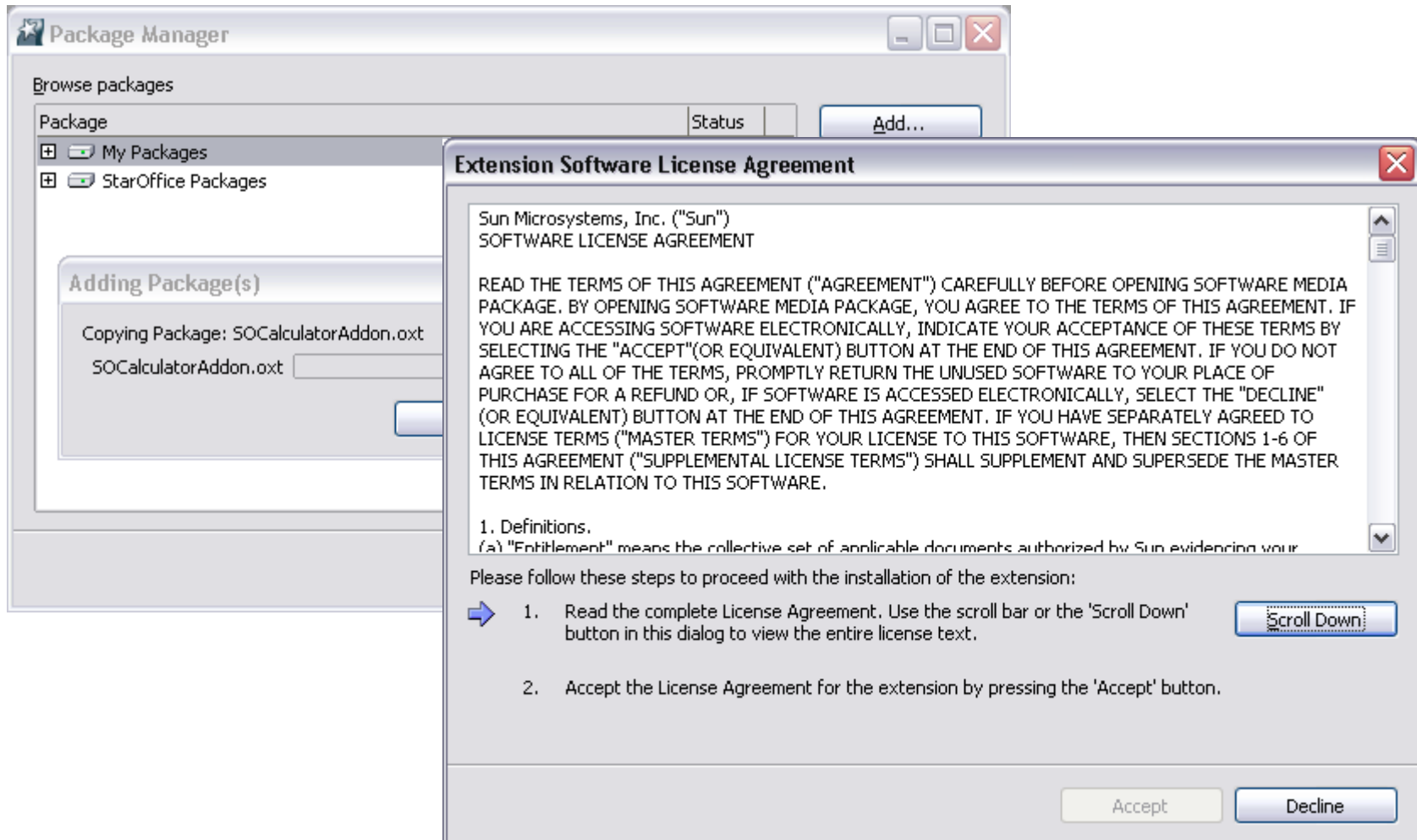
Extensions - Current State

- Scripting (like VBA)
 - > OOo BASIC, Python, JavaScript
- Uno Components
 - > C/C++, Java
- Add-Ons
 - > Menus,
 - > GUI,
 - > Configuration
- Content
 - > Templates
 - > Gallery Items

Extensions - Current State

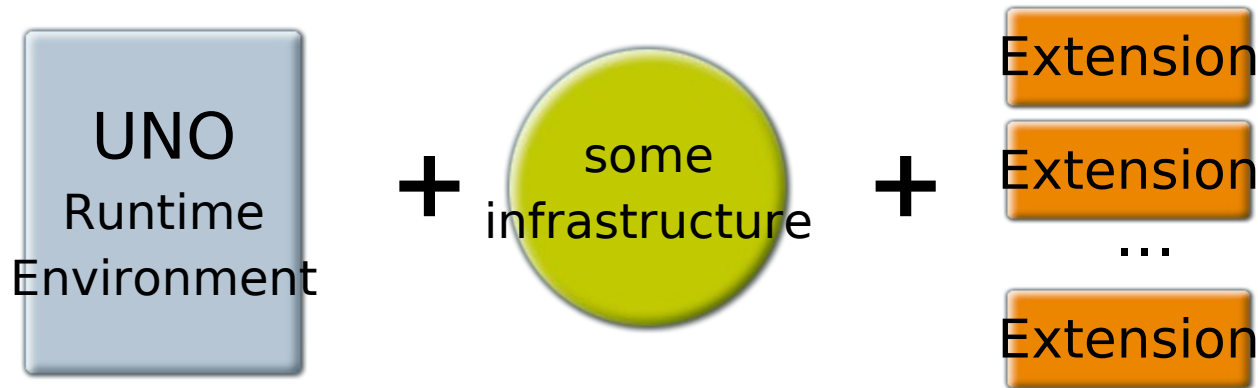
- Add-ins
 - > Calc functions
 - > Filters
 - > menu Interceptors
 - > Spell Checkers
 - > ...
- 3rd Party Integration
 - > Rendering (e.g. as Java Bean)
 - > Remote access
 - > Process management
 - > Installation detection

Extensions – Current State



An Outlook

- OpenOffice as a collection of extensions / modules



- Easy update for small parts of the office
- Small deployments possible (e.g. writer only)

Questions & Answers



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