

Surfing the Internet: An Introduction

Jean Armour Polly

The background of the lower half of the page is a solid blue color. Overlaid on this is a complex, abstract pattern of red lines and shapes. The pattern consists of numerous straight red lines of varying lengths and orientations, some of which form larger geometric shapes like triangles and rectangles. There are also several curved red lines, some of which are semi-circles or arcs. The overall effect is a dense, interconnected web of red lines against the blue background.

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Title: Surfing the Internet: An Introduction

Author: Jean Armour Polly

Release date: January 1, 1993 [eBook #49]

Most recently updated: December 23, 2011

Language: English

*** START OF THE PROJECT GUTENBERG EBOOK SURFING THE
INTERNET: AN INTRODUCTION ***

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

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```
ftp nysernet.org (192.77.173.2) login anonymous password
name@machine.node cd /pub/resources/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 DIRECTORY GET EJOURNL2 DIRECTORY For further information, contact Michael Strangelove: 441495@ACADV1.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 Free-net

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.

Free-nets 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 Free-net 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 Free-nets also provide weather, news, and gateways to other resources. To access the Cleveland Free-Net (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](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 AI 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.

Project Gutenberg

The primary goal of Project Gutenberg is to encourage the creation and distribution of electronic text. They hope to get ten thousand titles to one hundred million users for a trillion etexts in distribution by the end of 2001.

Some of the many texts available now include Alice in Wonderland, Peter Pan, Moby Dick, Paradise Lost and other texts in the public domain. Many of these texts are available via ftp:

ftp mrcnext.cso.uiuc.edu (128.174.201.12)

cd etext/etext92 [for 1992 releases] [etext93 is available for testing now]
cd etext/etext91 [for 1991 releases] [This file should be in it] cd
etext/articles [for Project Gutenberg articles and newsletters]. Most are also
available from quake.think.com (192.31.181.1); /pub/etext, from simtel20,
and from many other sites.

For more info try Gopher as in the following section or contact:

Michael S. Hart, Director

Project Gutenberg

National Clearinghouse for Machine Readable Texts

Illinois Benedictine College

5700 College Road

Lisle, Illinois 60532-0900

INTERNET: dircompg@ux1.cso.uiuc.edu

CompuServe: >INTERNET:dircompg@ux1.cso.uiuc.edu

Attmail: internet!ux1.cso.uiuc.edu!dircompg

BITNET: HART@UIUCVMD

Travel Agents:

Archie, Gopher, Veronica, WAIS, Worldwide Web and More

There is so much information on the net, it's impossible to know where everything is, or even how to begin looking. Fortunately, some computerized "agents" are in development to help sort through the massive data libraries on the net.

Archie

Peter Deutsch, of McGill's Computing Centre, describes the archie server concept, which allows users to ask a question once yet search many different hosts for files of interest.

"The archie service is a collection of resource discovery tools that together provide an electronic directory service for locating information in an Internet environment. Originally created to track the contents of anonymous ftp archive sites, the archie service is now being expanded to include a variety of other online directories and resource listings."

"Currently, archie tracks the contents of over 800 anonymous FTP archive sites containing some 1,000,000 files throughout the Internet. Collectively, these files represent well over 50 Gigabytes (50,000,000,000 bytes) of information, with additional information being added daily. Anonymous ftp archive sites offer software, data and other information which can be copied and used without charge by anyone with connection to the Internet."

"The archie server automatically updates the listing information from each site about once a month, ensuring users that the information they receive is reasonably timely, without imposing an undue load on the archive sites or network bandwidth."

Unfortunately the archie server at McGill is currently out of service. Other sites are: archie.ans.net (USA [NY]) archie.rutgers.edu (USA [NJ]) archie.sura.net (USA [MD]) archie.funet.fi (Finland/Mainland Europe) archie.au (Australia/New Zealand) archie.doc.ic.ac.uk (Great Britain/Ireland)

More information available from: UNIX Support Group Computing Centre McGill University Room 200 Burnside Hall 805 Sherbrooke Street

West Montreal, Quebec CANADA H3A 2K6 514/398-3709
peterd@cc.mcgill.ca

Internet Gopher

Gopher (or go-fer): someone who fetches necessary items from many locations.

Login as gopher after you telnet to consultant.micro.umn.edu and enjoy having a computer do all the work for you. Almost. Gopher is still in experimental mode at many gopherized sites. Still, it is one of the best ways to locate information on and in the Internet.

Besidesarchie, the gopher at consultant.micro.umn.edu includes fun and games, humor, libraries (including reference books such as the Hacker's Dictionary, Roget's 1911 Thesaurus, and the CIA World Fact Book), gateways to other US and foreign gophers, news, and gateways to other systems.

VERONICA: Very Easy Rodent-Oriented Net-wide Index to Computerized Archives.

Very new on the scene is VERONICA.
Here is some information from Steve Foster about it.

"Veronica offers a keyword search of most gopher-server menus in the entire gopher web. As Archie is to ftp archives, Veronica is to gopherspace. Unlike Archie, the search results can connect you directly to the data source. Imagine an Archie search that lets you select the data, not just the host sites, directly from a menu. Because Veronica is accessed through a gopher client, it is easy to use, and gives access to all types of data supported by the gopher protocol."

"Veronica was designed as a response to the problem of resource discovery in the rapidly-expanding gopher web. Frustrated comments in the net news- groups have recently reflected the need for such a service. Additional motivation came from the comments of naive gopher users, several of whom assumed that a simple-touse service would provide a means to find resources `without having to know where they are.'"

"The result of a Veronica search is an automatically-generated gopher menu, customized according to the user's keyword specification. Items on this menu may be drawn from many gopher servers. These are functional gopher items, immediately accessible via the gopher client just double-click to open directories, read files, or perform other searches — across hundreds of gopher servers. You need never know which server is actually involved in filling your request for information. Items that are appear particularly interesting can be saved in the user's bookmark list."

"Notice that these are NOT full-text searches of data at gopher-server sites, just as Archie does not index the contents of ftp sites, but only the names of files at those sites. Veronica indexes the TITLES on all levels of the menus, for most gopher sites in the Internet. 258 gophers are indexed by Veronica on Nov. 17, 1992; we have discovered over 500 servers and will index the full set in the near future. We hope that Veronica will encourage gopher administrators to use very descriptive titles on their menus."

"To try Veronica, select it from the `Other Gophers' menu on Minnesota's gopher server (consultant.micro.umn.edu), or point your gopher at:

Name=Veronica (search menu items in most of GopherSpace)

Type=1

Port=70

Path=1/Veronica Host=futique.scs.unr.edu"

"Veronica is an experimental service, developed by Steve Foster and Fred Barrie at University of Nevada. As we expect that the load will soon outgrow our hardware, we will distribute the Veronica service across other sites in the near future."

"Please address comments to: gophadm@futique.scs.unr.edu"

Is this the new world order of automated librarianship?

WAIS

Wide Area Information Servers (pronounced ways) allows users to get information from a variety of hosts by means of a "client". The user tells the client, in plain English, what to look for out in dataspace. The client then searches various WAIS servers around the globe. The user tells the client how relevant each hit is, and the client can be sent out on the same quest again and again to find new documents. Client software is available for many different types of computers.

WAISStation is an easy to use Macintosh implementation of a WAIS client. It can be downloaded from think.com as well as a self-running MediaTracks demo of WAISStation in action. Kahle also moderates a thoughtful WAIS newsletter and discussion group, often speculating about the future of libraries and librarians.

Info from: Brewster Kahle, Project Leader Wide Area Information Servers Thinking Machines Corporation 1010 El Camino Real Menlo Park, CA 94025 415/329-9300 x228 brewster@Think.COM

WorldWideWeb

Tim Berners-Lee describes the Web this way: "The WWW project merges the techniques of information retrieval and hypertext to make an easy but powerful global information system. The WWW world consists of documents, and links. Indexes are special documents which, rather than being read, may be searched. The result of such a search is another ('virtual') document containing links to the documents found. The Web contains documents in many formats. Those documents which are hypertext, (real or virtual) contain links to other documents, or places within documents. All documents, whether real, virtual or indexes, look similar to the reader and are contained within the same addressing scheme. To follow a link, a reader clicks with a mouse (or types in a number if he or she has no mouse). To search and index, a reader gives keywords (or other search criteria). These are the only operations necessary to access the entire world of data."

Info from: Tim Berners-Lee WorldWideWeb project CERN 1211 Geneva 23, Switzerland Tel: +41(22)767 3755 FAX:+41(22)767 7155 email:tbl@cernvax.cern.ch

Hytelnet

Peter Scott, the creator of HYTELNET, sends this recent update: "HYTELNET version 6.3, the utility which gives an IBM-PC user instant-access to all Internetaccessible library catalogs, FREE-NETS, CWISs, BBSs, Gophers, WAIS, etc. is now available. You can get it via anonymous ftp from: access.usask.ca in the pub/hytelnet/pc subdirectory. It is listed as HYTELN63.ZIP."

"Version 6.3 is a major upgrade. Much redundant information has been deleted, and errors have been corrected. New subdirectories have been added, which has meant that many files now have a more meaningful home. Also all the new/updated files created since Version 6.2 were incorporated."

"Note: the UNZIPPED files total over 1.2 mb but remember, you can always edit out any information you do not need, in order to save space. Information from Roy Tennant follows, slightly edited, describing how to obtain HYTELNET 6.3 from the ftp site (thanks Roy):"

"TO RETRIEVE HYTELNET:

At your system prompt, enter:

ftp access.usask.ca or ftp 128.233.3.1

When you receive the Name prompt, enter: anonymous

When you receive the password prompt, enter: your Internet address.

When you are at the ftp> prompt, enter: binary

At the next ftp> prompt, enter: cd pub/hytnet/pc

Then enter: get hytn63.zip

After the transfer has occurred, either proceed with the instructions below to retrieve the UNZIP utility (which you need unless you already have it) or enter: quit

The Hytnet program is archived using a ZIP utility. To unarchive it, you must be able to "unzip" the file. If you have the file PKUNZIP.EXE, it will unarchive the HYTELN63.ZIP file (see below for instructions). If you do not have it, you may retrieve it by following these instructions:

TO RETRIEVE PKUNZIP:

Use the above instructions for connecting to:

access.usask.ca At the ftp> prompt, enter: binary

Then enter: cd pub/hytnet/pc

Then enter: get pkunzip.exe

After the transfer has occurred, enter: quit

TO DOWNLOAD IT TO YOUR PC: Because of the plethora of PC communications programs, I will not attempt to give step-by-step

instructions here. You should check the instructions for your software for downloading a *binary* file from your Internet account to your PC.

TO UNARCHIVE HYTELN63.ZIP: Make a new directory on your hard disk (e.g., mkdir hytelnet) Copy PKUNZIP.EXE and HYTELN63.ZIP into the new directory Make sure you are in that directory, then enter: pkunzip HYTELN63 It will then unarchive HYTELN63.ZIP, which contains the following files: HYTELNET.ZIP READNOW. The file READNOW gives full instructions for un-archiving HYTELNET.ZIP. Simply put, you ****MUST**** unZIP the file with the -d parameter so that all the subdirectories will be recursed.

To use HYTELNET, you should refer to the instructions in the release announcement by Peter Scott, or to the README file included with the package."

"PLEASE NOTE that I offer the above instructions as a service for those who are unfamiliar with the steps required to download and use files from network sources. I cannot be responsible for any local variations in these procedures which may exist. Please contact your local computer support staff if you have difficulty performing these tasks."

"The UNIX/VMS version, created by Earl Fogel, is available for browsing by telnet to access.usask.ca login with hytelnet (lower case). For more information on this version contact Earl at: fogel@skyfox.usask.ca."

How to Get Connected

Now that you're interested in what resources are available, how does one go about getting connected? Time was that you needed a standard, dedicated connection to the Internet. Then you needed a robust computer

system and a couple of zany gurus to keep it all running. And once a year you could expect an invoice in the \$30,000 range to keep the data flowing.

These days, anyone can connect, from small libraries and non-profits to individuals. (and of course commercial-mh) And the prices are affordable.

There is a NSFNet acceptable-use policy you must agree to adhere to if your traffic passes through NSFNet. It is available from the NSF Network Service Center.

Contact your regional network first to see what services might be available to you. A list of regional nets can be obtained from the NSF Network Service Center (address below), or check with a local college or university's academic computing center. A university may be able to give you a guest account on its system for educational purposes.

Access to electronic mail alone is roughly \$20 a month at this writing. Additional capabilities, including telnet and ftp, cost more, and it will cost \$2,000 or more per year if you want to operate your own host system. The good news is that the costs are spiraling downwards. Here are a few other methods of connecting to the net. Many more are listed in the "must-have" books at the end of this article.

CERFnet

The California Education and Research Federation (CERFnet) has announced

DIAL N' CERF USA. It allows educators, scientists, corporations, and individuals access to the Internet from anywhere in the continental US.

A toll-free number, 1-800-7CERFNET (1-800-723-7363), provides subscribers with the capability to log in to remote machines, transfer files, and send and receive electronic mail, as if they had a standard, dedicated

connection. The cost of this toll-free connection is \$20 a month with a \$10 per hour usage fee and free installation. There is an installation charge of \$50.

CERFnet California Education and Research Federation c/o San Diego Supercomputer Center P.O. Box 85608 San Diego, CA 92186-9784 800/876-CERF or 619/534-5087 help@cerf.net

Performance Systems International

PSI offers several permutations of network connectivity, including low-end email-only accounts, dial-up host connectivity on demand, and dedicated connections. Costs are competitive and performance is reliable. PSI has POPs (points of presence) in over forty U.S. cities.

PSILink, email and delayed ftp, is \$19 a month for 2400 baud service or below, \$29 per month for 9600 baud service.

GDS (Global Dialup Service) includes telnet, rlogins at \$39 a month, 2400 baud, 24 hour access.

Host DCS (Dialup Connection Service), at about \$2000 per year, includes a full suite of internet activities (mail, news, ftp, telnet).

Performance Systems International, Inc. 11800 Sunrise Valley Dr. Suite 1100 Reston, VA 22091 800/82PSI82 or 703/620-6651 FAX: 703/620-4586 info@psi.com. All-info@psi.com generates an automatic reply response containing summaries of various PSI products.

Software Tool & Die

Software Tool & Die offers The World, a public access Unix system: The basic rates are \$2 per hour and a \$5 monthly account fee. Services offered by The World include internet electronic mail, USENET news, ClariNet - UPI, AP, and satellite news services, real-time chat, Unix Software, Archie, the Online Book Initiative (a publicly accessible repository for freely redistributable collections of textual information, a net-worker's library.) AlterNet Access - Users have access to AlterNet via ftp/telnet. The World can also be accessed over the CompuServe Packet Network. You do not have to be a CompuServe subscriber to use this network, but you will be billed for its use.

The WORLD Software Tool & Die 1330 Beacon Street Brookline, MA 02146 617/39-0202

Daniel Dern also provides the following definitive information file on how to get connected:

Daniel Dern's Short Answer to "How do I get a list of Internet Service/Access Providers for Individual Accounts":

For a list of Internet Service Providers contact:

NSF Network Service Center (NNSC) BBN Laboratories Inc. 10 Moulton St. Cambridge, MA 02238 617/873-3361 nnsd@nnsd.nsf.net

The NNSC info-server utility can also automatically e-mail you a copy of this list and other documents. Simply send an e-mail message to: info-server@nnsd.nsf.net

with the following text in the body:

request: nsfnet topic: <topic-here> topic: <topic-here> request: end

You don't need to put anything in the subject line.

"referral-list" gets you the NNSC's referral list of Internet Service Providers based in the U.S. (possibly providing international service). This is generally agreed to be the most comprehensive and least-biased list. "limited-referral" gets you the NNSC's referral list of Internet providers for "limited service," which includes Dial-Up IP, Internet E-mail.

"help" (recommended) gets you the Help document for the info-server facility.

For a list of dial-up-accessible Public-Access Internet Hosts (Unix BBSs that can do telnet, ftp, etc., that you can access by calling from your PC and modem), see the PDIAL list, maintained by Peter Kaminski. Kaminski periodically posts an updated version to the usenet groups alt.bbs.lists and alt.bbs.internet; also, the most recent edition may be obtained by sending e-mail to: kaminski@netcom.com with the 'Send PDIAL'

in the subject. To be placed on a list to receive future editions automatically, send e-mail to: kaminski@netcom.com with 'Subscribe PDIAL' in the subject.

The 'nixpub' list is a frequently updated list of Public-Access unix Systems -Unix-based BBSs usually carrying usenet news, supporting e-mail connectivity to the Internet, and with some mix of local archives, multi-user games, etc. The full list is long (over 1,000 lines). To get a current copy of 'nixpub' as an automatic e-mail reply, Send a message to 'nixpub@digex.com' (no subject or message text needed), or to 'archive-server@cs.widener.edu' with message body of one of these:

send nixpub long send nixpub short send nixpub long short index nixpub

The nixpub and nixpub.short lists are regularly reposted to the USENET comp.misc and alt.bbs groups

Info from: Daniel P. Dern Free-lance technology writer P.O. Box 309
Newton Centre, MA 02159 617/969-7947 FAX: 617/969-7949
ddern@world.std.com

Resources for Learning More

CERFnet Network Information Center (NIC)

This is a repository for many eclectic internet guides and RFC (Requests For Comments) from many sources, including the famous, if technical "Hitchhiker's Guide to the Internet." These may be obtained via anonymous ftp to nic.cerf.net (192.102.249.3). Call the CERFnet Hotline at 800-876-CERF for assistance. California Education and Research Federation c/o San Diego Supercomputer Center P. O. Box 85608 San Diego, CA 92186- 9784 800/876-CERF or 619/534-5087 help@cerf.net

CICNet Resource Guide

Over 200 pages of Internet resources, published June, 1992. Copies are \$27.00 from CICNet, Inc. Attn Kim Schaffer 2901 Hubbard Pod A Ann Arbor, MI 48109. 313/998-6103 FAX 313/998-6105 info@cic.net

"The December Lists"

"Information Sources: the Internet and Computer-Mediated Communication"

Compiled by John December (decemj@rpi.edu)

Here is part of his information file on this excellent resource:

"This document or updates are available via anonymous ftp. Host: ftp.rpi.edu file: /pub/communications/internet-cmc

PURPOSE: to list pointers to information describing the Internet, computer networks, and issues related to computer-mediated communication (CMC). Topics of interest include the technical, social, cognitive, and psychological aspects of CMC.

AUDIENCE: this file is useful for those getting started in understanding the Internet and CMC; it compactly summarizes sources of information for those who are already exploring these issues.

ASSUMPTIONS: to access many information sources listed here you must have access to and know how to use anonymous ftp, email, or USENET newsgroups. Some files are in TeX or PostScript format.

Contents:

Section -1- THE INTERNET AND SERVICES

Section -2- INFORMATION SERVICES/ELECTRONIC PUBLICATIONS

Section -3- SOCIETIES AND ORGANIZATIONS

Section -4- NEWSGROUPS

Section -5- SELECTED BIBLIOGRAPHY"

"Emily Postnews Answers Your Questions on Netiquette"

Brad Templeton's (brad@looking.on.ca) satirical and hilarious piece on how NOT to behave on the net. Emily Postnews, foremost authority on proper net behaviour, gives her advice. There are many places to ftp this file, and it is appearing on many gophers. One place to get the file is by ftp to ra.msstate.edu (130.18.80.10) Location: /pub/docs/words- l/Funnies

The file is called emily.postnews. Here is a sample:

"Dear Miss Postnews: How long should my signature be? —
verbose@noisy

A: Dear Verbose: Please try and make your signature as long as you can. It's much more important than your article, of course, so try to have more lines of signature than actual text. Try to include a large graphic made of ASCII characters, plus lots of cute quotes and slogans. People will never tire of reading these pearls of wisdom again and again, and you will soon become personally associated with the joy each reader feels at seeing yet another delightful repeat of your signature. Be sure as well to include a complete map of USENET with each signature, to show how anybody can get mail to you from any site in the world. Be sure to include Internet gateways as well. Also tell people on your own site how to mail to you. Give independent addresses for Internet, UUCP, and BITNET, even if they're all the same."

"Incomplete Guide to the Internet"

The "Incomplete Guide" was compiled by the NCSA Education Group, dated September, 1992. It is also available for anonymous FTP at:

ftp.ncsa.uiuc.edu in the /misc directory

This excellent manual is a must.
It even covers SLIP connections and use of Eudora.

Here are some comments about it from cfarmer@ncsa.uiuc.EDU (Chuck Farmer): "The first half of the text is devoted to the mechanics of telecommunications, how to connect, what to do once you are connected, etc. The second half of the manual is devoted to current telecommunications projects, past successful projects, and resources. The

resources include FTP sites, open BBS's and networks, Free-Nets, subscription services, and where to get more information on each resource. This resource was complied by the Living Lab program (NSF funded) at NCSA as an attempt to encourage the proliferation of HPCC use in the K-12 classroom. We welcome your comments and suggestions.

For further information: National Center for Supercomputing Applications 605 E Springfield Ave. Champaign, IL 61820 217/244-6122

"Library Resources on the Internet:
Strategies for Selection and Use" 1992.
RASD Occasional Paper no. 12, selling for \$18 to members,
\$20 for nonmembers. It can be ordered from:
ALA Order Services
50 E. Huron
Chicago, IL 60611,
800/545-2433

Electronic versions available via FTP ASCII file from: host
DLA.UCOP.EDU (128.48.108.25) directory /pub/internet/Libcat-guide

host FTP.UNT.EDU (129.120.1.1) directory /pub/library/libcat-guide

WordPerfect 5.1 file from: host HYDRA.UWO.CA (129.100.2.13)
directory libsoft/internet.com

Merit's Cruise of the Internet

This attractive overview looks great on a Macintosh.
I have not seen the Windows version.

From the README text: "Merit's `Cruise of the Internet' is a computer-based tutorial for new as well as experienced Internet `navigators.' The Cruise will introduce you to Internet resources as diverse as supercomputing, minorities, multimedia, and even cooking. It will also provide information about the tools needed to access those resources."

ftp to NIC.MERIT.EDU /internet/resources. There are Macintosh and Windows versions, and README text files to explain installation procedures.

A Cruise of the Internet
Version 2.01 for Apple Macintosh computers
December 1, 1992

SYSTEM REQUIREMENTS This tutorial will run on any color Macintosh which is capable of displaying 256 colors.

To run the Cruise tutorial you will need:

- A Macintosh II, LC or Quadra series computer - 8-bit color and any color monitor (12" minimum) - System 6.05 or 7.x - Approximately 3 MB of disk space - 4 MB RAM is recommended - Internet connectivity and software that does file transfers via FTP.

A Cruise of the Internet
Version 2.0 for IBM-DOS and DOS compatibles running Windows
October 28, 1992

SYSTEM REQUIREMENTS: This tutorial will run on any IBM-DOS or DOS-compatible computer which is equipped to display 256 colors at an aspect ratio of 640 x 480.

To run the Cruise tutorial you will need:

- An IBM-DOS or DOS-compatible computer
- XGA- or XGA-compatible adapter set to display 256 colors at 640 x 480
- Microsoft Windows(TM) version 3.1
- Approximately 1.5 MB of disk space
- 2 MB RAM minimum
- Internet connectivity and software that does file transfers via FTP.

"Mining the Internet"

The Net as mine metaphor is a popular theme. Tunneling through the network matrix in search of gems and ore is not far from fact. Sometimes it is hard work, and a lot of it is working in the dark.

There is a guidebook called "Mining the Internet", available from University of California at Davis. Here is how the Gold Country Mining

Instructions begin: "Jist durn tuckered o' workin' eight t' five for a salary. ain't you? An' you wanna set out for parts unknown. You're hankerin' for an a'venture. Come'n then go `Mining the Internet' with me, father of Clementine (that's my darlin'), and I'll tell you some old timey tales and introduce you to a new resource for students, faculty, and staff called wide area networking 'Taint goin' to hurt you any, and the prospect looks good for a lucky strike."

"Mining the Internet" and "Using the Internet A&B" available from:
Computing Services
University of California
Davis, CA 95616-8563
916/752-0233.
Or electronically by anonymous ftp from

ucdavis.edu (128.120.2.1)
directory /ucd.netdocs/mining

NSF Network Service Center (NNSC)

NSF Internet Tour HyperCard Stack—borrow a Macintosh long enough to view this, worth the effort! Includes net history, net maps, net poetry and lore. Free.

They also publish a very complete Internet Resource Guide (\$15). Many items, including the HyperCard Tour to the Internet, freely available by anonymous
ftp from nnsf.net

NNSC Bolt Beranek and Newman Inc. 10 Moulton Street, Cambridge, MA 02138 617/873-3400 nnsf@nnsf.net

New User's Guide to Unique and Interesting Resources on the Internet
2.2.

Available from NYSERNet (New York State Education and Research Network). It is over 145 pages and lists some 50 sources. OPACS, databases, information resources, and more. The New User's Guide is available in hard copy at the cost of \$25.00. (NYSERNet Members: \$18.00) It is available electronically at nysernet.org (192.77.173.2) in the directory /pub/resources/guides

It is called the new.user.guide.v2.2.txt

For more information: NYSERNet, Inc. 111 College Pl. Syracuse, NY 13244-4100 315/443-4120 FAX 315/425-7518 info@nysernet.org

NorthWestNet User Services Internet Resource Guide

NorthWestNet has released a 300-page guide to the Internet, covering electronic mail, file transfer, remote login, discussion groups, online library catalogues, and supercomputer access.

Copies may be purchased for \$20.00 from NorthWestNet. It is also available via anonymous ftp: `ftphost.nwnet.net` in the directory `/nic/nwnet/user-guide`

NorthWestNet 15400 SE 30th Place, Suite 202, Bellevue, WA 98007
206/562-3000 FAX: 206/562-4822

"There's Gold in Them Thar Networks! or Searching for Gold in all the Wrong Places" written by Jerry Martin at Ohio State University. This document is available via Internet message to `Infoserver@nnsf.net`. Once inside the message area, give the following commands to retrieve the document: `REQUEST:NSFNET`
`TOPIC:NETWORK-TREASURES`
`REQUEST: END`

"The Yanoff Lists"

"Special Internet Connections" Compiled by Scott Yanoff. This is an indispensable weekly list of network resources available using telnet and ftp.

It includes a few Online Public Access Catalogs, chat lines, weather servers, Campus Wide Information Systems, and reference resources. Send e-mail to the list manager (Scott Yanoff) at: `yanoff@csd4.csd.uwm.edu` or ftp to `csd4.csd.uwm.edu` The filename is `inet-services`.

How to Find out More About Discussion Lists

Thousands of discussion groups, LISTSERVs, and mail reflectors exist on the Internet. Here are several ways to find lists of interest to you.

LISTSERVs available from NYSERNet.org Nysernet.org hosts over 20 lists, including folk_music and PUBLIB for public librarians. Send a LIST GLOBAL command in an interactive message to our host. For example:

To: LISTSERV@nysernet.org
Subject:
Message: LIST GLOBAL

The SRI NIC Maintained Interest-Groups List of Lists This is available by FTP from ftp.nisc.sri.com (192.33.33.22) in the directory /netinfo/interest-groups.

The SRI NIC list-of-lists is also available via electronic mail. Send a message to mail-server@nisc.sri.com with the following line in the message body:

Send netinfo/interest-groups

Example:

To: mail-server@nisc.sri.com

Subject:

Message: Send netinfo/interest-groups

The List of Lists

A comprehensive list-of-lists can be obtained from some larger host computers running LISTSERV software, by sending a LIST GLOBAL command in an interactive message. This will return a "one line per list" list

of all lists known to that host as of that date. For example: To: LISTSERV@VM1.NoDak.EDU mail Subject: Message: LIST GLOBAL

The global list can also be searched online.
For details send LISTSERV the command INFO DATABASE

Network Accessible Database Server

Only available on the LISTSERV@VM1.NoDak.EDU is a searchable interest groups database. For example, to search of the databases for lists on "cats" you would send the following statements (copy them exactly into your mail message to the LISTSERV):

```
//DBlook JOB Echo=No
Database Search DD=Rules
//Rules DD *
Select cats in lists
index
Select cats in intgroup
index
Select cats in new-list
index
```

These statements search the global LISTSERV list of lists ("in lists"), and the local copy of the SRI-NIC Interest Groups ("in intgroup"), and the archives of the "new-list" list ("in new-list"). Send LISTSERV the command INFO DATABASE for more information.

The 5th Revision of the Directory of Scholarly Electronic Conferences

This resource is available at LISTSERV@KENTVM or LISTSERV@KENTVM.KENT.EDU and via anonymous FTP to [ksuvxa.kent.edu](ftp://ksuvxa.kent.edu) in the library directory.

This announcement is extracted from the ACADLIST README FILE

"This directory contains descriptions of 805 electronic conferences (econferences) on topics of interest to scholars. E- conference is the umbrella term that includes discussion lists, interest groups, e-journals, e-newsletters, Usenet newsgroups, forums, etc. We have used our own judgment in deciding what is of scholarly interest — and accept any advice or argument about our decisions. We have placed the entries into categories by deciding what the *dominant* academic subject area of the electronic conference is."

"The 5th Revision involves an attempt to make it easier to feed the Directory into HyperCard(TM), dBase(TM) and other database programs. The first step in this effort has been to use field labels for each part of each record. We've also reduced the size of each record by trying to keep topic information between 25-50 words (some are still bigger). Advice on this topic will be gratefully accepted at dkovacs@kentvm.kent.edu."

"In addition, information about editorial policy and archive availability and frequency have also been included in each record. Where possible the information in each record has been checked for currency and accuracy by checking the LISTSERV header in the case of LISTSERV based e-conferences and contacting the moderators of other kinds of e-conferences."

"The field labels are as follows:

LN: (e-conference name)

TI: (topic information)

SU: (subscription information)

ED: (edited? Yes or No)

AR: (archived? if Yes, frequency, private=subscribers only)

MO: (moderator, editor, listowner, manager, coordinator, etc.)

IA: ('official' institutional affiliation)."

"Topic descriptions are taken in whole or part from the descriptions provided by each listowner, editor, moderator or coordinator to the New-List, the List of Lists, and the Internet Interest Groups file."

"Any errors are the responsibility of the compiler of the Electronic Conferences for Academics Files. If you can provide corrections or additional information about any of these electronic conferences, please contact:

Diane Kovacs (Bitnet) DKOVACS@KENTVM (Internet)
DKOVACS@KENTVM.KENT.EDU

These files are available on the Directory of Scholarly E-Conferences:

ACADLIST README (explanatory notes for the Directory)

ACADSTCK HQX (binhexed, self-decompressing, HyperCard Stack of
entire Directory - Keyword searchable)

ACADLIST FILE1 (Anthropology- Education)

ACADLIST FILE2 (Geography-Library and Information Science)

ACADLIST FILE3 (Linguistics-Political Science)

ACADLIST FILE4 (Psychology-Writing)

ACADLIST FILE5 (Biological sciences)

ACADLIST FILE6 (Physical sciences -now includes Academic Computing
and Computer Science)

ACADLIST FILE7 (business, Academia, news)

ACADWHOL HQX (binhexed self-decompressing Macintosh M.S. Word
4.0 document of all 7 directories)

ACADLIST.CHANGES (Major additions and deletions)

How to retrieve the abovefiles via mail

1. Send an e-mail message addressed to `LISTSERV@KENTVM` or `LISTSERV@KENTVM.KENT.EDU`. 2. Leave the subject and other info lines blank. 3. The message must read: `GET Filename Filetype` (e.g., `filename=ACADLIST filetype=FILE1` or `HQX` or whatever) 4. The files will be sent to you and you must receive them. 5. If you need assistance receiving, etc. contact your local Computer Services people.

How to retrieve the files via anonymous FTP (File Transfer Protocol)

FTP to `KSUVXA.KENT.EDU` 1. when prompted for ``USERID,'` type `ANONYMOUS`. 2. Your password will be your actual userid on your local machine. 3. Type: `cd library` 4. Type: `GET Filename.Filetype` (e.g., `filename=ACADLIST filetype=FILE1` or `HQX` or whatever) 5. The files will be transferred directly into the directory you ftp'ed from at your site.

New Lists and List Changes

New lists are being started every day, and old ones fade away. To find out bout these changes, join the `NEW-LIST` mailing. Here is part of their Welcome message:

"The ``NEW-LIST'` list has been established as a central address to post announcements of new public mailing lists. In addition, ``NEW-LIST'` might be used as a final verification before establishing a list (to check for existing lists on the same topic, etc.). However, be sure to check sources such as the Internet List-of-Lists (`SIGLIST` or `INTEREST-GROUPS` list), `LISTSERV GROUPS`, and the `LISTS` database on the major `LISTSERVs` (we have the `LISTS` database on `NDSUVM1`)."

"We will gladly rebroadcast New List announcements, final list proposals (to avoid conflicts or redundancy), or emergency announcements about the availability of some list.

List Review Service

These folks subscribe to and monitor a list for awhile and then report on it to everyone else. It's a great idea and a useful way to "sample" a list. Here is the subscription information. Email its author to be added to the List Review Service list, BITNET ADDRESS: SRCMUNS@UMSLVMA

LIST REVIEW SERVICE ISSN: 1060-8192 Published bi-weekly, when school is in session, by The University of Missouri, St. Louis Libraries. Raleigh C. Muns, editor. For more information: Thomas Jefferson Library University of Missouri St. Louis 8001 Natural Bridge Road St. Louis, MO 63121 314/553-5059

Internet Library Guides

Three different Internet library guides are available to help both beginning and experienced OPAC users.

Art St. George's Internet-Accessible Library Catalogs and Databases includes directions for Internet libraries and Campus Wide Information Systems as well as dialup libraries and bulletin boards in the United States. Available from: [ariel.unm.edu /LIBRARY/INTERNET.LIBRARY](http://ariel.unm.edu/LIBRARY/INTERNET.LIBRARY)

Billy Barron's Accessing On-line Bibliographic Databases contains a number of useful features such as guides to local OPAC escape sequences and

commands. FTP to ftp.unt.edu
(129.120.1.1)
/LIBRARY/LIBRARIES.TXT

Dana Noonan's A Guide to Internet/Bitnet comes in two parts. Part two is about Internet Libraries. It is an easy to use guide to many national and international OPACS and their login and use instructions. (available via anonymous ftp from vm1.nodak.edu then CD NNEWS (although nnews may not show up on the directory menu, it works.) A printed version is available for \$10 from Metronet. For more information: Metronet 226 Metro Square Building Seventh and Robert Streets St. Paul, Minnesota 55101 612/224-4801 FAX 612/224-4827

Must-have Books for the Internet Surfer

Kehoe, Brendan. (1993). Zen and the Art of the Internet: a Beginner's Guide (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall. The first edition is available for free from many FTP sites (see below) This version has about 30 pages of new material and corrects various minor errors in the first edition. Includes the story of the Coke Machine on the Internet. For much of late 1991 and the first half of 1992, this was the document of choice for learning about the Internet. ISBN 0-13-010778-6. Index. \$22.00

To ftp Zen 1.0 in a PostScript version: ftp.uu.net [137.39.1.9] directory /inet/doc ftp.cs.toronto.edu [128.100.3.6] directory /pub/zen ftp.cs.widener.edu [147.31.254.132] directory /pub/zen as zen-1.0.tar.Z, zen-1.0.dvi, and zen-1.0.PS ftp.sura.net [128.167.254.179] directory /pub/nic as zen-1.0.PS It is also available to read on many Gopher servers.

Krol, Ed. (1992). *The Whole Internet User's Guide & Catalog*. Sebastopol, CA: O'Reilly & Associates. Comprehensive guide to how the network works, the domain name system, acceptable use, security, and other issues. Chapters on telnet/remote login, File Transfer Protocol, and electronic mail explain error messages, special situations, and other arcana. Archie, Gopher, Net News, WAIS, WWW, and troubleshooting each enjoy a chapter in this well-written book. Appendices contain info on how to get connected in addition to a glossary. ISBN 1-56592-025-2. \$24.95

LaQuey, Tracey, & Ryer, J.C. (1993). *The Internet Companion: a Beginner's Guide to Global Networking*. Reading, MA: Addison-Wesley. Beginning with a foreword by Vice-President Elect Al Gore, this book provides an often-humorous explanation of the origins of the Internet, acceptable use, basics of electronic mail, netiquette, online resources, transferring information, and finding email addresses. The In the Know guide provides background on Internet legends (Elvis sightings is one), organizations, security issues, and how to get connected. Bibliography. Index. ISBN 0-201-62224-6 \$10.95

Marine, April. (1992). *INTERNET: Getting Started..*. Menlo Park, CA: SRI International. This book has an international overview, and includes things the others don't, such as an index to all the RFC's (Request for Comments), Internet organizations, source information for the TCP/IP CD ROM, and the answer to "who is in charge of the Internet?" (No one is. The Internet is a cooperating group of independently administered networks. Some groups set basic policy though.) ISBN 0-944604-15-3 \$39.00 SRI 333 Ravenswood Ave. Menlo Park, CA 94025

Tennant, Roy, Ober, J., & Lipow, A. G. (1993). Crossing the Internet Threshold: An Instructional Handbook. Berkeley, CA: Library Solutions Press. A cookbook to run your own Internet training sessions. Real- world examples. Foreword by Cliff Lynch. ISBN: 1-882208-01-3 \$45.00 Library Solutions Institute and Press 2137 Oregon Street Berkeley, CA 94705 510/841-2636 FAX: 510/841-2926

Magazine

Matrix News, the monthly newsletter edited by John S. Quarterman. Subscriptions are \$30 per year. for a paper edition, \$25/yr for an online edition. Matrix News, Matrix Information & Directory Services, Inc. (MIDS) 1106 Clayton La. Suite 500 W Austin, TX 78746 512/329-1087 FAX: 512/327-1274 mids@tic.com

Organizations

CNI Coalition for Networked Information 1527 New Hampshire Ave., NW Washington, DC 20036 202/232-2466 FAX: 202/462-7849 info@cni.org

CPSR Computer Professionals for Social Responsibility PO Box 717 Palo Alto, CA 94302 415/322-3778 FAX: 415/322-3798 CPSR Newsletter, annual Computers, Freedom and Privacy Conference, poster ("Technology is driving the future— it's time to find out who's steering.") cpsr@clsi.stanford.edu

EFF The Electronic Frontier Foundation, Inc. 155 Second St. Cambridge, MA 02141 617/864-1550 FAX: 617/864-0866 Publishes the EFFector in online and print editions. T-shirts, bumper stickers ("I'd rather be telecommuting"; "ISDN: Make it so."; "CYBERNAUT") eff@eff.org

Internet Society 1895 Preston White Drive Suite 100 Reston, VA 22091
703/620-8990, FAX 703/620-0913 Annual conference, quarterly Internet
Society News. isoc@nri.reston.va.us

===== For more
information about this article: Jean Armour Polly Manager of Network
Development and User Training NYSERNet, Inc. 111 College Place
Syracuse, NY 13244-4100 315/443-4120 FAX: 315/425-7518
jpolly@nysernet.org

=====

End of Project Gutenberg's Surfing the Internet, by Jean Armour Polly

*** END OF THE PROJECT GUTENBERG EBOOK SURFING THE
INTERNET: AN INTRODUCTION ***

Updated editions will replace the previous one—the old editions will be renamed.

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