TEX at Chaos Communication Camp

Ziegeleipark Mildenberg, August 21st to 25th 2019

Henning Hraban Ramm

Chaos Communication Camp is a tent camp for 'hackers', organized every four years by Chaos Computer Club. In 2019 there was for the first time a TEX/LATEX village.
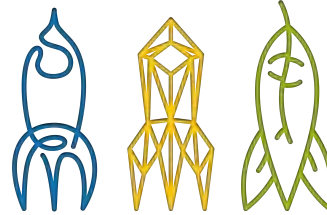

Figure 1. Camp logo

Introduction

Chaos Communication Camp is a tent camp organized every four years by Chaos Computer Club on the huge grounds of a brickworks museum, Ziegeleipark Mildenberg, directly at the Havel river in Brandenburg, north of Berlin. (The first camps took place on a former air base.) The camp alternates with the similar SHA event in the Netherlands.

The grounds themselves have many kilometers of narrow-gauge railway tracks, three small ports at the river, a big playing ground, stables with pigs, goats and rabbits, a swimming pond (former clay pothole) and of course kilns and some other industrial buildings (partly in ruins).

Figure 2. Physical Rocket

But this infrastructure isn't enough for ≈ 6000 hackers "and related lifeforms" – additional electricity, water and wastewater supplies were needed, also toilet and shower containers, diesel generators and solar panels – and of course CCC's famous 'Datenklos' ('data loos' = network hubs in porta-potties).

The first volunteers ('Engel' = 'angels') started at least one week before, setting up using heavy-duty forklifts and truckloads of tents, cables, mate soda and other stuff. There were angel teams for every need: technical tasks, emergency services, gate watch etc.

LaTeX village

Figure 3. LaTeX villagers

The camp is divided in 'villages' of different sizes, organized by CCC groups or other (non-)organizations.

At the previous ConTeXt meeting, DANTE's treasurer Doris asked me if I'd like to join her with my kids to form our own TeX related village. She insisted on the name LaTeX village though, because she wanted to set up beside the *Kinky Geeks* and further stress the slogan "Use more LaTeX". But at least the banner of context group was more prominent than DANTE's flag. (I should mention that our village was generously sponsored by DANTE e.V.)

With 15 participants we were one of the small villages, but one of the early groups, most of us arriving already on Saturday, while the camp officially started on Wednesday.

Figure 4. LaTeX village's lecture tent

Our own schedule included the talks "Introduction to LaTeX" (and to typography in general) by Nils, "Graphics with LaTeX" by Doris, "Introduction to ConTeXt" by me and a presentation by Nils about his setup for a Web CMS with LaTeX in a Docker container. Each talk except the latter was held two or three times; mine (twice in German, once in English) were attended by about 20 listeners who all knew LaTeX and were mostly interested in the differences between the systems and the possible advantages of ConTeXt.

Figure 5. Introduction to ConT_EXt

My invitation read:

> "Welcome to ConTeXt, the infamous alternative to LaTeX since more than 20 years!
>
> While most designers use graphical tools, there are still areas where code based typesetting systems are fun, make sense or are even superior. While LaTeX is the most known of these, ConTeXt is used by a growing minority of ambitioned enthusiasts around the world.
>
> The small but active and creative community of ConTeXt users and developers is always driving TeX development over new frontiers: Aleph, NTS, MetaFun, OrientalTeX, LuaTeX, mplib, LuaMeta-TeX… We're the incisors (AKA cutting edge) of the dinosaur of Open Source.
>
> ConTeXt is most known/interesting for some advanced features like direct XML processing, plotting of scientific data with Lua and MetaPost and an integrated kitchen sink of Lua libraries. (The main developer runs his home automation system on LuaTeX…) These features are unfortunately outside of the speaker's expertise. If you want to know more about this, consider attending ConTeXt meeting[…]"

Otherwise we were relaxing, walking around sightseeing, cooking or entertaining the children (who actually entertained themselves most of the time). Some participants served angel shifts (eg. Roberto as paramedic and Nils as train driver) or joined some of the many many talks and workshops in the main tents or at other villages.

Hardware hacking

Figure 6. My son soldering a robot controller

A lot of groups or single hackers presented their hardware hacking projects, including all the blinking lights at night. For everyone who needed to solder something, a Belgian group offered an open hacking space with about 50 stations, protected from the sun by a huge tarp. Making your own "Chaosknoten" or hacking the official badge "Card10" (as I continued at the ConT_EXt meeting) were popular activities.

Figure 7. Chaosknoten (CCC logo)

My children (7 and 9 years old) attended a workshop by Makerspace X-Hain (Berlin) to solder their own "Bakiwi" walking robot. (Actually I planned to let them build a much simpler model, but we didn't find the place and stumbled upon this workshop in RobotVillage.) They were focused on soldering those tiny joints for nearly four hours! In the evening the robot made its first steps on wobbly wire legs. In another X-Hain workshop they learned to program the "Calliope mini" microcontroller. Doris even brought two of these with her, since they're in wide use at German schools. Her daughter had thus some experience and could give my kids a few hints.

The Form Contest

This is based on a series of inside jokes.

The regular postal service of the camp "Chaospost" was operated by a few angels and lots of passerbies of the infodesk who were asked to deliver some items – mailfolks were welcomed and served at most villages, so this was a popular duty.

Figure 8. Chaospost logo

An Austrian group set up a complaints office for Chaospost, called "K. u. K. Salzamt"[1] (Royal Board of Salt). I learned later this was based on the Austrian saying "sich beim Salzamt beschweren" (complain at the Board of Salt), meaning to complain pointlessly.

They handed out convoluted complaints forms that were to be filled out, stamped, formally accepted or denied and finally ignored (especially complaints about Salzamt itself).

Mario submitted a complaint that those forms weren't typeset in LATEX, ornated with some DANTE stickers like "use more LATEX". Of course we felt obliged to offer such a form, so Nils and I decided to do it. Since I recently experienced how difficult it is to create tables with spanned columns and rows in LATEX, I was sure to have the upper hand with ConTEXt. So I could quickly deliver a first draft using natural tables, but he came up with a solution using "coffins" in LATEX 3 and one-upped me with a working electronic signature field from some obscure package. Since Mario's complaint mentioned LATEX anyway, he submitted Nils' version. As far as I know we didn't get a response apart from the complaint being accepted.

Figure 9. Complaints desk of 'K. u. K. Salzamt'

We didn't try to make our forms as similar as possible, and "of course" I like my design and my somewhat cleaner code still better.

Figure 10. Mario's complaint

---

[1] events.ccc.de/camp/2019/wiki/Projects:Salzamt

ConTEXt form by Hraban

LATEX 3 form by Nils

Figure 11. Form comparison

We further discussed how to achieve a vintage look, like forms that are (badly) copied, maybe faxed and stained. Of course there are "smudged" fonts, and we could use background or semitransparent overlay images with paper structure, coffee stains and fax lines. There are even Photoshop filters for such. But could we autogenerate this? Some MetaPost randomness in table lines? It would be interesting to simulate other vintage effects with signs of bad manual typesetting like worn lead letters, uneven baselines and jarred line elements...

Figure 12. CCCamp at night

Figure 13. CCCamp at night

Links and Sources

- map.events.ccc.de (interactive camp infrastructure map)
- events.ccc.de/camp/2019/wiki/Village:LaTeX
- events.ccc.de/camp/2019/wiki/Session:ConTeXt_für_Anfänger
- events.ccc.de/camp/2019/wiki/Projects:Salzamt
- gitlab.com/nilspickert/chaospost-beschwerdeformular (complaints form)
- github.com/fiee/ConTeXt/tree/master/form (complaints form)

- camp logo (three rockets): CCC
- Salzamt: Fuero @ /dev/lol
- Chaosknoten: ST @ BlinkenArea
- group picture: Roberto
- night pictures: smtw (smtw.de/cccamp19/, CC-BY 4.0)
- other images: Hraban