Discussion: Package selection in \TeX\ Live

(Codename: “\TeX\ Live M”)

Arthur Reutenauer, Norbert Preining, Mojca Miklavčec
**TEX Live**

- ~140,000 files, ~4000 packages, ~4.5 GB
- highly non-trivial task for downstream packaging to package it nicely and correctly; distributions need to reinvent the wheel and re-implement `tlmgr` to fit their needs
- (build infrastructure for OpenCSW brought to the limits with so many files)
Goals

- Create a te\TeX\-like distribution starting from existing T\TeX\ Live infrastructure with a subset of most popular & high quality packages
- Curated database with a complete dependency tree
- Reasonably complete to satisfy a large spectrum of users
- Basic test suite
- Make it easier to create packages for Linux distros
- Community effort!!!
Desired properties

- Allow a really minimalistic installation; let the user install just \textsf{X\LaTeX}, just \textsf{LuaLaTeX}, just OpenType GUST fonts (no enc/tfm/map), …

- Install all dependencies with `tlmgr install {name}`

- Users could opt-it for statistics collection (analyse just requested packages & collections, not all installed ones)

- Start with a small set of packages and keep adding new ones later based on user demand

- Users could still install missing packages from the official \TeX\ Live repository
Plan

- Ask a small group of experienced users (StackExchange with high reputation) for a list of the packages they consider useful
- Assemble the initial list of packages
- Analyse dependencies (recursively)
- Set up a \TeX\ Live repository with some additional schemes including those
- Ask people to try to install and test some of those schemes and provide feedback about what is missing
• Finally include the general community to propose further packages (vote packages up and down, if enough people vote, include that package)

• Create some “marking scheme” for packages (1–5: quality, popularity, …)
Work needs to be done

- Assemble a list of packages
- Find dependencies (time + programming)
- Support for optional dependencies (like in Debian: “you might also want to install …”)
- Create a separate repository with custom schemes
- Prepare a website to collect user feedback, statistics, ... collaborate with CTAN
Many open question

- Name
- Handling old fonts
- Handling optional dependencies
- How to make reasonable schemes
  \[ \text{Xe\LaTeX} \Rightarrow \text{LaTeX} + \text{Xe\LaTeX} + \text{OpenType LM} \]
- How to make it more friendly for distributors?
  (./configure && make && make install)