CHAP6

COLLABORATORS

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Contents

Chapter 1

CHAP6

1.1   Chapter 6: TELNET (Mining the Net, part 1)

      Like any large community, cyberspace has its libraries, places you
can go to look up information or take out a good book. Telnet is one of
your keys to these libraries.

      What is TELNET?
      Using TELNET
      Library catalogues
      Finger
      Finding someone on the net
      When things go wrong
        >> Telnet sites
        >> Telnet BBSs

FYI:

      The Usenet newsgroups alt.internet.services and alt.bbs.internet can
provide pointers to new telnet systems. Scott Yanoff periodically posts
his "Updated Internet Services List" in the former; Thomas Kreeger
periodically posts "Zamfield's Wonderfully Incomplete, Complete Internet
BBS List" in the latter newsgroup.   The alt.bbs.internet newsgroup is
also where you'll find Aydin Edguer's compendium of Internet-BBS- related
FAQs. Peter Scott, who maintains the Hytelnet database, runs a mailing
list about new telnet services and changes in existing ones. To get on
the list, send him a note at scott@sklib.usask.ca.

1.2   Chapter 6: Telnet (1 of 6) -- What is TELNET?

      Telnet is a program that lets you use the power of the Internet to
connect you to databases, library catalogs, and other information
resources around the world. Want to see what the weather's like in
Vermont? Check on crop conditions in Azerbaijan? Get more information
about somebody whose name you've seen online? Telnet lets you do this,
and more.
      Alas, there's a big "but!'' Unlike the phone system, Internet is

not yet universal; not everybody can use all of its services. Almost
all colleges and universities on the Internet provide telnet access.   So
do the WELL , Netcom   and the World . But the Freenet systems do not
give you access to every telnet system. And if you are using a
public-access UUCP or Usenet site, you will not have access to telnet.
     The main reason for this is cost. Connecting to the Internet can
easily cost $1,000 or more for a leased, high-speed phone line.
     Some databases and file libraries can be queried by e-mail, however;
we'll show you how to do that later on. In the meantime, the rest of this
chapter assumes you are connected to a site with at least partial
Internet access.

1.3   Chapter 6: Telnet (2 of 6) -- Using TELNET

Using TELNET
     Most telnet sites are fairly easy to use and have online help systems.
Most also work best (and in some cases, only) with VT100 emulation.
Let's dive right in and try one.
     At your host system's command line , type

          telnet access.usask.ca

and hit enter. That's all you have to do to connect to a telnet site!
In this case, you'll be connecting to a service known as Hytelnet, which
is a database of computerized library catalogs and other databases
available through telnet. You should see something like this:

          Trying 128.233.3.1 ...
          Connected to access.usask.ca.
          Escape character is '^]'.

          Ultrix UNIX (access.usask.ca)

          login:

     Every telnet site has two addresses -- one composed of words that
are easier for people to remember; the other a numerical address better
suited for computers. The "escape character" is good to remember. When
all else fails, hitting your control key and the] key at the same time
will disconnect you and return you to your host system. At the login
 prompt , type

        hytelnet

and hit enter. You'll see something like this:

                         Welcome to HYTELNET
                            version 6.2
                         ....

   What is HYTELNET?   <WHATIS>   .   Up/Down arrows MOVE
   Library catalogs   <SITES1>   .   Left/Right arrows SELECT
   Other resources   <SITES2>   .   ? for HELP anytime

```
   Help files for catalogs   <OP000>        .
   Catalog interfaces        <SYS000>       .         m returns here
   Internet Glossary         <GLOSSARY>     .         q quits
   Telnet tips               <TELNET>       .
   Telnet/TN3270 escape keys <ESCAPE.KEY> .
   Key-stroke commands       <HELP.TXT>     .
```

```
                      ......................
              HYTELNET 6.2 was written by Peter Scott,
        U of Saskatchewan Libraries, Saskatoon, Sask, Canada.  1992
     Unix and VMS software by Earl Fogel, Computing Services, U of S 1992
```

     The first choice, "<WHATIS>" will be highlighted. Use your down
and up arrows to move the cursor among the choices. Hit enter when you
decide on one. You'll get another menu, which in turn will bring up
text files telling you how to connect to sites and giving any special
commands or instructions you might need. Hytelnet does have one quirk.
To move back to where you started (for example, from a sub-menu to a
main menu), hit the left-arrow key on your computer.
     Play with the system. You might want to turn on your computer's
screen-capture, or at the very least, get out a pen and paper. You're
bound to run across some interesting telnet services that you'll want to
try -- and you'll need their telnet "addresses.''
     As you move around Hytelnet, it may seem as if you haven't left
your host system -- telnet can work that quickly. Occasionally, when
network loads are heavy, however, you will notice a delay between the
time you type a command or enter a request and the time the remote
service responds.
     To disconnect from Hytelnet and return to your system, hit your q
key and enter.
     Some telnet computers are set up so that you can only access them
through a specific "port." In those cases, you'll always see a number
after their name, for example: india.colorado.edu 13. It's important to
include that number, because otherwise, you may not get in.
     In fact, try the above address. Type

            telnet india.colorado.edu 13

and hit enter. You should see something like this:

            Trying 128.138.140.44 ...

Followed very quickly by this:

           telnet india.colorado.edu 13

           Escape character is '^]'.
           Sun Apr 5 14:11:41 1992
           Connection closed by foreign host.

     What we want is the middle line, which tells you the exact
Mountain Standard Time, as determined by a government-run atomic clock
in Boulder, Colo.

1.4   Chapter 6: Telnet (3 of 6) -- LIBRARY CATALOGS

        More than 200 libraries, from the Snohomish Public Library in
Washington State to the Library of Congress and the libraries of Harvard
University, are now available to you through telnet. You can use Hytelnet
to find their names, telnet addresses and use instructions.
        Why would you want to browse a library you can't physically get to?
Many libraries share books, so if yours doesn't have what you're looking
for, you can tell the librarian where he or she can get it. Or if you
live in an area where the libraries are not yet online, you can use
telnet to do some basic bibliographic research before you head down to
the local branch.
        There are several different database programs in use by online
libraries. Harvard's is one of the easier ones to use, so let's try it.

                    Example search of Harvard catalogue

        A particularly interesting system is the one run by the Colorado
Alliance of Research Libraries, which maintains databases for libraries
throughout Colorado, the West and even in Boston.

        telnet pac.carl.org.

        Follow the simple log-in instructions. When you get a menu, type 72
(even though that is not listed), which takes you to the Pikes Peak
Library District, which serves the city of Colorado Springs.
        Several years ago, its librarians realized they could use their
database program not just for books but for cataloging city records and
community information, as well. Today, if you want to look up municipal
ordinances or city records, you only have to type in the word you're
looking for and you'll get back cites of the relevant laws or decisions.
        Carl will also connect you to the University of Hawaii library,
which, like the one in Colorado Springs, has more than just bibliographic
material online. One of its features is an online Hawaiian almanac that
can tell you everything you ever wanted to know about Hawaiians,
including the number injured in boogie-board accidents each year (seven).

1.5   ...Catalogues (1 of 1) -- Search of Harvard Library catalogue

```
 ****************         H A R V A R D    U N I V E R S I T Y
 ****************          OFFICE FOR INFORMATION TECHNOLOGY
 ***    ***    ***
 *** VE *** RI ***
 ***    ***    ***        HOLLIS     (Harvard OnLine LIbrary System)
  *****     *****
   **** TAS ****          HUBS       (Harvard University Basic Services)
     ***   ***
      *****               IU         (Information Utility)
       ***
                          CMS        (VM/CMS Timesharing Service)


          ** HOLLIS IS AVAILABLE WITHOUT ACCESS RESTRICTIONS **
     Access to other applications is limited to individuals who have been
```

```
     granted specific permission by an authorized person.

     To select one of the applications above, type its name on the command
     line followed by your user ID, and press RETURN.
                    ** HOLLIS DOES NOT REQUIRE A USERID **

     EXAMPLES:  HOLLIS (press RETURN)  or  HUBS userid (press RETURN)
===>
```

Type

                hollis

and hit enter. You'll see several screens flash by quickly until finally
the system stops and you'll get this:

```
                    WELCOME TO HOLLIS
            (Harvard OnLine Library Information System)

 To begin, type one of the 2-character database codes listed below:

        HU      Union Catalog of the Harvard libraries
        OW      Catalog of Older Widener materials
        LG      Guide to Harvard Libraries and Computing Resources

        AI      Expanded Academic Index (selective 1987-1988, full 1989-  )
        LR      Legal Resource Index (1980-  )
        PA      PAIS International (1985-  )


 To change databases from any place in HOLLIS, type CHOOSE followed by a
 2-character database code, as in:    CHOOSE HU

 For general help in using HOLLIS, type HELP.   For HOLLIS news, type
 HELP NEWS.   For HOLLIS hours of operation, type HELP HOURS.

         ALWAYS PRESS THE ENTER OR RETURN KEY AFTER TYPING YOUR COMMAND
```

     The first thing to notice is the name of the system: Hollis.
Librarians around the world seem to be inordinately found of cutesy,
anthropomorphized acronyms for their machines (not far from Harvard, the
librarians at Brandeis University came up with Library On-Line User
Information Service, or Louis; MIT has Barton).
     If you want to do some general browsing, probably the best bet on
the Harvard system is to chose HU, which gets you access to their main
holdings, including those of its medical libraries. Chose that, and
you'll see this:

```
                THE HARVARD UNIVERSITY LIBRARY UNION CATALOG
```

 To begin a search, select a search option from the list below and type its
 code on the command line . Use either upper or lower case.

                        AU   Author search
                        TI   Title search
                        SU   Subject search
                        ME   Medical subject search
                        KEYWORD   Keyword search options
                        CALL   Call number search options
                        OTHER   Other search options

 For information on the contents of the Union Catalog, type HELP.
 To exit the Union Catalog, type QUIT.

 A search can be entered on the COMMAND line of any screen.

            ALWAYS PRESS THE ENTER OR RETURN KEY AFTER TYPING YOUR COMMAND.

     Say you want to see if Harvard has shed the starchy legacy of the
Puritans, who founded the school. Why not see if they have "The Joy of
Sex" somewhere in their stacks? Type

                TI Joy of Sex

and hit enter. This comes up:

HU: YOUR SEARCH RETRIEVED NO ITEMS. Enter new command or HELP.   You typed:
 TI JOY OF SEX
 ****

            ALWAYS PRESS THE ENTER OR RETURN KEY AFTER TYPING YOUR COMMAND.

OPTIONS: FIND   START – search options   HELP
                                           QUIT – exit database
COMMAND?

Oh, well! Do they have anything that mentions "sex" in the title? Try
another TI search, but this time just: TI sex. You get:

 HU GUIDE: SUMMARY OF SEARCH RESULTS   2086 items retrieved by your search:
FIND TI SEX
----
    1   SEX
    2   SEX A
  823   SEXA
  827   SEXBO

```
 831    SEXCE
 833    SEXDR
 834    SEXE
 879    SEXIE
 928    SEXJA
 929    SEXLE
 930    SEXO
 965    SEXPI
 968    SEXT
1280    SEXUA
2084    SEXWA
2085    SEXY
--------------------------------------------------------------------------
OPTIONS: INDEX (or I 5 etc) to see list of items         HELP
                                                         START - search options
         REDO - edit search                              QUIT - exit database
COMMAND?
```

If you want to get more information on the first line, type 1 and hit enter:

```
 HU INDEX: LIST OF ITEMS RETRIEVED          2086 items retrieved by your search:
FIND TI SEX
--------------------------------------------------------------------------
SEX
   1 geddes patrick sir 1854 1932/ 1914  bks

SEX A Z
   2 goldenson robert m/ 1987  bks

SEX ABUSE HYSTERIA SALEM WITCH TRIALS REVISITED
   3 gardner richard a/ 1991  bks

SEX AETATES MUNDI ENGLISH AND IRISH
   4 irish sex aetates mundi/ 1983  bks

SEX AFTER SIXTY A GUIDE FOR MEN AND WOMEN FOR THEIR LATER YEARS
   5 butler robert n 1927/ 1976  bks


------------------------------------------------------ (CONTINUES) -----------
OPTIONS: DISPLAY 1 (or D 5 etc) to see a record          HELP
         GUIDE                    MORE - next page       START - search options
         REDO - edit search                              QUIT - exit database
COMMAND?
```

     Most library systems give you a way to log off and return to your host
system. On Hollis, hit escape followed by

          xx

1.6   Chapter 6: Telnet (4 of 6) -- FINGER

      This is a handy little program which lets you tell others more
about you -- and which you can sometimes use to find out more about
people whose names you see on the Net.
      It uses the same concept as telnet or ftp . But it works with only
one file, called .plan (yes, with a period in front). This is a text
file you create with a text editor in your home directory. You can put
your phone number in there, or your address, or anything at all.
      To finger somebody else's .plan file, type this at the command
line:

      finger email-address

where email-address is the person's e-mail address. You'll get back a
display that shows the last time the person was online, whether
they've gotten any new mail since that time and what, if anything, is
in their .plan file.
      Some people and institutions have come up with creative uses for
these .plan files, letting you do everything from checking the weather
in Massachusetts to getting the latest baseball standings. Try
fingering these e-mail addresses:

weather@cirrus.mit.edu   Latest National Weather Service weather
                                   forecasts for regions in Massachusetts.

quake@geophys.washington.edu   Locations and magnitudes of recent
                                   earthquakes around the world.

jtchern@ocf.berkeley.edu   Current major-league baseball standings and
                                   results of the previous day's games.

nasanews@space.mit.edu   The day's events at NASA.

1.7   Chapter 6: Telnet (5 of 6) -- FINDING SOMEONE ON THE NET

      So you have a friend and you want to find out if he has an Internet
account to which you can write? The quickest way may be to just pick up
the phone, call him and ask him. Although there are a variety of "white
pages" services available on the Internet, they are far from complete --
college students, users of commercial services such as CompuServe and
many Internet public-access sites, and many others simply won't be
listed. Major e-mail providers are working on a universal directory
system, but that could be some time away.
      In the meantime, a couple of "white pages" services might give you
some leads, or even just entertain you as you look up famous people or
long-lost acquaintances.
      The whois directory provides names, e-mail and postal mail address
and often phone numbers for people listed in it. To use it, telnet to

      internic.net

No log-on is needed. The quickest way to use it is to type

      whois name

at the prompt, where "name" is the last name or organization name you're
looking for.
    Another service worth trying is the "knowbot" system reachable by
telnet to

    nri.reston.va.us 185

Again, no log-on is needed. This service actually searches through a
variety of other "white pages" systems, including the user directory for
MCIMail. To look for somebody, type

    query name

where "name" is the last name of the person you're looking for. You can
get details of other commands by hitting a question mark at the prompt.

1.8 Chapter 6: Telnet (6 of 6) -- Telnet problems

WHEN THINGS GO WRONG:

    * Nothing happens when you try to connect to a telnet site. The
site could be down for maintenance or problems.
    * You get a "host unavailable" message. The telnet site is down
for some reason. Try again later.
    * You get a "host unknown" message. Check your spelling of the
site name.
    * You type in a password on a telnet site that requires one, and you
get a "login incorrect" message. Try logging in again. If you get the
message again, hit your control and] keys at the same time to disengage
and return to your host system.
    * You can't seem to disconnect from a telnet site. Use control-] to
disengage and return to your host system.

1.9 TELNET SITES

AGRICULTURE

    PENPages, run by Pennsylvania State University's College of
Agricultural Sciences, provides weekly world weather and crop reports
from the U.S. Department of Agriculture. These reports detail everything
from the effect of the weather on palm trees in Malaysia to the state of
the Ukrainian wheat crop. Reports from Pennsylvania country extension
officers offer tips for improving farm life. One database lists
Pennsylvania hay distributors by county -- and rates the quality of their
hay!
    The service lets you search for information two different ways. A
menu system gives you quick access to reports that change frequently,
such as the weekly crop/weather reports. An index system lets you search
through several thousand online documents by keyword. At the main menu,
you can either browse through an online manual or chose "PENPages,''
which puts you into the agriculture system.
    Telnet: psupen.psu.edu

        User name: PNOTPA

    California State University's Advanced Technology Information
Network provides similar information as PENPages, only focusing on
California crops. It also maintains lists of upcoming California trade
shows and carries updates on biotechnology.
        Telnet: caticsuf.cati.csufresno.edu
        Log in: public

    You will then be asked to register and will be given a user name and
password. Hit "a'' at the main menu for agricultural information. Hit
"d'' to call up a menu that includes a biweekly biotechnology report.

AIDS

    The University of Miami maintains a database of AIDS health
providers in southern Florida.
        Telnet: callcat.med.miami.edu
        Log in: library

    At the main menu, select P (for "AIDS providers" and you'll be able
to search for doctors, hospitals and other providers that care for
patients with AIDS. You can also search by speciality.

        See also under Health and Conversation.

AMATEUR RADIO:

    The National Ham Radio Call-Sign Callbook lets you search for
American amateur operators by callsign, city, last name or Zip code. A
successful search will give you the ham's name, address, callsign, age,
type of license and when they got it.
        Telnet: callsign.buffalo.edu 2000 or ham.njit.edu 2000.
    When you connect, you tell the system how you want to search and
what you're looking for. For example, if you want to search for hams by
city, you would type

        city city name

and hit enter (for example: city Kankakee).
    Other search choices are "call" (after which you would type a ham's
name), "name," and "zip" (which you would follow with a Zip code). Be
careful when searching for hams in a large city; there doesn't seem to be
anyway to shut off the list once it starts except by using control-].
Otherwise, when done, type

            quit

and hit enter to disconnect.

ANIMALS

    See under Health.

ART

     The National Gallery of Art in Washington maintains a database of
its holdings, which you can search by artist (Van Gogh, for example) or
medium (watercolor, say). You can see when specific paintings were
completed, what medium they are in, how large they are and who donated it
to the gallery.
     Telnet: ursus.maine.edu
     Login: ursus
     At the main menu, hit your b key and then 4 to connect to the
gallery database.

CALCULATORS

     Hewlett-Packard maintains a free service on which you can seek
advice about their line of calculators.
     Telnet: hpcvbbs.cv.hp.com
     No log-in is needed.

CONGRESS

     The Library of Congress Information Service lets you search current
and past legislation (dating to 1982).
     Telnet: locis.loc.gov
     Password: none needed.
     When you connect, you'll get a main menu that lets you select from
several databases, including the Library of Congress card catalog (with
book entries dating to 1978) and a database of information on copyright
laws.
     For the congressional database, select the number next to its entry
and hit enter. You'll then be asked to choose which legislative year to
search. After that, a menu similar to this will come up:

  ***C103- THE LEGISLATIVE INFORMATION FILE FOR THE 103RD CONGRESS,
          which was updated on 05/10/93 and contains 4,044 records,
          is now available for your search.

   CURRENCY: All information is NOT current through the above date, which
          is machine generated when ANY information is added to the
          file. Bill numbers, official titles, sponsors, and status
          (STEP) added within 48 hours. Indexing terms and digests
          added later, in some cases several weeks after the bill is
          added to the file.

   TO START   RETRIEVE to find: EXAMPLES:
   SEARCH: member name --------------> retrieve rep gingrich
                                            retrieve sen kennedy
              bill number --------------> retrieve h.r. 1
              subject keywords ---------> retrieve day care

   FOR HELP: Type the word HELP and press the ENTER key.

```
     READY FOR NEW COMMAND:
```

CONVERSATION

     Communications Canada, a Canadian government agency is developing
Conversational Hypertext Access Technology (CHAT) is a system being
developed by Communications Canada to provide easy database access to
people with little or no computer experience, using what are known as
hypertext links. Instead of cryptic computer commands, users type
questions in English.
     Telnet: debra.doc.ca
     Log in: chat
     You chose one of the three databases now online, one on AIDS, and
then ask questions in English.
     Ask the AIDS database, "When was AIDS first discovered?'' and it
answers:
     "The first case of AIDS in North America was diagnosed in 1979.
Before that, it existed in Africa, probably beginning in the 1950's. AIDS
was discovered in North America when a number of young men with a history
of homosexuality developed a rare type of cancer called Kaposi's
sarcoma.''
     Sometimes, you do have to rephrase your question. For example, when
asked "What is the link between AIDS and drug use?'' the computer
responds:
     "I know two things about drugs: the drugs that are used to treat
people with AIDS, and the risks that drug users have in getting AIDS.
Please ask about treatments or drug users.''

COPYRIGHT LAW

     See under Congress.

CURRENT EVENTS

     Every year, the CIA publishes a Fact Book that is essentially an
almanac of all the world's countries and international organizations,
including such information as major products, type of government and
names of its leaders. It's available for searching through the
University of Maryland Info Database.
     Telnet: info.umd.edu
     User name: info
     Chose a terminal type and hit enter (or just hit enter if you are
using VT100). At the main menu, choose the number next to "Government"
and hit enter. One of your options will then be for "Factbook." Chose
that one, and you can then search by country or agency.

ENVIRONMENT

     The U.S. Environmental Protection Agency maintains online databases
of materials related to hazardous waste, the Clean Lakes program and
cleanup efforts in New England. The agency plans to eventually include
cleanup work in other regions, as well. The database is actually a
computerized card catalog of EPA documents -- you can look the documents
up, but you'll still have to visit your regional EPA office to see them.
     Telnet: epaibm.rtpnc.epa.gov

   No password or user name is needed. At the main menu, type

        public

and hit enter (there are other listed choices, but they are only for use
by EPA employees). You'll then see a one-line menu. Type

        ols

and hit enter, and you'll see something like this:

 NET-106 Logon to TSO04   in progress.

   DATABASES:
        N   NATIONAL CATALOG   CH   CHEMICAL COLL. SYSTEM
        H   HAZARDOUS WASTE   1   REGION I
        L   CLEAN LAKES

   OTHER OPTIONS:
        ?   HELP
        Q   QUIT

   ENTER SELECTION -->

   Choose one and you'll get a menu that lets you search by document
title, keyword, year of publication or corporation. After you enter the
search word and hit enter, you'll be told how many matches were found.
Hit 1 and then enter to see a list of the entries. To view the
bibliographic record for a specific entry, hit V and enter and then type
the number of the record.

   The University of Michigan maintains a database of newspaper and
magazine articles related to the environment, with the emphasis on
Michigan, dating back to 1980.
   Telnet: hermes.merit.edu
   Host: mirlyn
   Log in: meem

GEOGRAPHY

   The University of Michigan Geographic Name Server can provide basic
information, such as population, latitude and longitude of U.S. cities
and many mountains, rivers and other geographic features.
   Telnet: martini.eecs.umich.edu 3000
   No password or user name is needed. Type in the name of a city, a
Zip code or a geographic feature (Mt. McKinley, for example) and hit
enter.
   By typing in a town's name or zip code, you can find out a
community's county, Zip code and longitude and latitude. Not all
geographic features are yet included in the database.

GOVERNMENT

   See under Current Events.

HEALTH

     The U.S. Food and Drug Administration runs a database of health-
related information.
     Telnet: fdabbs.fda.gov
     Log in: bbs

     You'll then be asked for your name and a password you want to use
in the future. After that, type

          topics

and hit enter. You'll see this:

     TOPICS   DESCRIPTION

     *   NEWS   News releases
     *   ENFORCE   Enforcement Report
     *   APPROVALS   Drug and Device Product Approvals list
     *   CDRH   Centers for Devices and Radiological Health Bulletins
     *   BULLETIN   Text from Drug Bulletin
     *   AIDS   Current Information on AIDS
     *   CONSUMER   FDA Consumer magazine index and selected articles
     *   SUBJ-REG   FDA Federal Register Summaries by Subject
     *   ANSWERS   Summaries of FDA information
     *   INDEX   Index of News Releases and Answers
     *   DATE-REG   FDA Federal Register Summaries by Publication Date
     *   CONGRESS   Text of Testimony at FDA Congressional Hearings
     *   SPEECH   Speeches Given by FDA Commissioner and Deputy
     *   VETNEWS   Veterinary Medicine News
     *   MEETINGS   Upcoming FDA Meetings
     *   IMPORT   Import Alerts
     *   MANUAL   On-Line User's Manual

     You'll be able to search these topics by key word or
chronologically. It's probably a good idea, however, to capture a copy of
the manual, first, because the way searching works on the system is a
little odd. To capture a copy, type

          manual

and hit enter. Then type

          scan

and hit enter. You'll see this:

     FOR LIST OF AVAILABLE TOPICS TYPE TOPICS
     OR ENTER THE TOPIC YOU DESIRE ==>

     MANUAL
     BBSUSER
     08-OCT-91
     1 BBS User Manual

At this point, turn on your own computer's screen-capture or logging
function and hit your 1 key and then enter. The manual will begin to

scroll on your screen, pausing every 24 lines.

HIRING AND COLLEGE PROGRAM INFORMATION

    The Federal Information Exchange in Gaithersburg, MD, runs two
systems at the same address: FEDIX and MOLIS. FEDIX offers research,
scholarship and service information for several federal agencies,
including NASA, the Department of Energy and the Federal Aviation
Administration. Several more federal agencies provide minority hiring and
scholarship information. MOLIS provides information about minority
colleges, their programs and professors.
    Telnet: fedix.fie.com
    User name: fedix (for the federal hiring database) or
                molis (for the minority-college system)
    Both use easy menus to get you to information.

HISTORY

    Stanford University maintains a database of documents related to
Martin Luthor King.
    Telnet: forsythetn.stanford.edu
    Account: socrates

    At the main menu, type

        select mlk

and hit enter.

SKI REPORTS

    See under weather.

SPACE

    NASA Spacelink in Huntsville, Ala., provides all sorts of reports
and data about NASA, its history and its various missions, past and
present. You'll find detailed reports on every single probe, satellite
and mission NASA has ever launched along with daily updates and lesson
plans for teachers.
    The system maintains a large file library of GIF-format space
graphics, but you can't download these through telnet. If you want
them, you have to dial the system directly, at (205) 895-0028.
    Telnet: spacelink.msfc.nasa.gov
    When you connect, you'll be given an overview of the system and
asked to register and chose a password.

    The NED-NASA/IPAC Extragalactic Database lists data on more than
100,000 galaxies, quasars and other objects outside the Milky Way.
    Telnet: ipac.caltech.edu.
    Log in: ned

    You can learn more than you ever wanted to about quasars, novae and
related objects on a system run by the Smithsonian Astrophysical
Observatory in Cambridge, Mass.
    Telnet: cfa204.harvard.edu

    Log in: einline

    The physics department at the University of Massachusetts at Amherst
runs a bulletin-board system that provides extensive conferences and
document libraries related to space.
    Telnet: spacemet.phast.umass.edu
    Log on with your name and a password.

SUPREME COURT DECISIONS

    The University of Maryland Info Database maintains U.S. Supreme
Court decisions from 1991 on in its Government area.
    Telnet: info.umd.edu
    User name: info

and hit enter. Chose a terminal type and hit enter (or just hit enter if
you are using VT100). At the main menu, choose the number next to
"Government" and hit enter. One of your options will then be for "US."
Select that number and then, at the next menu, choose the one next to
"Supreme Court."

TELNET

    Hytelnet, at the University of Saskatchewan, is an online guide to
hundreds of telnet sites around the world.
    Telnet: access.usask.ca
    Log in: hytelnet.

TIME

    To find out the exact time:

    Telnet: india.colorado.edu 13

    You'll see something like this:

            Escape character is '^]'.
            Sun Apr 5 14:11:41 1992
            Connection closed by foreign host.

    The middle line tells you the date and exact Mountain Standard
    Time, as determined by a federal atomic clock.

WEATHER

    The University of Michigan's Department of Atmospheric,
Oceanographic and Space Sciences supplies weather forecasts for U.S. and
foreign cities, along with skiing and hurricane reports.
    Telnet: madlab.sprl.umich.edu 3000 (note the 3000).
    No log-in name is needed.
    Also see under Weather in the FTP list for information on
downloading satellite and radar weather images.

    Also see AGRICULTURE

1.10   TELNET BBSs

     You might think that Usenet , with its hundreds of newsgroups ,
would be enough to satisfy the most dedicated of online communicators.
     But there are a number of "bulletin-board" and other systems that
provide even more conferences or other services, many not found directly
on the Net. Some are free; others charge for access. They include:

      Cimarron. Run by the Instituto Technical in Monterey, Mexico, this
system has Spanish conferences, but English commands, as you can see from
this menu of available conferences:

```
        List of Boards
          Name                 Title
          General              Board general
          Dudas                Dudas de Cimarron
          Comentarios          Comentarios al SYSOP
          Musica               Para los afinados........
          Libros               El sano arte de leer.....
          Sistemas             Sistemas Operativos en General.
          Virus                Su peor enemigo......
          Cultural             Espacio Cultural de Cimarron
          NeXT                 El Mundo de NeXT
          Ciencias             Solo apto para Nerds.
          Inspiracion          Para los Romanticos e Inspirados.
          Deportes             Discusiones Deportivas
```

     To be able to write messages and gain access to files, you have to
leave a note to SYSOP with your name, address, occupation and phone
number. To do this, at any prompt , hit your M key and then enter,
which will bring up the mail system. Hitting H brings up a list of
commands and how to use them.
     Telnet: bugs.mty.itesm.mx (8 p.m. to 10 a.m., Eastern time, only).
     At the "login:" prompt , type

```
          bbs
```

and hit enter.

     Cleveland Free-Net. The first of a series of Freenets, this
represents an ambitious attempt to bring the Net to the public.
Originally an in-hospital help network, it is now sponsored by Case
Western Reserve University, the city of Cleveland, the state of Ohio and
IBM. It uses simple menus, similar to those found on CompuServe, but
organized like a city:

```
        <<< CLEVELAND FREE-NET DIRECTORY >>>

        1 The Administration Building
        2 The Post Office
        3 Public Square
        4 The Courthouse & Government Center
        5 The Arts Building
        6 Science and Technology Center
        7 The Medical Arts Building
```

```
     8 The Schoolhouse (Academy One)
     9 The Community Center & Recreation Area
    10 The Business and Industrial Park
    11 The Library
    12 University Circle
    13 The Teleport
    14 The Communications Center
    15 NPTN/USA TODAY HEADLINE NEWS
    ------------------------------------------------
    h=Help, x=Exit Free-Net, "go help"=extended help

    Your Choice ==>
```

The system has a vast and growing collection of public documents, from copies of U.S. and Ohio Supreme Court decisions to the Magna Carta and the U.S. Constitution. It links residents to various government agencies and has daily stories from USA Today. Beyond Usenet (found in the Teleport area), it has a large collection of local conferences on everything from pets to politics. And yes, it's free!
     Telnet: freenet-in-a.cwru.edu or
             freenet-in-b.cwru.edu

     When you connect to Free-Net, you can look around the system. However, if you want to be able to post messages in its conferences or use e-mail, you will have to apply in writing for an account. Information on this is available when you connect.

     Dialog. This commercial service offers access to a large variety of databases -- for a fairly sizable fee. You need a Dialog account to use the system through the Net.
     Telnet: dialog.com

     DUBBS. This is a bulletin-board system in Delft in the Netherlands. The conferences and files are mostly in Dutch, but the help files and the system commands themselves are in English.
     Telnet: tudrwa.tudelft.nl

     ISCA BBS. Run by the Iowa Student Computer Association, it has more than 100 conferences, including several in foreign languages. After you register, hit K for a list of available conferences and then J to join a particular conference (you have to type in the name of the conference, not the number next to it). Hitting H brings up information about commands.

     Telnet bbs.isca.uiowa.edu
     At the "login:" prompt, type

             bbs

and hit enter.

     Whole Earth 'Lectronic Link (WELL . Itself a major Net access point in the San Francisco area, the WELL is also a unique online community

that maintains dozens of conferences on every imaginable topic (seven
devoted just to the Grateful Dead). WELL users are intelligent and
opinionated; discussions are often fast and furious. The Electronic
Frontier Foundation was basically started in a series of online
conversations on the WELL. Although it has a serious San Francisco
flavor, it has users from across the country (enough to support both East
Coast and Midwest conferences).
     For its conferences, the WELL uses PicoSpan software, which presents
messages differently than rn or nn.   When you enter a conference, you
can call up a list of "topics." Enter a topic number, and all of the
messages start scrolling down the screen, sort of like the music on an
old-fashioned player-piano. There is some online help, but new users are
sent a written manual. See Chapter 2 for information on access charges
(one advantage to connecting to the WELL through telnet is that unless
you live in the Bay Area, it is likely to be much cheaper than other
access methods).
     Telnet: well.sf.ca.us

     Youngstown Free-Net. The people who created Cleveland Free-Net sell
their software for $1 to anybody willing to set up a similar system. A
number of cities now have their own Free-Nets, including Youngstown,
Ohio. Telnet: yfn.ysu.edu At the "login:" prompt, type

               visitor

and hit enter.