

T_EX Live 2020



T_EX Live 2020 News T_EX Services at texlive.info

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Nothing new!

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Nothing new!

T_EX services at texlive.info

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T_EX Live News

Nothing new!

T_EX services at texlive.info

Lots of mirrors

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Nothing new!

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Lots of mirrors

Thanks for your attention.

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T_EX 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

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- ▶ versioned containers
- ▶ more verbose log of install actions

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More verbose logging

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

```
TEXMFSYSVAR/web2c/tlmgr-commands.log
```

parallel to `tlmgr.log`.

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Versioned containers

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Versioned containers - The What

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

Before

PKG.tar.xz

PKG.source.tar.xz

PKG.doc.tar.xz

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After

`PKG.rNNNN.tar.xz`

`PKG.source.rNNNN.tar.xz`

`PKG.doc.rNNNN.tar.xz`

`PKG.ARCH.rNNNN.tar.xz`



Versioned containers - The What

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Before	After
<code>PKG.tar.xz</code>	<code>PKG.rNNNN.tar.xz</code>
<code>PKG.source.tar.xz</code>	<code>PKG.source.rNNNN.tar.xz</code>
<code>PKG.doc.tar.xz</code>	<code>PKG.doc.rNNNN.tar.xz</code>
<code>PKG.ARCH.tar.xz</code>	<code>PKG.ARCH.rNNNN.tar.xz</code>

Where 'rNNNN' is the revision number of the TL package.

```
update: 12many [376k]: local: MMMM, source: NNNN
```

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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.*

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Redistributing T_EX Live

Two different distribution styles:

- ▶ keep their **own** “upstream data” (Debian, RedHat)
- ▶ rely **directly** on “upstream data” (pkgsrc, MacPorts)



Redistributing T_EX Live

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For the later group, they normally publish a recipe:

- ▶ get a file from upstream
- ▶ verify checksum, ...
- ▶ unpack, install, ...

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Versioned containers - The How

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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 ++++++-----
tlpkg/bin/tl-update-containers      | 17 ++++++----
3 files changed, 63 insertions(+), 19 deletions(-)
```

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Staged switch during TL2020 preparation, final switch with the TL2020 rebuild.

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Other improvements we might see

- ▶ better support redistribution of T_EX Live
- ▶ archiving of T_EX Live packages can now be achieved by `rsync` without deleting disappearing files
- ▶ no complete rebuild for release
- ▶ changes of catalogue data now bump the revision number, too

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TEX services at texlive.info

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Overview of the services

- ▶ T_EX historic archives via rsync
- ▶ tlnet archive
- ▶ tlpptest mirror
- ▶ CTAN mirror
- ▶ CTAN git repo and web
- ▶ TL git - svn mirror
- ▶ TL GnuPG repository
- ▶ TLContrib repository

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T_EX historic archives

The T_EX historic archive¹ hierarchy contains many items of interest in T_EX history, from individual files to entire systems.

We provide a mirror, available via rsync:
`rsync://texlive.info/historic`

¹<https://tug.org/historic>

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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 T_EX Live releases going back about ten years. (Current size: 30G)

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tlpretest mirror

During preparation of a new T_EX Live release (the pretest phase we are distributing preliminary builds via a few tlpretest mirrors.² We also provide access to tlpretest:

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

²<https://tug.org/texlive/mirmon>

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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

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T_EX Live svn/git mirror

Mirror with complete history (back to 2005) of the main Subversion T_EX 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`

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T_EX Live GnuPG repository

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

This repository provides in the `tlgpg` package a minimal version of GnuPG program for Windows and MacOS.

- ▶ tlmgr repository: `https://www.texlive.info/tlgpg`
- ▶ git web interface: `https://git.texlive.info/tlgpg`
- ▶ git repository: `git://git.texlive.info/tlgpg`

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T_EX Live contrib repository

Companion to core T_EX Live containing packages that cannot be distributed in T_EX 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`

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Closing

We will try to keep these services running as long as server space, connectivity, bandwidth, load etc allow us to (we happily accept donations via Github/Patreon/PayPal).

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Thanks