
DANTE project funding of \TeX servers

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Abstract

For several years, DANTE e.V. has been supporting the operation of two physical servers that provide numerous \TeX and \LaTeX related services. This article is a report on what is provided and how the services came about. This article originally appeared in *Die \TeX nische Komödie* 1/2022, and was translated to English by the author.

1 Hardware and hosting

The DANTE-supported servers are located in two data centers of [Hetzner.com](https://www.hetzner.com). They run a Debian Linux with virtualization by Xen. The services mentioned in the following sections run on a number of virtual machines for clean separation and maintainability. The servers back up each other on the one hand and, on the other hand, an external backup area is also used. In the case of upgrades or migrations of virtual servers, the respective other server is used for the reinstallation.

The basic specifications of the two servers:

- Intel Xeon E5-1650V3 six-core, 2x4 terabyte hard drives, 256 gigabytes of RAM
- Intel i7-920 quad-core, 2x2 terabyte hard drives, 48 gigabytes of RAM

Both have a 1 Gbps network connection and unlimited traffic volume, as well as an off-site backup area. This hardware, with all services in professional data center operation, currently costs €104 and €59 per month, plus small fees for IP addresses and DNS entries. I ordered the larger server at a reverse auction, which is a bit unusual. The provider offers used and abandoned servers for monthly rent. Step by step, the price goes down until someone takes the offer. That made it relatively cheap.

One could do this with “dedicated servers” from other providers, but as soon as you have hardware such as 256 gigabytes of RAM, and multiple terabytes of hard disk, it gets expensive.

DANTE supports the project by paying the monthly server rent and fees. The costs for the domains are not included.

And now to the content, roughly sorted by the service type.

2 Internet forums

[LaTeX.org](https://www.latex.org) is a classic \LaTeX Internet forum, in the English language. The [TeXnicCenter](https://www.tug.org) developer Sven Wiegand founded it as [LaTeX-Community.org](https://www.latex-community.org) in 2007. I joined as a moderator in 2008, took over

the administration in 2012, and moved it to its own server. In 2017, I was able to register the domain [LaTeX.org](https://www.latex.org), and that is now what the forum is called. To date, 17,000 users have made 99,000 posts on 25,000 topics. The classic thread discussion culture lives on here.

[goLaTeX.de](https://www.golatex.de) was founded by Johannes Ähling in 2008 as a German-language forum for \TeX . In 2015 I took over as admin for the purpose of updating the software and relaunching the forum. To date, 8,700 users have written more than 108,000 posts on 21,000 topics.

[TeXwelt.de](https://www.texwelt.de) was started by me in 2013 as a German-language counterpart to StackExchange, for trying out this Q&A format and offering it to German-speaking users. So far, 1,300 users have written 3,700 questions and 4,200 answers. Here I would like to switch to the Askbot software or another alternative; maybe someone can help?

[TeXnique.fr](https://www.texnique.fr) was created in 2016 as a joint project by Patrick Bideault, Denis Bitouzé, and me, with the support of the French \TeX users group GUTenberg, as a question-and-answer site for \LaTeX in the French language. So far, 400 users have written 1,200 questions and 1,600 answers.

Each of those forums has a built-in online compiler, so you can translate code samples directly with a tap on your smartphone and view it as PDF output. You can also edit the code in the posts online and test the changes directly.

3 \LaTeX tools

[TeXlive.net](https://www.texlive.net) is the online compiler mentioned above. It was developed by David Carlisle and initially used at [LearnLaTeX.org](https://www.learnlatex.org) on a small free AWS instance. When that was no longer possible, we moved it to the DANTE-sponsored servers. The basis is an up-to-date and complete \TeX Live system with all packages and tools such as [BibTeX](https://www.bibtex.org), [Biber](https://www.biber.org), and [makeindex](https://www.makeindex.org). About 2,000 users translate around 3,000 to 4,000 documents every day, so I estimate over one million translated documents a year. This is also because [TeXlive.net](https://www.texlive.net) is integrated into the forums mentioned above, as well as into the blogs, wikis, galleries, and FAQ pages mentioned later.

[TeXdoc.org](https://www.texdoc.org) is the online version of [texdoc](https://www.texdoc.net). It was started in 2014 as [TeXdoc.net](https://www.texdoc.net) with a frontend written by Paulo Cereda, so that Overleaf users could easily access \TeX documentation online without local documentation, or \TeX users can read on the go on their smartphones when browsing forums. It comes with search features and with standardized links, and an API for external calls, such as from the forums. It now runs in a Docker container, which is being

further developed by the *Island of T_EX* project that you can visit at IslandOfTeX.org.

CTAN.net was set up by me as a CTAN mirror in 2018 because the servers were there and had capacity. So it was straightforward to mirror CTAN in order to further distribute content and accelerate the installation load. And as Michael Doob said: “Having a . . . CTAN mirror will change your life.”

LaTeX2e.org is a mirror of the “L^AT_EX 2_ε Unofficial Reference Manual” from latexref.xyz, since the widest possible mirroring is desired.

4 Wikis and FAQs

TeXfragen.de was started by Patrick Gundlach as a new T_EX FAQ as a wiki; several supporters contributed articles. In 2017, I took it over as admin and added selected excellent answers from TeXwelt.de to the wiki, among other things, and of course, added online compiling as on the other pages.

goLaTeX.de/wiki is another German-language wiki that documents L^AT_EX commands and packages and provides examples that can be tested online.

LaTeX.net.br is a Brazilian Portuguese version of the classic T_EX FAQ. I migrated it with a translator in 2018 on the occasion of the TUG conference in Rio de Janeiro. Due to a lack of support, I did not develop it further afterward, but it is still online.

TeXfaq.org was hosted here, too, until recently, but it has now moved to Github. This was the original www.tex.ac.uk FAQ from Robin Fairbairns and many contributors. At some point, it could no longer be operated in Cambridge, so I took over hosting with Joseph Wright and David Carlisle in 2015. Later we changed the domain. www.tex.ac.uk no longer exists as a domain due to involved costs.

5 Blogs

L^AT_EX developers, authors, and users use blogs to occasionally publish articles about their own projects, experiences, or news from the T_EX world. The following blogs are running on DANTE-sponsored servers.

LaTeX.net began as a collection of articles in a know-how area on LaTeX-Community.org, provides articles from many years, and now serves primarily as a blog for current news.

TeX-Talk.net is the T_EX StackExchange community blog. It originated at tex.blogoverflow.com and was retired by StackExchange in 2016. As a moderator on StackExchange, I urged preserving it, and so the content was handed over to me to continue operating under a new name. The section with 20 in-depth community-moderated interviews of well-known TeX.SE users is particularly interesting.

TeX.my is the blog of a Malaysian L^AT_EX user group, started in 2009 and moved here in 2016. Today it is mainly written by Lian Tze Lim, whom we know as a primary Overleaf L^AT_EX advisor.

cnltx.de is Clemens Niederberger’s blog. Because of its focus on chemistry, it previously ran under the name mychemistry.eu.

TeX.co is a T_EX blog started by members of TeXwelt.de, which was later separated.

TikZ.de is a blog by some TikZ friends, including me. It’s rather quiet in there at the moment because no one has much time. It’s not abandoned and I have the best excuse, now writing a TikZ book.

TeXblog.net is my T_EX blog from 2008, but I’ve put it so far behind everything else that I hardly use it at the moment.

6 Galleries

TeXample.net is a collection of TikZ examples and was built in 2008 by Kjell Magne Fauske. When Kjell no longer had time for it, I took over as admin in 2012. Today there are 407 submitted TikZ examples from 190 authors. There is also a blog aggregator at TeXample.net/community, a kind of news ticker from the T_EX blog world. There are 3,600 entries from 50 registered blogs (including TUG’s).

TikZ.net is another TikZ gallery that I designed as a potential successor of TeXample.net because the latter became difficult to maintain. Most of the approximately 1,000 examples have been written by Izaak Neutelings, with a focus on physics.

TikZ.fr is a French-language TikZ gallery that I’m currently building with Patrick Bideault, Denis Bitouzé, and Alain Matthes, with a focus on “tkz” packages such as tkz-euclide.

pgfplots.net is a gallery of selected plots that I set up as an enthusiastic pgfplots user.

LaTeX-Cookbook.net is a gallery of examples from my “L^AT_EX Cookbook” from 2015. All code examples of the book are available there, editable and compilable online.

LaTeXguide.org is the companion page to the “L^AT_EX Beginner’s Guide”, started on the occasion of the new edition in 2021 with updated code for all examples and additional information.

7 Thanks

I would like to thank DANTE e.V. for funding the hardware that makes possible what is described here. It is a great motivation for working on these projects.

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