AbiWord:

A Cross–Platform GNOME Office Component

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Abstract

What is AbiWord ?

1.Cross platform Word processor

2.Part of GNOME Office

AbiWord's Goals and Ambitions

1. Word processor for the masses

2. Cross platform: not everybody use GNOME yet

3. Strong import/export capabilities: open to the world.

4. Really extensible

Glossary

Some acronyms:

- **AP**: designates application framework code

- **XAP**: designates cross–application framework code

- **XP**: designates cross–platform code

The Future of AbiWord

After milestone 1.0 (really soon on the Internet)

- Tables

- Compound Objects

- Embeddable

We expect them for 1.2. Not promise however.

Tables

- One of the most requested features

- Require a large rewrite of the formatter
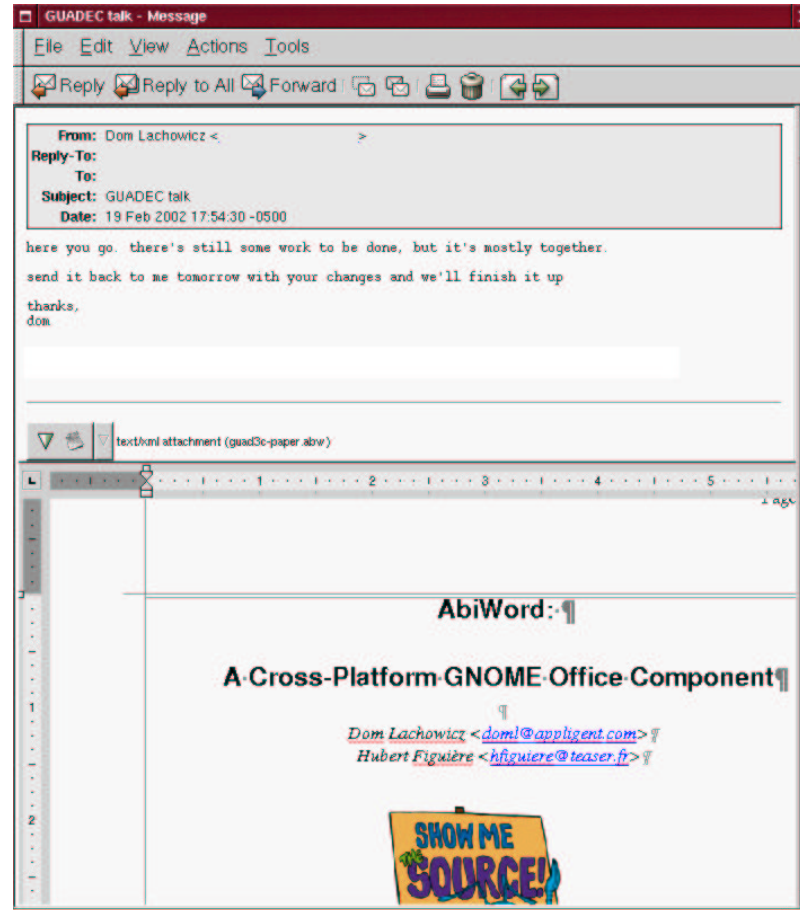
- Totally XP

Compound object embedding

- Also one of the most requested

- Would allow supporting more data inside a text

  - Spreadsheet (Gnumeric)

  - Equations (MathML)

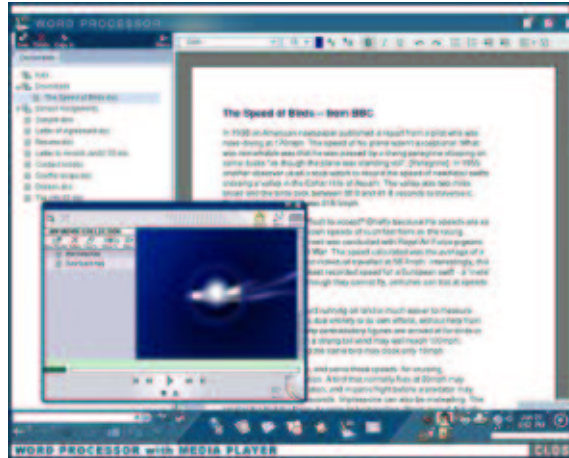- XP and work with native embedding (Bonobo, OLE, etc.) !

Embeddable component

- Already demonstrated by a Third party (OEOne)

- Needs to be XP but native (Bonobo, OLE)

- Examples:

  - Evolution

  - OEOne

AbiWord in Evolution

OEOne: AbiWord in Mozilla

The Future of GNOME Office

- Take advantage of GNOME new technologies

    - Bonobo
    - GConf
    - GTK 2.0

- Work with other team (Gnumeric)

Work with other Team

- An escher drawing model (new canvas)
- Better support for popular MS Windows graphic types
- Better support for popular MS Windows file formats
- Cross–Application embedability
- Shared dialogs and other controls
- Improved font handling
- Improved printing support

AbiWord's Cross–Platform Ambitions

Why cross platform ?

The framework

Why cross platform?

1.Freedom of code

2.Freedom of choice

The framework

Our own framework.

- Pros:

  - Integrate on each platform
  - Faster and lighter
- Cons:

  - More work

What we do

Separate interfaces from implementation (abstraction)

- Abstract drawing canvas
- I18N and L10N
- Event mapper/dispatcher
- Abstract SOME controls
- Activate and manage dialogs
- Provide a cross–platform text formatter and management

What we don't do

• Manage the widget creation and layout.

• ...Rewrite a complete graphics toolkit

• Render fonts

Platform implementor has to provide:

•Bindings between GUI events and the XP framework

•GUI layout for the word processor frame

•Ready made dialogs

•Graphics primitives

•Other platform specific features (fonts, printing, ...)

Portability ?

Still high !

The ultimate catch

Cross platform AND cross application

Ready made low level classes for any applications for each platform

- Toolbars
- Menus
- Graphics and font handling
- Printing
- A multitude of dialogs

How does that work?

Two parts

1.The cross−application framework (XAP)

2.The application framework (AP)

The framework classes

- Interface

$$\texttt{XAP\_Frame -> AP\_Frame}$$

- Implementation

$$\texttt{XAP\_FrameImp -> XAP\_GnomeFrameImp -> AP\_GnomeFrameImp}$$

This is the revised architecture planned for 1.2

How to Help AbiWord ?

1. Help us out with maintaining Bugzilla
2. File bugs and perform regression and stress tests
3. Help out with "bug–days"
4. Help answer questions on the abiword–user list
5. Write user and developer documentation
6. Translate or update an existing translation
7. Contribute code
8. Sponsor a developer
9. Port Abi to your favorite platform (eg: Qt/KDE, MacOS 9)

Conclusions

Questions?