TEX Live 2011 and some possible extensions to the TEX Live Manager

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very calm release, not much new
Mac OSX binaries only work on Leopard and upward
biber inclusion
metapost does not need memory dump (.mem) anymore
updmap perl implementation was extended and is now used on all platforms (before only Windows)
ptexlive

- merged in 2010: p*tex, pbibtex, pdvitype, mendex, makejvf, ppltotf, ptftopl, fonts, jsclasses

- during 2011 and afterwards: ep*, several bug fixes to ptex engine
ptexlive outlook

- already merged in dev version: (e)uptex
- missing pieces:
  - updmap: rewritten in perl, kanjimap support missing
  - various packages
  - programs: pxdvi,…
  - … see below …
Current projects, or extensions to \TeX Live Manager

- User mode
- Multiple repositories
- multi updmap
User mode

Rationale

allow to manage an independent tree (like TEXMFHOME) with tlmgr
background: system installation that is not complete or is not updated

Implementation status

preliminary patch is here, most actions that are relevant are supported (install, remove of packages)
Demo
Demo

Open problems

- testing ...
- checks between system and user packages?
- actually necessary???
Multiple repositories

Rationale

- during the time many alternative repositories have sprung into existence (e.g., tlcontrib, tlcritical).
- ability to draw from these repositories in parallel is asked for
Multiple repositories – implementation

- tlpdb can be virtual acting as a cover for different tlpdbs (why? keep changes to tlmgr minimal)
- allow adding/removing real databases to virtual databases
- pinning (see below)
- minimal changes to tlmgr code base
Pinning

- every package is unless specified otherwise pinned to the main repository
- pinning file is in TEXMFLOCAL/tlpkg/pinning.txt
- a line in the pinning file looks like `repo:pkgglob[,pkgglob]`
  - `repo` is either the full URL, or the `tag` that was given for that repo when adding it
  - `pkgglob` is a glob style pattern that must match a package
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\begin{verbatim}
  tlcontrib:*
tlmulti:texlive.infra*
\end{verbatim}
How to or what we should get soon

tlmgr --repo http://www.tug.org/~preining/tlmulti update --self
tlmgr repository add http://www.tug.org/~preining/tlmulti tlmulti
tlmgr repository add http://some.where.here/ptexlive/2011 ptexlive
echo "ptexlive :*" > $TEXMFLOCAL/tlpkg/pinning.txt
echo "tlmulti:texlive.infra:*" >> $TEXMFLOCAL/tlpkg/pinning.txt
tlmgr install pxdvi
DEMO

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 tlmgr install pxdvi
```
updmap – history and current status

▶ original script in sh from Thomas Esser, got very slow with growing amount of fonts and maps
▶ perl variant from Fabrice Popineau for Windows, much faster
▶ Reinhard Kotucha adapted the perl script so that it runs on all supported platforms
▶ TeX Live 2011 uses the perl variant everywhere
multi updmap – what and why

currently only reads one `updmap.cfg`, which means that this one has to contain all the map statements, system and local.

- multi updmap would read *all* the `updmap.cfg` files
  - easier integration of new fonts
  - separation of `updmap.cfg` files between the trees, each tree has exactly one describing the fonts available there
multi updmap – implementation status

- finished, but extensive testing by now
- only limited documentation by now (as it was always)
- integration into \TeX Live needs some work (tlmgr interface, documentation, user descriptions)
- timeline: soon we ship it as \texttt{mupdmap} and work on the integration, maybe for 2012 it will replace the current \texttt{updmap}. 
Wishlist

If you have anything you wish for \TeX\ Live
now is the time to ask!
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Thanks