Down the Gopher Hole

by Cameron Kaiser

[Editor's Note: Some of the URLs in this article use the <u>gopher://</u> scheme rather than the familiar http:// scheme. These gopher URLs can be viewed directly in Camino or Firefox, but if you are using Safari, which does not support the Gopher protocol, view these pages using the HTTP<->gopher proxy [1]. For more information, check out this document describing Gopher support [2] in most Web browsers.]

Back in the early 1990s, when I was an undergraduate at the University of California camping out in the beat-up, 24-hour-a-day, VT100 terminal lab under one of the lecture halls, the World Wide Web was, well, not very wide and certainly didn't encompass much of the world. Graphical interface to the Internet? Are you kidding? Most of what the Internet had to offer then could be viewed on those text screens. All my activity happened while logged in over a serial port to one of the campus Unix servers.

Still, that monochromatic interface was the gateway to an interconnected world of computers very much like the Web - a world accessible both to the people typing away on those ancient dumb terminals, and to the lucky folks on the spanking new Mac IIci computers in the Mac labs. It had weather, headline news, music, search engines, and even video clips (if I could use one of the Macs). This was Gopherspace [3], and it's still alive today [4].

Back in 1991, Gopher sprang out of a University of Minnesota campus information service project aimed at building a "friendly" method of accessing university documents and services. (The University of Minnesota's sports teams are the Golden Gophers.) In those days, most campuses and corporations maintained their own walled-garden services and access policies, and almost all of them operated in unique and sometimes wildly different manners.

In contrast, Gopher provided a unified, consistent hierarchical interface to access everything. The approach translated well to both text and graphical interfaces, and better still, it offered an easy way to connect a varied set of hosts using simple links. This beat the stuffing out of getting files via FTP, which usually required using a command line. Gopher's method was a large improvement over interacting with library and campus directory systems via Telnet and trying to remember how to compose searches from system to system. Thanks to Gopher, the public resources other servers offered weren't merely accessible - they were usable.

Within a year or two, many other campuses were using Gopher for their own local operations, along with some private users and corporations. Gopher servers and gateways pulled together many disparate Internet resources, such as local directories and white pages (using CSO), and access to FTP servers and WAIS (Wide Area Information Servers [5] - WAIS was an early standardized way to search remote databases).

At the same time that Gopher's purview expanded, point-and-click Gopher clients appeared, including some for Macs [6] - remember TurboGopher [7], anyone? An increasing amount of information started to pour into Gopherspace, including electronic books, email magazines, pictures, programs, software and more.

Sorting through that growing mass of content required yet another piece of software: a search engine called Veronica [8] (its name was a play on Archie, the search engine for FTP). No accounting tells us exactly how many Gopher servers existing during Gopherspace's heyday, but I remember all seven Veronica servers being busy during the day. As the Web become more generally popular, Gopher links were still rampant on Web pages because a lot of data was still in Gopherspace.

By 1995, Gopherspace had largely evaporated, thanks to a combination of the University of Minnesota's restrictive and expensive licensing policies [9] (they eventually released Gopher under the open-source GPL license [10], but years too late) and the wide availability of a better technology. The new technology had the same interconnectedness of resources, while offering a prettier interface and wider possibilities for creative and informational communication. Naturally, that was - and is - the Web.

The University of Minnesota tried to salvage Gopher, with neat tricks like merging Gopherspace with virtual reality via the GopherVR project [11], but the Web had already passed Gopher by. Fascinated as I was with the Gopher world I used to inhabit, I threw together my first bits of HTML and put up my own home page on the Web in 1994, and Gopher became history to me, too.

Or was it? In 1998, while working as a programmer for Point Loma Nazarene University in San Diego, I wondered what happened to the old world down the Gopher hole. I brought up my own Gopher server software on the Apple Network Server sitting in the office early in 1999 and told it to go find the other Gopher servers out there. Surprisingly, a few answers came back.

The University of Minnesota's Gopher pages still worked, and they still had most of their links to former Gopher peers. Many of those hosts had turned into Web sites, and some had utterly disappeared, but a few were not only still operating but also still maintaining their content. I started compiling a list and trying to index their content, and eventually I put my database up for searching and browsing as gopher.ptloma.edu (with the IT department's blessing), the host that was the forerunner of Floodgap [12]'s Gopher server.

Other people had been wondering what happened to Gopher, too, and had erected their own servers independently. One day I got an email message from a fellow named John Goerzen, who had also written his own new Gopher software to run a service he whimsically called quux [13]. Better still, along with his new content, he had managed to preserve a fair number of the archives of old Gopher sites that I thought had disappeared without a trace.

John was only the first of many people I would hear from who remembered the quick simplicity of Gopherspace. It got to the point where I started tracking all the new hobby and user servers that were cropping up. I even received a letter from Mark McCahill, one of Gopher's original architects, after he noticed the new Veronica clone [14] that I had thrown together out of the data the Gopher crawler had acquired.

Gopherspace had never disappeared after all; it had just gone underground. Even after the University of Minnesota finally turned off gopher.tc.umn.edu a few years later, Gopher hobbyists live on, writing new features (like the Gopher "phlog [15]"), creating clients and software, and adding new content [16] to their own little worlds. Plus, most of the old Gopherspace archives [17] now have new homes, meaning most of their content is still available today.

Nevertheless, Gopher remains more than just a living fossil. In a world where flash (and sometimes Flash) is often more important than substance, Gopher replaces all the trappings with a clean, sterile, and consistent interface of folders and files. The Gopher sites that people visit have real content and real function, so there's nothing but a menu between you and gigabytes and gigabytes of data. You can still access Gopherspace with a dumb terminal just as well as you can with a Mac Pro. It loads quickly over a dial-up link, and it's instantaneous over a broadband connection. You can still get weather reports [18] in Gopherspace, you can still read mailing lists and headline news, there are still lots of files for downloading, and heck, you can even read TidBITS [19]! (Thanks to Adam Engst for granting permission.)

More people are discovering that there's an alternative to the World Wide Web for many functions, and better still, an alternative that can co-exist seamlessly with the Web - all the Mozilla-based Web browsers work fine as Gopher clients too. Maybe it's for that reason that the Power Mac 7300+G3 that runs gopher.floodgap.com today still gets a few thousand hits daily.

Yes, there are far fewer Gopher hosts than there used to be (86 hosts and 740,000 unique resources, as I glance at the robot statistics file while I perform maintenance on the Veronica-2 index). But the world down the Gopher hole is still alive more than 15 years from its inception. If the Web seems to be a heavy or fluffy distraction as you wait for your browser to grind through another Flash animation and a pile of ads, perhaps it's time you took a trip back underground for a glance at the simpler and cleaner world that the Internet used to be.

[Cameron Kaiser [20] is a recovering database administrator and programmer who unwisely got an MD instead and now works as a county health physician in Southern California. He drives old United States highways, maintains old Commodore and Apple computers, and relentlessly implements old information technologies on his "\$50 Wal-Mart server rack" in his rapidly disappearing spare time. He has used Macs since 1987 except for a brief stint we shall not talk about.]

- [1]: <u>http://gopher.floodgap.com/gopher/</u>
- [2]: <u>http://gopher.floodgap.com/gopher/gw?gopher/0/gopher/wbgopher</u>
- [3]: http://en.wikipedia.org/wiki/Gopher (protocol)
- [4]: gopher://gopher.floodgap.com:70/0/gopher/welcome
- [5]: http://en.wikipedia.org/wiki/Wide area information server
- [6]: gopher://gopher.floodgap.com/1/gopher/clients/mac
- [7]: http://www.bio.net/bionet/mm/bio-soft/1992-October/003180.html
- [8]: <u>http://en.wikipedia.org/wiki/Veronica (computer)</u>
- [9]: <u>http://listserv.uh.edu/cgi-bin/wa?A2=ind9303b&L=pacs-l&T=0&P=5660</u>
- [10]: <u>http://www.gnu.org/copyleft/gpl.html</u>
- [11]: <u>http://en.wikipedia.org/wiki/GopherVR</u>
- [12]: gopher://gopher.floodgap.com/
- [13]: <u>gopher://gopher.quux.org/</u>
- [14]: gopher://gopher.floodgap.com/1/v2/
- [15]: gopher://hal3000.cx/1/Phlog
- [16]: gopher://home.jumpjet.info/
- [17]: <u>gopher://gopher.quux.org/1/Archives</u>
- [18]: gopher://gopher.floodgap.com/1/groundhog/
- [19]: gopher://gopher.floodgap.com/1/feeds/tidbits/
- [20]: <u>http://www.floodgap.com/</u>

Reprint of TidBITS article #8909 (19 Mar 2007); reuse governed by Creative Commons license. TidBITS has offered years of thoughtful commentary on Apple and Internet topics. For free email subscriptions and access to the entire TidBITS archive, visit tidbits.com.