

# Gopher: When Adversarial Interoperability Burrowed Under the Gatekeepers' Fortresses

By *Roy Schestowitz*

Created 22/02/2020 - 3:04am

Submitted by Roy Schestowitz on Saturday 22nd of February 2020 03:04:25 AM Filed under [Web](#) [1]

In the early 1990s, personal computers did not arrive in an "Internet-ready" state. Before students could connect their systems to UMN's network, they needed to install basic networking software that allowed their computers to communicate over TCP/IP, as well as dial-up software for protocols like PPP or SLIP. Some computers needed network cards or modems, and their associated drivers.

That was just for starters. Once the students' systems were ready to connect to the Internet, they still needed the basic tools for accessing distant servers: FTP software, a Usenet reader, a terminal emulator, and an email client, all crammed onto a floppy disk (or two). The task of marshalling, distributing, and supporting these tools fell to the university's Microcomputer Center.

For the university, the need to get students these basic tools was a blessing and a curse. It was labor-intensive work, sure, but it also meant that the Microcomputer Center could ensure that the students' newly Internet-ready computers were also configured to access the campus network and its resources, saving the Microcomputer Center thousands of hours talking students through the configuration process. It also meant that the Microcomputer Center could act like a mini App Store, starting students out on their online journeys with a curated collection of up-to-date, reliable tools.

That's where Gopher comes in. While the campus mainframe administrators had plans to selectively connect their systems to the Internet through specialized software, the Microcomputer Center had different ideas. Years before the public had heard of the World Wide Web, the Gopher team sought to fill the same niche, by connecting disparate systems to the Internet and making them available to those with little-to-no technical expertise?with or without the cooperation of the systems they were connecting.

Gopher used text-based menus to navigate "Gopherspace" (all the world's public Gopher servers). The Microcomputer Center team created Gopher clients that ran on Macs, DOS, and in Unix-based terminals. The original Gopher servers were a motley assortment of used Macintosh IIci systems running A/UX, Apple's flavor of Unix. The team also had access to several NeXT workstations.

[2]

Also: [The Things Industries Launches Global Join Server for Secure LoRaWAN](#) [3]

[Web](#)

---

**Source URL:** <http://www.tuxmachines.org/node/134353>

**Links:**

[1] <http://www.tuxmachines.org/taxonomy/term/103>

[2] <https://www.eff.org/deeplinks/2020/02/gopher-when-adversarial-interoperability-burrowed-under-gatekeepers-fortresses>

[3] <https://www.cnx-software.com/2020/02/21/the-things-industries-launches-global-join-server-for-secure-lorawan/>