



STOP
FOR
GOPHER

YIELD
E-MAIL

Navigating the Net

CAUTION
INTERNET
AHEAD

What's Inside:

- How to find your friends on e-mail
- Research methods
- Fun and games
- 'Netiquette'

Welcome to UR guide to the Net

Anyone who picks up a newspaper or magazine today cannot miss the infiltration of technology into American society, particularly the media. It should come as no surprise that college newspapers are also jumping on the Internet bandwagon and reporting about the affects of communication technologies on students' lives.

The Internet questions that fill the dining halls, libraries, lecture halls and dormitories provided much of the inspiration for producing this special section.

The Internet began in the United States Department of Defense as a small networked group of scientists and developers who exchanged research. The network was designed so that in the event of a nuclear war, there would still be communication between military bases. As more advanced telecommunications systems were developed, the number of networks increased and expanded internationally to what we now know as the Internet.

As of August 1989, there were more than 118,000 sites directly connected to the Internet. Uhura, for example, is one of hundreds of sites (computers) within UR's domain on the Net. Uhura alone has at least two thousand users. In the United States, there are currently more than 100 Internet access providers. All in all, about 20 million people are connected by the Internet.

Another site in UR's domain is roundtable.cif.rochester.edu. This machine is maintained by students on the Computer Interest Floor on the tenth and eleventh floors of deKiewiet Tower. On Roundtable, users can run several programs that are not allowed on Uhura. Inter Relay Chat (IRC), for example, is a program that enables users to talk with other users in a "party line" format. This program was removed from Uhura in 1993 because of the number of harassment incidents that were reported to UCC consultants. Roundtable, unlike Uhura, provides recreational access to the Internet. Uhura is intended for academic use and for reading mail.

Like many newspapers and television and radio stations, the *Campus Times* now has an e-mail address. (According to the October edition of the "Internet Index," 54 daily newspapers and 62 television and radio stations now have e-mail addresses.) You can write to the editors here at ct_editor@cc.rochester.edu with your questions and comments about this section and about the paper in general.

This publication is the first of four special sections the *Campus Times* will be producing this semester. Later projects will focus on the Rochester area, the registration process and potential careers.

These eight pages are just a brief glimpse of the tools with which one starts down the Infobahn. The section is designed to be a resource for any level of Internet surfer.

True beginners should get started by going to Taylor Hall and getting their user ID and password. Intermediate users will want to take a look at the lists of FTP and gopher sites. Advanced users may enjoy learning about Multiple User Dungeons.

Almost anyone can dig into the wealth of resources buried in computer memories everywhere. I encourage you to go out and explore.

— David N. Russo,
project editor

Navigating the Internet

Project Editor

David N. Russo

Assistant Project Editor

Stewart S. Bushman

Design/Production Team

Stephen Bjork, Rachel Dickler,
Adam Keats, Seth Krostich, Matthew Shambroom

Staff

Art Davis, Amy Hunter, Rajib Rashid

© 1994 Campus Times

Serving the University of Rochester community since 1873.

Wilson Commons 102 • (716) 275-5942

Full responsibility for the material that appears in these pages rests with the Editor-in-Chief. The *Campus Times* is printed weekly on Thursdays throughout the academic year, except around and during university holidays.

CyberDictionary

binary file:

Any non-text file. This includes all games, pictures and compiled programs.

browser:

A program used to read World Wide Web pages such as Mosaic.

cross-posting:

Posting an article to more than one newsgroup.

domain:

The area that encompasses all of the computers in a given location that are linked to the Internet.

elm:

A program for sending electronic mail, or e-mail, to another person on the Internet.

finger:

A Unix command for searching names and machines.

flame:

A form of Internet punishment for breaching netiquette. Generally, this is just a response to a USENET news posting that some people did not agree with or like. In extreme cases, flammers will fill your mail box with volumes of hate mail.

FTP (File Transfer Protocol):

A program popularly used to send and receive files to any machine on the Internet. "Anonymous" FTP allows users to connect to computers set up as archives for free information retrieval.

FTP server:

An anonymous FTP site that distributes information including freeware/shareware programs (like games and utilities), pictures, animation, sounds, news archives, comics and research information.

gopher:

A program developed by the University of Minnesota for anonymous reading of documents. Gopher provides a menu interface to documents on "gopher servers" for easy and fast browsing. Gopher servers provide all the things you might expect of an anonymous FTP site (in fact many sites allow anonymous FTP through their gopher servers). Gopher also allows immediate downloading into a program for browsing through pictures or listening to sounds.

handle:

A person's finger name

IRC (Internet Relay Chat):

The 1-900 numbers of the net... except they're free. Once connected, the user is in a party line-type environment where many other users connected to the same "channel" are chatting. Many "channels" are available. The channels range from discussions of general topics to game shows to the perverse. IRC is available on Roundtable, but not on Uhura.

listserv:

A listserv is a program that

maintains an Internet-based mailing list.

lynx:

Very similar program to Mosaic, but designed for text-based terminals. This allows access to Web servers with hypertext but denies access to the multimedia features. For example, displaying pictures would be impossible.

mainframe:

A computer that can handle many jobs at the same time.

Mosaic:

A World Wide Web browser that supports all of the hypermedia features of the World Wide Web. This means that multimedia information can be embedded directly into documents accessed with Mosaic. For example, a document could easily contain pictures on the screen where the click of the mouse may spawn another picture, a sound or an animation. The hypertext feature allows access to other documents simply by clicking on a highlighted word on the screen.

MUD (Multiple User Dungeon):

Text-based multiple user adventure games. People connect to a machine running the MUD and set themselves up with a character for exploring the "Dungeon." All the descriptions of what the character sees and where the character goes are printed as text on the screen. Users can interact with the characters of other people connected to the same MUD.

ncFTP (NCEMRsoft's File Transfer Protocol):

A really cool interface to FTP. NcFTP is much easier to use and has some features that are not available in the conventional FTP interface. Some of the highlights include funky bold-faced text and status lines, command line recall (cycling through previously typed commands using the up arrow), automatic viewing of text files, automatic formatting of directory listings and status bars displaying the percentage of the file sent.

netfind:

One command that is the equivalent of searching all the machines in a given domain.

newbie:

An Internet novice. Sometimes considered derogatory, but usually just used in good fun.

parser:

A program that translates a typed-in command into a form understood by the computer.

pirate:

A user who makes illegal duplicates of software or other copyrighted material.

rlogin:

A protocol especially used for logging into another machine with an interactive shell. Machines can be set up to allow users from one machine to rlogin onto another machine and access their account without using a password.

server name:

Another name for the address

given to a computer.

sig:

Sometimes .sig (note the dot). Your e-mail signature file. If you create a file in your account called .signature, it will be added to the end of all postings to USENET News and e-mail sent from your account.

talk/ntalk/ytalk:

A program used to carry out a real-time conversation with another user or users on another machine on the Internet.

telnet:

A protocol that is used to connect to other machines on the Internet.

thread:

A discussion about a particular topic carried on through a series of posted articles.

Unix:

A computer operating system like MS-DOS or Macintosh.

user ID:

A login name, e.g. rd001b.

USENET Newsgroups:

An increasing conglomeration of groups defined interest. One can post electronically their own messages about subjects discussed in the group.

WAIS (Wide Area Information Server):

An Internet backbone used to distribute information. WAIS answer questions over a network, giving information to individual users or servers.

whois:

A Unix command used with a site address that tells the name of the organization at that site address.

WWW (World Wide Web):

A "hypermedia" document server developed by the National Center for Supercomputing Applications (NCSA). With the proper programs, like Mosaic or lynx, it can provide different information in a hypertext document with multimedia.

Compiled by Art Davis.

A note about our styles ...

Throughout this guide, you'll notice that we have used different typefaces to signify different things.

Courier represents words that will appear on the computer's monitor.

Words in **Bold Courier** are commands you will type.

Underlined words appear in our CyberDictionary, which you'll find on this page.

Netiquette for the newbie: a few dos and don'ts

By ART DAVIS

The Internet existed as a community of scientists and researchers for many years before students and other public users gained access. The original group of users invented the system and guidelines which govern it. Using the Internet is like visiting a foreign country. It's important to respect the rules.

"Netiquette," a combination of the words "Net" and "etiquette," is the word used to define courteous Internet behavior. New users, often called "newbies," can get into trouble if they don't follow the rules of the Net's society.

Here are a few tips to follow before you begin exploring the Net:

- **Do not** copy software or any other information that is not legal for free public distribution. Never, ever pirate software. Pirates get their accounts revoked — not locked, not suspended, but permanently removed. They also stand a very good chance of being expelled from the university and having legal charges

pressed against them.

- **Do not** share your account or your password. Never send your password over e-mail, even to a system administrator. An administrator would never need to ask you for your password.

- **Do** notify a system administrator if you think there is a security problem with your account. If your account has been compromised, someone may be using your account to do evil things in your name. You are then in danger of being blamed.

- **Do** change your password frequently. A secure password is not a word in the dictionary and contains capital and lowercase letters, numbers and symbols.

- **Do** read the documentation on a command you are unfamiliar with before running the command. Ignorance is not an excuse for irresponsible actions.

- **Do not** harass other users on the network. Due to the impersonal environment of the Net, many people harass or threaten other users that they normally would not bother. People *can* and *do* press harassment and sexual-abuse charges against offenders over the Net.

- **Do not** run binary files unless you have been given permission by the system administrator. Binaries are computer programs compiled on other machines. This includes both C or Pascal programs and files acquired from other systems. (At UR, you are not allowed to run

binaries on Uhura, but you may on other machines, including Nova and Augustus.)

- **Do not** annoy other users. For example, repeated talk requests to random people on the system can get you in trouble. If someone complains, your account may get locked. Also remember, there's always someone out there who's a little better at being annoying than you are. And if he or she should decide to seek revenge ...

- **Do** delete files that are no longer needed. If you exceed your allotted disk quota, your account will be locked. This includes unnecessary mail accumulated over the ages.

- **Do not** waste either human or computer resources available to you. The Internet is invaluable because it allows for the free exchange of information. Don't take advantage of the situation.

- **Do** keep your signature and plan brief.

- **Do** follow the same guidelines when using e-mail that you would when using the U.S. Postal Service. Chain letters are just as illegal when mailed over the Internet as they are when you "snail" mail them.

- **Do** logout of your account when you will not be using it for more than a few minutes. You may be preventing another user from logging in.

- **Do not** use the Net to advertise, except in designated forums (like ur.forsale). While this is not illegal, it is considered extremely annoying and obnoxious.

- **Do not** invade other users' privacy. The Internet equivalent of breaking and entering is just as serious as the one you already understand.

- **Do** use common sense at all times. Access to the Internet is a privilege, not a

right. If you do something stupid, you may regret it.

When reading USENET News ...

- **Do** include your Internet address when posting. This allows people to contact you directly if they want to reply to something you wrote.

- **Do not** cross-post irrelevant information to other newsgroups. This includes continuing a thread that has already been fully explored.

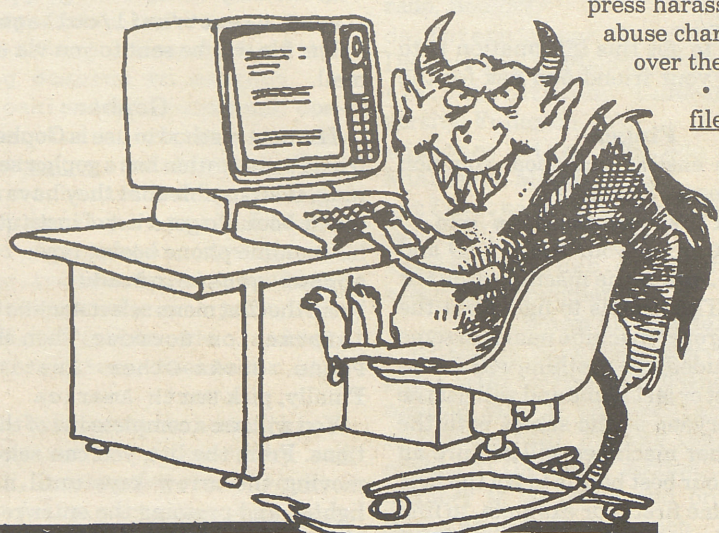
- **Do** use e-mail to reply personally to a posting if the rest of the group will not be interested in the follow-up.

- **Do** read the FAQ (a list of frequently asked questions) where available.

- **Do not** waste time and space correcting other users' misspellings and grammar.

- **Do not** re-post an article until you are positive your original did not go through. (It can take some time to appear, so be patient.)

Additional reporting
by Rachel Dickler.



We're jumping onto the information superhighway. And we want to take you with us.

The staff of the *Campus Times* wants to know what you think. You can now reach the editors via e-mail with your comments, questions, suggestions and letters to the editor.

Just write to us at:

ct_editor@cc.rochester.edu

Retrieving sources for papers within seconds

By AMY HUNTER

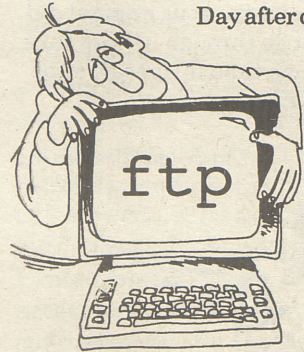
"Where do I begin?" I thought as I began my "Energy of the Earth and Environment" paper. I had a topic, and I knew that there had to be enough information to fill the assigned 20-page paper, but where would I find it? The library was one option, but who wants to walk to the library and search through book after book for the needed information — especially when the library is closed?

Then I remembered that I had exclusive access to one of the best sources of information at the university: my computer.

Day after day I would wake up and check my e-mail, play games and talk to friends, but that night I used my Internet account to find information to write my paper.

I turned on my trusty powerbook and logged in. I typed `nn`, and I was ready to begin my search in the USENET Newsgroups for information on electro-magnetic fields.

All I needed to do was go to the USENET newsgroup `comp.answers` by pressing `G` to go to a newsgroup and then typing `comp.answers`. I found an article on the effect that high transmission wires have on humans — just the thing I was looking for. I saved the article in a file by pressing the `s` and typing a file name: `emf.art`. Then I printed it to the printer in Taylor Hall by typing `lpr emf.art`.



Unfortunately I could not get it until next morning, so I decided to read the article on my screen. It was exactly what I needed — medical reports, statistics, research papers and locations of other information sources. Since I had the time, I decided to dig up some more information.

Instantaneous file transmission

I used `ftp` to connect to a machine at Massachusetts Institute of Technology by typing `ftp pit-manager.mit.edu`, which is the central archive for these kinds of articles that are posted on different newsgroups. I logged in as `anonymous` and entered my e-mail address as the password as per the `ftp server's` request.

Before I could send files back to my account though, I had to see what their directories had in them, so I typed `dir` which gave me a list of the files in the directory. I changed directories to the `comp.answers` directory by typing `cd \usenet\comp.answers` and retrieved several other files that looked interesting by the name given. The `get` command accomplished this within 2.6 seconds (as it so politely told me) after I typed `get filename`.

By the time I was finished, I had more than enough information to fill the 20 required pages.

This all took very little time and I did it all in the comfort of my dorm room while sipping a cup of tea — something you can't do in the library. I was able to go to bed knowing that in the morning I would have all the information I would need to write my paper.

Exploring the USENET News hierarchy is an excellent way to find resources that fit your interests.

See page 8 for a larger list of resources.

Professors utilize listserv database services to connect classes across the country

By LARISSA SOMM
STAFF WRITER

Douglas Brooks, assistant professor of religion and classics at UR, is breaking the barriers of classroom education in a collaborative process of integrating cyberspace into his courses.

Along with colleagues at Michigan State University and Davidson College in North Carolina, Brooks set up a listserv called Bhairava, exclusively for religion students at all three institutions.

'Cyber relationships create a whole new dynamic to whom you think you are and how you convey what you think.'

— Douglas Brooks
assistant professor

Bhairava serves as a mailing list forum for students' doubts, queries and feelings pertaining to what they are learning in the classroom.

"In some sense, class never ends," Brooks said.

As with all listservs, individuals discuss matters with each other by posting messages that are open for all to read and comment on.

Brooks does not yet require the students in his "Asian Search for Self" and "Hindu Goddesses and Women" courses to subscribe to the listserv, although he may require it of religion majors next year.

Presently, the courses at all three institutions are not coordinated.

Paul Muller-Ortega's course at MSU is a strict introduction to Hinduism, whereas UR students first study Buddhism, and then Hinduism.

Muller-Ortega and Brooks are considering coordinating syllabi next year and hope that, in the future students from different institutions will be able to write papers together.

Brooks also hopes to utilize the server for posting graphics and visual images, "so we don't use class time for things we can do outside of class."

After this experimental year, Brooks and his colleagues will assess how students are thinking and writing in this new medium.

So far, the Bhairava's success has exceeded Brooks' expectations. He said that the discussions are congenial and engaging because outside of the classroom students feel less shy and intimidated.

"I've been really surprised with how people have been openly sharing their personal experiences," Pranay Mehta, a sophomore in Brooks' Asian Search for Self class, said.

"There is a lot of digression (from lecture topics), which is really good," Edward Getman, a freshman, said.

"Cyber relationships create a whole new dynamic to whom you think you are and how you convey what you think," Brooks said. "(The students) spill their hearts and emotions."

Brooks said another advantage to Bhairava is that it encourages students to acquaint themselves with e-mail.

"It is a terribly underutilized resource at the university," he said. "It's the wave of the future."

Finding all those friends

By RAJIB RASHID

Finding internet accounts for friends and acquaintances anywhere in the world is like solving a difficult math problem. There are several solutions, you just have to know how to find the right one.

Many of the methods described here rely on the information provided by a simple `finger` request. But since some users prefer to use a `handle` instead of their real name as a `user ID`, the name associated with that user ID may make it practically impossible to find a specific person.

For example, junior Jeremy Smith's account responds only to "Wonko the Sane," his preferred handle.

Also, unlike UR, many institutions do not provide accounts to all of their students. In such cases your friend will have to go and ask his or her system administrator for an account.

If you have tried all of the following tricks and still cannot find a friend's e-mail address, it is quite possible that your friend does not have an account.

The best way to get this information is to write or call up your friend and ask for the address.

Finger

Finger is the easiest and most common method. The general format is:

`finger userID@some.machine.edu`

where `userID` is the your friend's ID and `some.machine.edu` is the machine at his or her university. The trick is to figure out the user id and the proper machine name. In some schools, UR included, the machine will accept your friend's first or last name and will list the user ID's of everyone at the school with the same name. Other machines will require an exact user ID. Your best bet is to try the first name or last name first. For example, to find John Doe at UR, you can type:

`finger john@uhura.cc.rochester.edu`

or

`finger doe@uhura.cc.rochester.edu`

The next step is to find the domain name. You know that it will end with `.edu` since it is a college or university. UR's domain is `rochester.edu`. Some schools have their institution name as the domain name like `amherst.edu` and `duke.edu`. In many other cases, it will be an abbreviation of the institution's name, for example `utexas.edu`, `rit.edu` and `mit.edu`.

In either case, you can find out the domain name using `whois`. Suppose you want to find a friend at California Institute of Technology. Logical guesses for their domain are `cit.edu`, `calit.edu`, or `caltech.edu`.

When you type `whois caltech.edu` you get a response including:
California Institute of Technology
Domain Name: CALTECH.EDU

The other two guesses will result in failed searches, so now you have a guess that the address may be `userid@caltech.edu`.

Go ahead and try it — you may already have enough information to find your friend's e-

mail address.

In most cases, it will be not this easy. At UR, people have to `finger uhura.cc.rochester.edu`, not just `rochester.edu`. Similarly, most institutions have a specific machine like Uhura for academic use. Unfortunately, there is no easy way to find that name.

Fortunately, there is a file that lists these machine names, and also how user IDs are formed in those institutions. The file is called 'FAQ: College E-mail Addresses' and is posted monthly in several `USENET Newsgroups`. This list is updated regularly, and chances are, you will find information about your friend's college in this file.

How do you get hold this file? The easiest way is to go to the newsgroups `soc.college`, `soc.net-people` or `news.answers`. You also can get it by e-mail. Send mail to `mail-server@rtfm.mit.edu`

In the body of the message type:
`send usenet/mail/college`

The file will be sent to you via electronic mail.

Gopher

The next method to use is Gopher. If your friend's institution has a `gopher` server running, it is possible that they have an online phone book. To get a list of institutions that have online phone books, type:

`gopher gopher.nd.edu`
From the first menu select Non-Notre Dame Information Sources. Then choose Phone Books-Other Institutions. Finally, pick North America

You will see a complete list of the institutions. From the list, you can select one by moving the arrow keys until it is highlighted and pressing the enter/return key. You can now type in the first or last name of your friend, and `gopher` respond with possible results.

NetFind

If you do not want to go through the trouble of the above steps, you can use `netfind` to locate your friend. `Netfind` checks all the machines it finds on a domain and issues a `finger` command on your behalf. This way you do not have to know the individual machine name, and it might find a machine that was not listed on the above mentioned file.

You can connect to any of the servers by typing `telnet <server name>`. Login with the user id `netfind`. You will not need any password.

Here is a sample session for looking up my own e-mail address:
`uhura% telnet ds.internic.net`

Connected to ds.internic.net
Escape character is '^]'.
SunOS UNIX (ds2)
login: netfind

Last login: Tue Sep 27 14:01:21

Gopher territory expands w

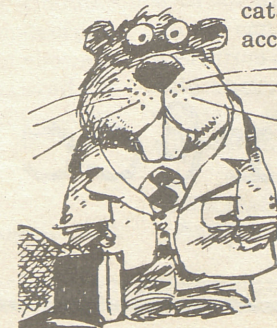
By DAVID RUSSO
MANAGING EDITOR

Although the names and terms used to describe some aspects of the Internet are certainly strange, many do reflect concepts in the real world. `Gopher` is a one such name.

It is used to search databases using menus.

CURio, the library's on-line card catalog can be accessed using

`gopher`.
The University Computing Center's experimental project with the Registrar's



office now offers class registration options in CURio that will enable students to search classes by time and department. A list of closed classes is also available.

Request for additional funds

UCC hopes to have The College grant them a \$20,000 capital budget for this project. This would provide "two machines that will be dedicated to this service and they're going to act as mirrors of each other [as a backup system]," Kirk Anne, an analyst and programmer for UCC, said.

The expansion of UR's `gopher` is UCC's attempt to make the exchange of information easier for all members of the campus community.

"[The goal of expanding `gopher` services] is to get the university

information all because right now information is in you don't know a lose out on a whole tion," Anne said.

"Once we have we'll be able to e from around cam mation into the s

"There are for pher right now v bers can connect form and get a rosters," Dick sa increasing access

`Gopher` was de versity of Minnes the Minnesota G

The annual gr traffic was measu percent, signaling

ends@places.on.net

SunOS Release 4.1.3 (DS2) #2: Wed
Feb 9 15:42:25 EST 1994

Welcome to the InterNIC Directory
and Database Server.

I think that your terminal can
display 24 lines. If this is wrong,
please enter the "Options" menu
and set the correct number of
lines.

Top level choices:

1. Help
2. Search
3. Seed database lookup
4. Options
5. Quit (exit server)

→ 2

Enter person and keys (blank to
exit) → **rajib university rochester**
locate: first key (university)
matched too many refs

Please select at most 3 of the
following domains to search:

0. acs.oakland.edu (academic computing services, oakland university, rochester, michigan)
 1. acs.rochester.edu (academic computing services, university of rochester, rochester, new york)
 2. amcc.rochester.edu (university of rochester, new york)
 3. anes.rochester.edu (university of rochester, rochester, new york)
 4. biology.rochester.edu (biology department, university of rochester, rochester, new york)
 5. biophysics.rochester.edu (biophysics department, university of rochester, new york)
- [... lots of machine names]

(2) SMTP_Finger_Search: checking host vangogh.cc.rochester.edu
SYSTEM: uhura.cc.rochester.edu
Login name: rr002c
In real life: Rajib Rashid
Directory: /u/c/rr002c
Shell: /usr/ucc/bin/tcsh
Last login Tue Sep 27 08:30 on
ttyq8 from camelot.cif.roch
Mail last read Tue Sep 27 13:51:51
1994

FINGER SUMMARY:

- The most promising e-mail
address for "rajib" based on the
above finger search is:
rr002c@uhura.cc.rochester.edu.

Enter person and keys (blank to
exit) →

Top level choices:

1. Help

2. Search
3. Seed database lookup
4. Options
5. Quit (exit server)

→5

Exiting Netfind server...

As you can see, I did not even need to know the name of the machine or the domain name. All I entered was the first name (last name will work better), and the words **University** and **Rochester**. The last two words are called the 'key' and will identify the institution. Since there were a lot of subdomains (like the biology department and the chemistry department), netfind asked me to narrow down the search by choosing a specific department. If you know your friend's field of study, you can choose the proper selection. Otherwise find a general academic computing department.

There are several netfind servers available... here is a partial list:

- bruno.cs.colorado.edu (University of Colorado, Boulder)
- ds.internic.net (InterNIC Directory and DB Services, S. Plainfield, NJ)
- eis.calstate.edu (California State University, Fullerton, CA)
- mudhoney.micro.umn.edu (University of Minnesota, Minneapolis)
- netfind.sjsu.edu (San Jose State University, San Jose, California)
- redmont.cis.uab.edu (University of Alabama at Birmingham)

When all else fails

When you have tried everything, and you really need to find your friend's address, try sending mail to postmaster@domain.edu requesting help. Finding the domain is described in the finger section. You should remember to be polite and provide as much information as you can, such as full name, year and major of your friend.



While World Wide Web waits

available to people
the university's
little clusters and if
about a cluster you
section of informa-

those machines, then
enable departments
pus to install infor-
pace," Anne added.
ns available in go-
here faculty mem-
to gopher, fill out a
copy of their class
d, referring to the
bility of gopher.
veloped at the Uni-
pta and named after
lden Gophers.

rowth rate of gopher
red in 1993 at 996
the wide acceptance

of the protocol throughout the world.
Technology exists that enables the
transmission of full color video im-
ages, music and pictures. It is called
the **World Wide Web (WWW)** and
can be accessed using **browsers** such
as Mosaic.

The WWW project was started in
Switzerland at the European Labora-
tory for Particle Physics to build a
system to distribute **hypermedia**.

A browser program such as
Mosaic, which is available on com-
puters in Taylor Hall's Macintosh
classroom and in the Multimedia
Center, reads documents and can
fetch documents from other sources,
simply by clicking on highlighted
words.

WWW is gopher and more

Although WWW is still "under
development," UCC consultant

Jonathan Dick said "the nice thing
about it is your can use a [World
Wide Web] client to view gopher
documents."

"We want to start with [gopher],"
Anne said "just to get people into
using the Internet as a way to get
information. Because the WWW
and Mosaic can read gopher docu-
ments, we want to create some-
thing that wraps around our go-
pher space, so that the informa-
tion is still available to the major-
ity," Anne said.

Part of that majority includes
the departments that do not have
machines capable of handling the
volume of information transferred
over the web.

It is also expensive to upgrade
and connect hardware for WWW
usage.

Fixed tolls for travel on the superhighway

By DAVID RUSSO
MANAGING EDITOR

Think about the thousands of people
around the world communicating with com-
puters via telephone lines and satellites.

The telephone bill does not sound pretty.
Fortunately for UR and other educational
institutions in New York State, the costs of
Internet access are fixed.

Unlike private Internet access providers
such as CompuServe, Delphi, and
AmericaOnline who usually charge hourly
usagerates, UR pays approximately \$35,000
per year to the New York State Education
Research Network (NYSERNet) for access
to the Internet.

Founded in 1985, NYSERNet is a con-
glomeration of educational institutions gov-
erned by a board of directors to maintain
the state's electronic backbone.

"NYSERNet is able to manage the
New York State network as a non-
profit corporation [more cheaply
than using private compa-
nies]" Gary Crane, Direc-
tor of Telecommunica-
tions said.

With an annual bud-
get of more than 9 mil-
lion dollars, Crane says
Telecommunications
spends more money on
long distance carrier
charges (about 2
million dollars per
year) than on people con-
nected for hours on end to computers in
other countries.

"The cost ... is not a lot," Crane said. It
becomes "expensive to count what you want
to charge for," which would be a measure-
ment of bytes of information. This is diffi-
cult way to meter usage Crane said, be-
cause millions of kilobytes of information
passes between users on the Net every
second.

Despite the difficulties of trying to estab-
lish a metered pricing system, it has been
attempted.

The Taxpayer Assets Project (TAP),
founded by consumer advocate Ralph Nader
to monitor the management of government
property, has lobbied against metered pri-
cing.

A widely distributed letter from TAP
stated that the Internet "represents the
most important new effort to expand de-
mocracy into a wide range of human en-
deavors ... Federal policy should be di-
rected at expanding public access to the
Internet, and it should reject efforts to
introduce pricing schemes for Internet us-
age that would mimic commercial telephone
networks."

On Crane's office table was the "Chronicle
of Higher Education," which reported Oct.
5 about Australia's planned shift to price
their electronic network through metered

usage. According to the "Chronicle," the
possible costs (\$1.50 per megabyte of data)
are upsetting many Internet users in
academia.

Peter Saalmans, general manager of the
Australian Academic Research Network
(AARNET), said, "the increase in capacity
is a response to the apparently insatiable
demand for Internet access in Australia by
universities [and other institutions]."

"I think there are really serious problems
with [metered usage]," Crane said.

He cited an imaginary scenario of a go-
pher server at a cancer center that would
have to pay for information going in or out
of the server.

"What's their incentive?" Crane asked.
"The Internet is founded on the free ex-
change of information," he explained.

Although UR does not have to
worry about NYSERNet shift-
ing from a fixed rate to me-
tered charges, transmission
capacity is a concern.

Presently, UR's "back-
bone" is a 10-megabyte
(Mb) capacity
Ethernet connection.
Physically, it is a mas-
sive aggregate of fiber
optic cords throughout
the university.

Crane said net-
work usage has
been up to 60 per-
cent of capacity
and is slowly becoming saturated.

As every department, building and com-
puter facility expands its number of ma-
chines connected to the backbone, the
workload of the backbone increases.

Predicting the need for expansion
throughout UR, Telecommunications is
switching communication technologies from
the 10 Mb Ethernet to a 100 Mb FDDI
(Fiber Distributed Data Interface) network.

"It's a more stable [network]" Crane said,
mentioning the high maintenance of
Ethernet hardware.

The smaller LAN (local area network)
connections will not be affected. Most of
these are AppleTalk or Ethernet networks.
Only the backbone communications hard-
ware that will change.

"It's like a water plumbing system. If you
have lots of little connections off of the big
pipe, your water pressure goes down," Crane
said.

The upgrade should be completed by late
November and will cost approximately
\$100,000.



tap-info is archived at
<ftp.cpsr.org> and
<gopher.cpsr.org>.

UR Security gets e-mail address and uses listserv to stay tuned in

By DAVID RUSSO
MANAGING EDITOR

UR Security & Traffic has proven that
the Internet is not just for researchers
and students.

For the past four or five months, the
department has had an e-mail address
and is subscribed to a listserv main-
tained at the University of North Caro-
lina. The list keeps its subscribers in-
formed about what their colleagues are
doing across the country.

"Mostly it's been informative and in-
teresting," Chris Sly, assistant director
for UR Security administration, said.
Sly, who's responsible for reading the e-
mail said the mailbox receives between
five and 25 messages a day.

"It's kind of like ... going to a national
security convention," he said.

Although the department has not yet

posted any questions to the list, known
as International Association of College
Law Enforcement Administrators
(IACLEA), Walter Maudin, director of
security, said it's an excellent way for
law enforcement agencies to exchange
ideas about what's happening at other
campuses, such as security problems or
fluxes in drug trafficking.

Sly said it is also much easier to com-
municate with departments within UR
using e-mail.

"Things that have previously been
handled by FAX [are now sent instanta-
neously via e-mail]," he said.

Despite having an e-mail address
listed in the new blue pages of the re-
cently published faculty and staff tele-
phone directory, Sly said that the de-
partment does not have the resources to
answer a large barrage of questions.

MUDs: role-playing games in cyberspace

By STEWART S. BUSHMAN
EXECUTIVE COPY EDITOR

You're in a dark cave, deep within the earth. Tall, ominous stalactites surround you. Basked in the light of your flickering lantern, their shadows seem to dance along the stony floor.

Have you ever wanted to be a fearless warrior roaming a foreign land teeming with hideous monsters? Or an unscrupulous bandit moving silently through dark city alleyways? You can experience your wildest fantasies through the magic of MUDs, Multiple User Dungeons (or Multiple User Dimensions).

A MUD is a computer program which allows users to log on and create their own persona: sex, race and all. They can wander around, explore dungeons, solve puzzles and even interact with other users.

You must use the telnet command to connect to a MUD. The format for the command, using a hypothetical site, is:

```
telnet mud.rochester.edu 4000
```

The address consists of two parts: the site address (in this example, `mud.rochester.edu`) and a port number (in this example, `4000`). Both are necessary to reach a MUD.

When logging into a MUD, you will be asked several questions. Each computer will not necessarily ask them in the same order. There are established criteria for responses.

Name: This is the name of your character in the game, and what the other users will call you. In most cases, this is the only information other users will have about you. Choose something that is easy to spell in case someone wants to talk to you. Also, do not choose a name of a monster, like Snake or Leviathan. Another user could mistake you for an enemy in the MUD.

Password: It is best to use the same criteria for choosing a MUD password as for your regular account password. Do not use

your real name, your character's name or a dictionary word. Also, if you are MUDding under the same character name on different MUDs, use different passwords for each site. If someone logs in as your character, they can wreak havoc and get you kicked off the MUD indefinitely. Choosing different passwords will reduce the chances of this happening.

Sex: Choose one. You do not have to be the same sex in real life. However, if another MUDder gets a little amorous (scary, but possible), it might be best to clear things up.

Race: Some MUDs will offer you a choice of races. If becoming an elf, dwarf or lizard man appeals to you, enjoy!

Class: This is from "Dungeons and Dragons." You must select the type of character you will play. There are usually four choices: Warrior, Magic User, Thief, and Cleric (Healer). Sites with more classes will generally have detailed descriptions.

The MUD interface is text-based, like the example above. Each has a built-in vocabulary, or **parser**, to interpret what the user types. Some parsers are quite advanced and can understand complex commands like:

```
>look at the bunny then put the bunny in the hat then wave the magic wand
```

The bunny is irresistibly cute.

The bunny is in the hat.

Poof The bunny disappears.

Other parsers are very primitive and require some time to get used to the vernacular.

```
>look at bunny
```

I do not understand that command.

```
>look bunny
```

The bunny is irresistibly cute.

```
>put bunny in hat
```

The bunny is in the hat.

```
>wave the wand
```

I do not understand that command.

```
>wave wand
```

Poof The bunny disappears.

There are usually help files designed to assist you with the parser. After first logging onto the MUD, you should pay attention to the information it provides regarding help.

There are some common commands that you can try like **look**, **go** and **say**. Try those if you get lost. Also, type **help**, **info**, **news** or **commands** for other introductory information.

The people who own and run the MUD, called gods, and other administrators, called wizards, will sometimes give you a hand. So will other MUDders, if you ask nicely.

However, be cautious, there are some seasoned users that do not care for novices (**newbies**). They might ignore, mislead or even kill your character.

Luckily, those people are few, and most of the players at all types of MUDs are both helpful and pleasant.

There are currently two major classes of MUDs: LPMUDs and TinyMUDs.

LPMUDs are combat-oriented MUDs. The general object is to kill monsters to gain "experience" points. The harder the enemy is to defeat, the more points you receive when you kill it. As points accrue, you advance in levels (everyone starts at level one). More advanced levels increase the number and variety of magic spells you can cast and makes your character stronger, faster and more intelligent.

TinyMUDs tend to be social settings, where people come as their characters to hang out and discuss the world's problems.

While these classes tend to dominate the gaming medium, there are certainly other types in existence, the most popular of which are currently DikuMUDs.

DikuMUDs (DIKU is a Danish acronym

for the department of computer science at the University of Copenhagen) are set primarily in a "Dungeons and Dragons" atmosphere. They represent a merging of the main two classes. DikuMUDs attempt to establish a "real-world" environment, complete with other people to engage as well as ghouls and hobgoblins to battle.

Of course, these are only guidelines; there's no rule that says there cannot be a TinyMUD with combat or an LPMUD with discussion. Every MUD has its own rules regarding both, and you should read them before you start roaming the countryside.

For example, unless it is explicitly stated otherwise, MUDs forbid killing of other characters, and you can be banned for doing so. Another command to avoid is **shout**. This sends a message to the screen of everyone currently playing and is annoying.

Some MUD sites to try:

PsychoMUD: chaos.bsu.edu 4355

Ragnarok: ragnarok.teleport.com 2222

For the advanced MUDder:

Sanctuary: 128.153.32.10 9000

And for an entirely new experience, try:

Mud II: 199.182.210.2 (no port number)

All MUDs attempt to bring you into another world, complete with rich prose to enhance your journey, new people to meet and new adventures to experience. The only limit is your own imagination.

Having scaled the sheer cliff, you collapse on the bare, sandy plateau. Shading your dusty brow from the harsh sunlight, you look out across the Land.

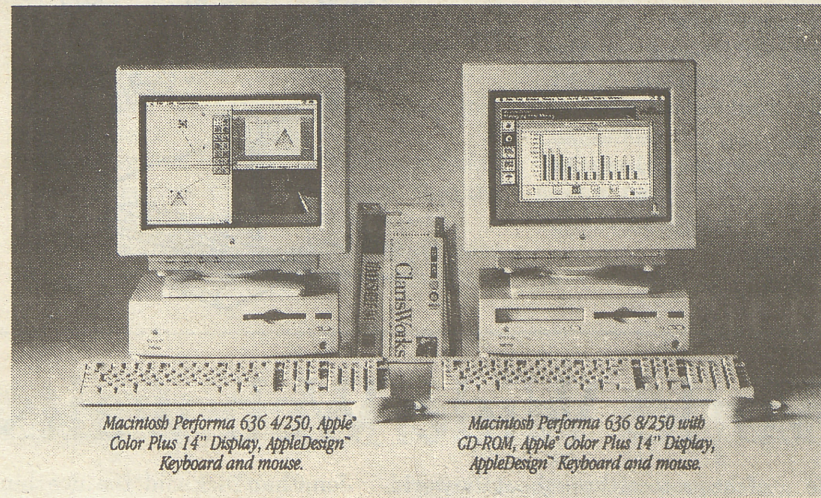
MUDding is forbidden on Uhura and Troi. If you have access to another system, you must ask your system administrator if it is allowed. The Computer Interest Floor does permit MUDding on Roundtable.

Two of the most popular bundles on campus this year.




A distinctively fragrant assortment of wool, denim, rayon and poly-cotton blends.

Now you can really clean up when you buy a select Macintosh® Performa®. For a limited time, it comes bundled with a unique new student software set available only from Apple. It's all the software you're likely to need in college. You'll get software that takes you through every aspect of writing papers, the only personal organizer/calendar created for your student lifestyle and the Internet Companion to help you tap into on-line



Macintosh Performa 636 4/250, Apple Color Plus 14" Display, AppleDesign Keyboard and mouse.

Macintosh Performa 636 8/250 with GD-ROM, Apple Color Plus 14" Display, AppleDesign Keyboard and mouse.

research resources. Plus ClarisWorks, an intuitive, integrated package with a spreadsheet, word processor, database and more. Buy a select Performa with CD-ROM, and you'll also get a multimedia library of essential reference tools. And now, with an Apple Computer Loan, you can own a Macintosh for less than a dollar a day! It's the power every student needs. The power to be your best. 

POWER
through it.

Visit UR Computer Sales

Fauver Stadium • Mon-Fri, 10am-4:30pm (extended hours starting in October
Tues, Wed, and Thurs until 7pm during academic school year) • 275-8353 or
Med Center, Room G7220 • Mon-Fri, 10am-3pm • 275-9747

Stop by for current pricing!

Offer expires October 17, 1994; available only while supplies last. ©1994 Apple Computer, Inc. All rights reserved. Apple, the Apple logo, Macintosh, Performa and "The power to be your best" are registered trademarks of Apple Computer, Inc. AppleDesign is a trademark of Apple Computer, Inc. ClarisWorks is a registered trademark of Claris Corporation. An estimate based on an Apple Computer Loan of \$1,549.15 for the Performa 636, and \$1,882.59 for the Performa 636 with CD-ROM system shown above. Prices and loan amounts are subject to change without notice. See your Apple Campus Reseller or representative for current system prices. A 5.5% loan origination fee will be added to the requested loan amount. The interest rate is variable, based on the commercial paper rate plus 5.35%. For the month of August, 1994, the interest rate was 10.10%, with an APR of 11.36%. 8-year loan term with no prepayment penalty. The monthly payment shown assumes no deferral of principal or interest. Students may defer principal payments up to 4 years, or until graduation. Deferral will change your monthly payments. The Apple Computer Loan is subject to credit approval.

Surfing the Internet while away from UR

By RAJIB RASHID

So you're going away on break and you want to check your e-mail. You don't have to be at UR to log into your account.

Telnet is a program that allows you to log into your account from another Internet site when you are away from school. It will let you work as if you were using one of the terminals at CLARC or Taylor Hall.

Whether or not you can do this depends upon where you are, as well as the computing environment in that location.

Using another machine

Suppose you are visiting your friend at another university.

If your friend has an account, you can log in by running the telnet program on his or her machine.

After asking your friend's permission, type the command: `telnet uhura.cc.-rochester.edu` at their prompt and you will be connected to Uhura or whatever machine your account is on.

At this point you should take over, and type in your user ID, and your password. Keep in mind that you should not ever share information about your account (i.e. your password) with anyone. It must be you who actually logs in, and not your friend.

From your home computer

Now imagine you are at home and you want to log into your account.

Assuming you have a computer and a modem, one way is to dial the "in-bound modem pool" at the university, (716) 256-7000, and then log in.

Keep in mind, though, that if you are dialing outside of the area code, this is a the long distance call and you will be charged — by the minute. The other alternative is to get an account with a local Internet provider and then login using telnet.

Some providers, including America Online and CompuServe, will charge you hourly for using their service, while others will ask for a monthly fee.

For example, in the Boston area

you can use a service named "world.std.com" that will charge you \$5 per month and \$2 for each hour of use.

If you generally spend a lot of time online, this can ring up a costly bill. You may want to look for a provider with the flat-fee option like Netcom, which charges \$19 per month and then provides unlimited access time.

The advantage of using a local provider is that connecting to the local modem pool costs the same amount as a local call, so you are not charged the long distance phone rates.

Selecting a provider depends on your needs and where you live. You can get a comprehensive list of providers, sorted by area code through `gopher`. At your prompt, type: `gopher nic.merit.edu` and choose the menu option: How to connect to the Internet Next, choose one of the files: `internet-access providers.txt` for a list of providers sorted by state and town or `pdial` for a list of providers sorted by phone area code.

You will get the rates for each provider, and also a phone number at which you can contact them to set up an account. The provider should be able to answer any questions about setting up the account.

In either case, remember that you have to let the proper authority (in UR's case, the University Computing Center) know that you will be logging in from a place off campus.

For security reasons, UCC will lock any accounts that are accessed from off-campus, unless the owner of the account notifies UCC that he or she will be doing so.

Use the away command by typing `away` at your prompt, and provide the information requested. Ideally, this should be done before you leave campus, but if you *do* forget it, run the away command as soon as you log in from the other site.

The administrators will see this and ensure that you will be able to use your account from off-campus.

And now a word from your local system administrator

By ART DAVIS

About 50 pages of psychology to read, an optics assignment due and a quiz in math all this week. Not to mention finals right around the corner. And how much did I study over the weekend? None.

Operating on less than minimal sleep, I checked my e-mail like any other undergraduate at the UR.

I had been elected lab director for the Computer Interest Floor several months back and at that time had named myself a system administrator. Roundtable had been made available to the general populace at the university about a month ago. Now we had lots of users instead of just CIF members.

After checking my e-mail I found that with the addition of these new users, really stupid people now had accounts on our machine. Not stupid users like those who don't know what they're doing ... that's not stupid; that's just inexperienced. But stupid users who knew what they were doing but still did stupid things.

I really hate that.

So I checked my e-mail and discovered that I had received mail from an administrator at another system who threatened to sue us if we didn't take action against a couple of our users who had been harassing a whole channel of people on IRC (Internet Relay Chat).

Like I didn't have enough to worry about as it was.

One of the other CIF administrators contacted the users and warned them that they had done a bad thing and if they should violate policy again (as clearly spelled out in the document they signed to get their Roundtable accounts) their accounts would be permanently locked.

This was good enough to appease the dude threatening to press charges. The only problem was that we had to watch these users carefully to make sure they don't do anything else wrong.

A day passed and I logged in.

UNBELIEVABLE! One of the users that almost got us sued was now blatantly violating another one of our guidelines. The user was logged in twice. Not that that's a bad thing, but one of the sessions was from Uhura and the other from out-of-state. The two sessions were "talk"ing with each other.

Obviously, this was a case of shared accounts. The Roundtable user had probably sent his password via e-mail to his out-of-state friend.

Even after a stern warning this idiot still insists on breaking the easiest-to-follow rules in the world.

Even if the user had not read the rules that he signed his name to in order to get an account, you would think that he would have at least seen rule number one, which clearly states: *Do Not Share Your Account with Anybody, Especially over the Network.*

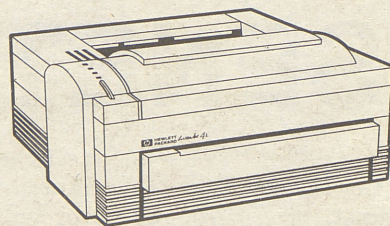
So I locked their account and killed their shell, an action well within my authority.

That felt good.

The Easiest Non-Academic Decision You'll Ever Make

\$50 REBATE

Direct from HP!
Now through Dec. 31, 1994
See us for details!



Nothing says dependability like Hewlett-Packard printers. And nothing says value like a \$50 rebate. That's why buying an HP LaserJet 4L printer is the easiest non-academic decision you'll ever make. The HP LaserJet 4L printer offers you the print you need to make professional-looking documents. Plus, the reliability HP is famous for. So, make the smart decision. Ask about the HP LaserJet 4L printer today!

Visit University of Rochester Computer Sales
Fauver Stadium, Mon-Fri 10am-4:30pm (extended hours)
Tues, Wed, Thurs until 7pm during academic school year)
275-8353 or Med Center Room G7220-B Mon-Fri
10am-3pm 275-9747. Stop by for current pricing!



Gopher sites

By STEPHEN BJORK

There are thousands of Gopher servers around the world that include selections that connect a user to other sites. This is a sample of interesting sites besides the UR gopher. You connect to these sites by typing the command **gopher** and the server name, e.g. **gopher.gopher.tc.umn.edu**.

Note: The services noted are not all the selections on each gopher.

- University of Minnesota root gopher server.

gopher.tc.umn.edu

Information about Gopher provides general information concerning the nature, development, and use of the Gopher software

Libraries contains a large collection of electronic books, journals, and reference works.

- University of California, Santa Cruz **gopher.ucsc.edu**

The Library contains a large collection of useful electronic books, journals, newspapers, and reference books.

- Electronic Frontier Foundation Gopher **ftp.eff.org**

Net Info contains a great deal of useful information about the Internet, including quite a few general guidebooks such as "The Big Dummy's Guide to the Internet" and "Zen and the Art of Internet." It also contains directories of electronic journals and conferences and lists of other Internet resources.

- Merit Network Gopher **nic.merit.edu**

Merit Software Archives contains a great deal of software for Macintosh, MS-DOS, Atari, and Apple 2 operating systems. The software is available through anonymous FTP.

- Library of Congress **marvel.loc.gov**

Library of Congress Online Systems allows the user to search for information on any work in the Library (i.e., any work copyrighted in the U.S.)

- MSEN Gopher **garnet.msen.com**

Online Career Center provides an employment advertising service. Positions can be advertised by employers and resumes can be posted by job-hunters.

- Internet Wiretap **wiretap.spies.com**

Wiretap Online Library contains the complete wiretap archives, a varied assortment of electronic books, articles, and documents, from "The Autobiography of Benjamin Franklin" to the "Alf Episode Guide."

- University of Michigan Library **una.hh.lib.umich.edu**

This server has a good collection of infor-

mation in different physical and social sciences. Economics under the socsci heading contains a useful Economic Bulletin Board providing interest rates, foreign exchange rates, and other current economic data.

- American Politics Gopher **toby.scott.nwu.edu**

Elections, Campaigns, and Speeches contains archives of speeches, as well as other interesting data. This server provides in a single centralized location links to a great many political resources and archives.

- Northeastern University Gopher **gopher.neu.edu**

Project Vote Smart provides an enormous number of election-oriented profiles of political candidates, both national and state.

- Hanover College Gopher Server **gopher.hanover.edu**

American Psychological Society in Public contains software, electronic journals, research links, and other resources dealing with psychology.

- NASA Spacelink **spacelink.fsf.nasa.gov**

The latest NASA news is available from this server, as well as instructional materials and software.

- George Washington University Gopher **gwis.circ.gwu.edu**

Train Schedules in General Information contains current Amtrak train information.

- Weather Machine Gopher Server **wx.atmos.uiuc.edu**

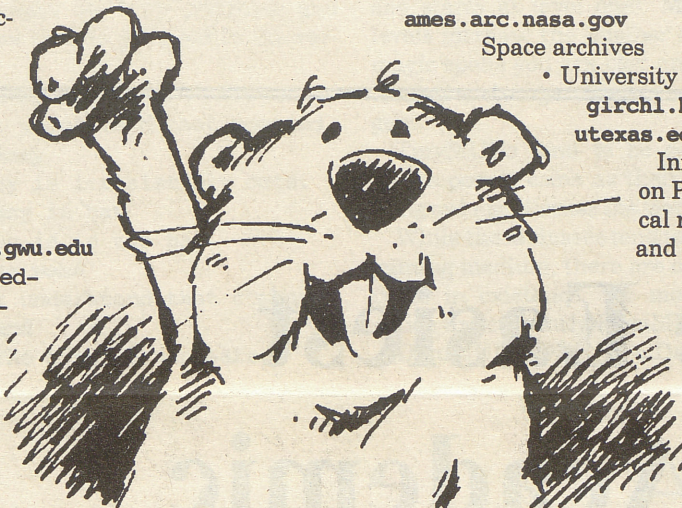
This server provides extensive weather information, both local and global.

- Islamic Resources, ADS, & BBS **latif.com**

This server provides bulletin boards, discussion groups, and other information pertaining to Islam. It also includes an online copy of the Koran.

- The Vanderbilt Television News Archive **tvnews.vanderbilt.edu**

This server contains an archive of television news for research purposes.



FTP servers

By STEWART S. BUSHMAN
EXECUTIVE COPY EDITOR

FTP servers, unlike Gopher clients, are not menu-based. They use a command-line interface like Uhura or Troi. FTP sites are used solely for the transfer of files from the ftp site to your account. You log onto an ftp site by typing **ftp** followed by the server name.

You must log on as **anonymous** to gain access to the ftp client. It will then ask for your Internet address as a password. Enter your full address (for example: **userID@uhura.cc.rochester.edu**).

To navigate within the ftp site, you must use standard UNIX or DOS commands. Use **ls** or **dir** to list the files and **cd directoryname** to change directories.

To receive a file, type **get filename**, where **filename** is the name of the file you want to retrieve.

You can also receive multiple files at once with **mget fileone filetwo**. If you use **mget**, it will ask you for confirmation for each file. This can get to be tedious, so to turn it off, just type **prompt**. To quit, type **bye**.

- NASA - Ames Research Center **ames.arc.nasa.gov**

Space archives

- University of Texas **girchl.hcsh.utexas.edu**

Information on Physiological research and programs

- University of Nevada **archive.-nevada.edu**

U.S. constitution and religious texts

- University of Michigan **archive.umich.edu**

Software for Macintosh, MS-DOS, NeXT, Amiga and Apple II

- University of Freiburg- Dept. of Psychology **ftp.psychologie.uni-freiburg.de**

psychology-related documents and software

- University of Illinois **deja-vu.aiss.uiuc.edu**

humor, movie scripts, song lyrics

- Case-Western Reserve University **ftp.cwru.edu**

Supreme Court rulings

- University of Wisconsin - Parkside **ftp.uwp.edu**

music-related files

- NASA **nsdca.gsfc.nasa.gov**

Hubble space telescope images

- University of Berne, Switzerland **siam.unibe.ch**

list of ftp sites

- University of Georgia **aisun1.ai.uga.edu**

archive of source code and examples, useful for computer science courses

- Rutgers University **aramis.rutgers.edu**

RFC's- readable, general Internet information

- Stanford University **argus.stanford.edu**

Internet information

- University of Colorado at Boulder **boulder.colorado.edu**

archive of Esperanto files

- Walnut Creek CDROM **cdrom.com**

archive of CD-ROM related files

- Carnegie Mellon University **cert.sei.cmu.edu**

computer virus related archives

- Convex Computer **convex.com**

Perl sources and examples - useful for computer science courses

- Apple Computer **ftp.apple.com**

Apple product information and support

- Stanford University **hanauma.stanford.edu**

Neptune picture files

- United States Geological Survey **isdres.er.usgs.gov**

US Geological Survey Maps

- SUNY Oswego **moxie.oswego.edu**

material related to the Soviet Coup

- San Diego State University **sciences.sdsu.edu**

sound files

- University of Western Australia- Dept. of Computer Science **ftp.cs.uwa.edu.au**

computer science related files, including local papers and research reports

- Oakland University **oak.oakland.edu**

MS-DOS-related software archive

- University of Massachusetts, Lowell **ftp.uml.edu**

The largest game archive in the United States

A sample of USENET newsgroups

alt.aldus.pagemaker
alt.alien.visitors
alt.bbs.internet
alt.best.of.internet
alt.binaries.multimedia
alt.binaries.sounds.mods
alt.books.isaac-asimov
alt.cyberpunk
alt.irc
alt.music.peter-gabriel
alt.tv.sn1
biz.books.technical
biz.comp.hardware
clari.apbl.stocks.dow
clari.biz.market.news
clari.news.weather
clari.sports.baseball
clari.sports.football
comp.infosystems.www
misc.forsale
misc.jobs.misc
misc.jobs.offered
misc.jobs.resumes
news.announce.newusers
news.newusers.questions
rec.arts.comics.creative

Discussion about Aldus Pagemaker
Space Aliens on Earth! Abduction! Gov't Coverup!
BBS systems accessible via the Internet.
It was a time of sorrow, it was a time of joy.
Sound, text and graphics data rolled in one.
MODs and related sound formats.
Fans of the late SF/science author Isaac Asimov.
High-tech low-life.
Internet Relay Chat material.
Discussion of the music of Peter Gabriel
Saturday Night Live, older but not better.
Technical bookstore & publisher advertising & info
Generic commercial hardware postings.
Dow Jones averages (Moderated)
News affecting the financial markets (Moderated)
Weather news and reports (Moderated)
Pro baseball: scores, stories, stats (Moderated)
NFL football coverage (Moderated)
The World Wide Web information system.
Short, tasteful postings about items for sale.
Discussion about employment, workplaces, careers.
Announcements of positions available.
Want ads and resumes.
Explanatory postings for new users. (Moderated)
Q & A for users new to the Usenet.
Encouraging good superhero-style writing.

rec.arts.sf.movies
rec.aviation.student
rec.motorcycles.harley
rec.music.indian.classical
rec.music.rem
rec.pets.dogs
rec.sport.volleyball
sci.physics.fusion
sci.psychology
sci.stat.consult
soc.college
soc.college.grad
soc.culture.bangladesh
soc.culture.german
soc.culture.indian.info
soc.religion.christian
ur.esm.comp.users
ur.forsale
ur.general
ur.music
ur.music.talk
ur.talk.misc
ur.talk.political
ur.ucc.problem.uhura
ur.unix-wizards
ur.wrur

Discussing SF motion pictures.
Learning to fly.
All aspects of Harley-Davidson motorcycles
Hindustani and Carnatic Indian classical music.
The musical group R.E.M.
Any and all subjects relating to dogs as pets.
Discussion about volleyball.
Info on fusion, esp. "cold" fusion.
Topics related to psychology.
Statistical consulting.
College, college activities, campus life, etc.
General issues related to graduate schools.
Issues & discussion about Bangladesh.
Discussions about German culture and history.
Info group for soc.culture.indian, etc. (Moderated)
Christianity and related topics. (Moderated)
Discussion related to the Eastman school.
Group for users to post items for sale.
General announcements for and about the U of R.
UR music news and reviews. Moderated by MIF
Discussion group for UR.MUSIC.
Discussion that doesn't belong in other newsgroups
Political discussions localized at the UR.
Gateway for uhura problem mail.
Discussions about UNIX at the U of R.
WRUR radio station happenings.