

There's Gold in them thar Networks!  
or  
Searching for Treasure in all the Wrong Places

Status of this Memo

This RFC provides information for the Internet community. It does not specify an Internet standard. Distribution of this memo is unlimited.

Abstract

This document was presented at the 1991 ACM SIGUCCS User Services Conference. It appears here in its updated form.

There is a wealth of information on the network. In fact, so much information, that you could spend your entire life browsing. This paper will present some of the "gold nuggets" of information and file repositories on the network that could be of use to end users.

The ultimate goal is to make the route to these sources of information invisible to the user. At present, this is not easy to do. I will explain some of the techniques that can be used to make these nuggets easier to pick up so that we can all be richer.

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## 1.0 Introduction

This paper is a list of the essential things, in my view, that a person who is responsible for providing network information should have in their hands as reference material. One of the basic problems of information is making it easily available to those who have need of the data. Libraries have been performing a cataloging function for many centuries. Information flow is now being provided at such a fast rate that it is difficult to keep up with it, even partially. Computer networks have only added to the problem by opening up even more information.

Attempting to make this wealth of information available to those who would find it useful poses some problems.

First, we need to know of its existence. To that end, this paper provides an index into the vast realm of network information. Most of the documents listed here are POINTERS to the final information.

Second, even if you know of a document's existence, you may not know if it is important or relevant. Few of us are knowledgeable in more than a limited area. We need to rely on others to make us aware of the importance of databases in a specific discipline. The librarians can be of great assistance here. They are familiar with the research databases that individuals search in Law, Mathematics, and many others.

Finally, once the existence and importance are known, the information needs to be indexed so that researchers can find it. This is the most difficult task to accomplish. Information available on the network is hardly ever static. It is always moving, growing, changing, and dying. Computers should be able to assist us in managing this ever-changing environment. Right now, we have to catalog the information as it passes through the network. In my case, I generally save it in a file somewhere, spending far too much time trying to retrieve it again when needed.

## 2.0 Lists and Indexes of Network Resources/Bibliographies/ Information Available over the Network

### 2.01 Internet Resource Guide (Document)

An excellent guide to major resources available on the network. The Table of Contents includes chapters on Computational Resources, Library Catalogs, Archives, White Pages, Networks, Network Information Centers, and Miscellaneous

**Source:**

```
Anonymous FTP to NNSC.NSF.NET
cd resource-guide
get resource-guide.ps.tar.Z (Postscript) or
get resource-guide.txt.tar.Z (ASCII Text)
```

**Search:**

```
Telnet to pac.carl.org
(Colorado Alliance of Research Libraries)
Select terminal type
Choose Item 3 (Information Databases)
Choose Item 65 Internet Resource Guide
You can then browse or do a keyword search
To quit type //EXIT
```

**2.02 Anonymous FTP Sites (Document)**

A list of all the sites on the Internet that support anonymous FTP.

**Source:**

```
Anonymous FTP to pilot.njin.net
cd pub/ftp-list
get ftp.list
```

**Search:**

```
Telnet to quiche.cs.mcgill.ca
login as user archie
type help to get a list of commands
type prog topic - where topic is the keyword for the search of
                  a program or topic
```

**2.03 INDEX - Index of all RFC's - (Document)**

```
RFC-1118 - The Hitchhikers Guide to the Internet
RFC-1175 - A Bibliography of Internetworking Information
RFC-1173 - Responsibilities of Host and Network Managers
RFC-1206 - Answers to Commonly asked "New Internet User"
          Questions
RFC-1207 - Answers to Commonly asked "Experienced Internet User"
          Questions
RFC-1208 - Networking Glossary of Terms
```

**Source:**

```
Anonymous FTP to nis.nsf.net
cd rfc
get $index.rfc
get RFC1118.TXT-1
```

```
get RFC1175.TXT-1
get RFC1173.TXT-1
get RFC1206.TXT-1
get RFC1207.TXT-1
get RFC1208.TXT-1
```

## 2.04 Interest Groups List-of-Lists (Document)

This is a document that list the mailing lists or groups that exist. To get on the list to receive updates, send e-mail to [Interest-groups-request@nisc.sri.com](mailto:Interest-groups-request@nisc.sri.com).

Source:  
Anonymous FTP to [ftp.nisc.sri.com](ftp://ftp.nisc.sri.com)  
cd netinfo  
get interest-groups

## 2.05 Regional Network Policies (Documents)

Many regional networks have developed policies on responsible use of their network. You can retrieve copies of these policies on line by anonymous FTP.

Source:  
Anonymous FTP to [ftp.nsic.sri.com](ftp://ftp.nsic.sri.com)  
cd netinfo  
dir  
get ????.policy

where ??? is the name of the regional network. The dir command will give you a directory of the filenames.

## 2.06 Campus ethics/policy statements (Documents)

Many universities have developed more complete policies based on the regional network policies. If you wish to look at some to use as guidelines for your own campus, you can get them through anonymous FTP.

Source:  
Anonymous FTP to [ariel.unm.edu](ftp://ariel.unm.edu)  
cd ethics  
dir  
get ????.policy

where ??? is the name of the university or college. The dir command will give you a directory of the filenames.

## 2.07 VAX book (Document)

Joe St Sauver of the University of Oregon has developed a very complete guide of information on the network available via anonymous FTP. The following is a quote from the README file: "While it is tailored to the University of Oregon's VAX8000 system, the skills it illustrates are general enough to be of interest to users at most other VAX sites, and even users at many non-VAX sites connected to the national networks." There is a major section on Network Topics that is excellent. It is a large document, over 300 pages.

**Source:**

```
Anonymous FTP to decoy.uoregon.edu
cd pub/vaxbook
get vms.ps (for postscript format)
get vms.mem (lineprinter format)
```

## 2.08 Network Tidbits COMPUNET BIBLIO (Document)

This is a "Network Bibliography" by Elliott Parker from the Journalism Dept. of Central Michigan University. It contains a bibliography of network related documents that he finds helpful.

**Source:**

Listserv

Send e-mail to comserve@rpiecs (BITNET)  
the message should contain the following one line request

**SEND COMPUNET BIBLIO**

You will receive the file "COMPUNET BIBLIO" via return mail as well as a "Welcome to Comserve" message and a "Getting started with Comserve message." If you are unfamiliar with how the program listserv works on BITNET, these documents are a good start.

## 2.09 Internet Tour Macintosh Hypercard 2.0 Stack (Program)

This is a Macintosh hypercard 2.0 stack that does a nice job of describing some of the functions of the Internet. It has a section that you can modify for your own institutions needs.

**Source:**

```
Anonymous FTP to nnsf.net
cd internet-tour
get Internet-Tour-README
```

```
get Internet-Tour.sit.hqx
```

Note this is a stuffed and binhexed file. So you must have the program Stuffit to convert it to an executable file on the Macintosh.

## 2.10 A Survey of Educational Computer Networks (Document)

This is a document that list the mailing lists or groups that exist. To get on the list to receive updates, send e-mail to Interest-groups-request@nisc.sri.com.

Source:

```
Anonymous FTP to ariel.unm.edu
cd library
get networks survey
```

## 2.11 Network Managers's Reading List (Document)

This is a document is an annotated list of books and other resources of use to network managers who are using TCP/IP, UNIC, and Ethernet technologies.

Source:

```
Anonymous FTP to ftp.utexas.edu
cd pub/netinfo/docs
get net-read.txt
```

## 3.0 Libraries Available over the Network

There are hundreds of libraries available over the network, far too many to list here. There are several documents available that list Internet accessible Libraries. There are two major documents that list many libraries. One is Internet-Accessible Library Catalogs and Databases, coauthored by Dr. Art St. George of the University of New Mexico (stgeorge@bootes.unm.edu [Internet] or stgeorge@unmb [BITNET]) and Dr. Ron Larsen of the University of Maryland. The other is UNT's Accessing On-Line Bibliographic Databases by Billy Barron, (billy@vaxb.acs.unt.edu [Internet]).

### 3.1 UNT's Accessing On-Line bibliographic Databases (Document)

Source:

```
Anonymous FTP to vaxb.acs.unt.edu
cd library
get libraries.ps (postscript format)
get libraries.txt (ASCII text version)
get libraries.wp5 (Wordperfect 5.1 source)
```

### 3.2 Internet-Accessible Library Catalogs & Databases (Docment)

Source:

```
Anonymous FTP to ariel.unm.edu
cd library
get library.ps (postscript format)
get internet.library (ASCII text version)
```

### 4.0 The Mother Lode of Anonymous FTP Sites

Throughout this document, there are listed sites for specific documents. Most of the documents listed in this paper are only indexes to more information. A big problem is searching through all of this information to find what you want. Listed below are some of the major sites for specific programs.

You can also use Archie for searching for specific programs. (See Search: category under Anonymous FTP sites above.)

#### 4.1 Washington University (Anonymous FTP)

Washington University represents perhaps one of the most popular sites for software on the network. The mirrors directory is where a copy of all of the wsmr-simtel20.army.mil files are kept. Wsmr-simtel20-army.mil is the originator and keeper of major amounts of public domain software. Their site, however, is often overloaded with connections and difficult to make connection to.

You will find enough software here to keep you busy for the rest of your life. The mirrors directory MSDOS and Macintosh directories contain files for those specific machines.

```
Anonymous FTP to wuarchive.wustl.edu
cd mirrors
```

```
cd msdos
```

```
for Income tax time cd taxes
for unzipping files cd zip, type binary, and get pkz110eu.exe
for education software cd education
for graphics files cd giff, tiff or graphics
```

```
cd macintosh
```

for the macintosh there are directories for applications, inits, sounds, reviews and many more.

#### 4.2 KERMIT (Anonymous FTP)

Kermit is a public domain file transfer protocol that is available for just about all microcomputers, minicomputers, and mainframes. It is very popular and has been utilized by many computer facilities everywhere.

Anonymous FTP to [watsun.cc.columbia.edu](http://watsun.cc.columbia.edu)

```
cd kermit
get read.me
```

For executable versions of kermit

```
cd bin
```

get READ.ME file and read for specifics of what file to get

For the IBM PC I get msvibm.exe after typing binary to activate the binary transfer mode.

#### 4.3 NCSA Software for Network Access from PC's (Anonymous FTP)

Source:

Anonymous FTP to [ftp.ncsa.uiuc.edu](http://ftp.ncsa.uiuc.edu)

```
cd NCSA_Telnet
```

```
cd PC/Telnet (for IBM PC Software)
```

```
get telxxbin.zip
```

where xx is the current version number

(in binary format, I also suggest getting readme files)

```
cd Mac/Telnet
```

```
get telnet.x.sithqx or
```

where x is the current version number

(in binary format, I also suggest getting readme files)

#### 5.0 Network Information Centers - NICs

These are the individuals to contact if you want information on what networking is all about, and how you can connect. They can put you in contact with the individuals in your area that can assist you in obtaining a network connection.

They can also provide assistance if you don't know who else to ask about network topics.



### 5.1 Defense Data Network (DDN)

Government Systems, Inc. (GSI)  
Attn: Network Information Center  
14200 Park Meadow Drive  
Suite 200  
Chantilly, VA 22021  
(800) 365-3642 or (703) 802-4535 FAX (703)-802-8373

NIC@NIC.DDN.MIL

The main NIC on the Internet. The source for network numbers, domain names, and much more.

### 5.2 NSF Network Service Center (NNSC)

NSF Network Service Center  
Bolt Baranek and Newman Inc.  
10 Moulton St.  
Cambridge, MA 02138  
(617) 873-3400

NNSC@NNSC.NSF.NET

Corinne Carroll  
NNSC Staff

Publishes Newsletter called NSF Network News; to subscribe, contact them at address above.

### 5.3 NSFNET Information Services (NIS)

NSFNET Information Services  
Merit Network, Inc.  
ITI Building  
2901 Hubbard, Pod G  
Ann Arbor, MI 48109-2016  
(313) 936-3000 or 1-800-66MERIT

NSFNET-INFO@MERIT.EDU

Publishes Newsletter called Linkletter, to subscribe send e-mail to NSFNET-linkletter-Request@merit.edu.

#### 5.4 SRI International Network Information Systems Center (NISC)

SRI International  
Network Information Systems Center  
333 Ravenswood Avenue, Room EJ291  
Menlo Park, CA 94015  
(415) 859-6387 or (415) 859-3695  
Fax: (415) 859-6028

NISC@NISC.SRI.COM

#### 5.5 BITNET (NIC)

BITNET Network Information Center  
Corporation for Research and Educational Networking (CREN)  
1112 16th Street, N.W.  
Suite 600  
Washington, DC 20036  
(202) 872-4200

INFO@BITNIC

Lisa Covi, BITNET Support

#### 6.0 Network Statistics

If you would like to publish statistics in your newsletter about your institutions network traffic into and out of the NSFNET backbone, you can obtain information on either the packets or bytes sent. I prefer the bytes since that can be translated into some sort of understandable figure.

##### 6.1 Files containing monthly information on NSF Internet backbone traffic by packets or bytes (Document)

Source:

Anonymous FTP to nis.nsf.net

cd stats

get nsfyy-mm.ptraffic where yy is year, 91 and mm is month, 06  
get nsf91-06.ptraffic ptraffic is the packet traffic

get nsfyy-mm.btraffic where yy is year, 91 and mm is month, 06  
get nsf91-06.btraffic btraffic is the byte traffic

## 7.0 Campus Wide Information Systems - CWIS

The information provided in this paper is primarily intended for the individuals who will use this information to then provide methods for access from their own computing environment. Although standards have been proposed, there are no "packages" that give you access to all of the information presented here. What we at Ohio State University have done, as have several other universities, is to provide a menu to the user that accesses these services and databases behind the scenes. In fact, Ur had to go into the shell scripts to look up the network addresses of these machines, because I rely on the menu for access as well.

As the name "Information Systems" implies, the user wants access to the information without having to know exactly how to get to it. In this way, the network is invisible to the end user. All they need to know is what they want, not the command structure needed to actually get the information.

At the present, the menu system seems to be the easiest way in which to lead the end user to the information. A term "knowbot" has been used to describe the ability to indicate what information you wish in free form, and have a "knowbot" which knows what is available, go out and retrieve it.

The following are some of the places you can connect to for a demonstration of their capabilities.

### 7.1 Appalachian State University

conrad.appstate.edu (152.10.1.1)  
Login as info.  
Emulate a VT100.

Hardware/software: DEC/VTX  
Contact: Ernest Jones (jonesel@appstate.bitnet)

### 7.2 Arizona State University PEGASUS and ASEDD

asuvvm.inre.asu.edu  
Login as helloasu.  
Use tn3270.

Hardware/software: Running PNN News Network Software under VM/CMS  
(with Profs and FOCUS).  
Contact: Joy Kramer (iejxk@asuvvm.inre.asu.edu)

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

### 7.3 Clemson University

eureka.clemson.edu  
Login as public.  
Emulate a VT100.

Hardware/software: DEC/VTX  
Contact: Amy Slankard (amy@clust1.clemson.edu)

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

### 7.4 Columbia University

cal.cc.columbia.edu  
Login as calendar.

Contact: David Millman (dsm@cunixf.cc.columbia.edu)

### 7.5 Cornell CUINFO

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

TELNET cuinfo.cornell.edu 300  
TELNET cuinfo.cornell.edu::300  
or TELNET cuinfo.cornell.edu..300

Hardware/software: VM/CMS; IBM S/370 assembler; locally written  
Contact: Steve Worona (slw@cornella.bitnet)

CUINFO of interest to non-Cornell community members:

Uncle Ezra	The Electronic Counselor - first program of its kind; a must see
Directories	Student and Staff directories includes staff electronic addresses
Ski Reports	Up to the minute Upstate New York Ski Reports (Seasonal)
Jobs Listings	and Descriptions of jobs at Cornell

Computing Extensive on-line information regarding computing at  
Cornell  
Patents Descriptions of current patents held by Cornell  
Various Newsletters Newsletters from numerous campus groups  
Weather Up to the minute local weather forecast

#### 7.6 Lafayette Integrated, Networked Campus - LINC

lafibm.lafayette.edu (139.147.8.4)  
Use telnet or tn3270. When you see the LINC logo, ignore the  
ALT-L advice and clear the logo by pressing Enter. On next  
screen, instead of logging on, type DIAL MUSIC (case does not  
matter). On login screen that appears, use GUEST as ID, and  
GUEST as password.

Hardware/software: IBM 9375 running MUSIC/SP  
Contact: Patrick Ciriello (ciri@lafayacs.bitnet)

#### 7.7 Lehigh

ibm1.cc.lehigh.edu  
Use tn3270.  
At the VM prompt, type DIAL MUSIC, and at the /ID prompt, type  
LUNA.

Hardware/software: IBM 4381 running MUSIC.  
Planning to move to AIX on RS/6000s.  
Contact: Timothy J. Foley (tjf0@ns.cc.lehigh.edu)

#### 7.8 Mississippi State University (MSUinfo)

isis.msstate.edu (130.18.164.2)  
Login as msuinfo.  
Terminal type: enter yours, most supported.

Hardware/software: UNIX/TechInfo  
Contact: Bennet George (George\_Bennet@admin.msstate.edu)

Contains: announcements, campus events, community events,  
continuing education offerings, jobs, recent press releases,  
research funding opportunities, etc.

#### 7.9 MIT TechInfo

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

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

For telnet access:

telnet techinfo.mit.edu (18.72.1.146)  
No username/password is required.  
Once you're in, you can use upper or lower case commands.  
To exit the system, use the QUIT command.

For native Macintosh access:

anonymous ftp to net-dist.mit.edu, look in the /pub/techinfo directory, fetch techinfo.hqx Binhex (public domain tool) required to decode the binary.

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

#### 7.10 New Mexico State University NMSU/INFO

info.nmsu.edu  
Login as info.  
Emulate a VT100.

Hardware/software: DEC/VTX  
Contact: D. Brian Ormand (bormand@nmsuvm1.bitnet) or  
(bormand@nmsu.edu)

#### 7.11 North Carolina State University Happenings!

ccvax1.cc.ncsu.edu (128.109.153.4)  
Login as info.  
Emulate a VT100.

Hardware/software: DEC/VTX  
Contact: Harry Nicholas (hmn@ncsuvax.bitnet) MIT TechInfo

#### 7.12 NYU ACF INFO system

info.nyu.edu (information.nyu.edu) (128.122.138.142)  
Emulating a VT100 or better enables some additional suboptions.

Contact: Stephen Tihor (tihor@ACFcluster.nyu.edu) or  
(tihor@nyuacf.bitnet)

### 7.13 Pima Community College

pimacc.pima.edu  
Login as pimainfo.  
Emulate a VT100.

Hardware/software: DEC/VTX  
Contact: Terry Loftus (tloftus@pimacc.pima.edu) or Al Camberos (acamberos@pimacc.pima.edu)

### 7.14 Princeton News Network PNN

pucc.princeton.edu  
Use telnet or tn3270. When you see the VM 370 logo, clear it, and instead of logging on, enter pnn (case does not matter). Clear the information screen that appears.

Hardware/software: VM/CMS - locally written. A UNIX version and a Mac HyperCard version are up, running, and available. All versions (CMS, UNIX, HyperCard) are available to universities at no cost.  
Contact: Rita Saltz (rita@pucc.bitnet)  
System and Development: Howard Strauss (howard@pucc.bitnet)

### 7.15 Rutgers University

info.rutgers.edu 98  
No password required.  
Can be accessed from any microcomputer or terminal.

Hardware/software: written in lush (a public domain program); runs on any SUN workstation.  
Contact: Leny Struminger (struming@zodiac.rutgers.edu)

INFO contains university wide activities, graduate courses catalogs, Faculty/Staff phone directory, computer services, libraries online catalog, weather, news, bus schedules, etc.

### 7.16 San Diego State University

wintermute.sdsu.edu  
Login as sdsuinfo.  
Emulate a VT100.

Hardware/software: pnn & nmm  
Contact: Richard Caasi (caasi@sdsu.edu)

### 7.17 University of Arkansas

uafsysb.uark.edu  
Login as info.

Hardware/software: IBM 4381-14, VM/HPO 6.0, Cornell's CUINFO module

Contact: Susan Adkins (sa06037@uafsysb.bitnet) or  
(sa06037@uafsysb.uark.edu)

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

### 7.18 University of Colorado at Boulder

culine.colorado.edu 852 (128.138.129.2 852)  
Login as CULINE.

Contact: Donna Pattee (pattee@spot.colorado.edu)

### 7.19 University of Denver

du.edu  
Login as atdu.

Contact: Bob Stocker (bstocker@ducair.bitnet)

### 7.20 University of Minnesota at Duluth

ub.d.umn.edu  
Login as info.  
Emulate a vt100.

Contact: Frank Simmons (fsimmons@ub.d.umn.edu)

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

### 7.21 University of New Brunswick, Canada, INFO

unbmvs1.csd.unb.ca (131.202.1.2)  
Login with application id INFO.  
There is no password required.  
INFO is a full-screen CICS application running under MVS.



tn3270 emulation.

Contact: Bonita Mockler (bgm@unb.ca)

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

#### 7.22 University of New Hampshire's VideoTex

unhvtx.unh.edu (132.177.128.58)

USERNAME: student (no password required).

Control-z to log off.

VT100/VT200 terminal emulation.

Hardware/software: DEC/VTX

Contact: Robin Tuttle (r\_tuttle1@unhh.unh.edu)

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

#### 7.23 University of North Carolina at Chapel Hill INFO

info.oit.unc.edu (128.109.157.1)

Login as info.

Emulate a VT100.

Hardware/software: DEC/VTX

Contact: Judy Hallman (hallman@unc.bitnet)

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

#### 7.24 University of North Carolina at Greensboro MINERVA

steffi.acc.uncg.edu

Login as info or MINERVA.

Emulate a VT100.

Hardware/software: DEC/VTX

Contact: Norman Hill (hillnr@uncg.bitnet)

### 7.25 University of North Carolina at Wilmington SEABOARD

vxc.uncwil.edu (128.109.221.3)  
Log in as info.  
Emulate a VT100.

Hardware/software: DEC/VTX  
Contact: Eddy Cavanaugh (cavanaughd@uncwil.bitnet) or  
(cavanaughd@vxc.uncwil.edu)

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

### 7.26 University of Northern Iowa

infosys.uni.edu  
Log in as public.  
Prefers a vtxxx terminal, but works with unknown terminal types.

Hardware/software: The program uses UNIX tput clear, tput mc4, and tput mc5 (for printing).  
Contact: Mike Yohe (yohe@iscsvax.uni.edu)

### 7.27 University of Pennsylvania - PennInfo

In final testing phase; due for release at the beginning of November, 1991.

penninfo.upenn.edu  
(no login id is needed).  
Emulate a VT100.

Hardware/software: MIT's Techinfo; type HELP for directions  
Human contact: Valerie Glauser (glauser@dccs.upenn.edu)  
Comments: penninfo-comments@dccs.upenn.edu  
Bugs: penninfo-bugs@dccs.upenn.edu  
Human contact: Valerie Glauser (glauser@dccs.upenn.edu)

PennInfo can be accessed via MIT's TechInfo MAC client program as well. We've modified the MAC client slightly because we have different contact information at Penn than MIT does.

## 8.0 Internet Bulleting Board System/Interactive Databases/Freenet

There are several systems you can establish a connection with, sometimes referred to as an "anonymous telnet" session, that provide a variety of services/information. In some respects they resemble Campus Wide Information Systems, in others they are more like bulletin boards or interactive databases.

A file containing the most frequently asked questions about Bulletin Board systems is available via anonymous ftp.

Source:

```
Anonymous FTP to polyslo.calpoly.edu
cd pub
get alt.bbs.faq
```

Listed below are some of these types of systems:

### 8.1 Cleveland Freenet - Case Western Reserve University

```
Telnet to freenet-in-a.cwru.edu
Follow the menu driven instructions.
```

### 8.2 Heartland Freenet

```
heartland.bradley.edu (136.176.10.10)
Login as fnguest
```

### 8.3 Youngstown Freenet - Youngstown State University

```
Telnet yfn.ysu.edu
```

Type visitor at userid prompt and follow menu driven instructions.

### 8.4 Ocean Network Information Center

```
Telnet delocn.udel.edu
When the Userid: prompt appears type INFO and press Enter/Return
key.
```

### 8.5 Geographic Name Server

```
Telnet martini.eecs.umich.edu 3000
```

To use just type the name of the city and state you would like information on, just like you would on the last line of a postal

address. Example: Zanesville, OH

## 8.6 ISAAC

ISAAC, the Information System for Advanced Academic Computing, serves as a clearinghouse for information about the use of IBM-compatible hardware and software as aids to instruction and research in higher education. Membership is free to all students, faculty, and staff at institutions of higher education.

For more information call 206-543-5604.

ISAAC requires that you register before you can access the system. To register, type register for the userid and password and fill in the information, using the TAB key to go from field to field. Once registered you will be assigned a userid and password; you must connect again, this time typing your assigned userid and password.

To access ISAAC, you need to establish a telnet connection over the network. If you do not have network access, you also can call over phone lines. Call 1-800-237-5551 in the U.S. or, within the local Seattle area or outside the United States, call 1-206-543-3761.

telnet isaac.engr.washington.edu or 128.95.32.61

## 8.7 FEDIX

FEDIX is an on-line information service that links the higher education community and the federal government to facilitate research, education, and services. The system provides accurate and timely federal agency information to colleges, universities, and other research organizations.

There are no registration fees and no access charges for using FEDIX. The only cost is for the phone call.

FEDIX provides daily information updates on:

Federal education and research programs (including descriptions, eligibility, funding, deadlines).

Scholarships, fellowships, and grants.

Available used government research equipment.

New funding for specific research and education activities from

the Commerce Business Daily, Federal Register, and other sources.

Minority assistance research and education programs.

News and current events within participating agencies.

General information such as agency history, budget, organizational structure, mission statement. etc.

For more information, contact the HELPLINE at 301-975-0103  
Monday-Friday, 8:30 am to 4:30 pm EST, except on federal holidays.

telnet 192.111.228.1

At the login: prompt type fedix

## 8.8 STIS

Science and Technology Information System at the National Science Foundation.

Information includes: the NSF Bulletin, Guide to Programs, grants booklet - including forms, program announcements, press releases, NSF Telephone Book, reports of the National Science Board, descriptions of research projects funded by NSF - with abstracts, and analytical reports and news from the International Programs Division.

Publications may be searched by using a keyword, such as japan or volcano; using a phrase, such as exchange of scientists and soviet union; or by selecting a broad topic like biosciences.

For more information, contact the National Science Foundation, Phone (202) 357-7555, FAX (202) 357-7745, TDD (202) 357-7492 or via E-Mail stis@nsf.gov (Internet), stis@nsf (BITNET).

telnet stis.nsf.gov

At the login: prompt type public

At the terminal type prompt type vt100nkp.

Enter your terminal type [blank=vt100]: vt100nkp

You are then asked for a userid of up to 8 characters. If you are a new user, you will be asked to supply your name and address for record keeping. You can then search the NSF publications for information and have the information sent to your e-mail address if you wish. STIS provides a menu system. To get back to the main menu, press the esc key until you have the main menu on the

screen. Press the arrow key until Exit is highlighted, and press enter to exit STIS.

## 8.9 Weather

Source:

Telnet madlab.sprl.umich.edu 3000

## 9.0 WHOIS - E-mail white pages

WHOIS is a program available on many workstation/mini/mainframe computers that can connect to another computer. By supplying a persons name, it will respond with information it has on the person. A similar program called finger does the same type of thing, except it only supplies information on individuals with an account on that specific computer. Whois generally is operating on a database containing most of the individuals at the university, not just on the machine you connect.

The following is a list of universities that have a whois service working. It is not, by any means exhaustive, and I would be interested in knowing about others that may exist so I can add to this list.

### 9.1 The Ohio State University

Telnet to osu.edu or

Use Whois command whois -h osu.edu

Enter firstname.lastname

Example: whois -h osu.edu jerry.smith

### 9.2 University of Oregon

Use Whois command whois -h oregon.uoregon.edu

Enter firstname.lastname

Example: whois -h oregon.uoregon.edu Rose.Smith

### 9.3 University of Virginia

Use Whois command whois -h whois.virginia.edu

Enter lastname, firstname middlename

Example: whois -h whois.virginia.edu Smith, John James

### 9.4 University of Pennsylvania

Use Whois command whois -h whois.upenn.edu

Enter lastname, firstname

Example: whois -h whois.upenn.edu Smith, Judy

## 9.5 University of Wisconsin

Use Whois command `whois -h wisc.edu`  
Enter `firstname_lastname`  
Example: `whois -h wisc.edu Jane Smith`

## 9.6 MIT

Use Whois command `whois -h mit.edu`  
Enter `firstname_lastname`  
Example: `whois -h mit.edu Robert_Smith`

## 9.7 Indiana University

Use Whois command `whois -h iugate.ucs.indiana.edu`  
Enter `firstname_lastname`  
Example: `whois -h iugate.ucs.indiana.edu Gerald_Smith`

## 10.0 Books

For a more complete listing, see sections 3.08 and 3.11.

Internetworking with TCP/IP Principles, Protocols, and Architecture by Douglas Comer, Prentice Hall, ISBN 0-13-470154-2.

The Matrix, Computer Networks and Conferencing Systems Worldwide by John S. Quarterman, Digital Press, ISBN 0-13-565607-9.

!%@:: A Directory of Electronic Mail Addressing and Networks, by Donnalyne Frey and Rick Adams, O'Reilly & Associates, Inc., ISBN 0-937175-39-0.

The User's Directory of Computer Networks, Edited by Tracy L. LaQuey, Digital Press, ISBN 0-13-950262-9.

## 11.0 Free Periodicals/Tabloids/Magazines

Below are just a few of the periodicals qualified subscribers can receive free. I find the first four, PCWeek, MacWeek, Info World, and Network World, the ones I try to glance over routinely. Others are dedicated to specific network, LAN, or UNIX topics that are useful if you have need for that information.

PC Week  
P.O. Box 1767  
Riverton, NJ 08077-9767

MacWEEK  
P.O. Box 1764  
Riverton, NJ 08077-9764

Info World  
P.O. Box 3013  
Northbrook, IL 60065-3013

Network World  
161 Worchester Road  
Framingham, Mass. 01701

Computer System News  
Circulation Dept.  
P.O. Box 2030  
Manhasset, NY 11030-7030

Network Management  
Circulation Department  
Box 2417  
Tulsa, Oklahoma 74101-2417

Unix Review  
Circulation Department  
P.O. Box 7439  
San Francisco, CA 94120-7439

Communication News  
2504 North Tamiami Trail  
Nokomis, FL 34275-9987

LAN Times  
P.O. Box 652  
Hightstown, NJ 08520

Communications Week  
Circulations Dept.  
P.O. Box 2070  
Manhasset, NY 11030

LAN Computing  
101 Witmer Road  
O.O. Box 322  
Horsham, PA 19044-0322

Midrange Systems  
P.O. Box 445  
Horsham, PA 19044-0445



Unix Today!  
Circulation Dept.  
P.O. Box 2170  
Manhasset NY 11030-4376

## 12.0 Glossary

I use some concepts here that may not be familiar to all. The following is a brief explanation of some of the concepts.

### 12.1 BITNET:

A network of normally mini or mainframe computers. BITNET connects many universities and colleges together. It provides e-mail and file transfer capabilities. It does not have the ability to do remote login (Telnet sessions).

### 12.2 Internet:

A very large network that connects just about any type of computer together. It supports e-mail, file transfer (FTP), and remote login (Telnet).

### 12.3 Anonymous FTP:

The ability to transfer a file from a remote computer connected to Internet without having an account on the remote computer. The program that performs the file transfer is normal FTP. To connect to a remote computer offering anonymous FTP you can use the following commands from a computer connected to Internet:

FTP Internet computer name  
When prompted for a userid: type anonymous  
When prompted for a password type your e-mail address  
To get a listing of files type dir  
To change directory type cd directory name  
To get a file type get filename  
To get a binary file type binary then get filename  
To end session type quit

Example:  
FTP pilot.njin.net  
Username: anonymous  
Password: yourname@computer.edu  
cd pub/ftp-list  
get ftp.list  
quit

#### 12.4 Telnet:

The ability to establish a connection to a remote computer connected to the Internet network. There are two types of programs that are used to do this. One, normally referred to as Telnet, normally establishes a VT100 type terminal emulation to the remote computer. The second, TN3270, establishes a full screen IBM 3270 type terminal connection.

#### 12.5 Listserv:

A program available on many BITNET connected computers that can act as a mail forward system and as a file repository. BITNET is another network that links many colleges and universities together. It does not normally link to military or government institutions as does the Internet. To subscribe to a listserv, you normally send mail to the machine which has the mailing list with the command to subscribe. As an example, to subscribe to a list for discussion of topics pertinent to Mechanical Engineering, you would send e-mail to [listserv@utarlvml](mailto:listserv@utarlvml) with the content of the message containing the one line command to subscribe:

SUB MECH-1 John Doe (Where John Doe would be your full name)

The document "Interest Groups" listed below contains the list of the majority of these lists that you can subscribe.

#### Disclaimer

The information provided in the previous sections has been put together from multiple sources acquired from the network. Much of it came from reading newsgroups and trying things out to see how they worked. The information is as accurate as I have been able to determine, as of December 5, 1991.

I used a DEC5500 system running Ultrix to check most of these sources. Most of the information is oriented toward Internet, since it has the ability to remote login (Telnet) and File Transfer (FTP).

#### Security Considerations

Security issues are not discussed in this memo.

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