Polly, Jean Armour



Surfing the Internet

DigiLibraries.com

Surfing the INTERNET: an Introduction Version 2.0.2 December 15, 1992

c. 1992 Jean Armour Polly. Material quoted from other authors was compiled from public Internet posts by those authors. No copyright claims are made for those compiled quotes. Permission to reprint is granted for nonprofit educational purposes. Please let me know if you find this compilation useful. This first (much shorter) version of this appeared in the June, 1992 Wilson Library Bulletin. Please include this entire copyright/copy notice if you duplicate this document. Updates may be ftp'd:

ftp nysernet.org (192.77.173.2) login anonymous password name@machine.node cd pubresources/guides

Please choose the most current version of surfing.the.internet.

Please send updates and corrections to: jpolly@nysernet.org

Today I'll travel to Minnesota, Texas, California, Cleveland, New Zealand, Sweden, and England. I'm not frantically packing, and I won't pick up any frequent flyer mileage. In fact, I'm sipping cocoa at my Macintosh. My trips will be electronic, using the computer on my desk, communications software, a modem, and a standard phone line.

I'll be using the Internet, the global network of computers and their interconnections, which lets me skip like a stone across oceans and continents and control computers at remote sites. I haven't "visited" Antarctica yet, but it is only a matter of time before a host computer becomes available there!

This short, non-technical article is an introduction to Internet communications and how librarians and libraries can benefit from net connectivity. Following will be descriptions of electronic mail, discussion lists, electronic journals and texts, and resources available to those willing to explore. Historical details about the building of the Internet and technical details regarding network speed and bandwidth are outside the scope of this piece.

What's Out There Anyway?

Until you use a radio receiver, you are unaware of the wealth of programming, music, and information otherwise invisible to you. Computer networks are much the same. About one million people worldwide use the Internet daily. Information packet traffic rises by 12% each month.

About 727,000 host computers are connected, according to a January, 1992 report (Network Working Group Request for Comments: 1296) by Mark K. Lottor. So, what's all the excitement about? What's zipping around in that fiber and cable and ether, anyway?

On my electronic adventure I browsed the online catalog at the University Library in Liverpool, England, leaving some "Hi there from Liverpool, New York" mail for the librarian.

I downloaded some new Macintosh anti-virus software from Stanford's SUMEX archive.

Then I checked a few databases for information needed for this article, and scanned today's news stories.

I looked at the weather forecast for here in the East and for the San Francisco Bay area, forwarding that information to a friend in San Jose who would read it when he woke up. The Internet never closes!

After that I read some electronic mail from other librarians in Israel, Korea, England, Australia and all over the U.S. We're exchanging information about how to keep viruses off public computers, how to network CDROMS, and how to reink inkjet printer cartridges, among other things.

I monitor about twelve discussion groups. Mail sent to the group address is distributed to all other "subscribers". It's similar to a round-robin discussion. These are known variously as mailing lists, discussion groups, reflectors, aliases, or listservs, depending on what type they are and how they are driven. Subscriptions are free.

One of these groups allows children and young adults all over the world to communicate with each other. Kids from Cupertino to Moscow are talking about their lives, pets, families, hope and dreams. It's interesting to see that Nintendo is a universal language!

Teachers exchange lesson plans and bibliographies in another group, and schools participate in projects like the global

market basket survey. For this project, students researched what foods a typical family of four would buy and prepare over one week's time. Their results were posted to the global project area, where they could be compared with reports from kids all over North and South America, India, Scandinavia, and Asia. It opened up discussions of dietary laws, staple foods, and cultural differences.

Other lists explore the worlds of library administration, reference, mystery readers, romance readers, bird-watcher hotlines, cat enthusiasts, ex-Soviet Union watchers, packet radio techies, and thousands more. There is even a list to announce the creation of new lists!

The Power of the Net

A net connection in a school is like having multiple foreign exchange students in the classroom all the time. It promotes active, participatory learning. Participating in a discussion group is like being at an ongoing library conference. All the experts are Out There, waiting to be asked.

Want to buy a CDROM drive? Send one query and "ask" the 3,000 folks on PACS-L (Public Access Computer Systems list) for advice. In a few hours you'll have personal testimonies on the pros and cons of various hardware configurations.

Want to see if any libraries are doing anything with Total Quality Management? Ask the members of LIBADMIN and you'll have offers of reports, studies, personal experiences and more. How do you cope with budget cuts: personnel layoffs or materials? Again, LIBADMIN use allows shared advice.

Here is one story about the power of the net. At Christmas, an electronic plea came from Ireland. "My daughter believes in Santa Claus," it began. "And although the `My Little Pony Megan & Sundance' set has not been made in three years, she believes Santa will prevail and she will find one under her tree." Mom, a university professor, had called the manufacturer in the US, but none were available. "Check around," they said, "maybe some yet stand on store shelves." So Mom sent the call out to the net.

Many readers began a global search for the wily Pony as part of their own holiday shopping forays.

Soon, another message came from Dublin. It seemed that a reader of the original message had a father who was a high-ranking executive in the toy company, and he had managed to acquire said pony where others had failed!

It was duly shipped in time to save Santa's reputation.

Part of the library's mission is to help remove barriers to accessing information, and part of this is removing barriers between people. One of the most interesting things about telecommunications is that it is the Great Equalizer. It lets all kinds of computers and humans talk to each other. The old barriers of sexism, ageism, and racism are not present, since you can't see the person to whom you're "speaking". You get to know the person without preconceived notions about what you THINK he is going to say, based on visual prejudices you may have, no matter how innocent.

Well, almost without visual prejudice. Electronic mail is not always an harmonic convergence of like souls adrift in the cyberspace cosmos: there are arguments and tirades (called "flames"). Sometimes you get so used to seeing a frequent poster's electronic signature that you know what he's going to say before he says it!

Smileys

One problem with written communication is that remarks meant to be humorous are often lost. Without the visual body-language clues, some messages may be misinterpreted. So a visual shorthand known as "smileys" has been developed. There are a hundred or more variations on this theme- :-) That's a little smiley face. Look at it sideways. More Smiley info may be found via anonymous ftp at many places, including the following: ftp nic.funet.fi cd *pub*misc/funnies/smiley.txt

FTP is introduced later in the text.

What a range of emotions you can show using only keyboard characters. Besides the smiley face above, you can have :- (if you're sad, or :-< if you're REALLY upset! ;-) is one way of showing a wink. Folks wearing glasses might look like this online: %^).

But for the most part, the electronic community is willing to help others. Telecommunications helps us overcome what has been called the tyranny of distance. We DO have a global village.

Electronic Newsletters and Serials

Subscribing to lists with reckless abandon can clog your mailbox and provide a convenient black hole to vacuum up all your spare time. You may be more interested in free subscriptions to compiled documents known as electronic journals. These journals are automatically delivered to your electronic door.

There are a growing number of these. Some of the best for librarians are listed below. To subscribe to these journals you must know how to send an interactive message to another computer. This information is well-documented in the resources listed at the end of this article. Telnet and ftp are introduced further along in this article.

ALCTS NETWORK NEWS

(Association for Library Collections and Technical Services)

Various ALA news, net news, other items of interest to librarians. Send the following message to LISTSERV@UICVM.BITNET SUBSCRIBE ALCTS First Name Last Name.

Current Cites

Bibliography of current journal articles relating to computers, networks, information issues, and technology. Distributed on PACS-L, or connect remotely via

TELNET to MELVYL.UCOP.EDU (192.35.222.222);

Enter this command at the prompt: SHOW CURRENT CITES.

Further information: David F. W. Robison, drobison@library.berkeley.edu.

EFFector Online

The online newsletter of the Electronic Frontier Foundation. All the hot net issues are covered here: privacy, freedom, first amendment rights. Join EFF to be added to the mailing list or ftp the files yourself from ftp.eff.org (192.88.144.4)

They are in the *pub*eff and subsequent directories.

Hot Off the Tree (HOTT)

(Excerpts and Abstracts of Articles about Information Technology)

TELNET MELVYL.UCOP.EDU (192.35.222.222); Enter command: SHOW HOTT. Further information: Susan Jurist, SJURIST@UCSD.EDU.

Network News

An irreverent compendium of tidbits, resources, and net factoids that is a must for true Internet surfers. To subscribe, send the following message to

LISTSERV@NDSUVM1.BITNET

SUBSCRIBE NNEWS First Name Last Name.

For more information: Dana Noonan at noonan@msus1.msus.edu.

Public-Access Computer Systems News and The Public-Access Computer Systems Review Sent automatically to PACS-L subscribers. See above. For a list of back issue files, send the following message to: LISTSERV@UHUPVM1.BITNET INDEX PACS-L

To obtain a comprehensive list of electronic serials on all topics, send the following commands to: LISTSERV@UOTTAWA.BITNET GET EJOURNL1 DIRECTRY GET EJOURNL2 DIRECTRY For further information, contact Michael Strangelove: 441495@ACADVM1.UOTTAWA.CA.

Remote Login to Internet Resources: TELNET

One step beyond electronic mail is the ability to control a remote computer using TELNET. This feature lets you virtually teleport anywhere on the network and use resources located physically at that host. Further, some hosts have gateways to other hosts, which have further gateways to still more hosts. How can you be in two places at once? It sounds more confusing than it is. What resources are available? Here is a sampling of some of the fare awaiting you at several sites:

Cleveland Freenet

Freenets are the progeny of: Tom Grundner, Director, Community Telecomputing Laboratory Case Western Reserve University 303 Wickenden Building Cleveland, OH 44106 216/368-2733 FAX: 216/368-5436 Internet: aa001@cleveland.freenet.edu BITNET: aa001%cleveland.freenet.edu@cunyvm and the folks at: National Public Telecomputing Network (NPTN) Box 1987 Cleveland, OH 44106 216/368-2733 FAX: 216/368-5436 Internet: aa622@cleveland.freenet.edu.

Freenets are built around a city metaphor, complete with schools, hospitals, libraries, courthouses, and other public services.

Academy One recently held an online global simulation of a series of major space achievements. 16 schools (from five states and four nations) participated. Here are several of the descriptions of their projects:

"VALKEALA HIGH SCHOOL VALKEALA ELEMENTARY SCHOOL

Valkeala, Finland (sa124@cleveland.freenet.edu)

Acting as Space Shuttle Discovery taking the Hubble Telescope into space.

These Finnish students will be in communication with students in Estonia, relaying their reports."

"DR. HOWARD ELEMENTARY SCHOOL Champaign, IL (cwilliam@mars.ncsa.uiuc.edu, cdouglas@ncsa.uiuc.edu) Dr. Howard School (25 students in 3rd/4th grade) will be simulating the Challenger 2 launch. They are being assisted by the National Center for Supercomputing Applications."

"ST. JULIE BILLIART SCHOOL Hamilton, OH (ba542@cleveland.freenet.edu) Simulating a NASA Tracking Station in Florida. They will be posting hourly weather reports about the conditions in Florida around Cape Kennedy. This information is vital to the recovery of the Friendship 7 capsule and crew. Students have taken an interest in Space Junk and will be posting additional reports on the various probes which were used to test the surface of the moon and how all of that junk is now becoming a hazard to current and future space exploration."

Another Freenet resource is Project Hermes. This service provides copies of Supreme Court opinions in electronic form to as wide an audience as possible, almost as soon as they are announced.

The Court's opinions can be sent directly to you or you may download the files directly from any NPTN community computer system.

The Freenets also provide weather, news, and gateways to other resources. To access the Cleveland FreeNet (where all this is being held) simply telnet to: freenet-in-a.cwru.edu 129.22.8.82 or 129.22.8.75 or 129.22.8.76 or 129.22.8.44 and select "visitor" at the login menu.

MELVYL

Catalog Division of Library Automation University of California Office of the President 300 Lakeside Drive, 8th floor, Oakland, California 94612-3550 415/987-0555 (MELVYL Catalog Helpline) E-mail: lynch@postgres.berkeley.edu

The MELVYL catalog is the union catalog of monographs and serials (periodicals) held by the nine University of California campuses and affiliated libraries. It represents nearly 11 million holdings at UC, the California State Library, and the Center for Research Libraries.

The MELVYL catalog also provides access to MEDLINE and Current Contents as well as a gateway to many other systems. Access to some databases is restricted under a license agreement to the University of California faculty, staff, and students. Telnet: MELVYL.UCOP.EDU (192.35.222.222)

CARL

Colorado Alliance of Research Libraries 777 Grant Suite 306 Denver CO 80203-3580 303/861-5319 E-mail: help@carl.org

CARL offers access to the following groups of databases: Academic and public library online catalogs, current article indexes such as UnCover and Magazine Index, databases such as the Academic American Encyclopedia and Internet Resource Guide, and a gateway to other library systems. Access to some items is limited. Telnet: pac.carl.org (192.54.81.128)

MICROMUSE

This is how Barry Kort (aka `Moulton'), Visiting Scientist at Educational Technology Research, BBN Labs, Cambridge, MA describes MicroMuse at M.I.T.

"MUDs (Multi-User Dimensions) or MUSEs (Multi-User Simulation Environments) are virtual realities which offer a rich environment for synergy, community, collaboration, and exploratory discovery."

"Players connect to the host computer, adopt a character and personality of their choosing, and enter into the synthetic world, consisting of a web of connected rooms and movable props."

"Everything (rooms, movable objects, connecting passageways, and players) has a description (typically a few lines of text) which are displayed when a player looks at it."

"Actions such as picking up or dropping an object, and exiting to an adjacent room also generate a short message appropriate to the action."

"At MIT's Al Lab, MicroMuse features explorations, adventures, and puzzles with redeeming social, cultural, and educational content. The MicroMuse Science Center offers an Exploratorium and Mathematica Exhibit complete with interactive exhibits drawn from experience with Science Museums around the country. The Mission to Mars includes an elaborate tour of the red planet with accurate descriptions rivaling those found in National Geographic."

"Elsewhere on MicroMuse, one can find an outstanding adventure based on the children's classic Narnia; a recreation of the Wizard of Oz adventure built by a gifted 8-year old; a challenging Logic Quest; and a living model of the science fiction genre `The DragonRiders of Pern' by author Anne McCaffrey."

If you would like to explore MicroMuse, you may connect as follows from your local host computer: telnet michael.ai.mit.edu [18.43.0.177] login: guest [no password required] tt [TinyTalk client program] connect guest [Connect to MicroMuse]

BBS.OIT.UNC.EDU

Telnet to BBS.OIT.UNC.EDU or 152.2.22.80. Type launch at the login message. It's a must. Not only can you read Usenet Newsfeeds, but you can use LibTel, a scripted telnet gateway to access both US and international libraries plus such things as Data Research Associates Library of Congress catalog, the Ham Radio Call Book, the National Science Foundation, the Weather Server, Webster's dictionary and thesaurus, and more.

Remote Access to Files (FTP)

FTP or File Transfer Protocol is what to use to retrieve a text file, software, or other item from a remote host. Normal practice is to ftp to the host you want and login as "anonymous". Some sites use the password "guest" while others require that you put in your network address as the password. Some popular ftp sites follow:

SUMEX-AIM

This archive at Stanford (sumex-aim.stanford.edu or 36.44.0.6) houses a plethora of Macintosh applications, utilities, graphics and sound files.

SIMTEL20

(simtel20.army.mil or 192.88.110.20) at the White Sands Missile Range in New Mexico contains a similar archive software for MS-DOS computers.

An FTP visit to the Network Service Center at nnsc.nsf.net (128.89.1.178) is a gold mine of documents and training materials on net use. See further information on this in the "Resources for Learning More" section of this article.