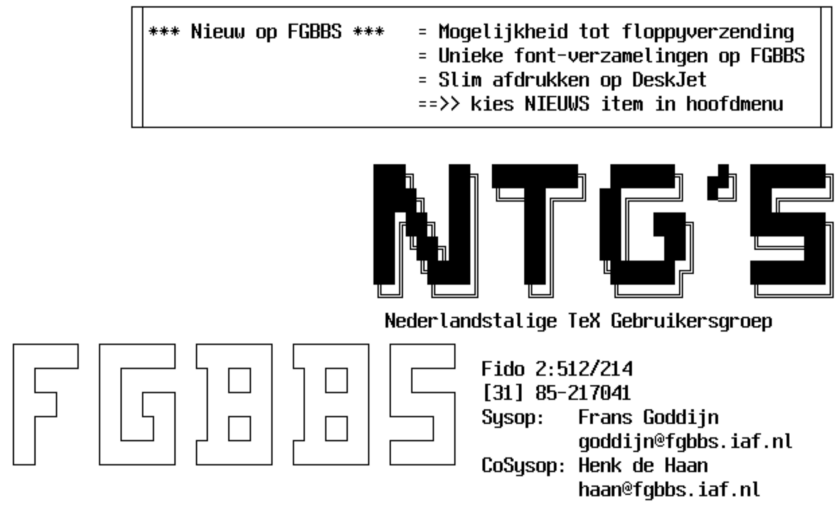
# The sound of data

## *Electronic TEX promotion in the nineties*




Today's wifi, cellular and cable information moves in silence and the speed has become a non-issue since high resolution Netflix video is streamed while we receive email in the background and laptops maintain backups in the cloud.

Elderly persons like me remember vividly the sound data transmissions used to make. In the eighties, a journalist with a Tandy100 word processor used a set of acoustic couplers on the horn of a phone and the screeching of modem negotiations was very audible.

In the early nineties I had a tower pc and one could hear the hard disc's tock-tock while information was read and written, a big rumbling fan in the back trying to cool the tower and a nervous mosquito-like buzz from the tiny fan clamped on the CPU. The backup tape streamer produced a loud and urgent whining sound as if a dentist was drilling into a molar. And the CD reader would occasionally start spinning with a soft whirr, or suddenly break to a hickup halt to eject the CD.

When the Internet was almost exclusively available for universities, an alternative network had been built for the others out there and this FIDO net worked so very well that its top maintainers assumed the internet would just be a temporary thing, way too complicated for ordinary people.

My PC was a BBS (Bulletin board System) node in that Fido network and callers who logged in by calling its dedicated phone number with their modem could exchange mail worldwide with anyone listed in the huge 'phonebook' that was updated daily. International mail could be sent 'on the cheap' using local tariff communication, as the message was handed over to a local hub sharing it with another hub higher up in the tree, to another continent's hub, and onwards to the BBS closest to the recipient. Alternatively, the message would be handed to my system with the 'crash bit' set and then, if the user had permissions, the BBS would directly call the destination and the message would be delivered in minutes. My users could pick up and deliver mail automatically if they had a compatible 'point' system or they could dial in and use an ASCII menu screen to browse around the options.

In the early nineties new TEX users without Internet access needed to find someone with the right stack of 15 diskettes and my Fidonet BBS system, called FGBBS 2:512/214 (phone number +31 26 3217041) provided an alternative. Visitors could still request floppies to be sent but one could also select parts of the file collection and download these.

Henk de Haan, a young man at Delft University preparing his doctorate in nuclear science about muon catalized nuclear fusion, did most of the complex work assembling the many software packages that were required to make the modular FGBBS environment work


smoothly. Soon, a 'waffle' was made to merge internet email into the Fidonet message base. We were not the only ones offering such services and Henk sometimes branstormed with others like the small team that founded XS4ALL, now one of the major internet poviders in The Netherlands.

Jason Fesler, an American programmer who is currently with Apple, was pioneering in this field and we were among the first users of his GIGO program which could convert UUCP data to our format and message-base. He also wrote WME, a Windowed Modem Environment which gave our FGBBS the screen presentation and 'look and feel' much like MS Windows would have later on.

The tower PC would be buzzing and whirring 24/7 in our little house in Arnhem and my two daughters in their adjoining bedroom got used to the sounds the modem would make whenever a caller made a connection at all times of night. Two rings, followed by a high pitched scream of the modem, a lower step pitch, another lower pitch and then silence as the modems agreed on speed and protocol.

All that hardware was frightfully expensive compared to what we use today. A good modem cost 1500 guilders (today's € 1200) and the backup tape streamer with 4 tapes of 400 MB each was 621 guilders (today's € 500). A CD drive was subsidized by NTG.

Henk de Haan provided a steady stream of file updates using his university account and he actively expanded the offering of messages so callers also had access to TeX related mailing lists like TEX-NL and newsgroups like comp.text.tex.

To save telephone costs of 'online' time, standalone ulitities like Silver Express were offered to allow callers to quickly get all they wanted and then unpack news offline.

The latest updates of TEX modules like Babel and LATEX2e were there to be picked up and also a 612 kilobyte (!) "TinyTeX" package could be fetched so one would have functional TeX setup so small that it's hard to imagine today.

In a series of updates in NTG's MAPS publication the sysops reported about new developments, also listing the FGBBS file contents. In 1994, the contents of the 4allTEX CD was added and the number of (zipped) file collections was a little over 1500 and 170 MB in size which was considered a lot of files.

In today's perspective the number of users was not very high. In 6 months of 1994, almost 40 individuals contacted FGBBS nearly 1400 times to pick up almost 3500 files.

The phone company, anticipating more intense growth, had by then installed a box with 16 telephone lines so FGBBS could, if needed, be greatly expanded.

In 1995, 72% of callers used 14k4 speed modems, 22% still used 2400 baud and just 1.5% had the state of the art 28k8 speed connection.

In 1996 FGBBS had on average 3 callers per day, a year later a call would come a little less than once a day.

In 1998 the system upgraded to the high speeds of ISDN and users could get internet email facilities for free. Once every two days a caller would stop by to use the facilities.

In 1999 the system was finally closed down and once again silence was to be heard in the little family house. Deleting the entire file library hardly made a sound. Just a soft crackle of the hard disk.

Sources:

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