An Incomplete Guide to the Internet

and Other Telecommunications Opportunities

Especially for Teachers and Students K-12

Compiled by the NCSA Education Group
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Why Incomplete?

In these days of high-powered computing the human element is often neglected. Acronyms and abbreviations abound and can confuse even the most educated computer consumer. What's more, those who do understand the concepts and jargon are often unwilling or unable to relay them to the novice computer user. This guide is meant to provide a helping hand in understand the Internet entity. It is by no means a complete guide; rather it is a general overview of what the Internet is and some of the resources available. In areas where the information presented is very general, alternate, more in-depth sources are cited, most of them available right from your computer. This guide will also provide you with ideas for using the Internet in a classroom as well as a personal environment.

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Part I

Introduction to Internet

Chapter 1:

What is the Internet?

The Internet is a worldwide collection of thousands of computer networks that can intercommunicate. All of them speak the same "language," namely the TCP/IP (Transmission Control Protocol/ Internet Protocol) protocol suite. Users of any of the Internet networks can reach users on any of the other networks. The Internet started with the ARPANET, but now includes such networks as NSFNET, NEARNet, and others. Many other networks, such as BITNET, are tied to the Internet but are not an integral part of it. Approximately three to five million people use the Internet daily.

The ancestry of the Internet is rooted in the ARPANET, a network developed by the Advanced Research Projects Agency (ARPA) to aid in the sharing of information and resources among researchers. The ARPANET, which was made operational in 1969, became an essential tool for remote login, file transfer, electronic mail and the sharing of information by interest groups.

The ARPANET was growing in size while other networks were being developed. Soon the architects of the ARPANET recognized the need to communicate with other networks. They also realized that they needed new protocols (the NCP protocol suite that they had developed wasn't able to cope with the diverse characteristics of other networks). Therefore they designed a new architecture and protocol suite called the ARPA Internet; the protocol suite was called TCP/IP.

Since its creation in 1983, the Internet has grown exponentially in terms of numbers of networks connected to it. By 1985, the number was approximately one hundred. By 1987, the number had grown to two hundred; in 1989, it exceeded five hundred. According to tables kept at the DDN (Defense Data Net) Network Information Center (DDN NIC), there were 2,218 networks connected to the Internet as of January 1990. By April 1, 1993, this number had increased to 10,497 networks in 53 countries, and over 6000 networks are within the United States alone!

NSFNET began providing backbone Internet service in July 1986 to permit supercomputer centers to communicate. NSFNET's scope has since expanded, and today it is the U.S. national research network. It has extended to the academic and commercial communities the TCP/IP services that were previously available to government researchers. NSFNET links mid level networks, which in turn connect networks at universities and commercial enterprises. Therefore, NSFNET, like the Internet of which it forms a large part, is itself a network of networks.

The Internet communicates via gateways with other networks such as CompuServe, MCI Mail, BITNET, FIDONet, UUNET, and USENET. The Internet has several component networks (which themselves include other networks):

- DDN (Defense Data Net)
- ESNET (Energy Sciences Network)
- NSFNET (National Science Foundation Network)
- TENET (Texas Education Network)

and many, many more.

Chapter 2:

Internet Etiquette

"Etiquette" means "ticket" in French. On the Internet, "netiquette" is your ticket to "traveling" (by FTP, TELNET, and electronic mail) without annoying others. Here's a few tips to keep you in good standing with other users.

•Never Forget that the Person on the Other Side is Human

Because your interaction with the network is through a computer, it is easy to forget that there are people "out there." Situations arise where emotions erupt into a verbal free-for-all that can lead to hurt feelings. Strongly critical messages on the network are called "flames." The following will help you to avoid sending or provoking flames.

Try not to say anything to others that you would not say to them in person in a room full of people. Please remember that when you send a message to a bulletin board or mailing list, people all over the world are reading your words.

Don't attack people—try to persuade them by presenting facts. Cursing and abuse only make people less willing to help when you need it.

If you are upset at something or someone, wait until you have had a chance to calm down and think about it. A cup of coffee or a good night's sleep works wonders on your perspective. Hasty words create more problems than they solve.

•Be Careful What You Say About Others

Please remember—thousands of people may read your message. They quite possibly include your boss, your friend's boss, your girlfriend's brother's best friend, and one of your father's beer buddies. Information posted on the net can come back to haunt you or the person you are talking about.

Think twice before you post personal information about yourself or others.

•Be Brief

Say what you have to say succinctly and it will have a greater impact. Remember that the longer you make your article, the fewer people will bother to read it.

•Your Postings Reflect Upon You—Be Proud of Them

Most people will know you only by what you say and how well you say it. Take some time to make sure each posting won't embarrass you later. Minimize your spelling errors and make sure that the article is easy to read and to understand.

•Use Descriptive Titles

The subject line of an article enables people to decide whether or not to read your article. Tell people what the article is about before they read it. A title like "Car for Sale" does not help as much as "66 MG Midget for sale: Beaverton OR." Don't expect people to read your article to find out what it's about – many won't bother. Some sites limit the length of the subject line to forty characters, so keep your subjects short and to the point.

•Think About Your Audience

When you post an article, think about the people you are trying to reach. Try to get the most appropriate audience for your message, not the widest. Avoid abbreviations and acronyms, if possible, and define the ones you use.

If your message is of interest to a limited geographic area (apartments, car sales, meetings, concerts, etc....), restrict the distribution of the message to your local area. Some areas have special newsgroups with geographical limitations—check with your system administrator.

If you want to try a test of something, don't use a world-wide newsgroup! There are newsgroups that are local to your computer or area, which should be used for this. Your system administrator can tell you what they are.

•Be familiar with the group you are posting to before you post.
You shouldn't post to groups you don't read, or to groups you've only read a few articles from—you may not be familiar with the conventions and themes of the group. One normally does not join a conversation by just walking up and talking. Instead, you listen first and then join in if you have something pertinent to contribute.

•Be Careful with Humor and Sarcasm
Without the voice inflections and body language of personal communications, it's easy for remarks meant to be funny to be misinterpreted. Subtle humor tends to get lost. Take steps to make sure that people realize you are trying to be funny. The net has developed a symbol called the smiley face, which looks like this: :-) It points out sections of articles with humorous intent. No matter how broad the humor or satire, it is safer to remind people that you are being funny.

But also be aware that frequently satire is posted without explicit indications. If an article outrages you strongly, ask yourself if it may have been unmarked satire. Several self-proclaimed connoisseurs refuse to use smiley faces, so take heed or you may make a temporary fool of yourself.

•Only Post a Message Once
Avoid posting messages to more than one group unless you are sure it is appropriate. If you do post to multiple groups, don't post to each group separately. Instead, specify all the groups on a single message. This reduces network overhead and lets people who subscribe to more than one of those groups see the message once instead of having to wade through each copy.

•Please "Rotate" Messages With Questionable Content
Certain messages may be offensive to some people. To make sure that these messages are not read unless they are explicitly requested, they should be encrypted. The standard encryption method is to rotate each letter by thirteen characters so that an "a" becomes an "n." This is known on the network as "rot13"; when you rotate a message the word "rot13" should be in the "Subject:" line.

Most of the software used to read network articles has some way of encrypting and decrypting messages. Your system administrator can tell you how the software on your system works.

•Summarize What You are Following Up
When you are following up someone's article, please summarize the parts of the article to which you are responding. This allows readers to appreciate your comments rather than trying to remember what the original article said. It is also possible for your response to reach some sites before the original article does!

Summarization is best done by including appropriate quotes from the original article. Don't include the entire article, since it will irritate the people who have already seen it. Even if you are responding to the entire article, summarize only the major points you are discussing.

•When Summarizing, Summarize!

When you request information from the network, it is common courtesy to report your findings so that others can benefit as well. The best way of doing this is to take all the responses that you received and edit them into a single article that is posted to the places where you originally posted your question. Take the time to strip headers, combine duplicate information, and write a short summary. Try to credit the information to the people that sent it to you, where possible.

•Use Mail, Don't Post a Follow-up

One of the biggest problems we have on the network is that when someone asks a question, many people send out identical answers. When this happens, dozens of identical answers pour through the net. Mail your answer to the person and suggest that they summarize to the network. This way the net will only see a single copy of the answers, no matter how many people answer the question.

If you post a question, please remind people to send you the answers by mail and at least offer to summarize them to the network.

•Read All Follow-ups and Don't Repeat What's Been Said

Before you submit a follow-up to a message, read the rest of the messages in the newsgroup to see whether someone has already said what you want to say. If someone has, don't repeat it.

•Check the Headers When Following Up

Some software has provisions to specify that follow-ups to an article should go to a specific set of newsgroups—possibly different from the newsgroups to which the original article was posted. Sometimes the groups chosen for follow-ups are inappropriate, especially as a thread of discussion changes with repeated postings. You should carefully check the groups and distributions given in the header and edit them as appropriate. If you change the groups named in the header, or if you direct follow-ups to a particular group, say so in the body of the message—not everyone reads the headers of postings.

•Be Careful About Copyrights and Licenses

Once something is posted onto the network, it is *probably* in the public domain unless you own the appropriate rights (for example, if you wrote it yourself) and you post it with a valid copyright notice; a court would have to decide the specifics and there are arguments for both sides of the issue.

Now that the US has ratified the Berne convention, the issue is even murkier. For all practical purposes, though, assume that you effectively give up the copyright if you don't put in a notice. Of course, the *information* becomes public, so you mustn't post trade secrets that way.

Keep in mind that material that is UNIX-related may be restricted by the license you or your company signed with AT&T, so be careful not to violate it. You should also be aware that posting movie reviews, song lyrics, or anything else published under a copyright could cause you, your company, or members of the net community to be held liable for damages, so we highly recommend caution in using this material.

•Cite Appropriate References

If you are using facts to support a cause, state where they came from. Don't take someone else's ideas and use them as your own. You don't want someone pretending that your ideas are theirs; show them the same respect.

•Mark or Rotate Answers and Spoilers

When you post something (like a movie review that discusses a detail of the plot) that might spoil a surprise for other people, please mark your message with a warning so that they can skip the message. Another alternative would be to use the "rot13" protocol to encrypt the message so it cannot be read accidentally. When you post a message with a spoiler in it make sure the word "spoiler" is part of the "Subject:" line.

•Spelling Flames Considered Harmful

Every few months a plague descends on the network called the spelling flame. It starts out when someone posts an article correcting the spelling or grammar in some article. The immediate result seems to be for everyone on the net to turn into a sixth grade English teacher and pick apart each other's posting. This is not productive and tends to cause people to get angry with each other.

It is important to remember that we all make mistakes, and that there are many users on the net who use English as a second language. There are also a number of people who suffer from dyslexia and who have difficulty noticing their spelling mistakes. If you feel that you must make a comment on the quality of a posting, please do so by mail, not on the network.

•Don't Overdo Signatures

Many people can have a signature added to their postings automatically by placing it in a file called "$HOME/.signature". Don't overdo it. Signatures can tell the world something about you, but keep them short. A signature that is longer than the message itself is considered to be in bad taste. The main purpose of a signature is to help people locate you, not to tell your life story. Every signature should include at least your return address relative to a major, known site on the network and a proper domain-format address. Your system administrator can give this to you. Some news posters attempt to enforce a four-line limit on signature files—an amount that should be more than sufficient to provide a return address and attribution.

•Limit Line Length and Avoid Control Characters

Try to keep your text in a generic format. Many (if not most) of the people reading Usenet do so from eighty-column terminals or from workstations with eighty-column terminal windows. Try to keep your lines of text to less than eighty-characters for optimal readability. Also realize that there are many, many different forms of terminals in use.

If you enter special control characters in your message, it may result in your message being unreadable on some terminal types; a character sequence that causes reverse video on your screen may result in a keyboard lock and graphics mode on someone else's terminal. You should try to avoid the use of tabs, too, since they may also be interpreted differently on terminals other than your own.

•Summary of Things to Remember

- Never forget that the person on the other side is human

- Be careful what you say about others
- Be brief
- Your postings reflect upon you; be proud of them
- Use descriptive titles
- Think about your audience
- Be careful with humor and sarcasm
- Only post a message once
- Please rotate material with questionable content
- Summarize what you are following up
- Use e-mail, don't post a follow-up
- Read all follow-ups and don't repeat what has already been said
- Double-check follow-up newsgroups and distributions.
- Be careful about copyrights and licenses
- Cite appropriate references
- When summarizing, summarize
- Mark or rotate answers or spoilers
- Spelling flames are considered harmful
- Don't overdo signatures
- Limit line length and avoid control characters

Part II

Tools for Using the Internet

Chapter 3:

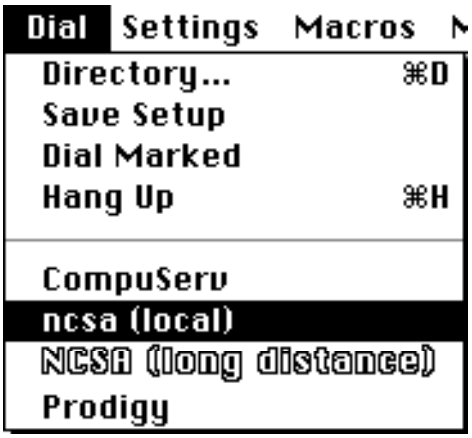
Connecting to NCSA by Modem

Connections to the Internet vary according to your point of contact, hardware, and software. For specific dialing via modem procedures, please refer to the manual of your software. For specific logging in procedures, please refer to the organization that provides you with access to the Internet. This chapter explains how to connect to NCSA using a Macintosh with Macintosh software. You may connect to the Internet via other systems and networks, but this chapter will discuss specific numbers for NCSA. You may also connect to NCSA using any type of computer as long as you have telecommunications software for your computer. Simply dial the NCSA number (244-0662) following the instructions for your software. In this chapter we will also use, as an example, a telecommunications program called "Z-Term", but the procedure is basically the same for most telecommunications software. Individual differences are expected, please refer to your owners manual for any problems. You should copy Z-Term onto your hard drive if you have one. You may also use any other communications software you are familiar with, e.g. Red Ryder, White Knight, or the Communications portion of Microsoft Works. Just make sure you enter the NCSA number to dial (244-0662).

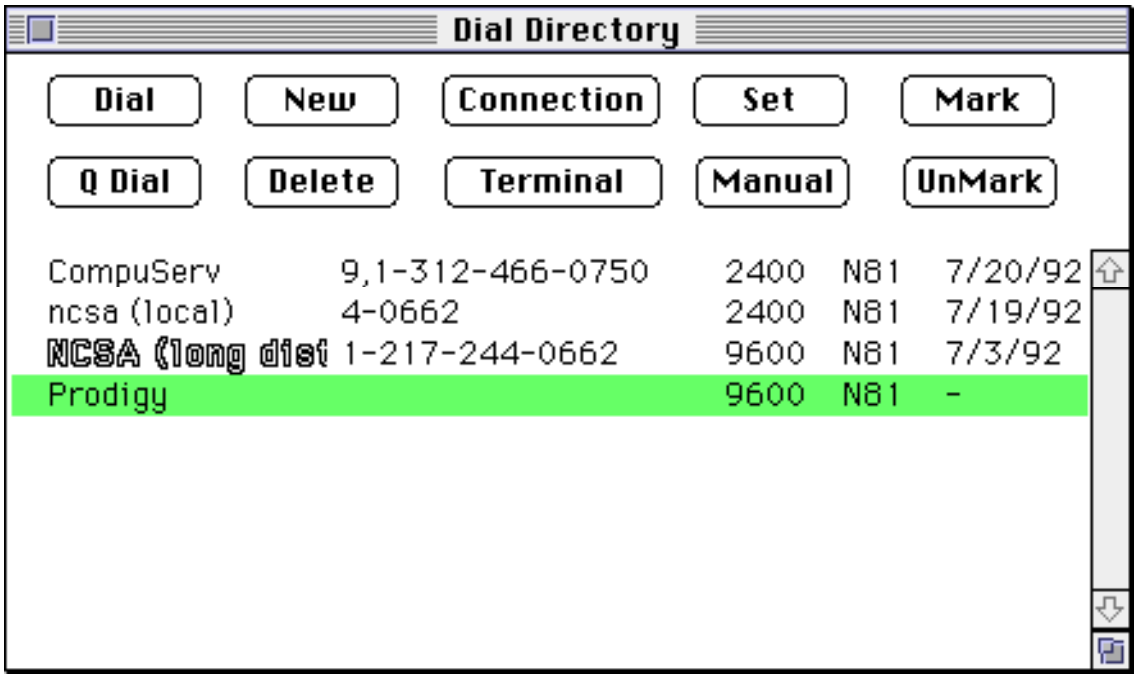
To start, double-click the Z-term icon

Z-term

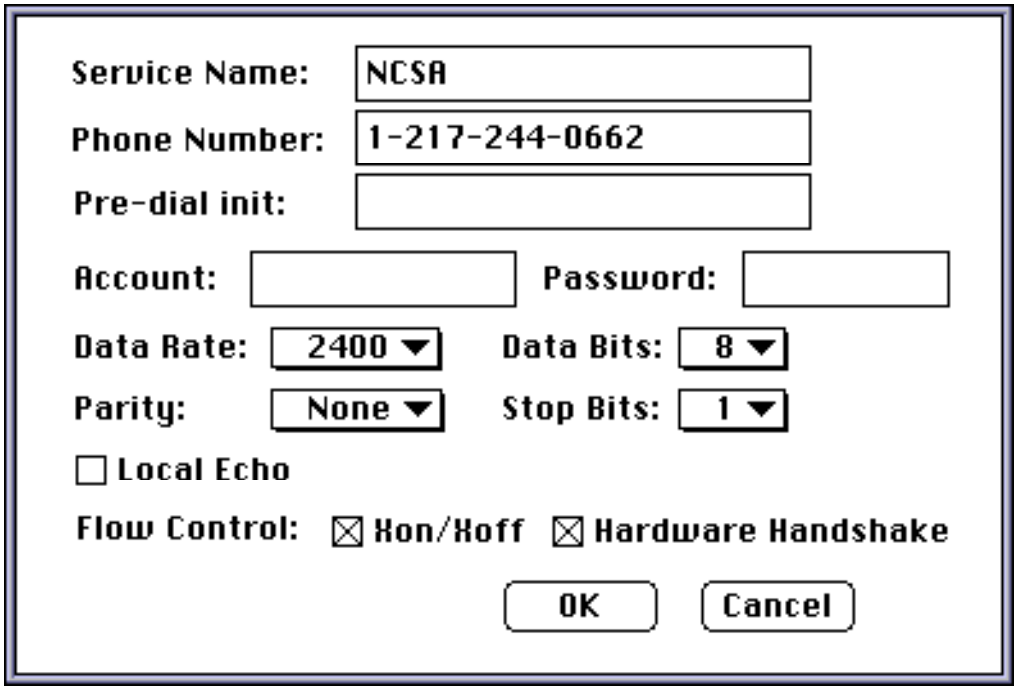
Once the program has begun, go to the "Dial" menu and choose NCSA if it is part of the menu.



If you do not see "NCSA" on the Dial menu, choose "Directory" and set up an entry for NCSA.

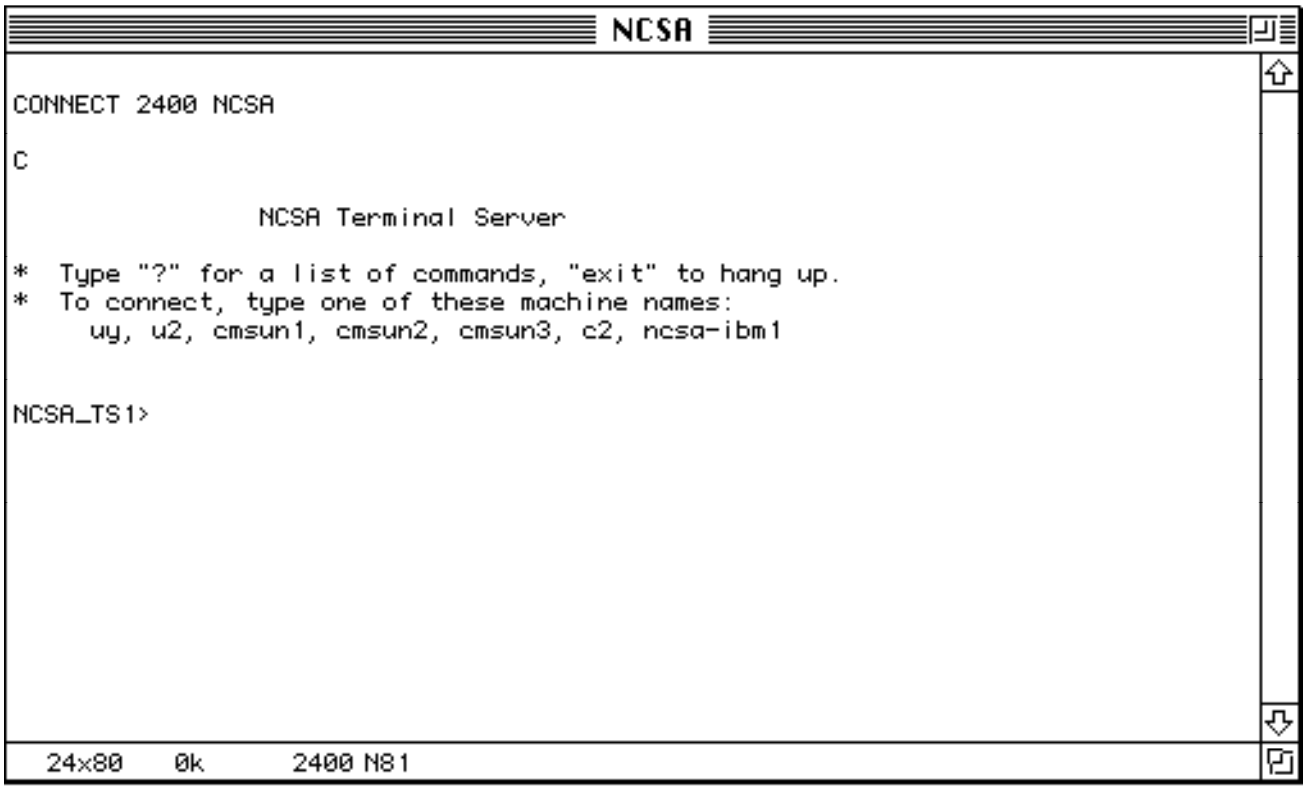


To set up an entry for NCSA, click on New and enter the appropriate information:



Now return to the Dial menu and select NCSA.

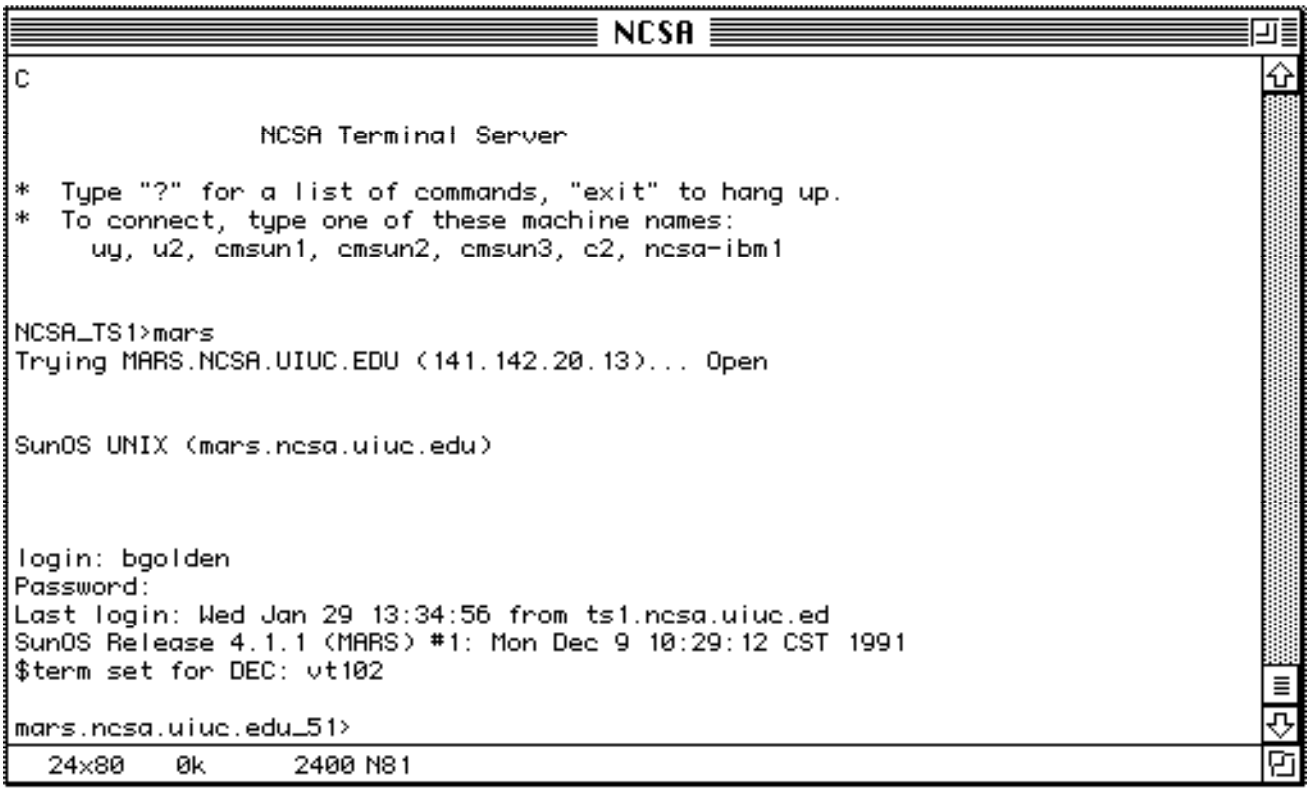
The program will automatically dial the number to NCSA for you, and in a moment you will see



In a few moments the connection will have been made. The “CONNECT 2400 NCSA” means that you have just connected to an NCSA machine at 2400 BAUD, which is defined by the speed of the modem. 2400 BAUD means 2400 bits (of data) can be sent and received every second. If your modem is a different speed the screen will show what speed you are connected.

The terminal server will let you access any of NCSA's computers, simply by typing in the name of the computer. You should use the one called "landrew".

In order to limit access to a computer, computer operators will often use a scheme of "passwords" and "logins". A login is the person’s computer name, with each user having a different one. The password is decided upon by the user. The computer will allow access only to those whose password matches their login. You cannot, for example, use your login and a friend's password. Your password is unique to your login. At this time, you should type your login, press return, and then enter your password (for security reasons, your password will not echo to the screen, so you will not see it). After a successful login, your screen will look something like this:



You are now connected to NCSA.

Chapter 4:

UNIX Commands

When you log on to NCSA machines, you'll notice that the screen is different in appearance from the Macintosh. That is because it uses a different operating system than the Mac. An operating system is the way that you communicate with the computer. The operating system that NCSA machines use is called UNIX. UNIX is a command line interface operating system, which means that you type commands on the keyboard, as opposed to moving and clicking a mouse, for example.

Here are several commands in UNIX that you may find useful. Following each is a short description of what they do and options involved with each. **This is not a complete list!** If you want to know more about a command type "man <command>", where <command> is the command you want to know more about.

alias Allows you to rename a certain command. For example, if you typed "alias dir ls", every time you typed "dir" the computer would return the same thing if you had typed "ls".

cd <directory> "Change Directory" -- changes directory to <directory>. Equivalent to opening a folder in the Macintosh operating system

clear Clears the screen

cp <file1> <file2> Copies the file <file1> and calls it <file2>

diff <file1> <file2> Compares <file1> and <file2> and reports the differences

finger <user> Displays information about a user

ftp <site> Connects you to a remote site for file transfer

help <topic> Displays on-line help about <topic>

logout Terminates your session

ls Lists the contents of a directory

mail <user> Send electronic mail to a user <user>

man <topic> Displays on-line information about <topic>

mkdir <directory> Make a directory called <directory>

more <file> Displays <file> one full screen at a time (type 'q <return>' to quit)

mv <file> Moves or renames <file>

passwd Allows you to changes your password

ph Local phone book service

pwd Prints the working directory name (the one you are currently in)

rm <file> Permanently removes (deletes) files

rmdir <directory> Remove a directory called <directory>

talk <user> Talk to another user <user>

telnet <host> Directly connects you to a host computer

vi <file> Edits the file <file> with the vi editor (pronounced “Vee-Eye”)

whereis <file> Locates file <file>. Similar to Find File in Macintosh operating system

who Shows what users are on the system

whoami Displays who your are

write <user> Sends a message to the user <user>

Chapter 5:

Electronic Mail

Mail in the Internet

Using Internet you can communicate with anyone around the world who has a computer account. To mail someone type “mail” and then their address. To mail someone you need to know their login (The name you use to identify yourself to the computer) and the name of the computer system they are using. The Internet standard for naming computers is called the "domain system." This hierarchical system references values such as country, type of organization, organization name, division name, and computer name. Below is an example:

joe@bitsy.mit.edu

The information in a mail address becomes more global as you read from left to right. The user's name is always to the left of an @ sign. Computer and organization names are always to the right. In the example above, the person, Joe, receives his mail on a computer called "bitsy" at MIT. Because MIT is an educational organization, it is included in the top-level domain "edu". Other top-level domains are listed below:

com	commercial
gov	government
mil	military
org	nonprofit organization
net	network operation and informational centers

Outside of the U.S., top-level domains are two-letter country codes such as these:

au	Australia
il	Israel
jp	Japan
uk	United Kingdom

Finding Mail Addresses

You can learn the electronic mail address of another person by asking him or by using one of the following resources:

- A “postmaster” at the recipient's organization can provide the correct address when you know the domain name of the organization. Send a message requesting help to postmaster@domain.

- The DDN Network Information Center (DDN NIC) in Menlo Park, California, maintains a "white pages" directory of computer users, hosts, and domains on the Internet. You can use Telnet to access this database on a computer called nic.ddn.mil. Many computers also have a program called whois, which automatically accesses the DDN NIC database. NCSA machines have this program.

Mail Program for UNIX

This is an abbreviated manual entry for mail, a common electronic mail system.

NAME

mail - send or read mail

Sending mail. To send a message to one or more persons, type mail and the names of the people to receive your mail.

Press the return key. You are then prompted for a subject.

After entering a subject, and pressing the return key, type your message. To send the message, type period (.) on a blank line.

Reading mail. In normal usage mail is given no arguments and checks your mail out of the mail directory. Then it prints out a one line header of each message there. The current message is initially the first message and is numbered 1. It can be displayed using the print command.

Disposing of mail. After reading a message you can delete (d) it or reply (r) to it. Deleted messages can be undeleted, however, in one of two ways: you can use the undelete (u) command and the number of the message, or you can end the mail session with the exit (x) command. Note that if you end a session with the quit (q) command, you cannot retrieve deleted messages.

Specifying messages. Commands such as print and delete can be given a list of message numbers as arguments. Thus, the command

delete 1 2

deletes messages 1 and 2, while the command

delete 1-5

deletes messages 1 through 5. The asterisk (*) addresses all messages, and the dollar sign ($) addresses the last message. For example, the top command, which prints the first few lines of a message, can be used in the following manner to print the first few lines of all messages:

top *

Replying to or originating mail. Use the reply command to respond to a message.

Ending a mail processing session. End a mail session with the quit (q) command. Unless they were deleted, messages that you have read go to your mbox file. Unread messages go back to the mail directory.

- Prints out the previous message. If given a numeric argument n, prints n-th previous message.

? Prints a brief summary of commands.

chdir (ch) Changes the user's working directory to that specified. If no directory is given, then the chdir command changes to the user's login directory.

copy (co) Takes a message list and file name and appends each message to the end of the file. The copy command functions in the same way as the save command, except that it does not mark the messages that you copy for deletion when you quit.

delete (d) Takes a list of messages as argument and marks them all as deleted. Deleted messages are not saved in mbox, nor are they available for most other commands.

dp (or dt) Deletes the current message and prints the next message. If there is no next message, mail returns a message: at EOF.

edit (e) Takes a list of messages and points the text editor at each one in turn. On return from the editor, the message is read back in.

exit (ex or x) Returns to the shell without modifying the user's system mailbox, mbox file, or edit file in -f.

headers (h) Lists the current range of headers, which is an eighteen-message group. If a plus sign (+) is given as an argument, then the next message group is printed. If a minus sign (-) is given as an argument, the previous message group is printed.

help Prints a brief summary of commands. Synonymous with ?.

hold (ho, also preserve) Takes a message list and marks each message in it to be saved in the user's system mailbox instead of in mbox. The hold command does not override the delete command.

mail(m) Takes login names and distribution group names as arguments and sends mail to those people.

mbox Indicates that a list of messages should be sent to mbox in your home directory when you quit. This is the default action for messages if you did not set the hold option.

next (n, + or CR) Goes to the next message in sequence and types it. With an argument list, it types the next matching message.

preserve (pre) Takes a message list and marks each message in it to be saved in the user's system mailbox instead of in mbox . Synonymous with the hold command.

Print (P) Prints a message in its entirety, including specified ignored fields.

print (p) Takes a message list and types out each message on the user's terminal, without printing any specified ignored fields.

quit (q) Terminates the session. All undeleted, unsaved messages are saved in the user's mbox file in his login directory; all messages marked with hold or preserve or that were never referenced are saved in his system mailbox; and all other messages are removed from his system mailbox.

reply (r) Takes a message list and sends mail to the sender and all recipients of the specified message. The default message must not be deleted.

Reply (R) Replies to originator of the message. Does not reply to other recipients of the original message.

save (s) Takes a message list and a file name and appends each message to the end of the file. The messages are saved in the order in which they appear in the mail directory, not in the order given in the message list. The filename, which is enclosed in quotes, followed by the line count and character count, is displayed on the user's terminal.

size Takes a message list and prints out the size (in characters) of each message. The size of the messages are printed in the order that they appear in the mail directory.

top Takes a message list and prints the top few lines of each. The number of lines printed is controlled by the variable toplines and defaults to five.

type (t) Takes a message list and types out each message on the user's terminal, without printing any specified ignored fields. Synonymous with print.

Type (T) Prints a message in its entirety, including specified ignored fields. Synonymous with Print.

undelete (u) Takes a message list and marks each one as not being deleted.

visual (v) Takes a message list and invokes the display editor on each message.

write (w) Takes a message list and a file name and appends each message to the end of the file. Synonymous with save.

xit (x) Returns to the Shell without modifying the user's system mailbox, mbox , or edit file in -f. Synonymous with exit.

z Presents message headers in windowfulls as described under the headers command. You can move forward to the next window with the z command. Also, you can move to the previous window by using z-.

If new mail arrives during the session, the user receives the message "You have new mail."

Chapter 6:

Telnet

Telnet is a program which allows you to communicate with other computers. To communicate with another computer simply type

telnet <host>

where <host> is the name or IP (Internet Protocol) address of the computer (e.g. landrew.ncsa.uiuc.edu or 141.142.2.4 refer to the same machine). Every machine which is connected to the Internet has an IP address and each one is unique. If you just type "telnet" with no host or with an invalid (non-existent) host, you will enter the interactive mode. This is indicated by the telnet prompt, which looks like

telnet>

You may also enter this mode if you accidentally give the wrong login or password to the host computer. To try to logon again, type a <return> and you will return to the login prompt. If you typed the wrong host, you can also type

close

to close the connection. To logon to another host, type

open <host>

at the telnet prompt (**telnet>**). If you are already connected to another machine, you must **close** the connection first.

Chapter 7:

Teaching Your Computer How to Fetch

or

How to FTP

FTP: What it is and why.

The File Transfer Protocol (FTP) is the Internet standard for moving files from one computer to another. You can use the ftp command to copy computer files containing a variety of kinds of information, such as software, documentation, or maps. FTP is the name not only of the protocol, but also of the program the user invokes to execute it (e.g., by typing ftp host.bbn.com).

Anonymous FTP, like Telnet, requires access to the Internet . Unlike Telnet, anonymous FTP is widely available. The term anonymous is used to denote the fact that most individuals logging into the remote machine do not have their own accounts but use the generic user account **anonymous**. Anyone can become an Internet traveler by using the ftp command.

The following short tutorial should be sufficient to introduce the novice to using ftp. It is primarily designed for those users who are not directly connected to the Internet. For those individuals who are already connected, additional software packages, like Fetch for the Macintosh computer, exist. These programs greatly facilitate the process of file transfer.

Because FTP is used to transfer files between two computers on a network, this tutorial assumes that you have access to a computer on the Internet and some familiarity with the Unix operating system. The tutorial begins at a point after you have logged into this computer. In this exercise, you'll be transferring a popular mail utility for the Macintosh family of computers. Named Eudora, this email utility is available at many anonymous ftp sites including **ftp.cso.uiuc.edu** in the directory **/mac/eudora**.

For those owners of IBM computers or compatibles, PC-Eudora will become available, but is still in the testing stage at this time. If you're interested in a similar utility, there is one by the name of NUPop at the anonymous ftp host **casbah.acns.nwu.edu** in the directory **pub/nupop**. Simply replace the host and directory information in the tutorial with these. The file that you will want to transfer is **nupop103.zip.**

Before you begin

I'll be referring to the computer that is our **initial** Internet contact as the **local** computer and the computer that we ftp **to** as the **remote** computer. Prompts will be displayed in bold to differentiate them from computer output. Your prompt should look something similar to my Unix prompt - **landrew.ncsa.uiuc.edu_51%**. The prompt for the ftp program is **ftp>.** Underlined text indicates a user command and should be entered exactly as they appear. Lines in `courier type face` are output (what you will see on your computer screen that you didn't put there). Sentences in the standard type face are short descriptions explaining user input and computer output. And so we begin.

Note: The program and the operating systems that are on the Internet are case sensitive. A file named 'readme' is different from a file named 'Readme'.

Setting up a temporary directory

For this tutorial, we'll be setting up a temporary directory in our Unix account on our local computer. I find that this is a good idea whenever I transfer files. See the Unix section of this manual, if you have additional questions about the commands 'mkdir' and 'cd'

landrew.ncsa.uiuc.edu_51% mkdir tempdir

This command creates a new directory named 'tempdir'.

landrew.ncsa.uiuc.edu_52% cd tempdir

By changing our current directory to the one we just created, we ensure that any files that we transfer will be placed into this directory.

Opening a session

landrew.ncsa.uiuc.edu_53% ftp ftp.cso.uiuc.edu

With this command, we have told our computer to run the program ftp and to use the address ftp.cso.uiuc.edu. The ftp program will attempt to open a connection to the computer at this address. In the future, you will be knowledgeable enough about the resources on the Internet to want to ftp to a machine of your choosing. This can be done by replacing the address ftp.cso.uiuc.edu with any valid address of a computer on the Internet. If the connection attempt is successful, you will be asked to login.

```
Connected to ftp.cso.uiuc.edu.
220 ux1.cso.uiuc.edu FTP server (Version 6.12 Fri May 15 15:45:18 CDT 1992)
Name (ftp.cso.uiuc.edu:jduban): anonymous
```

Since the computer at ftp.cso.uiuc.edu supports anonymous ftp, we'll be using the guest account anonymous. This will be true for virtually every machine to which you will ftp.

```
331 Guest login ok, send e-mail address as password.
```

Password:

At this point, they request that you enter your email address as a password. This is the case for virtually every anonymous ftp site on Internet. Note that your password does not appear on the screen. After your login, a short message similar to the following usually appears.

```
230-  This is an experimental FTP server.  If your FTP client crashes or
230-  hangs shortly after login please try using a dash (-) as the first
230-  character of your password.
230-
230-  Please read the file /README
230-  it was last modified on Fri Jun  5 11:06:41 1992 - 233 days ago
230-  Guest login ok, access restrictions apply.
```

The message contains pertinent information for users. It is in your best interest to read this message and any other files it suggests. These messages frequently let the user know when the site is available and what restrictions apply to anonymous logins. This message suggests that we read the file named '**README**'. Generally, the information in any '**README**' file is stored as text. The next section shows how to 'get' the '**README**' file mentioned above and display it on your screen.

Getting and reading a text file

ftp>get README

We've just told the computer to get us the file named README from the remote machine. The computer responds with the following.

```
200 PORT command successful.
150 Opening ASCII mode data connection for README (4248 bytes).
226 Transfer complete.
local: README remote: README
4341 bytes received in 0.16 seconds (26 Kbytes/s)
```

ASCII mode - indicates that the computer is transferring a text file
Transfer complete - indicates that the transfer of the file was successful

With the file on our local computer, we can use the following commands to display the file on the screen.

ftp> !more README

The ! allows us to give our local computer a command. We have invoked the program 'more' and told it to display the file named '**README**'. Your screen will be filled with the contents of the '**README**' file. For more information on 'more', refer to the Unix section of this manual.

After reading the contents of the file, we're ready to move on.

Navigation on the remote computer

Let's see what else is in the current directory. The 'ls' command will help us achieve this goal.

If you're interested in learning more about the commands like 'ls', please refer to the Unix section of this manual. For now just enter the following command at the prompt.

ftp>ls -l

We've requested a long listing (ls -l) of the current directory on the remote computer. Whenever an 'ls -l' is done the computer will respond with something similar to the following.

```
200 PORT command successful.
150 Opening ASCII mode data connection for /bin/ls.
total 258
-rw-r--r--  1 zinzow    ftp         4248        Jun  5  1992      README
drwxrwxr-x  11 root     amiga       1024        Jan 13 22:56      amiga
drwxrwxr-x  15 138      wheel       512         Jan  4 21:02      doc
-rw-r--r--  1 zinzow    ftp         145528      Jan  2  1992      ftp.list
drwxrwxr-x  8 root      mac         512         Jan 21 00:57      mac
226 Transfer complete.
1825 bytes received in 0.32 seconds (5.6 Kbytes/s)
```

To the new user, a long listing may appear to be chaotic and meaningless. But in truth there is a great deal of information to be gleaned from this listing. Of the items that would interest you, are those in the first, fourth, fifth and sixth columns.

From the 1st column, you can tell whether the file is a directory (denoted by a 'd' in the left most position) or a file (denoted by a '-').

The 4th column shows the size of each entry in the directory in bytes (characters).

The 5th column is the date when the file was last changed.

The 6th column contains the names of the files.

Individuals using guest access are usually restricted to which directories they can enter and which files that they can transfer. Later, when you explore the world of anonymous ftp on your own, do not be surprised to see a message indicating that you do not have enough privileges to access certain files or directories.

Now that we know that there is a directory named **mac**, let's see what's in it.

ftp> cd mac

Change the directory from the current one to the sub-directory titled **mac**.

```
250 CWD command successful.
ftp> ls -l
```

Let's see what's in this directory. Again, we're using the 'ls' command, to list the files in the current directory (**/mac**).

```
200 PORT command successful.
150 Opening ASCII mode data connection for /bin/ls.
total 50
```

```
-rw-rw-r--  1 dlong           18842       Nov  5  1991      FAQlist.txt
lrwxr-xr-x  1 root            22          Dec 10 19:57      MUG...
-rw-rw-r--  1 dlong           13593       Nov  3  1990      SIMTE...
drwxr-xr-x  6           116   512         Nov 18 00:05      eudora
drwxrwxr-x  2 root            512         Feb 18  1991      exec-pc
drwxrw-r-x  2 zinzow          512         Jan 31  1992      local
drwxrwxr-x  2 zinzow          512         Oct 29 20:51      sys7
-rw-r--r--  1 root            9528        Jan 21 01:01      tar.out
drwxrwxr-x  2 dlong           512         Sep 17  1991      utils
drwxrwxr-x  2 root            1024        Jul  6  1992      virus
226 Transfer complete.
remote: -l
584 bytes received in 0.14 seconds (4.1 Kbytes/s)
```

The 5th line of the listing tells us that there is a directory named **eudora**. The Eudora program should lie within this directory

ftp> cd eudora

Change the directory from the current one to the sub-directory titled eudora.

Note: We could have shortened the process by combining the multiple change directory commands into 1 command - cd /mac/eudora. This command would have brought us to the same directory in fewer steps.

```
250 CWD command successful.
ftp> ls -l
```

Get a listing of the files in the current directory (/mac/eudora).

```
200 PORT command successful.
150 Opening ASCII mode data connection for /bin/ls.
total 3940
-rw-r--r--  1     root  0           Jul  9  1992      .notar
-rw-r--r--  1     116   9660        Aug 16  1991      1.2Changes
-rw-r--r--  1     116   730150      Nov  2 21:52      1.2man.glue.sit.hqx
-rw-r--r--  1     116   826074      Jul  3  1991      1.2man.pm.sit.hqx
-rw-r--r--  1     116   17069       Oct  8 02:04      1.3Changes
-rw-r--r--  1     116   11407       Apr  2  1992      README
-rw-r--r--  1     116   11291       Oct  8 02:04      ReleaseNotes
-rw-r--r--  1     116   5890        Jun  5  1992      appendix-d
drwxr-xr-x  3     116   512         Jan 12 22:59      beta
-rw-r--r--  1     116   838381      Jan 17  1992      comm1.i.sit.hqx
-rw-r--r--  1     116   88352       Nov 26  1990      diskcopy.hqx
-rw-r--r--  1     116   950580      Oct 17  1991      doc.i.sit.hqx
-rw-r--r--  1     116   459636      Oct 18  1991      eudora1.2.2.i.sit.hqx
drwxr-xr-x  3     116   512         Nov 17 01:37      intl
drwxr-xr-x  2     116   512         Aug  7 22:07      oldbeta
-rw-r--r--  1     116   7589        May 11  1992      srialpop.c
drwxr-xr-x  2     116   512         Feb 18  1992      tables
226 Transfer complete.
remote: -l
993 bytes received in 0.42 seconds (2.3 Kbytes/s)
```

The file that we want is called '**eudora1.2.2.i.sit.hqx**'. Additionally, it is also a good idea to get the '**README**' file and one of the eudora manuals. This site has the complete Eudora manual in 2 forms; '**1.2man.glue.sit.hqx**' contains the manual in glue form and includes a program to read it, the '**1.2man.pm.sit.hqx**' file contains the manual in a Page Maker 4.0 file. We'll transfer '**1.2man.glue.sit.hqx**' since not everyone has a copy of Page Maker.

For those individuals who don't have DiskCopy for the Macintosh, we'll need to transfer the file '**diskcopy.hqx**'.

Let's get these files.

Transferring files

Of the three files, the '**README**' file is text file. No matter which remote machine that you connected to, the '**README**' files will always be text files. The other two files have the suffixes .sit and .hqx. The suffixes indicate that these files are not text files but are actually stored in binary form. As such, we will have to tell ftp to transfer these files in a different manner.

Note: See the "Archiving suffixes" section of this manual for more information about suffixes.

We'll transfer the '**README**' file first. Since it is a text file, we can use the same command that we used earlier.

```
ftp>get README

200 PORT command successful.
150 Opening BINARY mode data connection for README (11407 bytes).
226 Transfer complete.
local: README remote: README
11407 bytes received in 1.4 seconds (7.8 Kbytes/s)
```

Usually, it is a good idea to scan the '**README**' file for important information before transferring any other files. For the purpose of this tutorial it is not necessary but you can if you wish to do so.

Remember the command that we used to display the '**README**' file? Its !more README.

Note: Since the names of two text files were the same, '**README**', the first file has been overwritten and is now gone. This is true for any files that may have duplicate filenames; the older version will be over written. See the 'mv' command in the Unix section of this manual if you want to keep a copy of the older file.

Before we transfer the next two files, we need to tell the ftp program that these files are binary and need to be transferred in binary form. This is achieved by the following command.

ftp> bin
200 Type set to I.

The transfer mode has been changed to binary.

ftp> get eudora1.2.2.i.sit.hqx

Get the file '**eudora1.2.2.i.sit.hqx**'. The computer will tell us if the transfer was successful and how long it took.

```
200 PORT command successful.
150 Opening BINARY mode data connection for eudora1.2.2.i.sit.hqx (459636
bytes)
226 Transfer complete.
local: eudora1.2.2.i.sit.hqx remote: eudora1.2.2.i.sit.hqx
459636 bytes received in 8.7 seconds (51 Kbytes/s)
```

Since the transfer of the first file went smoothly, we can now get the manual that accompanies Eudora.

ftp> get 1.2man.glue.sit.hqx

```
200 PORT command successful.
150 Opening BINARY mode data connection for 1.2man.glue.sit.hqx (730150
bytes).
226 Transfer complete.
local: 1.2man.glue.sit.hqx remote: 1.2man.glue.sit.hqx
730150 bytes received in 21 seconds (34 Kbytes/s)
```

We transfer the third file in the same manner.

ftp> get diskcopy.hqx

```
200 PORT command successful.
150 Opening BINARY mode data connection for diskcopy.hqx (88352 bytes).
226 Transfer complete.
local: diskcopy.hqx remote: diskcopy.hqx
88352 bytes received in 1.2 seconds (71 Kbytes/s)
```

After transferring the last file we can now exit the ftp program. This is done using the following command.

ftp>bye

The ftp program responses with:

```
221 Goodbye.
```

And places you back at your system prompt.

Let's see what our local directory looks like. Remember how to do that?

landrew.ncsa.uiuc.edu_54%ls

The command 'ls' gives us a listing of the current directory but does not include all of the file information that 'ls -l' does.

```
1.2man.glue.sit.hqx          diskcopy.hqx
README                       eudora1.2.2.i.sit.hqx
```

You should see the four files listed above. You now have these files at your local machine.

For those individuals using modems, you may want to turn to the section of this manual that will walk you through transfer of the files to your personal computer.

For those lucky individuals that have their personal computer directly connected to the network, you may wish to turn to the section on archiving suffixes and decompression. This section will help you extract the files from the archive you have just downloaded. This must be done to put the files into a usable form.

Summary of the commands in the ftp tutorial

This is designed to be a template for ftping any file from any Internet site. The name of the remote computer **ftp.cso.uiuc.edu**, the directory **/mac/eudora** and the files transfered can be easily changed to suit your own purpose.

Prompts are displayed in bold to help differentiate them from user input. The prompt for the ftp program is **ftp>.** Underlined text indicates a user command.

landrew.ncsa.uiuc.edu_51%mkdir tempdir	Create a temporary directory to transfer files into.
landrew.ncsa.uiuc.edu_52%cd tempdir	Enter the directory just created.
landrew.ncsa.uiuc.edu_53% ftp ftp.cso.uiuc.edu	Start the ftp program & ask it to open a connection to a remote computer. In this tutorial we will be logging into the computer - **ftp.cso.uiuc.edu.**
Name (ftp.cso.uiuc.edu:jduban): anonymous	At the prompt, login as **anonymous.**
Password:	Enter your email address when it prompts you for a password. Ex. **jdoe@ncsa.uiuc.edu**
ftp>get README	Get the **README** in the default directory. It might contain important information.
ftp> !more README	Check to see what the system administrators have to say.
ftp>cd /mac/eudora	Change the directory to the one which contains the application.
ftp>get README	Get the **README** file in the /mac/eudora directory. It probably contains important information
ftp>bin	Change the transfer mode to binary. Necessary for all files other than text files. Text files do not have any suffixes like .hqx or .sit.
ftp>get eudora1.2.2.i.sit.hqx	Transfer the eudora application
ftp>get 1.2man.glue.sit.hqx	Transfer the Eudora 1.2 manual.
ftp>get diskcopy.hqx	Transfer DiskCopy.
ftp>bye	Close the connection and quit the ftp program. This will return you to your system prompt.

The following commands are recognized by ftp:
append local-file [remote-file] Appends a local file to a file on the remote machine. If remote-file is not specified, the local file name is used in naming the remote file. File transfer uses the current settings for type, format, mode, and structure.

ascii Sets the file transfer type to network ASCII. This is the default type.

bell Arranges for a bell to sound after each file transfer command is completed.

binary Sets the file transfer type to support binary image transfer.

bye Terminates the FTP session with the remote server and exits ftp.

case Toggles the remote computer's file name case mapping during mget commands. When case is on (default is off), the remote computer's file names are written in the local directory with all letters in upper case mapped to lower case.

cd remote-directory Changes the working directory on the remote machine to remote-directory.

cdup Changes the remote machine working directory to the parent of the current remote machine working directory.

close Terminates the FTP session with the remote server and returns to the command interpreter.

cr Toggles the carriage return stripping during ascii type file retrieval. Records are denoted by a carriage return/linefeed sequence during ascii type file transfer. When cr is on (the default), carriage returns are stripped from this sequence to conform with the UNIX single linefeed record delimiter. Records on non-UNIX remote systems may contain single linefeeds; when an ascii type transfer is made, these linefeeds may be distinguished from a record delimiter only when cr is off.

delete remote-file Deletes the file remote-file on the remote machine.

dir [remote-directory] [local-file] Prints a listing of the directory contents in the directory, remote directory, and, optionally, places the output in local file. If no directory is specified, the current working directory on the remote machine is used. If no local file is specified, output comes to the terminal.
disconnect A synonym for close.

form format Sets the file transfer form to format. The default format is file.

get remote-file [local-file] Retrieves the remote-file and stores it on the local machine. If the local filename is not specified, it is given the same name it has on the remote machine. The current settings for type, form, mode, and structure are used while transferring the file.

lcd [directory] Changes the working directory on the local machine. If no directory is specified, the user's home directory is used.

ls [remote-directory] [local-file] Prints an abbreviated listing of the contents of a directory on the remote machine. If remote-directory is left unspecified, the current working directory is used. If no local file is specified, the output is sent to the terminal.

mdir remote-files local-file Obtains a directory listing of multiple files on the remote machine and places the result in local-file.

mget remote-files Retrieves the specified files from the remote machine and places them in the current local directory. If globbing is enabled, the specification of remote files will first be expanding using ls.

mkdir directory-name Makes a directory on the remote machine.

mls remote-files local-file Obtains an abbreviated listing of multiple files on the remote machine and places the result in local-file.

mput local-files Transfers multiple local files from the current local directory to the current working directory on the remote machine.

open host [port] Establishes a connection to the specified host FTP server. If an optional port number is supplied, ftp attempts to contact an FTP server at that port. If the auto-login option is on (default), ftp automatically attempts to log the user in to the FTP server (see below).

prompt Toggles interactive prompting. Interactive prompting occurs during multiple file transfers to allow the user to retrieve or store files selectively. If prompting is turned off (default), any mget or mput transfers all files.

get and **mget** transfer files from the host on the primary control connection to the host on the secondary control connection

put, **mput**, and **append** transfer files from the host on the secondary control connection to the host on the primary control connection. Third party file transfers depend upon support of the ftp protocol PASV command by the server on the secondary control connection.

put local-file [remote-file] Stores a local file on the remote machine. If remote-file is unspecified, the local file name is used in naming the remote file. File transfer uses the current settings for type, format, mode, and structure.

pwd Prints the name of the current working directory on the remote machine.

quit A synonym for bye.

recv remote-file [local-file] A synonym for get.

rename [from] [to] Renames the file from on the remote machine, to the file to.

reset Clears the reply queue. This command re-synchronizes command/reply sequencing with the remote ftp server. If the remote server violates the ftp protocol, resynchronization may be necessary.

rmdir directory-name Deletes a directory on the remote machine.

runique Toggles storing of files on the local system with unique filenames. If a file already exists with a name equal to the target local filename for a get or mget command, a .1 is appended to the name. If the resulting name matches another existing file, a .2 is appended to the original name. If this process continues up to .99, an error message is printed, and the transfer does not take place. The generated unique filename will be reported. Note that runique will not affect local files generated from a shell command (see below). The default value is off.

send local-file [remote-file] A synonym for put.

status Shows the current status of ftp.

sunique Toggles storing of files on a remote machine under unique file names. The remote ftp server must support the ftp protocol STOU command for successful completion of this command. The remote server reports the unique name. Default value is off.

tenex Sets the file transfer type to that needed to talk to TENEX machines.

trace Toggles packet tracing.

type [type-name] Sets the file transfer type to type name. If no type is specified, the current type is printed. The default type is network ASCII.

user user-name [password] [account] Identifies the user to the remote FTP server. If the password is not specified and the server requires it, ftp disables the local echo and then prompts the user for it. If an account field is not specified, and the FTP server requires it, the user is prompted for it also. Unless ftp is invoked with auto login disabled, this process is done automatically on initial connection to the FTP server.

verbose Toggles the verbose mode. In verbose mode, all responses from the FTP server are displayed to the user. In addition, if verbose is on, statistics regarding the efficiency of a file transfer are reported when the transfer is complete. By default, verbose is on.

? [command] A synonym for help.
Command arguments which have embedded spaces may be quoted with quotation (") marks.

Aborting a file transfer To abort a file transfer, use the terminal interrupt key (usually <CTRL/C>). Sending transfers are halted immediately. Receiving transfers are halted by sending a ftp protocol ABOR command to the remote server, and discarding any further data received. The speed at which this is accomplished depends upon the remote server's support for ABOR processing. If the remote server does not support the ABOR command, an ftp> prompt appears when the remote server has completed sending the requested file.
The terminal interrupt key sequence is ignored when ftp has completed any local processing and is awaiting a reply from the remote server. A long delay in this mode may result from ABOR processing, or from unexpected behavior by the remote server, including violations of the ftp protocol. If the delay results from unexpected remote server behavior, the local ftp program must be killed by hand.

File-naming conventions Files specified as arguments to ftp commands are processed according to the following rules:

1) Standard input is used for reading and standard output is used for writing when the file name is specified by an en dash (-).

2) If the first character of the file name is a vertical line (|), the remainder of the argument is interpreted as a shell command. The ftp command then forks a shell, using popen(3) with the argument supplied, and reads (writes) from the stdout (stdin). If the shell command includes spaces, the argument must be quoted, as in ""| ls -lt"". A particularly useful example of this mechanism is: "dir |more".

3) If globbing is enabled, local file names are expanded according to the rules used in the csh(1) (compare to the glob command). If the ftp command expects a single local file, such as put, only the first filename generated by the globbing operation is used.

4) For mget commands and get commands with unspecified local file names, the local filename is the remote filename and can be altered by a case, ntrans, or nmap setting. The resulting filename may then be altered if runique is on.

5) For mput commands and put commands with unspecified remote file names, the remote filename is the local filename and may be altered by a ntrans or nmap setting. The resulting filename can then be altered by the remote server if sunique is on.

Chapter 8:

Eudora

The Incomplete Eudora Manual

For Macintosh users, an alternative to reading your mail through UNIX is using a program called Eudora. Eudora is a mail utility originally developed at the University of Illinois by Steve Dorner. Instead of logging in to a UNIX machine and reading mail through a command-line interface, Eudora lets you read your mail using only your Macintosh. Eudora takes mail from the UNIX machine and saves it on your Macintosh disk drive. You can page through the headers of your messages and click on the ones you want to read. One feature allows you to have multiple mailboxes which you name yourself. This allows you to sort your messages by subject and keep them in their appropriate mailboxes. Eudora also allows you to attach files, like a Microsoft Word document, to a letter.

Many other features are available through Eudora and are covered in the entire Eudora manual. This manual is available from many anonymous FTP sites, including ftp.cso.uiuc.edu in the directory /mac/eudora (see Chapter 7: How to FTP).

System Requirements

In order to use Eudora, these system requirements must be satisfied:

- Macintosh System 6.04 or newer.
- Telecommunications method (e.g., a modem or a high speed network connection)
- Communications software (e.g., Apple Modem Tool and Communications Toolbox, or MacTCP)
- Account on a computer with a POP 3 (Post Office Protocol 3) server.
- Eudora program.

Contents

This Eudora manual is divided into three sections. The first section contains all of the information necessary to receive and send mail. The second section contains answers for some frequently asked questions (FAQ) about Eudora. The last section explains how to set up Eudora for each individual so that it will run properly.

A. Eudora Tutorial

A step-by-step tutorial for the beginner, explaining the basic features of Eudora.

1) How To Check For and Receive Mail
2) How To Create and Send A Letter
    a) Writing a completely new message
    b) Replying to a letter
    c) Sending your letter (and/or reply)
    d) Quitting Eudora

B. Frequently Asked Questions (FAQ)

Helpful tidbits that aren't necessary to use Eudora, but they help.

1) What are those pictures at the top of the New Message window?
2) How can I design a signature block?
3) What if I decide I don't want to send a letter I'm working on?
4) What if there are multiple Eudora users on 1 computer?

C. Initial Setup For Eudora

Gives basic guidance on the first time setup and individualization of Eudora so that you can use it to send and receive electronic mail.

1) Installing the Required Software
2) Opening Eudora 1.3.1 For The First Time
3) Telling Eudora Who You Are (Configuration)
4) Telling Eudora How To Act (Switches)
5) Telling Eudora About Your Modem (Communications)

A. Eudora Tutorial

The following instructions are meant to help you through the basic e-mail/Eudora steps (Eudora is a program that simplifies e-mail/UNIX commands). This "manual" is by no means complete nor even detailed. It was written with the hope that it would allow you to receive and send mail with very little knowledge about Eudora. If you can follow these basic steps, then you should be on the road to becoming an electronic mail expert! Oh yeah...Please don't be afraid to experiment! The best way to learn is just to tinker around and see what happens.

Please make sure Eudora is properly setup (from section C: Initial Setup) before beginning this tutorial.

1) How To Check Your Mail

Step 1: Start the Eudora program

Double-click on the **Eudora 1.3.1** icon. This opens up your individualized Eudora settings from the Initial Setup section (from the "Configuration" command under the Special menu). **If you have multiple Eudora users on one computer, see B.4 in the FAQ section to learn the necessary Eudora start up method**.

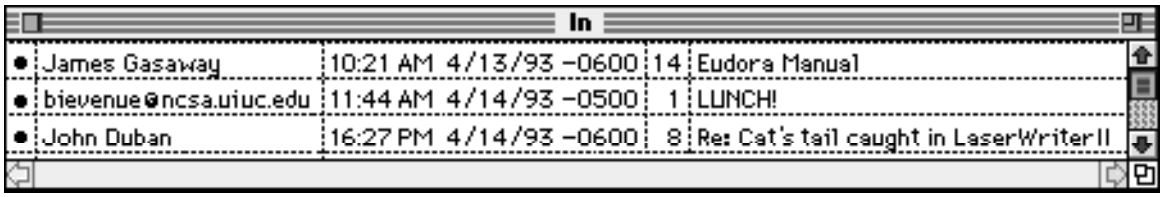
Eudora 1.3.1

Step 2: Get Your Mail

Select the "**Check Mail**" command under the File menu (at the top of the screen). Eudora will automatically contact the mail server and transfer all of your mail to your Macintosh. You just have to sit and wait!

To use the menu bar, simply place the mouse arrow on a menu item and click & hold the mouse button. "Hold" means that you don't let go of the button. Then "pull down" the menu by moving the mouse arrow down the screen. You'll notice that commands become highlighted as you move through the menu. Once you've highlighted the command you desire, simply let go of the mouse button. You've just given the computer a command!

If you receive any mail, Eudora will open up your "In" mailbox window. It'll look something like the one below:



Step 3: Read Your Mail

Just double-click on the message you want to read.

For example, I want to read the message from John Duban titled "Re: Cat's tail caught in LaserWriter II". I would just put the mouse arrow somewhere along the bottom five rectangles belonging to John Duban and double-click.

By double-clicking on a message, it will open into its own individual window so you can read it.

2) How To Create and Send A Letter

a) Writing A Completely New Message

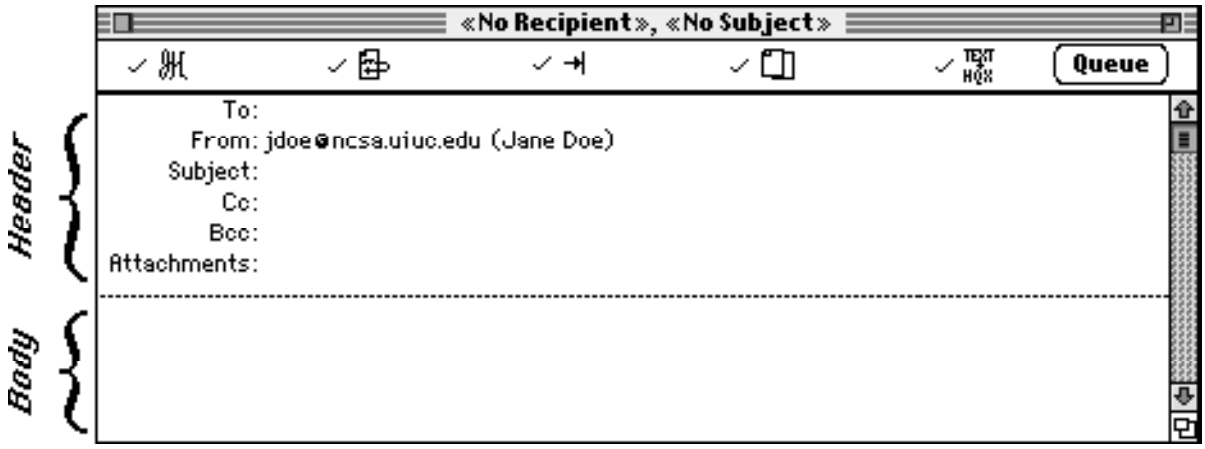
Step 1: Open New Message Window

Select "**New Message**" under the Message menu.

Note: There are two New Message commands in this menu. In fact there are several double commands here. The bottom commands with the "To" following them are shortcuts related to the "Nicknames" command under the Special menu. See a more complete manual for details.

This command opens a letter that automatically lists you as the sender.

A window will appear similar to the one below. The window is divided into two sections: the header and the body. The top part is called the header and is where you'll enter the address of the person(s) you're writing to. The bottom part is called the body and is where you'll actually type your message.



Step 2: Fill In The Header

a) Enter the person's e-mail address on the "**To:**" line.
b) Use the TAB key on the keyboard or the mouse (point and click where you want the cursor to be) to move the cursor to the next header line.
c) Type in the subject of your letter on the "**Subject:**" line. Be specific!
d) For now just ignore "**Cc**, **Bcc**, and **Attachments**". They're not necessary for sending a message. Just move down to the body of the message window (the empty space at the bottom) in order to begin your actual message.

Step 3: Write Your Message

It's exactly like typing a "normal" letter! Just place the cursor into the body of the message window by using the TAB key or the mouse (point and click in the body) and start typing.

Don't worry about hitting the RETURN key at the end of each line; Eudora's word wrap will take care of that (see What are those pictures at the top of the New Message window? in the FAQ section). Just use the RETURN key at the end of each paragraph. Note that the TAB key acts "normally" here; that is, now it moves the cursor to the right instead of down the page like it did in the header.

Step 4: Prepare Your Letter For Mailing

"**Queue**" your message by moving the mouse pointer to the Queue button and clicking (once). This places the letter into the Out mailbox so that you can mail it after you finish writing all of your letters (see the Sending Your Letter (and/or Reply) section).

You can still go back and edit any queued letters (in the "Out" mailbox) until the time you send them.

b) Replying To A Letter

Step 1: Open Reply Window

While you are reading the message, select "**Reply**" under the Message menu.

You'll get a window with a pre-addressed letter back to the original author in the "To" header. Eudora also fills in the "Subject" header. Of course, you are automatically listed in the "From" header as well.

In addition to the letter already being addressed, Eudora copies the original manuscript into this letter, each line being preceded by an arrow ">" (or more than one arrow depending directly on how many times a selection is sent back and forth between people).

This allows you to edit the original manuscript in order to remind people what you're replying to.

Step 2: Edit Letter

Just edit the original part of the letter to your heart's content, then add your comments exactly as if you were writing a new message. You can place your comments anywhere you want, such as replying to each point right after it's listed or by placing all your points together at the beginning or end of the document.

Step 3: Prepare Your Letter For Mailing

Queue the message exactly like the previous section, A.2.a step 4.

c) Sending Your Letter (and/or Reply)

After you've typed and queued all of your messages, send the mail to the "post office" by selecting "**Send Queued Messages**" under the File menu (at the top of the screen).

Eudora will contact the computer server and physically transfer your mail to that computer. The computer will sort and send your letters to their respective addresses. If you've misaddressed any of your letters, they'll be sent back to you, just like the post office.

d) Quitting Eudora

DON'T FORGET TO QUIT!!

When you're through dealing with your e-mail, you can quit the Eudora program by selecting the "**Quit**" command under the File menu.

You don't want anyone to accidentally read your mail, do you?

B. Frequently Asked Questions (FAQ)

1) What are those pictures at the top of the New Message window?

means "John Hancock" or automatic signature block attachment. (See section B.2)

symbolizes word wrap (versus hitting return after each line).

symbolizes the tab function.

refers to Eudora's ability to keep copies of the letters you mail.

means "BinHex" text. Check this if you're sending a document to another Eudora user.

You can activate or deactivate them simply by clicking (once) on their individual pictures. A check mark ✓ means it's activated. Their default settings are controlled in the Switches window (see the Initial Setup section C.4).

2) How can I design a signature block?

Select "**Signature**" under the Special menu.

Then type away! Once you've finished typing, click (once) in the upper left-hand box of the signature window to close it.

I recommend that you use a format similar to the one below:

You may notice that I left the first line blank. This is because Eudora puts your signature block under the last typed line.

3) What if I decide I don't want to send a letter I'm working on?

You can "Discard" or "Save" any message you create.

If you want to quit writing a message, simply click (once) in the message window's upper-left hand box to close it. Eudora will ask you to "Save" or "Discard" your work. Just click in your choice.

4) What if there are multiple Eudora users on 1 computer?

In order to support multiple Eudora users on one Macintosh, you must create a Eudora folder (just like in section C.2 Opening Eudora 1.3.1 For The First Time) for each person.

This is possible if you **remove** each Eudora folder from the system folder after it's been created. Then you can place those Eudora folders anywhere you want. Some people have one general mail folder containing folders with people's names on them. Inside each person's folder is their individual Eudora folder. Other people keep their Eudora folder on an individual floppy disk, while the Eudora 1.3.1 program stays on the computer.

To start Eudora you must double-click on the **Eudora Settings** icon instead of the Eudora 1.3.1 icon. Remember, the Eudora 1.3.1 icon creates a *new* Eudora folder in the system folder if one is not already there! You want to open your individual Eudora setup, not create a new one.

Eudora Settings

You can prevent people from using the Eudora 1.3.1 icon to start Eudora (and subsequently creating a new, blank folder) by placing an empty folder (or a blank TeachText document) named "Eudora folder" into your system folder. Double-clicking on the Eudora 1.3.1 icon will then give you a reminder to use the Eudora Settings icon.

Feel free to rename the Eudora Settings icon to something else, like "<your name>'s mail", as a reminder to double-click on that icon. (You could also make an alias of this icon.) Just remember that the Eudora Settings icon **must** remain in a folder with your mailboxes (In, In.toc, Out, Out.toc, Trash, etc...).

C. Initial Setup For Eudora

1) Installing the Required Software

Eudora 1.3.1

To run Eudora you need to make sure you have the correct software. Obviously, some version of **Eudora** is required! This manual talks about version 1.3.1 because it's readily available at many anonymous FTP sites. Refer to Chapter 7: How to FTP to learn how to obtain Eudora if you don't already have it. As long as Eudora is somewhere on your hard disk (i.e., not on a floppy disk), it's installed! If it's on a floppy disk, just copy it onto your hard disk.

There are other communication software files that you need within your system folder, depending on the type of connection you have to your mail server. Below, sections a and b differentiate between the different requirements.

Apple Modem Tool

a) People using only a modem need a file called "**Apple Modem Tool**" placed
in their extensions folder (within the system folder). Also, it must be version 1.1.1 or later; otherwise the Eudora program will give you error messages (you can check to see what version you have by clicking once on the Apple Modem Tool icon and selecting the "Get Info" command under the File menu).

MacTCP

b) People using a SLIP connection or a high speed network connection need
MacTCP in their control panels folder (within the system folder). The Apple Modem Tool is not required in this case, even if you are using a SLIP connection over a modem.

System 6 users need some software called "**Communications Toolbox**" installed into your system folders. System 7 automatically incorporates this software into its operating system. There's no easy way to determine if it's already installed; but if it's not, then Eudora will tell you that you need to install it.

2) Opening Eudora 1.3.1 For The First Time

Eudora 1.3.1

When using Eudora for the first time, simply double-click on the **Eudora 1.3.1** icon. A folder entitled "Eudora Folder" will appear in your system folder. This contains your initial mailboxes and a very important file called "Eudora Settings".

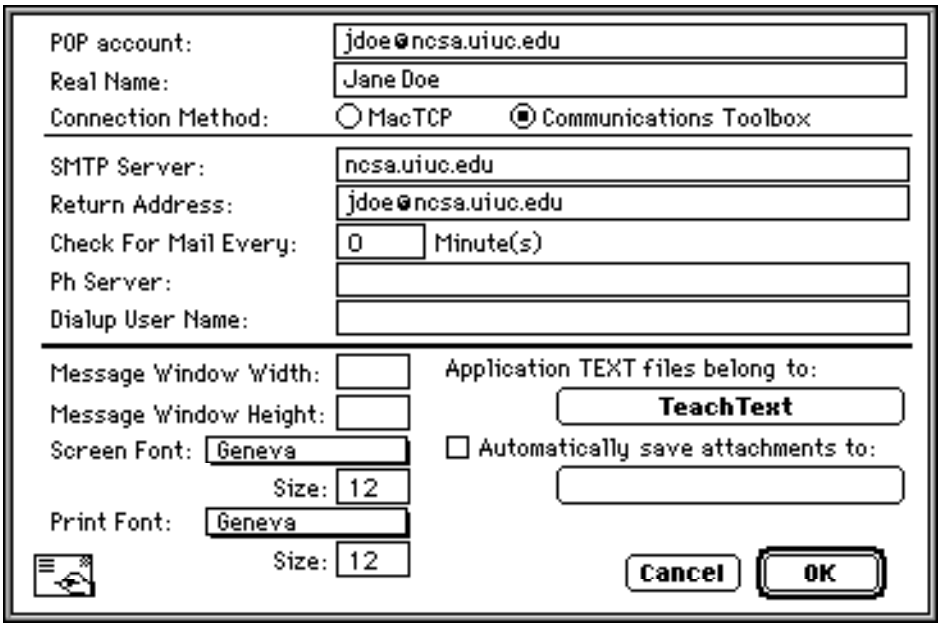
When the Eudora program is open, the menu bar at the top of the screen looks like this:

When you click & hold the mouse button down on one of these menu words, it offers you more selections related to the title word. For instance, under "Edit" there are various commands such as Cut, Copy, and Paste which are used to alter text. To select a menu item, just drag down the mouse until the command is highlighted and release the mouse button.

3) Telling Eudora Who You Are (Configuration)

Select "**Configuration**" under the Special menu.

A window should appear on your screen that looks something like the picture below, except most of the boxes will be empty.



POP account:

To use Eudora you need to have an account on a computer that runs a POP 3 (Post Office Protocol) program, such as NCSA's Sun computers. In the "POP account" box, enter **your** login name and the full (domain) name of the computer, separating them with an "@" sign. In other words, your **e-mail address** goes here.
For example, Jane Doe is a teacher at Golden Rule Elementary School in Urbana, Illinois. NCSA gave her an account with a login name of "jdoe" on a computer called "ncsa.uiuc.edu". She would enter *jdoe@ncsa.uiuc.edu* as her name and address in the POP account box. Please note the placement of the periods in the address; they're important!

Connection Method:
There are two choices here, depending on the type of connection you are using:

a) If you only have a modem connection, Communications Toolbox should be selected as the connection method. This means that you're using the Communications Toolbox software for communications.

b) If you have a SLIP connection or a high speed network connection, then you should select MacTCP as your connection method, indicating that you're using MacTCP software.

SMTP Server:
To send mail, you need access to a computer with an SMTP (Simple Mail Transfer Protocol) program. This does not require a login. If your POP account is on a computer that also runs an SMTP program (like NCSA's server), you don't have to put anything in this box. Otherwise, you have to type in the name of your SMTP server.

The previous page listed the **minimum** amounts of information that Eudora needs within the "Configurations" settings in order for you to send and receive mail. The selections not talked about above can be used, but they're not necessary for Eudora to function. Feel free to imitate the picture or to read about more settings below to find out what they mean! Otherwise, continue with the next section: Telling Eudora How To Act (Switches).

Real Name:
Just type in the name you want to be known as. For example, Jane realizes that not everyone will know who "jdoe@ncsa.uiuc.edu" really is. So in this box she enters Jane Doe in order to let people know who's writing to them. It adds a nice human touch!

Return Address:
Use this box to indicate what you'd like to state as your return address on outgoing messages. For most people this will be the same as your login name and address, but some people have more than one e-mail account. You can leave this blank, and Eudora will use your exact POP account address as your return address. If you do enter something here, be careful! If you accidentally mistype your address, replies to your messages will never get back to you.

Check For Mail Every ? Minute(s)
If you enter a number greater than zero in this box, at regular intervals Eudora will automatically check to see if you have mail, and it will transfer any mail it finds to your Macintosh. So if you enter 10, Eudora will contact your mail server and check for your mail every ten minutes starting from the time you open up the program. If you leave this empty, Eudora will default to 0 minutes; meaning you'll have to manually ask Eudora to check for your mail (select "Check Mail" under the File menu). Keep in mind, this automatic checker only works while the Eudora program is opened up and running!

Ph Server:
This space allows you to enter the name of a computer that runs a "phone book" program (which you use by selecting "Ph" under the Special menu). Not everyone has access to these programs, so you should ask your system administrator about this capability.

Dialup User Name:
Some people who use a modem with the Communications Toolbox need a secondary user name during the dialup process (NCSA does not). If this is your case, you enter your secondary login name here. If you're not sure, contact your system administrator.

Application TEXT Files Belong To:
This simply tells Eudora which word processing software you would like to use if you save a Eudora message as a document (by selecting "Save" under the File menu). Just use your simplest or most favorite word processor program!

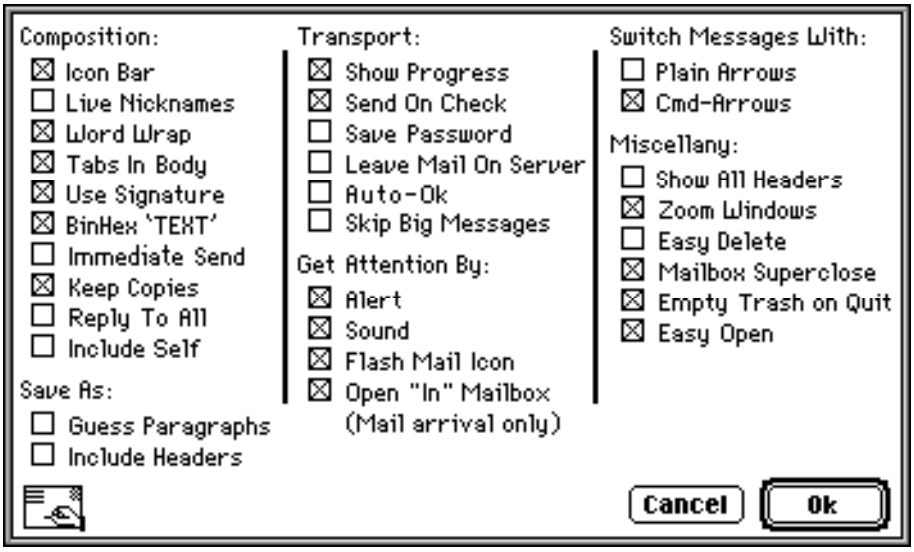
Automatically Save Attachments To:
If this option is checked, Eudora will automatically put file attachments that come with messages into a folder of your choice. For my mail messages, the folder I have designated to receive mail attachments is labeled "attachments", and I keep it in my Eudora folder. To change where the attached mail messages go, just click on the large box and select a different location and/or folder.

4) Telling Eudora How To Act (Switches)

Select "**Switches**" under the Special menu.

There's a lot of preference choices in the switches window below, so we'll just concentrate on "Immediate Send" and suggest you make your window look like ours.

Eudora will run fine if you completely ignore this step.
But if you make sure that "Immediate Send" is not checked, then you'll save yourself time and a lot of phone calls (with the modem). Instead, Eudora will queue your outgoing letters (see section A.2.c Sending Your Letter (and/or Reply)) so that they'll be bundled and all sent at the same time. This is like going out to the mailbox with five letters at once rather than making the trip five separate times!



The following switches, which appear in the window above, can also be controlled within every one of your outgoing messages:

- Word Wrap
- Tabs In Body
- Use Signature
- BinHex 'TEXT'
- Keep Copies

Section B.1 discusses how to change these switches from inside your messages, so that you don't have to go back into this window every time you want to change one of these settings.

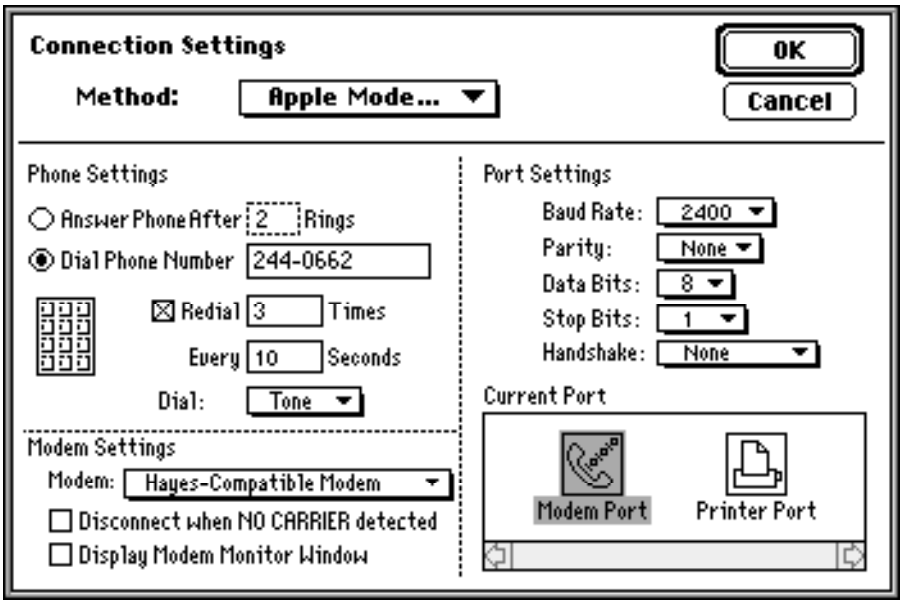
Again, if you would like more specifics on any of the switches settings, please feel free to read a more detailed manual, experiment, and/or contact someone here at NCSA!

5) Telling Eudora About Your Modem (Communications)

Note: You only have to make these settings if you are using a modem and have selected "Communications Toolbox" as your connection method within the Configuration window.

Select "**Communications**" under the Special menu.

A window should appear on your screen that looks something like the picture below (the phone number won't be entered):



Phone Settings:

These settings are self-explanatory! If you have an NCSA account, you do need to know that there are three phone numbers to the NCSA terminal servers: 244-0662/63/64.
Of course, you can put any phone number in here, but unless you have an account at that location (and enter the required information within the "Configuration" window) you won't find any mail. Remember that some phones require you to dial "9" in order to get an outside line. This number must be included in the box (Eudora dials no differently than you do)!

Modem Settings:

Eudora simply wants to know what type of modem is hooked up to your computer. Check the modem or its instruction manual for the brand name (e.g., Apple Data Modem 2400). To change this setting, click & hold the upside down triangle " ▾" in the box to see your options. Then drag the highlighted area to your desired selection and let go.

Port Settings:

Worry about the "**Baud Rate**" in this section. Baud rate indicates how fast information is transferred (bits per second). All you have to do is set this box equal to the baud rate of your modem (e.g.,

2400). This information can be found in the modem's manual or it may be listed on the modem itself.

Current Port:
Select the picture of the port in the back of your computer that you plugged the modem cable into. If you plug it into the hole with the phone picture, click on that picture.

Chapter 9:

Apple Remote Access

Apple Remote Access

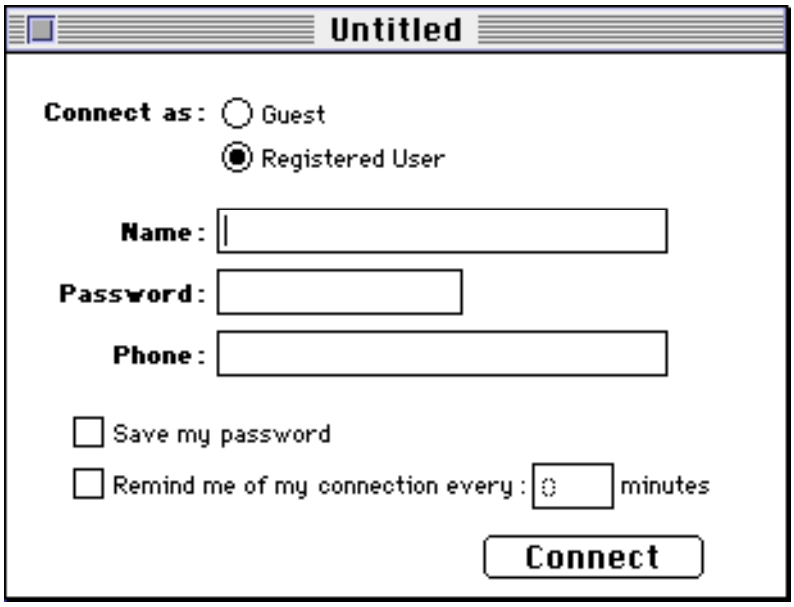
Apple Remote Access (ARA) is a software package from Apple Computer that allows the user to connect to a network via modem. While ARA requires system 7 and 2 modems (one for each computer), it greatly enhances the versatility of the Mac.

Equipped with ARA, a user can now work at home while still having direct access to their Mac at work or school. Moreover, ARA can grant the remote user access to every Mac or printer that is on the same network as the host Mac. Remote file exchange has never been easier.

Once connected the user simply opens the Chooser and selects the desired printer or Mac. ARA will mount the remote hard drive on their Mac, just as if it were directly connect to the computer. While the transfer speed will not approach that of a dedicated network, transfer rates using ARA are limited only by the speed of the modems. By employing modems with transfer rates of 9600 baud or greater, a user can achieve faster data transmission than many terminal servers which operate at 2400 baud. The ease with which this is achieved is remarkable.

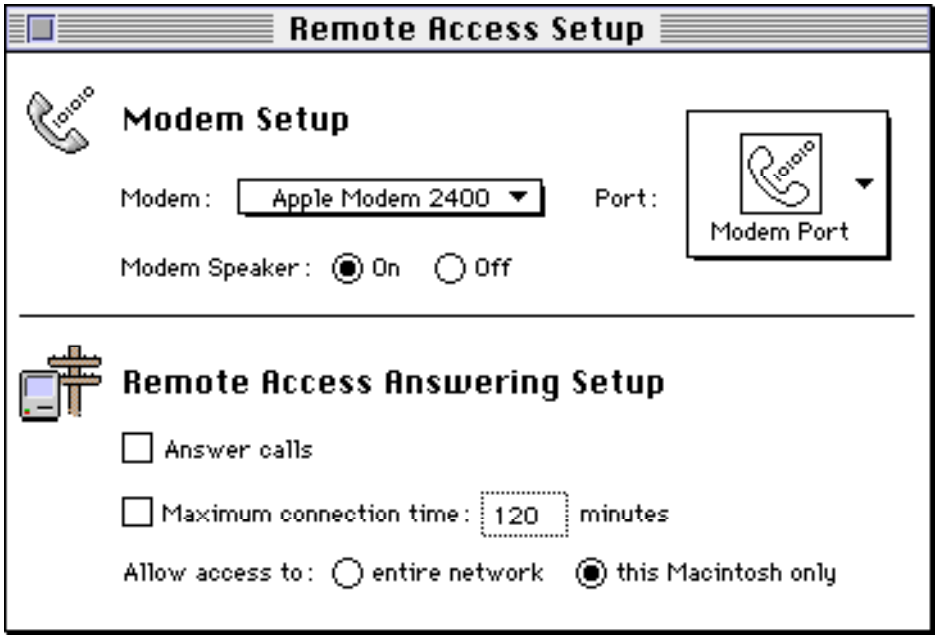
Connecting for the First Time:

A first time user of ARA will be presented with the following window:



Before filling in the requested information, the user should first check the settings that ARA will be using. The window in which the settings are changed is brought up by selecting the '**Remote Access Setup**' item in the '**Setup**' menu.

The new window should be similar in appearance to the following:



It is essential that you get the **Modem:** and **Port:** settings correct. These are determined by your hardware configuration. **Modem:** is the type of modem connected to the Mac. And **Port:** is the port through which the computer and the modem communicate.

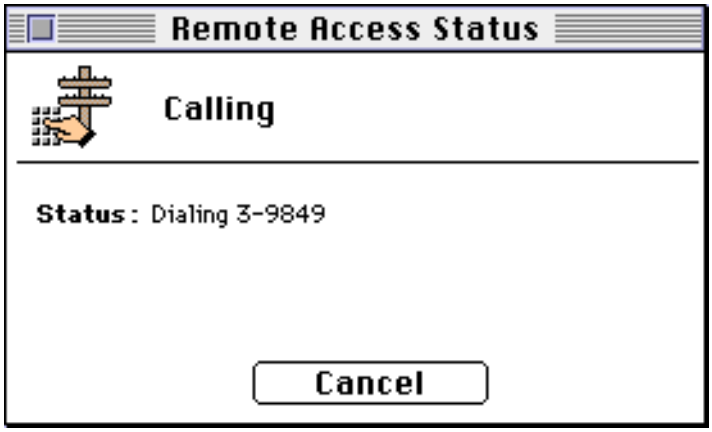
After the changing the settings to reflect the correct hardware configuration, it's time to enter the information used to connect to the host computer.

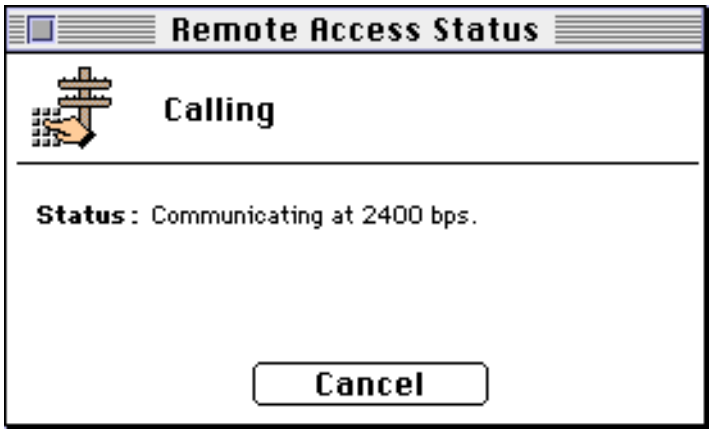
Your window might look something like the following:

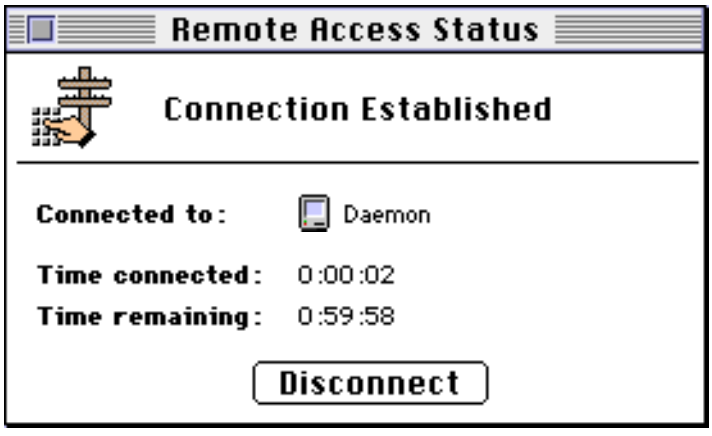
Rarely will a user be allowed to connect as guest. By selecting 'Registered User' the user will need to enter their name and password. These will most likely be set previously by the owner of the host computer . After the telephone number, user's name and password have been entered, it would be a good idea to save the information.

At this point all that's left is to try to connect to the remote host. The connection can be initiated by clicking in the '**Connect**' box in the above window.

The user should see the following sequence:

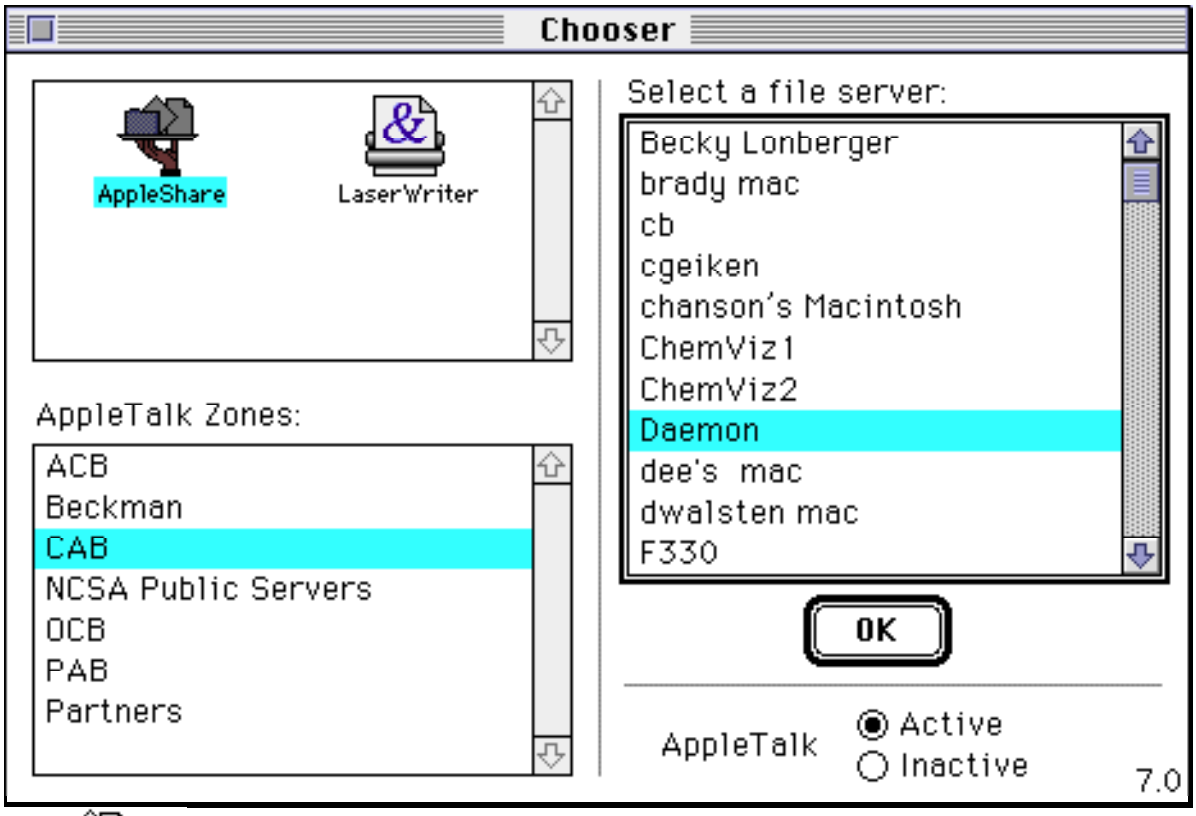






At this point your Mac is connected, via telephone line, to the remote host.

Simply select the '**Chooser**' item in the menu. This will bring up the **Chooser** window.

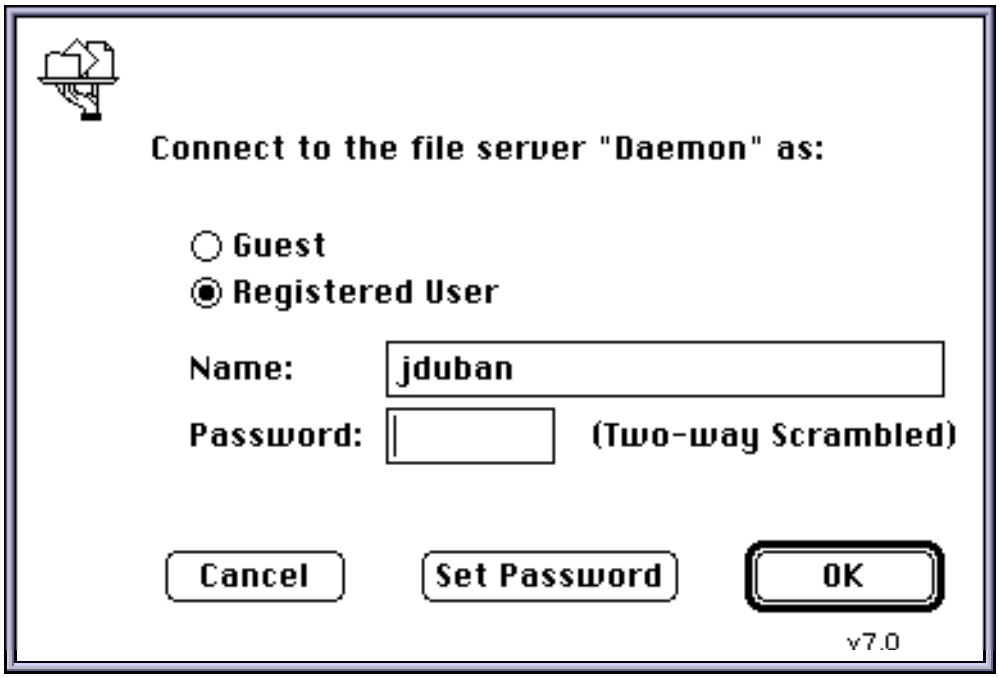


Selecting this icon, brings up a list of computers that are currently on the network.

Selecting this icon, brings up a list of printers that are currently on the network.

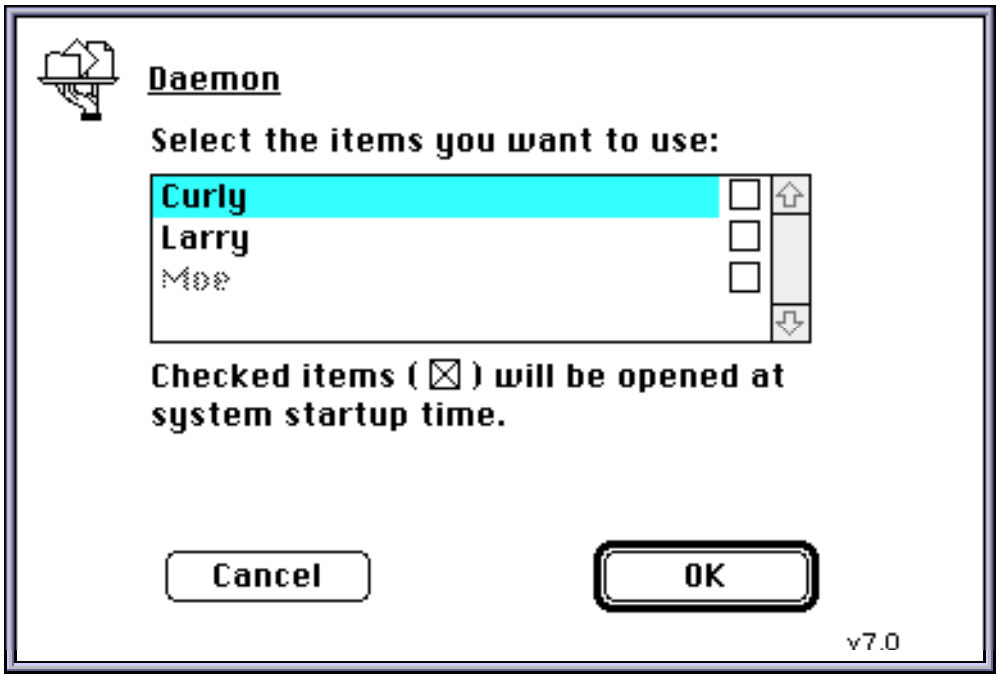
The network may be divided into separate zones. Each building or special group typically has their own zone. By selecting the appropriate zone, the name of the computer to which you want to connect will appear in the **File Server** box on the right.

After selecting the desired zone and computer, clicking on the **Okay** button will bring up the following window:



Here the user will indicate whether or not they wish to connect as a guest or register user. While **Guest** connections are usually very restrictive, **Registered User** connections are only given out to those that have a valid reason to connect. If connecting as a registered user, the user will need to enter his login name and password for that machine. If the password has not been set, now is the time to do it.

After a connection has been made, a window similar to the following will appear.



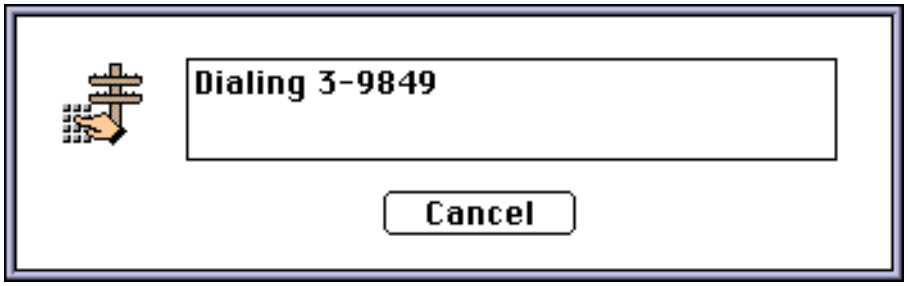
These are the hard drives currently connected to the host machine. Moe is grayed out, indicating that the user does not have access to that drive. Highlighting the desired drives and clicking on the **Ok** button will cause the icons for the drives to appear on your desk top. To copy a file to the remote drive, simply find the desired file and drag it to the desktop or into the local drive. Copying to the hard drive is just as simple. Occasionally some folders may have a belt around them. This indicates that the remote user does not have the privileges to access that folder.

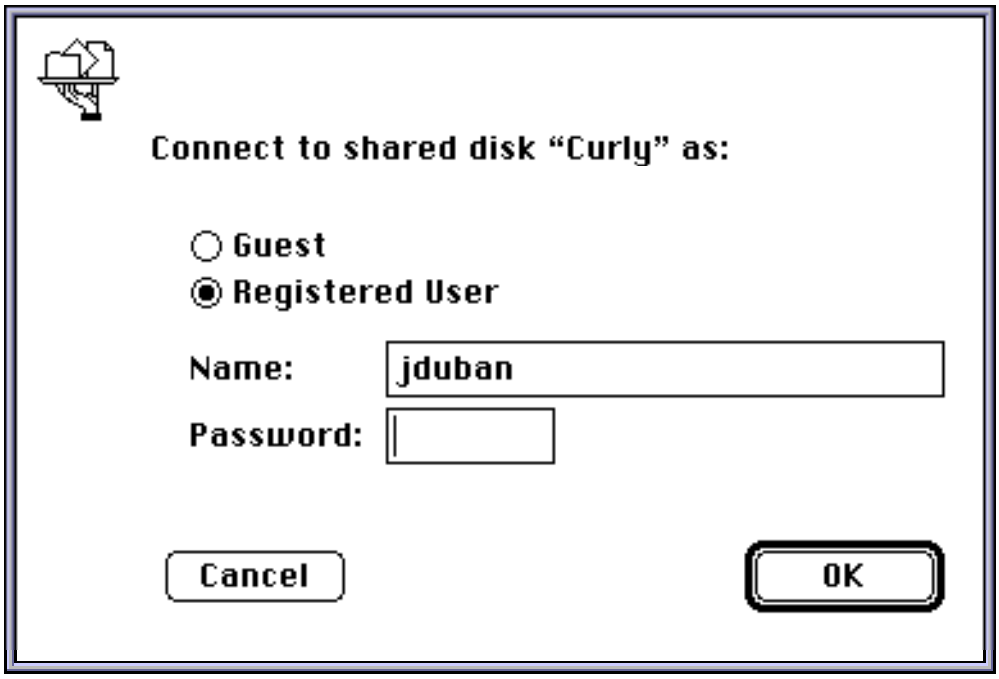
Connecting Using a Alias:

Connecting can be greatly simplified by creating an alias to the remote drive. When the user is connected to a remote drive, simply highlight it and select **'Make Alias'** in the **'File'** menu. The alias will appear next to the icon that is highlighted. The alias can be placed anywhere. A likely place is in the **Apple Menu** folder.

Simply by opening the alias the user will be able to access the remote drive. This action will bring up the next window.

This is the password that is required by the computer that the user is calling. After entering it, the following series of windows will appear:

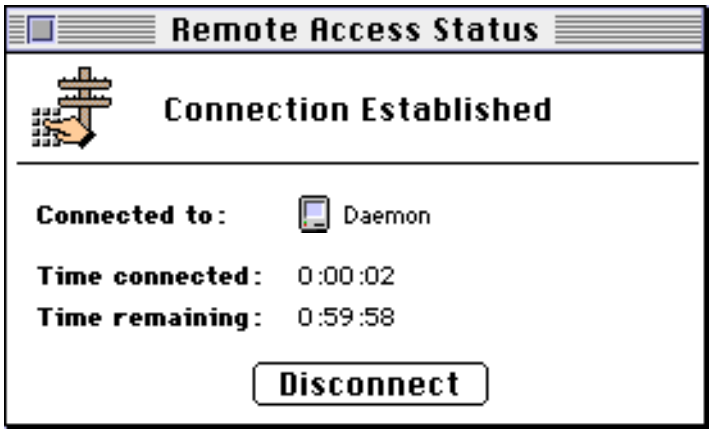




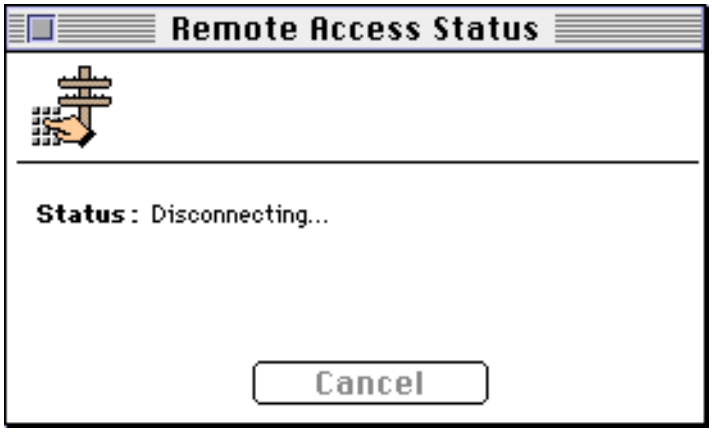
At this point you need to enter the password that allows you access to the remote drive. After the correct password is entered, the remote drive's icon will appear on the users desktop. Much shorter and simpler than the first method.

Disconnecting From the Remote Host:

There are a couple of steps that are necessary to disconnect from the remote host. First you need to drag the icons of the remote drives to the trash. Then, from within ARA click the disconnect button.



Failure to do so will leave the phone connection open, needlessly running up the users phone bill and preventing others access to that host. The ARA status window should briefly look like the following:



Part III

Projects, Ideas, and Resources

This section will discuss networking projects and offer a few ideas. There are several categories which can be used to describe projects that use Internet and other networks. Some of these categories are real-time (interactive), electronic mail and bulletin boards. Most projects can use any of these methods and each method has a particular advantage. Interactive projects have immediate feedback and a more informal feel. A good comparison would be a phone conversation. Electronic mail (e-mail) is just like sending a letter, it has the same advantages and disadvantages as real mail (although e-mail is much faster than surface mail). There tends to be a longer turn around time than interactive projects and more complete responses. Electronic bulletin boards invite a large number of people to discuss your topic or question. Some of these people may just ask questions or give an electronic nod of approval, but they may also debate your point by posting opposing views. The particular method which you might want to use depends on the project and your equipment.

An Interactive project requires the most preparation and is the most demanding on resources. Most interactive projects are some form of a "chat". Chat is jargon for having a set up where two or more users can communicate directly. As one user types a message on their machine, that message is being sent to all of the other people in the chat at the same time. To set up a chat, one must first find a host for the chat, such as Cleveland Free Net, that is available when you want and is willing to be the host. Coordinating all parties involved tends to be the most difficult part of a chat.

Electronic mail is a good method for projects that do not have time constraints. It might take as much as five to seven days to get a response with electronic mail. This allows time for delivery, reading, composing a response, and the return delivery. It does not allow for responses that need research and assumes that the recipient checks their mail two to three times a week. Many schools do not have the resources or freedom to allow their classes to check their mail everyday. A prearranged schedule may help to "speed up" responses. If everyone checks their mail only on Friday afternoons, then it would take two weeks to get a reply. But, if you check your mail on Tuesday and the other party checks their mail on Friday, then you should have your response when you check your mail the following Tuesday. If you are sending mail to people who check their mail at least once a day, like most of us at NCSA, then you may even get a response the next day. Using e-mail also helps students to develop their letter writing and grammatical skills.

Bulletin boards are the middle ground between chatting and e-mail. Newsgroups are similar to bulletin boards. News groups (more commonly called "net news" on Internet) are a collection of groups that are dedicated to specific issues. For instance, a news group called "rec.music.beatles" is a forum for the discussion of the Beatles and related issues. There are news groups for just about any topic you could imagine: alternative lifestyles, education issues, comic books, etc. When you send a message to a bulletin board or a news group, that message is sent to millions of potential readers. Any of those readers may choose to post an answer or comment to your note. You or anyone else may post a rebuttal and so on. Most postings will get an answer within a day or so. It is not unusual for more obscure topics to go unanswered or to have a controversial posting generate twenty or more responses in a single day. This method is a good way to seek advice or answers.

Chats, e-mail, and bulletin boards are three basic methods of doing network projects, but the number of possible projects is only limited by imagination. One simple use of the network is to use it as an expert resource.

You can send e-mail to college professors or post a note to a group and get the information faster than searching for the data in all of the libraries in town. You can also have your students use the network as a resource for a project or just to ask questions. Several systems offer electronic question and answer services. You can also set up a mentor type program with more advanced students or even university people. The NCSA "Ask the Scientist" program is an example. In this program, elementary and middle school students send questions to advanced high school science classes using e-mail and the high school students research the questions and respond with an understandable answer.

Internet is an international system, so you can use the network to communicate with people in other countries. You can compare cultures or work on a project together. Some current projects using the international aspect are the Global Grocery List and Glasnet. Both of these projects are described in detail in following chapters.

Some federal and public agencies have their own bulletin boards. NASA has a board which contains a large volume of information concerning their current or past projects. The National Science Foundation also maintains a bulletin board for monitoring projects or checking on grants. Most bulletin boards are run either by educational sources or computing agencies. Cleveland Freenet and FrEdMail are examples of educationally based bulletin boards, even though these two both are very different. These boards are discussed in depth in other sections of this manual. There are also bulletin boards, such as CompuServe, which are excellent software and technological information resources.

Chapter 10:

Current Internet Projects

This appendix contains a collection of current projects or projects that reoccur seasonally or annually. Most of these projects have periodic deadlines for preregistration or participation. All of the information necessary to participate in a project has been included. The following is a list of the projects followed by a brief description, the page number for the full article is listed on the right.

Ask the Scientist 93
Grade schools student submit science questions to AP classes.

Ask Prof. Maths 94
Any student or teacher in grades K-8 may ask ANY mathematics related question and the Prof. Maths team will respond within two school days.

The Global Schoolhouse (SAFER Water Project) 95
Students will be asked to investigate the problems created by water run-off and to design a public awareness program that can be implemented in their own communities, and then shared globally.

CoSN News 96
The Consortium for School Networking (CoSN) is a membership organization of institutions formed to further the development and use of computer network technology in K-12 education.

Story Scramble 99
Second and Third Graders summarize, scramble, and then exchange stories with other classes. Then the students try to unscramble the story based on grammitical clues.

Navigating the Internet: An Interactive Workshop 100
Where to retrieve the lesson plans and materials related to an online Internet class.

Kids Weathernet 101
The purpose is to bring together as many classrooms as possible in a joint sharing of weather and climatic data.

Tele-Fieldtrips 102
Promote knowledge sharing by taking virtual fieldtrips or providing the fieldtrip for others.

The Reynoldsburg Geography Project 107
After exchanging a few letters, the students will then be instructed to learn as much as possible about the other student's country through research.

Longest Day of the Year 109
Comparing duration of longest solar day against longitude and latitude in varied locations.

GEOGAME 110
Students try to locate other participants locations using a series of clues.

Environmental Problems discussion 113
Student e-mail discussion of environmental concerns and related issues.

Global Grocery List 114
Students compare prices of common items around the world

TeleOlympics 117

Students compete in events locally and then the best are matched electronically against the best students from all around the world

KIDS-ACT (What Can I Do Now?) 120

Welcome to KIDS-ACT - the space set up for 10-15 year old young people who want to discuss what THEY can do NOW to achieve their future visions.

Biomes Project 121

Exchange of information, data, pictures, and possibly specimens of plants, soil and rocks from their biome with students from other biomes.

NEWSDAY 122

Students gather and post articles and then assemble a newspaper from either their own or other's articles. Judging for the best paper is done by participants.

SuperQuest 131

The Computational Science Challenge for High School Students and Teachers promoting the study of high school science through the use of computing resources.

Grand and Everyday Challenges for Education 132

Challenges designed to develop students problem solving skills, especially working collaboratively with others, both locally and remotely.

Stream Study 134

Compare water quality with other schools.

Math Magic Project 135

Math Magic will motivate students to solve open-ended math word problems and use modems to write their solutions.

KIDLINK 136

Global dialog for kids 10-15. Communicate with children from other cultures.

Project IDEALS 138

Students are cast as high level negotiators discussing international problems in this role playing simulation design to encourage students awareness of world events.

Big Computer Pals 140

Big Brother/Sister interaction across the networks and aimed at the handicapped.

Noon Observation Project 141

Students calculate the circumference of the earth using the length of a shadow at noon. Data from other locations is collected over the net.

Ozone Study Networking Project 143

World wide ozone measuring and study.

An Acid Rain Study 144

International comparison of rain and stream acidity.

University of Illinois at Urbana Champaign

NCSA

National Center for Supercomputing Applications

HPCC in Education

Ask the Scientist!

NCSA Education Program
Fall 1993

- ***Do you know...***
  ...how many seconds the light takes to travel from the Sun to each planet in the Solar System?
  ...how many sums a supercomputer can perform in one second?
  ...how long ago the first human being appeared on Earth?
  ...the internal chemical composition of a star?
  ...what global warming is and why the earth is in potential danger if we don't take care of it?
  ...how old Beethoven was when he wrote his first musical composition?
  ...how many people inhabit our planet and what the life conditions are in other countries?
  ...which are the most spoken languages over the world?

- ***Do you want to know these answers? Do you have more questions? Are you interested in science? Why don't you... Ask the Scientist!***

If you are a middle school student with questions about science, please let us know. We have created this program for you, we want your questions!

If you are a high school student interested in using state-of-the-art technology in computers and communications to start your role as a scientist now, just give us a call!

If you are an interested middle or high school science teacher, we need your ideas and your class to get involved. Please register for the Ask the Scientist program at NCSA. We will have a seminar on November 19, discussing the goals and benefits of this project. You can participate!

For registration or more information please call John Duban (217-244-5677), or send e-mail to jduban@ncsa.uiuc.edu

Ask Prof. Maths

Any student or teacher in grades K-8 may ask ANY mathematics related question and the Prof. Maths team will respond within two school days. Prof. Maths encourages both students and teachers to ask questions relating to content and pedagogy.

Please post questions directly to: Maths@sbu.edu

Prof. Maths will not post responses to the whole network. Please include your personal address so a response may be e-mailed directly to you.

An archive of questions with responses will be available via anonymous ftp to ftp.sbu.edu in the subdirectory pub/prof.maths

Timothy D. Kurtz <tel.> 716-375-2024
Department of Mathematics <e-mail> KURTZ@SBU.EDU
102 De La Roche Hall
St. Bonaventure University
St. Bonaventure, NY 14778

THE GLOBAL SCHOOLHOUSE

The Global Schoolhouse makes its debut with the S.A.F.E.R. Water Project (Student Ambassadors for Environmental Reform) Students, their parents, and teachers are invited to participate in a very exciting and significant Global Schoolhouse project that will combine the elements of student problem solving skills, environmental issues, global conscientiousness, and modern information technologies to accomplish a common goal. They will be asked to investigate the problems created by water run-off and to design a public awareness program that can be implemented in their own communities, and then shared and replicated globally. They will help make the world's waters safer by becoming student ambassadors for environmental reform.

Dependence on toxic chemical has serious consequences for our environment and is compromising our future. Improper use or disposal of motor oil, antifreeze, pesticides, fertilizers, agricultural by-products, rock salt, household cleaning products, paints, solvents, and waste products contribute to serious water contamination through urban runoff, also known as nonpoint source pollution. Students have the power to play an important role in making their neighborhoods and the global environment safe from toxics and protecting the earth's water quality. Many regulatory agencies and educational programs have already been established to address the issue of urban runoff. Therefore, students will be encouraged to gather, compile, analyze, synthesize, organize, and share existing information in order to generate a strategic plan that will apply their findings in a useful and effective manner. Students will produce a newsletter and a calendar from collaborative their research.

Four 5th through 8th grade classrooms are currently conducting research on the environment. These classrooms, located in California, Tennessee, Virginia, and London, are reading Vice President Gore's "Earth in the Balance: Ecology and the Human Spirit" (Houghton Mifflin, 1992). In conjunction with their reading, the students are investigating the problems created by water run-off and are designing a public awareness program that can be implemented in their own communities. These same programs can later be replicated in other communities throughout the world.

Throughout the Global Schoolhouse project, the classrooms will interact with each other through the use of FrEdMail and the Internet.

The four original partner schools will engage in several special video teleconferences that will be conducted over the Internet using the Cornell CU-SeeMe software for the Apple Macintosh. Several guest speakers have been invited to help moderate this video teleconference, allowing the classrooms to present their findings and engage in a mutual dialogue about the environment and what can be done by both students and national leaders.

The Global Schoolhouse project will be aired on television during National Science and Technology Week (April 26-May 1), a yearly event conducted by the National Science Foundation to showcase programs of particular note.

The implementation of this project is being made possible through funding and support from the National Science Foundation, and donations of equipment and services from CERFnet, FrEdMail, Pac Bell, Sprint, Apple Computers, Cisco, Cayman, JDL Technologies, Cornell University, and other companies not yet determined.

CoSN NEWS

ABOUT CoSN
The Consortium for School Networking (CoSN) is a membership organization of institutions formed to further the development and use of computer network technology in K-12 education. Members represent educational, institutional, and commercial organizations with an interest in advancing the state of the art in all aspects of electronic computer networking.

For more information contact CoSN at:
P.O. Box 65193,
Washington, DC 20035-5193
Telephone: 202/466-6296
cosn@bitnic.bitnet

JOIN COSNDISC
CoSN hosts a mailing list which provides a forum for discussion of issues relating to the development of networking facilities for the K-12 community.
To join COSNDISC send an e-mail message to:
LISTSERV@bitnic.bitnet.
Include the following information in the body of the message:
Subscribe COSNDISC, your first and last name.

MAJOR HARDWARE DONATION FROM DEC
Digital Equipment Corporation has approved a donation of over $50,000 in hardware, software and services to CoSN. The equipment includes two DEC 5000 workstations with extra memory and large disk drives; two laptop and one PC-level machine. In addition, the donation provides for software and for maintenance support.
The equipment enables CoSN to provide two key services to the K-12 community. One of the workstations will be installed at SURAnet, where it will be connected to the network and will serve as CoSN's "presence on the net". The other machines will be used for traveling demonstrations of Internet access for educational purposes.
Thank you DEC for your commitment and support of CoSN and K-12 computer networking!

CoSN SERVER
A portion of the equipment donation from the DEC is being set up at SURAnet in College Park, Maryland. This equipment will form part of a new Internet domain, cosn.org, and will provide services to CoSN members and the educational community at large. Members are invited to join the Technical Committee and help set up and maintain these services. The new facility should be operational by the end of the month.

CoSN NOW IN GOPHERSPACE!
Thanks to the donations of equipment and time from IBM, EDUCOM and CoSN member Marco Hernandez, CoSN now has its own Gopher server! Gopher is a tool that allow easy access to text files, databases and other searchable resources. The gopher address is: cosn.educom.edu.

Come visit!

NETWORKING FOR EDUCATION IN THE CAPITAL
Bills to move the National Research and Education Network (NREN) forward are in process. In the Senate, S.4 is the relevant bill; Title VI deals with information infrastructure and technology, calling for networks to improve education, to provide library services, and to support health care and manufacturing. A similar bill is being developed for introduction in the House.

H.R.89 was introduced in the House; it would set up a program of technology grants to the states and would establish an Office of Technology reporting directly to the Secretary of Education. A bill with similar intent (but a lot of other provisions, as well) is in the works in the Senate. - John Clement

CoSN COMMITTEES
Members are encouraged to join the following recently formed committees: (Note that e-mail address of chairs' are in brackets.)

-Policy
Focuses on the legislative issues which must be addressed to ensure the development of a network which adequately serves the needs of the nation's schools
[cstout@tenet.edu, NY0026@mail.nyser.net]

-Technical
Addressing the technical issues which must be resolved as the network is put in place
[rdc@vms.cis.pitt.edu]

-Curriculum
Seeks to catalog current telecommunication projects and develop standards for excellence for future projects
[gsolomon@nycenet.edu]

-Professional Development
Addresses the techniques and practice of on-line instruction
[franko@bigsky.dillon.mt.us]

-Vendor Liaison Group
Facilitates the interaction of business members of the Consortium with participating departments of education, school districts and teachers.
[Contact jfenwick@attmail.com for more information]

-Membership Committee
CoSN is beginning a major membership campaign . To join, contact Bobbi Kurshan at: [kursan@vtvm1.bitnet].

You don't need to be a member of this committee to contribute. If you know of groups CoSN should contact, please forward their names, affiliations, phone numbers,land and e-mail addresses to Ellen McHugh: [mchugh@bitnic.bitnet] or call 202/466-6296. Also share information about CoSN and K-12 networking with your colleagues. If you need brochures or additional newsletters, contact Ellen.

CONFERENCES, COMMITTEES & PRESENTATIONS
The following is a list of recent CoSN presentations:
-Library of Congress' Network Advisory Committee, (Dec)
-Coalition for Networked Information, Teaching and Learning Group (Jan)
-American Association for the Advancement of Science, Technology Coordinators for the pilot projects in Project 2061, the Science Curriculum Initiative (Jan)
-Florida Education Technology Conference (FETC) (Feb)
-American Association of School Administrators (AASA) (Feb)
-Michigan Association for Computer Using Learning (MACUL) (Feb)
-National Forum on Educational Statistics, Automated Information Retrieval Systems (AIRS)
working group (Feb)
-Computer Systems Policy Project (Mar)
-American Society for Information Sciences (ASIS)
midwinter regional meeting Potomac chapter (Mar)

INSIDE CoSN
-Board Chair, Connie Stout, was named to the National Research Council panel conducting a mid-course study of the National Research and Education Network(NREN).
-Executive Director, John Clement has been spenting one-half of his time with the National Science Foundation's Education and Human Resources Directorate program officers on access and use of the Internet for professional development and educational support.

UPCOMING CONFERENCES
November 10-13, 1993 Dallas, TX - CoSN full membership meeting held in conjunction with the Second International Symposium on Telecommunications in Education and Tel-Ed '93.

COSNDISC SUMMARY
Wonderfully varied new Internet resources have been posted on COSNDISC. The following are some highlights from recent months:

*Communet: New listserv for community networking
*BBS-L: New listserv for BBS startup and growth
*Internet and CMC: A new listing of documents
*Margaret Honey to host 24 on-line teacher seminars
*BreadLoaf offers workshop grants for rural teachers
*White House and Federal Register now have Gopher Servers
*FARNET calls for stories about K-12 internet access
*K-12 Listservs listing posted
*K-12 "Barriers to Technology" discussion led by Connie Stout

We encourage readers' contributions and suggestions to the CoSN Newsletter.

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P.O. Box 65193, Washington, DC, 20036-5193.
Phone: 202/466-6296 FAX: 872-4318

Editors: Laurie Maak [lmaak@netcom.com] and Frank Odasz
[franko@bigsky.dillon.mt.us]

Story Scramble

To any second or third grader teachers:
Earlier this year we asked for partner classes to participate in a project in which our second graders selected a story, summarized it, and listed the main events in random order. We wanted to send these stories to classes which would order the events correctly based on the transition words our second graders used as clues and send them back to us. We hoped to find at least four partners. Because of technical problems we have only partially completed this activity but found it to be a very worthwhile activity. Not only did our second graders get to assess their communication skills but they have set up a dialog with their partner classes and are planning some more projects. We would really like to find several more classes which would participate with us in this project even though there are not many weeks left until the end of school. If you feel that your class has time and would benefit from this project please contact us.

Sincerely,
Annette Rains, Media Specialist and Diane Jones, Second Grade Teacher and other second grade teachers at Clayton Primary School, Clayton, (Johnston County) North Carolina

<arains@johnstn.cerf.fred.org> ---------- 35.05.00N, 78.12.00W
Annette Rains
K-12 Teacher at CLAYTON PRIMARY, JOHNSTON COUNTY CLAYTON, N. C.

Navigating the Internet: An Interactive Workshop

The following information on obtaining the materials for on on-line workshop on the internet.
The address are:
BITNET LISTSERV@UBVM
INTERNET LISTSERV@ubvm.cc.buffalo.edu
Leave the subject blank and in the message area enter the following: *get navigate filelist*
Don't put any other text in the message.

You will shortly receive the index. To receive a copy of a message simply send a message to either LISTSERV@UBVM or LISTSERV@ubvm.cc.buffalo.edu. Again no subject and
in the body enter:
get filename_1
get filename_2
You may put up to five request in one mail message.

They are exceptionally well done and worth the effort. As an added bonus there are now temporary passwords to explore CARL Uncover and OCLC.

Anyone who wants the sessions can pick them up themself from eitherlistserv or anonymous ftp:

listserv

send e-mail to either listserv@ubvm (on BITNET)
or listserv@ubvm.cc.buffalo.edu (on Internet)
No Subject: necessary
First line in body of mail: index navigate
Decide which session you want.
Then send the command: get navigate 92-000xx
where xx currently runs from 01 through 42.

Anonymous FTP

ftp ubvm.cc.buffalo.edu [This is a vax/vms machine but does not follow some of the conventions you may be accustomed to.]
login: anonymous [for some: user anonymous]
password: your-userid@your-node
ftp> cd navigate [Ignore case of files shown & directions in top directory about CD FTP220. You can *GET* a Read-Only file to read on your own machine. Note cd command to change directories, not: set default. Also, 'Up' does not work.
ftp> dir
ftp> get navigate.92000xx [first GET the list of files. Note that (where xx is same as above) the conventions for specifying directory and file differs (at least from Umass VAX/VMS)--so where directory shows space, insert period '.' between directory name and file name. Also, file is incorrectly specified here; should be a hyphen after 92, thus: get navigate.92-00021 or whatever number you're seeking.
ftp> quit

Kids WeatherNet

A Project for Elementary Classes
Collecting and sharing Weather and Climate Data

Background: During the last two years my class has informally shared weather data with several schools throughout the US using internet and bitnet. This experience has exceeded my wildest dreams in bringing science and the real world into the classroom. For the coming year I believe that it would be a tremendous opportunity for other schools to join the exchange of weather data.

Purpose: The purpose is to bring together as many classrooms as possible in a joint sharing of weather and climatic data.

How to Obtain: The actual collection of weather data can be as simple or as complex as you care to make it. My class set up a weather station which provides us with daily weather information. Or the weather data can be taken daily from a local newspaper. Or perhaps, you would collect some data and take some from the paper. Also, an inexpensive weather cube from Radio Shack will provide instant weather data from the National Weather Bureau radio station.

Types of Weather Data: The types of weather data would include the recording of the high & low daily temperatures, precipitation, and a short paragraph describing the weather for the week. The description can range from a one or two sentence summary of the weather to explaining local conditions such as drought, storms, first frost, first snow, etc.

Climatic Data: The climatic data helps explain how seasons, weather data and astronomy come together to influence our weather. This type of data would include sunrise and sunset times for one day each week and a general description of the current season.

Sending the Data: The weather data would be sent to each of the participating schools each Monday.

If you have any questions and would like to participate, send a note along. We would look at starting on August 31st.

Hope to hear from you,
Bill Wallace
Manzano Day School
Albquerque, New Mexico
Bitnet: ECHO@UNMB
Internet: ECHO@BOOTES.UNM.EDU

Tele-Fieldtrips

Purpose:
a. Motivate students to observe, learn, and report more effectively on school excursions
b. Give other students vicarious access to first-hand information about local, regional, and national museums, aquariums, libraries, and other places which can help students learn about their world.
Grade Level: All grades
Content Area: Science, Social Studies, History, Geography, Literature, Art, Music
Project Summary: Your local educational resources are a gold mine of information for you and your students. You probably don't think about it, but people in other places would love to learn about your museums, historical sites, geological and archaeological sites, natural wonders, libraries, national and state parks and nature preserves, zoos and aquariums, archives, scientific labs and archives, universities and colleges, and businesses and industries.

This project encourages your students to look at your own local resources with new eyes and share their visits, observations, and discoveries with students and classes all over the world. If you can't visit one of these places yourself, the reports written for your class will contain much useful and unique information which is sure to be of interest to your students.

The Fieldtrips project involves three simple steps:
1. Send us the approximate dates and destination of the field trip(s) you expect to take in 1992-1993. Also, send us the local destinations that your students may be inclined to attend apart from official school activities, as part of a family or youth group activity.
2. Each month, beginning in September, we will publish a list of destinations submitted, along with your tentative field trip schedule if included.
3. Check the Fieldtrips database each month. If you see field trip destinations which are pertinent to your curriculum and which interest you, send your questions to that class prior to their visit. The class will go on their field trip "armed" with your questions, and will have greater incentive to observe and report back to you. Your students, in turn, will be highly interested in reading and evaluating the replies. Both groups of students will benefit from the experience.

Project Coordinator: Nancy Sutherland, FrEdMail Foundation
PO Box 243, Bonita, CA 91908
619-475-4852
email: fieldtrip@bonita.cerf.fred.org
Registration: First attached file is the registration form. Complete the form and email it back.

REGISTRATION: 1992-1993
To register please complete and return the following information to: fieldtrips@bonita.cerf.fred.org

If your system receives FrEdMail's "Fieldtrips" newsgroup you can tune into the latest news and participate in ongoing discussions there. If you can't find the FrEdMail "Fieldtrips" newsgroup on your system, then answer yes to the first question and we will add you to our Fieldtrips mailing list.

Complete this form if you are TAKING an excursion, and/or you are REQUESTING information about an excursion destination.

If you would like information about a field trip destination not listed in the database, then submit your questions and the registration form below to fieldtrips@bonita.cerf.fred.org. We will include your request for information in the next database we publish: perhaps a teacher who has that trip scheduled will respond.

Add me to mail list:
Your full name:
Your email address:
Your school:
District:
SCHOOL address:
School voice phone:
Home voice phone:
Grade(s) taught:
Subject(s):

Please complete one or both:

Submitting Field Trip Destination

Where is your excursion destination?

What are tentative dates of your visit?

Please attach a description of the education "significance" of your excursion destination. Describe the kinds of things your students will see, and the kinds of things you expect them to learn during the excursion.

Requesting Field Trip Information

About what place/excursion destination do you want more information?

Is this excursion destination listed in the database? (If so, send this registration and your questions to BOTH FrEdMail and to the teacher listed in the database.)

Please attach a list of questions your students have raised about this place (see the sample questions in the project description).

PROJECT DESCRIPTION

This project attempts to solve two common problems that teachers have.

1. Many teachers find it difficult to motivate their students to seriously observe, study, evaluate, and report on the places and things they see and hear on a class field trip or excursion.

2. Often, teachers have no or limited first-hand information or knowledge of many of the things we teach and study about in our classes. This project will help you solve one or both of these problems.

REPORTING ON A CLASS EXCURSION

One thing the Process Writing movement emphasizes is that when students have a sympathetic, interested audience and something to say, they will

readily and even eagerly write. Moreover, they will take greater interest in "sounding" erudite and "smart" to their audience... especially if their audience is their peers (See "The Effect of Distant Audiences on Student Writing", _AERA_ Journal, Summer, 1989.)

When your students go on your excursion armed with specific questions and requests for information addressed to your class from distant places, they will have significant incentive to gather relevant information, to process it, and write reports back to their questioners. Compared to excursion reports written for you or their classmates, you will find their reports to be more fluent, better organized, more substantive, and more informative. Furthermore, your will be more willing to write, proofread, revise, and edit their work. They will be more careful about their spelling, punctuation, grammar, and vocabularies. Finally, they will enjoy it more when they know their audience is not only interested in what they have to say, but are in fact counting on their accurate and factual reporting.

LEARNING FROM OTHER CLASS EXCURSIONS

This project provides an opportunity for your students to obtain and read a significant quantity of informative and interesting first-hand information about subjects and distant places they are studying. It will increase their motivation and interest in extending their learning. They will want to read everything that comes back, and they will ask more questions and look more critically at the information received in comparison to other sources of information they have been studying.

PLACES TO VISIT

You no doubt have many local educational resources which are gold mines of valuable information for you and your students. In many cases, people in other places would love to learn about your museums, historical sites, geological and archaeological sites, natural wonders, libraries, national and state parks and nature preserves, zoos and aquariums, archives, scientific labs and archives, universities and colleges, and businesses and industries.

HOW TO PARTICIPATE

This project encourages your students to look at your own local resources with new eyes and share their visits, observations, and discoveries with students and classes all over the world.

Even if you won't take a formal class excursion this year, consider registering for one of your local resources which your students are likely to visit with their parents or a youth outing.

If you can't visit one of these places yourself, the reports and answers written for your class will contain much useful and unique information which is sure to be of interest to your students.

1. Register

a. Register for field trip destinations in your area: complete the registration form in Attached file 1 and mail it to: fieldtrips@bonita.cerf.fred.org. Include in your registration a brief description of the field trip destination for the benefit of teachers who may not be familiar with it. Include the tentative dates, if any, of your schedule field trip.

b. Register to receive information: If you are looking for information about a place not listed, send in the registration form in Attached file 1 and

include the places you wish to learn about, including specific questions your students have posed.

2. Each month the FrEdMail Foundation will publish an updated schedule of field trip destinations and requests for information based on your input.

3. Each month, look over the field trip schedules for destinations and requests for information that may pertain to your situation.

4. If you find a field trip destination that interests you, then:
a. Have your students do some preliminary background reading on the destination(s) that interest you.
b. Have your students brainstorm and generate questions relating to your curriculum and their reading which a visit to the field trip destination could be expected to answer. See the example questions later on.
c. Send your questions via email, along with a registration form, to the FrEdMail Foundation at:
fieldtrips@bonita.cerf.fred.org, and ALSO to the teacher listed in the database. Include a friendly preamble to your list of questions: description of your own class, community, and so on. Your questions will be posted to the mailing list.

5. Prior to and following your own excursion
a. Prior to your excursion, have your students read and discuss the questions you may receive. If you don't receive any questions, have your students pose their own questions which they think other students may be interested in learning about. Let your students select questions to research and answer during and after your excursion. This may be done solo, or as duets, trios, or quartets. If possible, point your students to the best resources available on the excursion. Give them strategies to pursue in order to gather and remember relevant information.
b. Following your excursion, conduct a group-writing project in which the class, or a subset of your class, write a general summary report of the excursion which will interest your partner students.
c. Have each of your student researcher write up their findings in answer to "their" question(s). This activity presents an excellent opportunity to conduct process-writing activities in which students read one another's work, individually, in small groups, or as a large group activity. The emphasis should be on giving each author appropriate feedback so that they can revise and improve their own writing. Students should be encouraged to be helpful and supportive of one another's work, regardless of ability or execution. Even your slowest students will benefit from the process of listening and sharing as students help and support one another in developing the best answers possible.
d. Send your summary and the answers to your questions to both your partner teacher and the FrEdMail Foundation at
fieldtrips@bonita.cerf.fred.org. We will electronically publish your field trip summaries and questions on FrEdMail's Field trip newsgroup. At the end of the year we may also publish a selection of excursion summaries in hard copy format available for the cost of duplication and processing.

SAMPLE QUESTIONS

Our class is very interested in zoos. Since you are visiting the San Diego Zoo, would you answer these questions for us?

1. We have heard that the San Diego Zoo is not only a zoological garden but a botanical garden. Can you tell us some interesting plants that are at the zoo?
2. We've heard a lot about Gorilla Tropics and Tiger River. Can you describe these exhibits and tell if you think they're better for the animals than cages?
3. What was your favorite animal and why did you like it?
4. Do you think the San Diego Zoo is really doing anything to save endangered species. If so, what?
5. What are some of the endangered species the zoo has and how do you think keeping them in zoos helps to save them?
6. Should zoos be places to exhibit animals or protect them or both?

SAMPLE SUMMARY

Our trip to the San Diego proved to be very interesting and educational. We had a lot of questions from other classrooms across the country that really gave us a good focus.

First of all, the San Diego is famous not only for its wonderful collection of animals - the largest of any zoo world wide - but also its beautiful collection of plants, many of which are extremely rare and even extinct in their natural habitat. We had never really noticed all the plants before or had just considered them a part of the landscaping, but they are just as important as the animal collection, and worth a great deal of money. We all feel our zoo would not be nearly so nice without the beautiful plants.

Zoos used to be a place where animals were caged so that people could look at them and little attention was given to their comfort or needs. Now days zoo keepers are very concerned about the needs of the animals in their care, especially at the San Diego Zoo. Most of the animals are in large enclosures that resemble their natural habitat as much as possible. One of the reasons for this is that many of the animals are endangered, and by keeping them in large healthy surroundings, we can make sure they stay healthy and reproduce so that they can be released into the wild again. Also, if we keep them in enclosures that are like their natural habitat, we can study their habits more closely and discover what we can do in the wild to help them survive better.

Gorilla Tropics is a good example of how the zoo is trying to place animals in an environment where they feel comfortable and at home. The gorillas used to live in a largely concrete enclosure but now live in a grassy enclosure with trees, hills and hiding places. Since the gorillas have been in this enclosure at least one female has given birth and successfully mothered a young gorilla, something the zoo has had trouble with until now. We thought the gorillas seemed much calmer and happier in their new enclosure.

All around the zoo different exhibits stress the importance of protecting our endangered species. Tiger River includes an exhibit showing the products we buy which come from the rain forest and cause it to be depleted. If we all tried not to use these products, we could help save the rain forest and the animals that live there. There is also an exhibit which tells which kinds of fur bearing animals are endangered and which furs we should not be wearing. The zoo prefers that people not wear furs at all. They think furs look better on animals than on humans. We all agreed.

THE REYNOLDSBURG GEOGRAPHY PROJECT

The Geography Project is designed to link students from different countries together for the purpose of studying foreign cultures as well as research techniques. The major goals of the project are to:

A) hone students skills in researching scientific and social information and map interpretation.

B) promote students to communicate with others in other countries.

C) help students to develop an understanding of the differences between scientific fact, presumption and errors based on misinformation based upon stereotypes and prejudice.

The project will link individual students, or small groups of students together via Electronic Mail. After exchanging a few letters, the students will then be instructed to learn as much as possible about the other student's country through research. They may look at maps, books, magazines, and any computer generated data they can find. One example of a resource on our side is the World Book of Facts, which is compiled by the American Central Intelligence Agency. It has facts about climate, population, major businesses and major economic influences in most major cities and countries. The book is available on our local Information System. Students will use that and other sources to learn as much as possible about the other country.

After the research is complete, each student must write "A Day in the Life of the other student." The paper should include what each student thinks the other student's life is like. What are schools like? What do the students do for fun? What kind of work/responsibilities do they have outside of school? What is family life like? What are most students' attitudes about the future?

These questions should be answered to the best ability of the student who has researched the other country. So If John Smith, of Reynoldsburg, is working with a student in Japan, he would communicate with a student from there, and then begin research, using as many sources as are available to him. He will then write a paper entitled "A day in the life of _____." The student in Japan will do the same thing, studying the American student..

When the papers are finished, they are sent to the student in that country. When each student receives the paper about their life, they will critique it. Obviously, they will discover mistakes. John Smith may not understand how Japanese life has become modernized while the Japanese student may have flase assumptions about what Americans do with their leisure time.

In the critique, each student should point out which observations are correct and which are wrong. Then each will write about what their day-to-day life is really like.

In this way, the students will use research tools to learn about real people in other cultures, and have the opportunity to separate myth from fact - stereotypical prejudice from actual social behavior.

This is the main idea behind the project. I am open to suggestions for enhancing the project in other directions. Our students working on the project will range in age from 16-18, but since many will be working with English as a second language, I think a greater range of ages is possible for other participants.

It is my belief that this project will promote Global understanding and the scientific process of geographic analysis of maps and other data.

If you have teachers or students interested in discussing this project further, please have them contact one of the two teachers listed below.

Thank you,
William Gathergood
-Computer Coordinator
wgatherg@magnus.acs.ohio-state.edu

Rob Sass
-Geography Teacher
rsass@magnus.acs.ohio-state.edu

Longest day of the year !

Greetings,

The summer solstice, the longest day of the year in the northern hemisphere will be on June 20th, 1992. What this means is that the duration of daylight; the time from sunrise to sunset will be the longest, for the year. Within a few days following the 20th, this daylight period will begin to get shorter again, by about 2 to 3 minutes per day. Here in the southern Connecticut region, New Haven, located at 41 degrees 18 minutes North latitude, 72 degrees 56 minutes West longitude, the sun will rise at 5:18 am and set at 8:28 PM (Eastern Daylight Saving Time), giving us 15 hours and 10 minutes of daylight. The farther north one travels the longer the period of daylight. Within the Arctic Circle, the sun remains above the horizon for several weeks.

I would like to hear from anyone who would be willing to contribute the name of their location, coordinates, time of sunrise - sunset (for June 20th) and duration of daylight for that date. Hopefully a collection of this data would yield a pattern by which my eighth grade Earth Science students may better understand this phenomenon.

I would be willing to share the results of this survey, to the best of my ability, through KIDSNET. Please send data or comments to :
Internet address: ADAMST@VENUS.YCC.YALE.EDU
On the subject line please enter "For Bill Lang"

Our mailing address is :
Bill Lang, Earth Science teacher
E. C. Adams Middle School
Church Street,
Guilford, Connecticut 06437
Telephone: (203) 453 - 2755

GEOGAME: Geography Game

First Call
Date: School year 1992-1993

Date: This project will be conducted three different times:
October 19, 1992
January 11, 1993
April 5, 1993

Purpose: Learn geography terms, learn how to read and interpret maps, increase awareness of geographical and cultural diversity
Subjects: Geography, social studies, writing
Grade level: Middle-Upper Elementary; open to all grade levels
Summary: Your class answers eight questions about your own location, including information about latitude, typical weather, land formations, etc.

We collect responses from all participants, scramble the locations, and return the list of answers and the scrambled sources back to you.

You students use maps, atlases, and other reference materials to match the description of each location with the name of the corresponding city.

At the conclusion of the project we will post the correct answers. The "winning" class is the first class with the most correct solutions to the game.

This has been a perennial favorite project, one which will excite your students and lead you into the exciting world of online communications.

Number of participants: 10-20 sites; If more than 20 sites respond we will open another section.

Project Coordinator: Nancy Sutherland, FrEdMail Foundation
PO Box 243, Bonita, CA 91908
619-475-4852
email: geogame@bonita2.cerf.fred.org

HOW TO REGISTER: First attached file is the registration form. Complete the form and email it back to the address indicated.

REGISTRATION: 1992-1993

To register please complete and return the following information to: geogame@Bonita2.cerf.fred.org

Register for Which Project:
October 19, 1992 _____
January 11, 1993 _____
April 5, 1993 _____

Your full name:
Your email address:
Your school:
District:
SCHOOL address:

School voice phone:
Home voice phone:

Grade(s) taught:
Subject(s)

To avoid confusion please refer to GEOGAME whenever you correspond with us so that we can match you up with the proper project.

GEOGAME TIME LINE

This project will be conducted three different times:
October 19, 1992
January 11, 1993
April 5, 1993

This time line is a summary; dates are for the October 19 project. Complete details are in the next section
October 5: Deadline for registration
October 5: Begin researching the answers to the GeoGame questions about your local community.
October 15: Have your students compose your answers according to the format described below.
October 19: Send your answer file as a message to:
geogame@bonita2.cerf.fred.org
October 26: We will assemble all responses and mail them to all participants.
October 27-30: Download the game files we send. Print them out and distribute them to your students. Discuss with them strategies they might use to match locations with descriptions.
November 2-November 13: Upload your answers which match the locations with your descriptions.
November 16: We will mail the results of the game, "winners" will be announced.

GENERAL PROCEDURE

1. FILLING OUT THE DESCRIPTION FOR YOUR CITY
Start with a whole-class discussion of the game and go over the identifying characteristics of the 8 description items. Discuss latitudes, time zones, land forms, points of interest, tourist attractions, state capitals, and nearby rivers as needed.
Divide your class into groups of two or three and give them each a question. Have them do a little research in the library or with local maps to find the answer to their question. Come back together in a whole-class discussion and elicit the answers to each group's question. Have a student in the class act as a 'secretary' to compile the answers.

Type up the 8 answers and Email them to the Project Coordinator by the deadline date.

Please help us by using the example below as your template. We will assemble your answer EXACTLY as you send them to us. If your answers are ambiguous or erratically formatted we will NOT be able to include them in the project.

ANSWER TEMPLATE

City:	Lancaster, Pennsylvania
1. Latitude:	40 degrees
2. Time Zone:	Eastern

3. Winter:	Cold & snowy!-High today: 40/Low: 20
Dress:	Heavy coats, boots, gloves, hat
4. Closest river:	Susquehanna River/gently rolling farmland
5. Tourist Attractions:	Amish farms
6. Population:	386,600
7. Direction from capital:	Southeast
8. Famous For:	Home of former president, James Buchanan; location of Franklin & Marshall College

2. PLAYING THE GAME

A week after the deadline, we will email a file containing all of the participating classes and their location descriptions.

While you are waiting, gather a few materials for the class so that students can break up into small groups to begin the process of matching locations up with descriptions. (Large United States map showing time zones & latitudes, set of encyclopedias for individual state maps, AAA road maps, Rand McNally Road Atlas, Almanac, etc.)

When you receive the GeoGame file from us, duplicate enough copies of the city/state locations to give one to each child in your class. Print out the descriptions, divide your class up into 4 or 5 groups and give each group an equal number of the descriptions.

You might want to set aside two or three 20-30 minute "Research Periods" for the groups to try to match up their descriptions with the city/state locations.

Or, you may want to set up a reference corner in the library or your classroom where students can go work on the project during their free time.

When your students have done the best job they can on the match ups, type the number of the description which matches next to the name of the City/State on the list which we sent you. Email it us by the deadline date listed in the timeline.

3. WHO WINS THE GAME?

After the final deadline, we will email the results. The "winning" classrooms will the earliest ones with which matched the most locations with their correct descriptions.

4. GEOGRAPHY GAME QUESTIONNAIRE

1. What is the latitude of your city?
2. In which time zone are you located?
3. Describe the winter season in your area. Include temperatures, precipitation, and seasonal dress.
4. List any prominent land forms in your area and name the closest river. How far are you from this river?
5. Name the points of interest or tourist attractions in your area.
6. What is the population of your city?
7. In what direction is your city from the state capital?
8. For whom or for what is your city famous?

Interested in "Environmental Problems & Solutions"?

Aloha from Hawaii,

Hi folks! We have some students in Honolulu from intermediate schools (7th and 8th graders) and high schools (9th to 12th graders) who would like to keep in contact with students from the other countries, and to learn about things related to "Environmental Problems and Solutions".

If anyone of you who's willing to share your time with us, please send us your E-mail address(es), and we will have our students to reach you. Thank you!

Maria Wong
Teleclass International

E-mail address: johnw@uhccvx.uhcc.hawaii.edu

Global Grocery List

Imagine a "global grocery shopping spree", where you could buy food from any place in the world. would you get oranges, or hamburger? What would shopping there be like? What kind of money would you need to pay for your groceries?

For the third year now, I'm asking the question, "How much does food cost in your town?" The Global Grocery List project is a very simple activity, designed for beginning FrEdMail users and old pros alike. The project is on-going, so there is no timetable. You just collect your local grocery prices at your convenience, email them to me, and keep checking your mail box for the price lists of other participants.

Why Global Grocery List... The "Information Age" is here. Nearly everything we do deals directly with or results from the use of information. This information comes in many forms, but much of it is in table format, i.e. grade books, bills, price lists, etc. Global Grocery List will use telecomputing to generate a living, growing table of peer collected information to be used by classes of all levels and subject areas. Prices from around the world can be used in math, science, social studies, health studies, and writing. They can be used to practice calculations, as an information basis upon which to draw conclusions, and as a springboard for writing assignments. So break out your modem and lets start shopping.

DETAILS...
Step 1: This project involves the teacher:
* sending students to the local grocery store(s) and calculating the average price for each of the items in my shopping list,
* entering your name, class grade and subject, location, currency, and prices on a text file,
note: Prices should be in your own currency.
This will require more students to experience converting from foreign currencies.
* then emailing the file to me,
FrEdMail: DWARLICK@NCSDPI
Internet: dwarlick%ncsdpi.fred.org@cerf.net

Step 2: ...me...
* entering your prices and related information onto a file with all previously received prices and emailing that file back to you,
* adding your address to a CONFERENCE/MAILING LIST so that you will receive future compiled price list files,
* regularly posting the compiled price list file on FrEdMail's IDEAS bulletin board and possibly on Internet fileservers,

Step 3: ...and you volunteering to email to me...
descriptions of how you use information collected from GGL, and the results of any tests or research you may conduct comparing student outcomes based on GGL collected data tables and textbook sample data tables., **note**: The time has come that we need to show how telecomputing projects enhance instruction. Please tell us how this project helps in motivating students to learn and develop shills by providing them real time, peer supplied data.

Below is the grocery list. It will be most helpful to me if you make your price list look as much like my grocery list as possible.

Teacher's name:
Class Grade & Subject:
Location (City, State, Country):
Currency (Dollars, rubles):

ITEM	QUANTITY	PRICE
HAMBURGER	1 pound	
RICE	1 pound	
ORANGES	1 pound	
SUGAR	5 pounds	
ALL PURPOSE FLOUR	5 pounds	
WHOLE MILK	1 gallon	
CHOCOLATE	1 pound	
POTATOES	5 pounds	
BUTTER	1 pound	
CORN	1, 16 oz. can	
PEANUT BUTTER	1, 12 oz. jar	
COFFEE	1 pound	
WHOLE CHICKEN	1 pound	
EGGS	1 dozen	
PREMIUM UNLEADED GAS	1 gallon	

The following table includes grocery prices that have been collect since the date indicated. All of these prices were transmitted to my electronic mail box via the FrEdMail network, and other numerous networks that exist beyond the FrEdMail-NSFNet gateway. Many thanks to the teachers and other education professionals who have contributed to this instructional project.

The prices below are intended to serves as a springboard for instructional activities in many subject areas and to provide for the integration of technology and multi-cultural studies into other non-related subject areas.

DATE: October 26, 1991

HAMBURGER	ORANGES	SUGAR	FLOUR	MILK	CHOCOLATE	POTATOES	PEANUT BUTTER	CORN	BUTTER	COFFEE	CHICKEN	EGGS	GAS
SITE: Nagaokakyoshi, Kyoto-fu, Japan													
CURRENCY: YEN													
??	292	113	2200	1870	756	??	50	795	??	??	3863	??	240	??

SITE: Clare, Michigan, USA
CURRENCY: Dollars DATE: October 26, 1991
1.48 .79 .79 1.89 1.39 2.37 4.19 ?? 1.93 ?? .55 1.89 .79 .89 1.23

SITE: Mt. Pleasant, Michigan, USA
CURRENCY: Dollars DATE: October 26, 1991
?? 1.59 ?? 1.49 .99 1.88 ?? ?? .59 .31 2.65 ?? ?? 1.27 1.16

SITE: Lake, Michigan, USA
CURRENCY: Dollars DATE: October 26, 1991
1.691.69 .68 1.75 1.49 2.49 2.49 ?? 1.29 .63 1.79 3.89 .89 .99 1.23

SITE: Farwell, Michigan, USA
CURRENCY: Dollars DATE: October 26, 1991
1.69 .69 1.19 1.79 .80 2.29 2.89 ?? 1.89 .69 1.99 2.50 .79 .99 1.20

SITE: Farwell, Springfield, IL, USA
CURRENCY: Dollars DATE: October 26, 1991
1.701.04 1.05 1.70 .93 2.36 6.36 1.88 1.43 .53 1.80 3.21 .96 .89 1.21

Many thanks to the following teachers for contributing to the Global Grocery List Project:

Dave McLane D. Sapp
Nagaokakyoshi, Kyoto-fu, Japan Farwell, Michigan, USA

D. Berrup
Springfield, Illinois, USA

.....To contribute prices from your town, just email them to:

FrEdMail: SDCOE!NCSDPI!DWARLICK
(This address will be effective November 5, 1991) Internet: dwarlick%ncsdpi.fred.org@cerf.net

Academy One TeleOlympics

THE NATIONAL PUBLIC TELECOMPUTING NETWORK
ACADEMY ONE TELEOLYMPICS
MAY 5-12, 1992

"The important thing in the Olympic Games is not to win but to take part, the important thing in life is not the triumph but the struggle. The essential thing is not to have conquered but to have fought well. To spread these precepts is to build up a stronger and more valiant and, above all, more scrupulous and more generous humanity."
De Coubertin

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The National Public Telecomputing Network (NPTN) will be hosting the Academy One TeleOlympics on May 5-12, 1992. This project is in honor of the real Olympics to be held this summer in Barcelona. It is open to any school in the world (for children ages 6-18) who has the ability to send/receive internet or bitnet electronic mail. The TeleOlympics is a project where students go out into their schoolyards on the same day and "compete" in events involving running, jumping, and throwing. Results are then posted via computer and modem to the Academy One area of any participating NPTN affiliate system.

Below is a basic description of the TeleOlympics events and registration procedures. Schools from fifteen countries are expected to be participating in this project. You can participate if you have email access through Internet or Bitnet Users from around the world may also send their messages of good luck and congratulations to the athletes and they will be posted to the Press Box.

Group Classifications:

Class A = grades 10-12, ages 15-18
Class B = grades 7-9, ages 12-14
Class C = grades 4-6, ages 9-11
Class D = grades 1-3, ages 6-8

List of Events:

50 m run
tennis ball throw
long jump (choose either standing or running for your school)
400 m run (for all ages)
800 m run (for Class A and B)
1600 m run (for Class A participants only)

Rules:

1. All times will be recorded in 1/100 of seconds. (x.xx)
2. Tennis ball throw recorded to the nearest meter mark.
3. Long jump will be recorded to the nearest decimeter.
4. Each participant will have two opportunities to throw the tennis ball and the farthest distance will be recorded.
5. All results will be posted directly to the Score Board, or emailed to xx188@cleveland.freenet.edu using the official report format. All students names must show both first and last names. Report format will be sent to those who register.
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6. All results must be received by 2400 EST on Monday, May 11, 1993 in order to qualify for the International Awards. Any results received after that time will not count, but will be posted to the Scoreboard.
7. If your school can not conduct the actual athletic events during May 5-11 due to conflicting events, you may run the events earlier. However, you may not run them later and still be eligible for the awards. So be careful of weather conditions and plan ahead to get all of your students through the events and the results posted by the deadline. You may also pre-write all of your email for the Opening and Closing Ceremonies, but you may not actually send it until the day of those events.

Special Wheelchair Rules:

1. When doing the long jump, a student gets one attempt to push on the wheel. The distance is measured from the starting line to the middle of the axle of the large wheel on their chair where the chair comes to a full stop. Distances are recorded to the nearest decimeter.

Opening Ceremonies:

The Opening Ceremonies will include a real-time chat on the Cleveland Free-Net and an exchange of email between all participating schools. The chat will be held on channel +TeleOlympics on Tuesday, May 5, 1992 at 11:00 am EST. Those who can not attend can still participate in the email exchange. More details on both the chat and the email exchange are included in the section on Educational Activities below.

Closing Ceremonies:

The Closing Ceremonies will include a real-time chat on the Cleveland Free-Net and an exchange of email between all participating schools. The chat will be held on channel +TeleOlympics on Tuesday, May 12, 1992 at 11:00 am EST. Those who can not attend can still participate in the email exchange. More details on both the chat and the email exchange are included in the section on Educational Activities below.

Educational Activities:

1. Opening and Closing Ceremonies - IRC chat. The IRC chat is a real-time computer conversation where all participants gather in the Cleveland Free-Net's multi-user cafe and engage in a dialogue simultaneously. You must have both telnet capabilities to participate and a Cleveland Free-Net id. It takes 4 weeks or more to get an id, so you must begin this process immediately. The purpose of these chats is to greet each other and exchange wishes of good will, good luck, and/or congratulations. Small talk is the nature of this chat as opposed to specific exchange of information, which can be done via email exchange.

2. Opening and Closing Ceremonies - email exchange. On the Opening Day, each participating school should send a letter to each and every other participating school, wishing them good luck. On the Closing Day, letters of Congratulations should be sent to every other participating school. These letters can include additional information and questions as desired, and potentially lead to establishing permanent keypal relationships with these other schools. A list of internet/bitnet addresses of all participants will be mailed out during the day or two prior to the Opening Ceremonies.

3. During the weeks prior to the TeleOlympics, schools are encouraged to post weekly reports on the progress of training of their athletes, weather conditions, or additional information of interest. This could include, but not limited to, stories of the Ancient Olympics, word searches in any language with the subject being the Olympics, and/or interviews/stories of athletes from their community who have participated in the Olympics. Student who know they will be attending the Summer Games or who have attended the Winter Games may also share their experiences/excitement. These reports should be posted to the Press Box area of the TeleOlympics Menu in Academy One. Those unable to post directly to the Press Box may email their postings to Linda Delzeit at xx188@cleveland.freenet.edu and request that it be posted.

4. Participating schools may also begin to contact each other and exchange private email as the registrations get posted to the Parade of Nations/ Schools area of the TeleOlympics menu in Academy One. Regular updates of who is involved will be mailed to those participants who have only email contact with Academy One.

5. The top three winners in each of the events and in each of the boys and girls age classifications will have their names, school identifications, national flags and a short biographical sketch posted to the Victory Platform. Teachers will be responsible for supplying the biographical sketches of all winners. It is advised that these biographies be one of the educational activities that each student prepares in case they are a winner. They can also be used to exchange with students in other countries.

Registration:
Schools wishing to participate in the Academy One TeleOlympics must fill out the form below and email to >> xx188@cleveland.freenet.edu attention: Linda Delzeit. >>
Name of School:
Name of Contact Person:
Email id of contact person:
School mailing address (must be complete so certificates can be mailed out at the completion of the event)
Approximate number of students competing:
Ages/grades of students competing:
A description of your school:
Please include such things as type of school (public/private), hours you attend class, size of classes, subjects taught, grades included, size of school, conditions under which you will compete (track/grass field).
A description of your community:
Please include such things as size/type of community (city, rural) population, and the most popular attraction/event in your community.

KIDS-ACT (What can I do now?)

Welcome to KIDS-ACT - the space set up for 10-15 year old young people who want to discuss what THEY can do NOW to achieve their future visions. Regard it as an extension of the KIDS-93 question #4 below.

Participation is free BUT before you start sending messages to others in KIDS-ACT, please make sure that you have responded to the four KIDS-93 questions:

1) Who am I?
2) What do I want to be when I grow up?
3) How do I want the world to be better when I grow up?
4) What can I do now to make this happen?

This is important because it is the only way we can make sure that everyone who has participated in KIDS-93 is included in the master KIDS-93 database. Please send your responses to these four questions to the following address: RESPONSE@VM1.NODAK.EDU

KIDS-ACT is for you to:

* learn about what others do to achieve their personal ambitions, and about what they plan to do to make this world better when they grow up.
* find others who think like you. Together you can make things happen!

Newspapers and news shows on TV and radio all over the world have already covered the KIDS-91/KIDS-92 projects. People are interested in what you have to say. Those of you who are interested in the topic of children's rights and the UN Convention on the Rights of the Child are in the right place. Those of you who have formed environmental clubs might want to use this space to coordinate projects and activities with your counterparts around the world.

You are free to use KIDS-ACT however you want. Your messages will not be edited in any form. It would be great if some of you would volunteer to be "moderators" which means that you would help to keep people on the subject, summarize information every once in a while, and otherwise help the discussion to flow. This is a valuable skill that might help you to get a job sometime in the future and KIDS-93 organizers will be glad to give you hints as a private message if you want.

Anyway, jump right in! And remember, KIDCAFE is the place to go if you are looking for a penpal or want to chitchat about subjects like pets, music, school, etc. while KIDS-ACT is for serious discussion.

Everyone looks forward to seeing what you come up with in KIDS-ACT!

Remember to check out the other KIDS-93 forums, if you have not done that already. They are:

KIDLINK	The project's official information "channel". --- If you don't subscribe to this list, then you won't know what is going on.
KIDCAFE	a get-together, get-acquainted place for kids
RESPONSE	our "data base" of responses to the 4 questions
KIDLEADR	an informal meeting place for KIDS-93 coordinators and others
KIDPROJ	for various approved school projects
KIDPLAN	day-to-day coordination of KIDS-92

To get some practical tips about "How to use KIDS-93", send an electronic message to LISTSERV@vm1.nodak.edu (or LISTSERV@NDSUVM1 on BITNET) with the TEXT of your message containing the following line:

GET KIDLINK TIPS

BIOMES EXCHANGE PROJECT

Following is an invitation to teachers who would be interested in a telecommunications project involving the exchange of biome data and information. The starting date will be mid-January. The goal is to have students research their own biome and compare it to other biomes. Themes to be covered will include- adaptation, climate, plant and animal life, soil and water, geologic features, changes through time and human impacts.

Grade level participation is variable. My students are 6th graders but 9th and 10th grade teachers have also expressed interest in the project. Classroom groups will research specific topics (see below) about the local biome. The group will present a written and oral report to their own class. This information will also be made available to participating schools. Each classroom group will then be responsible for learning and informing their class about their topic in the other biomes.

Following is a list of topics which will be researched by the groups. To participate in this project do not feel obligated to have your classes research all of these topics. We would love to have you participate to whatever extent you and your classes can.

Group 1- Your location- latitude and longitude. General location of biome in the world. Elevation. Climate- I will be having a group making weather measurements all year.

Group 2- Plants- names, pictures, specimens, endangered species, adaptations to the area, etc...

Group 3- Animals- names, pictures, specimens, endangered species, adaptations to the area, etc...

Group 4- General landscape- pictures Human uses and impacts Soil types- descriptions, effects on plants, samples.

Group 5- Water- samples and analyses. Fossils- samples (named), age and their habitat, how the area has changed. Rocks- samples, types (sedimentary, igneous, or metam.)

If you have students collect specimens and pictures for exchange with other students these will, of course, need be sent via US mail (Snail mail). If a group is ready to send or receive plant, soil, water, mineral or fossil samples they will ask via e-mail who would like to make an exchange. The actual exchange would then occur using US mail. I will keep a list of all participating classes and will make this list available to all of the teachers. Data and other information will be sent electronically.

Kirk Beckendorf
Fredericksburg Midlle School
Fredericksburg, Texas
kirkb@tenet.edu

NEWSDAY Project

Project Name: NEWSDAY
Date: November 6, 1992
Purpose: To address and improve:
* Academic skills - reading, writing, editing, revising, interviewing, literature appreciation and understanding
* Social Skills: cooperative learning, leadership, listening, discussing, encouraging, sharing.
* Technical Skills: word processing, file management, keyboarding; telecommunications: terminal software commands, uploading and downloading.

Summary: NEWSDAY is a multi-curricular project in which students in each participating school produce a local newspaper based on the news dispatches submitted on the NEWSDAY news wire by cooperating student correspondents. Students become news gatherers and reporters, editors, layout and graphics artists, and publishers. Participation on a national and international scale leads to understanding of broad issues which transcend local concerns. This project can involve your students in weeks of cross-curricular activity.

Schools may use a wide variety of methods to produce the papers, ranging from simple word processor cut and paste to full DTP packages. Participants will receive a newspaper produced by each of the other participants in the NEWSDAY project.

Grade Levels: Upper elementary, junior high, high school. Material coming off the news wire will appeal to all age levels. This is an excellent project to encourage profitable inter-grade participation.

Content Area: Many content areas may be included during NEWSDAY. By deciding what kinds of articles and features to write, you can include a focus in almost any content area. Possible content areas:

Writing	Reading	Language	Art
Social Studies	Science	Environmental Science	

Number of participants: Minimum of 10, Maximum of 30. If fewer than 10 schools register NEWSDAY will be canceled. When 30 registrations are received we will open registration for a another NEWSDAY section.

Newsday Theme: Cultural Diversity (see project description)

Project Coordinator: Nancy Sutherland, FrEdMail Foundation
PO Box 243, Bonita, CA 91908
619-475-4852
Email: newsday@bonita.cerf.fred.org

Registration: First attached file is the registration form. Complete the form and email it back to the address indicated.

NEWSDAY REGISTRATION

Only bonafide participants in NEWSDAY will be eligible to receive copies of newspapers produced by this project.

In order to be a bonafide participant, you must:

a. register by sending the information below
b. upload at least five of your best articles (but no ore than 10) on NEWSDAY
c. agree to send a copy of your newspaper to each of the other participants (as many as 30 newspapers)
d. agree to upload an electronic edition of your newsletter for dissemination to interested teachers online.
e. agree to send the FrEdMail Foundation three copies of your newspaper, of which at least one of them must be on white paper suitable for reproduction.

To register for NEWSDAY, please complete and return the following information to: newsday@bonita.cerf.fred.org

Your full name:
Your email address:
Your school:
District:
SCHOOL address:

School voice phone:
Home voice phone:
Grade(s) taught:
Subject(s)

TIME LINE
This time line is a summary. Please see following sections for further instructions.

Send questions, comments, suggestions (but not news articles) to newsday@bonita.cerf.fred.org.

September 1 - October 22
Register to participate in NEWSDAY by filling in the registration form in attached file #1; mail it to: newsday@bonita.cerf.fred.org

Introduce your students to the concepts and practices involved in the production of a newspaper and write a Hello File which will introduce you to the other participants.

October 23
Project Coordinator sends you a complete list of all participants.

October 28
Upload your "Hello File" to send to other participants.

October 26 - November 6
Begin researching and writing articles, planning layout and collecting graphics.

November 6
NEWSDAY: Upload your articles. ALL articles MUST be uploaded by the afternoon of November 10. (Note: send each article in a separate message. Ensure each

article is identified with author's name, age, school, district, city, country, and teacher.) Use one of these addresses:
FrEdMail: forum topic PROJ.NEWSDAY
Usenet: newsgroup SCHL.PROJ.NEWSDAY
Email: send email to NEWSDAY-LIST@BONITA.CERF.FRED.ORG

November 9 - 13
Scan bulletin board and download articles to use in your newspaper. (You may find a few strays showing up as late as November 27.)

November 16 - December 4
NEWSWEEK: Select and edit articles from the news wire, and combine them with local articles. Layout and publish your newspaper. Merge a text version of each article into a disk-based version of your newsletter.

December 7
1. Mail a copy of your printed newspaper to each of the other participating schools.
2. Upload your disk-based version of the newspaper.

January 13
Upload evaluation of the Newsday project.

GENERAL PROCEDURE
1. NEWSDAY will be November 6, 1992

2. NEWSDAY Theme will be Cultural Diversity. In view of the controversies surrounding the various ceremonies and demonstrations attending Columbus Day this October, the one constant we can all celebrate is our own unique racial, ethnic, religious, and cultural roots and contributions to our shared culture.
There are many directions you may wish to take this with your students. They could report on Columbus Day events in your region. They could write essays on how they view the discoveries and subsequent events of Columbus voyages, particularly as it affected their own families. They could investigate and report on the various local ethnic associations and their activities in your area. They could interview spokespersons of various community activist groups which have adopted specific positions regarding Columbus Day. The various viewpoints brought to light by this project should be of keen interest in every community.
Not all of your articles need to address the theme of Cultural Diversity, nor does all of your newspaper be devoted to this theme. Your students may choose to devote as much or as little of the space available as they wish to this theme.

3. Prior to NEWSDAY, have your students compose a HELLO FILE containing several essays about your class, school, neighborhood, and community. Have them take several surveys to identify favorite books, foods, styles of music, hobbies, and so on, and share the results. (Let's avoid favorite TV programs this time around.)

Merge ALL of your class essays into one large text file (see Attached file #4 on preparing student files for uploading.) Then send this file to: newsday-list@bonita.cerf.fred.org

4. Preceding NEWSDAY your students will learn about newspaper production, gather news, and write news dispatches. According to the standards outlined below, your board of editors will select the news dispatches to submit to the NEWSDAY wire service.

5. On NEWSDAY, November 6, your students will upload their news dispatches to one of these NEWSDAY Conferences.

FrEdMail:	proj.newsday
Usenet:	schl.proj.newsday
Email:	newsday-list@bonita.cerf.fred.org

It may take 24-48 hours for articles to begin arriving at your site for you to download

6. Beginning November 9 your students will download news dispatches from other participating schools to use in their newspaper.

7. Your boards of editors will read, select, and edit both locally written and downloaded articles for printing in their newspaper.

8. By Monday December 7 (or as soon thereafter as possible) you will mail a copy of your newspaper to each of the other collaborating sites.

9. Upload the disk-based version of your final newspaper to one of the newsday conferences listed above.

10. Following receipt of the other newspapers, your students will read them and in the process compare their own contribution.

11. The FrEdMail Foundation is interested in your students' reactions to the Newsday project. We invite your students to write a final summary report of their experience and tell us what they did, how they benefited, and their overall evaluation of the project. We welcome suggestions and constructive criticisms. Send your final summary or evaluation to newsday@bonita.cerf.fred.org on or before January 13.

ADDITIONAL DETAILS

THEME

This NEWSDAY's theme is Cultural Diversity. You are encouraged to base your newspaper around this theme, but you may include other material.

PREPARATION

1. Register to participate by sending in the registration form found at the end of this announcement.

2. Introduce students to the concepts and practices involved in the production of a newspaper.

This may be done through a unit of work covering newspaper production. Contact your local newspapers for assistance. Many larger city newspapers have an educational division which provides curriculum materials for students.

Students should read, study, and discuss real newspapers. They should note the way articles are written and material is presented.

3. Divide your class into newspaper teams, with each student assigned to one or more roles. Teams would include researchers, reporters, editors, photographers and artists. See section on "Who Makes the Newspaper?, below.

4. This Newsday announcement includes two lessons which you may find useful in preparing your students to become newspaper reporters and editors.

DESIGN YOUR NEWSPAPER APPEARANCE
Your students must make many decisions regarding the final appearance of the newspaper:
1. The name of the newspaper
2. The design and appearance of the banner or masthead.
3. The number of pages to print
4. The news sections to include (news, feature articles, editorials/opinions, sports, entertainment, and so on.)
5. The general layout, including whether or not to have columns, the order of news sections, and the amount of space devoted to each section.
6. The kind of graphics which will be included (photos, original sketches, Print Shop-type graphics, clip art. Photographs may be photocopied if you use a Letraset Dot Screen).

WRITE YOUR ARTICLES, STORIES, FEATURES
You will use many locally written articles in your newspaper. Therefore, every student should be involved in the days prior to NEWSDAY in writing and producing the various features you expect to include.

1. LOCAL STORIES: Students will research and develop interesting stories on your local area. Help them identify "news worthy" stories: history, accomplishment, "famous" people, places, or things. Have them include interviews and "man on the street" opinions and points of view. Of interest might be cultural or multicultural events in school or the community. Also, success stories/tragedies: What can we learn?

2. STATE, NATIONAL, INTERNATIONAL STORIES: These are appropriate topics for NEWSDAY, especially if you can get local angles: Effects on local businesses, schools, and so on. Get opinions and reports on major news stories from community leaders, including their views regarding the effects of these stories on your local community and economy. Ellis Island might prove to be a valuable mini unit for your class and an excellent article subject.

Perhaps there are students in your class or school whose great grand parents passed through Ellis Island.

3. Look over the list of NEWSDAY participants and make a note of their locations. If during the time of preparation any major news national/international news stories break in one of those locations it may be of interest to write a report of that news from the way it is reported in your local news media. Consider interviewing students from the participating school in that area, via telephone or email, to give it a first-person immediacy.

4. SURVEYS: During the preliminary on-line discussions leading up to NEWSDAY, participants may wish to discuss and identify one or more surveys to conduct at each participating school. For instance, a survey on cultural percentages in the school or community would provide some interesting data from across the network which could then be synthesized and reported by each local team. Students will find it interesting to compare news stories written by different students using the same data. In order to do this someone must prepare and distribute to each NEWSDAY participant an appropriate survey instrument. Surveys will not count toward your maximum number of articles.

5. EDITORIALS: Any issue is fair game for editorial comment, subject to the limits of good taste. You might consider whether the melting pot or salad bowl analogy is better suited to the United States. Be sensitive to the varying ages and locations of your correspondents. What may be appropriate for your local school may be too hot for other places. It may be best to avoid certain topics.

6. INTERVIEWS: See attached file #6 for a sample lesson plan on developing articles based on an interview. You must adapt and change this lesson to conform with the theme of this newsday.

7. OTHER SECTIONS: Look at the section below on Newspaper Sections. Decide what sections you want to include in your newspaper and have students begin work on producing them (for instance, crossword puzzles, acrostics, or political cartoons.)

8. GRAPHICS: Have your photographers, artists begin creating the supporting artwork. Ethnic artwork would be of particular interest.

SELECT ARTICLES FOR UPLOAD

1. Your students will select ONLY THE BEST articles for upload on NEWSDAY (Maximum: 10 articles, plus any surveys taken.) Prior to upload, have your authors edit and revise and incorporate suggestions so as to generate the best possible articles to represent your class and school.

2. You should act as the "Editor in Charge" and ensure that uploaded articles have been thoroughly proofread and edited. If necessary, some articles may include a brief preface. Accuracy in spelling and punctuation is important.

3. During this time student editors should be identifying which local articles and features will most likely be included in the newspaper. They should suggest changes and send them back to reporters for re-write when appropriate.

UPLOAD ARTICLES ON NEWSDAY

1. Prepare:
- Have computer(s) set up for students to use
- Have formatted disks for students to save their articles
- Have your modem ready to go

2. On NEWSDAY Upload ONLY THE BEST articles (Maximum: 10 articles). EACH article should clearly identify the author, author's age, school, district, city, country, and teacher.

3. UPLOAD EACH ARTICLE AS A SEPARATE MESSAGE. DO NOT merge and send batches of files. For each article, type a CATCHY, RELEVANT SUBJECT as the message header or subject field to ensure people will read your news item.

4. Upload your articles to one of the following addresses, depending on what service you have available:
FrEdMail: Upload directly to PROJ.NEWSDAY
Usenet: Upload directly to SCHL.PROJ.NEWSDAY
Email: Send articles to NEWSDAY-LIST@BONITA.CERF.FRED.ORG

DOWNLOAD ARTICLES
1. Prepare
- Have computer(s) set up for students to use
- Have formatted disks for students to save their articles
- Have your modem ready to go
- Have printers with new ribbon and enough paper to print articles
- Have a large pin board to pin up articles when assembling the paper
- Have your "DTP" program read to go
- Scissors, glue, paper, etc.
- Pagemaker, Publish It, etc., ready

2. Twenty four to forty eight hours after NEWSDAY have your senior editors log into your email system and scan the NEWSDAY subject headers. They should read and capture or download to disk all articles they may wish to include in your newspaper.

3. Student editors should consider downloading more than one article on a given subject, as they may be able to re-write and combine the articles into one better article.

4. Editors should print out at least 2 copies of all downloaded articles.

SELECT AND EDIT ARTICLES
1. Student editors should read and select both downloaded and locally produced articles. This will no doubt involve discussion and decision making.

2. If several articles have been written on the same subject (including both downloaded and local articles) the editors may wish to assign reporters the task of synthesizing the articles into one. If this is done, be sure to include the names of contributing reporters and their schools.

3. Editors should edit articles so that they are appropriate for your newspaper. This may require cutting, padding, and changing and revising language.

4. Editors should select headlines for each article that are short, pertinent, and eye-catching.

5. Merge each finished article into one or two large files which will become a disk-based version of your printed newspaper. You will upload a text-version of this newspaper to the newsday mailing list.

ASSEMBLE THE NEWSPAPER

The compositors and layout people will take the finished articles and lay them out for the newspaper. This may involve a DTP program or it may involve printing them out on the best printer you have and using scissors and glue to put them together.

Graphics (photos, sketches, cartoons, clip-art, graphics programs) should be included to add visual interest to your production.

PUBLISH THE NEWSPAPER

Print enough copies of your newspaper to give to each student in your class, plus one for each of the participating schools, plus three for the FrEdMail Foundation.

Mail your newspaper to each participating site. Also, upload your disk-based version (converted to ASCII text) to newsday@bonita.cerf.fred.org.

FOLLOW-UP

It is always a good idea to follow up the NEWSDAY activities. Below are some possible activities:

1. Have your senior editors write an evaluation of the NEWSDAY project and post their reactions, comments, suggestions, and criticisms on the NEWSDAY wire for other schools to read. Label these messages "Student Comment." (Your comments are invited also. Label them "Teacher Comment.")
2. Share your NEWSPAPER with other classes in your school.
3. Get feedback from parents and other readers.
4. Place several copies of the newspaper in the school library.
5 Have your students write and edit a letter which describes the NEWSDAY process, how telecommunications was used, and how they produced the newspaper. Then send a personalized copy of the letter and a copy of your newspaper to:

your principal
president of your local PTA
your superintendent
president of your Board of Education
local newspapers
Chamber of Commerce

The importance of this kind of public relations to foster understanding and acceptance of telecommunications technologies cannot be emphasized enough.

Who Makes the Newspaper?

Newspaper Sections

News	Classified	Weather	Star signs	Finance	Real Estate	
Crosswords	Sports	Advertising	Social Gossip	Politics	Fashion	
TV/Cinema Guide		Cartoons	Headlines	Book/Movie Reviews		

Newspaper Workers

Reporters	Typists	Copy Writers	Accountants	Lawyers	Editors	
Printers	Compositors	Designers	Collators	Salespeople	Researchers	
Cartoonists	Writers	Advertisers	Meteorologist	Board Members		

Leadership Positions

Editor in Chief: Supervises and coordinates the entire newspaper production system and every phase of production. Has final say on job assignments, editorial policy, news content and layout.
Managing Editor: Organizes the journalists to cover particular stories and feature items. Responsible for seeing that the reports are finished. Also oversees the assembly, printing and distribution of the paper.
Editorial Writer: Writes statements of editorial opinion for the newspaper. The comments should reflect the attitude of the majority of the class or group involved in producing the paper.
Copy Editor: Checks each story for accuracy, style, and grammatical errors. Also indicates how corrections can be carried out.
News Editor: Assemble the stories and prepares the pattern of layout for each page. Also responsible to write headlines for each article.
Art Staff: Responsible for the graphics on the page. Also design or arrange the heading for the paper.
Reporters: Gather information and write the articles and stories. Usually they have a specific area or topic to cover, e.g., world news, current affairs, politics, human interest, sports, etc.
Feature Writers: Research and write special features and articles. These can cover a wide range of topics.

The remaining attached files will be sent to you when and if you register for this project.

SuperQuest

The Computational Science Challenge for High School Students and Teachers
Promoting the study of high school science through the use of advanced computing resources.

A science project and a computer are all you need to become a part of SuperQuest, the national science competition for high school students and teachers. Winners will attend one of five SuperQuest
Summer Institutes to explore the world of computational science through hands-on experience! SuperQuest challenges high school students to use advanced scientific computing to explore and understand science and mathematics.

The 1993 competition is just getting underway, so get your team together now! SuperQuest teams are made up of one or two teacher- coaches and four students from grades 9 through 12. Teams can submit one group project or individual student projects. Problems can be from any scientific, engineering, or mathematics discipline, as long as they require computing resources for analyzing, modeling, or visualizing important aspects of the project. Students and their teacher-coaches may want to analyze patterns in music, study traffic jams, study the formation of snowflakes, or visualize ultrasonic surgery. The teams with the best projects are SuperQuest winners.

PRIZES

Winning teams will participate in an exciting three-week Summer Institute to learn about advanced scientific computing and computational science. Travel to a nationally known advanced scientific computing center, in addition to room and board, will be provided by the SuperQuest program. This is just the start of a year- long adventure in exploring science back home, as students continue their research using workstations awarded to their high schools as part of the SuperQuest program.

The winning schools will also receive network access and time on a high-performance computer to allow the students ample resources to complete their projects and to allow the teacher-coaches to use the computer in their math or science classroom.
Winners also receive stipends of $3,000 for each teacher-coach and $1,000 for each student.

SuperQuest is a partnership of the Cornell Theory Center, the National Center for Supercomputing Applications, the Northwest Regional SuperQuest Center, Sandia National Laboratories, and the University of Alabama in Huntsville/Alabama Supercomputer Network, with support from the National Science Foundation and corporate sponsors. In 1992, SuperQuest received support from Digital Equipment Corporation, IBM, Cray Research, Inc., Intel Corporation, Cisco, Inc., Advanced Digital Communications Consortium, and other corporations.

FOR MORE INFORMATION

Send in the requested information below via electronic mail to superquest@tc.cornell.edu, or call 607-255-4859, for an application booklet- it explains SuperQuest rules and includes entry forms and information for teams, schools, and parents. Get your booklet now; it will help you get started (Booklets are available hard-copy only). The registration deadline is March 1, 1993.

Grand & Everyday Challenges for Education

Want to involve students in real world problem solving activities? Join in the Grand & Everyday Challenges for Education. Questions and problems and other challenges, both "grand" and everyday, will be posed by folks for whom these are real challenges. These will be sent electronically to interested school groups so that they can find ones relevant to their curriculum. They can then interact with the challenge posers and develop solutions. Groups of students and teachers will be able to form "tele-task forces" to work together over the network to solve challenges. Successful solutions will in some cases lead to a reward for the school group.

Goals: To develop students problem solving skills, especially working collaboratively with others, both locally and remotely. To have students learn skills and knowledge within a broader, more motivating context.

Grade levels: This project can involve students of any grade level or ability level. The ways in which students become involved can vary, but all are welcome to participate.

Duration: This project will run throughout the 1992-1993 school year. If you send us a list of what topics you'll be dealing with during which periods of the year, we'll send you those challenges that are related to those topics.

Content Area: All content areas can be involved.

Attached are some examples of how we plan to have this project work. If you're interested in participating in the Grand & Everyday Challenges for Education, send me a message and I'll add you to our electronic mail list and send you further information.

Project coordinator:
Jim Levin
University of Illinois
210 Education Building, 1310 S. 6th St., Champaign, IL 61820
FrEdMail address: jlevin@uiuced2.uiuc.fred.org
Internet address: jim-levin@uiuc.edu

Here are some examples of how the Grand & Everyday Challenges for Education can work:

Grand Challenges

A world class mathematician posts on an unsolved theorem that's important to the progress of his work. A high school math class teacher selects that challenge and poses it to her students, who apply a new piece of visualization software to the problem and develop some promising new approaches which assist the mathematician in developing a new way to thinking about the theorem that allows an innovative solution.

A panel of ecological experts is concerned with the issue of how to increase the rate of recycling plastics. They are particularly concerned about the impact of "juice boxes", since they are a composite of plastic, paper, and aluminum. They post as a challenge how to deal with the problems raised for recycling of "juice boxes". Two elementary school classes chooses

to consider this challenge jointly. They interview their fellow classmates about what they like and dislike about juice boxes, they interview their parents about why they buy them, they observe the ways that they and their classmates use and dispose of them. They consider alternatives to juice boxes, and develop an alternate that they write up and submit back to the ecological panel, which considers it, and includes it in their report to Congress, which changes regulations about the manufacture of such containers to encourage the more effective solution suggested by the elementary school class and refined by the panel.

A team of scientists developing state-of-the-art supercomputer-based models of tornadoes posts a description of a puzzling mismatch between their model and data from a set of recent tornadoes in Illinois. A middle school science class in Illinois examines aspects of the model though their network connection, accesses additional weather information about those tornadoes from their online state weather database, and formulates some new hypotheses to explain the anomalies. They communicate electronically with the team of scientists to clarify some aspects of the mismatch, and to get suggestions for ways to test those hypotheses by applying the model to additional tornado data. Then the class submits the surviving hypotheses back to the team of scientists for further investigation.

Everyday Challenges

A local park district is in the process of deciding where to locate a new playground structure. They'd like to conduct a survey to help them decide. They post their challenge, and a local elementary school teacher organizes her class to formulate the questions, collect the data, enter it into a statistical analysis program, and print out the results.

A university professor, as part of her research project, needs to know what middle school students think about advertising on Saturday morning TV. She posts the challenge, then several schools together take up the challenge, conducting the surveys, analyzing them, and sending a report and the data to the professor.

A local agency serving homeless people faces a shortage of child care workers. It posts the challenge. A group of schools contact the homeless shelters in their areas, and compile a list of different ways in which child care is provided. One approach, to work with a local retirement home to involve retired people as child care providers, is proposed as a solution to the challenge. Details of how that solution works in another location are provided, along with some suggestions of modifications that would make the solution more effective in the challenge location.

Stream Study

Hello All,

We are planning to collect info on Venango County streams in October and we are interested in hearing from others who conduct stream studies and have data available. The first year we did this project, we limited the work to the pH of the water. Last year, in addition to pH, we measured total dissolved solids. We plan on adding to the project again this year.

In the past two years, we collected data at over 100 sampling sites in the Venango Co. area but tested only once during the year - in October. This year we may select just a few streams and take monthly samples, repeating the broad survey every 5 yrs. or so.

If you are interested in stream studies, will be doing a project this year, or have data to share, send a note to:

Gary Morford
gmorford%FSD@edinboro.edu

MathMagic Project

MathMagic Project

EXCITING NEWS! There is now a project which will motivate students to solve open-ended math word problems and use language arts skills to write their solutions. MATHMAGIC is a project which accomplishes this and provides an opportunity for students from around the world in a collaborative effort.

INTERNET MATHMAGIC--Working from each individual school (site), students team with groups from other sites to solve problems which have been posted by MATHMAGIC. These problems are discussed and solved through communications between teams. After working the problems, MATHMAGIC teams submit one solution format which requires that they state the problem, discuss the various strategies, and explain the solution.

K12NET FIDO MATHMAGIC--Students at all grade levels work on the posted cycle in six-week increments. They work with thier teams or individually at their site. They are allowed to post questions or start discussions during the cycle to further enhance their solutions.

Once solution formats are received, evaluators examine the final submission. Teams are not ranked, but achievement is recognized. The results are posted on the MATHMAGIC board and in a newsletter published by MATHMAGIC headquarters on a six-week basis.

This project provides an answer to the common problems math teachers around the world encounter. It provides the motivation for students to write and solve word problems in math. In addition, students develop needed skills in the use of a computer and modem while expanding their world through communication with other students.

For more information about MATHMAGIC, please contact:

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FidoNet 1:381/64

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All of MATHMAGIC files and problems are available via file request MATHMAG1.LZH from 1:381/64 (11 K). Also, Internet users can procure them as an FTP from laguna.epcc.edu.

Introduction to KIDLINK
Global dialog for kids 10 - 15

KIDLINK is a grassroot organization, which in two years has had 6,200 children from 45 countries participate in a global dialog. The work is organized in 12-month projects with names like KIDS-91, KIDS-92, and now KIDS-93. The latter will continue until May 1993.

KIDLINK's purpose is the dialog itself. There are no political objectives. All children in all countries between the age of 10 - 15 are invited. Participation is free, but the children have to reply to the following four questions before being allowed to join the dialog with the other children:

1) Who am I?
2) What do I want to be when I grow up?
3) How do I want the world to be better when I grow up?
4) What can I do now to make this happen?

Here is a sample response received from Grahamstown, South Africa:

1) MY name is luthando mqulwana and I am from Alice (S.A) my home language is XHOSA and I was born in SOUTH AFRICA. I go to college at ST ANDREW'S COLLEGE (S.A).I AM 14,3 years old and am in std 8. Since I went to school I have only been to four school but I have never been expelled but am a rebel in my sort of way. You must enjoy life while you can.
2) when I grow up I want to be a doctor and I think I will have to put a lot of effort to be that.
3) I would like every one to live in peace to love each other and care for each other. This is the world God created for us so we must take care of it hope that happens.
4) I want to pray that happens and I hope you do that too.

WHAT EDUCATORS SAY

KIDLINK has been eagerly seized by educators all over the world. Claus Berg, a Danish teacher, is one of them. In his view, KIDLINK has the following offerings:

* it breaks down frontiers between people from many different countries and cultures. The kids learn from each other and make friendships across the World - and maybe they'll also improve their knowledge of a foreign language!
* the kids learn, that others have the same thoughts about global problems: war, ethnic conflicts AND the Environment. KIDLINK gives them a fantastic opportunity to discuss, how to solve their (and ours!) common problems.

Giuliano Ortolani, a teacher at the Guido Reni School in Bologna, Italy, tells the following story:

"Then we have seen hundreds and hundreds of mails coming from all the world, we have seen kids pursue the English teachers to translate the mails and to write answers. We have seen the boys write pages of peace on their school-newspapers.
If this is a game it is a good game!"

Barbara Manchee, Pittsford Middle School, New York, USA in a message dated January 24, 1992:

"The 4 questions make KIDLINK unique. How great it is to give kids the chance to really think about their place in the world, how they imagine their future,

and what they can do to make a difference. The kids who are excited can get reinforcement and the kids who are depressed or have a negative outlook can get a dose of the outlook of other kids their age who have a different perspective and good positive ideas."

APPLICATIONS - EXAMPLES
Teacher: Mike Burleigh, of the Oldfield House School, in Hampton, UK:
Age of Students: Primary (6 to 11 years)
Plans for Using the KIDS-XX Project: Motivating students to communicate through writing to develop basic language skills. Working with other school/class groups on science/arts/humanities studies within common themes (list with dates available on request) interested in exchange of videos and books made by pupils etc.
Subject Area of Expertise or Interest: Qualified art, special needs and science teacher. Interested in Global Networking to develop links with disadvantaged children/communities.

Teacher: Sally Laughon, NorthCross School, Roanoke, VA, USA
Age of students: 13-18
Plans: Incorporate cultural exchanges with other students. Excite students with academic challenges and encourage environmental responsibility. Develop projects that span the curriculum.
Interest: Interdisciplinary telecommunication projects. I teach computer courses in our Upper School, ages 13-18, but help with telecommunications activities throughout the school. I maintain this file, so I can learn a little about mainframe computers at Virginia Tech and North Dakota!

Teacher: Wolfgang Reinfeldt, Caecilienschule Oldenburg (Pluto Project, Uni Oldenburg), Germany.
Age of students : 12-19 years
Plans for using KIDS-92 Project:
a) Pupils with technical ambitions shall establish international contacts.
b) Pupils with social ambitions shall find technical equipment useful.
c) Both groups shall help each other and use the facilities without help from teacher.

FOR MORE INFORMATION
General information about the current KIDLINK project, KIDS-93, is available by electronic mail. To get this information, send a request to LISTSERV@vm1.nodak.edu (or LISTSERV@NDSUVM1 on BITNET)

The TEXT of your request should contain the following commands:
GET KIDS-93 GENERAL

An "electronic book" about KIDLINK is also available by anonymous FTP. For information about how to get the KIDSHOW "book", add the following GET command in the message to the LISTSERV:
GET KIDS-93 KIDSHOW

You may also write Odd de Presno at opresno@extern.uio.no for information.

Project IDEALS

Promoting an International Dimension in Education via Active Learning and Simulation

Project IDEALS is a computer-assisted learning environment based on multi-site, semester-long, socially-interactive simulations. Computer technologies allow distant teams to communicate, hold real-time teleconferences, and to obtain feedback on their performance and progress. Project IDEALS is firmly based on the principles of experiential learning; it encourages students to become fully involved, motivates them to work hard, and helps them take responsibility for their own learning.

Objectives

* To develop competence and confidence in communicating with people from other cultures, and so help create international friendships.
* To give students greater knowledge and understanding of international events and issues (e.g., global environmental problems) and to provide a context for interdisciplinary studies.
* To enhance professional skills in such areas as team work, decision making, problem solving, leadership and negotiation, and to develop computer literacy, clear writing and critical thinking.

Structure

The central component of Project IDEALS is a large-scale simulation assisted by computers and telecommunications. Students take on the roles of high-level negotiators representing various countries at an international conference. The country teams are situated at different campuses (usually one team per campus) and communicate using computer networks and specialized simulation management software.

The ultimate goal of each simulation is for teams to negotiate an agreement related to some international situation -- for example, to hammer out the text of a treaty governing the emissions of CFCs, the use of the ocean's resources, or the future of Antarctica. Scenarios may involve real or hypothetical countries.

In Project IDEALS, the experiential learning cycle is paramount, emphasizing the importance of regular and structured reflection on experience to convert it into learning, which in turn becomes the basis for further practical experience.

Computers and telecommunications

In order to participate, each site needs a minimum of one microcomputer (e.g., BBC, IBM compatible, Macintosh), a modem, a printer, a telecommunications package, and a simple word processor. Faculty and students do not need any special computer skills in order to participate. Each site will also need access to the Internet (NSFNet) telecommunications network.

The main simulation management software, called Polnet II, is situated at the University of Alabama. It allows messages to be sent to any number of other teams at other sites and for those teams to sign on at any time to retrieve those messages and to send their own. It also enables teams to participate in real-time teleconferences, in which several teams communicate

in a synchronous, conversational mode. Finally, it collects feedback and research data.

Further information

For further information, please contact:
Catherine Schreiber-Jones, Assistant Director,
E-mail: cschreib@ua1vm.bitnet
or ua1vm.ua.edu

or David Crookall, Director:
E-mail: crookall@ua1vm.bitnet
or ua1vm.ua.edu

Project IDEALS
English/Morgan, Box 870244 Telephone: 205-348-9494
University of Alabama Facsimile: 205-348-5298
Tuscaloosa, AL 35487, USA

Big Computer Pals

Big Computer Pals is a Big Brother/Sister interaction across the Networks and aimed at the handicapped. There is no restriction on the type of handicapped and has included sensory, mobility, educational, and emotional. The list Bicompal@sjuvm.bitnet is a "personals" listing where people find big and little pals. Most of the interactions are then done through private mail, so I really have only a glimpse of the interactions that are taking place by looking at the proceedings. What is available on the logs however makes for some heart warming reading. Let me know if you are interested in subscribing.

Bob Zenhausern, Ph.D. CompuServe: 72440.32@compuserve.com
St. John's University Bitnet: drz@sjuvm.bitnet
SB 15 Marillac Phone: 718-990-6447
Jamaica, NY 11439 Fax: 718-380-3803

Given this e-mail address I am still not sure how to subscribe to Big Computer Pals. You can reply to me at You can reach me at
jdantoni@uva386.schools.virginia.edu

Noon Observation Project

This is the CLASSIC NOON OBSERVATION PROJECT wherein students calculate the circumference of the earth.

Project name: THE NOON OBSERVATION PROJECT

Purpose: Use simple measurements and calculations to determine the north-south circumference of the Earth.

Content area: Math, trigonometry, elementary statistics, science & social science.

Background: Over 2,000 years ago Eratosthenes made a remarkably accurate measurement of the earth's north-south circumference. This project requires collaboration of students in places at different latitudes of the earth to make some simple measurements, share data, problem solve the algorithms required, and then replicate and share their results. This a real, practical experiment which may provide lots of practice making measurements and using trigonometry, and statistics.

General Procedures:

1. At least two sites must collaborate whose latitudes are different enough to give a significant difference in measurements.

2. On the given date (or within a day or two on either side, depending on weather conditions) students will conduct their measurements outdoor at high noon, local time.

3. Using a standard meter stick, at precisely high noon local time, each team of students will:
   a) lay out a piece of paper flat on the ground
   b) hold the meter stick perfectly vertical
   c) mark on the paper the end of the shadow at one minute intervals over a twenty minute period.
   d) several measurements should be made by several different students or teams of students ... the more the better.
   e) measure the length of the shadow cast by the meter stick to the nearest centimeter and these measurements will then be analyzed by the students.

4. The data along with the time at which local high noon was observed (the time of the shortest shadow) will be sent to the other sites involved in the project.

5. This data along with the latitude and longitude measurements for each site should be enough information to use trigonometry to make a fairly accurate calculation of the Earth's circumference.

Additional details:

1. This project could be the basis for some really good problem solving for your class. Using your own algorithm, this could be a contest to see who, using this data, gets the closest results. Or, this could lend itself to some

interesting discussions between students at the cooperating schools to come up with a joint algorithm.

2. This project also will consider whether we should use the median or modal values of the shortest lengths of the shadows rather than just a simple average in the calculation of the circumference of the earth. Which measure will give the most accurate result? We will also plot the data in various ways using stem-and-leaf charts and box-and-whisker plots and publish them for the participants in the project.

3. Plotting of each site on maps using e & longitude will enable each site to calculate north-south distance, and east-west distance between sites. Knowing the north-south distance is essential to solving this problem.

4. Background information on Eratosthenes of Cyrene about his accurate calculation of the earth's circumference will be sent on request. This information was gathered by Al Rogers from the online version of Grolier's Academic American Encyclopedia. We will also supply Appleworks templates to help you and your students analyze the data.

An Ozone Network

We are looking for schools and colleges interested in being involved in an ozone measuring network. The idea of this project would be to create a classroom-based, research quality network for total ozone column measurements and to integrate these measurements into a curriculum that addresses the underlying science and puts it into a larger social context. The ozone measurements would be based on designs developed by TERC and Forrest Mims III, utilizing differential measurements of the intensity of solar radiation in the ultraviolet using narrow-band interference filters. With the cooperation of NOAA, these units will be calibrated against Dobson spectrometers so that they will be capable of measuring the ozone thickness to an absolute accuracy of 3%. We will then be able to maintain calibration by making periodic measurements when the TOMS instrument is overhead and, with the cooperation of NASA, comparing the space-based data with our ground observations.

The international concern about ozone, combined with the ability to contribute to its scientific study, creates the ideal atmosphere for learning. Students will want to know how to interpret their data, what the implications of their measurements are, what the ozone issue is, what the long-term predictions are, and what they can do about atmospheric change. We will assemble a series of educational resources that address these issues and the related background science topics suitable for students in a wide range of grades, from middle school through college. We will provide guidance for teachers at these different levels on how to use the materials.

We will also use the network to create a community of schools participating in the experiment. The combined data from all participant measurements will be available on the network together with software for easy display and analysis. The network will be a place to go for ideas for further research and also contain current news about scientific, regulatory, political, and education issues related to ozone, creating a way for students to link into current events.

Ideally, a class will be organized so someone from the class makes one or two measurements every day and contributes the results to the network. Then, at some point during the year, two to eight weeks of class time would be devoted to the project, analyzing the data from the network, learning the science, and discussing the larger issues. Students will be encouraged to continue their work and expand into related research. At TERC, we are currently developing a proposal to fund this network. If you are interested in participating, we would appreciate a letter of support--it would help us get funding. We need teachers and faculty willing to make the measurements and teach the concepts, we need scientists who could help interpret the data and communicate with students, and we need volunteers to contribute news to the network and to moderate electronic conferences.

Please send letters of support to: Robert Tinker, TERC, 2067 Mass. Ave., Cambridge, MA 02140 or e-mail to (Internet) bob_tinker@terc.edu

Acid Rain Study

At Patch High School in Stuttgart, Germany we have started collecting precipitation samples (rain, snow, sleet) for pH analysis to coincide with a study being done by two students at School 1173 in Moscow (Lena and Masha). We will be willing to post our results in this conference and topic. We are also doing an analysis of the drinking water in this area and will post those results here also if requested.

Larry and students at Patch High School, Please feel free to post your results of acid rain studies here. Others may join the effort.
I have requests from many schools around the USA for samples of "Acid Rain" (two this week by letter). Of course the only possibility right now is the study of "Acid Snow" which the Russian schools did last year. At any rate, we will be collecting samples and analyzing them ourselves and positing our results here. looking forward to seeing your data.
Bruce gl.tech moderator
Original-Sender: Bruce Seiger <bseiger@igc.org>

Chapter 11:
Past Projects

This appendix contains a number of past projects. These projects are included as a potential source of ideas. The following is a list of included projects followed by a brief summary.

Virtual Track Meet 149
Students perform events at their schools and then the results are posted to Cleveland Freenet for international competition.

What's Japan 151
Students answer questionnaire about Japan, which is answered by Japanese students.

Telecomputing Activity Plan Contest 153
Contest for the best use of telecomputing in the classroom.

Computer Programming Contest 154
Student programming challenge.

Space Mission Simulations 155
Electronic simulations of four different space missions with students acting as different groups involved with a launch (crew, mission control, recovery team, etc.).

Architecture Challenge 157
Students build popsicle stick structures and subject it to various tests. The best are compared against other participants.

Zero G School Design 158
Students design solutions to zero gravity problems and submit for discussion.

K-12 VIRTUAL TRACK MEET HELD

On October 10th and 11th, the National Public Telecomputing Network (NPTN) staged the world's first "virtual track meet."

Seventeen K-12 schools from four countries (Canada, Finland, New Zealand and the U.S.) went out into their schoolyards on the same day and "competed" in three events involving running, jumping, and throwing. Individual results, as well as class averages, were then posted via computer and modem to the Cleveland Free-Net Community Computer system, where a "leader board" and "Meet Headquarters" were maintained. Below are shown the winners of the "Class Average" competition (the individual boy and girl winners, by age categories, was too long to send here, but can be seen on the Cleveland Free-Net).

This October meet was a preliminary event to a much larger "TeleOlympics" program which will be held in May of 1992 in honor of the real Olympics which will be held later that summer. The May TeleOlympics is expected (at this time) to involve over 6000 students, from at least a dozen countries around the world.

The TeleOlympics is just one of many special NPTN projects that is a part of it's "Academy One" program, and designed to involve K-12 students and teachers in telecomputing activities. For more information on how your school can participate in the TeleOlympics or any other Academy One activity, please feel free to contact: Linda Delzeit NPTN's Director of Education at: (Internet) aa621@cleveland.freenet.edu or (BITNET) aa621%cleveland.freenet.edu@cunyvm

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<<< SCHOOL/CLASS AVERAGES - FINAL RESULTS >>>
As of: 12:00 EST (+5 GMT)
10/14/91
17 of 17 schools reporting

CLASS B: Grades 7-9 (Ages 12 - 14)

50 METER RUN

CAN 1. 8.2 - Westsyde Elementary (Beck) - Kamloops, BC CANADA
USA 2. 8.6 - Horace Mann Middle School (7th Grade #2) Lakewood, OH
FIN 3. 8.7 - Sarkijarvi Elementary School - Evijarvi, FINLAND
USA 3. 8.7 - Emerson Middle School (8th Grade #2) - Lakewood, OH

LONG JUMP (in meters)

USA 1. 3.40 m - Jefferson Intermediate School - Cleveland, OH USA
FIN 2. 3.20 m - Herttoniemi Elementary School - Helsinki, FINLAND
CAN 3. 3.15 m - Westsyde Elementary (Sigurdson) - Kamloops, BC CANADA
CAN 3. 3.13 m - Westsyde Elementary (Beck) - Kamloops, BC CANADA

THROW (in meters)

USA 1. 35.5 m - Jefferson Intermediate School - Cleveland, OH USA
FIN 2. 33.0 m - Sarkijarvi Elementary School - Evijarvi, FINLAND
USA 3. 30.2 m - Emerson Middle School (8th Grade #1) - Lakewood, OH USA

CLASS C: Grades 4-6 (Ages 9 - 11)

50 METER RUN

USA 1. 8.20 - University School - Shaker Heights, OH USA
FIN 2. 8.65 - Sarkijarvi Elementary School - Evijarvi, FINLAND

CAN 3. 8.85 - Ucluelet Elementary School - Ucluelet, BC CANADA

LONG JUMP (in meters)
CAN 1. 3.00 m - Queen's Park Elementary - Pentictin, BC - CANADA
USA 2. 2.97 m - Horace Mann Middle School - Lakewood, OH USA
FIN 3. 2.96 m - Sarkijarvi Elementary School - Evijarvi, FINLAND

THROW (in meters)
USA 1. 32.10 m - San Marino School (Slutsky) Buena Park, CA USA
CAN 2. 29.47 m - Ucluelet Elementary School Ucluelet, BC CANADA
USA 3. 27.00 m - Emerson Middle School (6th Grade #2) - Lakewood, OH USA

CLASS D: Grades 1-3 (Ages 6 - 8)
50 METER RUN
CAN 1. 10.10 - Queen's Park Elementary (Elder) Pentictin, BC - CANADA
FIN 2. 10.45 - Sarkijarvi Elementary School - Evijarvi, FINLAND
CAN 3. 11.30 - Queen's Park Elem. (Craig/Cousin) Pentictin, BC - CANADA

LONG JUMP (in meters)
CAN 1. 2.97 m - Queen's Park Elementary (Elder) Pentictin, BC - CANADA
CAN 2. 2.10 m - Queen's Park Elem. (Van Herwaarden/Philips) BC - CANADA
CAN 3. 1.80 m - Queen's Park Elem. (Craig/Cousin) Pentictin, BC - CANADA

THROW (in meters)
USA 1. 20.4 m - Carver School, Cerritos, California - USA
CAN 2. 20.0 m - Queen's Park Elementary (Elder) Pentictin, BC - CANADA
CAN 3. 15.4 m - Queen's Park Elem. (Van Herwaarden/Philips) BC - CANADA

Tom Grundner
Internet: aa001@cleveland.freenet.edu
BITNET: aa001%cleveland.freenet.edu@cunyvm Voice: 216-368-2733

What's Japan

A CULTURAL UNDERSTANDING PROGRAM FOR THE BORDERLESS WORLD
by APICNET (JAPAN)
PROGRAM GUIDE FOR OVERSEAS PARTICIPANTS

*** SYNOPSIS ***

As our world is getting to be borderless, various conflicts between nations are about to increase. Most of these conflicts seem to arise from the lack of mutual recognition. In order to build better relationship, we should keep trying to understand each other.

A cultural understanding program "What's Japan?" is intended to promote understanding of Japan to both Japanese students and foreign students by exchanging questions and answers concerning Japan interactively through computer networks. We think that understanding each culture is very important for the emerging borderless world because it would be the first step for the needed mutual recognition, and we are sure that computerized personal networks are of great help.

The program is proceeded with the following steps. Note that every communication is made by the use of electronic mail and computer conferencing, which is very quick and interactive even though the communication is global scale.

(1) We ask foreign students to fill the questionnaire about Japan.
(2) Japanese students review the results and present what Japan is.
(3) Q & A session about Japan.
(4) We try the same questionnaire to be compared with the first one.

*** ELIGIBILITY ***

(1) PARTICIPANTS
Participants should be students from elementary school through university and their teachers. We expect that a teacher play the role of a coordinator in the class. Every class coordinator and other individual participants are required to fill an application form to participate.

(2) COMPUTER NETWORKS
Tokyo-based APICNET is the home system for the program. Participants from overseas could get access to APICNET directly through international packet switched networks or could send/receive messages to/from APICNET Secretariat through either Dialcom Mail System or academic networks such as Internet and BITNET. We will give free accounts to those who want to get access to APICNET directly.

(3) LANGUAGES
The language is basically either English or Japanese. We anticipate the students studying Japanese use the Japanese language. Though we expect most participants who use Japanese send messages using Roman characters for the technical reason, in the case that you happen to have a Japanese terminal, we'd like you to send messages using two- byte-based Japanese characters (kanji / hiragana / katakana). I should tell you that Apple Macintosh is easily turned to a Japanese terminal if it's fed by some special software. Contact us for the details. And using FAX is another way to join the program in Japanese, even in your SHODO calligraphy.

*** CHALLENGES ***

We regard this program as a challenge to pioneer a new style of cross cultural exchange which happens in global electronic age. The followings are our challenging items;

(1)TO OVERCOME THE GEOGRAPHICAL DISTANCE
We have seen a lot of cross cultural exchanges everywhere, but all of them couldn't have been realized without physically visiting to the remote place. By using international e-mail we can easily communicate with people in different countries. What is more, the exchange would not end up with a single event but people could keep in touch with each other continuously and semi-permanently.

(2)TO OVERCOME THE LANGUAGE BARRIER
In face-to-face meetings people are required to communicate in realtime. Especially in the case of the meeting with people of different language, the communications sometimes get people frustrated because of the language barrier. Since the communications through computer networks are based upon its store-and-forward function, people don't have to be hastened to respond in realtime. You can write your message in accordance with your thinking speed and you can read other messages very carefully after downloading them from the host to your own terminal. We are sure that this method enable participants to communicate substantially. We would find it alternative learning environment of foreign languages.

(3)TO SUPPLEMENT THE INFORMATION FLOW OF MASS MEDIA
Owing to the enlargement of the coverage of mass media, we could even know about the happening in the opposite side of the planet a few hours after the event. But the things are that its information flow is one-sided and that it's limited to only highly prioritized news. Communications by e-mail enable people to exchange information interactively at personal level, so that it could supplement the information flow of mass media.

*** EFFECTS ***

It is expected to see the following effects.
*to develop presentation ability
*to recognize one's cultural identity by comparison with different culture
*to recognize common / different / universal aspects of each culture
*to motivate to study foreign languages
*to motivate to study cross culture things

*** SCHEDULE ***

(1) Call for applications.
(2) The first questionnaire about the image of Japan.
(3) Evaluation of the result of the questionnaire and online presentation about Japan.
(4) Exchange of questions and answers about Japan.
(5) The second questionnaire about the image of Japan.
(6) Evaluation of the result of the questionnaire.

TELECOMPUTING ACTIVITY PLAN CONTEST '92

Sponsored by the ISTE Special Interest Group for Telecommunications

This contest is open to entries from or sponsored by SIG/Tel members in good standing as of March 15, 1992. A SIG/Tel membership form is attached below.

Describe an effective activity plan for incorporating telecomputing into the classroom that you have used or would like to use in your classroom using the template below. Make sure you explain why telecomputing is important to your lesson. Limit the entry to no more than two pages (132 lines).

The activity plan will become the property of SIG/Tel and may be used by SIG/Tel or ISTE in subsequent publications. SIG/Tel plans to publish the best entries. If plans are published, the names of all authors will be included in the publication. Any profits from the sale of the publication(s) will go to the SIG/Tel treasury.

Entries MUST be submitted ONLINE by March 15, 1992. Paper entries will NOT be accepted. The entry MUST be sent here on the Internet as private e-mail to kathyk@tenet.edu. Your entry will be acknowledged online by return e-mail. If you do not receive an immediate acknowledgment, please message again or notify Kathy Kothmann at phone: 409-693-8134.

Entries will be judged on originality, practicality, appropriateness of using telecomputing versus other approaches, use of today's technology, indications of student learning, student appeal, class management, and clarity of activity plan description.

There will be five winners selected. Prizes will be awarded at the annual SIG/Tel meeting June 14 or 15 at NECC '92 in Dallas, Texas. The prizes will include subscriptions to the network projects such as AT&T Learning Circles and valuable telecomputing accessories. Winners will be notified by May 1, 1992 so that they can arrange to attend NECC or appoint a representative to accept the prize. Winners need not be at NECC to receive the prize.

Computer Programming Contest

The International Computer Problem Solving Contest (ICPSC) is an annual event that challenges teams throughout the world to create original solutions to a set of five problems within two hours using a computer and a programming language. The purpose of the ICPSC is to challenge the very best computer problem solvers in grades 4-12 yet still make it possible for beginners to have some success. Teams of one to three members each enter the contest in the Elementary (grades 4-6), Junior (grades 7-9), or Senior (grades 10-12) division. Their assignment: solve all five problems using Logo, BASIC, Pascal, C or in 1992, Hypertalk.

How It Works

The materials for running the contest along with a confidential set of problems and sample solutions are distributed to local contest directors (like yourself) who have agreed to conduct the contest locally during the last week in April P usually the last Saturday. Local directors are free to offer any local recognition by rewarding the best local teams in any way they choose. However, if a team solves all five problems, a difficult task, then their solutions are sent to us for re-grading and ranking among all teams that solved five problems. Certificates are sent to each team member in this category and the top ranked teams receive a plaque for their school.

1992

New in 1992 will be a Hypertalk Division for elementary, junior and senior students who have learned how to program using Hypercard for the Macintosh. The design of the contest will be slightly different and programs will be judged by submitting hypercard stacks on disk rather than program listing and sample runs on paper. This contest will be developed with the help of Joseph Hofmeister of Cincinnati Country Day School. Joe is the co-author of Learning With Hypercard published by South-Western Publishing Co.

The 12th Annual ICPSC will be held on Saturday, April 25, 1992 with Friday April 24 , and Monday April 27 as the alternate dates. To receive a free copy of the ICPSC newsletter Compute It! send a e-mail message to piele@cs.uwp.edu or write to:

Donald T. Piele
ICPSC
P.O. Box 085664
Racine, WI 53408
414-634-0868
piele@cs.uwp.edu

Space Mission Simulations

We are attempting to make the final preparations for the Feb. 20th space simulation in John Glenn's honor. We are calling it ACADEMY ONE SALUTES SPACE EXPLORATION. This is a walk through space history with simulations of historical missions being re-enacted by schools willing to do the necessary research and work.

This mission will run on the Cleveland Free-Net as no other networks or affiliate stepped forward to run a mission. All postings will be made to the Cleveland Free-Net. Schools without a CFN id will be able to email their reports to xx188@cleveland.freenet.edu and the reports will be posted to the appropriate newsgroup.

At the current time, we have schools simulating Friendship 7, Apollo 11 and the Hubble Telescope. We have other schools reporting on solar activity, simulating NASA stations worldwide, and giving weather reports. Several schools have indicated their interest to participate, but not what they will to do at this time.

Below is a copy of the About file for the February 20th simulation. I hope it will give you some ideas of what you can do. Let's make some final decisions quickly and let me know ASAP if you are participating and what you will be doing.

Menu for Feb. 20th mission:

<<< ACADEMY ONE SALUTES SPACE EXPLORATION >>>
1 About the Simulation
2 List of Participating Schools
3 Simulation of Friendship 7 mission
4 Simulation of Apollo 11 mission
5 Simulation of the Hubble Telescope
6 Reports from simulated NASA stations worldwide 7 Space Trivia
8 What were you doing when...
9 Press Box

About the Simulation

Ohio Senator John Glenn has observed previous Academy One space simulations and has sent official congratulatory letters to University School. In commemoration of the 30th anniversary of his historic flight of Friendship 7, Academy One is beginning an annual SALUTE TO SPACE EXPLORATION. This event will pay tribute to all pioneers of the space programs around the world and be a special way for students to learn about the history of the space program in the United States and elsewhere.

Any school with the ability to connect to Academy One on any network can participate in this project. A school can either research one of the historic space missions and conduct a simulation at their school, posting reports to Academy One hourly, or a school can assume a supporting role to a simulation.

Each simulation is carefully researched to allow students to re-enact it as closely as possible to the actual events. The time may be condensed to allow the simulation to fit into a school day. Reports on each simulation can include, but are not limited to, the following:
- description of the social atmosphere at that time; events which were taking place around the world
- information on the real astronauts (if applicable)

- the purpose of that mission and the impact on the space program as a result of its success or failure
- spin-offs from the space program into our daily lives

Schools who wish to participate in this SALUTE TO SPACE EXPLORATION, but who do not wish, or are unable, to be a part of a simulation, can contribute to the SPACE TRIVIA area. Examples of such contributions might be a) a listing of the Soviet space missions that were taking place at about the same time as the simulations being conducted; or b) reports on the development of space food or the history of rockets. Although, not a direct part of the simulations in progress, each report adds to the learning process by informing us of other developments in the space program.

Two areas are available for all readers to add their messages. The first area is entitled, "WHAT WERE YOU DOING WHEN..." and is a place where readers can describe their memories of the space program. Of particular interest is what you were thinking/feeling as you watched the space program on television or listened to it on the radio. Did you believe it? Did it give you a strong sense of pride in your country?

The second area where readers can post is the PRESS BOX. Your messages of encouragement and congratulations mean so much to the students taking part in this project. The realization that you are reading their reports and taking an interest in what they are doing gives them incentive to learn more, as well as, a stronger sense of accomplishment. Please post them directly, or send them to xx188@cleveland.freenet.edu and we will post them for you.

Architecture Challenge

What's the tallest structure you can build out of 100 3/8" wide popsicle sticks that can:
1) support a Grade A Large egg and
2) withstand the Big Bad Wolf Test (the biggest lungs in the room blow on it as long and hard as possible; if the structure stands, it passes)?

We at the Playing to Win Saturday Science Project challenge you to come up with interesting, strong structures to perform this engineering feat!

*Use only Elmer's Glue for adhesive (and ONLY for adhesive).
*Egg must be hard-boiled, with the shell intact (with yolk inside).

Submit your winning and unusual designs -- both written descriptions and either a picture or gif file -- to:
mnk00501@llwnet.linknet.com
(which is WNET's Learning Link, based in NYC)

or via mail to:
Carmela M. Federico
Playing to Win
1330 Fifth Ave.
New York NY 10026

Apple, Mac, or Amiga format are all acceptable.

Suggestions for Activity:
* Present students with various shapes (tripod, geodesic dome, pyramid, globe, arches, etc.) and in a hands-on fashion demonstrate why some shapes are stronger and more stable than others.
*Present information about domes, flying buttresses, the Eiffel Tower, and other architectural structures.
*Have students plan their structure, and to sketch and write down their plans.
*Building day!!! Allow glue to set before testing the structure.
*If possible have students draw their structures using a CAD or drawing program. Or take a picture, and scan that picture in as a GIF file.

****

I have no firm deadlines for this project. Please notify me if you wish to participate, or if you have any suggestions. Let me know when you plan for the project to take place, and if my students may write to yours via Internet and/or snail mail.

I plan to complete this project with two different sets of students by the middle of June. I look forward to hearing from you.

Zero-G School Design

Please do NOT reply to me. Send replies to:
FrEdMail: ....!sdcoe!bonita!jim-levin@uiuc.edu Internet: jim-levin@uiuc.edu
---

Design A Zero-g School

What would it be like to go to school in a zero-g environment? How would teachers and students work together in a classroom? How would you go down the hall? What kinds of sports and games would be played in physical education classes? How would students dance at school dances? What kinds of subjects would students learn?

The next Zero-g World Design Challenge is to develop a design for a school in a free-fall environment like a space station.

If you've participated in the previous zero-g design challenges, this challenge can provide a meaningful context for integrating those designs: for food service (lunchroom), for physical education (zero-g games and sports), for moving down a hallway from class to class.

If you're new to the Zero-g World Design Project, this is an excellent place for you to start.

There are several ways in which you can specify your design. You could describe (either in text or in graphics) the layout of the school and describe the way that your design would be used. Or you could provide a "day in the life" description of typical students and teachers in a zero-g school.

Please send me a note if you want to tackle this design challenge, and I'll send more details. If you're interested in tackling just a part of school life in zero-g, let us know and we'll try to match you up with others with the same interests. If you're willing to be a resource for others tackling this challenge, please let me know as well.

Jim Levin
Internet: jim-levin@uiuc.edu
FrEdMail: jlevin@uiuced2

Chapter 12:
Resources on the Internet

This appendix is a collection of bulletin boards, telnet or FTP resources, and other locations for future ideas and potential projects. A short description of each is included here for your convenience. Please report any errors or out of date information to cfarmer@ncsa.uiuc.edu so that we can update the resources for the next edition.

Invitation to Join LabNet 165
A mailing list to encourage collaboration between K-12 Science Educators.

Chemistry Related listservs 166
Mailing lists that discuss several different areas of Chemistry

Environmental Resources via Modem 168
Sources for environmental education materials.

Network Accessable (Gopher) Chemistry Resources 171
A sources for Chemistry education materials available via Gopher.

EnviroGopher 172
EnviroGopher contains archives of the EnviroLink Networks, as well as a compilation of many other on- and off-line information.

EcoGopher 173
EcoGopher is a new information service located at the University of Virginia devoted to the collection and dissemination of environmental information.

The HyperChem Project 174
This is a set of 14 stand-alone computer tutorials on general chemistry concepts, each includes a self test and an index.

PHYSSHARE 175
How to join an high school physics resource and discussion network.

Telnet to FEDIX 176
How to FEDIX, a BBS that has information on federal education and research programs, used research equipment, funding sources, etc.

NASA Spacelink 177
How to connect to the NASA Spacelink BBS.

Lunar and Planetary Institute 179
The LPI Center for Information and Research Services provides resources on geology, geophysics, astrmomy and astrophysics.

Space And Science Related Network Resources 180
A list of telnet sites and email lists with space related material.

Science Awareness List 183
The SAIS List was formed in hopes of creating a forum for exchanging innovative ideas about making science more appealing to students.

NCDC Weather Data 184
Online weather data and observations.

Great Lakes Information on-line 185
Great Lakes Information Services is available for FTPing.

Weather and research data available via Internet. 186
How to obtain various kinds of weather information from different sources.

Updates to the Incomplete Guide to the Internet 191
How to obtain updated versions of this guide via anonymous FTP.

The KIDSPHERE Mailing list. [This used to KIDSNET] 192
How to join the KIDSPHERE subscription service for K-12 educators and how to access the KIDSPHERE/KIDSNET archives..

KidzMail–A List for Elementay Children 194
The purpose is to promote 'Kids Exploring Issues and Interests Electonically'.

KIDLIT-L 195
A forum for discussing the study and teaching of literature for children and youth.

Announcing: A Curriculum Disscussion Listserver 196
A forum for discussing curriculum development and issues related to curriculum.

Teaching Success Stories (Bulletin Board) 197
A forum for discussing successful teaching ideas.

LM_NET 199
A World-Wide Discussion Group For School Library Media People.

The Jericho Project 200
EUIT's project which is designed to "break down the walls" in today's classrooms through the use of modern information technologies.

Scholarly Communications FTP Server 201
An FTP server for all scholarly electronic journals published at VPI.

PUBLIB 202
A listserv discussion group devoted to public library issues and how the Internet related to them.

HILITES 203
Background information on and instructions for joining a teacher's collaborative learning activity mailing list.

FrEdMail on the Internet (SCHLNet) 206
Information on SCHLNet, which is the adaption of the FrEdMail system for the Internet.

Daily Report Card news service (America 2000 report) 208
How to join a subscription service that provides daily updates on progress towards the goals of the America 2000 program.

Library of Congress Catalog 209
Catalog search resource and instructions for use.

Library of Congress Information System (LOCIS) 210
LOCIS includes millions catalog records and over 10 million records for other types of information.

Teacher Contact Files 211
How to get the "teacher contact" files. The files contain introductions from teachers, administrators, educators and parents

interested in telecommunication activities for k-12 students.

K-12 Network 212
Description of the K-12 networks and sample channel assignments.

ERIC Database 215
This file contains bibliographic information and abstracts for a variety of EDUCATIONAL documents from the Educational Resources Information Center.

Internet Library Guide 217
A resource for identifying and using library catalogs on the Internet.

USDA/CYFER-NET resources 218
Resources for USDA and the Children Youth Family Education Research Network.

A Resource Guide to Listservers 219
Explanation of “listserv” and information on how to join differnet lists and a brief selection of education related listservs.

Directory of List of Lists 224
How to get the full “List of Lists” for the LISTSERV information service.

ARCHIE by Mail at the University of Nebraska 225
An archie server that allows communications via electronic mail.

Special Internet Connections 226
Interesting telnet and FTP sites, especially those of interest to Science Teachers.

Anonymous FTP FAQ 234
Frequently Asked Questions about FTP and their answers.

Network Resource Mailing List 238
A mailing list for the "latest finds on the Internet."

FAQ from comp.sys.mac 239
Frequently Asked Questions from a newsgroup about macintosh computers. Contains many general troubleshooting tips.

Gopher Frequently Asked Questions 248
Common Questions and Answers about the Internet Gopher.

“archie-an Electronic Directory Service” 253
The archie service is a collection of resource discovery tools that together provide an electronic directory service for locating information in an Internet environment.

Veronica- an Archie for Gophers 256
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.

Questions About Network Resources 257
Locations for other Internet resource guides.

Public Information Networks (Freenets) 258
Public access information and discussion networks.

Mining the Internet 259
How to get abstracts from an Internet training and usage conference.

Information Sources: Computer Mediated Communication 260
A list of information sources and computer mediated communication sites on the Internet.

Directory of Ejournals 263
How and where to obtain the “Directory of Electronic Journals and Newsletters”

Internet Access for Individuals 264
Contacts for individuals wishing to gain access to the Internet privately.

Gutenberg Electronic Books Project 266
List of electronic books available and information on the Gutenberg project.

HYTELNET 268
HYTELNET, a utility which gives instant-access to all Internet accessible library catalogs, FREE-NETS, CWISs, BBSs, Gophers, WAIS, etc.

Invitation to Join LabNet

Invitation to Join LabNet
"The greatest benefit of LabNet to me has been the feeling of confidence and a feeling of belonging to the science teaching community." A LabNet Teacher

LABNET IS ACCEPTING NEW MEMBERS
o Are you a high school science teacher interested in a more hands-on, project-based approach in your classroom?
o Are you interested in learning to use a telecommunications network for information sharing and conversations with your colleagues across the country?

If so, then the LabNet project may be just what you're looking for. By joining the telecommunications LabNetwork on America Online, you will become part of a nationwide effort to promote, expand, and strengthen the community of high school science teachers dedicated to improving their practice.

For more information and an application, write to:
TERC
Attn: LabNet
2067 Massachusetts Avenue
Cambridge, MA 02140
or Internet: Jill_Carroll@TERC.edu
America Online JMCarroll

LabNet is funded by the National Science Foundation and is administered by TERC, a nationally recognized non-profit research and development organization dedicated to improving science and mathematics education. TERC will help with the cost of telecommunications charges.

Chemistry Related Listservs

Dr. James L. Pazun provided the name of a server for a list-of-lists (FTP.NISC.SRI.COM (192.33.33.53)). The list is quite long. I have extracted a sublist using chem and biochem as search words. That sublist is appended here. It may not contain all relevant hits.

CHMINF-L on LISTSERV@IUBVM.BITNET

The Chemical Information Sources list is intended to serve as a discussion medium and information source for any topic related to chemistry and the sources used to find information about chemical compounds. News about existing reference sources, the appearance of new primary, secondary, or tertiary printed or machine-readable sources, pricing and availability, bibliographic instruction--all are fair topics for distribution as long as they have some link to chemistry.

To subscribe, send mail or a message to LISTSERV@IUBVM.BITNET which contains the following command in the body:

SUBSCRIBE CHMINF-L yourfirstname yourlastname

Owner: Gary Wiggins WIGGINS@IUBACS.BITNET or WIGGINS@UCS.INDIANA.EDU

Chemistry@osc.edu

The Computational Chemistry List is maintained by Ohio Supercomputer Center. This list is not restricted to particular computational chemistry software or methodology. Examples of topics discussed include: quantum chemistry, molecular mechanics/dynamics, molecular modeling, molecular graphics, etc.

To subscribe to the list, send a short note stating your name, affiliation and e-mail address to: CHEMISTRY-REQUEST@oscsunb.osc.edu or JKL@OHSTPY.BITNET.

To get more information about the list (rules for posting, accessing archives, etc.) send the following one-line message to OSCPOST@oscsunb.osc.edu or OSCPOST@OHSTPY.BITNET send help from chemistry The information will be automatically forwarded to you via e-mail.

Owner:

Mr. Jan Labanowski
E-mail: jkl@osc.edu
JKL@OHSTPY.BITNET
Phone: 614-292-9279

Ohio Supercomputer Center
1224 Kinnear Rd
Columbus, OH 43212-1163, USA
FAX: 614-292-7168

FORENS-L@FAUVAX.BITNET (BITNET) or FORENS-L@ACC.FAU.EDU (Internet)

Forens-L is an unmoderated discussion list dealing with forensic aspects of anthropology, biology, chemistry, odontology, pathology, psychology, serology, toxicology, criminalistics, and expert witnessing and presentation of evidence in court.

Membership to this discussion list is open free of charge to all interested individuals or organizations.

To subscribe, send mail to FORENS-REQUEST@ACC.FAU.EDU
(BITNET-restricted users send to FORENS-REQUEST@FAUVAX) with this

request in the message body:
SUBSCRIBE FORENS-L Your Real Name

To post a message, send it to:
FORENS-L@ACC.FAU.EDU or FORENS-L@FAUVAX

All questions, requests for information, etc., should be sent to the List Owners. Technical issues should be addressed to the List Manager.

List Owners: M. Yasar Iscan (Iscan@acc.fau.edu, Iscan@FauVax)
Ronald K. Wright (RKW@MedExam.FtL.FL.US)
List Manager: Ralph P Carpenter (Ralpho@acc.fau.edu, Ralpho@FauVax)

SAFETY%UVMVM.BITNET@VM1.NODAK.EDU

Mailing list for people interested in the various environmental, health and safety issues and problems on college and university campuses. These can include life safety issues (fire protection, trip and fall and other general safety issues), chemical safety issues (waste disposal, laboratory safety, meeting regulations), biological hazards and radiation safety. Both users of hazardous materials and people administering campus safety programs are welcome on the list.

BitNet users can subscribe to the list by issuing the following interactive command on CMS: TELL LISTSERV AT UVMVM SUBSCRIBE SAFETY your_name where "your_name" is your real name, not your login Id. Non-CMS BitNet users can join by sending mail to LISTSERV@UVMVM with the command: SUB SAFETY your_name in the TEXT/BODY of the message. Non-BitNet users can join by sending the above command in the text/body of a message to LISTSERV%UVMVM.BITNET@VM1.NODAK.EDU.

Coordinator: Dayna Flath <DMF%UVMVM.BITNET@VM1.NODAK.EDU>

ORGCHE-L on LISTSERV%RPICICGE.BITNET@CUNYVM.CUNY.EDU

Organic Chemistry mailing list. To facilitate the interchange of ideas, information, computer programs, papers, to announce opportunities for doing collaborative efforts (teaching and/or research activities) between specialists in Organic Chemistry and related areas.
To subscribe to the list send mail with the following line to
LISTSERV%RPICICGE.BITNET@CUNYVM.CUNY.EDU:
SUBS ORGCHE-L Your_Real_Name

If you do not receive mail confirming your subscription, contact MSMITH%AMHERST.BITNET@CUNYVM.CUNY.EDU and he will add your name to the list.

Coordinator: Asuncion Valles
<D3QOAVC0%EB0UB011.BITNET@CUNYVM.CUNY.EDU>

Environmental Resources via modem "toll free 800# access"

We know that not everyone is on the Internet (yet!), and surprisingly, most government agencies are not accessible via the Internet yet, either. So, we tracked down several good sources related to environmental matters, and present them here for you to use. The NetPower Resource Guide features hundreds of such services available via modem and Internet-accessible, too. This list is largely modem dialup sites available with toll free access.

#1
U.S. Environmental Protection Agency
Office of Research and Development BBS
Center for Environmental Research Information
Peter Preuss, Office Director
26 West Martin Luther King Boulevard
Cincinnati, Ohio 45268

Telephone: (513) 569-7272
By Modem: (800) 258-9605; 9,600 bps, 8N1

The ORD BBS is an online, text-searchable database of every one of the more than 16,000 ORD publication produced since 1976. Each citation includes, title, authors, abstract, ordering information, and much more.

The ORD BBS offers messages, bulletins of new information, and public domain files. There are five specialty areas: water, regional operations, expert systems, biotechnology, and Quality Assistance/Quality Control. Software, news and information files available.

Getting Connected to ORD BBS
This is a direct dialup BBS, so use your modem to call the number above. There are no password requirements and there is no cost to use the system. Although the EPA doesn't actually advertise this, there are many software programs available for downloading. This is an extremely interesting BBS, with free software and information that you just won't find elsewhere.

#2
U.S. Environmental Protection Agency
DRIPSS BBS
Drinking Water Information Processing Support System

Telephone: (202) 382-7276
(703) 339-0420
By Modem: (800) 229-3737

The purpose of this BBS is to facilitate the exchange of information between various environmental professionals supporting state drinking water programs. You will find information regarding most states.

3
U.S. Environmental Protection Agency
SWICH BBS

Office of Solid Waste Management

Telephone: (800) 677-9424
By Modem: (301) 585-0204; 2,400 bps, 8N1

Online source of journals, reports, studies, and training materials.
Information on solid waste issues, meetings, conferences, source reduction, recycling, composting, training,legislation, special wastes.
There is so much topical information on this system, that you have to visit it to believe it. Teachers can use this system in many ways - you won't exhaust it in an entire year.

4
US Environmental Protection Agency
Wastewater Treatment - Small Flows Clearinghouse
West Virginia University
Morgantown, West Virginia

By Modem: (304) 293-5969 inside West Virginia
(800) 544-1936 nationally

The information on this BBS concerns wastewater technology and small community wastewater project finance and management.

5
Virginia State University & USDA
The National Biological Impact Assessment Program
Virginia Polytechnic Institute
Blacksburg, Virginia

Voice: (703) 231-3747
By Modem: (800) 624-2723 national access
(703) 231-3858; 2,400 bps, 8N1
Internet: ftp to ftp.vt.edu
retrieve files from pub/user/biotechnology

Information on the safe evaluation of the performance of genetically modified organisms in the environment. Agricultural/environmental bio-technology.
National toll-free access with remote connections to provide access to news, and numerous databases; messaging system online. Monthly news report on national and international biotech developments. Research news is also posted about biological control agents for crops and gardens. More details by logging on to the ALF bulletin board.
There is no charge for the system, but callers using the toll-free line are limited to thirty minutes per call, one call per day.

6
U.S. Environmental Protection Agency
Pollution Prevention Division
PPIC-PIES, Pollution Prevention Info Exchange
Office of Environmental Engineering
MC 7409
401 M Street, SW
Washington DC 20460

Telephone: (202) 260-3557 (Beth Anderson)
By Modem: (703) 506-1025
(800) special permission required

Provides access to pollution prevention information, technical experts, calendar of events, case studies, program summaries, documents. A tremendous amount of information, searchable by key words. Access is free. State agencies, and perhaps schools, may use a special toll free number to access the system. For approval to use the 800 number, call Rob McCurdy (703)-821-4670, Technical Assistance Division, or leave a message for the sysop online.

In the Classroom
Callers to these online databases will find a great deal of information, but little in the way of classroom-type projects. Teachers may find that a good way to utilize these services is to post a message in re a class project or problem, or request for additional information and ask for an expert to volunteer to become a mentor-tutor to the class. Don't expect a volunter devote in hours of time, but you will find that many of the other users on these systems are experts in their field, and will gladly answer a few questions, review a proposed project and give pointers.

Network-Accessible Chemistry Resources Summarized on Gopher

As part of the InterNIC (Internet Network Information Center) project, the first list of chemistry-related resources accessible via the Internet has been posted on Gopher. This list includes ftp sites, mailing lists, email contacts, etc. The InterNIC chemistry database is located in the Chemistry section of the Gopher hierarchy:

```
   Remote Gopher Resources via Univ. of Minnesota
      Internet file server (ftp) sites
         InterNIC: Internet Network Information Center
            InterNIC Information Services (General Atomics)
               Internet Information for Everybody
                  Things to Do on the Internet
                     Chemistry
```

Comments are welcome, as is information on other ftp sites, mailing lists, or other network-accessible chemistry-related resources. Please forward all replies to Nick Nystrom at nystrom@psc.edu.

Nicholas A. Nystrom, Ph.D.
Pittsburgh Supercomputing Center
InterNIC Field Specialist in Chemistry
nystrom@psc.edu

EnviroGopher

The EnviroLink Network is proud to announce the opening of EnviroGopher, the environmental information gopher server.

EnviroGopher contains archives of the EnviroLink Networks, as well as a compilation of many other on- and off-line information. EnviroGopher presents this information in a simple and easy format that is self-explanatory. Try it out, experiment with it, let us know what you think. Remember that this is still in development stage, so there will be many more nifty features added in the future.
There are several ways in which to access EnviroGopher:
Telnet to EnviroGopher
^^^^^^^^^^^^^^^^^^^^^^
type "telnet envirolink.hss.cmu.edu"
username: gopher
password: envirolink
****WARNING: The Gopher Application will be started immediately, this release has several bugs that we are trying to work out. There will be changes in the near future to this form of access.
>>>see the bottom of this message for other gopher servers that you can log in to, and then switch to EnviroGopher<<<
The Gopher Application -- Get it for your computer!!
^^^^^^^^^^^^^^^^^^^^^^
There are many different types of Gopher Applications, they are usually a lot easier to use than logging in directly to the server. Experiment with them and see which one you like the best.
Step 1: If you are on a workstation, type "gopher envirolink.hss.cmu.edu" (if this doesn't work, then you have to access the Gopher through other means, i.e. telnet or by getting the application through step 2)
Step 2: If you are on a PC of any sort, there is a compatible application for you that is available by anonymous FTP from: boombox.micro.umn.edu in the /pub/gopher directory.
>>Once You Have the Application or Are on Your Own Gopher Server<<
Almost every Gopher server has a directory that says, "Exploring Other Gopher Servers" Choose this directory and then look under "North America" and then "General" under the gopher name: EnviroGopher.
Choose this and you are in!

Other Gopher and Information Servers
   North America
      General
         Envirogopher

EcoGopher

In preparation for the offical premiere of EcoGopher during Earth Week '93, EcoGopher is going public for suggestions, comments, and most especially CONTRIBUTIONS.

EcoGopher is a new information service located at the University of Virginia devoted to the collection and dissemination of environmental information. From what's happening in Central Virginia to the latest information hot off the Internet mailing lists, this Gopher server has been designed with easy access as its top priority.

Got information you're keeping on an FTP site?
Worried that FTP is too complicated for novice net users?

EcoGopher is the answer. By providing information at the touch of a few keys, this Gopher server makes information access fantastically easy. Is there room for YOUR information? Most certainly. We want to make this a service for information providers as well as information seekers. Under some circumstances, we can even set up an automatic e-mail filter which takes your information and puts it directly into EcoGopher!

How to use Gopher:

1) Look under 'virginia' in the list of US servers at U.Minn.
   We're right there!
2) If you don't even know what Gopher is:
   Open a telnet session to
   'ecosys.drdr.virginia.edu'.
   Login as 'gopher'.
3) If you can't telnet anywhere:
   Set your modem to N-8-1 and call (804)924-0577.
   At the prompt type "connect ecosys.drdr"
   Login as 'gopher'.

We hope to hear from lots of you soon!

The EcoGopher Development Team
Division of Recoverable and Disposable Resources
University of Virginia
gopher@ecosys.drdr.virginia.edu

The HyperChem Project: General Chemistry Tutorials

This is a set of 14 stand-alone computer tutorials on general chemistry concepts, developed by Don Peterson at U.C. San Diego with NSF and Dreyfus Foundation support. Each includes a self test and an index to look up certain keywords. All are available by anonymous FTP from archive.umich.edu in the path /mac/misc/chemistry.

Atomic Structure 1

Electromagnetic Radiation, Atomic Spectra, Bohr Model
Part one of two related but standalone tutorials.

Atomic Structure 2

Orbital Types, Orbital Energy, Orbital Filling, Electronic Configuration.
Part two of two related but standalone tutorials.

The Periodic Table

Organization, Major Trends, Trends in Chemistry.

Mole Concept

What a mole is, why to use it, Molecular Mas, Formula Mass, Mole Calculations.

Stoichiometry Part 1

Chemical Formulas, Percent Composition, Formula from Percent Composition, Molecular Formula.
Part one of two.

Stoichiometry Part 2

Chemical Equations, Calculated Yields, Limiting Reagent, Observed Yield.
Part two of two.

Acid & Bases Part 1

Basic Concepts, pH, Strong Acids and Bases, Weak Acids and Bases.
Part one of two related but standalone tutorials.

Acid & Bases Part 2

Neutralization, Titration, pH of Salts, Buffers.
Part two of two related but standalone tutorials.

Chemical Equilibrium

Equilibrium State, LeChatelier's Principle, calculating equilibriums, Heterogenous Equilibriums.

Chemical Kinetics

Basic concepts, rate laws, temperature, and catalysis. Quite graphical.

The Gaseous State

States of Matter, Ideal Gas, Using the Ideal Gas Law, Calculating Molar Mass, and Dalton's Law.

Kinetic Theory

Basic Principles, Major Conclusions, Speed Distribution, Graham's Law.

Oxidation and Reduction

Basic Concepts, Oxidation Number, Balancing Equations.

Thermochemistry

Energy/First Law, Heat and Work, Heat of Reaction, Hess's Law, Heat of Formation.

PHYSSHARE

We are running a pilot project in networking at Penn State through the ITEC (Information Technology Education for the Commonwealt) Center and the Center for Academic Computing. We are working with high school physics teachers at this time and will offer training in telecomputing and using the network in the near future. We are calling the project PHYSHARE. The following is a brief announcement. I can provide more detailed information on request.

PHYSHARE has been organized to promote the shareing of resources by high school physics teachers. The objective is to create a framework where physics teachers can use the network to attack complex or time consuming problems by having each make a small contribution to the total effort. The first project is the creation of a test question database for the physical sciences. Teachers are submitting copies of tests containing questions they have created (no copyrighted material please). The ITEC Center at Penn State is classifying these questions and typing them into files based on the classificaiton. The files will be available as e-mail distributed by PHYSHARE. The ITEC Center has developed a BASIC program in Applesoft BASIC which will assemble tests from these files. The program is at the alpha test stage. As it is refined, it will be ported to MS-DOS. Long range plans include a hypercard version to take advandtage of graphics on the Mac. These resources will be freely distributed with the teachers maitaining the rights to the questions to prevent any commercial exploitation. The list went on line October 31, 1991.

To join PHYSHARE send e-mail to listserv@psuvm. You are sending mail to a computer program so you can leave the subject line of the message blank. In the body of the message type:

subscribe physhare yourfirstname yourlastname

then send the message.

Telnet to FEDIX

There are several pieces of information on this system and it is very well worth the time (over 1 hour they give you for logon time) that you can spend on it. It will ask you to register and ask your some questions. To get to it, TELNET **192.111.228.1** (fedix.fie.com) and logon as **fedix** .

* Federal Education and Research Programs
* Used Govt. research equipment
* New funding for specific research and educational activities from the Commerce Business Daily, The Federal Register and others.
* News and Current Events
* Minority Assistance Research and Educational Programs

NASA SpaceLink Information

Those of you who have not seen the NASA SpaceLink bulletin board I would like to offer a description of this nice resource.

There are two ways to read this bulletin board:
1. Direct dial:
   At the appropriate prompt of you communication package type in the phone number:
   1-205-895-0028.
2. Use telnet:
   At the UNIX prompt of your computer type in:
Telnet 192.149.89.61 or
Telnet spacelink.msfc.nasa.gov

At the first screen read and follow the instructions carefully. The system is menu driven and the main menu looks like this:
1. Log Off NASA Spacelink
2. NASA Spacelink Overview
3. Current NASA News
4. Aeronautics
5. Space Exploration: Before the Shuttle
6. Space Exploration: The Shuttle and Beyond
7. NASA and its Centers
8. NASA Educational Services
9. Classroom Materials
10. Space Program Spinoffs/Technology Transfer
11. International Space Year (ISY)

Enter an option number, 'G' for GO TO, ? for HELP, or
press RETURN to redisplay previous menu...

Choosing 9. for classroom materials you will see options such as:
Classroom Materials
0. Previous Menu
1. Main Menu
2. Living In Space Activities
3. Space Science Activities
4. Commercially Available Software for Aerospace Education
5. How to Obtain NASA Educational Publications
6. Astronomy Information
7. Very Lo-Res "Graphics"
8. Film/Video List
9. Careers in Aerospace
10. NASA Educational Fact Sheets
11. Computer Programs & Graphics
12. Key Dates (by Ralph Winrich)
13. Materials from Outside Organizations
14. 1990-1991 High School Debate Topic Information
15. Liftoff to Learning Series--Educational Videotapes
16. Miscellaneous Aeronautics Classroom Activities
17. Using Art to Teach Science

```
Enter an option number, 'G' for GO TO, ? for HELP, or
press RETURN to redisplay previous menu...


Select living in space.
Living in Space
0..Previous Menu
1..Main Menu
2..Food Lesson Plans
3..Clothing Lesson Plans
4..Health Lesson Plans
5..Housing Lesson Plans
6..Communication Lesson Plans
7..Working Lesson Plans
8..Space Station Research & Design, 7-12
9.."Down on the Moon" Activity

Enter an option number, 'G' for GO TO, ? for HELP, or
press RETURN to redisplay previous menu...

Living in Space
Food Lesson Plans
0..Previous Menu
1..Main Menu
2..Background, 1-3
3..Background, 4-6
4..Background, 7-12
5..Grades 1-3
6..Grades 4-6
7..Grades 7-8
8..Grades 9-12

Enter an option number, 'G' for GO TO, ? for HELP, or
press RETURN to redisplay previous menu...

There are nice science activities you can choose to do with your classes to
learn more about food. Some description of kitchen equipment such as ovens is
also available here.

There is tons of other interesting information you may want to check out !
```

LUNAR AND PLANETARY INSTITUTE

The Lunar and Planetary Institute's databases are available on the Internet. The LPI Center for Information and Research Services provides resources on geology, geophysics, astrmomy and astrophysics. Support services are provided for other departments, such as publications, and computer. Materials on these topics are available. The files may be accessed at **lpi.jsc.nasa.gov**. Login as lpi. No password is required.

The available files are:

+ Journals - A catalog of our journal holdings.

+ New Arrivals - A file of our latest arrivals of books, documents and journals.

+ Book Catalog - A catalog of our monograph and monographic series holdings. A limited number of thesie and documents which have been cataloged are included.

+ Map Catalog - A start on cataloging our map collection. About 500 planetary maps are covered, most issued by NASA or the U.S.G.S. A retrospective conversion is in process.

+ Lunar and Planetary Bibliography - A bibliography covering planetary literature from 1980-. Earlier years will be added. All items in the bibliography are at the LPI.

+ Index to the Benchmarks in Geology Series - Our holdings are indexed. We do not have a complete set. The volume numbers missing are 20, 35, 37, 38, 39, 40, 42, 45, 46, 61, 63, 65-70, 72-83, 85-87. If any one owning these numberss would send a photocopy of the table of contents, or even better donate a copy ;-) these will be added as time permits.

+ Requests - This allows a user to enter a request for materials via e-mail. If possible we ask users to place an inter library loan request with their library.

The system is menu driven. Inmagic, with the Search Magic front end, and 1032 are the data base managers used.

For comments and questions contact:
David Bigwood
bigwood@lpi.jsc.nasa.gov

LUNAR & PLANETARY INSTITUTE
3600 BAY AREA BLVD
HOUSTON TX 77058-1113

SPACE AND SCIENCE RELATED NETWORK RESOURCES

Science Teachers Resources

STIS telnet stis.nsf.gov or 128.150.195.40
offers: Science & Technology Information System (Login: public)

Oceanic Info Center telnet delocn.udel.edu or telnet 128.175.24.1
(Login: public)

Lunar/Planet. Instit. telnet lpi.jsc.nasa.gov or telnet 192.101.147.11 offers: resources on Geology, Geophys, Astron., Astrophys. (Login: lpi)

Other Resources

MAILING LISTS

SPACE Digest is the main Internet list. Email space-request+@andrew.cmu.edu to join.

SPACE Magazine is an Internet list containing a distillation of interesting material from SPACE Digest which may be of interest to readers tiring of the signal-to-noise level in the digest. Email space-mag-request+@andrew.cmu.edu to join.

Space-investors is a list for information relevant to investing in space-related companies. Email Vincent Cate (vac@cs.cmu.edu) to join.

Space-tech is a list for more technical discussion of space topics; discussion has included esoteric propulsion technologies, asteroid capture, starflight, orbital debris removal, etc. Email to space-tech-request@cs.cmu.edu to join. Archives of old digests and selected excerpts are available by anonymous FTP from daisy.learning.cs.cmu.edu (128.2.218.26) in /usr/anon/public/space-tech, or by email to space-tech-request if you don't have FTP access.

SEDS-L is a BITNET list for members of Students for the Exploration and Development of Space and other interested parties. Email LISTSERV@TAMVM1.BITNET with a message saying "SUBSCRIBE SEDS-L your name". Email saying "INDEX SEDS-L" to list the archive contents.

SEDSNEWS is a BITNET list for news items, press releases, shuttle status reports, and the like. This duplicates material which is also found in Space Digest, sci.space, sci.space.shuttle, and sci.astro. Email LISTSERV@TAMVM1.BITNET saying "SUBSCRIBE SEDSNEWS your name" to join. Email saying "INDEX SEDSNEWS" to list the archive contents.

As a general note, please mail to the *request* address to get off a mailing list. SPACE Digest, for example, relays many inappropriate 'please remove me from this list' messages which are sent to the list address rather than the request address.

PERIODICALLY UPDATED INFORMATION

In addition to this FAQ list, a broad variety of topical information is posted to the net (unless otherwise noted, in the new group sci.space.news created

for this purpose). Please remember that the individuals posting this information are performing a service for all net readers, and don't take up their time with frivolous requests.

ACRONYMS

Garrett Wollman (wollman@UVM.EDU) posts an acronym list around the first of each month.

AVIATION WEEK

Henry Spencer (henry@zoo.toronto.edu) posts summaries of space-related stories in the weekly _Aviation Week and Space Technology_.

BUYING TELESCOPES

Ronnie Kon (ronnie@cisco.com) posts a guide to buying telescopes to sci.astro.

ELECTRONIC JOURNAL OF THE ASA

Don Barry (don@chara.gsu.edu) posts the monthly Electronic Journal of the Astronomical Society of the Atlantic to sci.astro.

ESA BULLETIN

Harm Munk (munk@prl.philips.nl) posts summaries of articles in the quarterly _ESA Bulletin_ and the _ESA Journal_.

FLIGHT INTERNATIONAL

Swaraj Jeyasingh (sjeyasin@axion.bt.co.uk) posts summaries of space-related news from _Flight International_. This focuses more on non-US space activities than Aviation Week.

LARGE ASTRONOMICAL PROJECTS

Robert Bunge (rbunge@access.digex.com) posts a list describing many "Large Telescope Projects Either Being Considered or in the Works" to sci.astro.

NASA HEADLINE NEWS & SHUTTLE REPORTS

Peter Yee (yee@ames.arc.nasa.gov) posts a variety of NASA material, including NASA Headline News (with the schedule for NASA SELECT), shuttle payload briefings and flight manifests, and KSC shuttle status reports. For Usenet users, much of this material appears in the group sci.space.shuttle.

NASA UPDATES

Ron Baalke (baalke@kelvin.jpl.nasa.gov) posts frequent updates from JPL, Ames, and other centers on the Ulysses, Gailileo, Pioneer, Magellan, Landsat, and other missions.

The updates posted by Ron and Peter are also available on a mailing list. Contact either one to be added to this list.

ORBITAL ELEMENT SETS

TS Kelso (tkelso@blackbird.afit.af.mil) posts orbital elements from NASA Prediction Bulletins.

Mike Rose (mrose@stsci.edu) posts orbital elements for the Hubble Space Telescope to sci.astro.

Jost Jahn (j.jahn@abbs.hanse.de) posts ephemerides for asteroids, comets, conjunctions, and encounters to sci.astro.

SATELLITE LAUNCHES

Richard Langley (lang@unb.ca) posts SPACEWARN Bulletin, which describes recent launch/orbital decay information and satellites which are useful for scientific activities. Recent bulletins are available by anonymous FTP from nssdca.gsfc.nasa.gov in ANON_DIR:[000000.ACTIVE.SPX].

SOLAR ACTIVITY

Cary Oler (oler@hg.uleth.ca) posts Solar Terrestrial reports (describing solar activity and its effect on the Earth) to sci.space. The report is issued in part from data released by the Space Enviroment Services Center, Boulder Colorado. The intro document needed to understand these reports is available by anonymous FTP from

solar.stanford.edu (36.10.0.4) in pub/understanding_solar_terrestrial_reports.

nic.funet.fi (128.214.6.100) /pub/misc/rec.radio.shortwave/solarreports

and is an archive site for the reports (please note this site is in Europe, and the connection to the US is only 56KB). A new primary archive site, xi.uleth.ca (142.66.3.29), has recently been established and will be actively supported.

SOVIET SPACE ACTIVITIES

Glenn Chapman (glennc@cs.sfu.cad) posts summaries of Soviet space activities.

SPACE ACTIVIST NEWSLETTER

Allen Sherzer (aws@iti.org) posts a newsletter, "One Small Step for a Space Activist," to talk.politics.space. It describes current legislative activity affecting NASA and commercial space activities.

SPACE NEWS

John Magliacane (kd2bd@ka2qhd.UUCP) posts "SpaceNews" (covering AMSATs, NOAA and other weather satellites, and other ham information) to rec.radio.amateur.misc and sci.space.

SPACE REPORT

Jonathan McDowell (mcdowell@xanth.msfc.nasa.gov) posts "Jonathan's Space Report" (covering launches, landings, reentries, status reports, satellite activities, etc.) Despite the address, this is not in any way an official NASA document.

TOWARD 2001

Bev Freed (freed@nss.fidonet.org) posts "Toward 2001", a weekly global news summary reprinted from _Space Calendar_ magazine.

SAIS-L on LISTSERV@UNB.ca
Science Awareness and Promotion

The SAIS List was formed in hopes of creating a forum for exchanging innovative ideas about making science more appealing to students. Science has brought to humankind better health, improved communication, better transportation and other advancements that raise the standard of living. It is imperative that students see the potentialities of science, whether harmful or beneficial, in order to judge how best to use science in their own lives and in the best interests of society. It was for this reason that SAIS-L was formed. All topics pertaining to science are welcome.

Archives of SAIS-L and related files are stored in the SAIS-L FILELIST. To receive a list of files, send the command INDEX SAIS-L to LISTSERV@UNB.ca.

To subscribe to SAIS-L, send the following command to LISTSERV@UNB.ca (LISTSERV@UNBVM1.BITNET) via mail text or interactive message:

SUBscribe SAIS-L Yourfirstname Yourlastname

For example:

SUB SAIS-L Joe Smith

Owner: Keith W. Wilson <SAIS@UNB.ca>

POSTED BY:
Craig Coates n043gn@tamvm1.tamu.edu

NCDC weather data

NCDC now has on-line data and metadata access using Internet. The service is available February 1st, 1992. Access is by Internet at 192.67.134.72 or HURRICANE.NCDC.NOAA.GOV The Login is: STORM and the Password :RESEARCH Please feel free to use the system and leave comments and suggestions about the system.

Meteorological data from NCDC

********** NCDC ON-LINE SYSTEM UPDATE **********

NCDC has recently expanded its on-line data and metadata access through Internet. Profiler data and the software routines necessary to decode the data are on-line in near realtime (within 1 1/2 hours of observation time). NCDC has recently placed surface hourly observations on-line for over 700 stations nationwide in a near realtime mode. The data are available for the month of January 1992. Software is also avilable to decode the data. Access and downloading are currently available to you without charge by using Internet. Please use the address 192.67.134.72 or HURRICANE.NCDC.NOAA.GOV The Login is : STORM and the password is : RESEARCH . Please feel free to use the system and leave comments and suggestions on your needs and ideas to make the system better.....

***** NCDC ON-LINE METADATA/DATA SYSTEM UPDATE *****

NCDC has expanded its' on line data and metadata access through INTERNET. Using the on-line data access system developed by the joint efforts of NCDC, Forecast Systems Lab (FSL) and the STORM Project Office, profiler data from the Wind Profiler Demonstration Network and surface airways observations from NMC are on-line. The software routines needed to decode the data are part of the on-line package. Surface hourly observations for over 700 stations nationwide are available through mid February 1992.

Please note in the table below the length of time the data will be available on-line. Access and downloading are currently available to you without charge by using INTERNET. Please use the address 192.67.134.72 or hurricane.ncdc.noaa.gov The Login is : storm and the password is : research . Please feel free to browse the system, download profiler and/or surface data, and leave comments or suggestions on your needs and ideas to make the system better.....

ARCHIVAL PERIOD FOR ON-LINE ACCESS

PROFILER SURFACE OBSERVATIONS

WINDS-60	31 DAYS
SURFACE DATA	31 DAYS
SURFACE-60	31 DAYS
MOMENTS-60	07 DAYS
MOMENTS-06	07 DAYS

NOTE : After these archive dates data are available for off-line access only.

GREAT LAKES INFO on-line!

Archive-name: auto/alt.great-lakes/GREAT-LAKES-INFO-on-line

THE GREAT LAKES INFORMATION SERVICE is now available for ftp!

Fact Sheets about various Great Lakes topics and issues, along with two years worth of new stories from the Great Lakes Reporter, can be found via anonymous ftp at nic.cic.net, in the subdirectory /pub/great-lakes/cgl (where you'll find a readme.txt file which explains and lists what's available in what subdirectory).

Topics covered by Fact Sheets include Great Lakes water diversion, water quality, waterfront development, pollution prevention, regional and international agreements such as the Great Lakes Water QUality Agreement, and the effects of global warming on the Lakes.

The Great Lakes Reporter, a regional newsmagazine published by The Center for the Great Lakes, covers news, trends, and issues relating the environment of the Great Lakes ecosystem and the economy of the region, especially when they interact. You will find every major story that ahs appeared in the Reporter since the start of 1990, listed by subject area with headlines for easy access and searching. Typical topics include coverage of the historic regional public meetings held in Traverse City in October 1991; trends in various key economic sectors around the Lakes; analysis of current water quality planning and activities by governments, industry and citizen's groups around the region; waterfront development aroound the Lakes; "invader" species such as the zebra mussel; the state and future of the Great Lakes' fishery; the status of proposals to divert Great Lakes water, and so forth.

The Reporter is a part of the Great Lakes Information Service, a public service of The Center for the Great Lakes. This ftp access is the first step in a long-range plan to put the Information Service "on-line"; more Fact Sheets on more topics will be added, Reporter stories will be continuously added as they are published, and existing Fact Sheets are periodically updated by Center researchers.

For more information, or to receive this material by U.S. Mail, send email to prb@chinet.chi.il.us. The Information Service also responds to requests for information from researchers, inlcuding searches of our library, and picking the brains of our brilliant, experienced and modest staff. Call 312-263-0785 and ask for Paul Botts or Noah Eiger; be sure and tell us where you heard of us, so we know whether this method of making the service known is working!

Weather and research data available via Internet, CD-ROM, and tape.

Archive-name: weather-data
Last-modified: 8 August 1992

Recent changes:
Addition of marlin.jcu.edu.au ftp site (Australian satellite data) Change of email contact address for NWS/NOHRSC snow data CD-ROM Change of name of ftp site gator.netcom.com to snow.nohrsc.nws.gov Addition of cumulus.met.ed.ac.uk ftp site (European satellite data!) Addition of blurbs which give the portions of the globe covered by the satellite data and analyses from the FTP areas. Addition of price and other information to the Climate Change Data CD-ROM Change of separators to accomodate some newsreaders --
Addition of uriacc.uri.edu ftp site
Addition of soundings to STORM-FEST info

This is a guide to various sources of meteorological, oceanographic, and geophysical data. Some of these data types are intended for enjoyment or hobbyist use; other data are more research-oriented. Much of the research data is not free.

More information on geological/geographical data can be found in the FAQ for sci.geo.geology, or see the file available via FTP from csn.org.

This guide is divided into four sections. The first discusses data available over the Internet (using FTP or telnet). The second section lists some CD-ROMS that are available from various sources. The third gives addresses for sources of research data on tape. The fourth describes some mailing lists which may be of interest.

This guide is posted every two weeks; a copy can be obtained by anonymous FTP to pit-manager.mit.edu, from the file weather-data in the directory /pub/usenet/news.answers.

Corrections, additions, and comments should be sent to Ilana Stern at ilana@ncar.ucar.edu.
##################################
Data available via the network
To access the FTP areas listed here, use "anonymous" as the login and your email address as the password (if requested). If you need help with FTP, see your sysadmin.

[Note: quotes ("like this") are used to set off names of directories and files, and are not part of these names.]

==Current weather GIFs via FTP==
vmd.cso.uiuc.edu [128.174.5.98]
FTP: Change directory to "wx" and set transfer type to "binary". GOES-7 visible and IR imagery over the US and Mexico, and surface analyses over the US, are available. A script to retrieve GIFs automatically is available from the ncardata FTP area (see below).

Also available in this directory are SPOTFREQ.DOC and CHASE-TV.DOC, lists of ham radio frequencies and TV stations which carry useful info for storm chasers, and a few other useful documents.

uriacc.uri.edu [131.128.1.1]
FTP: Change directory to "davet.195" and set transfer type to "binary". Images of the northeast US in GIF format from the afternoon passes of NOAA-11. (Provided by Dave Tetreault, DAVET@uriacc.uri.edu.)

unidata.ucar.edu [128.117.140.3]
FTP: Change directory to "images" and set transfer type to "binary". Weather radar summary map GIFS, surface maps for various places, a few soundings on skew-t log-p diagrams, GOES Hugo images (in subdirectory "images/hugo"). Surface maps include Europe and China.

cumulus.met.ed.ac.uk
FTP: Change directory to "images" and set transfer type to "binary". IR and visibal images of Europe from Meteosat, twice daily, in 1152 x 900 GIF format (size of Sun root window). The subdirectory "gifs" has smaller 3x daily images of the Nordic areas, the UK, and Europe.

marlin.jcu.edu.au [137.219.16.14]
FTP: GMS-4 images updated regularly for various Australian states, the entire country, and for regions/events of interest such as TOGA/COARE. The images are in a format designed for the package JCUMetSat but can be converted to GIF format using the ALCHEMY public domain software available at this site.

aurelie.soest.hawaii.edu [128.171.151.121]
FTP: Sea-Surface-Temperature data (near-real-time) in "pub/avhrr/images". AVHRR images within the radius of reception of the university's HRPT station, approximately 5 S to 45 N and 125 W to 165 E. The processed images are available usually within 30 min. of NOAA-11 and NOAA-12 passages. Data are compressed binary in netCDF format (get documentation from unidata.ucar.edu, above) labelled by satellite name (n11/n12) and time. More info available from hrpt@hokulea.soest.hawaii.edu.

==Current weather data via telnet==
madlab.sprl.umich.edu 3000 [141.212.196.79]
Telnet: include the "3000". Menu driven.

hermes.merit.edu [35.1.48.150]
Telnet: type um-weather at the "Which Host?" prompt and use menus. (Connects to madlab.sprl.umich.edu)

==Meteorological, oceanographic, and geophysical research data==
ncardata.ucar.edu [128.117.8.111]
FTP: contains information on datasets available from NCAR (the National Center for Atmospheric Research, address in section 3) , not actual data. If you would like to order data after browsing this information, email to datahelp@ncar.ucar.edu. Small datasets can be provided by FTP; we also write various kinds of tapes. See the README file, and the information in section 3 of this posting.

A shell archive containing scripts to retrieve GIFs from vmd.cso.uiuc.edu, get_gifs, is located in the "weather" subdirectory. This subdirectory also contains Colorado weather and ski reports.
A few special datasets are located in the FTP area, and are free. They are described in the file "pricing".

cdiac.esd.ornl.gov [128.219.24.36] (formerly suns01.esd.ornl.gov)
FTP: contains data and information on general and technical aspects of carbon dioxide, methane, and other trace gas emissions; the carbon cycle; and other climate-change topics from CDIAC (the Carbon Dioxide Information Analysis Center, address in section 3). The data for CDIAC's "Trends 91: A Compendium of Data on Global Change" is also available here. (Contact CDIAC to obtain a copy of the book.)

pioneer.unm.edu [129.24.9.217]
FTP: change directory to "pub/info" and retrieve beginner-info, cd-list, newcd-list, and cd-schedule to get started. This machine is part of the Space and Planetary Image Facility (SPIF), sponsored by the Computer and Information Resource Technology group at UNM; it currently has 3 CD readers and expects to add more. You can use this machine to FTP data and software from a variety of CD-ROMs, including both research data and images. There is no charge for this service. Contact help@pioneer.unm.edu for more information.

==STORM-FEST data==
storm.mmm.ucar.edu [128.117.88.53]
FTP: contains hourly and 5-minute composite surface observations, and composite rawinsonde soundings, from STORM-FEST, in the directories "/fest/hrly_sfc", "fest/5min_sfc", and "/fest/sounding", respectively. There is one file per day. The data are in ASCII. This data is a preliminary release.
This FTP system will eventually be replaced by a different data access system, although the data will still be available via the new system. (Info from Mark Bradford, bradfrd2@ncar.ucar.edu)

==Digital photos of earth from space==
sseop.jsc.nasa.gov [146.154.11.34]
FTP: many pictures taken from the space shuttle. Files are in a 512x512 format as red, green, and blue bitmaps. Image files are binary format, and have .DAT as an extension.

ames.arc.nasa.gov
FTP: change directory to "SPACE/CDROM". Images from Magellan and Viking missions, other stuff.

Also see pioneer.unm.edu site in "Research Data" section.

==AVHRR satellite images of USA==
sanddunes.scd.ucar.edu
Telnet: contact Tim Kelley by email kelley@sanddunes.scd.ucar.edu or telephone 303/497-1221 for login, password, and manual. Service is free to Internet users and is funded by NASA.
AVHRR (Advanced Very High Resolution Radiometer) images from 1989 through 7 Jan 1992 cover CO, WY, KS, NE, and NM, as well as parts of AZ, UT, OK, and TX. Since 7 Jan 1992, coverage includes these plus CA, OR, NV, WA, and MT, to 1000

km off Pacific coast. Total coverage of US for 1989-present will be available soon. West coast data from 1980-1985 will be available some time this year. Images are 1024 lines x 1024 elements before 7 Jan 1992, 2560 lines x 1024 elements after. Images are 1 km resolution and 8-bit format.

==Snow cover maps of US from GOES==
snow.nohrsc.nws.gov [192.46.108.1]
FTP: change directory to "snow". Various snow-related images in GIF form. US snow cover map updated weekly. JPEG of current AVHRR images. Contact tim@snow.nohrsc.nws.gov (Tim Szeliga) for more info. (Formerly gator.netcom.com, 192.100.81.102)

==Map data==
spectrum.xerox.com [192.70.225.78]FTP: various USGS data in subdirectories under the directory "pub/map".

hanauma.stanford.edu [36.51.0.16]
FTP: the CIA World Bank database contains coastlines, rivers and political boundaries. An 0.5 degree elevation dataset is also there. A program for decoding the CIA data can be found as "mfil" on pi1.arc.umn.edu [137.66.130.11] (Info from ken@msc.edu)

Also see pioneer.unm.edu site in "Research Data" section.

==Other resource information==
csn.org [128.138.213.21]
FTP: a large, frequently updated file containing detailed information on FTP sites, Bitnet and Usenet discussion groups, and data sources is located in the file "internet.resources.earth.sci" in the directory "COGS". This file contains more information on mapping, GIS, remote sensing, and geology, subjects which are mostly outside the scope of this meteorology- oriented FAQ. Mapping software and datasets are also available in this directory. Contact bthoen@csn.org (Bill Thoen) for more information.

Mailing lists
==CLIMLIST (moderated by John Arnfield)==
CLIMLIST is a moderated electronic mail distribution list for climat- ologists and those working in closely-related fields. It is used to disseminate notices regarding conferences and workshops, data avail- ability, calls for papers, positions available etc, as well as requests for information. An updated directory of email addresses for the subscribers to the list is distributed every month (usually on the 15th).

To subscribe, mail to whichever of these addresses works for you: AJA+@OHSTMAIL.BITNET / aja+@osu.edu / johna@magnus.acs.ohio-state.edu with the following information:

Your name (for directory listing), email address, institutional affiliation;
Indicate if your email address is shared, so your name will be in header of messages.
If your 'climatological credentials' are not apparent from your affiliation, please explain.

==Wxsat (administered by Richard B. Emerson)==
Wxsat resends all NOAA/NESDIS bulletins on polar and geostationary weather satellites as well as occasional material on Meteosat. Bulletins with orbital predictions, spacecraft operation schedules, and related messages are copied from NOAA.SAT on SCIENCEnet and forwarded to all addresses on the list. The list is configured to accept and broadcast mail from subscribers to the list at large. Wxsat does not store or distribute imagery and is not primarily a "chat" list. Wxsat is oriented towards users with a daily operational need for TBUS and related bulletins.

An archive of roughly 60 days' messages are available for retrieval via email messages to wxsat-archive@ssg.com. Send the message "help" in the text to the archive server for details on how to retrieve the current index and other files.

Subscription requests go to wxsat-request@ssg.com. The service is free to all Internet users but donations are accepted as this is a volunteer operation.

==Weather-users (administered by scott@zorch.sf-bay.org)==
This list is for discussions of weather servers; sharing of code to automatically query weather servers; and announcements of availability (or lack thereof) and changes to weather servers. Initially, Jeff Masters (sdm@madlab.sprl.umich.edu) has agreed to send Weather Underground status notices to this list.

To join or quit the list, email to weather-users-request@zorch.sf-bay.org; the list mail address is weather-users@zorch.sf-bay.org.

Updates to the Incomplete Guide to the Internet

This guide is periodically updated and those updates are made available for anonymous FTP at ftp.ncsa.uiuc.edu in the education directory. The version there is compressed using stuffit and binhex and is for Macintoshes. Several other formats are made available here at NCSA. Also several people at other sites have made the necessary conversions for formats which we do not support. Please note that there will be a delay when updates are made to the Guide.

Other Locations to FTP the Incomplete Guide to the Internet

The original document, which is indeed a Mac MS Word document, is available by anonymous ftp from yak.macc.wisc.edu [144.92.30.18], directory pub/misc/docs/ncsa, together with the same document in three additional forms:
(a) an rtf document that does not contain the illustrations (there are many).
(b) an rtfd document that does contain the illustrations, available in the rtf directory as separate tiff files.
(c) a PostScript form, ready to print; it also includes the illustrations.
For what it's worth, I have not read the document myself. Various people worked on it and I have merely made their work readily available. There's a README in there that reminds you of the four available forms of the document.
I recently found another copy of your documents that seem to be in even better shape on sonata.cc.purdue.edu in /pub/next/submissions:

```
-rw-r--r--  1 ftp     1170 Nov 19 12:05 Incomplete Guide to Internet.README
-rw-r--r--  1 ftp    73728 Nov 19 17:24 Incomplete Guide to Internet.ps
-rw-r--r--  1 ftp   648778 Nov 19 11:47 Incomplete Guide to Internet.wn
```

Joining the KIDSPHERE mailing list

The KIDSPHERE list (originally known as KIDSNET) was established in May, 1989, to stimulate the development of an international computer network for the use of children and their teachers. The first pieces of this network have already begun to take shape, and the mailing list now helps to guide its continuing evolution. Subscribers to the list include teachers, administrators, scientists, developers of software and hardware and officials of relevant funding agencies. Topics of continuing interest include:

* networks at the local, regional and national level
* news and mail interfaces suitable for children's use
* network services for the K-12 audience
* development of new network services and projects
* collaborative projects at the national and international level
* network access for the handicapped

Subscription requests may be sent to one of the following addresses:

```
kidsphere-request@vms.cis.pitt.edu  [Internet]
joinkids@vms.cis.pitt.edu           [Internet]
joinkids@pittvms                    [BITNET]
```

A spin-off of the KIDSPHERE list is another list called KIDS, which exists for children to post messages to other children. This second list was established after some children's postings appeared on KIDSPHERE and readers requested that the children's traffic be kept separate. Subscription requests for KIDS can be sent to JOINKIDS at the address given above. Postings to the KIDSPHERE list are accomplished with mailings to the address

```
kidsphere@vms.cis.pitt.edu          [Internet]        or
kidsphere@pittvms                   [BITNET]
```

Similarly, children may post messages for the KIDS list by sending mail to

```
kids@vms.cis.pitt.edu               [Internet]        or
kids@pittvms                        [BITNET]
```

Bob Carlitz

How to get KIDSNET/KIDSPHERE Back Issues

In response to many requests over the last year I have edited previous KIDSNET or KIDSPHERE submissions and made them available for access via anonymous ftp. Subscribers on Internet may access these files as follows

```
ftp vulcan.phyast.pitt.edu
user anonymous
password your_name@your_site
cd pub/kidsnet
dir
get ...
quit
```

Any password is permitted for anonymous ftp, but etiquette suggests that you supply your own electronic mail address. The files have been archived monthly with file names "kidsnet.yymm," where "yy" denotes the year and "mm" the month in which the archived messages were received at KIDSNET. The "dir" command will give you a list of all available files. The "get" command may be used to obtain copies of those archives which you would like to read.

Subscribers on BITNET may also access the archive via a mail message to BITFTP@PUCC. The body of your message should include the following commands

```
      FTP vulcan.phyast.pitt.edu
      USER anonymous
      CD pub/kidsnet
      DIR
      GET ...
      QUIT
```

The BITFTP server will supply the information requested by return mail.

The machine vulcan.phyast.pitt.edu is located in the Department of Physics and Astronomy at the University of Pittsburgh and is being used only on a temporary basis. Once an appropriate permanent archive machine has been obtained, it will be made available for the storage of other material related to efforts to develop an international network for children and their teachers.

Please report problems with the archive to kidsnet administration - joinkids@vms.cis.pitt.edu (Internet) or joinkids@pittvms (BITNET). I have made an effort to record all submissions faithfully, but it is entirely possible that errors have been introduced in the process of editing this information. As these errors are noted I will try to rectify them where possible.

Bob Carlitz

KidzMail--a List for Elementary Children

There is a relatively new Bitnet list called KidzMail located at Arizona State University. Its purpose is to promote 'Kids Exploring Issues and Interests Electonically'. The main participants so far are PACE (gifted) students in the Tempe elementary school district, and the list is primarily intended for that age group, but is also open to anyone else (at present).

If you'd like to subscribe to the list, send a note containing the text

'subscribe kidzmail My Name' (use your own name!)

to listserv@asuacad.bitnet and you will receive all of the list activity on a regular basis (only a few notes a day, currently). To unsubscribe, you would send a message similar to the one above with 'un' at the beginning.

The students on the list would be glad to hear from you about things that interest you, and also about specific discussion topics (the current one is violence/gangs in schools).

KIDLIT-L

KIDLIT-L is a new electronic discussion group to provide a forum for faculty members, librarians, researchers, teachers and others interested in the study and teaching of literature for children and youth. This group will discuss teaching strategies, innovative course ideas, current research, and most importantly we will share, ideas, questions and stories of interest to the group.
To join, send the following message to: listserv@bingvmb

subscribe KIDLIT-L Jane Doe (your first and last name)

After you subscribe (or join) additional information will be sent to you. Prue Stelling and Pamela Summers will serve as co-moderators of this list. Messages sent to the list are reviewed by the moderators, who distribute appropriate items to all participants. The moderators reserve the right to determine appropriateness of the messages. Please be aware that internet policy prohibits advertising. While position-available listings are permissible, positions-wanted, services offered, or product advertising are not permitted.
Prue Stelling is the librarian at Binghamton University, State University of New York, who works with the School of Education and Human Development. She has worked for several years as a school library media specialist and as the Teaching Materials Center Librarian at the State University College at Cortland, New York.
Pamela Summers is a faculty member in the Division of Education of the School of Education and Human Development at Binghamton University. She teaches Literature for Children and Youth and other courses in the Reading and Elementary Education and Early Childhood programs.

** ANNOUNCING The Curriculum Discussion Listserver**

Sponsored by Rowan College of New Jersey
List manager:

John V. Gallagher, Ph.D.
Associate Professor
School of Education and Related Professional Studies
Rowan College of New Jersey
Glassboro NJ 08028-1701
GALLAGHERJ@saturn.rowan.edu

I hope you will join in the discussions regarding curriculum development and issues related to curriculum. These could include topics related to the historical, philosophical, psychological, and sociological foundations of curriculum, curriculum theory, curriculum models, curriculum evaluation, the role of the curriculum worker, curriculum theorists, etc. If it relates to curriculum directly or peripherally, it should be discussed. Help us grow and join for your own personal growth. Do you have a new book to recommend to curriculum workers? Give us the details and your opinions about it. Do you have a curriculum problem? State the problem, give us as many details regarding the problem, and ask for help. Someone on the list ought to be able to contribute and help you solve it. Perhaps, someone can recommend another specialist to contact or give a reference in the literature. This is your list, started to encourage dialogue about curriculum. Let us use it and get the discussion going. You may even start with a short bio about yourself so we may get to know you. Thanks for your participation and your contributions. Incidentally, this is not a list exclusively for curriculum professors. We welcome discussion from curriculum professors, graduate students studying curriculum, curriculum specialists in school districts, school administrators, classroom teachers, citizens involved in school district curricula affairs as volunteers, in fact, anyone interested in curriculum related discussion. Don't be intimidated. Join, read, and contribute! To subscribe, send a message to:
LISTSERV@saturn.rowan.edu
Make the message:
subscribe curricul your e-mail address your name
Address messages to be posted to:
CURRICUL@saturn.rowan.edu

Teaching Success Stories Bulletin Board

Overview

Teaching Success Stories (TSS) is an electronic bulletin board maintained by the University of Missouri - Columbia (MU). TSS provides brief descriptions of successful teaching initiatives -- big and small -across the state and nation. Teachers, professors, and trainers can contribute their success stories to TTS and read about their colleagues' needs and solutions.

Access

The bulletin board can be accessed by anyone who has a computer, modem, and communications software, or other data communications device. The bulletin board is provided as a public service, free of charge. Users located outside of the Columbia, Missouri area may have longdistance telephone charges; Internet users are not charged.

To access TSS follow this general procedure:

1. LogOn to MIZZOU1.
2. At the Ready prompt, type INFORMU.
3. When the INFORMU Menu appears, select option
4 (Faculty & Academic Unit Information).
4. When the next menu appears, select option 5, (Teaching Success Stories).
5. Following the on-screen prompts to review stories of interest.

.....
. CAUTION! CAUTION! CAUTION!
You will be in a 'main frame' environment. We are working to make the system more user friendly, but we have a long way to go. Your input will be appreciated (the system programers tell me not to expect major changes, at least not for a while.

Organization

The TSS bulletin board consists of the the following menu options:

1. Introduction to Teaching Success Stories
2. How to Use the TSS B-Board
3. Elementary School Success Stories
4. Secondary School Success Stories
5. Higher & Adult Education Success Stories
6. Announcements
7. Suggestions and Submissions

Items 1, 2, and 6 provide general info, how to navigate, and lists upcoming events. Items 3, 4, and 5 are the success stories. Item 7 provides an opportunity to make suggestions and submit success stories.

Each success story includes the following information:

-- Title: short, descriptive, like a newspaper story title
-- Level: Elementary, Secondary, Higher/Adult
-- Subject Area: math, psychology, zoology, etc.
-- Contact Person: who to contact for more information
-- Background: context of the story
-- Success Story: what happened and how
-- Success Indicators: what resulted; how was success identified

Submissions

Any educator is invited to submit a Teaching Success Story. The story can be about anything. The submissions are reviewed using the criteria below:

-- Mechanics: Each element of the story (e.g., title, level, contact person) must be included in the submission.

-- Length: The Background, Success Story, and Success Indicators sections must total no more than 250 words (including section headings).
-- Names: Each story must be submitted by the Contact Person. This person's name will appear with the success story. No other names will be used in the story. (Note: Wording such as "the high school math teacher reported. . ." should be used, not "Ms. Jones reported. . .").
-- Ethics: Stories involving unethical or questionable practices (e.g., giving extra credit in a math class for those students who volunteer to clean-up the gym after a basketball game) will not be posted. However, a group of external reviewers must agree that the story should not be posted. The vast majority of submissions to the Teaching Success Stories Bulletin Board will be posted.

How to Submit

There are three ways to submit a story. In order of preference, the three ways are:
-- Electronically: Send the story via e-mail to: MERLIN@mizzou1.missouri.edu
-- On disk: Write the success story using a word processor and send the disk to:

Teaching Success Stories
c/o John Wedman
327 Townsend Hall University of Missouri Columbia, MO 65211

-- On paper: Write the success story and mail the paper copy to the address given above

More Info?

For more information about the Teaching Success Stories Bulletin Board, contact John Wedman in one of the following ways:

US Mail: 327 Townsend Hall
University of Missouri
Columbia, MO 65211
Phone 314-882-3828
E-mail: wedmanjf@mizzou1.missouri.edu

LM_NET: A World-Wide Discussion Group For School Library Media People

A World-Wide Discussion Group for School Library Media People (Library Media Network)
LM_NET on LISTSERV@SUVM.BITNET or
LISTSERV@SUVM.SYR.EDU

For all school library media people--a new listserv called LM_NET (library media network) has just been set up to serve the school library media community world-wide. This list is operated by Mike Eisenberg, Syracuse University, AASL, and Peter Milbury, library media specialist, Chico, California, AASL/CMLEA.

Conversation on this list will focus on the topics of interest to the school library media community, including the latest on school library media services, operations, and activities. It is a list for practitioners helping practitioners, sharing ideas, solving problems, telling each other about new publications and up-coming conferences, asking for assistance or information, and linking schools through their library media centers.

This listserv is open to ALL school library media specialists worldwide- and people involved with the school library media field. It is not for general librarians or educators. We want to keep the activity and discussion focused on school library media. But, the listserv can be used by library media people for many different thingsto ask for input, share ideas and information, link programs that are geographically remote, make contacts, etc.

To join, send an email request to either:
Peter Milbury: PMILBUR@EIS.CALSTATE.EDU

or

Mike Eisenberg: MIKE@SUVM.SYR.EDU (MIKE@SUVM.BITNET)

It's _important_ to include your full userid/address and your firstname lastname, so that we have you entered properly.

For example:

"Add to LM_NET JDoe@lmc.mystate.edu name: Jane Doe" [quotes unnecessary]

So, please join us on this this new, global, school library media network.

Mike Eisenberg and Peter Milbury
LM_NET Co-Owners

Jericho Project

Planning for EUIT's new Jericho Project (originally conceived as Project Delta) continued at the EUIT Preconference Working Session in Baltimore in October.

The project's goal is to bring down some of the walls that currently make it difficult for most faculty to learn how to adapt information technologies for their own teaching. We hope to enable faculty members to use information technologies to lower other sets of walls: walls separating potential students from a college education; walls separating students from intellectual resources located in places other than their own campuses; and walls imposed by traditional course designs that prevent students from learning by applying real tools to real problems. Those goals led to naming this effort the "Jericho Project."

The Project will develop a nationwide information distribution and sharing system to enable faculty members to use information technologies to improve the quality, accessibility and cost-effectiveness of education. Participating faculty members will be supported in taking the next steps in moving beyond their current levels of skills and knowledge in using technologies to help students learn. The Jericho Project structure consists of target areas, a peer review selection process, Jericho resources, and the Jericho network.

The following were the bases for Baltimore discussion groups:

(a) Resource development and peer review screening processes (including initial target areas and resources);
(b) Hubs and Hosts (including training for event leaders);
(c) Online services (including initial pilot projects and long-term design and structure);
(d) Alliance building (disciplinary organizations, corporate partners, consortia, and other educational associations);
(e) Marketing and fulfillment; and
(f) Roles for publishers (textbook, software, and other).

For background information on the Jericho Project, see the October 28th issue of The Chronicle of Higher Education, page A21.

For a copy of the full concept paper, send mail to listserv@bitnic (BITNET) or listserv@bitnic.educom.edu (Internet) with the following message:

GET JERICHO EUIT EDUNEWS

For a paper copy, please reply to this message and include your mailing address in your request.

To subscribe to the new listserv created to facilitate planning and discussion, send your request to EUITEDIT@BITNIC.EDUCOM.EDU (Internet) or EUITEDIT@BITNIC (BITNET). (Please specify the Jericho listserv in your request.)

REPEAT WELCOME: Welcome to EUITNEWS, a listserv for EUIT participants and an experiment in providing short, frequent updates directly to you (by e-mail or fax). EUIT staff will receive your message if you send e-mail to EUITEDIT@BITNIC.EDUCOM.EDU or EUITEDIT@BITNIC.

Let us know if you missed previous messages and want copies. Let us know if you have colleagues who also want to receive EUITNEWS.

Please allow us two weeks for updating our lists.

Announcing the Scholarly Communications FTP Server

The Scholarly Communications Project of Virginia Tech with the support of University Libraries would like to announce the establishment of an FTP server for all scholarly electronic journals published at VPI. Titles which were previously available only by subscription to listserv lists include:

The Community Services CATALYST
Journal of Technology Education
Journal of the International Academy of Hospitality Research
The International Journal of Analytical and Experimental Modal Analysis

Also available at this FTP site are the monthly logs for VPIEJ-L, issues of the electronic version of the _Newsletter of the Visual Communication Division of the Association for Education in Journalism and Mass Communication_, as well as frequently asked questions relevant to electronic publishing and tools for text processing and data compression for various platforms. The server is available 24 hours a day for multiple logins via the Internet.

FTP Instructions:
```
ftp borg.lib.vt.edu
cd /pub
cd /<directory-of-your-choice>
get <filename>.<filetype>
```

About the Scholarly Communications FTP server:
The server runs on a NeXTstation Turbo with 24Mb of RAM located at University Libraries, Virginia Polytechnic Institute and State University.

James Powell >>> Systems Support and Development, University Libraries, VPI&SU
>>> JPOWELL@VTVM1.CC.VT.EDU
>>> jpowell@borg.lib.vt.edu - NeXTMail welcome here
>>> Owner of VPIEJ-L, a discussion list for Electronic Journals

PUBLIB Public Libraries and the Internet Mailing List

PUBLIB@nysernet.org Public Libraries and the Internet

PUBLIB, initiated on December 1, 1992, is a new discussion list concerned with use of the Internet in public libraries. Issues to be examined include connectivity, public access to the Internet, user and staff training, resources of interest to public librarians (online, print, video, other), electronic freedoms and responsibilities, new technologies for public library Internet access, National, International, and regional public telecommunications policy and public libraries, and more.

To join the list and receive the mailings from PUBLIB:
Send a message to LISTSERV@nysernet.org (no subject necessary) saying:
subscribe PUBLIB "your full name here"

For example:

To: LISTSERV@nysernet.org
Subject:
Message:
subscribe PUBLIB Melvil Dewey

Please introduce yourself to the list after you receive the welcome message back from the listserv.

Co-moderators:

John Iliff jiliff@nysernet.org
Pinellas Park Public Library
7770 52nd St. Pinellas Park, FL 34665
(813) 541-0719 Fax (813) 541-0818
Jean Armour Polly jpolly@nysernet.org
NYSERNet, Inc.
111 College Place Syracuse, NY 13244-4100
(315) 443-4120 Fax (315) 425-7518

Welcome to HILITES.

BACKGROUND & PURPOSE

The HILITES mailing list was established in the fall of 1991 and is maintained by the FrEdMail Foundation. Currently, support for this service is provided by the California Technology Project.

HILITES now has over 200 names and networks. Since September, 1991 we have advertised projects developed and coordinated by teachers (Reflections on WWII, Global Grocery List, American Families, and Near and Far: Literary Journal), by a university (Zero Gravity), by the European School Project (Hare and Hounds), and by the FrEdMail Foundation (Newsday, GeoGame). We also posted summary reports on three exemplary completed projects (Fire!Fire!, Most Livable Places, and TeleScience Fair).

Teachers from many networks have participated in these projects. For instance, in our recent GeoGame project, we had participants from tenet.edu, nycenet.edu, atl.calstate.edu, ncsa.uiuc.edu, ritvax.isc.rit.edu, erie%sed.bitnet@cunyvm.cuny.edu, uva386.schools.virginia.edu, alaska.bitnet, tmn.com, and FrEdMail.

HILITES is designed to meet some urgent short-term needs of growing networks which serve teachers and students:

1. These networks have many novice teachers coming on-line. They need a rich collection of varied, simple, and useful curriculum-focused activities.
2. Teachers need many different examples of successful project planning, implementation, and evaluation if they are to take the initiative to organize and implement their own project ideas.
3. Many teachers and budding project coordinators need help in project development. Many excellent project ideas languish for lack of skill in "bringing them to market." Teachers need help in refining their ideas, developing a marketable project announcement, and obtaining collaborators from the widest possible pool of potential participants.
4. Busy networks need some form of "noise control." Announcements for exemplary projects must often contend with an ocean of messages asking for pen pals, sister schools, and messages of the "Kilroy was here" genre. Most teachers don't have the time to wade through a large volume of extraneous mail looking for "gems."
5. HILITES will NOT be the place where resources, addresses, lists, bibliographies, references, tips, lesson plans, recipes, or any other data will be posted. Other lists on the Internet are open for this kind of free-wheeling exchange of information.
6. HILITES projects will engage students in collaboration with other clasess in their learning experiences. Students will measure, collect, evaluate, write, read, publish, simulate, hypothesize, compare, debate, examine, investigate, report, and summarize their learning experiences. Much of this will take place via the network as they collect, organize, share, and report.

------- FrEdMail Foundation-------

As the primary moderator of HILITES, the FrEdMail Foundation will:

1. Develop a calendar and curriculum matrix for projects appearing on HILITES each semester or each quarter.
2. Screen and post project ideas which meet the established project criteria

4. Work with teachers who have worthy project ideas to develop credible project announcements for posting on HILITES. For example, Joe Quain in the Virgin Islands came up with an interesting geography project idea. The FrEdMail Foundation assisted him in writing a detailed call for collaboration, and within a week he had participating classes from Finland, England, Spain, Estonia, and Texas.

How Teachers Can Use HILITES

1. Read HILITES to find credible, worthwhile classroom-based, collaborative learning activities. Since it is moderated, only well-organized and useful projects will be announced here. You will not have to wade through oceans of trivia to find good projects.

If your network does not carry a HILITES bulletin board or news topic, ask your system administrator to contact us and set it up for you and your colleagues. If this is not possible, you may subscribe to HILITES directly by sending mail to:

hilites@bonita.cerf.fred.org

2. Post your project on HILITES. If you have a project idea and wish to solicit participation from the widest and most interesting audience possible, send your project announcement to HILITES at the FrEdMail Foundation. We will work with you to develop a well-structured call for collaboration and post it on the international HILITES mailing conference. Use the guidelines below to help you begin developing your idea. Send your project ideas and announcements to: arogers@bonita.cerf.fred.org

Be sure and leave plenty of lead time prior to your project start date. Use the general format for your call for collaboration that you will find in subsequent HILITES messages.

--- How Network Administrators Can Help

Ideally, HILITES will carry announcements for on-line curriculum projects FROM each participating network TO each of the others, where it can be posted in the form of a moderated or read-only bbs, group mail, or news forum.

Because it is distributed via email, HILITES can be carried by every Internet affiliate with an interest in education. Since many advertised projects rely exclusively on email, teachers on every network will be able to participate. Announcements for projects which require tcp/ip connections will help to build awareness and interest where it is not available (it will build demand for better access.)

You can help to build the value of HILITES to your constituent teachers. Here's how:

1. Provide us with one network address for HILITES (some of you have already done so). Your network can post or "explode" or "echo" HILITES mail to all your constituents. This approach will alleviate the need to deal with countless individuals from the same network who want to be added to the list. We currently send multiple copies of HILITES messages to several networks. We want to reduce that to one message.
2. Delegate a "curriculum" person on your network to work with us in refining this approach to network collaboration, and who will also select and post on HILITES projects originating within your network which can be enhanced by collaborators from around the world.

--- Guidelines to Successful Project Design

KEYS TO SUCCESSFUL TELECOMPUTING PROJECTS

Extracted from the article of the same name, The Computing Teacher, May, 1990

1. Design a project with specific goals, specific tasks, and specific outcomes. The more specific, the better; the more closely aligned with traditional instructional objectives, the better.

2. Set specific beginning and ending dates for your project, and set precise deadlines for participant responses. Then, make a time line and provide lots of lead time to announce your project. Teachers feel more comfortable participating in projects that have a definite goal and an ending date. Experience shows that peak use on an educational network is geared to traditional cycles of the school calendar. October through December, February through May, and July (with summer school) are very busy times on the network. However, most of the successful networking activities were planned and announcements posted six to eight weeks before the actual projects began. You'll also find that sometimes, you'll need to advertise for participants several times, and thus the more lead time the better.

   Phased deadlines establish a sense of accountability to the other participants in the project, and makes it easier to secure follow through. Often, where the teacher may not be inclined to complete the project, if the students have been apprised of the deadlines they will often hold their own teachers accountable to complete the project.

3. Request collaborators by posting messages on electronic bulletin boards, and by sending out flyers if possible. Once you have designed your project, create a formal "call for collaboration" to post on the network of your choice. By preparing this call off line with your word processor and then uploading it, you'll be able to conveniently repeat the announcement as often as needed until you get the collaborators you need. If you happen to have the addresses of people you would like to collaborate with, send them a hard copy of your request, as they may not be actively using the service during the time your calls went out.

4. Give specific information about your project:

- Goals and objectives of the project
- Your location
- grade levels desired
- contact person
- Time line and deadlines
- how many responses you would like
- what you will do with the responses

5. Provide examples of the kinds of writing or data collection which students will submit. This is important to the success of the project.

6. At the conclusion of the project, follow through on sharing the results of the project with all participants. If you publish any student writing, send a hard copy to all who participated. Have your students collaborate on writing up a summary of the project, describing it, what they did, what they learned, and what changes they would make in the project. Post that message on the network for all to see (not just the project participants). Finally, have your students send a thank you message to all participants. You might also want to send a hard-copy of your summary and thank you to the principal of each school which participated. This can be an effective way to reinforce one another in our ongoing efforts to educate others and validate use of this technology.

FrEdMail on the Internet (SCHLnet)

On October 11 the FrEdMail Foundation inaugurated SCHLnet, a new service on California's CERFnet and CORE (formerly TRIE) networks which brings all of the acclaimed FrEdMail projects and activities for the first time to thousands of teachers in California. This new service will soon be available to other networks throughout the world, creating for the first time a truly global distributed conferencing network for teachers and their students.

The past two years have seen an enormous number of teachers coming to the Internet around the world. Current estimates are upwards from 50,000 teachers who are using the Internet.

Incredible as it may seem, prior to this time there has been no effective system to help teachers find one another and build interesting collaborative learning projects across the nation and around the world. Although many excellent mailing lists exist on the Internet, mailing lists send messages directly to your mailbox. If you subscribe to two or three mailing lists you can be drowned in a sea of messages spanning a dozen different topics, resulting in a severe case of information overload.

Many educators have taken a serious look at a distributed conferencing system called Usenet. Usenet is an effective transport protocol for topical discussions, covering almost 2000 different subjects, to over ten thousand different computers around the world. If you can think of a subject in which you are interested, you can probably find a discussion of it on Usenet, with a truly global audience of contributors.

Usenet has much of interest to gadflies, scholars, hobbyists, the idle and the curious. There is tremendous educational and entertainment value within the daily multi-megabytes of Usenet discussions. For example, topics in the science hierarchy represent fascinating ongoing discussions on current research topics by practicing scientists. Whether the topic is cold fusion, biogenetic engineering, astronomy or astrophysics, you can find scientists discussing the state of the art in their discipline.

Usenet could provide the perfect solution to teachers whose mailboxes are filled to overflowing with a wide variety of extraneous content, and who find it difficult to make connections with those interesting projects that are lost in the sea of "extra" mail that often comes with mailing lists. Content on Usenet is divided into topics: you read only the topics which interest you. And it is distributed... it reaches thousands of sites around the world, ensuring access to a wide variety of different classrooms and cultures.

However, Usenet's value to a typical classroom teacher is compromised because there are no rules or limits or controls on "freedom" of expression. You can never tell when you will read something that will be controversial, offensive, crude, or pornographic. Most superintendents and boards of educations would have serious reservations about the suitability, or at least political "safety," of Usenet in their local schools as an educational tool for teachers and their students.

SCHLnet, the FrEdMail Foundation's new service to teachers on the Internet, takes advantage of Usenet transport protocols to deliver a distributed conferencing system for educators, but which avoids the often unwelcome "surprises" in content which tends to make educators shy away from Usenet. Because SCHLnet is a distributed conference it puts teachers in touch with their peers throughout the United States, Canada, Europe, Latin America, Australia, the Orient, Russia, and many other countries... even where direct Internet access is not available.

SCHLnet solves the problems of "noise control" on the Internet. It moves your listserv and group mail topics out of your personal mail boxes into the SCHLnet conference area, organized by topic, and ready for browsing when you are ready. Your mailbox will once again be used only for personal correspondence.

SCHLnet uses Usenet format newsgroups to create a "mini-usenet" aimed specifically at K-12 teachers and their students. SCHLnet creates an interactive flea-market of ideas, resources, opportunities, and information of specific relevance to teachers and their students, without the extraneous and sometimes offensive distractions posed by Usenet netnews.

Because SCHLnet's audience includes young children, we prohibit profane, discourteous, abusive, racist, sexist, obscene, and sexually explicit language within the SCHLnet newsgroups. We actively moderate many topics and monitor the rest in order to ensure professional standards of expression and etiquette.

SCHLnet news is delivered directly to your local network using the USENET message interchange format, and is available via the Internet, UUCP, FrEdMail Network, and other delivery protocols. If you would like to receive SCHLnet on your network, ask your system administrator to contact us at fred@acme.fred.org for more information.

SCHLnet newsgroups include a range of topics; new topics will be added as demand dictates. Current categories include:

CALLS - Calls for collaboration, requests for project partners and sister schools, and keypal requests. These teacher-developed projects will have students measure, collect, evaluate, write, read, publish, simulate, hypothesize, compare, debate, examine, investigate, organize, share, and report.

NEWS - News and information on a variety of topics, including America 2000 Daily Report Card, CNN Newsroom Daily Lesson Plans and Democracy in America, and other publications and announcements for educators.

SIG - Special Interest Groups and discussion forums on a variety of general interest issues.

CURR - Curriculum Interest Groups, similar to SIGS but specific to curricular themes.

PROJ - Current and Recent Classroom Projects. Ongoing network-wide projects will be conducted in this area, so that all participants may "peek" at the progress of a project
and new participants may choose to join.

PUB - Publications of various sorts, INCLUDING the electronic publishing of the best of student work. Teachers supervise the selection and posting of only the BEST of student work. Other electronic publications from around the Internet will also be posted here.

STU - Various student topics/exchanges. This is the place for students to correspond with one another. Moderators encourage appropriate and timely discussions on a variety of topics.

<arogers@bonita.cerf.fred.org> 32.39.28N, 117.01.45W
Al Rogers
FrEdMail Foundation
PO Box 243, Bonita, CA 91908 619-475-4852

Daily Report Card Service

The DAILY REPORT CARD news service is now available to you AT NO CHARGE via electronic mail. Some of our readers thought you might be interested and recommended that we get in touch with you.

The DAILY REPORT CARD is an update on the six education goals for America in the year 2000, adopted by the president and governors in February 1990. The goals for the year 2000:

ONE: All children will start school ready to learn.
TWO: The high school graduation rate will be 90%.
THREE: Students will leave grades 4, 8, 12 competent in English, math, science, history, and geography.
FOUR: U.S. students will be first in math and science.
FIVE: Every adult will be literate, with the knowledge and skills to compete in a global economy.
SIX: Every school will be free of drugs and violence.

The DAILY REPORT CARD is published by the American Political Network with support from the Annie E. Casey Foundation and the Business Coalition for Education Reform. It is distributed at no charge to a national audience of leaders in government, business, media and education.

The DAILY REPORT CARD "covers the coverage" the media gives the movement toward all six education goals -- summarizing that day's published news from all 50 states on local, regional, and national stories affecting education reform --and pointing out what reform isn't getting coverage.

It is an approach suited to the subject: While the goals are national, education solutions are almost always local. A daily national report that filters and sums up all the local progress reports can provide national impetus toward the goals.

To subscribe to the DAILY REPORT CARD, send an electronic mail message to the following address:

listserv@gwuvm.gwu.edu

The message should begin on the first line and read as follows:

sub rptcrd your full name

So, for example, if the president wanted to subscribe, he would type:

sub rptcrd George Bush

After you send the message requesting delivery, you will receive a response confirming your subscription (please allow a few hours). After that, the DAILY REPORT CARD will be delivered into your electronic mailbox each weekday.

If you have any questions, please call Karl Eisenhower at (703) 237-5130 or send a message to drc@gwumv.gwu.edu.

Cataloging from Library of Congress

Email: (see Miscellaneous Information, below) Phone: (314) 432-1100

Description

The Software Development Group of Data Research Associates, Inc. has made the 3.8 million cataloging records from the Library of Congress available to researchers via the Internet. This database contains the records from the Books All, Maps, Music, Serials, and Visual Materials services as distributed by the Cataloging Distribution Service (CDS) of the Library of Congress.

Guest users may search the database by author, title, author/title, ISBN, ISSN, LCCN, as well as qualifying searches by language, copyright date, or cataloging format. Subject and keyword searching is not available to guest users. Additional types of searches may be available for users with Data Research accounts.

Network Access:

Telnet, using VT100 or higher emulation, to dra.com [192.65.218.43]. After the copyright notice and initial screen appears, you can begin searching the database.

"A=" for an author search, for example "A=Shakespeare William"
"T=" for a title search, for example "T=Taming of the Shrew"
"L=" for a LCCN search, for example "L=89001392"
"I=" for a ISBN search, for example "I=0134701542"
_____
The information in this section is provided in accordance with the copyright notice appearing at the front of this guide.

"N=" for a ISSN search, for example "N=0891-9860" "??" for additional help
"EX" to exit

Who Can Use the Catalog

Only two guest users are allowed access at a time during business hours, 8:00 am to 5:00 pm (Central Time). Guest access to this database may not be used for cataloging or competitive purposes. Access from outside the United States may require prior arrangements.

Miscellaneous Information

Mail about problems, suggestions, or comments may be sent to catalog@dra.com.
For information on continuing access for a host, site, or network contact sales@dra.com or write to the address above.
Disclaimer:
Data Research Associates, Inc. is not responsible for supporting or maintaining this service or its data for guest users. This service may be modified, unavailable, or withdrawn at any time without notice.

Records originating with the Library of Congress are copy-righted by the Library of Congress for use outside the United States.
This database is NOT the same as the LC card catalog.

The Library of Congress Information System (LOCIS)

The Library of Congress Information System (LOCIS) is now available over the Internet. The telnet address is:
locis.loc.gov
LOCIS accepts both telnet 3270 and line mode.
LOCIS includes over 15 million catalog records and over 10 million records for other types of information: federal legislation, copyright registrations, Braille and audio, organizations, and selected foreign legal materials.

Searching hours are (all times USA eastern; closed national holidays):

Monday - Friday: 6:30am - 9:30pm
Saturday: 8:00am - 5:00pm
Sunday: 1:00pm - 5:00pm

Printed manuals will be available for sale later this summer and very soon via FTP (ftp seq1.loc.gov /pub/LC.Online). There will be a LOCIS Quick Search Guide and a LOCIS Reference Manual.
LC Online Internet: lconline@seq1.loc.gov
Library of Congress
Stan Horwitz Internet: STAN@VM.TEMPLE.EDU Bitnet: STAN@TEMPLEVM Temple University's Sr. Mainframe Consultant; Manager of the Help-Net and Suggest lists;

Teacher Contact Files

The Kidsnet "Teacher Contact Files" have been updated. These four files average 2,000 lines in length. They contain introductions from teachers, administrators, educators and parents interested in telecommunication activities in the kindergarten-grade 12 classroom. The files are available from an e-mail message or through anonymous FTP.
To receive the files, send a mail message to listserv@unmvma (Bitnet) OR to listserv@unmvma.unm.edu (Internet), leave the subject line blank and include these commands in the body of your message:
get teacher1 contacts
get teacher2 contacts
get teacher3 contacts
get teacher4 contacts
If you would like to automatically receive the files whenever they are updated, included these commands in the body of your message:
afd add teacher1 contacts
afd add teacher2 contacts
afd add teacher3 contacts
afd add teacher4 contacts
To retrieve the files by anonymous FTP:
ftp to ftp.vt.edu
login: anonymous (must be lower case)
password: guest (or your complete userid in lower case)
cd /pub/k12
get teacher1.contacts
get teacher1.contacts
get teacher3.contacts
get teacher4.contacts
quit

These files are my work so if you have any additions, corrections or suggestions, write to me at one of the addresses below.

To join Kidsnet or the companion list, Kids, write a message to the owner, Bob Carlitz at joinkids@pittvms or joinkids@vms.cis.pitt.edu (Internet). These are NOT listserv lists so the standard commands will not work.
Enjoy!
Sally

Sally Laughon
Computer Department
Northcross School
Roanoke, VA USA

BITNET: laughon@vtvm1
INTERNET: laughon@vtvm1.cc.vt.edu
slaughon@rvgs.vak12ed.edu
VOICE: 703 989-6641
FAX: 703 989-7299

K12 PROJECT CHANNELS

How to get one!
How to use one!

K12 Net offers 12 conference areas that can be assigned to different people at different times to pursue individual projects. Anyone, teachers and students alike, can request and use a channel by following the following guidelines.

WHAT QUALIFIES AS A PROJECT?
This is a very big question... Basically, any idea that requires telecommunications to succeed, and deals with a specific topic or activity on which the user wishes to focus. For example, there are currently coordinated weather readings planned for four future dates- the data collection is to be global in nature, potentially covering the breadth of the network. In addition, while this might be considered a "science" project and could possibly be conducted in the K12_SCI_ED echo, the intent of this project is to focus exclusively on weather reading, warranting a dedicated channel for that specific purpose. Other projects have included compilation of Top Ten lists, cookbooks, Role Playing games, Composition critiquing, Physics challenges, and private educational sessions for specific groups.

WHO PARTICIPATES IN PROJECTS?
There are two classifications of projects: Open and Closed.

Open projects will be available to all users of K12Net. If you design a project in which you want as many people as possible to participate, then you want an Open project.

Closed projects are limited to only a selected set of participants. If, for example, you want to conduct an on-line class specifically for Jr. High Phys. Ed. teachers, and didn't want anyone else posting, then you would want a Closed project.

HOW DO YOU START?
Start with an idea. Engage other users of the net in conversation about your idea, and see if anyone would like to join you in the project. You can 'advertise' your idea in the Teacher Chat echo, Projects echo, or any of the appropriate curricular conferences. Make sure that your idea would require its own channel, and cannot be carried out in the existing conferences.

When it seems you have a few others interested in your project ("critical mass"- enough to make it work), apply for a channel. Given the limited number of channels available, and the growing interest, new projects should demonstrate that there at least several other points in the net that wish to participate in the project.

Send channel requests to Helen Sternheim, Channels Coordinator, at 1:321/109.

Your request can be made in the Projects echo, or via Netmail. Include the following:

1. Name of the Project

2. Name and FIDO address of the Moderator (see below)
3. Project type- Open or Closed
4. Requested start time and duration of the project (see below)
5. A brief project description (see current project guides for samples)
6. If your project is to be Closed, a list of participants who are to be granted access to the channel.

With this information is received, you will be assigned a channel when one is available. Please note: changes are slowly being made to the channel allocations to minimize the extra work required of Sysops throughout the net.

To that end, new projects will be assigned to Channels 1-12. Your project will be assigned appropriate channel when and if a channel is available.

WHO IS IN CHARGE OF THE PROJECT?
The person designated as the Moderator will have control over the conduct of the project channel. It is they who will make decisions about appropriate posting and participation, set whatever rules are required, and generally conduct the business of the project. The Channels Coordinator will offer advice and assistance if asked for, and help with technical problems if possible. However, the Moderator is responsible for setting up, advertising (beyond the projects listing), and running the project.

HOW LONG CAN I USER A CHANNEL?
Unless unusual circumstances exist, new project channel allocations will be limited to a two month period. You may request a channel for a shorter time.

It is advised that the Moderator schedule the channel activities very carefully to make the most of the two month allocation. A good schedule also will help your other participants make better use of your project by being able to plan more effectively their participation. Extensions to projects will be given _only_ if there are no other projects waiting for channels and the Moderator demonstrates a need to continue.

WHAT'S CHANNEL 0 FOR?
Channel 0 if provided for Moderators and other to work and coordinate projects out of view of other project participants - this is not to be sneaky, but is intended for teacher to teacher coordination. Messages to the Channel Coordinator also may be left in Channel 0. Channel 0 is a Closed channel. If you have several participants who need to be in touch 'behind the scenes' send a list of their names and FIDO addresses to the Channel Coordinator.

Channel 0 may also be used to ask for help and/or advice from other project moderators.

QUESTIONS?
Please read these guidelines carefully. If you still have questions you may contact the Channels Coordinator, Helen Sternheim at 1:321/109

--
uucp: uunet!m2xenix!puddle!321!109!Helen.Sternheim
Internet: Helen.Sternheim@f109.n321.z1.fidonet.org

K12 - CHANNEL GUIDE - current activity in the K12 project echoes
Channel '0' (K12.CH0) - K12 Inter Class Pen Pals Messages Groups Messages sent by teachers from one class to another, requests for class pen pal exchanges.
Type OPEN
Helen Sternheim (1:321/109) moderator
Channel '1' (K12.CH1) - Available for a project
Channel '2' (K12.CH2) MathMagic Project
Project moderators:
Carol Hooper 1:381/64 Alan Hodson 1:381/64
Math Problem Solving Activities - Teams - Various problems
Type Closed, Contact Carol or Alan to join
Dates: Sept 1, 1992 - Nov 1, 1992 (Extendable to a later date)
Channel '3' (K12.CH3) - Brown Bag Science Experiments
New Materials for Fall of '92
Science projects to do at home with simple materials.
May be done in the classroom too.
Moderator - Tom Barner 321/120
Type OPEN
Dates October thru December
Please join this project, and supply Tom with feedback.
Channel '4' (K12.CH4) - Available for a project
Channel '5" (K12.CH5) - Available for a project
Channel '6' (K12.CH6) - Currently Available
Channel '7' (K12.CH7) - Currently Available
Channel '8' (K12.CH8) - Global Confernces Reports
Moderator Janet Murray 1:105/23
3 conferences starting in October Ending Nov 15
Channel '9' (K12.CH9) - Global Conference Reports Moderator Janet Murray 1:105/23
3 conferences starting in October Ending Nov 30
Channel '10' (K12.CH10) - Currently Available!
Channel '11' (K12.CH11) - Global Village News
Moderator Chris Rowan 1:3820/2
Sept thru Nov 30 open to all school groups
Channel '12' (K12.CH12) - Weather Data Collection
Report the weather conditions in your locale. Every Wednesday is reporting day, see the channel for an outline.
Moderator - Tom Barner 321/120
TYPE - OPEN
Dates October thru December 1992

For more information or comment on the different projects underway contact the listed moderator of the conference via K12.PROJECTS, or netmail.
-=-
Do not post messages in CLOSED conferences until you have been admitted to the echo by the moderator.
Conference Moderators may be contacted via Netmail at the address listed, or in K12.PROJECTS.
==========
uucp: uunet!m2xenix!puddle!321!109!Helen.Sternheim
Internet: Helen.Sternheim@f109.n321.z1.fidonet.org
[Note: This is current as of 15NOV92, Channel Assignments vary regularly]

ERIC database

Syracuse University (PRISM)

To access type telnet acsnet.syr.edu (login with suvm)
ENTER TERMINAL TYPE: vt100
At USERID ===> suinfo
Type suinfo once more

or

ACCESSING THE ERIC DATABASE THROUGH SUINFO

Internet users can access the latest five years of the ERIC Database through SUINFO, a campus information system at Syracuse University that uses the SPIRES/PRISM interface. Instructions follow:

1. Telnet acsnet.syr.edu
2. At the prompt, type SUINFO.
3. At the ENTER TERMINAL TYPE prompt, type VT100.
4. Bypass the USERID prompt (with the tab key).
5. Bypass the PASSWORD prompt (with the tab key).
6. At the COMMAND prompt, type SUINFO.
7. After a pause, you will see a Welcome to SUINFO screen. Read the messages and type Y to continue. (Note: If you do not get the welcome screen, try typing SUINFO again and hit return.)
8. After a pause, you will see a Welcome to PRISM screen, followed by the main menu. Choose "General Interest" from the main menu by typing 1.
9. You will see a File Selection menu. Choose ERIC by typing the numeral (13 as of this writing).
10. Follow screen instructions to search the database.
11. To end the SUINFO session, type LOGOFF.

Welcome to SUINFO! You will now be able to perform online searches on all publicly available databases currently carried by PRISM. Before proceeding, the following may be noted:

* This account may be used for PRISM searches only.
* Certain databases cannot be searched because of licensing restrictions. You may search these databases by logging into SUVM the regular way.
*PRINTing, SENDing to a userid or the WRITEing to a computer file of your search result(s) has been disabled. Numerous error messages will be encountered if attempted!
* You must type LOGOFF to EXIT PRISM

Welcome to Prism
File selection 33 files available

Select a file or service by typing its name below, or, press the Return key to see a list of all files, or, type a category number to see a list of files in that category:

1. General Interest
2. CWIS: Campus Wide Info. System (includes SCIS, Job Ops)
3. WOT: Network Accessible Resources

4. Demonstration
5. Application Development
6. Testing New Applications

Welcome to ERIC
This file contains bibliographic information and abstracts for a variety of EDUCATIONAL documents from the Educational Resources Information Center (ERIC). The file contains all the ERIC data from 1984 through the first quarter of 1991 (approximately 208507 records).

You can search for items using one or more keywords from a variety of fields such as title, author, or abstract.

For help call the ERIC Clearinghouse at 443-3640
To report technical problems contact: Jhychun Wang [JINWANG@SUVM] x-2143

New Guide to Internet Library Catalogs

A new resource is now available for identifying and using library catalogs on the Internet. The guide is titled "Library Catalogs on the Internet: Strategies for Selection and Use". The guide is directed toward anyone interested in exploring the many library catalogs worldwide that are on the Internet. It may also be useful to librarians or computer center staff as a resource for preparing materials to assist their users. The guide provides an overview of using the Internet to reach remote systems, suggests reasons for exploring library catalogs, lists resources for identifying which catalogs are available and for selecting among them, and provides practical tips on navigating the Internet and using unfamiliar systems. It emphasizes a non-technical approach and consolidates information that has been accumulating but has not been available in one source until now. A copy of the table of contents is appended.

The guide is available in electronic format now and will soon be published as a printed guide. In electronic format: Via anonymous FTP from host dla.ucop.edu, directory pub/internet, filename libcat-guide, or host vaxb.acs.unt.edu, directory library, filename libcat-guide. where other related documents are also available. In print: from the American Library Association, Reference and Adult Services Division, as an RASD Occasional Paper (not yet available--watch for later announcement). A printed copy of the guide will also be deposited in the LOEX Clearinghouse on Library Instruction where it can be borrowed by members, and in the ERIC system. For more information, contact Laine Farley, University of California, (510) 987-0552, or lxfol@uccmvsa.bitnet (for questions only--please do not request that copies be sent to you.)

LIBRARY RESOURCES ON THE INTERNET:
STRATEGIES FOR SELECTION AND USE
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Christian Burl Barrow S. bbsc@mercury.cs.uregina.ca

USDA/CYFER-NET resources are now available via Gopher:

USDA/CYFER-NET resources are now available via Gopher:
1. About the CYFER-NET/ES-USDA Gopher.
2. Extension Service USDA Information/
3. Children Youth Family Education Research Network (CYFER-net)/
4. Cooperative Extension System: Information Servers /
5. Information About Gopher/
6. Libraries/
7. Other Federal Agencies/
8. Other Gopher and Information Servers/
9. public/

Just point your Gopher to:
cyfer.esusda.gov

A Resource Guide to Listservers

This Resource Guide started as a presentation to the Association for Institutional Research (AIR) 1991 Forum ("The Effective Use of Listserv Software to Enhance Professional Electronic Communication"). After my presentation obligations were fulfilled I realized there were a lot of important topics that I had not covered. Several individuals at AIR gave me encouragement to pursue this subject further and I also found that there is an emerging need for some guidance in this area at the University of Arizona. Thus I embarked on this task of consolidating a number of papers, email messages, listserver notices, etc. into this Resource Guide.

This Guide is principally about listservers. However, one cannot talk about listservers without some discussion about the highways that move listserver messages (BITNET and Internet) or the complementary Internet service called Usenet.

The Resource Guide is placed on-line on the listserver at the University of Arizona. To obtain a copy send the command GET LISTSERV GUIDE to LISTSERV@ARIZVM1. Comments about this Guide and its contents are welcome, please forward to d.viehland@massey.ac.nz.

- - - - -Introduction to Lists/Listserver- - - - -

Listserver technology can be considered an extension of electronic mail. Whereas email is one-to-one communication, listservers allow one-to-many communication. Simply put, mail sent to a list sends an electronic message to many persons instead of just one.

Listservers are used for discussion and information sharing. Typically a person faces a problem that needs solving or has a question that needs a answer. The problem or question is sent to the list (i.e., to ten's or hundred's of individuals who have expressed an interest in the subject of the list). Recipients of the message who can give advice or answers will respond back to the user who send the message or to the list--in which case the response is also circulated for potentially more replies and responses.

--What is a listserver? a listserver is a special kind of user account; instead of a person at the end of an electronic address there is software that maintains mailing lists, stores files, and responds to your commands. The principal purpose of listserver software is to facilitate one-to-many communication for network users.

A listserver can also be used as a file server. ASCII files can be posted on the listserver and list members (or nonmembers in some lists) can request copies of the files, receive automatic notification that a file was updated, or request that new or updated files be sent (these fileserver features are discussed in Appendix D).

Other names and concepts used to describe a listserver and its function are inter-institutional conferencing, mail explorer program, distribution list, email conferences, or inter-institutional campus-wide information system.

The best known listserver is LISTSERV@BITNIC. BITNIC (BITNET Network Information Center) contains a large amount of listserver information (see Appendix C) and performs a coordinating function for other listservers. Similarly, there are regionally-located "backbone listservers" that contain an variety of frequently-accessed information (e.g., an inventory of all lists on all listservers). Backbone listservers allow efficient distribution of network information.

The electronic address for a listserver is LISTSERV@node.

--What is a list? a list of persons used by the listserver to distribute mail. The best way to think of a list is as an "electronic mailing list." When mail is sent to the list it is automatically forwarded to all addresses contained within the list.

The electronic address for a list is list@node.

****KEY POINT****: Note the difference between LISTSERV@node and list@node. A mail message to be distributed to the list members is sent to list@node; commands such as SUBSCRIBE, GET FILE, INDEX, and REVIEW are sent to LISTSERV@node. Be careful not to confuse these two; occasionally a user sends a command to list@node and everyone on the list receives this command as a mail message.

--What is Usenet? Usenet is an Internet-based distributed bulletin board system that resembles conferencing systems available on PC-based bulletin board services. Usenet subscribers post messages to subject-related "newsgroups" on a local server. These messages are routed to Usenet servers at thousands of locations around the world. Other subscribers access these servers to read the messages and, if desired, post a reply which is redistributed to all servers.

Like listservers, Usenet is one-to-many communication, but its underlying metaphor is a bulletin board, not electronic mail. Despite similar purposes, the technology, users, discussions, and services on Usenet are considerably different from that found in listservers . For more information on Usenet see Appendix F.

Features of Lists/Listservers:

--one-to-many electronic mail communication: mail messages sent to list@node are distributed to list members, as are replies to these messages

--archives of previous list discussions: log files of previously sent mail messages are maintained on most listservers, allowing list members to access previous discussions for review or search purposes

--fileserver: in addition to log files, listowners may use the list to post files that would be useful for list members; list members can then download copies of these files. Finally, listservers maintain a number of listservers help files for users to access.

Tips to Using Lists:

--learn to use your campus mail system first; learn about sending mail to colleagues across campus, learn to use your email editor, develop a habit of accessing email regularly--then join lists.

--save the letter that you receive confirming your subscription to the list; it contains important information about the distinction between the listserver address and the list address, how to resign from the list, etc.

--when requesting information from list members you may want to ask that they send their responses to you directly; generally the response rate will be higher because people are more willing to share information privately than publicly.

--provide feedback to the group. After you have the information you requested, write up a summary and send it to the list so others will benefit from what you have learned (but avoid names and institutional identifications unless the information-sharing requires it).

--do not use automatic mail reply programs (i.e., programs that reply to incoming mail with a message such as "I'm out of the office now, I will be back in two weeks."). These programs unnecessarily increase network traffic and clutter list members' mailboxes.

--if you are going on vacation or want to "stop out" of a list for a while, use the SET NOMAIL command (see Appendix G for instructions).
--be careful when using the REPLY command; mail intended for an individual will be received by everyone on the list if you reply to a list message. At best, this creates confusion and increases network traffic needlessly. At worst, it can be personally embarrassing.
****KEY POINT**** Messages intended for individual members of a list must be addressed to that person's userid@node address. Because list mail originates from the list, if you read a message and use the REPLY command your response will be delivered to everyone on the list.
List "Netiquette"
--keep messages relevant to the topic of the list.
--cover only one subject per message.
--do not type messages in all caps, WHICH HAS THE EFFECT OF SHOUTING. They should be used for effect, not for regular communication.
--when responding to a message, either "attach" the original message (if it is short) or lead your response with a clear reference to the original message (e.g., Regarding John Smith's September 5 message requesting recommendations for EIS software, our experience is that....). This maintains a clear connection between the original message and responses to it. A common network convention is to use the > character in the left margin to indicate text from a previously posted message.
--avoid flaming: beware of making strong, emotional, or angry statements, which is called flaming. It is easier for written messages to be misunderstood than spoken words. Never write a message in anger and if you have any doubt about how a message will be received delay it for a day ("sleep on it"), share it with a friend for an opinion, and/or print it out and read aloud. Sarcastic comments should be identified with the "sideways smile" :-). If you feel compelled to flame, warn the readers so their response will be appropriate.
--include a meaningful subject for the message. Including a subject in list messages helps recipients preview and organize list messages. Additionally, the subject is the only words that appear in the archives.
--once you join a list, make sure you check your mailbox frequently and regularly to avoid mailbox overload. A list may send a couple of messages a year, or 30 or more messages a day; and an inactive list may suddenly come to life and become very active.
****KEY POINT**** An obligation of list membership is that you regularly check your mailbox and delete messages you don't want to save. This keeps your institution's disk space available for others.

- - -Advantages and Disadvantages of Email/Lists- - -

Because listserver technology is an extension of electronic mail, many of the advantages and disadvantages of electronic mail also apply to lists. Accordingly, most of the arguments cited below are equally applicable to email and listservers, exceptions are noted.
Advantages of electronic mail/lists:
--marginal costs are near zero. Email isn't free, but the resources have been paid by the colleges and universities who belong to the network; the user's time is the only true cost
--mail can be read when it is convenient
--email is faster than postal mail
--telephone tag is avoided because the recipient doesn't have to be on-line when you send your message

--messages communicated in writing are usually better thought out than phone call messages
--barriers of race, sex, and general first impressions are minimized; these barriers shouldn't affect face-to-face conversations, but they often do
--participation in lists enhances information sharing and one-to- many communication
--its fun; using email has some of the same excitement that ham radio operators experience

Disadvantages of electronic mail/lists:

--although direct costs are zero, hidden costs are frequently overlooked; communication by email usually takes longer than communication by phone and phone call savings can be eliminated by the extra time spent in composing and responding to issues that could be resolved in a short phone conversation.
--false sense of expertise; the recipient of information from a list may be unable to objectively compare the credibility of information provided by members of the list
--it can become addictive (see "its fun" above); some who would not think about reading personal books or magazines at their desk can become involved in lists relating to personal interests and spend an extraordinary amount of time in reading and responding to these lists
--it is never confidential (this applies to lists, of course, but also to so-called "private" electronic mail)
--written words are much more easily misunderstood than spoken words; because voice inflections and body language are missing users must choose words much more carefully than in conversation; words written in anger cannot be recalled
--mistakes can be amplified--a few wrong keystrokes and a message intended for one person is seen by several hundred (applies to lists)
--list mail can fill disks and clog the network (e.g., 25 identical mail messages sent to 25 individuals on the same campus uses up 25 times the disk space one mail message would)

SOURCES: William (Joe) Moore "Inter-Campus Electronic Mail -- Tool or Toy?" CUMREC '90 Proceedings (author: CC19@SDSUMUS)
Winicur, Daniel H. "Bitnet, Internet, and Electronic Mail Lists: What Are They and How Do I Get Started?" AACRAO conference, 1990 (author: WINICUR@IRISHMVS)

- - - - -Types of Lists- - - - -

Membership

--Open lists: open to all who wish to participate. When one sends a request to subscribe one is joined to the list automatically and the listowner is notified of the new member. Most lists have open membership.
--Closed lists: membership is controlled by the listowner. When one sends a request to subscribe he/she is notified that their request has been forwarded to the listowner. Usually the listowner will respond by promptly honoring the request and subscribing the person to the list. Occasionally the listowner will respond with a questionnaire asking for some information about the prospective member, why he/she wants to join the list, etc. Only rarely is membership denied.

Editing Control

--Newsletters: Newsletters represent the highest level of list editorial control. Communications to the list are forwarded to the listowner who assembles them into a newsletter format for circulation as a single message to

the list members. This is the most "user friendly" format for list subscribers because no error messages reach the subscriber, a table of contents is provided, messages are assembled in a meaningful order (e.g., all job postings are grouped together) and the messages are uniform in format. This is the most difficult for listowners because editing the newsletter can require considerable time and effort. There are a number of such newsletters of interest to institutional researchers including the AIR BITNET Newsletter, SCUP BITNET News, and the NACUBO Forum.
--Digests: Frequently used in lists with heavy volume, messages are forwarded to the listowner who assembles all messages from a day into a single message, removes all junk mail and error messages, and sends out the messages collectively as a digest. Newsletter features such as a table of contents, uniform margins, and editor's comments are not included.
--Edited Forums: In edited forums messages are captured by the listowner who usually passes them on without comment or significant delay. As in digests the listowner exercises some editorial control (i.e., only meaningful messages reach list subscribers), but list traffic arrives as individual messages.
--Unedited Forums: This is the "default" value for list editing. Any message sent to list@node is immediately sent to all list members. Unedited lists require no effort from the listowner, but such lists may receive error messages, junk mail, and other mail not useful to the list member.

Peered Lists

A peered list is distributed to several listservers; this distribution reduces traffic network in high volume lists. For example, instead of sending 2,000 individual messages to servers throughout the country, maybe 25 messages will be sent to 25 regional servers, who will forward the messages to the 2,000 users in their respective regions. For popular lists with high volume, this can lead to a significant savings in network traffic.

Join a list

SEND LISTSERV@node SUBSCRIBE listname your_name - institution
or on IBM computers running VM/CMS:
TELL LISTSERV AT node SUBSCRIBE listname your_name - institution If it is an "open" list you will receive a message that you have been added to the list. If it is a "closed" list you will be notified that your request has been forwarded to the listowner. Of course, you must know the node and listname of the list you wish to join and substitute them in the command given above. Your name and institution help other list members identify who you are.

There is no need to include your electronic address in this command, the listserver reads it automatically from the incoming message.

Resign from a list

SEND LISTSERV@node SIGNOFF listname
or on IBM computers running VM/CMS:
TELL LISTSERV AT node SIGNOFF listname
This removes your name from the list. Be sure to issue this command from the computer account from which you joined the list, otherwise the listserver will not recognize a different electronic address and will ignore the command.

Directories of Listserv Lists

The following is information regarding a variety of Listserv list directories presently available on the Net. These directories will help you find online discussion groups for personal interest or as research forums.

*** List of Lists**
This directory contains brief information on all of the discussion groups on BITNET. To retrieve this document, send the command to any Listserv

LIST GLOBAL

On Internet, send the above command as a mail message to Listserv@vm1.nodak.edu. A 3000 line file named Listserv Lists will be returned.

*** SRI Interest-Groups Directory**
The SRI network service maintains an extensive directory of list descriptions. To retrieve this directory, send the following command to mail-server@nisc.sri.com

SEND NETINFO/INTEREST-GROUPS

The above command will return twenty-six files, each approximately 800 lines long. This document is also available via FTP as interest-groups.Z from the node ftp.nisc.sri.com in the directory /netinfo/.

*** Directory of Scholarly Electronic Conferences**
The best organized directory of academic discussion groups is Diane Kovacs' Directory of Scholarly Electronic Conferences. This directory contains information on over 800 online conferences of interest to scholars.

> Retrieval Information
The latest revision of the Directory of Scholarly Electronic Conferences is available via e-mail to Listserv@kentvm and via anonymous FTP to the node ksuvxa.kent.edu in the directory /library/.

> For more information, contact:
Diane K. Kovacs Kent State University Libraries
DKOVACS@kentvm.kent.edu or LIBRK329@ksuvxa.kent.edu

The University of Nebraska--Lincoln's ARCHIE Mail Server

This is the HELP file for the archie mail server, as of 9 April, 1991 Requests to this server should be addressed to archie@archie.unl.edu To contact us humans, mail to archie-l@archie.unl.edu
Note that the "help" command is exclusive. All other commands in the same message are ignored. Command lines begin in the first column. All lines that do not match a valid commands are ignored. Results are now sorted by archive hostname in lexical order. An archie UNIX man page and it's straight ASCII text file equivalent are available on ftp.unl.edu in the /pub/archie/doc directory as: archie.man.roff and archie.man.txt respectively.
The server recognizes six commands. If a message not containing any valid requests or an empty message is received, it will be considered to be a 'help' request.
path <path> This lets the requestor override the address that would
normally be extracted from the header. If you do not hear from the archive server within oh, about 2 days, you might consider adding a "path" command to your request. The path describes how to mail a message from archie.unl.edu to your address. archie.unl.edu is fully connected to the Internet.
BITNET users can use the convention: user@site.BITNET
UUCP user can use the convention: user@site.uucp
help Will send you this message.
prog <reg expr1> [<reg exp2> ...]
A search of the "archie" database is performed with each <reg exp> (a regular expression as defined by ed(1)) in turn, and any matches found are returned to the requestor.
Note that multiple <reg exp> may be placed on one line, in which case the results will be mailed back to you in one message. If you have multiple "prog" lines, then multiple messages will be returned, one for each line [This doesn't work as expected at the moment... stay tuned].
Any regular expression containing spaces must be quoted with single (') or double (") quotes. ALL OTHER ed(1) rules must be followed.
NOTE: The searches are CASE SENSITIVE. The ability to change this will hopefully be added soon.
site <site name> | <site IP address>
A listing of the given <site name> will be returned. The fully qualified domain name or IP address may be used.
compress ALL of your files in the current mail message will be "compressed" and "uuencoded". When you receive the reply, remove everything before the "begin" line and run it through "uudecode". This will produce a .Z file. You can then run "uncompress" on this file and get the results of your request.
quit Nothing past this point is interpreted. This is provided so that the occasional lost soul whose signature contains a line that looks like a command can still use the server without getting a bogus response.
For your information anonymous FTP may be performed through the mail by various ftp-mail servers. Send a message with the word 'help' in it to:
bitftp@pucc.princeton.edu
or
ftpmail@decwrl.dec.com
for an explanations on how to use them.

Updated Special Internet Services List

*** SPECIAL INTERNET CONNECTIONS: Last Update: 1/19/93 ***
* A ? by an entry designates entries have not been verified or are unstable *

-Almanac mail servers
mail almanac@esusda.gov
mail almanac@ces.ncsu.edu
mail almanac@oes.orst.edu
mail almanac@ecn.purdue.edu
mail almanac@silo.ucdavis.edu
offers: USDA market news, articles about the use of computer in agricultural science, and Extension Computing Technology Newsletters.

-Am. Philos. Assoc. telnet atl.calstate.edu or telnet 130.150.102.33
offers: BBS for APA. (Login: apa)

-Archie

telnet archie.funet.fi	or	128.214.6.100	(Finland/Eur.)
telnet archie.au	or	139.130.4.6	(Aussie/NZ)
telnet archie.cs.huji.ac.il	or	132.65.6.5	(Israel)
telnet archie.doc.ic.ac.uk	or	146.169.11.3	(UK/Ireland)
telnet archie.sura.net	or	128.167.254.179	(USA [MD])
telnet archie.unl.edu	or	129.93.1.14	(USA [NE])
telnet archie.ans.net	or	147.225.1.2	(USA [NY])
telnet archie.rutgers.edu	or	128.6.18.15	(USA [NJ])
telnet archie.kuis.kyoto-u.ac.jp	or	130.54.20.1	(JAPAN)
telnet archie.nz	or	130.195.9.4	(New Zealand)
telnet archie.th-darmstadt.de	or	130.83.128.111	(GER.)
telnet archie.ncu.edu.tw	or	140.115.19.24	(TWN)

offers: Searches all ftp sites for any program you want. (Login: archie)

-Archie Mail Servers mail archie@<INSERT ONE OF ABOVE ADDRESSES HERE>
Subject: help Offers: alternative Archie access to those w/o ftp or telnet.

-Auroral Activity finger aurora@xi.uleth.ca or finger aurora@142.66.3.29
offers: Auroral activity warnings/watches/sightings, updated hourly.

-Baseball Scores mail jtchern@ocf.berkeley.edu w/Subject: MLB
offers: This will subscribe you to receive Major League scores daily!

-Backgammon Server telnet 134.130.13.46 4321
offers: Play Backgammon! (Login: guest)

-Billboard Charts finger buckmr@rpi.edu
offers: U.S. Top Pop singles for the week.

-CARL telnet pac.carl.org or 192.54.81.128
offers: Online database, book reviews, magazine fax delivery service.

-CHAT telnet debra.dgbt.doc.ca or telnet 142.92.36.15
offers: Interactive AIDS document and simulated conversation (Login: chat)

-Chess Server telnet valkyries.andrew.cmu.edu 5000 or 128.2.232.4 5000
offers: Play/watch real-time chess with human opponents. Type 'help' for help

-C64 Archive Server mail twtick@corral.uwyo.edu
Subject: Mail-Archive-Request Body-of-letter: help (hit return) end

-Dante Project telnet library.dartmouth.edu or 129.170.16.11
offers: Divine Comedy and reviews. (Login: connect dante)

-Diplomacy mail judge@morrolan.eff.org or mail judge@gu.uwa.edu.au
mail judge@shrike.und.ac.za or judge@u.washington.edu
offers: Play the game Diplomacy by Email. Body-of-letter: help

-Distance Education Data telnet sun.nsf.ac.uk or telnet 128.86.8.7
(Login: janet Hostname: uk.ac.open.acs.vax Username: icdl)

-Earthquake Info. finger quake@geophys.washington.edu or 128.95.16.50
offers: Recent quake info (location, time, magnitude, etc.)

-E-Math telnet 130.44.1.100 (Login: e-math Password: e-math)
offers: Am. Math. Society sponsored BBS with software and reviews.

-Educational Tech. Net telnet etnet.nlm.nih.gov or telnet 130.14.10.123
offers: Forums and discussion groups on medical tech. and edu. (Login: etnet)

-FDA BBS telnet fdabbs.fda.gov or telnet 150.148.8.48
offers: FDA BBS (News releases, Aids info, consumer info...) (Login: bbs)

-FEDIX telnet fedix.fie.com or telnet 192.111.228.1
offers: info. on scholarships, minority assistance, etc. (login: fedix)

-Fileserver via Email mail smiley@uiuc.edu
In body-of-message: Filesend: help and on a separate line: Filesend: list

-Freenet
See the section on freenets in this manual
offers: USA Today Headline News, Sports, etc...

-FTP Mail mail ftpmail@decwrl.dec.com
Subject: (hit return)
Body-of-letter: help (return) quit
Offers: ftp via email

-FTP Mail mail bitftp@pucc.princeton.edu
Body-of-letter: help or ftplist for a list of anon. ftp sites.

-FTP Sites/Archives (see also Mac Archives)
ftp ocf.berkeley.edu
offers: Docs, 5 purity tests, the Bible, Dec. of Ind, lyrics..cd /pub/Library
ftp wuarchive.wustl.edu or rainbow.cse.nau.edu or
plaza.aarnet.edu.au or erratic.bradley.edu
offers: Gif archive, pc software.
ftp ftp.uu.net
offers: You name it, it's here!

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    ftp archive.umich.edu      or       sumex-aim.stanford.edu
offers: Software for MS-Dos computers, Mac, Amiga, Apple2, Apollo...
    ftp oak.oakland.edu
offers: A huge software archive for PCs and UNIX.
    ftp ftp.sura.net
offers: How-to's about internet (how to email, ftp, telnet, etc.) in /pub/nic

-GenBank telnet genbank.bio.net
offers: gene sequence info. (Login: genbank Password: 4nigms)

-Genetics Bank    mail gene-server@bchs.uh.edu
Subject: help Offers: genetic database accessible via email.

-Geographic Server
    telnet martini.eecs.umich.edu 3000
offers: Info by city or area code (Population, Lat./Long., Elevation, etc.).

-Georgetown Med. Lib.
    telnet mars.georgetown.edu
(Login: medlib Password: dahlgren Last name: netguest)

-GO Server
    telnet lacerta.unm.edu 6969
    telnet icsib18.icsi.Berkeley.EDU 6969
    telnet cnam.cnam.fr 6969
offers: Join others and play a game of GO. (Login/Password: go)

-Gopher
    telnet consultant.micro.umn.edu
    telnet panda.uiowa.edu
    telnet gdunix.gd.chalmers.se
    telnet gopher.uiuc.edu
    telnet gopher.unt.edu
    telnet gopher.uwp.edu
    telnet siam.mi.cnr.it
    telnet info.anu.edu.au
    telnet fatty.law.cornell.edu
    telnet ecnet.ec
    telnet finfo.tu-graz.ac.at (Login: info)
    telnet gopher.isnet.is
    telnet sunic.sunet.se
    telnet info.brad.ac.uk (login: info)
    telnet gopher.virginia.edu (logn: gwis)
    telnet grist.valdosta.peachnet.edu
    telnet gopher.ycc.yale.edu
Offers: access to other services, gophers, documents, etc. (Login: gopher)

-Ham Radio Callbook   telnet callsign.cs.buffalo.edu 2000
offers: National ham radio call-sign callbook.

-HP Calculator BBS    telnet hpcvbbs.cv.hp.com
offers: BBS for HP Calc. users, with chat mode. (Login: new)

-Handicap/Medical Siteftp handicap.shel.isc-br.com
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offers: anonymous ftp of software and medical info.

-Hytelnet Server
    telnet access.usask.ca
    telnet silence.pi.nctu.edu.tw
offers: Univ.. & library catalogues around the world. (Login: hytelnet)

-INFO - Rutgers CWIS telnet info.rutgers.edu
offers: Dictionary, thesaurus, CIA world fact book, quotations database.

-Info/Software Server  telnet rusmv1.rus.uni-stuttgart.de
offers: journals, UNIX stuff, etc. login: infoserv or softserv

-Internet Resource Guide
    ftp nnsc.nsf.net
offers: compressed/tar'd list of net resources in /resource-guide.txt.tar.Z

-Iowa Political Stock Market    telnet ipsm.biz.uiowa.edu
offers: Buy & sell shares in political candidates. (Non profit research proj.)

-IP Address Resolver
    mail resolve@cs.widener.edu
usage: in body-of-letter: site <address here> Mails you IP address of site.

-IRC Telnet Client
    telnet bradenville.andrew.cmu.edu
    telnet ara.kaist.ac.kr          (Login: irc)
    telnet santafe.santafe.edu      (Login: irc)
offers: Internet Relay Chat access, like a CB on the computer.

-Law Library      telnet liberty.uc.wlu.edu
offers: Law libraries and legal research
                  ftp sulaw.law.su.oz.au (Login: lawlib) (cd /pub/law)
Offers: copies of laws for each state, computer laws, and more!

-Library Catalogs      ftp dla.ucop.edu (pub/internet/libcat-guide)
offers: "Library Catalogs on the Internet: Strategies for Selection and Use"
    (how, but not where; also get one of the following).
        ftp ftp.unt.edu (library/libraries.txt)
offers: "Accessing Bibliographic Databases" document.
        ftp ariel.unm.edu (library/internet.library)
offers: "Internet-Accessible Catalogs and Databases" document.

-Library of Congress  telnet dra.com
offers: COPY of Library of Congress (Assumes terminal is emulating a vt100).

-LIBS        telnet nessie.cc.wwu.edu
offers: Access to nearly all online services seen in this list.(Login: LIBS)

-List of Lists        ftp ftp.nisc.sri.com
mail mlol-request@wariat.org (music list of lists)
offers: List of interest groups/email lists in /netinfo/interest-groups.

-Lunar/Planetary Institute
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    telnet lpi.jsc.nasa.gov
offers: Resources on Geology, Geophys, Astron., Astrophys. (Login: lpi)

-Lyric/Music Server    ftp cs.uwp.edu        (/pub/lyrics)
                       ftp ftp.iastate.edu   (/pub/music/...)
offers: Lyrics, chords/tablature, and music pictures.

-Mac Software Archives
    ftp sumex-aim.stanford.edu
    ftp rascal.ics.utexas.edu
    ftp mac.archive.umich.edu
    ftp ftp.apple.com
    ftp ftp.ncsa.uiuc.edu
    ftp dartvax.dartmouth.edu
Login:   anonymous
Password:    "your email address"
offers: Software for the Macintosh computers. Most also support other systems.

-Mail Server/User Lookup
    mail mail-server@pit-manager.mit.edu
in body of mail message: send usenet-addresses/[name searching for]

-Melvyl  telnet melvyl.ucop.edu
offers: access to various libraries. Type 'other' at prompt to see others.

-MOLIS   telnet fedix.fie.com
offers: Minority Online Information Service. (Login: molis)

-Music Newsletter
    mail listserv@vm.marist.edu
Body-of-letter: SUBSCRIBE UPNEWS <your full name> Offers: Reviews, intviews.

-NASA Headline News    finger nasanews@space.mit.edu
offers: Daily press releases from NASA.

-NASA SpaceLink
    telnet spacelink.msfc.nasa.gov
offers: Latest NASA news, including shuttle launches and satellite updates.

-National Education BBS
    telnet nebbs.nersc.gov
offers: Education BBS (Login: guest)

-NED         telnet ned.ipac.caltech.edu
offers: NASA Extragalactic Database. (Login: ned)

-Netfind User Lookup
    telnet bruno.cs.colorado.edu
    telnet archie.au
    telnet malloco.ing.puc.cl
    telnet monolith.cc.ic.ac.uk
    telnet mudhoney.micro.umn.edu
    telnet netfind.oc.com
    telnet redmont.cis.uab.edu
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    telnet sun.uakom.cs
offers: Given a name and org./school, finds a user for you (login: netfind)

-NetLib      mail netlib@ornl.gov
             mail netlib@uunet.uu.net
Subject:(hit return) Body-of-letter: send index Offers: Software thru email

-News Mail Servers         mail [newsgroup]@cs.utexas.edu
offers: Post to Usenet news via email. (eg. [newsgroup] = alt-bbs)

-Newton  telnet newton.dep.anl.gov
offers: Gov't BBS for those teaching or studying science, CS, math.

-NICOL   telnet nisc.jvnc.net
offers: Access to internet resources, Elec. Publishing Service (Login: nicol)

-NICOLAS telnet dftnic.gsfc.nasa.gov
offers: Network Info. Center On-Line Aid System (Login: dftnic)

-NNTP News Servers
    telnet sol.ctr.columbia.edu 119
    telnet rusmv1.rus.uni-stuttgart.de 119
    telnet news.fu-berlin.de 119
offers: Telnetable access to post to the Usenet news.

-NOAA    telnet nodc.nodc.noaa.gov  (Login: NOAADIR)
offers: National Oceanic and Atmos. Admin.  Lots of data!

-NODIS   telnet nssdc.gsfc.nasa.gov
         telnet nssdca.gsfc.nasa.gov
offers: Menu-driven access to Nat'l Space Science Data Center (Login: nodis)

-NONA    telnet nsinic.gsfc.nasa.gov
   offers: Nasa Science Internet Online Network Aid. (Login: nsinic)

-Nuclear Data Center
    telnet bnlnd2.dne.bnl.gov
offers: National nuclear data. (Login: nndc)

-Oceanic Info. Center
    telnet delocn.udel.edu  (Login: info)

-Oracle
    mail oracle@iuvax.cs.indiana.edu  w/ subject: help
offers: The Usenet Oracle answers all your questions!

-OSS-IS      ftp soaf1.ssa.gov
             mail info@soaf1.ssa.gov with "send index" as your msg.
offers: Many FAQ's, ftp lists, library and service lists, gov't documents.

-Public-Access Unix
         telnet hermes.merit.edu
         telnet m-net.ann-arbor.mi.us
(Which host: um-m-net Enter 'g' for guest. login: newuser)
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         telnet nyx.cs.du.edu
offers: Free account, with access to various UNIX features. (login: new)

-Public-Access Unix    telnet digex.com
offers: full internet services, anonymous accounts, privacy orientation.

-Readers Guide    telnet lib.uwstout.edu
offers: Readers Guide to periodical literature, online.

-Recipe Archives  ftp gatekeeper.dec.com     (cd pub/recipes)
                  ftp mthvax.cs.miami.edu    (cd /recipes)
offers: Anonymous ftp site for MANY food recipes.

-SDDAS   telnet espsun.space.swri.edu 540
offers: SW Research Data Display & Analysis Center.

-SERVICES         telnet wugate.wustl.edu
offers: Access to nearly every listed service! (Login: services)

-Software Server (ASK)
     telnet askhp.ask.uni-karlsruhe.de
offers: On-line software search. (Login/password: ask)

-Spacemet         telnet spacemet.phast.umass.edu
offers: Science/space bbs.

-SPAN         telnet nssdca.gsfc.nasa.gov
offers: Space Physics Analysis Network (Login: SPAN_NIC)

-StatLib Server   mail statlib@lib.stat.cmu.edu
Mail with line: send index. Offers: Prgms, Datasets, etc. for statisticians.

-STIS         telnet stis.nsf.gov
offers: Science & Technology Information System. (Login: public)

-Stock Market Report   telnet a2i.rahul.net
offers: Public access unix for a fee, market report is free! (Login: guest)

-Supernet     telnet supernet.ans.net
offers: Excellent menu-driven information searches. (Login: supernet)

-Supreme Court Rulings          ftp ftp.cwru.edu
offers: ASCII files of Supreme Court rulings in directory /hermes

-Tropical Storm Forecast   finger forecast@typhoon.atmos.colostate.edu
 offers: Seasonal forecast for Atlantic Ocean.

-UMD Info Database         telnet info.umd.edu
offers: Info. docs on many subjects, incl. Supr. Crt Decisions (Login: info)

-UNC BBS      telnet bbs.oit.unc.edu
offers: Access to Library of Congress and nationwide libraries (Login: bbs)

-WAIStation       telnet quake.think.com
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                  telnet nnsc.nsf.net
                  telnet wais.funet.fi
offers: Wide Area Info. Service. (Login: wais)
         FTP think.com for more info.

-Weather Service  telnet downwind.sprl.umich.edu 3000
offers: City/State forecasts, ski conditions, earthquake reports, etc.

-Weather Maps     ftp vmd.cso.uiuc.edu
offers: Surface analysis & current infrared weather maps GIFs. (cd wx)

-Webster
    telnet moose.cs.indiana.edu 2627
offers: Dictionary/Spelling service. Type "HELP" for info. (ALL CAPS!)

-Whois Service         telnet nic.ddn.mil
offers: Way to find internet address given a keyword. To access type: whois

-World-Wide Web
    telnet info.cern.ch            (SWISS)
    telnet eies2.njit.edu          (USA [NJ])
    telnet vms.huji.ac.il          (ISRAEL)
    telnet info.funet.fi           (FINLAND)
offers: Access to various documents, lists, and services. (Login: WWW)

-ZIB Electronic Libr.      telnet elib.zib-berlin.de
offers: Library of software, links to other libraries. (Login: elib)

*NOTE: NO LOGIN NAMES OR PASSWORDS ARE REQUIRED UNLESS STATED OTHERWISE! *
*NOTE: FOR FTP SITES, LOGIN AS ANONYMOUS, PASSWORD IS YOUR EMAIL ADDRESS *
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Anonymous FTP List Frequently Asked Questions (FAQ)

*** Topics ***

1) Understanding the ISO date.
2) Retrieving the list from alternate sources.
3) Retrieving it directly from the coordinator.
4) Using FTP without direct Internet access.
5) Problems with a site.
6) Information presented is wrong or outdated.
7) Getting a site listed or changes made.
8) Making the list publicly available.
9) Using the general mail server at DEC's Western Research Labs.
10) What is Archie and how does it relate to the list?
11) What is and how do I use the FTP program?

*** Answers ***

1) Understanding the ISO date.
A) Format: Year.Month.Day (1991.12.30 is 30 December 1991).

2) Retrieving the list from alternate sources.
A) It is available from various FTP sites which archive the Usenet news.answers: ftp-list. Also look for 'ftp-list' in either the Sites or Files list. Or as a last resort, all the public lists can be retrieved from gator.netcom.com 192.100.81.102 in /pub/profile during NON-PEAK hours only!

3) Retrieving it directly from the coordinator.
A) I don't have time to mail copies to people.
I make exceptions to people who redistribute it to closed systems or areas that don't have access to the newsgroups. Don't abuse this! Send me mail to be put on the mailing list.

4) Using FTP without direct Internet access.
A) It is possible to get files from a site by using a general mail server or many sites have their own servers. If you're on BITNET, ask your sysadmin or technical support group about PUCC. For non-BITNET sites, try using DEC's; you will find instructions for using it below, in answer #9.

5) Problems with a site.
A) Mail the problems to the address shown in the Sites list. If a FTP comments address is not shown, attempt to use 'ftp@site_name'; subsitute 'site_name' with the name of the troublesome site. If that fails, post a note to comp.archives.admin (the newsgroup for archive administrators).

6) Information is wrong or outdated.
A) Send mail to me detailing the incorrect information and the corrections. If you are the site manager for the archive, please see below (topic #7) for the information I need.

7) Getting a site listed or changes made.
A) Send the following information to aftp-list@netcom.com.
o Site name (and aliases you wanted listed).
o IP address.

o Manager(s) full name & email address(es).
o Address for FTP related issues (problems, comments, etc...).
o General description of the types of files available.
o Directories that are for anonymous FTP use (besides /pub).
o Site's location (country) & ISO code.
o Organization operating site.
o UT/GMT difference (include daylight savings time).
o Are there any special restrictions?
o Can it be used 24 hours/day?
o Is an E-mail server available for the site's files only?

8) Making the list publicly available.
A) Please let me know if there is a site that archives either the Sites or Files list. I will include it in future updates; the more people who have access, the better. All I ask: update the list as changes are made.

9) Using the general mail server at DEC's Western Research Labs.
A) Send mail to ftpmail@decwrl.dec.com with 'help' in the body of the letter. You CANNOT send a blank letter, commands are not optional.

10) What is Archie and how does it relate to the list?
A) Archie is a special server that keeps file listings from different FTP sites. You can Telnet to a server or use a client program to search for specific files. There are sites which do not appear in an Archie server and you can use the lists for these.

Here are some sites; send mail to 'archie@site_name' for a help file.
archie.ans.net (North America)
archie.sura.net (North America)
archie.funet.fi (Finland/Mainland Europe)
archie.au (Australia/New Zealand)
archie.doc.ic.ac.uk (Great Britain/Ireland)
archie.unl.edu (North America)
cs.huji.ac.il (Israel)

11) What is and how do I use the FTP program?
A) This information file was originally maintained by John Granrose. Mike Jones added the info about the existence and location of the compression data chart maintained by David Lemson. I added some, too little to be thanked or hated for its content.

This is not a definitive guide to FTP, but will give a novice a general idea of what it is and how to do it.

What is FTP?

FTP (File Transfer Protocol) allows a person to transfer files between two computers, generally connected via the Internet. If your system has FTP and is connected to the Internet, you can access very large amounts of archives available on a number of systems. If you are on Bitnet or a UUCP host, you should look for servers that work through the mail. A good source of information on archives in general, is the Usenet newsgroup comp.archives.

What is Anonymous FTP?

Many systems throughout the Internet offer files through anonymous FTP. These include software, documents of various sorts, and files for configuring

networks. Archives for electronic mailing lists are often stored on and available through anonymous FTP. Note that all this is subject to change.

Commands

All the normal FTP commands may be used to retrieve files. Some FTP commands are the same on different computers, but others are not. Usually, FTP will list the commands if you type 'help' or type a question mark (?). Also, your computer's help command may have information about FTP. Try 'man ftp' or 'man ftpd'.

Some useful commands available on most systems include:

get	copy a file from the remote computer to yours
ls/dir	list the files in the current directory
cd	Change directory
binary	Switch to binary mode. For transferring binary files
ascii	Switch to ascii mode. Ascii mode is the default mode

Procedure

Anonymous FTP is a facility offered by many machines on the Internet. This permits you to log in with the user name 'anonymous' or the user name 'ftp'. When prompted for a password, type your e-mail address -- it's not necessary, but it's a courtesy for those sites that like to know who is making use of their facility. Be courteous.

You can then look around and retrieve files. (Most anonymous ftp sites do not permit people to store files)

Typically, a directory called 'pub' is where the interesting things are stored. Some sites will have a file with a name like ls-lR, that contains a complete list of the files on that site. Otherwise, you can type ls -lR and get such a listing -- for some sites, this can take a LONG time.

Usually, files are grouped in archive files, so you don't have to get many small files separately. The most common archival file format for the Internet is tar. Occasionally, people use shell archives (shar) instead. Tar archives can be unpacked by running the 'tar' command -- you may want to first do a 'tar t' on the file to see what it contains before unpacking it. Be careful when unpacking shell archives since they have to be run through the Bourne shell to unpack them. (The simplest way is to use the unshar command)

Files are often stored compressed -- for Unix, the most common scheme is the compress program, indicated by a .Z suffix on the file name. Sometimes, people use programs like Arc or Zoo, which are combined archival and compression formats. (There are probably other archival formats as well - talk to the systems staff if you encounter them and don't know how to deal with them)

When retrieving non-text files, you must use binary mode, otherwise the file gets messed up. To do this, use the 'binary' command. (It's safe to set this for text files. If the site at the other end is non-Unix, you may need to use some other mode -- see the documents for that site and for FTP)

The simplest way to initiate FTP would be to give the command 'ftp <system-name>'. The <system-name> is the remote system you are connecting to, either a name (wsmr-simtel20.army.mil, if you have an entry in /etc/hosts or are accessing a Domain Name Server) or the Internet address (192.88.110.20 for Simtel20). After a short wait, you will be prompted for your username. If you do not have an account on the remote system, some systems allow you to use 'anonymous'. This gives you a restricted access path.

You would then be prompted for a password. Some systems will tell you to send your real identity as the password. What you type doesn't matter, but it

is suggested to give your mail address. Other systems need a password of 'guest', or something similar.

After that, you should receive the FTP prompt (usually ftp>) and have access. You can get a directory of files be giving a 'dir' command or if the remote system is Unix-based, 'ls -l' will give the familiar output. On Simtel20, there is a file available in the default anonymous ftp directory that explains what Simtel20 is and where files are located. The name is 'SIMTEL-ARCHIVES.INFO.nn, where ".nn" is a file generation number. You don't need to specify the file generation number when requesting the file. In fact, it's better not to because you will always get the latest generation that way.

Unix systems will all have the familiar directory structure, and moving around is done with the familiar 'cd' or 'cwd' command. TOPS-20 systems have a different structure, but movement is still accomplished with the 'cd' command.

Different systems have different organizations for their files, and the above example is the way most archives have it set up. By looking around other systems, you can learn how their files are arranged and move around much faster. Note, however, that FTP will not allow you outside the FTP 'root' directory. Moving about the entire system is not permitted.

These are the common Unix file types:

SUFFIX	FTP	TYPE
.Z	bin	compress
.arc	bin	ARChive
.shar	ascii	SHell ARchive
.tar	bin	Tape ARchive
.uu	ascii	uuencode/uudecode
.zip	bin	Zip
.zoo	bin	Zoo

To get a list of all file compression/archiving methods and the programs to uncompress/unarchive (on the PC, Mac, Unix, VM/CMS, AtariST and Amiga systems), FTP to the following sites and retrieve the listed file:

ftp.cso.uiuc.edu /doc/pcnet/compression
gator.netcom.com /pub/profile/compression.Z
(make sure to set the binary mode with 'bin')

This could be helpful to people new to FTP that don't know how to unpackage the file they have just transferred.

[Editor's note: the contact person for this FAQ is Mike Jones (mjones@ux1.cso.uiuc.edu)]

Network Resource Mailing List

Merit Network has just such a list of "latest finds on the Internet". The list is called network-resource-information-sharing@merit.edu or nris@merit.edu for short.

All reports to the list are annotated with a brief, subjective opinion of the resource, commenting on both its usefulness and its user interface.

To subscribe, send mail to

    nris-request@merit.edu

Leave the subject line blank, and enter as the first line of text

    subscribe nris "Your Real Name"

Mark Davis-Craig, Merit/NSFNET Information Services
mad@merit.edu (313)-936-2110. FAX number is (313)-747-3185

comp.sys.mac.faq

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Disclaimer: I do my best to ensure that information contained in this document is current and accurate, but I can accept no responsibility for actions resulting from information contained herein. This document is provided as is and with no warranty of any kind. Corrections and suggestions should be addressed to erh0362@tesla.njit.edu.

I HAVE A QUESTION... (1.0)

Congratulations! You've come to the right place. The Usenet community is a wonderful resource for information ranging from basic questions (How do I lock a floppy disk?) to queries that would make Steve Jobs himself run screaming from the room in terror. (I used ResEdit to remove resources Init #11, WDEF 34, and nVIR 17 from my system file and used the Hex Editor to add code string #A67B45 as a patch to the SFGetFile routine so the Standard File Dialog Box would be a nice shade of mauve. Everything worked fine until I installed SuperCDevBlaster, and now when I use the Aldus driver to print from PageMaker 5.0d4 to a Linotronic 6000 my system hangs. P.S. I'm running System 6.02 on a PowerBook 170.)

However, since the comp.sys.mac.* newsgroups are medium to high volume, we ask that you first peruse this FAQ file, check any other relevant online resources (listed below), and RTFM (Read the Friendly Manual) before posting your question. We realize that you are personally incensed that the System is taking up fourteen of your newly-installed twenty megs of RAM, but this question has already made its way around the world three hundred times before, and it's developing tired feet.

WHAT OTHER INFORMATION IS AVAILABLE? (1.1)

This FAQ list provides short answers to a number of frequently asked questions from the newsgroups comp.sys.mac.system, comp.sys.mac.misc, and comp.sys.mac.apps. Various Mac gurus have written other files of excellent quality that go into more detail about individual topics including not a few that aren't covered here. Please check out any that seem relevant to your problem before posting a question. All of the following are available for anonymous FTP from sumex-aim.stanford.edu and its mirrors in the /info-mac/report directory.

File Name	Question
800-phone-numbers.txt	What's company X's phone number?
at-connector-substitute.txt	How can I make an Appletalk Connector?
backup-to-unix.txt	How do I back up my Mac disk onto myUNIX box?
color-monitor-survey.txt	What's a good multisync monitor?
compression-util-table.txt	What can uncompress this file?
e-mail-gateways.txt	How can I send E-mail to someone on CompuServe? on MCI? on Fidonet? on America Online? etc.
ftp-primer.txt	What's ftp? How do I use it?
ftp-sites.txt	What are good ftp sites for Mac software?
iici-cache-cards.txt	What cache-card should I buy for my IIci?

```
iisi-upgrade-options.txt     How can I speed up my IIsi?
large-color-monitors.txt     What are some good 16 inch and larger color
                             monitors?
mac-discussion-groups.txt    Where can I subscribe to Mac mailing lists?
mac-laser-jet-up-rev-11.txt  How can I use a HP LaserJet with a Mac?
mac-memory-guide.hqx         Everything you ever wanted to know about
                             Macintosh memory in a HyperCard stack.
mac-plus-accelerators.txt    How can I accelerate my Plus?
mac-se-accelerators.txt      How can I accelerate my SE?
mac-secret-names.txt         What's the codename of product X?
mac-secret-trick-list.txt    Where's the Easter Egg in product X?
mac-tcp-info.txt             What's Mac TCP?
mac-to-workstation.txt       How do I connect my Mac and my Unix box?
modem-guide-10.txt           LOTS of useful information about modems, esp.
                             high speed modems and modem protocols.
power-glove-to-mac.txt       How can I connect a PowerGlove to a Mac?
powerbook-170-tips.txt       How can I improve the performance of my
                             PowerBook? (Not just for 170 owners)
powerbook-faq.txt            Frequently asked PowerBook questions.
powerbook-solutions-guide    A catalog of various payware products to enhance
                             your PowerBook
radius-rocket-upgrade.txt    What do people think of the Radius Rocket and
                             similar accelerators?
se30-external-video.txt      What external monitors and cards do people like
se30-monitor-options.txt          for the SE/30?
se30-full-page-monitors.txt
style-writer-refills.txt     How do I refill a StyleWriter cartridge?
sys7-compat-info             Is application X System 7 compatible?
sys7-emergency-disk.txt      How can I force System7 to fit on a boot floppy?
sys7-finder-command-keys.txt      How do I add Command-key equivalents to the
                                  Finder menu in System 7?
vendor-emails.txt            What's company X's E-mail address?
```

Two other files of particular note: Mike Kelly maintains a FAQ list covering Macintosh programming for the newsgroup comp.sys.mac.programmer. It's posted to that group on the first of the month and available for anonymous ftp from ftp.cs.uoregon.edu (in /pub/mac. Jim Jagielski maintains a FAQ for comp.unix.aux covering covering Apple's UNIX environment, A/UX. It's posted every 2 to 3 weeks in comp.unix.aux and news.answers. It's available for anonymous ftp at jagubox.gsfc.nasa.gov.

WHICH NEWSGROUP SHOULD I POST TO? (1.2)

Posting questions to the proper newsgroup will fill your mailbox with pearls of wisdom (and maybe a few rotten oysters too :-)). Posting to the wrong newsgroup often engenders a thundering silence. For instance the most common and glaring mispost, one that seems as incongruous to dwellers in the Macintosh regions of Usenet as would a purple elephant in Antarctica, asking a question about networking anywhere except comp.sys.mac.comm, normally produces no useful responses. Posting the same question to comp.sys.mac.comm ensures that your post is read and considered by dozens of experienced network administrators and not a few network software designers.

Please post to exactly ONE newsgroup. Do not cross-post. If a question isn't important enough for you to spend the extra time to figure out where it properly belongs, it's not important enough for several thousand people to

spend their time reading. Similarly comp.sys.mac.misc should not be used as a catch- all newsgroup.

Questions about applications should go to comp.sys.mac.apps except for queries about communications programs, games, HyperCard, and databases all of which have their own comp.sys.mac.* newsgroups. Post questions about non-communications hardware including questions about what software is necessary to make particular hardware work to comp.sys.mac.hardware. Questions about Mac OS System Software and extensions belong in comp.sys.mac.system. Questions about A/UX go to comp.unix.aux. Detailed questions about Appletalk belong in comp.protocols.appletalk.

Direct questions about HyperCard including programming HyperCard to comp.sys.mac.hypercard. Non-HyperCard programming questions and questions about development environments should go to comp.sys.mac.programmer. ResEdit questions may be posted either to comp.sys.mac.misc, comp.sys.mac.system, or comp.sys.mac.programmer; but generally the netters who inhabit the darker recesses of comp.sys.mac.programmer are considerably more practiced at the art of resource hacking.

A general exception to the above rules is that any VERY technical question about an application that actually begins to delve into the hows of a program as well as the whats (Recent example: How does WriteNow which is written entirely in assembly compare to other word processors written in high level languages?) might be better addressed to the programmer newsgroup.

For Sale and Want to Buy posts should go to comp.sys.mac.wanted ONLY. We understand that you're desperate to sell your upgraded 128K Mac to get the $$ for a PowerBook 170; but trust me, anyone who wants to buy it will be reading comp.sys.mac.wanted. Anything not specifically mentioned above, especially political and religious questions, (The Mac is better than Windows! Is not! Is too! Is not! Is too! Hey! How 'bout the Amiga! What about it? Is Not! Is too!) belongs in comp.sys.mac.misc.

Finally don't be so provincial as to consider only the comp.sys.mac newsgroups the appropriate forums for your questions. A lot of modem questions in comp.sys.mac.comm are much more thoroughly discussed in comp.dcom.modems. Questions about Mac MIDI often would be better handled in comp.music even though this is not a Mac specific newsgroup. Shop around. Usenet's a big place and not everything relevant to the Macintosh happens in comp.sys.mac.*.

QUESTION OF THE YEAR: WHY IS MY SYSTEM TAKING UP SO MUCH MEMORY? (2.0)

If today Apple changed About this Macintosh (About the Finder in System 6) to report unusable memory in its own bar rather than lumped together with the system, this would probably still be the most frequently asked question of the year. Under system versions earlier than 7.0 or under System 7.x without 32-bit addressing turned on the Mac cannot handle more than eight megabytes of real memory. If you have more physical RAM installed, the Mac knows it's there but can't do anything with it. When you select About the Finder from the Apple menu, the system takes all the extra memory it can't access and reports it as part of the memory allocated to the system.

To use the memory you need to get System 7 and turn on 32-bit addressing. If you have a Mac with dirty ROMs (a II, IIx, SE/30, or IIcx) you also need MODE32, free from ftp.apple.com or your local dealer. If you have an original Mac II you'll also need to add a PMMU chip. If you're staying with System 6, Maxima from Connectix ($45 street) will let you use the extra memory as a RAM disk.

If you have an LC or an LC II with four megabytes of RAM soldered to the motherboard, you still need to add two four-megabyte SIMM's to reach the ten megabyte maximum imposed by the LC ROM. This means you'll always have two unused megabytes which About this Macintosh and About the Finder report as part of the system memory allocation. Unfortunately there is no current means of accessing this extra memory.

FTP (3.0)

WHERE CAN I FTP MAC SOFTWARE? (3.1)

The three major American Internet archives of shareware, freeware, and demo software are sumex-aim.stanford.edu (36.44.0.6), mac.archive.umich.edu (141.211.164.153), and wuarchive.wustl.edu (128.252.135.4) which mirrors the other two sites and is often easier to connect to. Wuarchive often holds on to files after other sites remove them for space concerns, and still has files that were recently deleted from the formerly important site, rascal.ics.utexas.edu. Rascal was notable for storing its files in MacBinary format rather than the less efficient BinHex format common at the other archives. Unless otherwise noted shareware and freeware mentioned in this document should be available at the above sites.

To keep traffic on the Internet manageable, European users should try connecting to ftp.funet.fi, src.doc.ic.ac.uk, or ftp.irisa.fr instead. Australian users should try to find what they want at archie.au which mirrors the info-mac archives at Stanford. Japanese users can find sumex mirrored at utsun.s.u-tokyo.ac.jp.

A fourth very important site is ftp.apple.com. This is Apple's semi-official repository for system software, developer tools, source code, technical notes, and other things that come more or less straight from Apple's mouth. Some material at this site may not be distributed outside the U.S. or by other sites that don't have an official license to distribute Apple system software. Please read the various README documents available at ftp.apple.com for the detailed info if you're connecting from outside the U.S. or if you wish to redistribute material you find here.

Michael Gleason's mac.ftp.list, a more comprehensive list of FTP sites for Macintosh software, is available from sumex-aim in the info-mac/report directory as ftp-sites.txt. This list catalogs dozens of sites and mirrors, both well- known and obscure.

CAN I GET SHAREWARE BY E-MAIL? (3.2)

The info-mac archives at sumex-aim are available by E-mail from LISTSERV@RICEVM1.bitnet (alternately listserv@ricevm1.rice.edu). The listserver responds to the commands $MACARCH HELP, $MACARCH INDEX, and $MACARCH GET filename. You can retrieve files from other sites by using the server at ftpmail@decwrl.dec.com. For details send it a message with just the text "help" (no quotes).

WHERE CAN I FIND APPLICATION X? (3.3)

If you can't find what you're looking for at one of the above sites, try telnetting to your nearest archie server or sending it an E-mail message addressed to archie with the subject "help." Archie servers are located at archie.rutgers.edu (America), archie.au (Australia), archie.funet.fi (the continent), and archie.doc.ic.ac.uk (the U.K.). These sites serve as indexes for the tens of thousands of files available for anonymous ftp. Login as "archie" (no password is needed) and type "prog filename" to find what you're

looking for or type "help" for more detailed instructions. For instance after connecting type "prog Disinfectant" to search for a convenient ftp site for Disinfectant. If the initial search fails to turn up your file, try variations on the name. For instance if you didn't find Disinfectant, you might try prog dis instead.

Please check the above archives and ARCHIE personally BEFORE asking where you can find a particular piece of shareware. If you follow the above advice, you should almost never have to ask the net where to find a particular piece of software.

CAN SOMEONE MAIL ME APPLICATION X? (3.4)

No. Nor will anyone mail you a part of a file from comp.binaries.mac that was corrupt or missed at your site. Please refer to the first questions in this section to find out about anonymous FTP, archie, and how to request files from automatic E-mail servers.

WHAT IS .BIN? .HQX? .CPT? .ETC? (3.5)

Most files available by FTP are modified twice to allow them to more easily pass through foreign computer systems. First they're compressed to make them faster to download, and then they're translated to either a binhex or MacBinary format that other computers can digest. (The Macintosh uses a special two-fork filing system that chokes most other computers.) BinHex files are 7-bit ASCII text files, while MacBinary files are pure 8-bit binary data that must always be transferred using a binary protocol.

How a file has been translated and compressed for transmission is indicated by its suffix. Normally a file will have a name something like filename.xxx.yyy. .xxx indicates how it was compressed and .yyy indicates how it was translated. To use a file you've FTP'd and downloaded to your Mac you'll need to reverse the process. Most files you get from the net require a two-step decoding process. First change the binhex or MacBinary file to a double-clickable Macintosh file; then uncompress it. The details of decoding are covered in the table below.

Suffix:	.sit	.cpt	.hqx	.bin	.pit	.Z	.image	.dd	.zip	.uu	.tar
Extractors											
Stuffit 3.0	X	X	X	X	X			X			
Compact Pro		X	X								
Packit					X						
UUTool										X	
MacCompress						X					
SunTar				X	X	X					X
BinHex 5.0				X							
BinHex 4.0			X								
DiskDoubler								X			
UnZip									X		
DiskCopy							X				

A few notes on the uncompressors:

Stuffit is a family of products that use several different compression schemes. The recently released shareware Stuffit Lite 3.01 should unstuff all of these. Stuffit 3.01 also makes smaller archives than any other compression utility for the Mac. To allow maximum space for files on the various ftp sites

and to keep net-bandwidth down, please compress all files you send to anonymous ftp sites with Stuffit 3.01.

UUTool, MacCompress, and SunTar handle the popular UNIX formats of uuencode, compress, and tar respectively. The UNIX versions are often more robust than the Mac products, so use them instead when that's an option. Translators that allow Stuffit Lite to expand uuencoded and tar files are also available by anonymous ftp.

A few notes on the compression formats:

.bin:
These are MacBinary files. Always use a binary file transfer protocol when transferring them, never ASCII or text. Most files on the net are stored as .hqx instead. Only rascal stores most of its files in .bin format. Most communications programs such as ZTerm and MacKermit are capable of translating MacBinary files on the fly as they download if they know in advance they'll be downloading MacBinary files.

.image:
Typically this format is used only for system software, so that online users can download files that can easily be converted into exact copies of the installer floppies. Instead of using DiskCopy to restore the images to floppies, you can use Steve Christensen's freeware utility MountImage to treat the images on your hard disk as actual floppies inserted in a floppy drive. MountImage has a reputation for being buggy, so you should have some blank floppies and a copy of DiskCopy handy just in case.

.sea (.x, .X):
.sea doesn't merit a position in the above table because these are self-extracting archives. They may have been created with Compact Pro, Stuffit, or even Disk Doubler; but all should be capable of uncompressing themselves when double-clicked. For some unknown reason Alysis has chosen not to use this industry standard designation for self-extracting archives created with their payware products SuperDisk! and More Disk Space. Instead these two append either .x or .X to their self-extracting archives.

VIRUSES (4.0)

HELP! I HAVE A VIRUS. (4.1)

90% of all problems reportedly caused by viruses are actually due to mundane bugs in software (and 90% of all statistics are made up :-)). Before reporting a virus infection make sure you check your system with the latest version of Disinfectant, 2.8 as of this writing, by the excellent John Norstad and friends from Northwestern University. Disinfectant is absolutely free and available from sumex-aim and all the other usual suspects. It's easy to use and can completely protect your system from currently known Macintosh viruses. Releases to protect from new viruses are normally made within a day or two of the first confirmed sighting and capture of a new virus, and make their merry way around the electronic highways faster than any Macintosh virus ever has.

I THINK I'VE FOUND A NEW VIRUS. WHAT DO I DO? (4.2)

DON'T post a report to any comp.sys.mac.* newsgroup. 99% of all suspected new viruses are merely mundane bugs in the system or applications being used; and even if you really have found a new virus, there's nothing we can do about it anyway. You'll only succeed in generating a lot of follow-up

panic reports from other people who'll blame every crash of Quark XPress on the new virus.

If your system is protected against known viruses by Disinfectant or one of the other anti-virus packages and you suspect a new virus is causing you trouble, first consult with the most knowledgeable local guru about your problem. Nine times out of ten, he or she will identify it as a boring, ordinary, known bug in the software. If you are the local guru and still think you may have found a new virus, and have thoroughly checked out all other possibilities, then, and only then, send a detailed description of your problem to j_norstad@nwu.edu. Check the appropriate sections of the Disinfectant manual for procedures to follow before reporting a new virus.

PRINTING PROBLEMS (5.0)

HOW DO I MAKE A POSTSCRIPT FILE? (5.1)

First make sure a LaserWriter driver is in your System folder. It doesn't really matter which one although the one from the System 7 Tuneup disk is the best. You don't need System 7 to use the System 7 LaserWriter driver. If you're using the System 6 driver, you'll also need a Laser Prep file in your System Folder and background printing turned off. Once you've verified that there is indeed a LaserWriter driver in your system folder, select LaserWriter in the Chooser. A dialog box will likely pop up informing you that the LaserWriter requires Appletalk and asking you if you want to turn Appletalk on. Whether or not you have AppleTalk click OK. Then select Page Setup from the File menu to format your document for the LaserWriter. Next select Print from the File menu.

If you're using the System 7 LaserWriter driver, the Print dialog box that appears will have a radio button for Destination near the bottom. Click on PostScript file. The Print button at the top should change to a Save button. Click it and you'll get a standard file dialog asking you what to name and where to save the PostScript file.

If you're using the LaserWriter driver 6.0x or 5.2, the procedure is more complicated. When the Print dialog box comes up, put one finger over the K key. If you'll eventually print the file on a non-Apple PostScript printer, especially one not designed with the Macintosh in mind, also put a finger over the Command key. Using Command-K instead of plain K includes some Mac specific information non-Apple-oriented PostScript printers need to know about. Next hit return or click OK with the mouse and then IMMEDIATELY hit K or Command-K with your other hand. You've got about one second to do this. If you see a message box that says "Creating PostScript file," you did it right. If you don't see that message, you weren't quick enough. Try again.

Once you've gotten the message "Creating PostScript file" you should find a file called PostScript0 in the same folder as the application you were printing from. This is the file you just printed. Rename it before you forget what it is. If you print to disk (what this whole process is officially called) more than once, the second file will be called PostScript1, the third PostScript2, and so on. It really is much easier to use the System 7 LaserWriter driver.

HOW DO I PRINT A POSTSCRIPT FILE? (5.2)

On a Macintosh you'll need the LaserWriter Utility available on the high density TidBits disk from System 7 or the More Tidbits disk from the 800K distribution. It's also available for anonymous ftp from ftp.apple.com in /dts/mac/sys.soft/imaging. LaserWriter Utility allows you to send files to the

LaserWriter in such a way that PostScript commands get interpreted as PostScript rather than as text to be printed. If you're printing to a PostScript printer connected to something other than a Macintosh, you'll need to consult your local system gurus. A simple "lpr filename.ps" works on my Sparc, but your mileage may vary.

WHY WON'T MY POSTSCRIPT FILE PRINT ON MY MAINFRAME'S PRINTER? (5.3)

Moving PostScript files between the Macintosh and other platforms is as dark an art as exists in the Macintosh universe. You'll have to experiment with your specific setup and see what works best for you. If you're using the System 6 LaserWriter driver, try using K instead of F to create the PostScript file so that the Laser Prep header is included. System 7 includes this automatically though you can use Hugo Ayala's shareware Control Panel device Trimmer to leave it out if you need to. More importantly Trimmer lets you select which fonts to include in your PostScript file. The upload to the mainframe from which the PostScript file will be printed may also make a difference. Normally you need to upload in pure Binary format, neither MacBinary nor ASCII. Try using only genuine PostScript fonts, no TrueType or bitmapped fonts.

Gopher Frequently Asked Questions (FAQ)

Common Questions and Answers about the Internet Gopher, a client/server protocol for making a world wide information service, with many implementations.

Archive-name: gopher-faq
Last-modified: 1992/10/19

Common Questions and Answers about the Internet Gopher, a client/server protocol for making a world wide information service, with many implementations. Posted to comp.infosystems.gopher and news.answers every two weeks.

The most recent version of this FAQ can be gotten through gopher, or via anonymous ftp:

pit-manager.mit.edu:/pub/usenet/news.answers/gopher-faq

Those without FTP access should send e-mail to mail-server@rtfm.mit.edu with "send usenet/news.answers/finding-sources" in the body to find out how to do FTP by e-mail.

Q0: What is Gopher?

A0: The Internet Gopher client/server provides a distributed information delivery system around which a world/campus-wide information system (CWIS) can readily be constructed. While providing a delivery vehicle for local information, Gopher facilitates access to other Gopher and information servers throughout the world.

Q1: Where can I get gopher?

A1: via anonymous ftp to boombox.micro.umn.edu. Look in the directory /pub/gopher

Q2: What do I need to access gopher?

A2: You will need a gopher "client" program that runs on your local PC or workstation

There are clients for the following systems. The directory following the name is the location of the client on the anonymous ftp site boombox.micro.umn.edu (134.84.132.2) in the directory /pub/gopher.

Unix Curses & Emacs	/pub/gopher/Unix/gopher1.03.tar.Z
Xwindows	/pub/gopher/Unix/xgopher1.1a.tar.Z
Macintosh Hypercard	/pub/gopher/Mac_client/
Macintosh Application	/pub/gopher/Macintosh-TurboGopher
DOS w/Clarkson Driver	/pub/gopher/PC_client/
NeXTstep	/pub/gopher/NeXT/
VMS	/pub/gopher/VMS/

A Macintosh application, MacGopher is available via anonymous ftp from ftp.cc.utah.edu: Macintosh Application : /pub/gopher/Macintosh

Another Macintosh application, "GopherApp" is available via anonymous ftp from ftp.bio.indiana.edu:
Macintosh Application : /util/gopher/gopherapp

There are also a number of public telnet login sites available. The University of Minnesota operates one on the machine "consultant.micro.umn.edu" (134.84.132.4) See Q3 for more information about this. It is recommended that you run the client software instead of logging into the public telnet login sites. A client uses the custom features of the local machine (mouse, scroll bars, etc.) A local client is also faster.

Q3: Where are there publicly available logins for gopher.

A3: Here is a short list, use the site closest to you to minimize network lag.

Hostname	Login	Area
consultant.micro.umn.edu	gopher	North America
gopher.uiuc.edu	gopher	North America
panda.uiowa.edu	panda	North America
gopher.sunet.se	gopher	Europe
info.anu.edu.au	info	Australia
gopher.chalmers.se	gopher	Sweden
tolten.puc.cl	gopher	South America
ecnet.ec	gopher	Ecuador

It is recommended that you run the client software instead of logging into the public telnet login sites. A client uses the custom features of the local machine (mouse, scroll bars, etc.) A local client is also faster.

Q4: How can I add to the information in gopher?

A4: You can do this by running a gopher server. Servers are available for a number of systems. Use anonymous ftp to boombox.micro.umn.edu (134.84.132.2) and look in /pub/gopher. The following servers are available there:

Unix	/pub/gopher/Unix/gopherxx.tar.Z
VMS	/pub/gopher/VMS/
Macintosh	/pub/gopher/Mac_server/
VM/CMS	/pub/gopher/Rice_CMS/ or /pub/gopher/Vienna_CMS/
MVS	/pub/gopher/mvs/
DOS PC	/pub/gopher/PC_server/

When you have your server ready you can publish it to the world by sending e-mail to the maintainters of the "Other gophers" list:

gopher@boombox.micro.umn.edu

Q5: Who Develops Gopher Software?

A5: Gopher was originally developed in April 1991 by the University of Minnesota Microcomputer, Workstation, Networks Center to help our campus find answers to their computer questions.

It has since grown into a full-fledged World Wide Information System used by a large number of sites in the world. Many people have contributed to the project, too numerous to count.

The people behind the much of the gopher software can be reached via e-mail at gopher@boombox.micro.umn.edu, or via paper mail:

Internet Gopher Developers
100 Union St. SE #190
Minneapolis, MN 55455 USA

Q6: How can I set up a "CSO" phone book server? Where is the software?

A6: CSO phone book servers are also known as "qi" servers. The software implementation can be gotten via anonymous ftp from uxc.cso.uiuc.edu (128.174.5.50) as /pub/qi.tar.Z. You may also see this referred to as "ph", which is what most of the clients are called.

There is also an archive of the mailing list for qi/ph software on the same machine. It's in /pub/info-ph.archive.

This software is supported by Steve Dorner <s-dorner@uiuc.edu> Contact him for more information.

Q7: Why can't I access the University of Minnesota's UPI news?

A7: The University of Minnesota has a site license for UPI news, we are not allowed to distribute it off of our campus. We get our UPI news from Clarinet. For more information about getting UPI news send mail to info@clarinet.com. For information about setting up your own gopher-UPI server search the gopher-news archive for UPI.

Q9: What are the type characters for the different Gopher Objects?

A9: Normal IDs.

0	Item is a file
1	Item is a directory
2	Item is a CSO (qi) phone-book server
3	Error
4	Item is a BinHexed Macintosh file.
5	Item is DOS binary archive of some sort.
6	Item is a UNIX uuencoded file.
7	Item is an Index-Search server.
8	Item points to a text-based telnet session.
9	Item is a binary file! Client must read until the connection closes.
T	TN3270 connection.

Experimental IDs.

s	Sound type. Data stream is a mulaw sound.
g	GIF type.
M	MIME type. Item contains MIME data.
h	html type.
I	Image type.
i	"inline" text type (used by panda).

Q10: When I do full-text searches I always get every document back, Why?

A10: This is a problem occasionally encountered with Unix full-text indexes. It is caused by setting up the link incorrectly to a gindexd port.

The Path= field should be *blank* when pointing to a gindexd index.

Otherwise the client will send the path to the gindexd daemon, which interprets everything as a keyword. This path is likely to contain a pathname that is common to all of the indexed files. Thus a search generates hits on everything.

Q11: When I try to build the UNIX software I get an error from make: "Must be a separator on rules line #. Stop" Why?

A11: This is a problem with older makes that don't understand the "include" keyword. One easy way to cope with this problem is compiling GNU make, which does understand the include keyword.

If this is too difficult, remove the line: include Makefile.config from all the Makefiles and paste in a copy of Makefile.config at the top of each Makefile.

Or, instead of pasting you can make the client/server by going into the appropriate directory and typing:

make -f ../Makefile.config -f Makefile

Q12: What is the relationship between Gopher and (WAIS, WWW, ftp)?

A12: Gopher is intimately intertwined with these two other systems. As shipped the Unix gopher server has the capability to:

- Search local WAIS indices.
- Query remote WAIS servers and funnel the results to gopher clients.
- Query remote ftp sites and funnel the results to gopher clients.
- Be queried by WWW (World Wide Web) clients (either using built in gopher querying or using native http querying.

Q13: Are papers or articles describing gopher available?

A13:

The Whole Internet, Ed Kroll, O'Reilly, 1992

The Internet Gopher, "ConneXions", July 1992, Interop.

Exploring Internet GopherSpace "The Internet Society News", v1n2 1992, (You can subscribe to the Internet Society News by sending e-mail to isoc@nri.reston.va.us)

The Internet Gopher Protocol , Proceedings of the Twenty-Third IETF, CNRI, Section 5.3

Internet Gopher , Proceedings of Canadian Networking '92

The Internet Gopher , INTERNET: Getting Started, SRI International, Section 10.5.5

Tools help Internet users discover on-line treasures, Computerworld, July 20, 1992

TCP/IP Network Administration , O'Reilly.

Q14: On a DECstation I get the error message "/etc/svc.conf no such file or directory" when running the gopherd server, why?

A14: This is caused by the chroot() call in gopherd. It can be easily fixed by running gopherd with the -c option.

Alternatively you can copy /etc/svc.conf into a directory named "etc" inside the gopher-data directory.

Q15: The boolean searching terms don't work for my full-text index, why?

A15: This is probably because the searching is being provided by WAIS. WAIS opts to return all documents that contain a search phrase within certain limits. WAIS searches do return the documents with the highest "score" at the top, those documents will have the closest relevance.

Q16: When linking the Unix gopher server with WAIS I get undefined symbols, such as:

log_file_name
logfile
PrintStatus
find_value
Sources
NumSources

A17: This happens if you make gopherd before linking in the WAIS ir/ui directories. The fix is to "make clean" or remove gopherd/{waisgopher.o,Waisindex.o} and then remake gopherd. Or link the ir/ui directories first.

Q18: Why don't my WAIS indexes work? I never get anything back for searches. or Why do I get "Dangling file" error messages in my logfile?

A18: The problem could be in the server. The server should be run using the -c option if you want WAIS to work. Another solution is to patch the WAIS code so that it doesn't check the files on the disk. Search the gopher-news archive for "dangling". This will turn up a single document with the patch.

Q19: My gopher server doesn't work under inetd, why?

A19: It could be that your inetd server only supports a limited amount of arguments. For instance, the maximum number of arguments to an inetd server is 5. You can get around this by combining arguments: i.e.

gopherd -I -c
becomes:
gopherd -Ic

You may also leave the port specifier off of the command line. The gopher server automagically finds out the port it's running on.

"archie - An Electronic Directory Service for the Internet"

Peter Deutsch,
Computing Centre,
McGill University.
email: peterd@cc.mcgill.ca

Introduction

Few other areas in the field of computer science hold out such promise for significant performance gains in the coming years as the field of computer networking. While even a single computer allows the user to access and process information faster and more accurately than ever before, joining large numbers of such computers together with the communications tools needed for users to easily share information and resources promises the prospect of a true "electronic highway" for information exchange unlike anything seen to date.

A principal requirement for the creation of this brave new world of networked information was the creation of a standard set of protocols and communication mechanisms to allow users on disparate networks to share information. Such mechanisms have allowed the creation of the Internet, a global network of networks that now span the globe, connecting millions of users on hundreds of thousands of computers.

The Internet now connects universities, colleges and other centres of learning with commercial research and development groups throughout the world. It serves as both a live testbed for on-going networking research and a daily communications tool for thousands of users in fields far removed from networking and computer science. One recent survey estimates that the Internet currently has over 535,000 attached hosts in over 30 countries, with a user community estimated at over three million people.

The existence of this global information service has in turn spurred the development of mechanisms for locating and exchanging information. Distributed file systems, on-line file archiving mechanisms, electronic mail and bulletin boards and expert systems for locating and accessing technical expertise are all services that exist now on the Internet.

The huge size (and continued rapid growth) of the Internet offer a particular challenge to systems designers and service providers in this new environment. Before a user can effectively exploit any of the services offered by the Internet community the user must be aware of both the existence of the service and the host or hosts on which it is available. Adequately addressing this "resource discovery problem" is a central challenge for both service providers and users wishing to capitalize on the possibilities of the Internet.

What is the archie service?

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 on-line directories and resource listings.

Users can access an archie server either through interactive sessions (provided they have a direct Internet connection) or through queries sent via electronic mail messages (provided they can at least gateway electronic mail messages onto the Internet).

Interactive access to archie may be through a conventional telnet session to a machine running an archie server or through a program that has been integrated into a larger system, such as the Prospero network distributed file system. Additional stand-alone clients are now being tested and are available over the network.

Why use archie?

The existence of the archie service allow those seeking information maintained by an archie server to limit their network search to a set of questions to a known server. The responses in turn offer pointers to specific Internet service providers. Once the existence and location of specific information or services has been determined using archie, traditional networking tools can be used for final access.

Programs have already been created that integrate an archie client with the ftp file transfer program or into larger information access services. This allows a user to first locate and then access information from archie sites using a single program.

The archie service today

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 that 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.

The "whatis" database

In addition to offering access to anonymous ftp listings, archie also permits access to the "whatis" description database. This database is a collection of descriptions that includes the name and a brief synopsis for over 3,500 public domain software packages, datasets and informational documents located on the Internet.

Additional "whatis" databases are scheduled to be added in the coming months. Planned offerings include listings for the names and locations of on-line library catalogue programs, the names of publicly accessible electronic mailing lists and compilations of Frequently Asked Questions lists and archive sites for the most popular Usenet "newsgroups" or bulletin boards. Suggestions for additional descriptions or locations databases are welcomed and should be sent to the archie developers at "archie-l@archie.mcgill.ca".

Service providers are also encouraged to send in details of their offerings to the archie maintainers so that the server tracking software can be configured to automatically perform updates when site information changes. An automatic registration mechanism has also been proposed that would allow service providers to make their service available without human intervention. This feature is expected to be integrated into an upcoming release.

Using archie

Users with direct Internet connectivity can try out an interactive archie server using the basic "telnet" command (available at most sites). To

use, telnet to the host "archie.mcgill.ca" and login as user "archie" (there is no password needed). A banner message giving latest developments and information on the archie project will be displayed and then the command prompt will appear. First-time users should try the "help" command to get started.
{Other archie sites are listed in the article on Special Internet Services}

Users with only email connectivity to the Internet should send a message to "archie@archie.mcgill.ca", with the single word "help" in either the subject line or body of the message. You should receive back an email message explaining how to use the email archie server, along with details of an email-based ftp server operated by Digital Equipment Corporation that will perform ftp transfers through email requests.

Demo archie clients are stored on archie.mcgill.ca in the subdirectory "archie/clients" and may be obtained using anonymous ftp. There are several such clients and others are currently being tested. Additional work is planned in this area in the coming months and details will be announced in the archie banner message displayed on login.

Documentation for the archie system is still limited, but what there is is also available for anonymous ftp from the same host under the directory "archie/pub".

Miscellaneous Information

The archie service began as a project for students and volunteer staff at the McGill University School of Computer Science. It is now offered as a network resource by a number of sites. At the time this article was prepared, archie servers are being operated as "archie.mcgill.ca" (by McGill University in Montreal, Canada), "archie.funet.fi" (by FUnet in Finland) and "archie.au" (by AARnet in Australia). The source to the archie project has been distributed to a number of U.S. sites and additional North American servers are expected to be operational soon.

The archie project continues to grow in part because of the feedback and response from users. Suggestions for improvements and additional features are especially welcome. Please let us know what you think...

Contacting the archie people

Email addresses:
Please send comments, suggestions and bug reports to "archie-l@archie.mcgill.ca". This address reaches the implementors of archie.

There is also the "archie-people@archie.mcgill.ca" mailing list. This list is for people interested in developments and progress of the archie project and is open to all who wish to subscribe.

Surface mail address:
UNIX Support Group,
Computing Centre,
McGill University,
room 200, Burnside Hall,
805 Sherbrooke Street West,
Montreal, Quebec
CANADA H3A 2K6
Phone: (514) 398-3709

Veronica: an Archie for Gopher

This is a new service that should help to relieve the resource-discovery bottleneck in the rapidly-expanding gopher web. It adds global indexing (by title keywords) to gopher's distributed information model.
Introductory announcement follows:

About the Veronica service
VERONICA: Very Easy Rodent-Oriented Net-wide Index to Computerized Archives.

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-to-use 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, 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

Questions About Network Resources

The problem of sharing information about Internet resources is one that many, many people and organizations are trying to deal with. There has been a tendency for every organization who needs a document such as the one you describe to create one of their own, which takes (as you are undoubtedly finding out) an incredible amount of work - as a result there are several such documents around the community these days, so you really don't have to start from scratch.

There are at least two national organizations that are trying to deal with the issue of duplication of effort in creating documentation and the general of issue of providing info about resources on the Internet. FARNET's (federation of American Research Networks) U-NICS committee (User and NIC Services) has taken as their primary project the creation of a set of "boilerplate" documents, pulled from their members; to address the issues of attribution and copyright and cost recovery for redistribution... IETF's User Services Area has several working groups which are looking at many similar issues, such as creating a living bibliography of Internet Information and a glossary of terms.

While I'd like to be able to point you to a single source of info, unfortunately, the internet support structure isn't that integrated as yet, so let me point you to several locations for the info you are looking for. You will undoubtedly find more sources than these - and these tend to provide information on many kinds of resources, not specifically aimed at the sciences.

Let me remind you that while all this information is available on the net, its been put together with considerable effort and attribution of the author is required for use.

NYSERNET - the regional network in NY has an excellent user guide contact Jim Luckett, luckett@nysernet.org

NorthWestNet - the regional network based in Washington state has another excellent user guide, contact Eric Hood, ehood@nwnet.net

RFC1175 - bibliography of Internetworking Information, available via anonymous ftp from several locales, try nis.nsf.net, cd rfc

Internet Resource Guide - created by NSFNet Network Service Center via anonymous ftp, nnsf.nsf.net, cd resource-guide (you can also get the rfc's from here - for general information, you will want to look at the entire FYI series of info, retrieve the file fyi-index.txt)

Public Information Networks (Freenets)

Cleveland Freenet (Cleveland, OH)
telnet freenet-in-[a,b, or c].cwru.edu or hela.ins.cwru
Login as visitor

Heartland Freenet (Peoria, IL)
telnet heartland.bradley.edu
login as bbguest

Youngstown Freenet (Youngstown, OH)
telnet yfn.ysu.edu
login as visitor

Prairienet (prototype, Champaign, IL)
telnet gpx.lis.uiuc.edu
login as visitor; password is guest

Lorain County Freenet (Elyria, OH)
telnet freenet.lorain.oberlin.edu
login as guest

Denver Freenet (Denver, CO)
telnet freenet.hsc.colorado.edu
login as guest

Tallahassee Freenet (Tallahassee, FL)
telnet freenet.fsu.edu
login as visitor

Victoria Freenet (Victoria, BC, Canada)
telnet freenet.victoria.bc.ca
login as guest

National Capital Freenet (Ottawa, CA)
telnet freenet.carleton.ca
login as guest

CapAccess: National Capital Area Public Access Network
telnet cap.gwu.edu
login as guest, password is visitor

TriState Online
telnet cbos.uc.edu
Login as visitor

MINING THE INTERNET

The electronic event "Mining the Internet" and the workshops "Using the Internet" A & B, were introduced at CECC Computing Workshops '91, a conference held at the University of California, Davis on August 10-12 1991. (CECC = California Educational Computing Consortium.) The concept and materials were developed by Computing Services, UC Davis.

The "Using the Internet" workshops were intended to provide an informational basis for the electronic event/competition held on the last day of the conference. Two versions of the workshop were offered (featuring different exercises) to reduce network traffic and distribute the load evenly on local and remote computers.

The documents "Using the Internet" A & B were created with Microsoft Word on an Apple Macintosh microcomputer. The document "Mining the Internet" was created with Aldus PageMaker, also on a Macintosh. These training materials are available in PostScript form for non-profit purposes by educational institutions that request them. They are distributed free of charge. Postscript files can be obtained via anonymous FTP to ucdavis.edu under the directory ucd.netdocs/mining. Macintosh source files in binhex form are available via e-mail.

UC Davis has found that the concept of Mining the Internet and the workshops provide excellent training in the use of the Internet. If you use the concept or adapt the documents, please send us a brief note containing the following information:

1. Your name, institution, address, phone number, and e-mail address.
2. The source(s) from which you learned about our training materials.
3. The purpose(s) for which you expect to adapt them.

Send your comments and requests for the electronic source files (in Macintosh binhex form if you need them) to:

Gee Lee
Publications Manager
Computing Services
University of California
Davis, CA 95616-8563
(916) 752-1928
INTERNET: gblee@ucdavis.edu BITNET: gblee@ucdavis

You should note that the Mining the Internet package has numerous system-dependent features. If you plan to use this training package, you may wish to change the language and adapt the exercises to suit your local circumstances. We suggest that you contact the systems administrators of the remote sites with dates, times, number of users, etc.

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Information Sources: the Internet and Computer Mediated Communication

This is a list of information sources on the Internet and computer-mediated communication (CMC). This list (Release 1.5 or the most recent version) is available via anonymous ftp from:

host: ftp.rpi.edu
file: pub/communications/internet-cmc

The purpose of this file is 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.

This file might help those getting started in understanding the Internet and CMC; it compactly summarizes sources of information for those who are already exploring these issues.

Contents:

Section -1- THE INTERNET AND SERVICES
Section -2- INFORMATION SERVICES/ELECTRONIC PUBLICATIONS
Section -3- SOCIETIES AND ORGANIZATIONS
Section -4- NEWSGROUPS

Section -1- THE INTERNET AND SERVICES

This section lists information about the Internet, services available on it, and topics related to computer networking. The "POPULAR TOPICS" subsection lists information that is frequently requested.

Title	Site	Directory
New User's Questions	ftp.nisc.sri.com	fyi/fyi4.txt
Zen & Art of Internet	ftp.cs.widener.edu	pub/zen/
NWNet Internet Guide	ftphost.nwnet.net	nic/nwnet/user-guide/
Gold in Networks!	ftp.nisc.sri.com	rfc/rfc1290.txt
Hitchhikers Guide	ftp.nisc.sri.com	rfc/rfc1118.txt
Internet Resource Guide	nnsc.nsf.net	resource-guide/
CERF Net Guide	nic.cerf.net	cerfnet/
NYSER Net Guide	nysernet.org	pub/guides/
DDN New User Guide	nic.ddn.mil	netinfo/nug.doc
Incomplete Guide to the Internet	zaphod.ncsa.uiuc.edu	education/

Info Respository	Site	Directory
RFCs	ftp.nisc.sri.com	rfc/rfc-index.txt
FYIs	ftp.nisc.sri.com	fyi/fyi-index.txt
Network Info Center	nic.ddn.mil	netinfo/
UUNET archive	ftp.uu.net	uunet-info/
Telecomm Archives	lcs.mit.edu	telecom-archives/
Usenet Repository	pit-manager.mit.edu	pub/usenet/

Networking Info	Site	Directory
Network Reading List	ftp.uu.net	inet/doc/
Internetworking Guides	ra.msstate.edu	pub/docs/
List of FTP Sites	pilot.njin.net	pub/ftp-list/

NREN Information	nis.nsf.net	nsfnet/

Services Info	Site	Directory
Yanoff Services List	csd4.csd.uwm.edu	pub/inet.services.txt
WAIS information	think.com	wais/
Public access UNIX	gvl.unisys.com	pub/nixpub/long
Internet access BBS	wuarchive.wustl.edu	pub/
WorldWideWeb	info.cern.ch	pub/www/doc/the_www_book.*
Gopher	boombox.micro.umn.edu	pub/gopher/
Dialup BBS list	wuarchive.wustl.edu	mirrors/msdos/bbslists
Network Service Guides	ftp.sura.net	pub/nic/network.service.guides/
List of Whois Servers	sipb.mit.edu	pub/whois/whois-servers.list
HYTELNET	access.usask.ca	pub/hytelnet/pc

Directories	Site	Directory
Electronic Journals	ftp.eff.org	pub/journals/
Barron Library Catalogs	ftp.unt.edu	library/
St. George Lib Catalogs	nic.cerf.net	cerfnet/cerfnet_info/library_catalog/
Technical Reports	daneel.rdt.monash.edu.au	pub/techreports
Interest Groups List	ftp.nisc.sri.com	netinfo/interest-groups
Dartmouth Merged SIGL	dartcms1.dartmouth.edu	siglists/

Popular Topics	Site	Directory
College Email addresses	pit-manager.mit.edu	pub/usenet/soc.college/
Current Weathermap GIF	vmd.cso.uiuc.edu	wx/sa*
Whois Registration	nic.ddn.mil	netinfo/user-template.txt

Section -2- INFORMATION SERVICES/ELECTRONIC PUBLICATIONS

This section lists sources of information devoted to the study of computer mediated communication (CMC) and computer network technology. Below the description of the services and journals are tables describing online access if it is available. [see also DIRECTORIES/Electronic Journals in Section -1-]

Information Services/Electronic Publications

Comserve. An electronic information service for people interested in human communication studies.

Current Cites. A journal which provides citations and brief annotations for articles from 30 journals in networks and information and computer technology.

Electronic Journal of Communication / La Revue Electronique de Communication (EJC/REC). Covers communication theory, research, practice, and policy.

EJournal. Concerned with implications of electronic networks and texts.

HCIBIB. A mail-based retrieval system interface to a database related to Human-Computer Interaction (HCI). The database now contains over 3000 abstracts related to HCI

Netweaver. The Newsletter of the Electronic Networking Association.

LISTSERV. A mailing-list server which was designed to make group communication easier.

CNIDIR Coalition for Networked Information Working Group on Directories.

NETSCOUT "A forum for the general user of the BitNet and/or the Internet to discuss and exchange information about Servers, FTP sites, Filelists, lists, tools and any related aspects."

Matrix News (paper newsletter, but partially online) Covers crossnetwork issues. Some back articles, editorials, and indices available online.

NET-TRAIN is "a discussion list for librarians, academic department computer jocks, computing and information services people--anyone who is involved in training or support of others in using the resources available on Bitnet and Internet." This is not a LISTSERVE mailing list.

RFCs (Request For Comments). Documents about various issues for discussion, covering a broad range of networking issues.

JOURNAL/SERVICE	Access with email to	Body of letter(Name = your full name)
Comserve	comserve@vm.ecs.rpi.edu	Send Comserve Helpfile
CMC notes	comserve@vm.ecs.rpi.edu	Send CMC Notebook
EJC/REC	comserve@vm.ecs.rpi.edu	Directory EJCREC
EJournal	listserv@albnyvm1.bitnet	Subscribe EJRNL Name
HCIBIB	hcibib@rumpus.colorado.edu	query:
Netweaver	comserve@vm.ecs.rpi.edu	Send Netweave Winter91
RFCs	rfc-info@isi.edu	help: ways_to_get_rfcs
LISTSERV	listserv@uacsc2.albany.edu	send listserv memo
NET-TRAIN	millesjg@sluvca.slu.edu	Subject: NET-TRAIN
CNIDIR	listserv@unmvma.bitnet	Subscribe CNIDIR-L Name
NETSCOUT	listserv@unmvma.bitnet	Subscribe NETSCOUT-L Name

JOURNAL/SERVICE/DOC	ANONYMOUS FTP HOST	FILE OR DIRECTORY/
Current Cites	a.cni.org	current.cites/
Matrix News (parts)	quake.think.com	pub/mids/matrix_news/
Discussion of Comp Conf	ftp.nisc.sri.com	rfc/rfc1324.txt

Section -3- SOCIETIES AND ORGANIZATIONS

This section lists societies and organizations which are concerned with issues of electronic information and communication. Below the description of each organization is a table describing online access to more information if it is available.

Societies and Organizations

Computer Professionals for Social Responsibility (CPSR): alliance of computer professionals who discuss the impact of computer technology on society.

(Contact: cpsr@csli.stanford.edu).

Electronic Frontier Foundation (EFF): public interest organization to educate public about computer and communication technologies; works on public policies.

The Internet Society (ISOC): supports the development of the Internet and promotes education and applications. Electronic Networking Association (ENA): "...to promote electronic networking in ways that enrich individuals, enhance organizations, and build global communities."

INFO FOR	ANONYMOUS FTP HOST	FILE OR DIRECTORY/
EFF	ftp.eff.org	pub/EFF
ISOC	nnsc.nsf.net	internet-society/

Directory of Ejournals available for anonymous ftp

Edition 2.1 of Michael Strangelove's Revised Directory of Electronic Journals and Newsletters is now available for anonymous ftp from the LIBrary SOFTware archives at:
hydra.uwo.ca
as file
EJOURNALS.TXT in the
/LIBSOFT directory

The EJOURNL package includes Michael Strangelove's <441495@Acadvm1.UOttawa.CA> two-part Directory of Electronic Journals and Newsletters. The file EJOURNL1.DIRECTRY includes:

```
>>> Section 1:  Information <<<
 Introduction
 How to Retrieve This Directory From Networked Sources
 Networked Resources for Electronic Publication
 Electronic Serials and Related Topics:  A Brief Bibliography
 How to Submit an Entry to the Directory
 Getting an ISSN for an Electronic Journal
 How to Start an E-Newsletter
 PACS-L Review Special Issue on Networked Based E-Serials
 Changes to the Second Edition
>>> Section 2:  Electronic Journals <<<
 Inactive Electronic Journals
 Active Journals
```

The file EJOURNL2.DIRECTRY includes:

```
>>> Section 3:  Electronic Newsletters <<<
>>> Section 4:  Hypercard Stacks, Digest-Newsletters and Others <<<
```

To retrieve this complete distribution of files, in 7 parts to accommodate mailing, include:

```
 SENDME EJOURNL
```

in the body of a mail message to FILESERV@SHSU.BITNET (FILESERV@SSHU.edu). To retrieve a specific journal, such as EJOURNL1.DIRECTRY, or to retrieve a specific file, such as EJOURNL.DIRECTRY1_1OF3, include:

```
 SENDME EJOURNL.DIRECTRY1*
 SENDME EJOURNL.DIRECTRY1_1OF3
```

respectively, in your mail message to FILESERV.
The complete, uncut versions of these files (EJOURNL1.DIRECTRY and EJOURNL2.DIRECTRY) are available for anonymous ftp retrieval from Niord.SHSU.edu (192.92.115.8).

```
EJOURNL.DIRECTRY1_1OF3               77  Concatenate parts 1-3 to create
EJOURNL.DIRECTRY1_2OF3               73    EJOURNL1.DIRECTRY
EJOURNL.DIRECTRY1_3OF3               74
EJOURNL.DIRECTRY2_1OF4               79  Concatenate parts 1-4 to
create
EJOURNL.DIRECTRY2_2OF4               79    EJOURNL2.DIRECTRY
EJOURNL.DIRECTRY2_3OF4               76
EJOURNL.DIRECTRY2_4OF4               39
Approximate total blocks in full EJOURNL package = 497
```

Internet Access for Individuals

Someone asked about the opportunities for individuals to get access to the Internet. The opportunities keep expanding. For instance, in New York, NYSERnet provides a service aimed at individuals. In the December 1991 issue of NYSERnet User, this new NYSERnet service is mentioned. called NYSERLink, it provides dialup mail-only access to the Internet. For a flat fee (unspecified), you get unlimited message volume. There seem to be dialup points-of-presence (POPs) in about 9 places, with more planned. Phone (315) 443-4120 or send e-mail to info@nysernet.org.
Other regional networks, such as PREPnet, BARRnet, and SURAnet have been adding low-end access services.

I have attached a list I made up last spring (and therefore certainly out-of-date as far as details are concerned) of outfits that provide Internet access to non-academic users. PSInet (run by the same organization -- PSI -- that runs NYSERnet) certainly offers dial-up access in a number of cities. UUNET may also have low-end arrangements suitable for an individual subscription. As far as I know, ANS is more interested in high-volume customers.
 Caroline Arms
      Head, Microcomputer & Media Center
      Falk Library of the Health Sciences
      University of Pittsburgh
      cra@med.pitt.edu

ANS
Advanced Network & Services, Inc.
*   Non-profit organization founded in late 1990 by Merit,
      IBM, and MCI to operate NSFnet
*   For advancement of education and research
*   Incorporates all costs into single yearly fee
*   24-hour monitoring of equipment
*   Also offers R&D and consulting in high-speed networking
*   T3, T1, and 56K bits/second (no dialup)

Contact: Peter O'Neil
Director, Client Services
100 Clearbrook Road
Elmsford, NY 10523
(914) 789-5329
oneil@nis.ans.net

PSINet
Performance Systems International, Inc.
      Founded by team that developed NYSERNet -- operates NYSERNet
      Offers access to USENET and TCP/IP network to any organization
      Turnkey service with annual fee
      Access to other TCP/IP networks requires compliance with
      acceptable use policies
      T1, 56K, 9600 baud, + individual dial-up for terminals
      or PCs

Contact: 11800 Sunrise Valley Drive

```
            Suite 1100
            Reston, VA 22091

(800) 82PSI82
info@psi.com


Alternet
UUNET Technologies, Inc.
      Company primarily supports UNIX users, and access to
      USENET
      Provides services to all types of organization
      Access to other TCP/IP networks requires compliance with
      acceptable use policies
      One-time and monthly charges
      T1, 56K, 9600 baud -- not all speeds in all areas

Contact:    3110 Fairview Park Drive, Suite 570
            Falls Church, VA 22042

(703) 876-5050
info@uunet.uu.net
```

Project Gutenberg Announces the last 1992 releases and the first of the 1993 releases:

(* new posting)
(Comments on the past and future posted separately)

Jan 1993	Anne of the Island	(iland10x.xxx)*
Jan 1993	Pi (circumference/diameter)	(pimil10x.xxx)*
Jan 1993	Surfing the Internet	(Surf10xx.xxx)*
Jan 1993	The World Factbook	(world192.xxx)*
	(Appendix e has been added)	
Dec 1992	A Christmas Carol (Dickens)	(carol10x.xxx)
Dec 1992	Anne of Avonlea	(avon10xx.xxx)
Dec 1992	Gift of the Magi	(magi10xx.xxx)
Nov 1992	Anne of Green Gables	(anne11xx.xxx)*
Nov 1992	Song of the Lark (Cather)	(song10xx.xxx)

INDEX OF PROJECT GUTENBERG ETEXTS (1991 and 1992)
ftp mrcnext.cso.uiuc.edu (not from 10 AM to 5 PM)
(These 1992 etext releases in> cd /etext/etext92) (Do a dir *.zip or dir *.txt to see exact names.) [Articles are available in> cd/etext/articles.] The article SUGGEST.GUT tells how to get going. gutxxxxx.xxx files are the Newsletters, and the Newsletter2 files are gut2xxxx.xxx
Questions about Project Gutenberg should go to: dircompg@ux1.cso.uiuc.edu
Director/Communications
Relayed to simtel20, quake.think.com and nptn.org and other sites described in the Newsletter.

Jan 1992	Frederick Douglass	(duglas10.xxx)
Jan 1992	O Pioneers! Willa Cather	(opion10x.xxx)
Feb 1992	1991 CIA World Factbook	(world91a.xxx)
Feb 1992	Paradise Lost (Raben)	(plrabn11.xxx)
Mar 1992	Far From the Madding Crowd	(crowd13x.xxx)
Mar 1992	Aesop's Fables (Advantage)	(aesopa10.xxx)
Apr 1992	Data From the 1990 Census	(uscen901.xxx)
Apr 1992	New Etext of Bible (KJV)	(bible10x.xxx)
May 1992	Sophocles' Oedipus Trilogy	(oedip10x.xxx)
May 1992	Herland (for Mother's Day)	(hrlnd10x.xxx)
Jun 1992	The Scarlet Letter	(scrlt10x.xxx)
Jun 1992	Zen & the Art of Internet)	(zen10xxx.xxx)
Jul 1992	The Time Machine-HG Wells)	(timem10x.xxx)
Jul 1992	The War of the Worlds-HGW)	(warw10xx.xxx)
Aug 1992	The 1990 US Census (2nd)	(uscen902.xxx)
Aug 1992	The Hackers' Dictionary	(jargn10x.xxx)
Sep 1992	Hitchhiker's Guide to the Internet	(hhgi10xx.xxx)
Sep 1992	NorthWestNet NUSIRG Internet Guide	(nusirg10.xxx)
Oct 1992	The Legend of Sleepy Hollow	(sleep10x.xxx)
Oct 1992	Dr. Jekyll and Mr. Hyde #1	(hyde10xx.xxx)
Oct 1992	Dr. Jekyll and Mr. Hyde #2	(hydea10x.xxx)
Nov 1992	Anne of Green Gables	(anne10xx.xxx)
Nov 1992	Song of the Lark (Cather)	(song10xx.xxx)
Dec 1992	A Christmas Carol (Dickens)	(carol10x.xxx)
Dec 1992	Anne of Avonlea	(avon10xx.xxx)
Dec 1992	The Gift of the Magi-O Henry	(magi10.txt)
	(This is too short to zip, and will join xmasx.xxx)	

(These 1991 etexts are now in> cd /etext/etext91) (Do a dir *.zip or dir *.txt to see exact names.)

```
Jan 1991 Alice in Wonderland                    (alice29x.xxx)
Feb 1991 Through the Looking Glass              (lglass16.xxx)
Mar 1991 The Hunting of the Snark               (snark12x.xxx)
Apr 1991 1990 CIA World Factbook                (world12x.xxx)
May 1991 Moby Dick (From OBI)*                  (mobyxxxx.xxx)
Jun 1991 Peter Pan (for US only)**              (peter14a.xxx)
Jul 1991 The Book of Mormon                     (mormon13.xxx)
Aug 1991 The Federalist Papers                  (feder12x.xxx)
Sep 1991 The Song of Hiawatha                   (hisong11.xxx)
Oct 1991 Paradise Lost                          (plboss11.xxx)
Nov 1991 Aesop's Fables                         (aesop11x.xxx)
Dec 1991 Roget's Thesaurus                      (roget11x.xxx)
Dec 1991 Roget's Thesaurus                      (roget12x.xxx)
      (These two Roget's are not exactly the same)
*Moby Dick is missing Chapter 72
**Please do not download Peter Pan outside the US
Michael S. Hart, Professor of Electronic Text Executive Director of Project
Gutenberg Etext Illinois Benedictine College, Lisle, IL 60532
No official connection to U of Illinois--UIUC
hart @uiucvmd.bitnet or hart@vmd.cso.uiuc.edu
```

HYTELNET version 6.3

1. Announcement of version 6.3 (October 15/1992)
2. Announcement of version 6.3 for the Mac (October 16/1991)
3. Other ftp sites holding version 6.3 (October 17/1992)

1. Announcement of version 6.3 (October 15/1992)
HYTELNET version 6.3, the utility which gives an IBM-PC user instant-access to all Internet-accessible 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 have been 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 toobtain HYTELNET 6.3 from the ftp site.

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/hytelnet/pc
Then enter: get hyteln63.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 Hytelnet 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 with 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/hytelnet/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.

2. Announcement of version 6.3 for the Mac (October 16/1991)

From: burchil@ccu.UManitoba.CA "Charles Andrew Burchill"
Notice of Upgrade to Hytelnet for the Macintosh. version 6.3.0

This version will work over a network, and will be able to use the IBM PC data files. The numbering system and directory structure are the same as the PC version. If you want a copy of this version of Hytelnet please send a note to Charles Burchill <burchil@ccu.umt may be available from access.usask.ca in the near future. Hytelnet comes as a binhex'd self extracting archive: Hytelnet for the Mac. You will need about 1.2Mb free hard disk space, HyperCard 2.x. The archive contains Hytelnet, a hypercard stack that reads the raw data files from Peter Scotts Hytelnet. It also contains a 'Hytelnet data' folder containing many folders with the Hytelnet data files (1000+).

Modifications from the last version:
- Finder Events XCMD added to allow the use of some applewithout having to worry about the name or location of the program.
- Configuration items have been moved to a configuration dialog.
- Using the Configuration settings the Telnet, and TN3270 applications can have other names and be located in a variety of locations, along with the configuration files.
- A button has been added that will extract the site files from letters coming from the LIB_HYTELNET mailing list. The headers will be stripped and the file will be saved in the appropriate foldere saved in a seperate file "New

Site Names 'current date'". The site name lists are not automatically updated.

Binhex'd files may be unarchived using binhex 4.0, Stuffit, Compactor Pro,Tickler and many other common archiving programs.

HYTELNET..... Program Description

HYTELNET is a utility that is designed to assist you in reaching all of the INTERNET-accessible libraries, Freenets, CWISs,Library BBSs, & other information sites by Telnet. It is available for IBM PC, Unix

Host pinus.slu.se (130.238.98.11)
Last updated 02:07 15 Oct 1992

Location: /pub/library/hytelnet/pc
FILE r--r--r-- 463649 Oct 14 15:24 hyteln63.zip

Host oak.oakland.edu
Location: pub/msdos/hypertext
FILE hyteln63.zip

Part IV

Appendices

The follow are a compilation of additional tools and reference that are supplements to the tools and other sections of this guide. In the future, we will be adding and index and glossary to this section.

Appendix A:	Archie Tutorial	275
Appendix B:	Gopher Tutorial	283
Appendix C:	Veronica Tutorial	289
Appendix D:	Jughead	291

What Is Archie?

With the existence of File Transfer Protocol (FTP), it is possible to retrieve files from thousands of computer facilities in the United States and abroad. Yet with all these resources, it can often be difficult to know where to look for the information you want. Archie was created to help solve this problem.

Archie is an Internet feature which allows users to search all FTP sites worldwide for files which contain a particular word or set of words. Since filenames typically reflect the contents of the file, Archie can be useful in locating resources which are related to a particular topic.

What Information Do I Need to Use Archie?

To use Archie, you must specify the name (or a portion of the name) of the file that you wish Archie to find. If you do not know the file's exact name, you can try Archie several times, experimenting with different possibilities to find different resources and various files which may suit your purpose.

However, Archie simply matches your search words with the names of files on computers throughout the country. Archie does not check the contents of these files to see if, in fact, they really do reflect their title. Also, Archie will NOT check related categories or words. For example, if you use Archie to search for all files containing the word "car," it will find all files containing "car" in the title, even if one or more of these files contain no information on cars at all. Further this search will not show files whose names contain "automobile," "vehicle," or any other related term. To find these files, you need to perform separate searches.

How Do I Access Archie?

Many Gopher systems permit access to Archie. Typically, Archie can be found in a section of Gopher which lists FTP sites. (Details forthcoming...) Many systems also allow access to Archie outside of a Gopher environment. (Also, stay tuned...)

How Do I Perform an Archie Search?
within Gopher

Let's perform an Archie search within a Gopher Information Server.

First, begin Gopher. Many Gopher servers offer an option such as *Internet File Server (FTP) Sites.* If yours contains such an option, you will be able to perform Archie searches through Gopher. If not, you will need to use command-line mode, as discussed later in the section on Archie searches without Gopher.

Begin and find the menu regarding *Internet File Server (FTP) Sites.* You will see a menu similar to the following.

```
                  Internet Gopher Information Client v1.03

                       Internet File Server (ftp) Sites

     1.  About this directory.
     2.  About Anonymous FTP.
 -->  3.  Search of Most FTP sites (archie) <?>
     4.  Keyword Search of Entries in FTP Menus <?>
     5.  FTP.CSO: University of Illinois CCSO's Main FTP Server/
     6.  FTP.NCSA: University of Illinois NCSA's Main FTP Server/
     7.  UXC: University of Illinois/
     8.  Boombox at Minnesota, Home of the Gopher and POPmail/
     9.  Type in the ftp site name for direct access <?>
     10. Wuarchive.wustl.edu 128.252.135.4   GNU, X.11R3, GIF, IEN, RFCs,/
     11. Popular FTP Sites via Gopher/
     12. FTP sites that start with 'a'/
     13. b/
     14. c/
     15. d/
     16. e/
     17. f/
     18. g/

Press ? for Help, q to Quit, u to go up a menu                  Page: 1/3
```

One option (number 3 in the above example) lists a Search of Most FTP Sites. This is the Archie function.
Once you select it, you will be asked to enter keywords. In this example, we will search for files containing the word "automobile."

We respond as follows...

Index word(s) to search for: **automobile**

It takes several seconds to several minutes for Archie to search worldwide for your request. The time depends on the complexity of your request, and the amount of network traffic at the time you make your request. Requests during the day tend to take considerably longer than those at off-peak hours.

This search found two items, which are then listed in the following Gopher menu.

```
                    Internet Gopher Information Client v1.03

                 Search of Most FTP sites (archie): automobile

 -->  1.  ..alt/alt.american.automobile.breakdown.breakdown.breakdown.Z <Bin>
      2.  ..alt/alt.american.automobile.breakdown.breakdown.breakdown.Z <Bin>









Press ? for Help, q to Quit, u to go up a menu                      Page: 1/1
```

These are the two files found by Archie in its search.

You have several options at this point.

First, if you know immediately that you wish to transfer a file, simply choose the appropriate file. Gopher will ask you to specify a name for the file in your personal directory, and then will transfer the file directly to your own directory.

However, you may instead wish to know more information about the file. This is available by choosing

Display Technical Information About Current Item

Your help file should let you know how to choose this option. On many computers the choice is made by pressing the "equals" key("="). Other systems use "Command-I" or another key. See your help file for more information.

When you display the technical information, you will see a screen like the following.

```
Name=ftp.uu.net@/usenet/control/alt/alt.american.automobile.breakdown.breakdow
n.
breakdown.Z
Type=9
Port=7997
Path=ftp.uu.net@/usenet/control/alt/alt.american.automobile.breakdown.breakdow
n.
breakdown.Z
Host=gopher.uiuc.edu

Press <RETURN> to continue, <m> to mail, <s> to save:
```

While the entire machine name and path may not have appeared on the Gopher menu, it will appear here. The machine name is that portion of the "Name" and "Path" lines preceding the "@" symbol. Then, within that machine, the desired file is found at the location indicated after the "@" symbol.

In this example, the file is contained on a machine called
ftp.uu.net
and, on that machine, the file is in the directory
/usenet/control/alt
The file itself is named...
alt.american.automobile.breakdown.breakdown.breakdown.Z

(For more information about Unix directories and the naming of files, see the section of this manual which discusses Unix and its file structure.)

From this point, return to the earlier menu by pressing <RETURN>.

without Gopher

Many systems now allow Archie to be used outside of Gopher, in command-line mode of Unix.

Here, we will perform a search of all files at all FTP sites containing the word "flower."

This procedure is simple. At the Unix prompt, simply type
landrew.ncsa.uiuc.edu% **archie flower**
(Only the boldface words should be typed. The prompt is shown above simply to add proper context to the command.)

You will see output similar to the following.

```
landrew.ncsa.uiuc.edu_51% archie flower

Host ic16.ee.umanitoba.ca

    Location: /pub/Database/Images/Grey/People/512x480
           FILE -rwxr-xr-x     245792  Dec  8 20:31  flower

Host ipl.rpi.edu

    Location: /pub/image/still/canon/bgr
           FILE -rw-r--r--     737312  Jun  3 1990  flower
    Location: /pub/image/still/canon/color
           FILE -rw-r--r--     737312  Nov 22 1989  flower
    Location: /pub/image/still/canon/gray
           FILE -rw-r--r--     245792  Nov 22 1989  flower

Host sparc01.cc.ncsu.edu

    Location: /mirrors/wustl/graphics/gif/f
           FILE -rw-rw-r--     230750  Feb  5 1992  flower

Host think.com

    Location: /mail/joy-abuse/rochester
           FILE -r--r--r--       1193  Oct 22 1990  flower

Host wuarchive.wustl.edu

    Location: /graphics/gif/f
           FILE -rw-rw-r--     230750  Feb  5 1992  flower
landrew.ncsa.uiuc.edu_52%
```

You will see on the screen, the various files, listed by host. Each host name is listed, and then the location of each file is listed under each host, as shown above. The actual FILE listings follow the format of full-length Unix directory listings, beginning with access information, followed by file size, creation date, and name.

Note that each of these files is an exact match. That is, its name is the exact word "flower." Archie will also find those files for which "flower," is only part of the name, such as "flower bed" or "Mayflower."

The search algorithms for Gopher-based Archie and command-line Archie are slightly different, and thus may yield slightly different results. Similarly, Archie searches may show small differences from machine to machine.

From this point, the user may use FTP commands to access the desired files.

GOPHER

Gopher is an extremely easy to use information retrieval system . One can look around for information on the Internet quickly and easily using Gopher. Information can be searched for and accessed using an intuitive menu driven interface.

Where is the information stored?
Information is stored on different servers which are all networked together. There are a large number of servers that are already on the gopher system , and more servers are being added on to the Gopher system rapidly. Many academic institutions (and many departments within them) have gopher servers.

How do you access the information?
Select the gopher server which you want to explore .This can be done by either using the cursor keys to move onto the number, or by typing the number before the server. To go back up a menu hit "u". The "?" key can be used for online help anytime. These above mentioned 3 keys are also listed at the bottom of the screen for reference. To scroll from one page to the next, the "page down" key can be used. (On Keyboards without this key, the ">" key or the spacebar can be used). Don't worry if you don't understand what all this means now; this will all become clear after we try out a gopher session!

A Gopher Session :
Type "gopher" at the Unix prompt. A similar screen appears:

```
                  Internet Gopher Information Client v1.03

                    Root gopher server: gopher.ncsa.uiuc.edu

 ->   1.  About NCSA'S gopher.
      2.  MetaCenter High Performance Computing  and Communications Calendar.
      3.  HPCC Logical Library System (Enter 'hpcc' at login prompt) <TEL>
      4.  MetaCenter Contacts Directory.
      5.  NSF MetaCenter/
      6.  UIUC Gopher Information Service/
      7.  The Rest of the Gopher World/
      8. Education Reports at NCSA/
      9. Activity Reports for this Server/









   Press ? for Help, q to Quit, u to go up a menu                  Page: 1/1
```

The menu on the previous page is also referred to as the root menu.The "/" symbols after the titles represent directories. Directories may contain files (which contain information) or subdirectories. Let's check out a few directories. Type "6" and press return to select the "UIUC Gopher Information Service". A screen similar to the one below shows up:

```
Internet Gopher Information Client v1.03

                        UIUC Gopher Information Service

 -->     1.  Welcome to the U of Illinois Gopher.
         2.  Campus Announcements (5/06/93)/
         3.  What's New?  (last update: 4/20/93)/
         4.  Information about Gopher/
         5.  Keyword Search of Gopher Menus <?>
         6.  U of Illinois Campus Information/
         7.  Champaign-Urbana & Regional Information/
         8.  Computer Documentation, Software, and Information/
         9.  Libraries and Reference Information/
         10. Newspapers, Newsletters, and Weather/
         11. Other Gopher and Information Servers/
         12. Phone Books (ph)/
         13. Internet File Server (ftp) Sites/









   Press ? for Help, q to Quit, u to go up a menu                  Page: 1/1
```

Select " University of Illinois Campus Information" by pressing "6" and hitting "return". A screen similar to the one on the next page appears. You can then select any of the directories that interest you by typing the number before it and pressing return. (If nothing about the U of Illinois interests you, hit "u" to go back to the previous menu).

```
      Internet Gopher Information Client v1.03

                        U of Illinois Campus Information

 -->  1.  About U of Illinois Campus Information.
      2.  Engineering Placement Office/
      3.  Financial Aid and Student Employment/
      4.  Course Timetables; Academic Calendars; Registration Information/
      5.  Daily Illini Newspaper/
      6.  Inside Illinois (the Faculty-Staff Newspaper) and PostMarks/
      7.  Campus Safety and Crime Bulletins/
      8.  Central Stores/
      9.  Departmental Information/
      10. Lectures and Seminars/
      11. Campus Services & Facilities/
      12. Entertainment and the Arts/
      13. Sports and Recreation/
      14. Student Organizations/
      15. Faculty and Staff Organizations/
      16. Student Job Opportunities/
      17. Staff Employment/

Press ? for Help, q to Quit, u to go up a menu                  Page: 1/2
```

Try experimenting with different topics (directories). Once again, to back up, hit "u".

An example using keyword searches.
Let's say you wanted some information on the tennis faclities, or just tennis in general, at the University of Illinois. It would be rather time consuming to search through all the menus for information The "keyword search of Gopher Menus" option lets you search for all the menus with the string "tennis" in them. Lets try it out.

Go back to the screen with "University of Illinois Campus Information" as the header. Select "Keyword Search of Gopher Menus". You will be prompted to enter a word. Type in "tennis" and hit return. You should get a screen similar to the one on the next page.

```
                  Internet Gopher Information Client v1.03

                    Keyword Search of Gopher Menus: tennis

     1.  THIS SEARCH DOES NOT RETURN ITEMS ADDED SINCE 2AM
     2.  Atkins Tennis Center/









Press ? for Help, q to Quit, u to go up a menu                    Page: 1/1
```

•Select "Atkins Tennis Center" for the information you need.

One more example (long, but informative):

Looking Around for Indian Restaurants using Gopher

•Select "The Rest of the Gopher World" from the root gopher menu.
•Select "St. Olaf College". (you may have to scroll down several screens to do this)
•Select "Databases"
•Select "Omni-Cultural-Academic-Resource"
•Select "Society-Culture-Religion"
•Select "Variety of Info about Stuff on India"
•Choose "Lists of Restaurants" from the menu

And lo and behold, you get a list of Indian Restaurants!

Additional Features:

Bookmarks:
Just as a bookmark in a book helps us find the page we were last reading much faster, bookmarks in gopher let us quickly access directories that we use often. Once we have the directory whose path we want to save , all we have to do is type "a" to add a directory to the list of bookmarks (or to create a bookmark for the first time). The next time you start up gopher, if you press "v" the list of bookmarks shows up. These keys are also mentioned in the online help. And you can select the directory or file that you need quickly without having to search through different menus.

As you are sure to have realized by now, there is a tremendous amount of information available on gopher, but the problem is knowing where to look for it. Keyword searches go a long way in solving that problem. However, a far more powerful new tool called **Veronica** (which can be used within gopher) has been developed for that purpose. There is a separate tutorial on using Veronica in this manual.

What is VERONICA?

Gopher and TurboGopher are utilities which take the wealth of information on the Internet, and organize it into a hierarchical menu system. With Gopher, users can more easily find the information they need.

However, the amount of available information, and the number of available resources, is enormous. Worse yet, these resources are not centralized on one computer system; they are distributed among thousands of machines worldwide, each of which operates its own Gopher menu system.

So what happens when you're searching for a certain item on the Internet, but don't quite know where it is? Under the current organization of the Internet, you would have to check the Gopher system at one location, then check the Gopher at another location, and repeat this search at each of the thousands of machines worldwide until you found your desired item.

Fortunately, we have VERONICA to do this for us. VERONICA stands for (no kidding!) Very Easy Rodent-Oriented Net-wide Index to Computerized Archives. As its name suggests, it is an indexing and search system designed to be very easy and accessible, even to users with limited computer and/or network experience.

How Does VERONICA Work?
VERONICA is a tool to be used with Gopher or TurboGopher. Once you begin Gopher, VERONICA is simply a menu item, which you select just like any other menu item.

When you select VERONICA, you provide a list of "keywords." VERONICA will search hundreds of different Gopher servers, looking for menu items which contain the keywords you specified. For example, if you asked VERONICA to search using the keyword "baseball," VERONICA would find all menu items in all known Gopher servers worldwide which contain the word "baseball."

Note that VERONICA does not search the contents of every Internet resource; it merely searches the title of the resource as it would appear in a Gopher menu. For example, a VERONICA search for "baseball," as above, would not find a document whose Gopher menu title was "Babe Ruth," even though that document may contain the word "baseball."

How Do I Use the Results of VERONICA Searches?
When VERONICA is finished searching, it produces a Gopher menu listing all relevant items which match your request. You can choose any of these items and explore them further, just as you would in any other Gopher menu.

OK! Let's Try It!!!

Step-by-Step Tutorial for VERONICA...

Begin a Gopher session.

If you are using TurboGopher, simply begin the TurboGopher program.

If you are in a Unix session, type

gopher

at the prompt.

(If this is unsuccessful, type

telnet gopher.uiuc.edu

Respond as follows, typing the word gopher , as follows

login: **gopher**

)

You will see the following or a similar menu.

```
                    Internet Gopher Information Client v1.03

                    Root gopher server: gopher.ncsa.uiuc.edu

 -->  1.  About NCSA'S gopher.
      2.  MetaCenter High Performance Computing  and Communications Calendar.
      3.  HPCC Logical Library System (Enter 'hpcc' at login prompt) <TEL>
      4.  MetaCenter Contacts Directory.
      5.  NSF MetaCenter/
      6.  UIUC Gopher Information Service/
      7.  The Rest of the Gopher World/
      8.  Education Programs at NCSA/
      9.  Activity Reports for this Server/









Press ? for Help, q to Quit, u to go up a menu                        Page:
1/1
```

Choose the selection...

7. The Rest of the Gopher World

(If your menu looks different from the above, there should be some choice referring to other gopher servers.)

Eventually, (and hopefully immediately,) you will find a menu with a selection...

Other Gopher and Information Servers

Choose this option. You will see a menu like the following..

```
                    Internet Gopher Information Client v1.03

                      Other Gopher and Information Servers

 -->  1.  All the Gopher Servers in the World/
      2.  Search titles in Gopherspace using veronica/
      3.  Africa/
      4.  Asia/
      5.  Europe/
      6.  Middle East/
      7.  North America/
      8.  Pacific/
      9.  South America/
      10. Terminal Based Information/
      11. WAIS Based Information/









Press ? for Help, q to Quit, u to go up a menu                        Page:
1/1
```

Your menu may differ from the above. If so, your menu probably contains the above choices and several others.

In any case, these choices are locations of Gopher servers throughout the world. If you knew the exact location of your desired resource, you could retrieve it using these menus. For example, if you wanted a resource at the University of Notre Dame, you would choose *North America* from this menu, and then, from subsequent menus, *USA, Indiana,* and, finally, *University of Notre Dame.* You would then be connected to the Gopher server at Notre Dame, from which you could find any available resource there.

We, however, do not know the location of our resource. We need VERONICA. Thus, choose

Search titles in GopherSpace using VERONICA.

If this or a similar title is not an option on your system, VERONICA may not yet be available on your system. Ask your system administrator.

VERONICA, like many Internet software tools, is still in development. Thus, the next menu may present several versions of VERONICA which use slightly different searching algorithms. These may or may not be working at any given time, and they may or may not produce the same results. While this may not be comforting information for users, know that VERONICA searches are always becoming faster and more complete, and therefore more useful. Further, this development stage, and the inconveniences associated with it, are very necessary to this maintenance and improvement of VERONICA.

Select any VERONICA search. It will ask you for a keyword.

Suppose we are searching for information on robots. Thus, for a keyword, we will want to use the word "robot."
Thus, after selecting a VERONICA search method, type robot as follows...

Index word(s) to search for: **robot**

TurboGopher will generate a window and leave you a space in which to type a word or words for searching.

Depending on the complexity of the search, and the volume of traffic on the network, your search may take from several seconds to several minutes. When finished, you will see a new Gopher menu displaying the results of the search.

Here is the result of the search we performed for the word "robot." Note that since the Internet is always being updated and changed, your search probably will not match this exactly.

```
                  Internet Gopher Information Client v1.03

               Search gopherspace by veronica at NYSERNet: robot

 -->  1.  robot.
      2.  Robot (Penn State)/
      3.  robot_carnival.script.
      4.  NASA Cancels Robot's Mission Into Volcano.
      5.  Area students take controls of deep-sea robot.
      6.  Howard A. Paul; Co-Inventor of Surgical Robot.
      7.  robowar-robot..
      8.  robot pollueur.
      9.  robot pollueur.
      10. BEAUDOIN.92Mar17145158@felix.ireq-robot.hydro.qc.ca.
      11. Arai T.: A Robot Language System with a Colour Graphic Simulator.
      12. Findler N. V., Shaw J. N.: Multi-PIERRE - a Learning Robot System.
      13. Kantabutra V., Kosaraju S. R.: Algorithms for robot arm movements.
      14. Paul R. P.: Robot Manipulators: Mathematics, Programming, and Con.
      15. Dooner M., Taylor N. K., Bonney M. C.: Planning Robot Installatio.
      16. Heginbotham W. B.: How Computer Graphics Benefit Industrial Robot.
      17. Asada H.: Dynamic analysis and design of robot manipulators using.
      18. Jakopac D. E.: Robot programming assistant: A new approach to ass.

Press ? for Help, q to Quit, u to go up a menu                    Page:
1/5
```

If you received an error such as "Could Not Connect," try using another VERONICA choice, or try again at a later time.

Now, your search is complete, and these selections (actually, there are five pages of them--only page one is shown above) are now part of a Gopher menu, which can be accessed the same way as any other Gopher menu.

Notes

Boolean Searching

Many systems offer Boolean searching on VERONICA. Boolean searching is the ability of a system to find more than one keyword in a given title. If, for example, you wished to search for all titles containing either the word "baseball" or the word "football," you could type "baseball or football" at the keyword prompt as follows...

Index word(s) to search for: **baseball or football**

This request would find all Gopher menu items containing the word "baseball" or the word "football." Similarly, you can find menu items containing both "baseball" and "football" by typing

Index word(s) to search for: **baseball and football**

Note that any terms involving more than one word should be searched using AND or OR terms. This includes terms of more than one word. For example, you can find menu items about "acid rain" by typing...

Index word(s) to search for: **acid and rain**

Contents of Search Results

A Word of Warning

After a VERONICA search is complete, you can begin exploring the items which it has found. However, you should remember that each item may come from any Gopher system in the world. Therefore, be wary of any phrases such as "on campus" or "downtown," or any words which describe a location or event as if it were nearby. Perhaps it is nearby for regular users of that Gopher system. That system, however, may be thousands of miles away, so you may be very far from that "downtown area" or from the "campus" to which the article refers. Be careful.

From Where Did It Come?

Which leads us to our next point. If the article may not have come from nearby, how do we know the origin of the information, and the Gopher system where VERONICA found it?

This is an important question. Suppose we want to use this resource at a later date. We could do a VERONICA search once more, and have VERONICA find the resource for us again. But this could take several minutes. And in a worst-case scenario, it is possible that VERONICA may be temporarily disabled when you next need this resource.

It would be easier and much faster if we could have VERONICA find an item the first time, and then we would know thereafter where to go to find it ourselves.

Using the Gopher option

Display Technical Information About Current Item

we can usually find out the location from which the item came, as well as some other information about it.

For example, after performing the "robot" search described above, we pointed to the first item in the list and (while still looking at the menu) chose

Display Technical Information About Current Item

On many machines this is achieved simply by pressing the equals key ("="). On other systems, you may use a key such as "Command-I"), or it may be a menu choice.

In any case, after selecting this item, you will see information similar to the following...

```
Name=robot
Type=0
Port=70
Path=0/under-construction/uadv/robot
Host=cwis.oac.uci.edu

Press <RETURN> to continue, <m> to mail, <s> to save, or <p> to print:
```

From this information, we can see that the information comes from the Gopher host named "cwis.oac.uci.edu"

The suffix "edu" designates this host as being part of some educational facility. The portion "uci" probably designates the particular institution, such as the University of California at Irvine.

However, it is not necessary to know the precise meanings of each of these terms. Were you to wish to read this document at a later date, you would connect to this machine using

telnet cwis.oac.uci.edu (the name listed as the "host")

and the login anonymous. You could then find the document in the designated path

0/under-construction/uadv/robot

as listed in the path.

You could then either read the document. If the item were a picture or directory, or other type of file, you could access it in the appropriate way, or use "ftp" to transfer it to your own computer for your personal use, if this is permitted.

Jughead

Jughead is a database of Gopher links. It accepts word searches and the search result can be used to access menus on either the W&L Gopher or on many remote Gophers. There are two Jughead databases on the W&L Gopher, one (on the main Gopher menu) indexes all menus at the W&L Gopher, and the other (on the "Other Gopher Resources" menu) indexes all Gopher sites but is selective in only including high-level menu items, and does not include any file-name menus.

Searches may use AND, OR, NOT connectors (a space between search-words = AND) Multiple ANDs, ORs and NOTs are evaluated left to right Upper and lower case are ignored. Words may be truncated with an '*' as the last character of the root-word as in:

```
SUPREME COURT     =  both supreme and court
SUPREME AND COURT =  both supreme and court
LAW OR LEGAL      =  either law or legal
CONSTIT*          =  any word beginning with 'constit'
COURT NOT SUPREME =  all entries with 'court' but excluding any with 'supreme'
```

jughead supports some special commands, where each special command must be preceeded by a question mark '?', and are listed below:

```
   ?all what
   ?help [what]
   ?limit=n what
   ?range=n1-n2 what
   ?version [what]
```

where 'what' is a standard search string, anything enclosed in square brackets is optional, and all special commands must be preceeded with '?'. And each command is described below:

```
   ?all what       returns all the hits on 'what'.
   ?help [what]    Gives you this document and any optional hits on 'what'.
   ?limit=n what   Returns the 'n' items on 'what'.
   ?range=n1-n2    Returns items from 'n1' through 'n2'
   ?version[what]  Returns the version of jughead and any optional hits on
'what'.
```

Only 1 special command is supported per query, and if any syntax error is encountered it is reported as the title to this document.

Currently there is no way to search on the words "AND", "OR", or "NOT"; nor is there a way to break an expression into a group of smaller expressions.

All words are broken into smaller words if any word contains a whitespace character or one of the following characters:

```
   !"#$%&'()+,-./:;<=>?@[\]^_`{|}~
```

Thus if a menu item has the name "A sample.file", this is broken into the three words "A", "sample", and "file". So if your search statement is: "sample.file some_thing-else", your query gets broken into the statement: "sample AND file AND some AND thing AND else", which will only return those items with all these words in the menu.

jughead is an acronym for:

```
   Jonzy's Universal Gopher Hierarchy Excavation And Display
```