How to become an Internet power user . . .

By Larry Schankman

. . . or the seven habits of highly successful Internauts

Power. That's what we really want from the Internet, right? We want information, and we want it now! As librarians, we are expected to share our skills with others. Ultimately, our goal is not just simply to provide people with the information they desire, but the knowledge of how to find that information themselves.

But most of us are not technicians. Our primary concern is not with protocols, technology, or keystrokes. Rather, we seek pure information, regardless of format. Naturally, we must know how to find it ourselves. Following are some tips based on what I call the seven habits of highly successful Internet users.

1. Power users recognize that patrons want information, not just a physical object (i.e., book or journal). Let's face it, most libraries don't have everything. The Internet provides (connected) librarians with equal access to public-domain information and data. Regardless of how we feel personally about computers and the so-called virtual library, our patrons need us to provide them with timely information. Librarians are trained in the practicalities of retrieving, organizing, and presenting information to effectively resolve a patron's need for knowledge or personal empowerment. A positive attitude towards this power helps us both individually and as a profession.

2. Power users comprehend technobabble and know all the latest trends in Internet access. Today's Internet is an ever-evolving phenomenon, still in its infancy. New software and searching tools gain preeminence quickly. Keep in top form by monitoring the latest news and trends affecting the nets. Talk to computer center staff to assure that your organization's mainframe or host server utilizes the latest protocols and services. Read regularly at least one Internet magazine,[1] and subscribe to a current awareness discussion group or listserv (see sidebar).

3. Power users network with colleagues and monitor issues and news within their areas of interest. Find a listserv or usenet group which shares your interests. Monitor the discussions and become active yourself. Power users are not passive lurkers. Network with your peers; it is easy, fun, and rewarding. Download current copies of the *Directory of Scholarly Electronic Conferences* or Charles Bailey's *List of Library-Related Lists and Electronic Serials* to identify lists (see sidebar).

4. Power users search the Internet efficiently with tools such as Veronica, Archie, Aliweb, and WAIS. Don't let the silly terminology intimidate you. One minute with Veronica, Archie, or one of the equivalents in World Wide Web (e.g., Aliweb, WWW Worm, or Web Crawler) can save hours of manual searching. Most gophers offer Veronica searching of files and directories throughout the Internet somewhere within their menu structure. Archie searches mostly files in ftp archives.[2] Several of the better gophers place these feature conveniently on the opening screen.[3]

If you don't see the actual word *Veronica*, you can find it among such menu items as *All the Gophers in the World, Search All of Gopherspace,* or *Other Gopher and Information Servers*. After you select the Veronica op-

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tion, you might have to specify a particular host (there are only a few Veronica databases world-wide[1]). Eventually you will see a prompt at which you can type keywords (e.g., Haiti and Clinton). Veronica will not only locate files, directories, and objects (sounds, videos, pictures), but will even connect you to the appropriate site after you highlight and select one of the hits. Note that not all Veronica sites index all resources, and many sites are often busy, so you may need to try several sites.

5. Power users distinguish themselves by their apparent ease and mastery in locating new resources. New gophers and web servers pop up daily, though most mirror the same master sites. Some power users memorize dozens of Internet addresses and glide along the keyboard effortlessly. That's power. But this is not a test, we can use a cheat sheet. Dozens of books, lists of lists, and directories[5] exist (see the sidebar). Compile your own list to suit your needs and keep it near the reference desk.
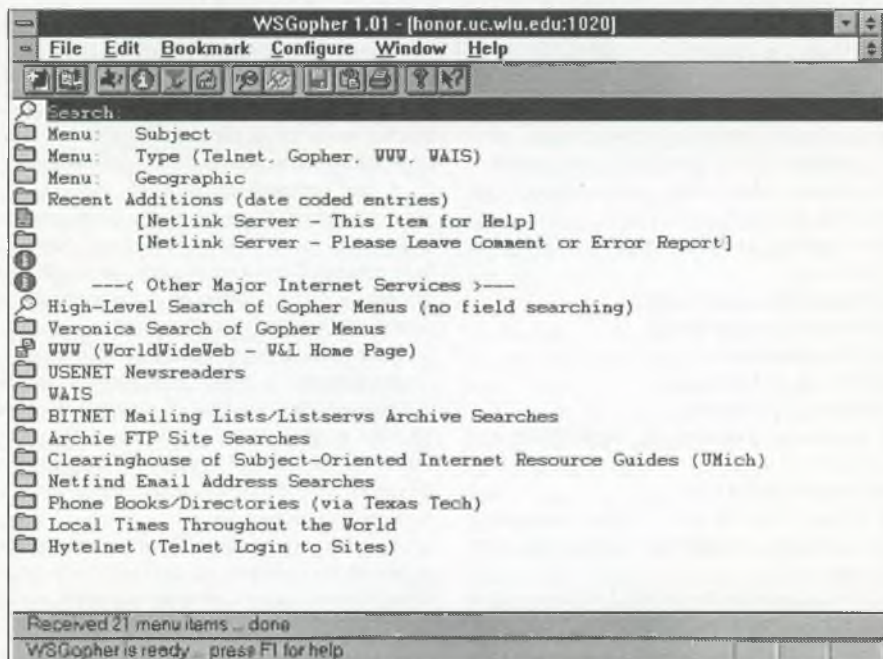
6. Power users are not intimidated by the quantity and diversity of information sources. At first find just one good, uncomplicated site, preferably a gopher since they're easy to use and require only a basic Internet hookup (graphical programs like Mosaic re-

quire special connections or a Local Area Network, and some knowledge of URLs, Universal Resource Locators). Read one of the many books[6] or free how-to guides to become familiar with these resources (the sidebar lists some gopher sites with collections of such guides).

Examine all the menu choices to gain intimacy with the directory structure and information content. Keep a notebook with screen prints or written path directions near the reference desk. Navigating the Internet is just like finding your way in a new town: initially you need to ask for directions and consult maps, but eventually you'll know your way around instinctively, short cuts and all. The following are my favorite gophers in order of preference:

- honor.uc.wlu.edu 1020 [must include the number]
- vienna.hh.lib.umich.edu
- gopher.cic.net (see especially the Resource Discovery Tools directory)
- nysernet.org
- gopher.uidaho.edu.

If your organization does not have gopher capability telnet to one of several "public" gophers (ask your support technicians to explain your options). When prompted for a login, most

The main menu of Washington and Lee University's "Honor" gopher.

Guides to cyberspace

Guides to download

In addition to the growing number of books and articles about the Internet, several guides are available for searching and downloading over the Net itself. The following gopher sites are very useful since they provide ready access to many of the better resources in one place:

• gopher.cni.org (directory = Coalition FTP Archives/Publicly Available Documents/Guides to Network Use)

• gopher.internic.net (several great choices in directory = InterNIC Information Services)

• gopher.uidaho.edu (directory = Computer and InternetDocumentation)

• library3.library.carleton.ca (directory = Electronic Resources/Internet Guides)

• refmac.kent.edu (directory = Internet Training and Information).

Lists of lists

Among the many guides that will help you become a power user are the following lists of lists. Again, Veronica will help you find specific information.

• *Charles Bailey's List of Library-Related Lists and Electronic Serials.* Available above or also via telnet (login = mlink) at vienna.hh.lib.umich.edu in directory = Libraries and Librarianship.

• *Directory of Scholarly Electronic Conferences* (includes listservs, news groups, electronic journals, etc.). Available via e-mail at listserv@kentvm.kent.edu with message: get acadlist file *n* f=mail, where n =

    1 (Education and Library and Information Science)
    2 (Humanities: part one)
    3 (Humanities: file two)
    4 (Social Science)
    5 (Biological Sciences)
    6 (Physical Sciences)
    7 (Business, Economics, Publishing and News)
    8 (Computer Science)
    9 (Social, Cultural, and Political Aspects of Computing; Academic Computing Support).

It is also searchable online by keyword or subject via gopher at refmac.kent.edu (choose from main menu) and many other sites, or ftp from ksuvxa.kent.edu in directory = library

• *List of Lists Resources.* Available for browsing or searching via gopher at cwis.usc.edu in directory = Other Gophers and Information Resources/Gopher-Jewels/Internet and Computer Related Resources/Lists of Lists Resources.

• *Netstuff and Bestgo4 Lists.* Available via ftp at ftp.clark.net in directory = /pub/lschank; download compressed WordPerfect version (use the *binary* command) with extension .zip or older ASCII version with extension .asc.

Another way to get a list of lists via e-mail is to send the following message to any listserv host: *list global,* or more precisely, *list global/<keyword>.* For example, the message "list global/geography" to listserv@kentvm.kent.edu yields a list of several discussion groups concerned with geography.

Useful listservs

To subscribe to most listservs, leave the subject line blank and send as a message: subscribe <list name> <your first name> <your last name>. Example: subscribe govdoc-l jane doe.

Note: Save the subscription verification letter for future reference; it explains how to post messages, unsubscribe from the list, search, etc.

• gopher-jewels: announces new gophers and services. Send one-word message of "subscribe" (no name) to: gopherjewelslist-request@tpis.cactus.org; searchable via gopher at cwis.usc.edu in directory = Other Gophers and Information Resources/Gopher-Jewels.

• net-happenings: current awareness service consisting of posts mostly from other lists; announces new Internet tools and sites, conferences, and services for educators. Warning: generates large number of daily postings. Subscribe to: listserv@is.internic.net.

• newnir-l: announces new Internet resources; provides good current awareness with a manageable number of messages; gopher archive at govan.cent.gla.ac.uk in directory = Software and Mail Archives/University of Glasgow Mail Archives. Subscribe as e-mail to: listserv@itocsivm.csi.it.

• scout-report: weekly announcements of new Internet resources and services; searchable gopher archive at is.internic.net in directory = InterNIC Information Services/Scout Report. Subscribe as e-mail to: majordomo@is.internic.net.

telnetable gophers expect you to type "gopher." If you are asked for a password, either the login is incorrect or the site does not allow outsiders to dial in. Below are some of the better public sites with "gopher" or no login required:

- consultant.micro.umn.edu
- gopher.msu.edu
- inform.umd.edu
- sunsite.unc.edu
- vienna.hh.lib.umich.edu (login = mlink).

First-rate gophers contain the most useful items on the opening screen. The main menu of Washington and Lee University's "Honor" gopher is on page 719.

7. Power users maintain a database of subject-oriented sites and individual text/data files. Often you'll need more than just an all-purpose gopher. Power users are busy, driven people with specific needs. The internet has a database for everyone. Find specific material from a list of lists or Internet directory. Maintain a directory list of important ftp[7] and World Wide Web sites as well. Several info-scouts have prepared articles and pathfinders identifying Internet resources by subject. The University of Michigan maintains one of the best known databases of such guides in the *Clearinghouse for Subject-Oriented Lists.*[8]

> **Some power users memorize dozens of Internet addresses and glide along the keyboard effortlessly. That's power.**

Find an archive that maintains texts or data in your area of interest and learn the essential commands to search and retrieve files. Most importantly, anticipate likely reference questions and download useful material onto your local computer *before* questions arise. Strive for a successful "live" session by knowing your destination in advance. This requires preparation and practice. Searching the Internet should be no different than an online, for-fee search: ill-preparedness may lead to unpleasant results. As my final advice: feel the excitement of cyberspace and explore!

Notes

1. See especially: *Internet Research* (ISSN 1066-2243); *Internet World* (ISSN 1064-3923); *The World Wide Web Newsletter* (ISSN 1350-2263); and selected coverage in library-oriented journals such as *Computers in Libraries, Database,* and *Online.*

2. Two of the best Archie databases via gopher are: archie.internic.net and unlinfo2.unl.edu 2007 (include the number).

3. Gophers with Veronica on the main menu include gopher.tamu.edu, gopher.uchicago.edu, gopher.uidaho.edu, gopher.unr.edu, infolib.lib.berkeley.edu, and refmac.kent.edu; see page 719 for a screen print from honor.uc.wlu.edu 1020.

4. To search Veronica directly, without navigating menus, type in one of the following URLs: gopher://veronica.sunet.se:2347/7; gopher://info.psi.net:2347/7; gopher://soundgarden.micro.umn.edu:8001/7.

5. Current directories include ARL's annual *Directory of Electronic Journals, Newsletters, and Academic Discussion Lists* (Washington, D.C.: Association of Research Libraries, Office of Scientific and Academic Publishing); Eric Braun's *The Internet Directory* (New York: Fawcett Columbine, 1994); Edward T. Hardie's *Internet Mailing Lists* (Englewood Cliffs, N.J.: Prentice Hall, 1994); and *Internet World's On Internet 94*, edited by Tony Abbott (Westport, Conn.: Meckler, 1993). All are fairly complete, though no one directory can keep up with the constant additions and changes.

6. Two free lists available via gopher are John Makulowich's *Bibliography of Introductory Internet Books* at gopher.cni.org (path given in appendix), and Kevin Savetz's *Unofficial Internet Book List* at library3.library.carleton.ca in directory = Electronic Resources/Internet Guides/Books about the Internet.

7. For a good list of essential ftp-accessible documents, download internet-cmc.txt from ftp.rpi.edu in directory = pub/communications; the list is also available via gopher at many sites, including gopher.cni.org in directory = Coalition FTP Archives/Publicly Accessible Documents/Guides to Network Use/December, John; Computer Mediated Communications and Internet Tools.

8. Una.hh.lib.umich.edu (telnet login = "gopher") or gopher.lib.umich.edu in directory = What's New and Featured Resources; una's ftp directory = /inetdirs; for a list of several resources by topic download my "Social Sciences and Humanities" guide. ■