

The XEmTeX Project

Marie-Louise Chaix

`mlchaix@edpsciences.com`

Fabrice Popineau

`fabrice.popineau@supelec.fr`



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You said T_EX? Why T_EX today?

- ▶ T_EX is still a must for many typesetting tasks:
 - ▼ higher education: mathematics, physics...
 - ▼ large typesetting jobs
- ▶ Many people have just heard about it and wonder how to come to T_EX.
 - ▼ The learning curve is too steep
 - ▼ You can't ask someone to install a couple of tools and read a 200 pages manual before starting to do anything
- ▶ Ready to run distributions are a big step in helping them.



Problems

Still, there are problems people do not want to deal with :

- ▶ Your T_EX distribution, as complete as it is, does not hold every tool needed.
- ▶ The first missing tool is a T_EX-oriented text editor.
- ▶ But you may need many others: Perl, ImageMagick, NetPBM, etc.
- ▶ All in all, our free T_EX distributions are not up to the standards of commercial products when it comes to integration.



What to do?

- ▶ We have the T_EXLive distribution as a starting point
 - ▼ *But not entirely satisfactory given some of the emails I get*
- ▶ How to enhance it along the previous lines ?
- ▶ Start to think about the Win32 platform
 - ▼ *What makes commercial applications successful?*
- ▶ Linux users are of a different species.
 - ▼ *They are not afraid of dealing with the system*
- ▶ How do behave any standard application today?
- ▶ The one-icon-on-the-desktop paradigm.
 - ▼ *Many people don't want to bother with mechanics when they buy a car*



Why XEmTeX?

In fact lots of reasons...

- ▶ First of all because of T_EX!
- ▶ XEmacs is a free text editor
- ▶ XEmacs is flexible enough to serve as an integrator for all other tools
- ▶ XEmacs is multiplatform and takes advantage of native widgets
- ▶ XEmacs has already good support for T_EX



What I didn't say

- ▶ XEmTeX won't be as extensive as extensive as T_EXLive
- ▶ XEmTeX will includes all tools needed to produce PDF or HTML files
- ▶ XEmTeX will allow transparent use of these tools
 - ▼ *Everything will remain hidden to the user*
- ▶ XEmTeX will install in one click



The Road to XEmT_EX

- ▶ The starting point is T_EXLive 7.
- ▶ We use the T_EXLive project repository (Perforce server) and in fact, both projects will be merged
 - ▼ *part of XEmT_EX will be on T_EXLive 8*
- ▶ We act as an integrator: we are not building a whole new world, but we will rely on existing tools.
- ▶ We prefer to put glue between boxes: we can't change the package we use unless there is an agreement with the maintainer.
- ▶ Iterative development: release, then add a couple of features and release again.



Framework

- ▶ We want a restricted distribution: selected packages, mostly the $\text{teT}_{\text{E}}\text{X}$ texmf tree plus a couple of other things.
- ▶ We want PDF and HTML output only.
- ▶ As few binaries as possible: that means pdfetex is enough.
- ▶ Only Type1 fonts: no metafont, no mktex*
- ▶ Metapost to draw diagrams.
- ▶ We want a text editor: XEmacs.
- ▶ Support tools: AUC-TeX, Preview-L^AT_EX, ...
- ▶ Ispell and dictionaries.
- ▶ ImageMagick.
- ▶ Ghostscript and GSView.



Installer

- ▶ The T_EXLive installer is not satisfactory: portability, compliance, etc.
- ▶ Should we stay with dedicated installers or go with portable one ?
- ▶ MSI on Windows, Debian package on Linux.
- ▶ No package selection for XEmT_EX.
- ▶ complex post installation
- ▶ T_EXLive wil benefit from the MSI installer.



Editing text

- ▶ AUC-TeX considered not intuitive for beginners.
- ▶ Dialog between User and XEmacs.
- ▶ Definition of menus and toolbars for XEmacs
- ▶ Adding a rebar control to XEmacs maybe a plus.
- ▶ Equation editor
- ▶ Graphics files, support for MetaPost



Viewing documents

- ▶ Output in HTML or PDF, only PDF is a problem
- ▶ No PDF viewers in common between Windows and Linux
- ▶ Windows: GsView and Acrobat Reader
- ▶ Remote control : both can be controlled by DDE
- ▶ Package `vpe` by Heiko Oberdiek



Documentation

- ▶ Documentation is a key point of the project.
- ▶ 4AllT_EX as an example of what to do.
- ▶ Installation guide, Quickstart guide, User Manual
- ▶ Demo files for the targeted public



Conclusion

- ▶ Maybe nothing really new
- ▶ But certainly a plus for beginners
 - ▼ we need to get new users to TeX,
 - ▼ we need to target the right audience with the right arguments
- ▶ We are confident in delivering the bundle
- ▶ National funding was needed and has been obtained
- ▶ The T_EX community should seek more funding outside of itself.

