# The Occult Secrets of TeXLive

Sebastian Rahtz

Fabrice Popineau

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# Overview of TeXLive

TeXLive is a multiple-platform distribution of TeX on CD, coming up to its yearly $8^{\text{th}}$ edition

- Started from a working party in 1993, which went nowhere, but stimulated the production of the great 4AllTeX DOS-based distribution, and the TDS standard

- Work on TL started in late 1995, and the first edition came out in spring 1996

- Initially Unix/Linux only. Basically, it is Thomas Esser's teTeX

- Joined by Windows in $4^{\text{th}}$ edition

- Joined by MacOSX in $7^{\text{th}}$ edition

- Since the $5^{\text{th}}$ edition, has aimed to be compliant with the Debian Free Software Guidelines

# Heroes (no villains)

- DANTE e.V., who provide the master server (run by Reinhard Zierke and Rainer Schöpf)

- The Perforce company, who give us a free license for the change management software

- Thomas Esser and Olaf Weber (teTeX and Web2c, *sine qua non*)

- Fabrice Popineau (Windows) and Gerben Wierda (MacOSX)

- Staszek Wawrykiewicz, the conscience

- Mimi Burbank, Kaja Christiansen, Karl Berry, Petr Olsak, and others (testers and compilers)

- Hans Hagen, Martin Schröder, Norbert Preining, Vladimir Volovich and others (active contributors)

- ... and all the LUG teams which have produced and distributed it

# Management

TEXLive sits in the Perforce change management system, which looks after:

- File change history (date, comments, responsibility

- Security (only named people can change things)

- State (it knows who has which version of each file)

- Conflict (it tracks who has edited what file)

- Management of branches (main vs development source)

Just over 3000 changes (one change may involve many files) have been committed to the TEXLive repository, by about 20 people.

# Keeping it up to date

- Updating source tree (mainly follows Olaf/Thomas, plus Martin for pdfTeX)

- Recompiling for different systems (various)

- Keeping Windows in sync and vice versa (Fabrice)

- Updating macro and font packages from CTAN (mainly Sebastian)

- Installation programs (Unix: mainly Sebastian, Windows: Fabrice)

- Metadata and structural integrity (Sebastian and Fabrice)

- Documentation (was Sebastian, now looking for an owner)

- Testing (the TeXLive mailing list)

- Production (LUGs and publishers)

# TPM: what next?

- Integrate with Graham William's Catalogue to provide a single metadata system

- Maintain XML files on CTAN as the definitive resource

- Merge in pre-compilation information from TeXLive sausage machine

- Provide web-based editing facilities for authors and packagers

From this (with luck):

- TeXLive, teTeX, MikTeX etc can use the information for installation and (most importantly!) upgrade

- CTAN can provide new views and searching facilities

- The users can query their own installed systems

# TeXLive 8: whats new?

- web2c 7.5.2

- pdfTeX 1.11a

- e-Omega (!)

- Hundreds of updated macro packages

- All the improvements in recent teTeX (eg updmap)

- TeXLive has become too big. So delivery is in three formats:

    - Compressed (zip) archives on CD, with install programsm

    - Uncompressed system on DVD, like previous releases

    - Installed (subset) snapshot on CD, ready to run (no installer)