

# Speak Freely History

## Library Mgmt Software

An ILS Solely for Public Libraries 6th Year at the Top of the Charts



A brief history of Speak Freely:

When I moved to Europe in May of 1991 to help organise Autodesk's European Software Centre, I realised that one thing I'd miss is being able to listen in on design meetings and talk with individual developers without running up huge phone bills. Autodesk had a dedicated 56 Kb leased line between headquarters in California and the European Software Centre which was used primarily for transmitting software updates but which was nearly idle in the overlap hours between Europe and California. Since all of our software developers had Sun workstations which came with audio hardware, I decided to see if I could put the pieces together so we could talk and/or broadcast meetings over the leased line. Since raw Sun mu-law audio requires 64 Kb and I only had 56 Kb to work with, I hammered in a decimation/expansion scheme to reduce the bandwidth to 32 Kb. (It remains today, in a more refined form, as "Simple compression".) I knew very little about audio encoding at the time--obviously ADPCM would have been a far better choice, but I was ignorant of it and I'm not sure a public domain implementation of it existed in 1991. I first experimented with an RPC implementation which worked fine over a LAN but was hopeless over the leased line, which was routed over a satellite link and had high latency; I finally settled on UDP as the only viable protocol, a decision independently reached by the designers of RTP years later.

Anyway, the first release of what was then called NetFone was posted on July 11, 1991. Release 2 was posted on September 12, 1991 and consisted of cleanups and bug fixes.

That's where things stood until Release 3 on December 13, 1994, which corrected some compiler warnings on the ANSI compiler which replaced Sun's original K&R cc.

I didn't really get back into development mode until the summer of 1995, when I discovered the public domain implementation of GSM which is still used in Speak Freely. This, along with Phil Karn's DES (which I had used in a number of other programs over the years), and the Silicon Graphics audio drivers supplied by Paul Schurman made up NetFone release 4, posted on August 2, 1995. This was the first version able to run on a typical Internet connection as opposed to a leased line, albeit still limited to Sun and Silicon Graphics workstations.

NetFone release 5 followed on August 28, 1995 and added IDEA encryption as well as fixes to features in release 4.

Netfone 5.1 was released on September 2, 1995, and was the first to include the log.doc file. The program was renamed Speak Freely as of release 5.2 on September 21, 1995 and all subsequent development is documented in the log.

The Windows version began as a port of NetFone 5 (aka 5.0) and all development following its initial release on August 23, 1995 is described in the Windows development log.

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*Last Modified: June 26, 1999 by Brian C. Wiles*