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 one 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.

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):

- CREN/CSNET
- DDN (Defense Data Net)
- ESNET (Energy Sciences Network)
- NASA Science Internet
- NSFNET (National Science Foundation Network)
- Terrestrial Wideband Network

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 truncate 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 "mars".

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".

`cal <year>` Prints a calendar for the year <year>

`cat <file>` Displays <file> all at once

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

`chmod xxx <file>` Changes the permission modes on <file> to xxx (type "man chmod" at the UNIX prompt for more information)

`clear` Clears the screen

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

`date` Reports the current time and date

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

`emacs <file>` Uses the text editor *Emacs* to edit the file <file>

`finger <user>` Displays information about a user

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

`grep` Search files for a pattern

`head <file>` Displays the first few lines of <file>

`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` UIUC 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>

`tail <file>` Displays the last few lines of <file>

`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
p	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

<u>Sending mail.</u> 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 whcih 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. mars.ncsa.uiuc.edu or 141.142.20.13 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:
FTP (File Transfer Protocol)

The File Transfer Protocol (FTP) is the Internet standard protocol 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 usually also of the program the user invokes to execute it (e.g., by typing ftp host.bbn.com). FTP is available on several operating systems.

Anonymous FTP, like Telnet, requires access to the Internet . Unlike Telnet, anonymous FTP is widely available. Anyone can become an Internet traveler by giving the command ftp host, for example, ftp cs.fredonia.edu. When the remote host prompts with login: and password: (or something similar—details vary on different types of computers) the traveler types "anonymous" for the login name and "guest" for the password. The UNIX command “ftp” stands for “file transfer program”, whereas the acronym FTP stands for “File Transfer Protocol”. When using ftp (the program) it is important that you do not capitalize the letters (UNIX is case-sensitive).

After logging in, the traveler remains in a program with a restricted set of commands. Files on the remote host are usually protected so that visitors cannot change or delete them.

This is a partial UNIX manual entry for ftp. A complete entry can be found by typing “man ftp” at the UNIX prompt.

`ftp` - file transfer program

The ftp command is the user interface to the ARPANET standard File Transfer Protocol. The program allows a user to transfer files to and from a remote network site.

The client host with which ftp is to communicate may be specified on the command line. If the client host is specified on the command line, ftp immediately attempts to establish a connection to an FTP server on that host; otherwise, ftp enters its command interpreter and awaits instructions from the user. While ftp is awaiting commands from the user, it provides the user with the prompt: **`ftp>`**.

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.

<u>Aborting a file transfer</u> 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

An alternative to reading your mail through Unix is by use of a program called Eudora. Eudora is a mail utility for the Macintosh 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 hard drive. You can page through the headers of your messages and click on the ones you want to read. A nice feature is one which allows you to have multiple mailboxes which you name yourself; you can sort your messages by subject in this manner and put them in the appropriate mailboxes. Eudora also allows you to send files to other users. As long as the recipient of your message is also using Eudora you can send files to them -- text files, applications, any Macintosh files. Eudora takes care of all the conversion for you.

Eudora Installation

1) First it is necessary to install the communications toolbox.

2) Restart your Macintosh with disk #2: Communications Toolbox in the drive. Your Macintosh musted booted from this floppy.

3) Double click on the ***Installer Script*** file.

4) Click ***OK*** in the 'Welcome' window.

5) In the 'Easy Install' window, click ***Install.***

6) At this point, the software will take over and install itself.

7) When it finishes, a window will come up that says that the software was successfully installed. Click ***Quit.***

8) Make sure the **communications folder** was installed in the system folder on the hard disk. Also make sure the files "Apple Modem Tool," "XMODEM Tool," and "Text Tool" are in that communicatons folder. If these are not in the system folder, copy the whole folder (with the three tool files) into the system folder of the hard disk. The communications folder can be found in the system folder of the floppy disk.

9) Now you *should restart* your computer.

Now follow the **Eudora Installation Instructions** to install Eudora.

Eudora Installation Instructions

0) Install the Communications Toolbox first. See **’Communications Toolbox Instructions**, above.

1) Once you have put disk #1 with Eudora on it in the drive, double click on the picture of the folder titled **EUDORA.**

2) Drag the **EUDORA** program (looks like an envelope) to your hard disk. You might put it inside a folder or by itself.

3) After you have done this, drag the ***Eudora Folder*** folder into the system folder, without dragging it into another folder inside the <u>system</u> folder.

4) Now close all windows, go back to your hard disk and open up **EUDORA**. Go to the ’Special’ menu and select ’Configuration’. At this point you can read page v for additional information.   (your POP account and Return address are:

<your login name>@ncsa.uiuc.edu

and the SMTP and Ph servers are:

ncsa.uiuc.edu.

5) Pull down the ***’Special’*** menu and choose ***’Communications...’*** .

6) Now you can check that the communication settings are correct:

<u>Method:</u> Apple Modem Tool

MODEM SETTINGS

Dial Phone Number*: 244-0662 (or 1-217-244-0662)

Redial: 3 times

Every: 20 seconds

PORT SETTINGS

Baud Rate: 2400 (or whatever baud rate your modem is)

Parity: None

Data Bits: 8

Stop Bits: 1

Handshake: None

Dial: Tone
Modem: Apple Data Modem 2400 (or whatever modem you are using)

Current Port: Modem Port (picture of a phone)

If any of your settings do not match these, click on the incorrect setting and choose the appropriate setting from the list that appears.

Now you are ready to send mail and receive mail. Everything is fairly easy to do, especially if you are familiar with Macintosh software. The instruction manual is included here, which gives detailed instructions about all the functions. We have already set up some nicknames so you can send mail to us very easily: Just go to the *Message* menu and pull down to *Message to* and then drag to *BrianGolden* or *ChuckFarmer* or *LisaBievenue*. We have also added other teachers in the Champaign/Urbana area to the nickname list.

If you have any questions, feel free to send us mail using Eudora. This will give you practice using the software. Good luck!

Eudora Manual

NOTE: This Eudora manual is divided into three main sections, we have included the first to sections because they contain all of the information necessary to get started. The third section contains detailed explanations of advanced features. The entire manual is available from many anonymous FTP sites:

For basic guidance on setting up and configuring the Eudora program such that you can use it to send and recieve electronic mail.

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

Eudora - *Getting Started*

1. System Requirements

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

- *Macintosh System 6.04* or newer.
- *MacTCP* (software) for network connection or *The Macintosh*
- *Communications Toolbox* (software) for modem or serial connection.
- Ethernet card *or* an AppleTalk to IP (Internet Protocol) gateway (e.g. a Fastpath or Gatorbox) *or* a modem or other serial connection.
- Account on a computer with POP 3 (Post Office Protocol 3) server.
- *Eudora* program (software).

See Appendix A in the Reference Guide if you don't have this software or (UIUC users only) the necessary account.

2. Installing MacTCP or Communications Toolbox

MacTCP software is necessary to use Eudora if your Macintosh has a network connection. For help with installing MacTCP, please see the "Eudora-QA" HyperCard stack that accompanies Eudora.

Communications Toolbox (CTB) software is needed for Eudora if your Macintosh uses a modem or other serial connection, but no network connection. To install it, boot your Macintosh from the "Network Products Installer" disk from the proper set of "System Tools" disks for your Macintosh (if you use a Macintosh older than the Classic, LC, and IIsi, you may boot directly from the "Communications 1" diskette, if you wish). Click "OK" at the opening screen. Select "Communications Toolbox," and click "Install." When you are asked to insert the "Communications 1" disk, do so. When the installer is finished, click the "Quit" button. Use the Finder to drag the "Communications Folder" from the "Communications 1" disk into your System Folder. Restart your Macintosh. After you have installed Eudora, choose "Communications" from the "Special" menu, and select settings appropriate to your modem or other device.

Unless you use a Cisco terminal server, some work will have to be done with ResEdit to make Eudora work with the CTB. Please have a local expert refer to Appendix D of this manual for details.

3. Installing Eudora

To install Eudora on your Macintosh, copy the program from the diskette to your hard drive. The program will appear as the following icon:

4. Eudora Configuration

Once you have installed Eudora, double click on its icon and the program will open. Before you can actually use Eudora, you must give it some necessary pieces of information. To enter this information, select “Configuration” from the Special menu. A large dialog box will appear.

To use Eudora, you need to have an account on a computer that runs a *POP 3 (Post Office Protocol) server*. In the top "POP account" box, enter ***your*** login name for this account and the full (domain) name of the computer, separating them with an “@” sign.

For example, if your assigned login name was “carolyn”, and the name of the computer where you receive e-mail was “uxh.cso.uiuc.edu”, you would enter *carolyn@uxh.cso.uiuc.edu* in the "POP account" box.

If you are using Eudora with a network connection, "MacTCP" should be selected next to the option "Connection Method."

If you are using a modem or other serial connection, click on the "Communications Toolbox" for the "Connection Method" option. Then choose "Communications" from the Special menu, and select the appropriate modem/serial communications settings.

For now, it is best to leave the other items unchanged, and click on the "OK" button.

For information on the other Configuration settings, please refer to the Reference Guide (Section 20).

Eudora - *Tutorial*

The Eudora Tutorial is designed to be a step-by-step introduction to basic features of the Eudora electronic mail program. Please follow the instructions in “Getting Started” before beginning this tutorial.

1. Creating an Outgoing Message

A good way to begin familiarizing yourself with Eudora is to create an *.i.Messages:outgoing:definition;outgoing message*. An outgoing message is one that you will send to someone else; it is “going out” from your Macintosh.

Select .i."New Message" command;“New Message” from the .i.Message menu;Message menu. A new message window will appear, with the blinking insertion point situated at the start of the “T.i."To:";o:”.i.Fields:definition; *field*. (A field is simply a space for information).

You will notice an "icon bar" of symbols and check marks between the title of this message window and the "To:" field. You may ignore the icon bar for now.

Since it would be easiest to experiment with Eudora by sending a message to yourself, type your own e-mail address in the “To:” field.

Note that the “From:” field has been automatically filled in (and can’t be altered within the message). This is the message’s.i.Return address; *return address*; it should be your own e-mail (POP account) address, thus the same address as you typed in the “To:” field above it.

Press the TAB key or point and click the mouse to move the insertion point down to the “Su.i."Subject:";bject:” field. Typically you type in this field some brief text indicating what the message is about. For this message, type in the words “test message.”

Move the insertion point past the remaining “Cc:,” “Bcc:,” and “X-Attachment:” fields down to the large area below them; this area is reserved for the actual body .i.Messages:body of;of the message. Here you may type in whatever text you wish. When you have finished composing your message, to be referred to throughout this tutorial as your *test message*, your message window should look something like the following figure.

2. .i.Messages:sending;Sending a Message

Notice a .i."Send" command;"Send" button in the upper right hand corner of your message window. In order to send a message in its current state, you simply click on this button. Do this.

Your message window will immediately close, and .i.Progress window;"progress" windows will momentarily appear on the top of your screen, indicating that the message is being transferred out onto the network.

3. .i.Checking for Mail;Checking for and Receiving Mail

Now that you've seen how to create and send a message, it's time to find out how to check for and receive incoming mail.

There are two ways to check your.i.POP Server; POP (Post Office Protocol) Server to see if a message has arrived for you. To best understand the functioning of the POP server with respect to Eudora, please see Appendix XX.

One way to check for mail is aut.i.Checking for Mail:automatic check;omatic, and is determined by the.i.Check for Mail Every ? Minute(s); "Check for mail every ? minutes" setting in your program Configuration. The alternative is to check for mail.i.Checking for Mail:manual check; manually whenever you wish, by selecting the .i."Check Mail" command;"Check Mail" command from the .i.File menu;File menu. Do this manual check now.

There is .i.Password:protection;password protection on mail checks to your account on the POP server. Each time the Eudora program is opened, your password will be requested prior to the first mail check, whether it is conducted automatically or manually. Upon the first check, such as now, a dialog box will appear, requesting the password of your POP account.

Type in the password of your POP account box at the insertion point and click the "OK" button. If you make a mistake before clicking "OK," simply backspace and re-enter the password correctly. If your password is rejected, you will have to do a another manual check (by choosing "Check Mail" from the File menu) to have another chance to enter your password.

After successfully entering your password, some.i.Progress window; "progress" windows should appear briefly at the top of your screen, showing that an attempt to reach your POP account is being made.

If there is a problem with the network between you and the PO.i.POP Server:problems reaching;P server, a dialog box will appear telling you so, at which time you'll have to consult with your system administrator to rectify the situation.

If there is no mail waiting when a manual check is conducted, nothing will happen. This means that your test message has not been delivered to your POP account yet.

If mail is found waiting in your POP account, a momentary .i.Progress window;“progress” window will appear at the top of your screen, allowing you to monitor any message(s) being sent from the POP server to your Macintosh system.

This will be followed by a dialog box stating that you have new mail.

Keep choosing.i."Check Mail" command; “Check Mail” from the.i.File menu; File menu until a message arrives; this will be your test message. When a mail check finally yields the return of your test message, click the “OK” button in the dialog box informing you that new mail has arrived. The.i.Mailbox:In; In mailbox window will automatically appear, listing inside it any incoming messages.

Messages stored in a mailbox are listed in that mailbox window, like that above, as individual.i.Message summaries; *message summaries*. A message summary is divided into fields containing the address of sender or recipient of the message, the contents of the.i."Subject:"; “Subject” field, and possibly the date and size, depending on which mailbox window you are looking at. Your test message should be listed in the In mailbox, and can be identified by what was entered in its .i."From:";“From," .i."Date:";"Date," and “Subject” fields.

To open .i.Messages:opening;up a message, simply double click on its corresponding message summary within the listing in the mailbox window. Do this for your arrived test message, and it will be displayed on the screen.

.i.Messages:incoming;Incoming messages will be stored indefinitely in the In m.i.Mailbox:In;ailbox unless they are deleted or transferred to another mailbox (to be discussed).

Now close the message window (either by clicking the close box in the upper left-hand corner of the message window or by selecting "Close" form the File menu). Also close the In mailbox (in the same fashion).

4..i.Mailbox:opening; Opening a Mailbox to View a Message

Opening any mailbox is easily accomplished by selecting that mailbox from the list that appears under the Mailbox menu.

To open the In mailbox where your test message is currently being stored, select In from the .i.Mailbox menu;Mailbox menu. The In mailbox window will then be displayed, with your test message summary listed inside.

NOTE: A moment should be taken here to define a special term to be used throughout this tutorial as well as in the Eudora Reference Guide. Eudora has been designed such that nearly every command can be applied to a message that has been opened on the screen, or alternatively to a message summary that has been selected (i.e. highlighted) within a mailbox window. This allows Eudora users to apply commands to messages without opening them first. For future reference, whenever the term “*curre.i.Messages:current;nt message*” is used in explanations of this tutorial or in the reference guide, it refers to a message that may either be open and is in the topmost window, or whose message summary is simply selected within a mailbox window. See the following example Figures.

The above two windws show what constitutes a “current message.” A current message is one that is open and topmost on the screen (above), or one whose summary is selected within a mailbox window (below).

5..i.Messages:replying to; Replying To a Message

For any current incoming message, you may easily initiate a reply message to its sender. (An .i.Messages:incoming;"incoming" message is one that has arrived to Eudora on your Macintosh).

If you haven’t already done so, open your test message from its place in the In mailbox. If this had been a message from another individual, you might have wanted to send back a reply to that person. This does not require creating a new message as described in Section 1 of this tutorial. Instead, choose.i."Reply" command; “Reply” from the .i.Message menu;Message menu.

A new message window will appear, with the sender’s address (in this case, your own) automatically placed in the “T.i."To:";o:” field of the header. The original sender’s text will also be automatically included in the beginning of the message (marked by “>” markers at the beginning of each line) for reference. This text may be edited as needed or since it is fully selected in the new message window, it can be easily deleted if you so wish. You may enter more text in the reply message just as in any outgoing message. See the following figure.

Use the cursor to move the insertion point to the area below the original message and type in some additional text as you would normally when replying to a note. After typing in the text, leave this reply window open.

6. Saving a.i.Messages:outgoing:saving;n Outgoing Message

Sometimes it is convenient to save an outgoing message either as a safeguard when typing long messages, or for temporary storage so you can return to it at a later time for changes or additions.

To save any outgoing message, such as your new reply message, select .i."Save" command;“Save” from the.i.File menu; File menu. This won’t close the message window but will save the version of the message (as it appears at the time of the save) in the .i.Mailbox:Out;Out mailbox, which holds all outgoing mail.

As long as an outgoing message has not yet been sent out on the network, editions may be made to it. For example, if you had wanted to also send the message to another person, you could add his/her address to the “T.i."To:";o:” field (any two addresses in a single field must be separated by a comma). Having saved your reply message, close the reply message window. If you’d like, open the Out mailbox (select Out from the.i.Mailbox menu; Mailbox menu) and verify that the reply message has been stored there.

7..i.Mailbox:creating; Creating a New Mailbox

A convenient feature of Eudora allows you to easily organize your incoming mail by creating new mailboxes in which to store received messages. The easiest way to create a new mailbox is to choose.i."New" command; "New..." from the Mailbox menu. A dialog box will appear requesting the name of the mailbox to be created.

Any name may be typed in here, but for this example, type in *Testing*. (Note the existence of .i."Make it a Folder" command;"Make it a Folder" option. This would allow you to create a ma.i.Folder:creating;il folder, in which one or more mailboxes can be placed for more advanced organizational purposes. For now, don’t select this option; to learn more about it, refer to the Reference Guide.) Click the “OK” button, and a new mailbox called "Testing" will have been created. To verify this, find and select "Testing" from the Mailbox menu. An empty mailbox window by that name will appear.

8. .i.Messages:transferring between mailboxes; Transferring a Message Between Mailboxes

Messages can be easily transferred between already existing mailboxes. This will be demonstrated by moving your original test message from your In box to your newly created Testing mailbox.

First, select "In" mailbox from the .i.Mailbox menu;Mailbox menu and select your test message summary within the mailbox window. Next, choose "Testing" from the.i.Transfer menu; Transfer menu.

This will remove your test message from In and place it in the Testing mailbox. If you wish, open the Testing mailbox to verify that the message has been transferred there.

9. Delet.i.Messages:deleting;ing a Message

Incoming messages may be stored in any mailbox (except the.i.Mailbox:Out; Out mailbox) indefinitely and will remain there until they are explicitly deleted or transferred to another mailbox. Outgoing .i.Messages:outgoing;messages that have been saved for further editions will remain in the Out mailbox until they are either sent or deleted. Any curren.i.Messages:current;t message can be deleted with the .i."Delete" command;“Delete” command from the .i.Message menu;Message menu.
If you haven’t already done so, open your test message from its place in the Testing mailbox, and use the .i."Delete" command;“Delete” command to delete it from there. Open the Ou.i.Mailbox:Out;t mailbox and select (without opening) the message summary of the reply message you generated previously. Again, choose “Delete” from the .i.Message menu;Message menu, which will empty the Out mailbox.

As a safeguard, the "Delete" command doesn’t actually destroy messages but transfers them to the Tra.i.Mailbox:Trash;sh mailbox. So if you suddenly realized you had mistakenly deleted a message, it could be recovered from and transferred out of the Trash mailbox.

To destroy m.i.Messages:destroying;essages held in the Trash mailbox, choose.i."Empty Trash" command; “Empty Trash” from the .i.Special menu;Special menu.

One additional related command is recommended for efficient operation of Eudora. Even after a message has been deleted, the storage space which that message originally required is still taken. In order to reclaim the storage space, select the .i.Compact Mailboxes;“Compact Mailboxes” command from the Special menu. This command doesn’t have to be used every time a message is deleted, but should be used from time to time after many message deletions. This will reassign message storage in all mailboxes such that space is no longer allocated toward deleted messages.

* *

There are a host of other features and functions in Eudora. This tutorial was only an introduction to the most basic capabilities of this powerful program. You are invited to read the *Eudora Reference Guide* for more detailed explanations of the many available operations.

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 the appendix to this chapter.

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

Teachers,

Would you like to participate in a project that is designed to encourage students to ask questions and think about science? The “Ask the Scientist” project is a telecommunications project between local high schools and the elementary and middle schools. Elementary and middle school students will ask questions of advanced and A. P. science classes in the high schools. The high school students will then research the questions and respond with the answers. The communication will be done using computers (Macintoshes) and electronic mail. Some typical beginning questions might be: what is velveta made of? or how does a virus work?

The Ask the Scientist project can increase your students interest in science by challenging them to explore new areas for that better question. It will improve your students computer skills and sharpen their writing and communication skills. On a regular basis, a few of the best questions and answers will be posted to a national bulletin board.

If you are interested or have questions please call
Chuck Farmer at 244-6122, or e-mail cfarmer@ncsa.uiuc.edu

Sincerely,

Chuck Farmer
NCSA Consultant

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

Date: School year 1992-1993

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.

<u>REPORTING ON A CLASS EXCURSION</u>
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.

<u>LEARNING FROM OTHER CLASS EXCURSIONS</u>

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:

b. Have your students do some preliminary background reading on the destination(s) that interest you.

c. 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.

d. 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.

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, and so on.

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 Nancy Sutherland, FrEdMail Foundation
Coordinator: 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 da te indicated. All of these prices were transmitted to my electronic mail box v ia the FrEdMail network, and other numerous networks that exist beyond the FrEd Mail-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 acti vities 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	RICE	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

1.69	1.69	.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

1.70	1.04	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

NPTN/ACADEMY ONE UPCOMING PROJECT ANNOUNCEMENT

*** NPTN/ACADEMY ONE ANNOUNCES UPCOMING PROJECTS ***

In addition to the on-going projects in Academy One, there will be several short-duration projects in the months ahead. We are announcing these in plenty of time for you to plan to join us.

ACADEMY ONE SPECIAL EVENTS CALENDER

October	Solar Sailing Simulation and a Science Fiction anthology on solar sailing
Oct - Nov. 6	CAMPAIGN ’92
Nov - Dec 20	Letters to Santa Program
December	International Holiday Exchange
January	Future Problem Solving
February	Salute to Space Exploration
April - May	TeleOlympics

Each of the above programs will have several levels of participation from observer to maximal involvement. It is possible to involve many subjects and grade levels in each project. We are limited only by our imagination, time, and desire.

SOLAR SAILING SIMULATION is a tribute to the quincentenary anniversary of Christopher Columbus and the International Space Year. Originally, four nations (Japan, U.S., U.K. and Soviet Union) had planned to build and launch remote control solar sail vehicles this year. The project has been postponed, but University School in Ohio has organized this simulation for the schools. For additional information on this project write soon to Bob Morgan at aa629@cleveland.freenet.edu and get involved with the summer planning. For those schools not ready to build their own solar sail vessels, there will be a science fiction writing project for the students which will be compiled into an anthology.

CAMPAIGN ’92 will focus on the Presidential Elections. There will be information on such topics as WHY TO VOTE and the HISTORY OF SUFFRAGE. There will be a student issues board and debates between schools. Students can read the position papers from the major candidates and hold elections on the various issues and positions. This project will culminate with a final vote and compare the numbers of individual student votes with the electorial votes the students represent for their state.

LETTERS TO SANTA project will involve several grades. Typically, the youngest students (5-8) write letters to Santa on either paper or the computer. The 9-12 year olds at the same school might be learning word processing and touch typing and be assigned to correct spelling and grammar and/or enter the letters into the computer and upload them. The letters are then sent across the network to older students who act as Santa and respond to the letters. The letters are returned, downloaded by the 9-12 year-olds, printed on holiday stationary, and then given to the youngest during the holiday parties before vacation begins.

INTERNATIONAL HOLIDAY EXCHANGE is designed to allow students around the world to exchange information about the customs they celebrate at this time of the year. It can be extremely interesting to see the variety in customs and reasons for them. We also encourage the older generation to share memories of how those same holidays were celebrated many years ago. The generational exchange adds richness to this project.

FUTURE PROBLEM SOLVING involves a core team of educators who design and announce a problem for the students to solve. Students will work within their school to solve the complex problem and then write up their solution, support it, and post it for others to read. Students will be able to see how others solved the same problem and why they reached different conclusions.

SALUTE TO SPACE EXPLORATION will allow schools the opportunity to research and conduct their own space simulation or be a supporting part of a simulation at another school. Last year there were four separate historic missions going simultaneously.

TELEOLYMPICS is a "virtual" track meet whereby schools compete in their own schoolyards and report the top three contenders in each age category for boys and girls. There will be special events for wheelchair students. Information is also exchanged about their schools and communities. There will be Opening and Closing Ceremonies as in the real Olympics.

We will be sending out additional details on each of these events as the time draws closer. These projects are open to any school in the world with e.mail capabilities. If you are reading this announcement from a bulletin board or listserve and would like to be placed on the Academy One mailing list for further updates to be sent directly to your mailbox, send a message to John Kurilec at aa005@nptn.org and simply ask to be placed on the mailing list.

We look forward to your participation.

Linda Delzeit
NPTN Director of Education
Primary Sysop for Academy One
aa002@nptn.org

(Please distribute this message to other networks to help us reach all possible educators. Thank you.)

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

~~~~~~

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 e.mail 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 e.mailed 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.
6. All results must be received by 2400 EST on Monday, May 11, 1992 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 e.mail 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 e.mail 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 e.mail exchange. More details on both the chat and the e.mail 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 e.mail 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 e.mail exchange. More details on both the chat and the e.mail 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

simulataneously. 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 e.mail exchange.

2. Opening and Closing Ceremonies - e.mail 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 e.mail 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 e.mail 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 e.mail 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 e.mail to >> xx188@cleveland.freenet.edu attention: Linda Delzeit. >>

Name of School:

Name of Contact Person:

E.mail 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.

Solar Sail Update
COLUMBUS QUINCENTENARY EXPLORATION PROPOSAL

UPDATE, JULY 20, 1992

Robert E. Morgan
Director of the Computer Center
University School
20701 Brantley Rd.
Shaker Heights, Ohio 44122
216-321-8260
Cleveland Freenet aa629; internet aa629@cleveland.freenet.edu

The national Columbus Quincentenary Commission in cooperation with the International Space Year Committee, had planned to jointly sponsor a "solar sailing race" during 1992 as part of the celebration of exploration. However, due to technical and political problems, the race has been postponed until at least 1993 and probably later.

A number of nations had planned to build remote controlled solar sailing vehicles which were to be launched by the Soviet Union. It is now unclear when and how those vehicles will be launched. Certainly, political events in the Soviet Union may have an impact.

Solar sailing involves a spacecraft within the solar system which deploys huge light or, more accurately, photon reflecting sails (measured in square miles and probably made of thin reflective aluminum foil-like material) which catch the photons emitted by the sun much as a sail catches the wind and hence are moved. This intense stream of photons emitted by the sun will, if your reflective sail is big enough (and there are no size limits in outer space), actually push a vehicle along in outer space. Exposure to this photon stream causes a vehicle to move and to increase in velocity slowly. Such vehicles have seriously been proposed as low-cost methods for travel to other planets in the solar system. The solar wind normally discussed is actually the massive quantity of protons and electrons given off by the sun, not the streams of photons used in solar sailing.

A SOLAR SAILING SIMULATION
Although are plans are still in discussion, these are the components of the solar sailing simulation proposal:

1. A celebration of exploration would be the central focus. At University School, our space shuttle simulator facility will become a classroom simulated and manned solar sailing vehicle, probably named (temporarily) after one of Columbus' original ships. Students in participating schools worldwide would be involved in the simulation which might last several days for a quick simulation or even longer if the simulation uses "real time." Solar sailing simulators with varying degrees of complexity would be constructed at various schools. Students in schools nationwide would be involved via computer telecommunications much as we have done with shuttle missions in

the past.

2. Tie-ins to science, geography, history, the spirit of exploration, man's need to explore, the courage of explorers and etc. are (I hope) obvious and manifold. Individual schools will want to develop programs in many disciplines and at many grade levels to coordinate with the simulations. At University School, we hope these activities will be part of a year long school-wide them on exploration and discovery. Schools will be encouraged to share ideas and materials.

3. Local schools (Cleveland area, anyway) would also communicate with each other via amateur radio television (live video) and amateur radio. It is our intent that students aboard solar sailing simulators at each local school will be able to see each other in action and to communicate in real time. Schools in other areas might be able to make arrangements for the same type of activity. Since amateur television is short distance, arrangements will need to be made for each local area. We can provide help to those who are interested in finding local amateurs who might be able to help.

4. A national telecommunications hookup celebrating the ISY and Exploration will occur simultaneously via the Academy One project of the National Public Telecomputing Network. This activity would be under the auspices of NESPUT, the National Educational Simulations Project Using Telecommunications which I am coordinating.

THE DATE FOR THE TELECOMMUNICATED SIMULATION IS OCTOBER 13, 1992.

In addition to the simulations in which schools operate simulated solar sailing vehicles, several other telecommunicated activities are planned including the posting of student stories on Kid Trek.

A representative from NASA's Lewis Research Center is working with the group as well.

IT'S NOT TOO LATE! YOU'RE INVITED TO PARTICIPATE! CONTACT ROBERT MORGAN (ADDRESSES ABOVE) IF YOU'RE INTERESTED!

WE'D LIKE SCHOOLS WORLDWIDE TO PARTICIPATE. LET US KNOW IF YOU'RE INTERESTED AND IF YOU'D LIKE MORE INFORMATION!

BIOMES PROJECT

I would like to hear from other science teachers who would like for their students to be involved in exchanging information, data, pictures, and possibly specimens of plants, soil and rocks from their biome with students from other biomes. I would like to have at least one group from each of the major types of biomes. My students are 6th graders but yours need not be. The exchange of materials can be either electronic or the old fashioned way. I would like to begin this project in either October or November.

If you would like for your students to participate please contact me via the INTERNET at kirkb@tenet.edu

Kirk Beckendorf
Fredericksburg Middle School
Fredericksburg, Texas

Fall NEWSDAY - Call #1

It's time for our Fall Semester NEWSDAY. Our spring NEWSDAY was a smashing success, with many schools participating and sharing their productions. Now's the time to begin organizing to participate in our next NEWSDAY scheduled for November 6, 1992.

Please print and distribute this call for collaboration to teachers you know who may be interested in participating.

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 cancelled. 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.

Contents:

August 16, 1992

NEWSDAY REGISTRATION

Only bonafide participants in NEWSDAY will be eligible to receive opies 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.

<u>GENERAL PROCEDURE</u>

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 spokepersons 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 benefitted, 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.

Attached file #5 is a lesson on writing a newspaper report of information.
Attached file #6 is a lesson on conducting an interview. You will need to modify and adapt the lesson to focus on

views and opinions surrounding the theme of this newsday.

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 Delivery people 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.

Project KYBER-12

Greetings!

I solicit your participation in Project KYBER-12. Project KYBER-12 is an intensive, systematic study of the leadership, management, and supervision of K12 computer networking (computer-mediated communication, computer telecommunications). Project KYBER-12 seeks information on the following topics:

1. Exemplary K12 computer networking initiatives, projects, programs, operations,
2. Purpose, vision, and/or futures of initiatives, projects, and programs in K12 computer networking,
3. Policy on K12 computer networking,
4. Funding and budgeting K12 computer networking
5. Planning K12 computer networking:
    a. Strategic,
    b. Long range,
    c. Intermediate range,
    d. Short range,
6. Evaluation (including designs and reports) of K12 computer networking,
7. Decision strategies/methods/techniques for resolving issues, problems, incidents involving K12 computer networking.
8. Empowerment, motivation, in-service, and teacher education factors relative to K12 computer networking,
9. Community, ethical, political, economic, and legal issues on K12 computer networking,
10. Bios/profiles/characteristics of leaders of exemplary K12 computer networking initiatives,

Please, contribute information on one or more of the above topics and/or related issues to Project KYBER-12, including:

1. Copies of newsletters, newspaper stories, and magazine/journal/periodical articles,
2. Copies of official documents (if possible),
3. Names (with e-mail addresses, postal addresses, phone numbers, and/or FAX numbers) of **key** contacts: leaders, superintendents, other school system administrators (directors, coordinators), supervisors, principals, teachers, and/or community/organizational supporters/partners, and
4. Your personal viewpoints and opinions.

I will summarize contributions to the list.

If possible, please send all communication to me privately - not the list.

Thank you,

Ermel

Dr. Ermel Stepp	Internet	m034050@marshall.wvnet.edu
Educational Administration	BITNET	m034050@marshall
Marshall University	FAX	(304) 696-6565
Huntington, WV 25755	VOICE	(304) 696-2946

Math Magic Project

Call for Math word problem contributors

Other MathMagic info:

EXCITING NEWS! There is now a project which will motivate students to solve open-ended math word problems and use modems to write their solutions. MATHMAGIC is a project which accomplishes this as well as bring students from around the world together in a collaborative effort.

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.

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:

Alan A. Hodson	Carol Hooper
900 S. Cotton	11201 Pebble Hills
El Paso, TX 79901	El Paso, TX 79936
(915) 533-5566	(915) 592-7787
FAX: (915) 775-6126	FAX: (915) 590-7034
ahodson@tenet.edu	cshooper@tenet.edu
alanh@laguna.epcc.edu	
FidoNet 1:381/64	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.

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Introduction to KIDLINK - Global dialog for kids 10 - 15

An interesting opportunity to educators

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.

<u>WHAT EDUCATORS SAY</u>
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 frienships 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 our's!) 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 trans- late 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."

Bertel Haarder, minister of Education & Research, Denmark:
"You are pioneers in an extremely important field of study. Participants in this experiment are laying the foundation for a very valuable form of internationalization bringing school children from all over the world in contact with one another thereby creating a lasting peacekeeping force in the hearts of future mankind. Thank you for your promising endeavours."

<u>APPLICATIONS - EXAMPLES</u>
Teacher: Mike Burleigh, of the Oldfield House School, in Hampton, United Kingdom:
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 activites 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 Projekt, 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, or David Crookall, Director:

E-mail: crookall @ ua1vm.bitnet or ua1vm.ua.edu
cschreib @ 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.

Time line: Register by March 15, 1992; Observations: March 25-27. Global Participation requested.

Please do NOT reply to me. Send your messages directly to Kathleen Smith at:

FrEdMail: ...!sdcoe!bonita!ksmith@uiuced.uiuc.fred.org

Internet: ksmith@uiuced.uiuc.fred.org

The FrEdMail Foundation

Dear Nooners,

In the attached file you will find the description of a much loved network project called the "NOON PROJECT". It is applicable for grades K-12 and requires only a few days of your time. I promise you will love this one. Capture the following text file and send me your acceptance a.s.a.p. The further you are in North-South distance from Illinois the better our chances for a great result. The best my classes have done in the past is to be 99.89% correct with a site in Alaska!

Hope to hear from a lot of you nooners out there, Kathleen

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. Ths a real, practical experiment which may provide lots of practice making measurements and using trigonometry, and statistics.

How to participate: Send a message to me (KSMITH@UIUCED2) stating your interest in participating. We will then set up a private conference that will give easy access to one another as we develop this project.

Deadline to respond: March 15, 1992

Observations: March 25 &27

Final results shared: April 15th

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 (probably 2/team) 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 precipitaton samples (rain, snow, sleet) for pH analysis to coinside 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 possiblity 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 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.

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 infor- mation 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

<u>CLASS B: Grades 7-9 (Ages 12 - 14)</u>

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 bordeless 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 interacive 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 frastrated 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 paticipants 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.

*** SUPPLEMENTAL MATERIALS ***

Videotapes and books about Japan are available through APICNET Secretariat on your demand.

(1)VIDEOTAPES

NIPPON - The land and its people
Video Series - English Version

This video series is based on the book "NIPPON - The land and its people" produced by Nippon Steel Corporation. This series has won The Second Japan Industrial Film and Video Festival 1989 Tokyo, The 1989 Foreign Minister’s Award, and The International Software Development Prize according to the pamphlet. Each video includes a Japanese / English narration booklet.

<Titles>
1.The Tradition of Performing Arts in Japan
    The Heart of KABUKI,NOH and BUNRAKU
2.The Japanese Businessman
    The The Fighting Spirit within the Group Ethic
3.The Japanese Family
    The Lifestyle of the Businessman
4.The Taste of Japan
    A Tradition of Hospitality
5.Japanese Technology
    A Tradition of Craftsmanship
6.Japanese Society
    In Tokyo and In the Country

<Price>
NTSC : 3,000 yen per Title
PAL : 6,000 yen per Title
SECAM : 7,000 yen per Title

The color pamphlet is available on your demand.

(2)BOOK

"TSUKURU: Aesthetics at Work"
(146 pages / English / color)

This is a book published by Matsuda Motor Corporation as a corporate communication material. But I should say that it's not a corporate advertisement but a pure Japanese culture book. And thanks to Matsuda we've got 40 free copies so that we could provide you with a copy for nothing. But please be sure that we'll do a random selection if we have more than 40 applicants.

*** CONTACT ***

Toshi Tsubo & Yoko Kaneko
APICNET Secretariat

c/o GLOBAL COMMONS, INC.
3F KY Bldg. 1-9-3 Nishi-waseda, Shinjuiku, Tokyo, 169 Japan TEL; int'l + 81-3-3204-8104 FAX; int'l + 81-3-3202-2414 Dialcom Mail; 7014:gci001
Internet; tsubo@twics.co.jp

WHAT'S JAPAN? APPLICATION FORM

Name of School / Institution..............................
Contact Person (Ms. / Mr.)................................
Address...
....
Country....................
Tel....................
Fax....................
E-mail ID.................... Network....................
How old are your students?....................
How many students are planned to participate?....................
What network do you use to participate?.....
(APICNET / Dialcom Mail/ academic networks)
What language do you use to participate?.....(Japanese / English)
Do you want a copy of "TSUKURU: Aesthetics at Work"?.....(yes / no)
Do you want the pamphlet of the video series "NIPPON"?.....(yes / no)
What kind of personal computer do you use?....................
Dose your school have a Japanese class?.....(yes / no)
When is your vacation periods?....................
When is your examination periods?....................

Thank you for your cooperation!

===

*ABOUT APICNET

APICNET(Asia Pacific Interactive Communication NETwork) is a personal computer network for global education and international cooperation promoted by APIC(Association for Promotion of International Cooperation), an affiliated organization of Foreign Ministry of Japan.

Its aims are...

(1) Facilitating global education (education aimed at international understanding, environmental education, development education, etc.) by providing cross border learning and educational environment for the young generation.

(2) Creating a effective communication environment for those engaging in international cooperation activities.

(3) Promoting interchanges between those active in the educational circles and those in the international cooperation.

The brochures of both APIC and APICNET are available through APICNET Secretariat. Contact and tell us in which form (paper or electronic document) and in which language (English or Japanese) you want.

*PROPOSAL TO EDUCATIONAL NETWORKING ORGANIZATIONS IN OTHER COUNTRIES

We are planning to promote this "What's Japan?" program every year. We hope the program grow year by year in terms of the contents and the number of participants. On the other hand, we hope that the similar programs such as "What's Germany?", "What's Australia?" by each initiative will come out, so that we could realize two-way or multi-way cultural programs. Thank you.

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 acknowledgement, 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.

---------- Complete and submit the following template ------------

Title of your Lesson Plan: ____________________________________

SIG/Tel Member? ______ If not, give name of SIG/Tel member sponsoring this entry:

____

Author Name: ____

Other Contributing Authors: ___________________________________

____

School: ____

School Address: ____

____

____

Country: ____________________

Email Address: Network Name ___________________________
ID/Address ______________________________

Telephone Number (School): ____________________________
Telephone Number (Home - Optional): _________________________

[Entry limited to two pages (132 lines) from here to end of template.]
Title of your Lesson Plan:
Objective(s) of Lesson:
Hardware/Software Needed:
Telecommunication Resources Needed or Recommended (i.e. local BBS, Internet, WorldClassroom, AT&T Learning Circles, online database):
Curriculum Area(s) Involved:
Grade Level(s) Targeted:
Class Management Strategies:
Class Time Required:
Print Materials Needed:
Procedures/Activities:
Method(s) for Evaluating Student Achievement of Objective(s):

International Society for Technology in Education
Special Interest Group for Telecommunication

** PLEASE-- Direct questions about membership rates and **
** benefits to ISTE, not the poster of this message **

SIG/Tel's goal is to support and promote the use of telecommunication as a tool for the enhancement of learning and the delivery of instruction. The main, but not exclusive, medium of interest is computer-based communication, alone or combined with television, radio, telephone, and/or other media. Specifically, SIG/Tel:
a. Promotes the appropriate use of telecommunication technologies in learning
b. Initiates and encourage research on instructional telecommunication
c. Collects and disseminates information on educational applications of telecommunication
d. Assists in the development of communication links for students and educators.
Activities of the group include publications, conference seminars, cooperative classroom projects, cooperative research, online discussions and news, and a printed newsletter.

Our annual meeting takes place at the National (USA) Educational Computer Conference, "NECC". The next such meeting is June 1992 in Dallas. SIG/Tel will also sponsor two sessions at NECC.

Our newsletter, T.I.E. News, is in its third year of publication. It has a ten-member editorial board, composed of respected experts in the field.

There are currently six committees:
1. PROJECTS - promotes cooperative classroom projects
2. COMMUNICATION - manages our electronic "home" in ISTE-Net (GTE) and informs about SIG/Tel on other nets
3. RESEARCH - promotes cooperative research efforts
4. PUBLICATION - coordinates print publication efforts
5. INTERNATIONAL - promotes international activities
6. TRAINING - discusses ways of providing appropriate inservice training on telecommunication.

ISTE is a not-for-profit professional membership society serving computer-using educators around the world. ISTE is dedicated to the improvement of education at all levels through the use of computer based technology.

To join SIG/Tel, fill out the form below and send it to:
ISTE
1787 Agate Street
Eugene, OR 97403

*** * * MEMBERSHIP FORM FOR ISTE AND SIG/TEL * * ***

Name ____

Address ____

____

City & State/Province ____

Zip/Postal Code __________________________ Country _________________ Phone (______) _______________

AMOUNT DUE:
[ ] Join SIG/Tel for 1 year ....($16.00) $____.____
SIG/Tel members MUST belong to ISTE. Contact ISTE to receive "TIE News" without joining.
[ ] Join ISTE for 1 year ....($46.00) $____.____
Check ONE periodical if joining ISTE
[ ] The Computing Teacher
[ ] Jrnl. of Research on Computing in Ed. Contact ISTE on how to receive both journals.

Subtotal -> -> $____.____
[ ] I belong to an ISTE Organizational Affiliate

OA Name: ____________________ (-15% of subtotal) $-_______

[ ] Non-US SIG/Tel membership ....($10.00) $____.____ [ ] Non-US ISTE membership ....($10.00) $____.____ [ ] Purchase order processing ....($2.50) $____.____ [ ] C.O.D. processing ....($2.75) $____.____

Total -> -> $____.____

[ ] As an ISTE member, I would like to receive a complimentary subscription to Electronic Learning

METHOD OF PAYMENT (please check one):

[ ] Purchase order enclosed (include $2.50 fee above) [ ] Check enclosed in US funds, made out to ISTE [ ] C.O.D.-- pay UPS the total on delivery (add $2.75 fee above) [ ] Charge my credit card - [ ] VISA

[ ] Mastercard

Number - _ _ _ _ _ _ _ _ _ _ _ _ _ _ Expires - ___ /_____

Name on card - ____

OPTIONAL INFORMATION:

[ ] I am interested in the following SIG/Tel committee (s):

[ ] PROJECTS [ ] COMMUNICATION [ ] RESEARCH

[ ] PUBLICATION [ ] INTERNATIONAL [ ] TRAINING [ ] I have access to electronic mail on Compuserve..__________________ Bitnet....__________________ Prodigy.....__________________ FrEdMail..__________________ AppleLink...__________________ GTE.......__________________ [ ] This information may be included in a SIG/Tel directory

For information on student rates, details on ISTE (benefits, OAs activities, etc.), how to submit forms by fax or e-mail, or other questions, write to ISTE at the address above, or:

Phone: 503/346-4414 CompuServe: 70014,2117

Fax: 503/346-5890 GTE: ISTE.office

Bitnet: ISTE@Oregon

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 coauthor 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 e.mail 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 Hubbel 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.

Thank you.
Linda Delzeit

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 upon 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.

NCSA and the Internet: Using your telecommunication software (e.g. Z-Term or Procomm), dial 244-0662 or 244-6736 and login with your NCSA login (you will be logged on to a SUN using the Unix operating system). There are several different SUNs that you can log on to, some of the names are: pluto, mars, and saturn.

Cleveland Free-Net: From your internet login, use the command **telnet** (see chapter 5). The Internet “address” of Cleveland Free-Net is `freenet-in-a.cwru.edu`, `freenet-in-b.cwru`, or `freenet-in-c.cwru.edu`.

FrEdMail: For UIUC Board One call 333-2246 or 1-800-527-9937

For UIUC Board Two call 244-3368

For Urbana Board call 384-3606

Joining the KIDSNET mailing list

The KIDSNET list 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:

kidsnet-request@vms.cis.pitt.edu [Internet] joinkids@vms.cis.pitt.edu [Internet]
joinkids@pittvms [BITNET]

A spin-off of the KIDSNET 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 KIDSNET 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 KIDSNET list are accomplished with mailings to the address
kidsnet@vms.cis.pitt.edu [Internet]
or
kidsnet@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 Back Issues

The KIDSNET archive is now back in service after a brief interruption. Instructions for accessing the archive are attached below.

In response to many requests over the last year I have edited previous KIDSNET 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. Its numerical address (which you should not really need) is 130.49.33.16. 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

Updated Special Internet Services List

Summary: Changed IP addresses for FEDIX & MOLIS, added IPSM and another Backgammon server and Ham Radio Callbook and Stock Market Report, re-added Oracle, added Whois server.

*** SPECIAL INTERNET CONNECTIONS: Last Update: 9/1/92 ***
* Compiled By: Scott Yanoff - yanoff@csd4.csd.uwm.edu *
* A + by an entry designates new entries/changes to the list since last update *
* Finger yanoff@csd4.csd.uwm.edu to find ways to receive this list!

-Am. Philos. Assoc. telnet atl.calstate.edu or telnet 130.150.102.33
offers: BBS for APA. (Login: apa)

-Archie

telnet archie.mcgill.ca or	132.206.2.3	(Canada)
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])

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: alterative Archie access to those w/o ftp or telnet.

+Baseball Scores finger jtchern@ocf.berkeley.edu for scores/standings OR
mail jtchern@ocf.berkeley.edu w/Subject: MLB
offers: The latter will subscribe you to receive Major League scores daily!

+Backgammon Server telnet 134.130.13.46 4321
offers: Play Backgammon! (Login: guest)

-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 eve.assumption.edu 5000 or 192.80.61.5 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)

-Distance Educat. Data telnet sun.nsf.ac.uk or telnet 128.86.8.7
(Login: janet Hostname: uk.ac.open.acs.vax Username: icdl)

-DUATS telnet duat.contel.com or telnet 131.131.7.105
telnet duats.contel.com or telnet 131.131.7.106
offers: Aviation weather, flight planning. (Login: <last name>)
The first address is for certified pilots, the second for uncertified.

-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.

-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)

+Freenet

telnet yfn.ysu.edu or 192.55.234.27
(Login: visitor)
telnet freenet-in-[a,b,c].cwru.edu or 129.22.8.47
telnet heartland.bradley.edu or 136.176.10.10
(login: fnguest)

offers: USA Today Headline News, Sports, etc...

+Fileserver via Email mail smiley@uiuc.edu

In body-of-message: Filesend: help and on a separate line: Filesend: list

-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

ftp ocf.berkeley.edu or ftp 128.32.184.254
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!

ftp archive.umich.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 or telnet 134.172.1.160
offers: gene sequence info. (Login: genbank Password: 4nigms)

-Genetics Bank mail gene-server@bchs.uh.edu
Subject: help Offers: genetic database accessable via email.

-Geographic Server
telnet martini.eecs.umich.edu 3000 or 141.212.99.9 3000
offers: Info by city or area code (Population, Lat./Long., Elevation, etc).

-Georgetown Med. Lib.
telnet mars.georgetown.edu or telnet 141.161.40.4
(Login: medlib Password: dahlgren Last name: netguest)

-GO Server
telnet lacerta.unm.edu 6969
telnet 129.24.14.70 6969

telnet icsib18.icsi.Berkeley.EDU 6969
telnet cnam.cnam.fr 6969
telnet 192.33.159.6 6969
offers: Join others and play a game of GO. (Login/Password: go)

-Gopher
telnet consultant.micro.umn.edu
telnet 134.84.132.4
telnet panda.uiowa.edu
telnet 128.255.63.234
telnet gdunix.gd.chalmers.se
telnet 129.16.221.40 (SWEDISH)
telnet gopher.uiuc.edu
telnet 128.174.33.160
telnet gopher.unt.edu
telnet 129.120.1.42
telnet gopher.uwp.edu
telnet 131.210.1.4
Offers: access to other services, gophers, documents, etc. (Login: gopher)

-Ham Radio Callbook
telnet callsign.cs.buffalo.edu 2000
128.205.32.2 2000
offers: National ham radio call-sign callbook.

-Handicap/Medical Site
ftp handicap.shel.isc-br.com
ftp 129.189.4.184
offers: anonymous ftp of software and medical info.

-HP Calculator BBS telnet hpcvbbs.cv.hp.com or telnet 15.255.72.16
offers: BBS for HP Calc. users, with chat mode. (Login: new)

-Hytelnet Server
telnet access.usask.ca
telnet 128.233.3.1
telnet silence.pi.nctu.edu.tw
telnet 140.113.180.1
offers: univ. & library catalogues around the world. (Login: hytelnet)

-INFO - Rutgers CWIS telnet info.rutgers.edu or 128.6.26.25
offers: Dictionary, thesaurus, CIA world fact book, quotations database.

-Info/Software Server telnet rusmv1.rus.uni-stuttgart.de or 129.69.1.12
offers: journals, unix stuff, etc. login: infoserv or softserv

+Inter-Ntwk Mail Guide
telnet 192.134.69.8 1643
offers: List known networks and connections to/from them, help emailing.

-Internet Resource Guide
ftp nnsc.nsf.net
offers: compressed/tar'd list of net resources in /resource-guide.txt.tar.Z
ftp 141.142.50.20

+Iowa Politcl. Stk Mkt telnet ipsm.biz.uiowa.edu or 128.255.44.2
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 128.2.54.2
telnet ara.kaist.ac.kr or 143.248.1.53 (Login: irc)
telnet santafe.santafe.edu or 192.12.12.2 (Login: irc)
offers: Internet Relay Chat access, like a CB on the computer.

-Law Library telnet liberty.uc.wlu.edu or telnet 137.113.10.35
offers: Law libraries and legal research
ftp sulaw.law.su.oz.au (cd /pub/law)
(Login: lawlib) Offers copies of laws for each state, computer laws, and more!

-Library of Congress telnet dra.com or 192.65.218.43
offers: COPY of Library of Congress (Assumes terminal is emulating a vt100).

-List of Lists ftp ftp.nisc.sri.com or ftp 192.33.33.22
mail mlol-request@wariat.org (music list of lists)
offers: List of interest groups/email lists in /netinfo/interest-groups.

-Lunar/Planet. Instit.
telnet lpi.jsc.nasa.gov
telnet 192.101.147.11
offers: Resources on Geology, Geophys, Astron., Astrophys. (Login: lpi)

-Lyric/Music Server ftp cs.uwp.edu
ftp ftp.iastate.edu (/pub/lyrics)
offers: Lyrics, chords/tablature, and music pictures. (/pub/music/...)

-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
ftp sierra.stanford.edu
ftp 128.102.18.3
Login: anonymous
Password: "your email address"
offers: Ftp'able software for the Macintosh computers. Most also support other systems.

-Mail Srver/Usr Lookup
mail mail-server@pit-manager.mit.edu
in body of mail message: send usenet-addresses/[name searching for]

-Melvyl telnet melvyl.ucop.edu or 31.1.0.1
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 or 192.149.89.61
offers: Latest NASA news, including shuttle launches and satellite updates.

-Nat'l Education BBS

telnet nebbs.nersc.gov

telnet 128.55.160.162

offers: Education BBS (Login: guest)

-NED telnet ned.ipac.caltech.edu or telnet 134.4.10.118
offers: NASA Extragalactic Database. (Login: ned)

-Netfind User Lookup telnet bruno.cs.colorado.edu or 128.138.243.151
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)

-NICOL telnet nisc.jvnc.net or telnet 128.121.50.7
offers: Access to internet resources, Elec. Publishing Service (Login: nicol)

-NICOLAS telnet dftnic.gsfc.nasa.gov or telnet 128.183.10.3
offers: Network Info. Center On-Line Aid System (Login: dftnic)

-NNTP News Servers

telnet uwm.edu 119 or telnet 129.89.2.1 119

telnet sol.ctr.columbia.edu 119 or 128.59.64.40 119

telnet rusmv1.rus.uni-stuttgart.de 119 or 129.69.1.12

telnet news.fu-berlin.de 119 or 130.133.4.250 119

offers: Telnetable access to post to the Usenet news.

-NODIS telnet nssdc.gsfc.nasa.gov or telnet 128.183.36.25

telnet nssdca.gsfc.nasa.gov or telnet 128.183.36.23

offers: Menu-driven access to Nat'l Space Science Data Center (Login: nodis)

-Nuclear Data Center

telnet bnlnd2.dne.bnl.gov or telnet 130.199.112.132

offers: National nuclear data. (Login: nndc)

-Oceanic Info. Center
telnet delocn.udel.edu or telnet 128.175.24.1
(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 or telnet 35.1.48.150
telnet m-net.ann-arbor.mi.us or telnet 35.208.17.4
(Which host: um-m-net Enter 'g' for guest. login: newuser)
telnet nyx.cs.du.edu or 130.253.192.68
offers: Free account, with access to various UNIX features. (login: new)

+Public-Access Unix telnet digex.com or 192.55.213.2
offers: full internet services, anonymous accounts, privacy orientation.

-Readers Guide telnet lib.uwstout.edu or telnet 144.13.12.1
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 or 129.162.150.99 540
offers: SW Research Data Display & Analysis Center.

-SERVICES telnet wugate.wustl.edu or 128.252.120.1
offers: Access to nearly every listed service! (Login: services)

-Sid's Music Server mail mwilkenf@silver.ucs.indiana.edu
Subject: BOOTHELP Offers: Lists of rare live recordings, cd's for sale.

-Software Server (ASK)

telnet askhp.ask.uni-karlsruhe.de or 192.67.194.33
offers: On-line software search. (Login/password: ask)

-Spacemet telnet spacemet.phast.umass.edu or telnet 128.119.50.48
offers: Science/space bbs.

-SPAN telnet nssdca.gsfc.nasa.gov or telnet 128.183.36.23
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 or telnet 128.150.195.40
offers: Science & Technology Information System. (Login: public)

+Stock Market Report telnet a2i.rahul.net or telnet 192.160.13.1
offers: Public access unix for a fee, market report is free! (Login: guest)

-Supernet telnet supernet.ans.net or telnet 147.225.1.51
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

-UMD Info Database telnet info.umd.edu or telnet 128.8.10.29
offers: Info. docs on many subjects, incl. Supr. Crt Decisions (Login: info)

-UNC BBS telnet bbs.oit.unc.edu or telnet 152.2.22.80
offers: Access to Library of Congress and nationwide libraries (Login: bbs)

-WAIStation telnet quake.think.com or telnet 192.31.181.1
telnet nnsc.nsf.net or telnet 128.89.1.178
telnet wais.funet.fi or telnet 128.214.6.100
offers: Wide Area Info. Service. (Login: wais) FTP think.com for more info.

-Weather Service telnet downwind.sprl.umich.edu 3000 or 141.212.196.177
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 or telnet 129.79.254.191 2627

offers: Dictionary/Spelling service. Type "HELP" for info. (ALL CAPS!)

+Whois Service telnet nic.ddn.mil or telnet 192.112.36.5

offers: Way to find internet address given a keyword. To access type: whois

-World-Wide Web

telnet info.cern.ch or telnet 128.141.201.74 (SWISS)

telnet eies2.njit.edu or telnet 128.235.1.43 (USA [NJ])

telnet vms.huji.ac.il or telnet 128.139.4.3 (ISRAEL)

telnet info.funet.fi or telnet 128.214.6.100 (FINLAND)

offers: Access to various documents, lists, and services. (Login: WWW)

-ZIB Electronic Libr. telnet elib.zib-berlin.de or telnet 130.73.108.11

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 *

* PLEASE email me (Scott Yanoff) if you have any additional info/corrections/comments! *

Anonymous FTP List Frequently Asked Questions (FAQ)

Lists available:

SITES

o Site name	o Date of last audit (ISO format)
o IP address(s)	o UT/GMT difference
o Comments/problems address	o Country (ISO format)
o Organization	o Types of files
o E-mail server if available	o Restrictions

FILES

o Site name	o Date of last audit (ISO format)
o IP address(s)	o UT/GMT difference
o Types of files	o Country (ISO format)

*** 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.mcgill.ca (Canada)
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.

By:
John Granrose (odin@pilot.njin.net)
Mike Jones (mjones@ux1.cso.uiuc.edu)

Tom Czarnik (profile@netcom.com)

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 information is Mike Jones (mjones@ux1.cso.uiuc.edu)]

comp.sys.mac.faq

Last modified: August 14, 1992

Changes:
Question 3.5
Since bugs in the Compact Pro translator have been exterminated in the recent 3.01 release, Stuffit is now listed as being able to open Compact Pro files.

Question 5.7
Added a little more information about MacPalette.

Question 11.7
Stuffit SpaceSaver has been moved from the vaporware category to the "It's been released but the promised free upgrade wasn't really free so I don't have a copy yet so I can't say anything about it" category. I hope to rectify this omission in the next release of the FAQ. Meanwhile I've removed Compress Express from this category in favor of products that are actually shipping. Once AutoDoubler 2.0 and More Disk Space 2.0 are released I may finally get around to making a definite recommendation for one of these products versus the others.

Table of Contents

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? Where can I get it? How do I use it?
mac-to-workstation.txt	How do I connect my Mac and my Unix box?
modem-guide-10.txt	LOTS of useful information about modems, especially high speed modems and the alphabet soup of 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.hqx	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 for the SE/30?
se30-monitor-options.txt	
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 System 7 to fit on a bootable 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 (128.223.8.8) 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 (128.214.6.100), src.doc.ic.ac.uk (146.169.2.1), or ftp.irisa.fr (131.254.254.2) instead. Australian users should try to find what they want at archie.au (139.130.4.6) which mirrors the info-mac archives at Stanford. Japanese users can find sumex mirrored at utsun.s.u-tokyo.ac.jp (133.11.11.11).

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 (128.6.18.15, America), archie.mcgill.ca (132.206.2.3, the original archie server in Canada), archie.au (139.130.4.6, Australia), archie.funet.fi (128.214.6.100, the continent), and archie.doc.ic.ac.uk (146.169.3.7, 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.

"archie - An Electronic Directory Service for the Internet"

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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" [132.206.2.3] 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

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)

Zen and the Art of the Internet: A Beginner's Guide

The following is a brief description of the article entitled "Zen and the Art of the Internet'' and how to get it.

''Zen and the Art of the Internet'' serves as an introductory text to using the Internet in its various incarnations. In approximately 100 pages, Zen addresses domain names, electronic mail, telnet and ftp, and a variety of other topics. An extensive glossary and fairly decent bibliography are also included.

This booklet explicitly avoids being oriented towards one specific operating system or computing environment. It's not Unix-heavy, nor does it directly address VMS or any other OS. Rather, it provides the fundamental concepts and ideas behind using the Internet, and leaves the specific details of command options and usage to the local site.

Directors of academic computing services departments for universities and colleges are encouraged to make copies for their user communities; system administrators are welcome to offer it to their users, whether the system be private, commercial, or public; any companies in need of training or other educational literature may use this booklet as an aid; and, most of all, "normal users" are invited to use it to help expand their knowledge of the Internet and the possibilities it offers. The author is keenly interested in hearing from anyone considering large distribution; if you're going to do such a thing, please drop me a line just to satisfy my curiosity.

Now, how to get it: Printed copies are currently unavailable (Widener has no mechanism to deal with this sort of publishing). However, the guide will be available via anonymous FTP from a number of sites. As of now, it's stored in three forms: a .tar.Z file (Unix-ites will know what to do with this), a .dvi file (output from the TeX typesetting system), and a .PS (Postscript) file on:

* ftp.cs.widener.edu in pub/zen
as: zen-1.0.tar.Z }
zen-1.0.dvi } pick your favorite format
zen-1.0.PS }

Thanks, and I hope you find it useful! Brendan Kehoe <brendan@cs.widener.edu>

Welcome to HILITES.

This document:
1. Explains the purpose of HILITES.
2. Describes how TEACHERS can utilize HILITES.
3. Describes how network administrators can participate to make HILITES a useful internetwork resource for project implementation.

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.

<u>How Teachers Can Use HILITES</u>

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:

Internet: arogers@bonita.cerf.fred.org
FrEdMail: ....!sdcoe!bonita!arogers

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.

Telnet Locations

Here are some more places to TELNET that I received from MERIT. I have tried most of them out and there are some very good information.

1)- CONRAD.APPSTATE.EDU (login as info) - Appalachian State Univ's CWIS contains world news obtained by mointoring short-wave broadcasts from the BBC and other global sources. For help, send e-mail to jonesel@appstate.bitnet

2)- TECHINFO.MIT.EDU - The campus wide info center for MIT provides menus of Boston area resturants and documents on how to use a database of song lyrics. For help, send e-mail to tjm@eagle.mit.edu

3)- INFO.NMSU.EDU - New Mexico State Univ. CWIS has lots of information for K-12 teachers including a database of activites for helping at- risk students in the New Mexico Public Schools. For help, e-mail bormand@nmsu.edu . LOGIN AS technet

4)- INFO.ACS.UNC.EDU - The CWIS at Univ. of North Carolina, Chapel Hill includes a database of grants,scholarships, and funding opportunites for undergrads, grad students and faculty. For help, e-mail Judy Hallman at hallman@unc.bitnet . LOGIN AS info

5)- PAC.CARL.ORG - You can access the card catalogs of 20 libraries in Colorado. Also contains online indexes and informational databases. Offers access to other online card catalogs available via INTERNET.

6)- SPCAELINK.MFSC.NASA.GOV - Spacelink, sponsored by NASA's Marshall Spaceflight center in Huntsville, Alabama contains information about space shuttle launches, astronauts' bio's, and NASA publications. It is primarily geared towards the K-12 educators and students but is open to the public.

7)- FREENET-IN-A.CWRU.EDU - Freenet bulletin board operated out of Case Western Univ. in Cleveland, Ohio. Contains full text versions of recent U.S. Supreme Court decisions. For help send e-mail to XX997@cleveland.freenet.edu .

8)- PSUPEN.PSU.EDU - PENpages, sponsored by the College of Agriculture at Penn. State contains thousands of reports, newsletters and fact sheets on research based agricultural and consumer-oriented reports. For help, e-mail support@psupen.psu.edu . LOGIN AS pnotpa.

Other Internet Bulletin Boaard Systems

N A M E	**LOGIN**	**DESCRIPTION**
9)- QUARTZ.RUTGERS.EDU	BBS	Lots of discussions

10)- STAR96.NODAK.EDU	20	Good User Interface
11)- SAMBA.ACS.UNC.EDU	BBS	Includes Usenet News
12)- ISCA.ICAEN.UIOWA.EDU	ISCABBS	Much public domain software.
13)- ATL.CALSTATE.EDU	LEWISNTS	Electronic Journals and the Art World.
14)- HPCVBBS.CV.HP.COM	BBS	BBS for users of HP calculators.
15)- TOLSUN.OULU.FI	BOX	In Finland; Choice of Finnish or English.

Other CWIS (Campus Wide Information Systems);

16)- CAL.CC.COLUMBIA.EDU	CALENDAR	Columbia University
17)- CUINFO.CORNELL.EDU	300	Cornell University
18)- INFO.NYU.EDU		New York University
19)- CCVAX1.CC.NCSU.EDU	INFO	North Carolina State
20)- UNHVTX.UNH.EDU	STUDENT	UNIV. OF NEW HAMPSHIRE
21)- MED.UPENN.EDU	PENN_MED	Univ. of Penn. Medical

Richard Lee

Richard Lee Holbert X075RT@TAMVM1.BITNET
306 Tee Drive RLH7730@TAMVENUS.TAMU.EDU
P.O.Box 4111 X075RT@TAMVM1.TAMU.EDU
Bryan, Texas 77805-4111 A044RH@TAMVM1.BITNET
(409)-845-4210 AK152@CLEVELAND.FREENET.EDU

Seeing the world thru the eyes of computer education

Public Information Networks
(Freenets)

Cleveland Freenet

telnet freenet-in-[a,b,c].cwru.eduor 129.22.8.47

Heartland Freenet

telnet heartland.bradley.edu or 136.176.10.10

login as fnguest

Youngstown Freenet

telnet yfn.ysu.edu or 192.55.234.27

login as guest

Teaching Success Stories Bulletin Board

Network access

This bulletin board is accessable only through the internet and requires IBM 3270 terminal emulation. Telnet to UMCVMB.MISSOURI.EDU and use the userid of MOREinfo, no password is needed. The bulletin board is located within item#6. We expect to add a gateway for VT100 terminals within the month.

Overview

The 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. It is not necessary to have a computer account with MU to access TSS. The bulletin board is provided as a public service, free of charge. Users located outside of the Columbia, Missouri area may have long- distance telephone charges; Internet users are not charged.

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 success story via e-mail to MERLIN@umcvmb.bitnet
or MERLIN@umcvmb.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@umcvmb.missouri.edu

For network problems send mail to MOREnet's Network Information Center
morenic@more.net
or to Jim Newton, MOREnet User Services at: ccjimn@more.net

The GreenDisk

Hello,

Thank you for your inquiry into The GreenDisk Paperless Environmental Journal. If you have more detailed questions that are not addressed here, please feel free to contact us.

The GreenDisk Paperless Environmental Journal is a unique concept in environmental information exchange, providing environmental professionals, journalists, librarians, activists, environmental studies teachers, students, and others with an inexpensive and comprehensive resource documenting the work that is going on within the environmental community. We scan hundreds of different sources on a wide range of topics; everything from renewable energy to marine mammal protection to toxic waste disposal. The GreenDisk is a forum for the publication of research reports, press releases, action alerts, and news summaries from the world's environmental groups and governmental agencies. Much of the information indexed on The GreenDisk is hard to find and not carried by libraries, and thus is missed during literature searches.

The GreenDisk is published on computer disk for some very important reasons. Our goal is to provide a publication that has the maximum benefit for, and minimum impact on the environment. The paper and envelopes we use for correspondence are made from 100% old newspapers and magazines and bleached with hydrogen peroxide. The disk mailers are made from 100% waste fibers as well. The disks and mailers can and should be reused many times.

Another important aspect of publishing in this format is that with the shareware text locator program included with each subscription, every word of each issue of The GreenDisk is literally at your fingertips, and not gathering dust on a bookshelf, or taking up space in a landfill. Anyone with a personal computer can quickly compile an extensive in-house database of environmental information that can be quickly searched for keywords and phrases.

The GreenDisk accepts submissions of research reports, press releases, action alerts, internship and employment opportunity listings, upcoming conferences or events, descriptions of university environmental studies programs, etc., that you might want to share with our subscribers at no charge to you. The best way to get us information is through the computer networks.

Consulting editors of The GreenDisk are Andre Carothers, environmental writer and past editor of Greenpeace magazine, Heather Spalding, editor, International Waste Trade Update, John Young, research associate, Worldwatch Institute and William Sugg, biologist, Smithsonian Institution.

* Accessing The GreenDisk Online *

If your computer has a modem, you may download Volume 1, Number 1 of The GreenDisk at no charge. Internet connected sites may obtain a 'zip' archive of the journal from host machine 'csus.edu' (IP address 130.86.90.1), under the /pub/greendisk directory as filename gdjuly92.zip. It is also available from The Osprey's Nest Electronic Bulletin Board in Colesville, Maryland (301)-989-9036. The 'zip' file is posted under the CONSERVE file area as gdjuly92.zip.

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- A summary of articles contained in hundreds of different environmental newsletters and magazines from NGO's and governmental agencies.
- Summaries of recent environmental publications and reports.
- A listing of conferences, meetings, rallies, and upcoming events.
- A newsletter on electronic computer networking and the environment.
- Press releases and action alerts from environmental organizations.
- The complete text of the Smithsonian's Biological Conservation Newsletter, April & May 1992. Includes extensive conservation research bibliography.
- University environmental studies program descriptions.
- Name and address list of participating environmental organizations.
- Environmental education teaching aides; workbooks, games, videos, etc.
- Employment opportunities and internships with environmental groups.
- A shareware program that will allow you to search your current or past issues of The GreenDisk for key words and phrases.
- The complete text to Playing With Fire, a Greenpeace report by Joe Thornton and Pat Costner on hazardous waste incineration.
- The complete text of the Sierra Club's recent National News Reports.
- The complete text to Worldwatch Institute paper #101, Discarding the Throwaway Society, by John E. Young.

To subscribe send check or money order for $35 ($40 outside the U.S.) to:

The GreenDisk
PO Box 32224
Washington, DC 20007

Phone: 202-337-4175 EcoNet: <greendisk>
INTERNET: <greendisk@igc.org> CompuServe: <70760,2721>

Indicate if you need the IBM or MacIntosh edition on 3.5" or 5.25" disks.

Your money will refunded if you are not satisfied.

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 (128.120.2.1) 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
BITNET: gblee@ucdavis
INTERNET: gblee@ucdavis.edu

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.

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.

Information Sources: the Internet and Computer Mediated Communication

I’ve compiled a list of information sources on the Internet and computer-mediated communication (CMC). This list (Release 1.5) 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:

These will be update periodically

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

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/
Archie	archie.mcgill.ca	archie/doc/whatis.archie
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.

LISTSERVE LISTS of interest

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 (Name = your full name)	Access with email to	Body of letter
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." [see Netweaver newsletter in Section -2-]

INFO FOR	ANONYMOUS FTP HOST	FILE OR DIRECTORY/
EFF	ftp.eff.org	pub/EFF
ISOC	nnsc.nsf.net	internet-society/

Section -4- NEWSGROUPS

Newsgroups are sometimes a rich source of information about the Internet, networks, and CMC issues. This section lists newsgroups in which topics related to the Internet and CMC are discussed.

INTEREST AREA	NEWSGROUP(S)
Beginners	news.announce.newusers
FAQs	news.answers
Internet BBS	alt.bbs.internet (FAQ)
Email	comp.mail.misc (FAQ)
WAIS	comp.infosystems.wais
Gopher	alt.gopher
Network Info Sources	comp.archives, comp.internet.library, news.lists, comp.protocols.tcp-ip
Newsgroups	news.gropus, news.announce.newgroups
Information Services	comp.infosystems
ISDN	comp.dcom.isdn
Technical Reports	comp.doc.techreports

(FAQ) = periodic posting of Frequently Asked Questions (FAQ) & answers

Section -5- SELECTED BIBLIOGRAPHY

This section lists useful information sources.

BIBLIOGRAPHIES	ANONYMOUS FTP HOST	FILE OR DIRECTORY/
FYI Bibliography	ftp.nisc.sri.com	fyi/fyi3.txt

Romiszowski, A. J. Computer mediated communication: a selected bibliography. Englewood Cliffs, N.J.: Educational Technology Publications, 1992.

o GENERAL INFORMATION: lists (relatively) recent publications explaining computer networks or computer-mediated communication systems and issues:

Scientific American, volume 265, number 3, September 1991. Issue on computer networks.

Journal of Communication, volume 39, number 3, Summer 1989. Issue on computer communication affecting social power distribution. Written Communication (Jan 1991)

o PAPER JOURNALS: which cover aspects of computer networks or CMC

Technical aspects----------------------------

Computer Communication Review (ACM SIGCOMM) ONLINE

Communications of the ACM IEEE transactions on communication technologyIEEE

Electronics & communication engineering journal Information Today LinkUp

Spectrum MIS Quarterly Transactions on Information Systems

Information World Review Telecommunications Telecommunications Products and Technology

Human communication aspects----------------------------

Communication Quarterly Communication Research

Communication Yearbook Written Communication

Computers and Human Behavior Human Communication Research

Journal of Communication Technical Communication

World Communication

o BOOKS: a selected listing of particularly useful books.

--COMPUTER NETWORKS:

Adams, Rick and Frey, Donnalyn: !%@:: A Directory of Mail Addressing and Networks, 2nd Ed. Sebastopol, CA: O'Reilly & Associates, 1990. Kessler, Gary C. ISDN: concepts, facilities, and services. New York: McGraw-Hill, 1990.

LaQuey, Tracy L., ed. The User's Directory of Computer Networks. Bedford, MA: Digital Press, 1990.

Quarterman, John S. The Matrix: Computer Networks and Conferencing Systems Worldwide. Bedford, MA: Digital Press, 1990.

--COMPUTER-MEDIATED COMMUNICATION:

Chesebro, James W. and Donald G. Bonsall. Computer-mediated communication: human relationships in a computerized world. Tuscaloosa: University of Alabama Press, 1989.

Dunlop, Charles and Rob Kling, eds. Computerization and Controversy: Value Conflicts and Social Choices. Academic Press, 1991.

Hiltz, Starr Roxanne and Murray Turoff. The Networked Nation: Human Communication via Computer. Reading, MA: Addison-Wesley, 1978.

Rapaport, Matthew. Computer Mediated Communications. New York: Wiley, 1991.

Sproull, Lee and Sara Kiesler. Connections: New Ways of Working in the Networked Organization. MIT Press, 1991.

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.

Telnet to FEDIX

In the posting I just sent out about 45 minutes ago, there was a listing for a place called FEDIX. I logged on to the location and this is some of the things they list as having available;

* 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

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 .

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

There are also many other items which are in the same directory that might be useful, including tutorials and help files on telnet, internet and ftp.

RFE/RL Daily Reports now available on Russia list

The Russia & her neighbors list, Russia on ListServ@IndyCMS.IUPUI.Edu, is now receiving a direct feed of the Radio Free Europe / Radio Liberty Daily Report produced by the RFE/RL Research Institute in Munich. It usually appears at approximately 8am US ET (1300 UTC / 1400 CET).

Anyone wishing to receive the RFE/RL Daily Report via the Russia list is welcome to subscribe by sending the command

Subscribe Russia <your first name> <your last name>

to ListServ@IndyCMS.IUPUI.Edu.

RFE/RL Daily Reports are also now available via direct subscription by sending your request (with your name and e-mail address) in the form of an e-mail message to rferl-daily-report-request@rferl.org

John B. Harlan

JBHarlan@IndyVAX
JBHarlan@IndyVAX.IUPUI.Edu
219.289.6629

Current World Information

The CIA World Factbook is available by anonymous FTP from a number of sites. It contains piles of information about the world's countries (as of 1990). I got it from ncar.ucar.edu (128.117.64.4) in the directory /guido with the filename CIA-1990-fact-book.zip. Good Luck. Another file that has an interesting name, but I haven't downloaded yet, is CIA_WorldMap available from nic.funet.fi in the directory pub/misc or from relay.cs.toronto.ca (128.160.3.6) in doc/geography.

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==
Mary J. Knowles Internet: mjk11@po.cwru.edu
Shaker Heights, Ohio USA
==

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 128.158.13.250
(Telnet spacelink.msfc.nasa.gov should also work but it does not do the job for me!)

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 !

MAGELLAN CAPTION FILES

January 15, 1992

A new version of the caption file for the Magellan images is now available. It can serve as a useful database to identify P-numbered images of specific features by searching for the feature name. The caption files are in ASCII format, IBM Wordperfect 5.1 format and a Macintosh Word format compressed with the Stuffit program. The files are available via anonyous ftp at:

ftp: ames.arc.nasa.gov (128.102.18.3)

user: anonymous

cd: pub/SPACE/MAGELLAN

files: captions.txt (ASCII)

caps_wp5.zip (IBM PC Wordperfect 5.1 -> PKZIP)

caps_word.sit (Macintosh Word -> Stuffit)

LUNAR AND PLANETARY INSTITUTE

Folks,

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 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
OVERVIEW

You may be reading this document on any one of an amazing variety of computers, so much of the material below may not apply to you. In general, however, systems connected to 'the net' fall in one of three categories: Internet, Usenet, or BITNET. Electronic mail may be sent between these networks, and other resources available on one of these networks are sometimes accessible from other networks by email sent to special 'servers'.

The space and astronomy discussion groups actually are composed of several mechanisms with (mostly) transparent connections between them.

One mechanism is the mailing list, in which mail is sent to a central distribution point which relays it to all recipients of the list. In addition to the general lists for space (called SPACE Digest for Internet users, and SPACE-L on BITNET), there are a number of more specialized mailing lists described below.

A second mechanism is Usenet 'netnews'. This is somewhat like a bulletin board operating on each system which is a part of the net. Netnews separates contributions into hundreds of different categories based on a 'group name'. The groups dealing most closely with space topics are called 'sci.space.news', 'sci.space', 'sci.space.shuttle', 'sci.astro', and 'talk.politics.space'. Contributors 'post' submissions (called 'articles' in netnews terminology) on their local machine, which sends it to other nearby machines. Similarly, articles sent from nearby machines are stored locally and may be forwarded to other systems, so that an article is posted locally and eventually reaches all the Usenet sites interested in receiving the news group to which the article was posted.

Gateway machines serve to redirect Usenet netnews into Internet and BITNET mailing lists and vice versa. If you can receive netnews, its more flexible interface usually makes it the preferred option to getting on one of the main mailing lists.

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) also has this document in /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.

WARNING ABOUT NON-PUBLIC NETWORKS

(Included at the suggestion of Eugene Miya, who wrote the item)

NASA has an internal system of unclassified electronic mail and bulletin boards. This system is not open for public use. Specifically, NASA personnel and procurement operations are regarded with some sensitivity. Contractors must renegotiate their contracts. The Fair and Open Procurement Act does not look kindly to those having inside information. Contractors and outsiders caught using this type of information can expect severe penalities. Unauthorized access attempts may subject you to a fine and/or imprisonment in accordance with Title 18, USC, Section 1030. If in fact you should should learn of unauthorized access, contact NASA personnel.

Cataloging from Library of Congress

Address:
Data Research Associates, Inc.
Sales Department
1276 North Warson Road
St. Louis, Missouri 63105

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"

"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.

This database is NOT the same as the LC card catalog.

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.

Teacher Contact Files

The Kidsnet "Teacher Contact Files" have been updated. These four files average 1,300 lines in length. The files contain introductions from teachers, administrators, educators and parents interested in telecommunication activities for kindergarten to grade 12 students.

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

These files are my work so if you have any additions, corrections or suggestions, write to me at one of the addresses below.

Enjoy!
Sally
Sally Laughon
BITNET: laughon@vtvm1
INTERNET: laughon@vtvm1.cc.vt.edu
slaughon@rvgs.vak12ed.edu

GlasNetî - A new Commonwealth Computer Network for Information Interchange.

A new computer network called "GlasNet" has been installed in Moscow by The International Foundation (Washington, Munich, Sofia) and The Institute for Global Communications (San Francisco). GlasNet™ is the first non-profit, non-governmental telecommunications network to be established in the Commonwealth of Independent States (ex USSR).

The purpose of GlasNet™ is to offer easy and inexpensive information exchange between diverse groups within the Commonwealth, including scientists, educators, cultural groups, journalists, environmentalists, computer enthusiasts, and so forth. It will also enable these groups to correspond electronically with their counterparts in the Americas, Europe, and Asia. GlasNet™ is intended to serve the communication needs of pro bono groups in the Commonwealth who could not otherwise afford modern communication services. Charges to non-commercial GlasNet™ users in the Commonwealth will be entirely in rubles, and kept as low as possible while maintaining good system services.

GlasNet™ is a member of the Association for Progressive Communications (APC), a global network-of-networks with host computers in Australia (Pegasus), Brazil (AlterNex), Canada (Web), Great Britain (GreenNet), Nicaragua (Nicarao), Sweden (FredsNaetet), and the USA (PeaceNet,EcoNet). The first GlasNet™ host computer is a 386 computer running UNIX; it uses the standard APC electronic mail, conferencing, and networking software. The user interface of this software is identical to that which has been used by Sovam Teleport for the last two years. The initial GlasNet™ hardware configuration will support 5,000 user accounts; of these 7 to 30 can be on line simultaneously, depending on the number of available telephone lines. GlasNet™ was installed in Moscow in March of 1991 and has been operating officially since May 30, 1991.

GlasNet™ is negotiating with organizations in Dnepropetrovsk, Kiev, Saint Petersburg, and Zelenograd to set up GlasNet™ associate host computer systems in these cities.

Collaboration among scientists, business people, and other specialists in the USA has been facilitated in recent years through the use of computer-based electronic mail and conferencing capabilities, allowing people in different parts of the country to work on joint projects, access data banks and information in computers all across the country, and electronically publish new work. These powerful capabilties are now becoming available to the general public, the non-profit community in particular, through such services as PeaceNet and EcoNet.

It is the goal of GlasNet™ to provide similar performance- enhancing services to the fast-emerging independent sector in the Commonwealth, offering Soviet users easy access to friends, colleagues, and potential associates in the Commonwealth and abroad.

The initial services available to GlasNet™ users will include:

Electronic Mail: GlasNet™ subscribers will be able to exchange messages with users on GlasNet™, other users within APC, or with users belonging to many other networks through APC "gateways."

Networks accessible through APC gateways include: Applelink, ARPANET, AT&T LandMail, AT&T MAIL, Bitnet, BIX, BOLNET, CARINET, CGNET, CIGnet, COMLINK, COMPUSERVE, CONNECT, CSNet, DASNET, DELPHI, DIALCOM, EasyLink, ECUANEX, EIES, ENVOY 100, FIDONET, GALAXY, GeoNet, GTE, HandsNet, HURACAN, IMC, INET, Internet, JANET, MCI MAIL, MicroLink, NASA, NWI, PANDORA, PINET, Portal, PsychNet, ScienceNet, SOURCE, TCN, Telecom Gold, Telemail, THE META NETWORK, TWICS, Tymnet/Ontyme, UNDP;UNDRO;UNINET, UNISON, UUCP Mail Net, WELL, WORKNET, OMNET, Usenet

Electronic mail (Email) overcomes the cost and problems of telephone use. An electronic mail message is composed at the user's convenience, then quickly sent by the GlasNet™ computer to its destination in the addressee's host computer mailbox, which may be in Moscow or halfway around the world. When the person to whom it is sent logs in to his or her local network host computer, the message is waiting. Transmission is immediate, and there is no need for both parties to be present simultaneously. Costs are less than long distance telephone calls or those of air parcel services.

FAX And Telex Service: GlasNet™ will provide its users with the ability to send messages to FAX machines, and to send or receive messages from Telex machines.

Electronic Conferencing: An electronic conference is a written conversation with other users; a conference is created to discuss a particular topic or to facilitate communication between people working on a joint project. GlasNet™ users will be able to start their own conferences on topics of interest, or will be able to participate in on-going conferences on other APC networks.

GlasNet has office space in and works closely with the Bank of Ideas of the Commonwealth at their offices on Ulitsa Yaroslavskaya.

The Russian staff of GlasNet™ opposed the the August 19 - 23 coup and courageously kept GlasNet™ operating during it. GlasNet™ was used to keep GlasNet™ users informed about the fight against the coup, and to pass information about it back to the West.

GlasMail: In November 1991 GlasNet™ began offering a new service - GlasMail™. This allows communication between people who have no Email or other equipment; people in the USA can send letters, telegrams, or FAXes quickly and reliably to anyone in the Commonwealth. Delivery is 3 days or less from from receipt of a message in the USA to its delivery in the Commonwealth.

For further information on GlasNet™ or GlasMail™, please contact:

Anatoly Voronov, Executive Director
Email: avoronov@glas.apc.org

Alexander Zaytsev, Technical Director
Email: alexz@glas.apc.org

Anatoly Yeroshin, User Support Director
Email: toll@glas.apc.org

GlasNet™

Ulitsa Yaroslavskaya 8

Korpus 3 Room 111
129164 Moscow

217-6173, 217-6182 (voice)

217-6170, 217-6171, 217-6172, 217-6174, 217-6180, 217-6181, 217-6183 (data)

In the USA:

David Caulkins
GlasNet USA
437 Mundel Way
Los Altos, CA 94022
(415)948-5753 voice
(415)948-1474 fax

Email:
dcaulkins@igc.org (from Internet in the USA) dcaulkins (from PeaceNet/EcoNet in the USA)

People in the USA who wish to access GlasNet™ and do not have an account on one of the APC-connected gateway networks listed above should get an account on one of the IGC networks: PeaceNet or EcoNet. For information about these networks, contact:

IGC
18 de Boom
San Francisco, CA 94107
(415)442-0220
(415)546-1794 fax
Email: igcoffice@igc.org

Because GlasNet™ charges users in the Commonwealth in rubles, and because we have some communications costs we must pay in dollars, there is a charge to US individuals and groups who communicate with GlasNet™.

It is possible to sponsor a GlasNet™ account for colleagues in the Commonwealth by making dollar payments to IGC in the USA; accounts sponsored in this way are effectively free to users in the Commonwealth. Contact IGC for more information about this.

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

New/Old Project Gutenberg Etext

New/Old Project Gutenberg Etext

Project Gutenberg announces Paradise Lost, in our second version of John Milton's classic.

Feb 1992 Paradise Lost (Raben) (plrabn10.txt)

This is the oldest etext known to the project, as the original etext from which we worked was 1964- 1965, prepared by Joseph Raben. (More information in the etext.)

Books currently available on mrcnext or via mail:

Jan 1991 Alice in Wonderland (alice28x.xxx)
Feb 1991 Through the Looking Glass (lglass15.xxx)
Mar 1991 The Hunting of the Snark (snark11x.xxx)
Apr 1991 The CIA World Factbook (world11x.xxx)
May 1991 Moby Dick (From OBI)* (mobyxxxx.xxx)
Jun 1991 Peter Pan (for US only)** (peter14a.xxx)
Jul 1991 The Book of Mormon (mormon11.xxx)
Aug 1991 The Federalist Papers (feder11x.xxx)
Sep 1991 The Song of Hiawatha (hisong10.xxx)
Oct 1991 Paradise Lost (Boss) (plboss10.xxx)
Nov 1991 Aesop's Fables (aesop10x.xxx)
Dec 1991 Roget's Thesaurus (roget11x.xxx)
*Moby Dick is missing Chapter 72
**Please do not download Peter Pan outside the US

1991 books will soon be in mrcnext.cso.uiuc.edu cd etext2/1991, and will be deleted from /etext (Easy instructions: FTP to mrcnext as anonymous, then cd etext or cd etext2/1991

Jan 1992 Frederick Douglass (duglas10.xxx)
Jan 1992 O Pioneers! (opion10x.xxx)
Feb 1992 CIA World Factbook (world91a.xxx)
(Internally mislabeled as January but replaced at last minute by O Pioneers to coincide with CBS)
Feb 1992 Paradise Lost (Raben) (plrabn10.xxx)

Donations to Project Gutenberg should be sent to:
Father David Turner
Illinois Benedictine
5700 College Road
Lisle, IL 60532-0900

You may write to Project Gutenberg c/o:

Prof Michael S. Hart
Post Office Box 2782
Champaign, IL 61825

Please enclose stamp and mailing label or SASLE for reply.

Email addresses:
BITNET HART@UIUCVMD INTERNET or HART@VMD.CSO.UIUC.EDU
Also as the Usenet group bit.listserv.gutnberg CompuServe:
INTERNET: hart@vmd.cso.uiuc.edu or Attmail: internet!vmd.cso.uiuc.edu!HART

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

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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) - Holiday Whimseys

Name and FIDO address of the Moderator
John Feltham (3:640/706)

Project type- Open
Till Aug 31, 1992

Channel '2' (K12.CH2) MathMagic Project

Project moderators:
Carol Hooper 1:381/90
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

Channel '3' (K12.CH3) - Available for a Project

Channel '4' (K12.CH4) - Available for a project

Channel '5" (K12.CH5) - Computer Curriculum
Moderator Rob Reilly 1:321/223

Discussion about Computer Curriculum

Till Sept. 20, 1992

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) - STAR TREK RPG
Peter Stark 278/721 moderator
Till August 31, 1992
Contact Peter in Sr Chat to join.

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 1:397/100

Sept thru Nov 30
open to all school groups

Channel '12' (K12.CH12) - Currently available

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 27AUG92, Channel Assignments vary regularly]

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.

##

HYTELNET version 6.2 now available

To: Multiple recipients of list EDTECH <EDTECH@ohstvma.bitnet>

July 27, 1992 <apologies for cross-posting>

HYTELNET version 6.2, 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 HYTELN62.ZIP.

Version 6.2 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 6.1 have been incorporated.

Note: the UNZIPPED files total over 600,000 bytes...but remember, you can always edit out any information you do not need, in order to save space.

Information from Roy Tennant follows, slightly edited, describing how to obtain HYTELNET 6.2 from the ftp site (thanks Roy)::

TO RETRIEVE HYTELNET:
At your system prompt, enter: ftp access.usask.ca
or ftp 128.233.3.1
When you receive the Name prompt, enter: anonymous When you receive the password prompt, enter your Internet address. When you are at the ftp> prompt, enter: binary
At the next ftp> prompt, enter: cd pub/hytelnet/pc
Then enter: get hyteln62.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 HYTELN62.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 HYTELN62.ZIP:
Make a new directory on your hard disk (e.g., mkdir hytelnet) Copy PKUNZIP.EXE and HYTELN62.ZIP into the new directory Make sure you are in that directory, then enter: pkunzip HYTELN62 It will then unarchive HYTELN62.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.

....
Peter Scott [] Phone: 306-966-5920
University of Saskatchewan [] FAX: 306-966-6040
Saskatoon [] Internet: scott@sklib.usask.ca
Saskatchewan, Canada S7N OWO [] Envoy: pa.scott Date: Tue, 4 Aug 1992 08:43:46 EDT

New version of toplevel index to the net available

The new version 0.16 of MaasInfo.TopIndex (64k bytes) is now online at the University of North Texas (other archive sites for MaasInfo files are delayed due to people being offline for the holidays I presume). Thanks to Billy Barron <billy@unt.edu> <BILLY@UNTVAX.BITNET> for being around at this time to install my files for anonymous FTP access: ftp ftp.unt.edu (129.120.1.4) ARTICLES/MAAS/MAASINFO.TOPINDEX This file is a toplevel index to all the major indexes of InterNet/BitNet/UseNet services etc., including a description and access information for each index. The indexes themselves cover: interest groups (mailing lists, newsgroups, digests, etc.), special sites (list&file servers, file archives, public-access dialup hosts, online library catalogs, etc.), documents & tutorials (both online and hardcopy) related to these networks. I also list some other toplevel indexes that are available, both official such as the InterNet Resource Guide and ad hoc such as Marty Hoag's "GLOBAL LISTS". All the actual indexes and meta-indexes I cite are online, accessible by FTP and/or file server, even where some or all entries within some of the indexes themselves may refer to hardcopy documents not available online. Nearly all are plain text files.

The new version of MaasInfo.DocIndex (21k bytes) is also now available at the same site & directory. This file is my version of a comprehensive bibliography of online documents and tutorials describing how to use various network services: General network tutorials, glossaries, advice about electronic mail, requesting files indirectly via e-mail, how to get information, 'archie' file-finding database&service, special interest groups (INFO-NETS, HELP-NET, PACS-L) and their specific collections of documents & archives, services specific to BITNET or InterNet, some special services, and generally useful reference information. Some documents contain both tutorial information and listings of services, thus are both a document and an index, so I had to make the decision where it would appear. My rule is that if an expert user of the service would nevertheless find a useful listing of particular sites then it's considered an index whereas if the only purpose of listing any sites is to illustrate the tutorial then it's considered a document instead; but sometimes that decision is difficult to make.

The new version of MaasInfo.HowNet (9k bytes) is also now available at the same site & directory. This file contains very brief information about how to use several very useful network services that aren't documented elsewhere or are documented only in places you might not think of looking or in places that are difficult to access: InterNet domain-name to number lookup, BitNet - InterNet equivalences, "white pages" (name of person or institution to user@host), Gutenberg, WAIS, gopher, Cleveland FreeNet, Library of Congress catalog. I'm hoping that someday other people on the net will write up medium-short documents to replace all the items in this file and place those documents online for anonymous access so that this file can be eliminated.

MaasInfo.Files (3k bytes, 1991.Dec.23 version, at the same site & directory) lists&describes these and the other MaasInfo files, including latest-version identification so you can be sure you are getting the latest version if you are getting the larger files from some other site closer to your location. Only users in the Americas (Canada&Alaska thru South America) should access these files from UNT, except for MaasInfo.Files which is small enough to be e-mailable to anywhere in the World. Non-BITNET users elsewhere may want to just obtain MaasInfo.Files now, then wait until their local archive sites (Austraila and Europe) have the new versions of the larger files available. I'll be posting a follow-up when the other major archive sites for MaasInfo files have all the new versions.

New version of toplevel index to the net via email

This is an update to my announcement of a few days ago that new versions of some MaasInfo files (TopIndex version 0.16, DocIndex, HowNet) are now online at ftp.unt.edu (North America #2) for anonymous InterNet FTP access.

As of today (Dec.31), the new versions are also available at SHSU.edu for both FTP and e-mail access. Users who don't have InterNet connections will now be able to get these new (Dec.23) versions:

North America #1 (problems to bed_gdg@SHSU.edu):

To: FILESERV@SHSU.edu (BitNet: FILESERV@SHSU)

SENDME MAASINFO (to send the whole package, which includes all the below:)

SENDME MAASINFO.TOPINDEX* (just the three pieces of this one 57k file)

SENDME MAASINFO.DOCINDEX (etc. for all the other files, none of them split)

DIRECTORY MaasInfo (annotated directory of MaasInfo files in server format)

ftp Niord.SHSU.edu (192.92.115.8) maasinfo/ MAASINFO_FOR_FTP.TOPINDEX (57k, all in one piece for FTP only) MAASINFO.DOCINDEX (etc. for all the other files, none of them split) ftp Niord.SHSU.edu (192.92.115.8) MAASINFO.DESCRIPTION (annotated directory)

InterNet users near Australia, and misc. users near Europe, may wish to wait until the new versions are available locally (mainland Australia & Tasmania; Britain & Greece), except for the smaller files which can be ordered from anywhere without excessively overloading the inter-continental links. MaasInfo.Files (3k bytes) in particular is small enough to be ordered from anywhere.

ERIC database

Syracuse University (PRISM)

To access type telnet acsnet.syr.edu or 128.230.1.21 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
   or
   Telnet 128.230.1.21

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 |
---]

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/.

The files available are:

ACADLIST README	(explanatory notes for the Directory with an index)
ACADLIST FILE1	(Anthropology--Education)
ACADLIST FILE2	(Futurology--Latin American Studies)
ACADLIST FILE3	(Library and Information Science--Music)
ACADLIST FILE4	(Political Science--Writing)
ACADLIST FILE5	(biological sciences)
ACADLIST FILE6	(physical sciences)
ACADLIST FILE7	(business and general academia)

ACADWHOL HQX	(binhexed self-decompressing Macintosh M.S. Word 4.0 document of all 6 directories)
ACADSOCH HQX	(binhexed self-decompressing Macintosh M.S. Word 4.0 document of the Social Science and Humanities files 1-3)
ACADLIST CHANGES	(all the major additions, deletions and alterations)

> For more information, contact:

Diane K. Kovacs
Kent State University Libraries
Kent, Ohio 44242
Phone: (216)672-3045
DKOVACS@kentvm.kent.edu or LIBRK329@ksuvxa.kent.edu

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

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". It was prepared by the Direct Patron Access to Computer-Based Reference Systems Committee, under the auspices of the American Library Association.

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.)

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LIBRARY RESOURCES ON THE INTERNET:
STRATEGIES FOR SELECTION AND USE

TABLE OF CONTENTS

Christian Burl Barrow S.
bbsc@mercury.cs.uregina.ca

"Changing the Way We Learn and Teach"

The growth of telecommunication networks and projects is changing the image of the classroom for the 1990s. The walls of the classroom are expanding to encompass the world not only through communication but through a global philosophy and cultural understanding. The global classroom as it evolves will be connected by networks that reach across the globe, across ages and across subject areas. The classroom will include diverse communication technologies including computer networks, video, CD-ROM and satellite access. Students, teachers and parents in the global classroom will learn from each other and will together solve problems.

The concept of the global classroom has become a reality because of the expansion of world communication systems. These new and diverse telecommunication technologies represent powerful tools for linking both students and teachers together for sharing knowledge and diverse solutions to problems; and for actually creating the global classroom. As this learning environment is evolving, education is developing new visions of learning and teaching that will provide students with new ways to think and live in the global village.

Today there are many global classroom projects that have been designed for implementation. These projects provide the tools for developing global understanding as well as in depth studies in a variety of content areas and a thorough introduction to computers and telecommunication skills. One model for implementing a global classroom project is described in the following section. Specific projects are described at the end of the article.

A Model for Implementing the Global Classroom

Getting Started: Participating in an international telecommunications network requires some detailed advance planning and some teacher preparation. To get started on a project, teachers and administrators will need to acquire the equipment software and arrange the physical facilities to insure that the program will be easily implemented. After setting up and testing the equipment and software, teachers need to develop an effective plan for integrating the project into the program. This can be accomplished by meeting with the selected content teachers and then presenting the project to the class.

Getting connected: The first step in using telecommunications in the classroom is to learn how to access the network and the account. As with most online projects, this procedure is usually documented in the manuals for the project and/or software.

Getting acquainted: To insure the success of any telecommunications project, students and teachers must become acquainted with the system and the other participants. Initial activities involve sending "hello" messages to and from each site. After the introductory messages are sent and read, part of each session can be spent reviewing and responding to messages received. The teachers from each site also can communicate online with the participating teachers. In addition, students during the early online sessions should explore the other activities on the network. This exploration time, exposes students to the diversity of network communication and the breadth of possible projects

Selecting a project and setting a schedule: Once the students and teachers feel comfortable online, the communication should be directed at deciding what specific project will be done. This will vary by the needs of the class and the other sites.

Educational and Social Outcomes and Benefits

Global classroom projects provide numerous benefits to the students and the schools. Students improve their writing ability, foreign language skills, facility with technology and their cultural understanding. The curriculum improves due to the interdisciplinary approach to the topics covered and the use of collaborative projects.

Moreover, students learn how to use the network, to produce and develop a product and to present their learning while studying how to communicate and solve problems via computer with people from around the world. This cultural immersion with technology as a tool for communication, models for the student the world of tomorrow and opens up the classroom for students and teachers in the following ways:

Enhanced Curriculum: Telecommunication projects provide for access to current data, shared data, real applications and global perspectives. This wealth of information is available to expand and enhance the curriculum.

Student Motivation: Use of the network often increases student motivation by providing more options for student involvement and hands-on activities.

Global Interaction: The network allows students and teachers to work with people from around the world. A variety of resources and experts with global perspectives are easily accessible online.

Interdisciplinary: Curriculum designed for telecommunications is naturally interdisciplinary. Students are required to apply writing, critical thinking skills and technology skills across a variety of subjects.

Variety: The broad spectrum of conferences and online components, resources and people offer students a wide range of topics and projects to complete.

Flexibility: The curriculum is easily changed to adapt to current data and information. The online lesson development allows for immediate change.

Impact: Online lessons often make a strong impression on students because the projects deal with real world issues in the global village.

Summary

"One important function of telecommunications is to provide a substitute for transportation: instead of moving people to ideas, telecommunications moves ideas to people" (Rogers, 1986). The global classroom expands the opportunity to use telecommunications and other communication technologies for sharing and acting upon ideas in the global village. Teachers and students are able to learn about new technologies while solving problems in our ever smaller world. The transportation of ideas through global classrooms is becoming a fundamental way to restructure and expand education for the classrooms of tomorrow.

Beyond OPACS...The Wealth of Information Resources on the Internet

INTRODUCTION

Much has been written about ”the library without walls”, or the ability to access information independent of the library itself. As the concept of the scholar’s workstation becomes more widespread, librarians and other scholars will no longer be confined to using materials found only within their institutions or libraries. The wonders of telecommunications, networks, and microcomputers, with their file storage and processing power, enable researchers to access all kinds of automated information systems regardless of location.

The Internet is being hailed as a great research tool. A shortened version of ”internetworks” it is a superhighway of local, regional and national telecommunications networks. One recent news article termed it a highway of ideas, a collective brain for the nation’s scientists, and perhaps the world’s most important bulletin board” . Primarily funded by the federal government, its participants include educational institutions, government agencies, and organizations who do research and development for the federal government. These participating groups allow other network users to access their databases and files, often without charge or even passwords. Therefore, scholars with workstations connected to a campus network with the appropriate telecommunications infrastructure can link to the Internet and exploit a growing number of open access databases found there.

Although estimates indicate that the Internet now links up to S00,000 computers to over 400 networks with up to 1,000,000 users, it is still in the infancy of its potential. Librarians are probably most accustomed to hearing about the library catalogs available via the Internet, but these are only part of the offerings. The Internet includes access to commercial databases (RLIN and OCLC’s EPIC), databases devoted to research on specific topics (OCEANIC), special indexes created by libraries, and files of computer software. Many of these have reference ant research value, and therefore should be of interest to information professionals. This article will discuss some issues relating to using the Internet as a research tool, and highlight a few databases of special interest.

As exciting as the Internet is, there are still some problems that must be worked out before it truly is the research network scholars expect it to be. Telecommunications are not always perfect, users must be taught the ethics of using open access systems, and researchers need better and more information on what is available on the Internet. In addition, librarians must evaluate what role they have in the dissemination of information about Internet resources.

IDENTIFYING WHAT EXISTS

Information resources on the Internet can be difficult to discover. Perhaps the primary reason for this is that the Internet is not one network supported by an organization or government body, but is a collection of separately administered networks. Currently, no single entity is responsible for identifying information resources available on the Internet.

However, the Coalition for Networked Information (CNI), which was formed by ARL, EDUCOM, and CAUSE in 1990, is currently addressing this need. One of the missions of its program strategy states that it will be “undertaking activities . . . that formulate, evaluate, and promote policies and protocols that enable powerful, flexible, and universal access to networked information.”

This vacuum of responsibility means that one must use a variety of formal and informal sources of information to identify available resources. Formal sources of information include network information centers

(NICs) and lists or catalogs of network resources produced by NICs or other organizations. Informal sources include lists of resources gathered and distributed by individuals and announcements posted to electronic discussions of various kinds.

Network information centers (NICs) exist on many of the regional networks that comprise the Internet. They exist primarily to serve the needs of their local network users, and secondarily (if at all) to serve the needs of Internet users at large. Several of the larger NICs are: BITNIC@BITNET (the NIC for BITNET), NNSC@NNSC.NSF.NET (the National Science Foundation Network Service Center), and NIC@NIC.DDN.MIL (the NIC for the Defense Data Network). these centers can be queried by electronic mail, telephone, or U.S. mail. NICs often publish newsletters or other documents that provide information on network information sources.

Formal lists of network resources are often published (paper copy, electronically or both) by a NIC as a service to their users. Formal lists tend to adhere to a particular format throughout and the information in the list has generally been volunteered by the parties involved or permission to publish has been granted. Formal lists are sponsored by an organization and are therefore usually produced under more rigorous standards for accuracy than informal lists.

The Internet *Resource Guide* (compiled by the National Science Foundation Network Service Center) is one of the most important lists of network resources. The guide may be obtained from the NSFNet Network Service Center (e-mail to: NNSC@NNSC.NSF.NET). It is also possible to get on an electronic mailing list to receive updates in text or Postscript. Each entry (1-2 pages per source) briefly describes the resource, how to connect to it, who to contact and miscellaneous information. The standard format of the guide makes it very easy to use as a quick reference. Detailed instructions are generally not included.

Informal lists are compiled by private individuals to fill in the gap left by formal information sources. The list *Internet-Accessible Library Catalogs and Databases* compiled by Dr. Art St. George and Dr. Ron Larsen is an example of a list of this type. Typically informal lists tend to be compiled using any available information and therefore tend to be more prone to errors. Permission to publish is not always obtained from the sources in an informal list. However, resources usually appear in informal lists long before (if ever) the information makes it into a formal list. Since informal lists do not always adhere to a particular format, a variety of information about each source can be included.

Electronic discussions include diverse range of bulletin boards, BITNET listserver discussions, USENET news groups, electronic journals, and other means of network communications Announcements of new network resources are often “posted” in such forums, usually before they make it into a formal or informal list. For librarians, two of the more important BITNET listserver discussion forums for these kinds of announcements are PACS-L@UHUPVM1 (Public Access Computer Systems) and CWIS-L@WUVMD (Campus Wide Information Systems). [To subscribe to these discussions send an electronic mail message to LISTSERV@UHUPVM1 or LISTSERV@WUVMD respectively, leave the subject area blank and enter this in the body of the message: SUB <list name> <your name>; for example: SUB PACS-L Joe Librarian.]

EVALUATING WHAT YOU FIND

Once an interesting Internet resource has been identified, the work has merely begun. It is then necessary to evaluate the resource as one would any other information source. Unfortunately, reviews of Internet resources are not yet a common feature of the professional literature.

In his article “Evaluating Online and CD-ROM Reference Sources,” Andy Large describes some of the difficulties of evaluating electronic reference sources, albeit in the context of commercial online databases and CD-ROMs. Without the clues offered by book jackets, promotional material, and perhaps even a reputable ”publisher” it can be very difficult to evaluate adequately the quality of the resource. The inability to browse quickly the contents makes it very difficult to obtain an impression of coverage and depth. Because reference use of Internet resources is still very much in its infancy, there is a major gulf between our knowledge of the existence of these resources and the evidence of their efficacy.

ACCESS CONCERNS

Access to the Internet is via a network connection that supports the TCP/IP (Transmission Control Protocol/Internet Protocol) suite of communication protocols. Telnet (not to be confused with Telenet) is the part of this suite that provides support for remote logins: it allows a user on a local system to initiate a session on a remote or host computer; it also allows a user at a remote site to initiate a session with a local host computer. Each host computer has a specific address to which the user ”telnets” Internet addresses have two forms: numeric and named. Telnet lias.psu.edu and telnet 128.118.88.88 will both get users into the LIAS, the online catalog at Penn State. Use the numeric form if the named form does not work. Some host computers require a password, but many do not.

To simplify, let’s say that a reference librarian has a workstation that links to her campus network. If the campus network is also linked to the Internet (in popular vernacular, this might be referred to as the ’backbone’), she can connect to a host computer anywhere on the Internet and operate interactively with it as though it were located at her own institution. She can also transfer files from a host computer into her computer or personal workstation, and use the Internet for electronic mail.

Gaining access to the Internet is more problematic for libraries not attached to institutions already linked to the jumble of networks making up the Internet. They might want to investigate the possibility of a “guest” computer account at a local university that does have an Internet connection Direct links to the Internet (at a variety of speeds and costs) are available to organizations that satisfy the requirements for acceptable use of the networks that comprise the Internet. NSFNET, which forms the backbone of the Internet, governs access to most Internet resources. Key points from its interim policy (issued in July 1990) are:

• The purpose of NSFNET is to support research and education in and among academic institutions in the U.S. by providing access to unique resources and the opportunity for collaborative work.

• Use in support of research or instruction at not-for-profit institutions of research or instruction in the United States is acceptable.

• Use for research or instruction at for-profit institutions may or may not be consistent be with the purposes of NSFNET, and will be reviewed by the NSF Project Office on a case by case basis.

Internet links are primarily available through non-profit regional networks. For information on the regional network in your area, contact Merit/NSFNET Information Services at 800/66-MERIT. However, two commercial networking corporations now offer an alternative. UUNET Technologies Inc. (703/876-5050) runs a network called AlterNet; and PSI (703/6204651) runs PSINet. Although these are commercial corporations, links that provide interactive access to the rest of the Internet are still subject to the acceptable use policies.

However, telecommunications to the Internet do not always operate smoothly. As packets of data go through the switching stations or nodes, they sometimes slow down or get stopped, which mean slow response time or interrupted access. Also, some terminal emulations may not be compatible with the host computer. This is especially true with systems designed to support only IBM 3270 type terminals. Unless a user has special software available, he will find these systems quite frustrating to use.

Clifford Lynch, in his excellent article “Linking Library Automation Systems in the Internet,” makes the point that library catalogs linked to the Internet should show “acceptable behavior” when accessed via telnet. Obviously, this is true of all systems available over the Internet. With the diversity of equipment, software, and emulations available, and the fact that some databases were created without public service objectives, there is no guarantee that anyone accessing databases over the Internet can be assured of “acceptable” behavior.

IMPORTANCE OF ETHICAL BEHAVIOR

In November 1988, a Cornell graduate student released a worm into the Internet. A worm-is a computer program designed to replicate itself quickly, and within a short time the Cornell worm had generated hundreds of thousands of copies of itself. Computers throughout the Internet ground to a halt. The stunt served at least one valuable purpose it illuminated the vulnerability of the network and open access systems.

At this time, there are no plans to restrict access to the Internet, which would run counter to the idea of the free exchange of research findings, a value the scientific community holds dear. However, there are those who feel that the open systems should have more protection, such as password authentication. This issue has resulted in some spirited discussions among computer security experts and systems personnel.

Librarians and scholars who want to use the Internet are accountable for the responsible and ethical use of its resources. They should be beware of the wide ranging effects of irresponsible use or security breaches. The phrase ’host computers’ means that the owners of these computers have invited others to use them: therefore those accessing these computers remotely are “guests.” As guests, they must recognize that access is a privilege not a right, and they should behave accordingly. They should be considerate for instance, they should not use the host computer for extended periods, possibly denying others—particularly those from the owning location—access. Some Internet users go as far as accessing host computers during off hours.

SUPPORT AND TRAINING ISSUES

Libraries cannot afford to be myopic about the resources they make available. Those reachable through networks such as the Internet are like any other research tools: if they are valuable to a library’s clientele, then staff members are obligated to learn about them and either make them accessible within the library or inform their patrons on how they can gain access.

Caroline Arms, writing in *ONLINE*, September 1990, stresses that locating materials on networks such as the Internet is a natural extension of a reference librarians responsibilities: “The networks were not built as centrally-managed, standardized entities, and have grown through the cooperation of hundreds of institutions. They lack a large central staff to catalog a constantly changing set of resources . . . locating banks of files that may contain relevant material requires detective work. Reference librarians know how to locate appropriate print sources for the information a patron requires. Locating information on the networks requires the same skills.”

Because the Internet is not really *owned* by any one organization, there really isn’t anyone in charge. This means that there is no centralized or organized effort for support and documentation. There are a variety of resource directories available, but the amount of information provided and its comprehensibility for novices is inconsistent. The online assistance offered on some systems is often very rudimentary and there may be no introductory screens, so the user can be left hanging about a database's contents and dates of coverage. Learning to use some of the Internet resources is often more a matter of 'mucking around' than a structured learning experience with manuals, online tutorials or other instructional tools.

Until there is a national effort to provide user-friendly documentation, librarians who have clientele that would benefit from using Internet resources will likely find themselves writing and distributing documentation. Users may want quick guides to each database to supplement what published material, if any, is available. Writing any kind of documentation for Internet databases will be a challenge: many databases are quite sophisticated. and may require a certain level of subject expertise to understand them adequately. Since making an easy and successful connection to the Internet is the first step in the research process, librarians will want to facilitate this process by also providing information on how to use the network.

Many of the databases- producers provide contact persons, and their names and address are often available in directories *such* as the *Internet Resources Guide.* However, users can not be guaranteed an immediate response to their questions since these people are not always available or may work part-time. Also remote users are "guests" of the host computers, and should not anticipate a high level of support and service.

All library staff members need to be introduced to the Internet and its research potential. This philosophy imposes a commitment to train librarians and staff on the use of the Internet; otherwise, they will not be able to convey the excitement of this new resource to their clientele. They must be able to navigate comfortably on the Internet, as well as understand concepts such as what it means to "telnet" to an Internet address. In addition, they should be familiar with the various tools that keep them informed about what is new on the Internet. In this age of computerization, the rising expectations of increasingly sophisticated library patrons may actually force library personnel to become conversant with these new tools. Already reference librarians are being asked by patrons, "If I can access this at University X, why can't I do it here?"

Librarians, because they are an integral part of the world of information providers, are becoming more aware of the Internet and the resources it contains. Their professional literature, bulletin boards, and forums have pushed the Internet to the forefront of discussions. This is not true of many other professions, and librarians may find themselves possessing unique knowledge that is of potential benefit to their campus community. It then becomes their responsibility to disseminate this information to a wider audience.

Recently, one of the authors spoke with a faculty member who was preparing an argument for his dean about the importance of supplying liberal arts faculty with microcomputers. Although a Senior member of the faculty, he had no idea of the OPACS and other information resources that would be at his fingertips if he could use a workstation to access the University's backbone (and hence. the Internet).

He was excited about this new tool, and this knowledge helped him to prepare a compelling argument for his administration. No doubt there are many other professionals out there that could also benefit from this information.

There are a variety of ways that librarians can spread the word about the Internet: special seminars, bibliographic instruction, brochures and guides, and promotional materials. Those librarians planning or implementing such programs should be encouraged to share their experiences with other information professionals. The numbers and variety of resources available on the Internet is growing; now is the time for public service librarians to begin integrating these resources into their reference work.

HARNESS THE POTENTIAL

The Internet provides an opportunity for resource sharing and information access that is unparalleled. Databases half a world away can be accessed as easily as a database in the next room. Researchers at Bergen University in Norway have been known to use a library catalog in California because they can connect faster than to their own local catalog. As more information becomes available on the Internet, the importance of network resources to reference services will increase as well.

Information professionals in this electronic age must learn the skills required to use these resources effectively. In many cases they must also teach their clientele how to use these resources themselves. Accomplishing these objectives will require some extra effort, adaptability and commitment on the part of information professionals, but this is necessary if they are to harness the potential of the Internet.

Campus-Wide Information Systems (CWIS)

Appalachian State University
conrad.appstate.edu (152.10.1.1)
Login as info.
Emulate a VT100.
Hardware/software: DEC/VTX
Contact: Ernest Jones <jonesel@appstate.bitnet>

Arizona State University PEGASUS and ASEDD asuvm.inre.asu.edu
login as helloasu
Use tn3270.
Hardware/Software: Running PNN News Network Software under VM/CMS (with Profs and FOCUS).
Contact: Joy Kramer <iejxk@asuvm.inre.asu.edu>

Contains two databases: PErsonal Guide to ASU Stuff (PEGASUS) and Arizona State Economic Development Database (ASEDD).

Clemson University
eureka.clemson.edu
Login as public.
Emulate a VT100.
Hardware/software: DEC/VTX
Contact: Amy Slankard <amy@clust1.clemson.edu>

System contains information on: Weather for SC, NC, and GA; economics; plants; animals; engineering; food; home, health, family and youth.

Columbia University
cal.cc.columbia.edu
Login as calendar.
Contact: David Millman <dsm@cunixf.cc.columbia.edu>

Cornell CUINFO
cuinfo.cornell.edu
Connect to port 300.
Use telnet or tn3270. Different versions of telnet or tn3270 have different syntax for defining the port. The following are the commonest:
TELNET cuinfo.cornell.edu 300

TELNET cuinfo.cornell.edu::300
or TELNET cuinfo.cornell.edu..300
Hardware/software: VM/CMS; IBM S/370 assembler; locally written Contact: Steve Worona <slw@cornella.bitnet>

CUINFO of interest to non-Cornell community members:

Uncle Ezra - The Electronic Counselor - First program of its kind - A must see.
Directories - Student and Staff directories - Includes staff electronic addresses
Ski Reports - Up to the minute Upstate New York Ski Reports (Seasonal)
Jobs - Listings and Descriptions of jobs at Cornell Computing
- Extensive on-line information regarding computing at Cornell Patents
- Descriptions of current patents held by Cornell Various Newsletters
- Newsletters from numerous campus groups Weather
- Up to the minute local weather forecast

Lafayette Integrated, Networked Campus - LINC lafibm.lafayette.edu (139.147.8.4)
Use telnet or tn3270. When you see the LINC logo, ignore the ALT-L advice and clear the logo by pressing Enter. On next screen, instead of logging on, type DIAL MUSIC (case does not matter). On login screen that appears, use GUEST as ID, and GUEST as password.
Hardware/software: IBM 9375 running MUSIC/SP Contact: Patrick Ciriello <ciri@lafayacs.bitnet>

Lehigh
ibm1.cc.lehigh.edu
Use tn3270.
At the VM prompt, type DIAL MUSIC, and at the /ID prompt, type LUNA.
Hardware/software: IBM 4381 running MUSIC. Planning to move to AIX on RS/6000s.
Contact: Timothy J. Foley <tjf0@ns.cc.lehigh.edu>

MIT TechInfo
Accessible either via telnet, or via a native Macintosh application that uses the MacTCP drivers to access the TechInfo server. MacPlus with 1 Meg memory or better required, System 6.0.3 or better, and licensed MacTCP drivers.

Source code available freely to other schools looking to get started quickly...contact folks listed below.

For telnet access:
telnet techinfo.mit.edu
No username/password is required.
Once you’re in, you can use upper or lower case commands. To exit the system, use the QUIT command.

For native Macintosh access:
anonymous ftp to net-dist.mit.edu,
look in the /pub/techinfo directory, fetch techinfo.hqx Binhex4 (public domain tool) required to decode the binary.

Human contact: Tim McGovern <tjm@mit.edu>, (617) 253-0505 Bugs: bug-techinfo@mit.edu
Comments: comment-techinfo@mit.edu
Administration: admin-techinfo@mit.edu

New Mexico State University NMSU/INFO
info.nmsu.edu
Login as info.
Emulate a VT100.
Hardware/software: DEC/VTX
Contact: D. Brian Ormand <bormand@nmsuvm1.bitnet>
or <bormand@nmsu.edu>

North Carolina State University Happenings! ccvax1.cc.ncsu.edu (128.109.153.4)
Login as info.
Emulate a VT100.
Hardware/software: DEC/VTX
Contact: Harry Nicholos <hmn@ncsuvax.bitnet>

NYU ACF INFO system
info.nyu.edu (information.nyu.edu) (128.122.138.142) Emulating a VT100 or better enables some additional suboptions Contact: Stephen Tihor <tihor@ACFcluster.nyu.edu>
or <tihor@nyuacf.bitnet>

Pima Community College
pimacc.pima.edu
Login as pimainfo.
Emulate a VT100.
Hardware/software: DEC/VTX
Contact: Terry Loftus <tloftus@pimacc.pima.edu>
or Al Camberos <acamberos@pimacc.pima.edu>

Princeton News Network PNN
pucc.princeton.edu
Use telnet or tn3270. When you see the VM 370 logo, clear it, and instead of logging on, enter pnn (case does not matter). Clear the information screen that appears. Hardware/software: VM/CMS -- locally written. A UNIX version and a Mac HyperCard version are up, running, and available. All versions (CMS, UNIX, HyperCard) are available to universities at no cost. Contact: Rita Saltz <rita@pucc.bitnet>

System and Development: Howard Strauss <howard@pucc.bitnet>

San Diego State University
wintermute.sdsu.edu
Login as sdsuinfo
Emulate a VT100
Hardware/software: pnn & nmm
Contact: Richard Caasi <caasi@sdsu.edu>

University of Arkansas
uafsysb.uark.edu
Login as info
Hardware/software: IBM 4381-14, VM/HPO 6.0, Cornell's CUINFO module
Contact: Susan Adkins <sa06037@uafsysb.bitnet>
or <sa06037@uafsysb.uark.edu>

System contains information on: Calendar of events, campus e- mail directory, and hours and services.

University of Denver
du.edu
Login as atdu
Contact: Bob Stocker <bstocker@ducair.bitnet>

University of Minnesota at Duluth
ub.d.umn.edu
Login as info
Emulate a vt100.
Contact: Frank Simmons <fsimmons@ub.d.umn.edu>

System contains over 700 documents ranging from athletic schedules to micro-computer prices to art gallery showing schedules. All commands are displayed at the bottom of each screen and separate on-line help is available. Keyword searching is available, although at this time only words in the titles of documents are used.

University of New Brunswick, Canada, INFO unbmvs1.csd.unb.ca (131.202.1.2)
Login with application id INFO
There is no password required.
INFO is a full-screen CICS application running under MVS. tn3270 emulation.
Contact: Bonita Mockler bgm@unb.ca

System contains: University Calendar, class timetable, phone/fax numbers for faculty/staff/students, faculty and staff email ids, seminar schedules, minutes, newsletter, etc.

University of New Hampshire’s VideoTex
unhvtx.unh.edu (132.177.128.58)
USERNAME: student (no password required) Control-z to log off
VT100/VT200 terminal emulation
Hardware/software: DEC/VTX
Contact: Robin Tuttle (r_tuttle1@unhh.unh.edu)

System includes: phone directories, campus calendar, job listings, off-campus housing list, undergraduate catalog, class schedules, newsletters, services and programs, rights and rules of conduct, athletics and recreation information, activities and workshops.

University of New Mexico UNM_INFO
unminfo.unm.edu
No login is required
Contact: Art St. George <stgeorge@unmb.bitnet>

University of North Carolina at Chapel Hill INFO info.oit.unc.edu (128.109.157.1)
Login as info.
Emulate a VT100.
Hardware/software: DEC/VTX
Contact: Judy Hallman <hallman@unc.bitnet>

System contains: Campus directory; job openings; "The Independent Study" catalog (courses people can take by correspondence); undergraduate catalog; continuing education classes; several campus newsletters, including "Newsbrief," the weekly campus computing newsletter.

University of North Carolina at Greensboro MINERVA steffi.acc.uncg.edu
Login as info or MINERVA
Emulate a VT100.
Hardware/software: DEC/VTX
Contact: Norman Hill <hillnr@uncg.bitnet>

University of North Carolina at Wilmington SEABOARD vxc.uncwil.edu (128.109.221.3)
Log in as info
Emulate a VT100.
Hardware/software: DEC/VTX
Contact: Eddy Cavenaugh <cavenaughd@uncwil.bitnet>
or <cavenaughd@vxc.uncwil.edu>

System includes: class schedule listings, institutional statistics, library services, faculty & staff publications, current university news releases, phone directories, facilities schedules