

Ideas for T_EX Live's infrastructure

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The T_EX Live distribution

- ▶ includes all the free stuff from CTAN
- ▶ available for a wide range of platform–operating system combinations
- ▶ has replaced teT_EX in many (Unix) distributions as default T_EX system

The central `texlive.tlpdb`

One installation or media is now completely described by one file, the T_EX Live Database:

- ▶ simple text file – easily parseable
- ▶ revision number for the single packages
- ▶ generated from static content (the `tlpsrc` files)
- ▶ enriched with information from the T_EX Catalogue
- ▶ format documented in detail (POD documentation in the respective perl module)

How does `texlive.tlpdb` look like

`texlive.tlpdb`

`name_abbrev`

...

`name_memoir`

...

- ▶ sequence of `key value` pairs
- ▶ separated by an empty line (or more)
- ▶ one group per package
- ▶ some 'meta'-packages for configuration options and special purpose packages

The single packages: tlpobj by example

bin-bibtex8 and friends

```
name_bin-bibtex8
category_TLCore
revision_7340
depend_bin-bibtex8.ARCH
docfiles_size=15
_texmf/doc/bibtex8/00readme.txt
_texmf/doc/bibtex8/HISTORY
_texmf/doc/bibtex8/csfile.txt
_texmf/doc/bibtex8/file_id.diz
runfiles_size=10
_texmf-dist/bibtex/csf/base/88592pl.csf
_texmf-dist/bibtex/csf/base/cp1250pl.csf
_texmf-dist/bibtex/csf/base/cp852pl.csf
_texmf-dist/bibtex/csf/base/iso8859-7.csf

name_bin-bibtex8.alpha-linux
category_TLCore
revision_7340
shortdesc_binary_files_of_bin-bibtex8_for_alpha-linux
binfiles_arch=alpha-linux_size=62
_bin/alpha-linux/bibtex8

...
name_bin-bibtex8.win32
category_TLCore
revision_7340
shortdesc_binary_files_of_bin-bibtex8_for_win32
binfiles_arch=win32_size=25
_bin/win32/bibtex8.exe
```

Idea I: other language bindings

- ▶ currently all implemented in Perl modules (slow)
- ▶ texlua function to read and evaluate (most of) the tlpdb (fast)
- ▶ minimal C code (was/is in dev)
- ▶ ???

Idea II: tlmgr improvements

- ▶ tighter integration of the GUI
- ▶ other features: consistency checks, ... (what do you want?)
- ▶ other frontend (e.g., GTK)
- ▶ Post Actions shipping with packages

Idea III: different installation sources

```
tlmgr -location
http://www.contextgarden.net/texlive/context
install context luatex
```


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- ▶ already possible
- ▶ revision numbers? (extensions in the queue)
- ▶ please don't mess up the rest

Idea IV: multiple source repositories

- ▶ multiple source repositories
- ▶ pinning for different packages
- ▶ APT ... GSoC