Current state of CTAN

Erik Braun
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Faculty of Mathematics and Computer Science, Jena University
Introduction
What’s CTAN?

Comprehensive \TeX\ Archive Network

- Webpage www.ctan.org et al.
- Upload management, Catalogue updates
- Synchronization with mirrors
- Source for distributions
- Announcements
- ...

CTAN lion drawing by Duane Bibby
CTAN’s connections

Drawing by Gerd Neugebauer
A Brief History of CTAN
CTAN

- was founded in 1992
- See TUGboat 14:3 (October 1993)
- has an eventful history, which is written down on https://ctan.org/ctan and in Wikipedia
- You can ask the men of the first hour!
CTAN in numbers:

- Main node **comedy** (8 cores, 40 GB RAM, 50 MBit/s, \(\approx 0.8\) TByte/week)
- 5 active team members
- 110 mirrors all over the world
- 5716 packages from 2620 contributors (last 12 months: 900 packages from 503 authors)
- Size of **catalogue.xml**: 7 MByte
- 270373 files / 15523 directories / 41 GByte
Members

- Upload manager team: Ina Dau, Petra Rübe-Pugliese, Manfred Lotz (also programming and TeX Collection), Erik Braun

- Webmaster and programming: Gerd Neugebauer

- System administration and mirror management on comedy: (formerly: Rainer Schöpf, Joachim Schrod)
≈ 110 Mirrors:

Visualization by Google GeoChart
Becoming a mirror is described on the CTAN website
Mirrors should synchronize every 24 h
State and freshness of mirrors are not actively checked
Status of the mirrors is displayed on the CTAN website at https://ctan.org/mirrors/mirmon
Uploads

- Over the years constantly about 100 uploads/month

- Upload managers check for formal correctness (constraints on filenames, licenses)

- Simple and frequent problems are wrong file formats, forgotten version numbers and license information
Problems I

The daily/weekly/monthly routine:

- Check for formal requirements of uploads
- Find a concise description and suitable topics for new packages
- Periodic check of the links in the description
- Supporting tools for uploaders exist:
  - l3build (The \LaTeX3 Project)
  - ctanify (Scott Pakin)
  - ctan-o-mat (Gerd Neugebauer)
  - pkgcheck (Manfred Lotz)
Problems II

Legacy work. Previously installed packages that do not meet the requirements of new packages:

- Updates of this works can be complex and time-consuming
- Packages that are warned not to use in \texttt{l2tabu} are still prominent to find
- (even \texttt{l2tabu} has become old)
Problems III

The Vanishing Maintainer

1. An author has a bright idea and creates a package which is widely used
2. The author loses his interest in his work, the contact data gets outdated, \textit{BUT}
3. Other users could improve the package, they and CTAN try (sometimes to no avail) to contact him; this is a WOMBAT

⇒ Hard Solution: Fork
⇒ Preferred Solution: authors keep in contact with CTAN and let mark themself as “inactive”
(Should the authors periodically be reminded that they own packages on CTAN?)
... and the Future.

Switching to a new website, codename »3.0«, due to an outdated technological code base in the background:

- Client-side rendering instead (in particular with the use of Javascript)
- Client Nuxt.js, server framework Dropwizard
- A cleaner user interface with less crowded pages
- Integration of the historical archive

- Mirroring needs an update: Integration of a multiplexer that understands IPv6 and HTTPS
  ([https://github.com/etix/mirrorbits](https://github.com/etix/mirrorbits) seems appropriate)
- Hierarchical topics
- Updates / Installation on comedy: DKIM, DNSSEC, IMAP-Server, mailing list managers, Apache
Q & A
Questions?