TEX Live 2020 News
TEX Services at texlive.info

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Accelia, Inc., Japan and TEX Live Team

TUG 2020, online 2020-07-26
TEX Live News

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Nothing new!
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TEX services at texlive.info
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Lots of mirrors
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Lots of mirrors

Thanks for your attention.
TEX Live News

Some changes since my last talk in 2016

- **TL2017**: system-wide configuration file for `tlmgr`, `tlmgr shell` (and followup frontends), `conf auxtrees`
- **TL2018**: JSON output for `tlmgr info`
- **TL2019**: download and compress program can be configured, switch to `lz4` backups, ssh support
TEX Live News

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- **TL2017**: system-wide configuration file for `tlmgr`, `tlmgr shell` (and followup frontends), `conf` `auxtrees`
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TEX Live 2020

- versioned containers
- more verbose log of install actions
More verbose logging

Full logging of sub-commands (fmtutil, updmap etc) into

TEXMFSYSVAR/web2c/tlmgr-commands.log

parallel to tlmgr.log.
Versioned containers
Versioned containers – The What

So what has changed - the file names of the containers we are using to ship TeX Live packages:

<table>
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Versioned containers – The Why

Good question – we haven’t done it for around the last 15 years or so.
Versioned containers – The Why

In the process of integrating TeXlive packages from CTAN into pkgsrc, I (and others) run into a persistent issue that creates difficulties. The main issue has two aspects: (i) TeXlive packages on CTAN do not reflect version information in the filenames, and (ii) the contents of the *.tar.xz files change periodically as a result of updates to the packages. The consequence of this is that the checksum of an identically named file changes periodically. This triggers downloads that fail to pass validation, which then must be serviced elsewhere.
Redistributing \TeX\ Live

Two different distribution styles:

- keep their own “upstream data” (Debian, RedHat)
- rely directly on “upstream data” (pkgsrc, MacPorts)
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▶ keep their own “upstream data” (Debian, RedHat)
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For the later group, they normally publish a recipe:

▶ get a file from upstream
▶ verify checksum, …
▶ unpack, install, …
Versioned containers – The How

Lots of wheels are to be considered (container building, \texttt{tlmgr} actions for install, backup, update, verification)
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My first shot at it (as usual, very optimistic):

> diffstat versioned-containers.diff
texmf-dist/scripts/texlive/tlmgr.pl | 30 ++++++++++++++++++++++++++++++-----
tlpkg/TeXLive/TLPOBJ.pm | 35 ++++++++++++++++++++++++++++++-----
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Staged switch during TL2020 preparation, final switch with the TL2020 rebuild.
Other improvements we might see

- better support redistribution of \TeX\ Live
- archiving of \TeX\ Live packages can now be achieved by \texttt{rsync} without deleting disappearing files
- no complete rebuild for release
- changes of catalogue data now bump the revision number, too
TEX services at texlive.info
Overview of the services

▶ \TeX\ historic archives via rsync
▶ tlnet archive
▶ tlpretest mirror
▶ CTAN mirror
▶ CTAN git repo and web
▶ TL git - svn mirror
▶ TL GnuPG repository
▶ TLContrib repository
The TeX historic archive\(^1\) hierarchy contains many items of interest in TeX history, from individual files to entire systems. We provide a mirror, available via rsync: \texttt{rsync://texlive.info/historic}

\(^1\text{https://tug.org/historic} \)
tlnet archive

As of 2019-08-30, we archive (by date) the daily tlnet updates, available at

https://www.texlive.info/tlnet-archive

e.g.

https://www.texlive.info/tlnet-archive/2019/11/24/

We have also added the final tlnet for TeX Live releases going back about ten years. (Current size: 30G)
During preparation of a new TeX Live release (the pretest phase we are distributing preliminary builds via a few tlpretest mirrors.\textsuperscript{2} We also provide access to tlpretest:

- via https: https://www.texlive.info/tlpretest
- via rsync: rsync://texlive.info/tlpretest

\textsuperscript{2}https://tug.org/texlive/mirmon
CTAN-related services

Member of the CTAN-mirror group

Tracking CTAN updates via a git repository (ignoring large binary files like cab, deb, exe etc)

- mirror via https: https://www.texlive.info/CTAN
- mirror via rsync: rsync://texlive.info/CTAN
- git repository: git://git.texlive.info/CTAN
- git web interface: https://git.texlive.info/CTAN

Current raw git repo size: 7.9G
Mirror with complete history (back to 2005) of the main Subversion TeX Live repository into Git.

Mirroring runs every 15min, several dev/xxx branches I used for development, rather big (raw git repo currently 31G, checkout 42G).

- git repository: `git://git.texlive.info/texlive`
- git web interface: `https://git.texlive.info/texlive`
- statistics: `https://www.texlive.info/tlstats`
\TeX\ Live GnuPG repository

\TeX\ Live does provide the necessary information to cryptographically verify our distribution files, but we do not ship the GnuPG binary within \TeX\ Live proper.

This repository provides in the \texttt{tlgpg} package a minimal version of GnuPG program for Windows and Macos.

- tlmgr repository: \url{https://www.texlive.info/tlgpg}
- git web interface: \url{https://git.texlive.info/tlgpg}
- git repository: \url{git://git.texlive.info/tlgpg}
TEX Live contrib repository

Companion to core TEX Live containing packages that cannot be distributed in TEX Live proper due to license reasons, support for non-free software, etc.:

- tlmgr repository: https://contrib.texlive.info
- git web interface: https://git.texlive.info/tlcontrib
- git repository: git://git.texlive.info/tlcontrib
Closing

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Thanks