The Winsock Client Listing

INTRODUCTION

Winsock: a Windows Internet standard ("Windows Sockets")

This is a detailed listing of Winsock based Freeware and Shareware packages used in communicating through a modem to the Internet. Although this listing is oriented towards the individual home based modem user, most of these packages are universal, and equally suitable for use in a network environment. I have indicated if there is a prime or preferred location where the latest version of each package is usually available. Alternatively, with the file names and associated data supplied, most of these packages can also be readily found elsewhere on the Internet with search and retrieval tools like Archie, FTP, Gopher and WAIS.

At the present time the better of these are at least equivalent to and even superior to the corresponding modules in commercial packages that you can buy, although there is not really a lot in the marketplace to begin with. This situation will dramatically change over the next year or two, but for now, and in particular for the home based user, Freeware/Shareware is usually the best choice. You can try out different packages until you find the ones with the features you want, and that you are comfortable with. Where registration is required the fees are usually quite reasonable and can bring additional benefits in additional documentation, technical support and upgrades with additional or uncrippled features.

Using these packages with a modem requires at a minimum:

1. Windows 3.1.
2. A "SLIP" or "PPP" account from an Internet provider. If this is not available or too expensive from your service provider, the innovative program TIA (The Internet Adaptor) provides another option.
3. A special communications package capable of accessing the SLIP/PPP account through a modem. Unfortunately most of the regular commercial and Shareware communications software commonly used to access other on-line services do not currently have Winsock capability and therefore cannot be used for the Internet. The best package currently available which does work is Peter Tattam's Shareware package Trumpet Winsock. See the Index for the chapter providing information on this very popular and widely used program.

I have tried to keep the terminology as simple as possible, but, as Einstein discovered, everything is relative. At the end of this listing I have included a series of chapters containing references to some supplemental reading material. For a better understanding of the Internet terms "Winsock" and "SLIP", following up on the suggested reading material is a beginning.

With the increased availability of Winsock applications for Windows NT I have started including a few 32 bit applications in this listing. Some of these can only be run on Windows NT, but a few of these are in fact usable on Windows 3.1 with the Microsoft's Win32s extension installed. The Win32s extension gives Windows 3.1 a limited 32 bit capability enabling it to run 32 bit programs written for this extension. The most popular and best known such program is NCSA Mosaic, the World Wide Web (WWW) browser. More information on Win32s and Mosaic are included in the appropriate sections in this listing.

Standard disclaimer applies - as with everything you use these out at your own risk. Many of these packages are still being developed by their authors. Bugs are unfortunately common, and updates to both fix these and add new features are frequent.

Feedback on this listing is always appreciated. I am constantly looking for ways to improve it and welcome suggestions as well as information on items which I may have missed and which deserve to be included.

Looking for something? I realize that this listing is getting a bit large, and if you are looking for something in particular try using the Edit/Find menu item in MS Word or the Find command in Windows Write. Other word processors usually have something similar available.

New this month: In addition to the usual error corrections, change updates, and addition of new material, I've separated out the non Winsock items into a section of their own and broken them down into categories. I hope that this arrangement is more convenient.

Recommended: I have added this comment to some items. This is based upon both my personal opinion and comments from others. Criteria I look for are:
1. One of the leaders in its category in operation, functionality and features. This does not imply perfection.
2. Reasonable cost compared to other comparable programs. This does not mean that it's free or even cheap.
3. Supported by its authors and under continued development. This should mean that it has a future.

This does not mean that other programs don't have better features or won't work better in your particular situation. All I am doing is suggesting that if these appear to fit your needs, they should be looked at first. They shouldn't necessarily be the only thing you look at.

Updates of this listing under file name winterXX.zip (where XX is the version) are available from the prime location:

ftp.cica.indiana.edu: /pub/pc/win3/winsock

This site is difficult to access in the daytime. There are many locations which "mirror" its files. See the listing in Other Information.

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Ed Sinkovits
edsink@mail.mbnet.mb.ca

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B*U*G*S

Bugs are almost in^%evitable in any kind of software under development as many of these are. Please give the author a chance. If you have carefully followed the instructions and are sure that there is a problem with a particular program which is not already mentioned in the documentation, contact the author first, AND give him some reasonable time to respond. If you don't tell him about it he can't fix it! It's rather a bit impolite and counterproductive to flame the author and his program publicly in a newsgroup for something he's not even aware of. Ultimately it may even turn out not to be his problem. Most authors include their email addresses in the program documentation for this reason and also to encourage suggestions for improvement.

WINSOCK APPLICATIONS

1. CHAMELEON

The widespread popularity of these packages from NetManage merits their own section. One is a basic Internet beginner's package freely available. The other is a full professional networking package, not free.

1.1

NAME.........................	**Chameleon Demo**
PRIME PURPOSE......	Full featured professional network demo package [DEMO - Function or time crippled]
FILE NAME.................	5 files: readme.txt, chameln1.exe, chameln2.exe, chameln3.exe, chameln4.exe.
FILE SIZE...................	Total approximately 5,003,764 bytes.
LATEST VERSION.....	n/a
AVAILABLE FROM.....	ftp.netmanage.com: /pub/demos/chameleon
STATUS....................	Freeware.
DOCUMENTATION....	n/a
FEATURES................	This is the full featured professional package with all the clients, FTP, Telnet, Gopher, Ping, Mail, News etc. and network features like ethernet and NFS support.
COMMENTS..............	This full demonstration version is time crippled - it will expire sometime in December. NetManage can be expected to replace it with a new copy on their server with a new expire date by then. The readme file contains the password needed for installation. Because of the size of this package and the time required to get it running and the effort required to get familiar with all its features within the time limitation, this package should only be looked at by those who are really seriously prepared to buy the uncrippled version if they like what they see (I believe it starts at a couple hundred dollars and up depending on features). This commercial version is fairly complex and is more suited to a network installation rather than the individual user. For others the Chameleon Sampler (listed below) may be a better choice. Although it only has some basic clients, it is free, not crippled and will run forever.

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1.2

NAME.........................	**Chameleon Sampler**
PRIME PURPOSE......	Multi-function commercial sampler package.

FILE NAME................ sampler.exe
FILE SIZE................. 753,947 bytes
LATEST VERSION..... 3.11
AVAILABLE FROM..... ftp.netmanage.com: /pub/demos/sampler
This same package can also be found on the disk included with several Internet books currently at bookstores.
STATUS.................... Freeware.
DOCUMENTATION.... Good, with on-line help.
FEATURES............... Supports both SLIP/CSLIP and PPP and has its own built in Winsock and telephone dialer which means that it does not require Trumpet Winsock - it has its own corresponding features built in. Basic FTP, Telnet, Mail and Ping clients are included, but missing are others such as Archie and Gopher. Telnet emulation TTY/ANSI/VT52/VT100/VT220.
COMMENTS............... A good way to get going on the Internet, this beginner's Freeware package is intended to provide an introduction to the commercial version of Chameleon. It works well, and has become very popular. It is included on the disk supplied with a number of introductory Internet books. If I have one complaint, its that I dislike software packages such as this which are programmed to make changes to an autoexec file during installation without prompting for notification or approval to proceed. Nonetheless this is a good stable package and other Freeware and Shareware Winsock clients can be installed and will work with it to make up for ones not included in this package (or to upgrade to better ones).
Recommended

2. CHAT / IRC / PERSONAL COMMUNICATIONS

Communicate with others through your keyboard, or a microphone. Be forewarned though that this is not always as easy as it sounds. The good news is that many of these packages are continually being improved by their authors, the bad news that some of the problems and limitations are beyond their control.

2.1
NAME........................ **Internet Voice Chat**
PRIME PURPOSE...... 2 way Internet voice(!) communications
FILE NAME.................. ivc10.zip
FILE SIZE.................. 331,720 bytes
LATEST VERSION..... 1.0   May 1994
AVAILABLE FROM..... ftp.cica.indiana.edu: /pub/pc/win3/winsock (or mirrors)
STATUS.................... Shareware $US 20
DOCUMENTATION.... Installation instructions and on-line help included.
FEATURES............... Registered version adds Answering Machine Mode capability. A Fax mode is planned for a future release.
COMMENTS............... Requires microphone, sound card etc.

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2.2
NAME........................ **IRC4WIN**
PRIME PURPOSE...... Internet Relay Chat II (IRC II)
FILE NAME............... irc4win.zip
FILE SIZE.................. 91,039 bytes
LATEST VERSION..... 1.10 beta October 1994
AVAILABLE FROM..... ftp.cica.indiana.edu: /pub/pc/win3/winsock (or mirrors)
STATUS.................... Shareware $US 50 single user, $US 450 site license
DOCUMENTATION.... Very minimal, with nothing much included in this unregistered version.

FEATURES...............

COMMENTS............... An upgrade of this fairly new program from David Elkind. No information on what's changed in this version. Registration cost is a bit stiff.

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2.3

NAME........................ **Sticky**
PRIME PURPOSE...... Electronic notes exchange.
FILE NAME................ sticky06.zip
FILE SIZE.................. 366,332 bytes
LATEST VERSION..... .61 October 1994
AVAILABLE FROM..... commsun.its.csiro.au csiro/msdos/sticky
ftp.cica.indiana.edu: /pub/pc/win3/winsock (or mirrors)
STATUS..................... freeware.
DOCUMENTATION.... Minimal instructions.
FEATURES................ Automated installation.
COMMENTS............... Based on 3M's yellow sticky post-it notes that are so popular. This program contains separate talk and listen modules which allows you to exchange quick notes with another PC which also has the program running. For people interested in Sticky there is now a mailing list. To subscribe send an email to listserv@oliver.sun.ac.za with the following in the BODY of the message (without the brackets):
SUBSCRIBE STICKY-TALK <Your firstname> <Lastname>

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2.4

NAME........................ **Winsock IRC**
PRIME PURPOSE...... Internet Relay Chat (IRC)
FILE NAME................ Three files: winirc.exe, winirc.doc (Windows documentation), irc.doc (DOS version documentation).
FILE SIZE.................. 96,000, 313 and 8,276 bytes
LATEST VERSION..... .1 Beta
AVAILABLE FROM..... ftp.trumpet.com.au: /ftp/pub/winirc
STATUS..................... No mention of any charges for using this program.
DOCUMENTATION.... Negligible/inadequate. Only documentation is in a separate file winirc.doc (MS Word format), 313 bytes, found in the same directory as the program file which should be downloaded at the same time, and in which the suggestion is made that if documentation is needed for this Windows version it should be obtained from one of the corresponding DOS versions (such as irc101.zip, 65,737 bytes, Nov. 1993) which is supposedly applicable. At this particular site at least the DOS documentation is available in a separate and readily available file so that it can be downloaded at the same time.
FEATURES................
COMMENTS............... A very basic package which does not appear to be undergoing further development.

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2.5

NAME........................ **Wintalk**
PRIME PURPOSE...... Two way on-line communications
FILE NAME................ wtalk11a.zip
FILE SIZE.................. 142,379 bytes
LATEST VERSION..... 1.1a   September 1994
AVAILABLE FROM..... ftp.elf.com: /pub/wintalk
STATUS..................... Freeware (limited)
DOCUMENTATION.... Installation and start-up instructions, but no on-line help.
FEATURES................ Uses the Unix "ntalk" protocol.

| COMMENTS.............. | Will not work properly with current Trumpet Winsock 1.0A, (Winsock bugs). It should be OK with newer Trumpet version 1.0B beta 2 or higher. Released by ELF Communications. |

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2.6

NAME.........................	**WSIRC**
PRIME PURPOSE......	Internet Relay Chat (IRC)
FILE NAME.................	wsirc14b.zip
FILE SIZE..................	502,366 bytes
LATEST VERSION.....	1.14b-S September 1994
AVAILABLE FROM.....	USA: cs-ftp.bu.edu: /irc/clients/pc/windows
	USA: ftp.cica.indiana.edu: /pub/pc/win3/winsock (or mirrors)
	EUROPE: disabuse.demon.co.uk
STATUS....................	Shareware version $US 39.95 (1 disk, 1 manual), students 24.95. Site license: $US 449.95 (20 disks, 20 manuals)
DOCUMENTATION....	Very Good. Installation instructions, and on-line help included. A comprehensive list of IRC servers is also included.
FEATURES................	Supports most IRCII server commands with the exception of DCC and CTCP.
COMMENTS..............	Also available in a simpler Freeware version (WSIRC 1.14b-G). According to the author, Caesar Samsi: "The future includes images, sound and video in both client and server versions." **Note:** An up to date list of worldwide IRC servers is posted on a regular basis by Chuck Kane to the newsgroup alt.irc. It is also available for FTP download from: h.ece.uiuc.edu: /irc A questions and answers IRC FAQ is available from: cs-ftp.bu.edu: /irc/support/alt-irc-faq **Recommended**

3. DIAGNOSTIC TOOLS

The increasing size and complexity of networks and their communications links attracts increasing problems. Fortunately, specialized tools are beginning to appear to deal with some of the problems.

3.1

NAME.........................	**Socket Wrencher**
PRIME PURPOSE......	Winsock testing tool
FILE NAME.................	socketw.exe
FILE SIZE..................	59,345
LATEST VERSION.....	1.0 April 1994
AVAILABLE FROM.....	ftp.netmanage.com: /pub/demos/sockwrench
STATUS....................	Free.
DOCUMENTATION....	Installation and start up instructions.
FEATURES................	
COMMENTS..............	"Socket Wrencher provides a suite of performance tests over TCP and UDP as well as several tests to check characteristics of a Winsock based protocol stack." Released by NetManage Inc.

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3.2

NAME.........................	**X-Ray/Winsock**
PRIME PURPOSE......	Winsock API trace/debugger for Windows 3.1
FILE NAME.................	xraywins.zip
FILE SIZE..................	212,269 bytes
LATEST VERSION.....	1.13 November 1994
AVAILABLE FROM.....	ftp.netcom.com: /pub/sstinc

STATUS.....................	Shareware. registration $US 69.95
DOCUMENTATION....	Installation instructions and on-line help included
FEATURES................	
COMMENTS..............	"Traces and displays the parameters of all Winsock API functions. Works with any version of Winsock." Some features crippled on this free version.

4. FILE SEARCH AND TRANSFER PROTOCOLS

The search program WSARCHIE and John Junod's file retrieval program WS_FTP (16 bit) are the standards by which ALL Archie and FTP clients should be measured. I am referring to commercial programs, not just shareware. Not only do they have features and performance, but they work well together for a one two punch.

4.1

NAME.........................	**AutoNet** (Automated Internet Communications) [DOS]
PRIME PURPOSE......	Automated File retrieval (FTP).
FILE NAME................	autont23.zip
FILE SIZE..................	300,404 bytes
LATEST VERSION.....	2.3 November 1994
AVAILABLE FROM.....	wuarchive.wustl.edu: /pub/MSDOS_UPLOADS/utils
STATUS.....................	Shareware $US 35
DOCUMENTATION....	Extensive start up instructions.
FEATURES................	Also performs Finger and Archie searches. Simple command line mail creation/sending (and Usenet posting) including mass mailing capability in the registered version. Text based faxing capability (non-Internet).
COMMENTS..............	According to its documentation AutoNet will automatically log onto an FTP site, change directories and retrieve either specific files or a group of the latest files at that site. Note that this program does not use a Winsock/SLIP connection - it operates through your Unix shell account. Designed by a BBS operator to feed his site with large numbers of the latest files from Internet locations. [Note: this is the last time this DOS item will be listed]

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4.2

NAME.........................	**WINFSP**
PRIME PURPOSE......	File Service Protocol (FSP)
FILE NAME................	winfsp12.zip
FILE SIZE..................	57,956 bytes
LATEST VERSION.....	1.2 August 1993
AVAILABLE FROM.....	ftp.cica.indiana.edu: /pub/pc/win3/winsock (or mirrors)
STATUS.....................	Freeware
DOCUMENTATION....	Brief setup and use instructions, no on-line help. A good source of information about FSP can be found in the Frequently Asked Questions (FAQ) document available from: ftp.germany.eu.net: /pub/network/inet/fsp The file name is simply FAQ.
FEATURES................	
COMMENTS..............	This is the only Windows based FSP based file retrieval program I've ever seen, and there are no recent versions. FSP is sometimes nicknamed "File Slurping Protocol" and is only usable on certain servers which support it. Once tooted as a potential replacement for FTP, it should perhaps be renamed "Sleeping Protocol". It just doesn't seem to be going anywhere.

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4.3

NAME.........................	**WinFTP**

PRIME PURPOSE......	File retrieval (FTP)
FILE NAME................	winftp.zip
FILE SIZE..................	177,738 bytes
LATEST VERSION.....	Jan 1994
AVAILABLE FROM.....	ftp.cica.indiana.edu: /pub/pc/win3/winsock (or mirrors)
STATUS.....................	Released to Public Domain.
DOCUMENTATION....	Installation instructions, but no on-line help.
FEATURES................	Based on an earlier version of WSFTP with some added features . Program contains both 16 and 32 bit execution versions, (winftp.exe and win32ftp.exe), your choice if you have 32 bit capability, although I'm not sure if there's any real difference in performance between the two. This program also includes some limited ping capabilities.
COMMENTS..............	I have seen postings indicating that this program is more firewall friendly than other FTP clients although the more recent versions of WS_FTP appear to have significantly improved their firewall capabilities.

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4.4

NAME.........................	**WSARCHIE**
PRIME PURPOSE......	File search client (Archie)
FILE NAME................	wsarch07.zip
FILE SIZE..................	174,837 bytes
LATEST VERSION.....	alpha .7 November 1994
AVAILABLE FROM.....	disabuse.demon.co.uk: /pub/ibmpc/winsock/apps/wsarchie
	ftp.cica.indiana.edu: /pub/pc/win3/winsock (or mirrors)
STATUS.....................	No charge for non-commercial use.
DOCUMENTATION....	Installation instructions and on-line help included.
FEATURES................	Display shows file sizes and file dates. This latest version now has the capability to save search results to a text file for later viewing.
COMMENTS..............	Visually well laid out and functioning mainscreen. Works with WS_FTP to retrieve files.
	Recommended

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4.5

NAME.........................	**WS-FTP**
PRIME PURPOSE......	File retrieval (FTP)
FILE NAME................	ws_ftp.zip
FILE SIZE..................	113,252 bytes
LATEST VERSION.....	October 1994. **Note:** unfortunately the various versions to date are indistinguishable by file name, but latest version is always in the site listed below, or if looking elsewhere, match by file size to double check.
AVAILABLE FROM.....	ftp.usma.edu: /pub/msdos/winsock.files
STATUS.....................	No charge for non-commercial use by individuals or for use by U.S. government organization. For commercial use contact Ipswitch, Inc. at info@ipswitch.com
DOCUMENTATION....	Installation instructions and on-line help included.
FEATURES................	Can store repetitively used locations/directories for easy callup, and comes pre-configured with a number of the more popular sites. Can be set to a number of "redials" if unable to connect although there is unfortunately no time delay allowed between these redials. Supports firewalls.
COMMENTS..............	Major new version just released, an excellent upgrade with many new features. See also the matching file search package WSARCHIE above. A new version is also currently under development specifically for Windows NT, see below.
	Recommended

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4.6

NAME.........................	**WS-FTP32** [Windows NT version by John Junod]
PRIME PURPOSE......	File retrieval (FTP)
FILE NAME.................	ws_ftp32.zip
FILE SIZE...................	140,747 bytes
LATEST VERSION.....	October 1994
AVAILABLE FROM.....	ftp.usma.edu: /pub/msdos/winsock.files
STATUS.....................	No charge for non-commercial use by individuals or for use by U.S. government organizations. For commercial use contact Ipswitch, Inc. at info@ipswitch.com
DOCUMENTATION....	Installation instructions and on-line help included.
FEATURES................	Contains the same features as the 16 bit version. See WS_FTP.
COMMENTS...............	John Junod has ported his latest code to a 32 bit version for Windows NT. The latest release of this version also now runs on Windows 3.1 with the Win32s 32 bit extension installed (see the Miscellaneous Non-Winsock section), Windows NT, and Windows 95. I was able to run both the 16 and 32 bit versions of WS_FTP simultaneously by moving them into the same directory and sharing the same ini file. There is no advantage in running this 32 bit version in a 16 bit machine even with Win32s. File transfers will not be faster.

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4.7

NAME.........................	**WSFTP32** [Windows NT version by Larry Kahn]
PRIME PURPOSE......	File retrieval (FTP)
FILE NAME.................	wsftp32.zip
FILE SIZE...................	233,719 bytes
LATEST VERSION.....	October 1994
AVAILABLE FROM.....	ftp.cica.indiana.edu: /pub/pc/win3/winsock (or mirrors)
STATUS.....................	Freeware.
DOCUMENTATION....	Installation and startup instructions but no on-line help.
FEATURES................	
COMMENTS...............	This is an updated and recompiled version for Windows NT based on WS_FTP source code from December 1993 originated by John Junod. Some bugs have been fixed and some features added by the new author Larry Kahn who created this version which works on either NT 3.1 or Daytona NT 3.5. It will not work on windows under Win32s since it uses multi-threads. John Junod has also issued a Windows NT update based on his latest 16 bit version of WS_FTP and so there are now two different 32 bit NT versions of WS_FTP to choose from. According to the author of this version: " I believe my version is better than his as with my multi-threading I can do a local operation while a remote one is pending and also resize/move the window around. This cannot be done on his version ported to NT..." The author Larry Kahn is also considering producing an x-windows Unix version of the program. If interested drop him a line: kahn@kahn.pdial.interpath.net

5. FINGERS

No, not the kind you give other motorists. A program such as Finger is used to check servers for information about the users logged on at a particular location. Sometimes little more than their real name is available, and sometimes a brief profile. The Finger function can also be found included in some other packages such as more recent versions of Eudora, a popular mail program.

5.1

```
NAME........................    Finger: A Windows Socket Finger Client
PRIME PURPOSE......    Finger query
FILE NAME................    finger31.zip
FILE SIZE...................    68,108 bytes
LATEST VERSION.....    3.1  March 1993
AVAILABLE FROM.....    ftp.cica.indiana.edu:    /pub/pc/win3/winsock  (or mirrors)
STATUS.....................    No mention of any charges for using this program.
DOCUMENTATION....    Minimal, but little required.
FEATURES................
COMMENTS..............    Contains two executables, one for Berkeley style synchronous blocking
                         (finger.exe), the other for asynchronous Winsockets (mfinger.exe).
```

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5.2
```
NAME........................    FINGER 1.0
PRIME PURPOSE......    Finger query
FILE NAME................    finger10.zip
FILE SIZE...................    76,517 bytes
LATEST VERSION.....    1.0    September 1994
AVAILABLE FROM.....    ftp.cica.indiana.edu:    /pub/pc/win3/winsock  (or mirrors)
STATUS.....................    Freeware (limited)
DOCUMENTATION....    Startup introduction only.
FEATURES................
COMMENTS..............    From Zoran Dukic, a  contribution from Europe. Fairly straight forward and
                         easy to use as are most finger clients.
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5.3
```
NAME........................    Finger32    [Windows NT version ]
PRIME PURPOSE......    Finger query
FILE NAME................    finger32.zip
FILE SIZE...................    37,196  bytes
LATEST VERSION.....    May 1994
AVAILABLE FROM.....    ftp.cica.indiana.edu:    /pub/pc/win3/nt    (or mirrors)
STATUS.....................
DOCUMENTATION....    Nil.
FEATURES................
COMMENTS..............    This is a 32 bit  version of the program Finger. It does appear to work with
                         Windows 3.1 with the Win32s upgrade.
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5.4
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NAME........................    Finger and Host Lookup  (2 programs)
PRIME PURPOSE......    Finger query and host name to IP number lookup/converter.
FILE NAME................    iwork.zip
FILE SIZE...................    17,017 bytes
LATEST VERSION.....    January 1994
AVAILABLE FROM.....    Try ftp.cuslm.ca:    network/winsock
STATUS.....................    Freeware.
DOCUMENTATION....    Minimal.
FEATURES................
COMMENTS..............
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5.5
```
NAME........................    Peter's Winsock Finger Client
PRIME PURPOSE......    Finger query
FILE NAME................    pfing10.zip
FILE SIZE...................    67,283
```

LATEST VERSION.....	1.0 May 1994
AVAILABLE FROM.....	pringle.mta.ca: /pub/winsock/apps
STATUS....................	Copyright notice, but no other information.
DOCUMENTATION....	Startup documentation, but no on-line help.
FEATURES...............	
COMMENTS..............	Tested with Trumpet Winsock and Microsoft's 32 bit tcp/ip stack. Released by Peter Crawshaw.

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5.6

NAME.........................	**WS Finger**
PRIME PURPOSE......	Finger query
FILE NAME.................	wsfngr11.zip
FILE SIZE..................	91,785 bytes
LATEST VERSION.....	1.1 Feb. 1994
AVAILABLE FROM.....	ftp.cac.psu.edu: /pub/access/test
STATUS....................	Freeware
DOCUMENTATION....	Minimal, but little required.
FEATURES...............	
COMMENTS..............	

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For a combined Finger / Ping / Echo client, see also WSNWDEMO and WSNWUTIL in the PING section.

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6. GAMES - MUDS

One interpretation from the introductory text in MUD Man: "MUD, short for Multi-User Dungeon, is a fantasy world where people can interact and fight monsters, go on quests, etc..." And then there's MUSH, a "Multi-User Shared Hallucination". And then there's MOO........

6.1

NAME.........................	**MUD Man**
PRIME PURPOSE......	MUD client
FILE NAME.................	mudman12.zip
FILE SIZE..................	78,834 bytes
LATEST VERSION.....	1.2 August 1994
AVAILABLE FROM.....	wuarchive.wustl.edu: /pub/MSDOS_UPLOADS/win_games
STATUS....................	Shareware $US 9, non-USA users $US 15. Registration benefits include an upgraded version of the program.
DOCUMENTATION....	Basic start up instructions and on-line help included.
FEATURES...............	
COMMENTS..............	

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6.2

NAME.........................	**MudWin** (Mud Windows Client)
PRIME PURPOSE......	MUD client
FILE NAME.................	mudwin.zip
FILE SIZE..................	104,148
LATEST VERSION.....	1.0 October 1994
AVAILABLE FROM.....	Try: ftp.microserve.com: /pub/msdos/winsock
STATUS....................	Copyright by the author but no mention of any charges for use.
DOCUMENTATION....	On-line help file containing start up and usage information.
FEATURES...............	
COMMENTS..............	Nice graphical toolbar.

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6.3

NAME.........................	**MUDManager**
PRIME PURPOSE......	MUD client
FILE NAME.................	mudmgr01.exe
FILE SIZE..................	762,013 bytes
LATEST VERSION.....	.1 beta June 1994
AVAILABLE FROM.....	caisr2.caisr.cwru.edu: /pub/mud/clients
STATUS.....................	Shareware, but no charges yet while still in development.
DOCUMENTATION....	
FEATURES...............	
COMMENTS..............	Fairly stiff requirements to operate this, including Windows 3.1 with the Win32s extension or Windows NT, 8 meg RAM, 5 meg disk space etc. It also requires a permanent IP number which disqualifies most modem connections.

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6.4

NAME.........................	**MUTT(tm) Lite** (Multi-User Trivial Terminal client)
PRIME PURPOSE......	MUD/MUSH/MU* client.
FILE NAME.................	mutt_01f.zip
FILE SIZE..................	28,620 bytes
LATEST VERSION.....	.1f November 1994
AVAILABLE FROM.....	caisr2.caisr.cwru.edu: /pub/mud
STATUS.....................	Freeware (limited).
DOCUMENTATION....	Installation and startup info in a file "readme.bnd". No on-line help and none planned for the Lite version.
FEATURES...............	Multiple character connections with an MDI presentation. Separate send and receive windows with dialogue logging. Drag & drop support for sending files and command-streams. User-definable hotkeys, including cursor key definitions.
COMMENTS..............	The is the first public, pre-1.0 release of MUTT(tm) Lite, a Multi-User Trivial Terminal client that provides Winsock access to MU* hosts. Design criteria: the executable will remain below 32K in order to minimize internet traffic and ftp site impact and therefore features are limited. A full featured version called MUTT(tm) Elite is planned for future release by the author Bob Free.

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6.5

NAME.........................	**SneezyMUD Windows client**
PRIME PURPOSE......	MUD client.
FILE NAME.................	mudclnt.zip
FILE SIZE..................	153,489 bytes
LATEST VERSION.....	.20a2 (Alpha test! Not released.)
AVAILABLE FROM.....	Contact the author at russ.russell@em.doe.gov for info.
STATUS.....................	Not mentioned.
DOCUMENTATION....	Startup information.
FEATURES...............	
COMMENTS..............	Requires a minimum of a 386 computer. Program is at an early stage and somewhat rough, but under intensive development by the author.

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6.6

NAME.........................	**VWMUD Master**
PRIME PURPOSE......	MUD client
FILE NAME.................	vwmud107.zip
FILE SIZE..................	46,551
LATEST VERSION.....	1.07 November 1994
AVAILABLE FROM.....	xmission.com: /pub/users/kslewin
	ftp.primenet.com

STATUS.....................	Shareware, registration $US 5.00, with 6 months of updates $US 15, source code $US 50.
DOCUMENTATION....	Start up instructions and on-line help.
FEATURES...............	
COMMENTS..............	Telnet client designed specifically for "Outlaws" - players who kill other players. You must have vbrun300.dll installed on your system. From author Vaughan Wynne-Jones.

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6.7

NAME..........................	**Winfugue**
PRIME PURPOSE......	MU* client
FILE NAME................	wfugue01.zip
FILE SIZE...................	49,458
LATEST VERSION.....	.1 alpha November 1994
AVAILABLE FROM.....	ftp.mgl.ca: /pub/winfugue
STATUS.....................	No mention.
DOCUMENTATION....	Very basic startup and installation instructions. Unfortunately some of these instructions are in a MS Word file (.doc) which may be a problem if you don't have a word processor which can read this format.
FEATURES...............	Auto-login, multiple simultaneous worlds - but only one world displayed at a time (no window clutter!).
COMMENTS..............	This is at an early stage of development and is being released by the author Eric Stern for further testing purposes. It requires that you have the visual basic file vbrun300.dll on your system in an accessible directory.

7. GAMES - OTHER

7.1

NAME..........................	**First International Backgammon Server For Windows (FIBS/W)**
PRIME PURPOSE......	Backgammon server.
FILE NAME................	fibsw121.zip
FILE SIZE...................	191,596
LATEST VERSION.....	1.21 June 1994
AVAILABLE FROM.....	ftp.cica.indiana.edu: /pub/pc/win3/games (or mirrors)
STATUS.....................	Shareware $US 40
DOCUMENTATION....	Start up information and on-line help.
FEATURES...............	Works with dial-up dumb-terminal-server access, TCP/IP, SLIP and PPP. Built in dialer with script.
COMMENTS..............	An Internet server which allows users to play against human opponents all over the world.

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7.2

NAME..........................	**WIGC**
PRIME PURPOSE......	Winsock client for the Internet GO server.
FILE NAME................	wigc1_3.zip
FILE SIZE...................	156,940
LATEST VERSION.....	1.3 March 1994
AVAILABLE FROM.....	disabuse.demon.co.uk: /pub/ibmpc/winsock/games/go
STATUS.....................	Shareware $US 5
DOCUMENTATION....	Minimal startup instructions. It would be nice if there had been something in the instructions explaining the game of "go" with this package.
FEATURES...............	
COMMENTS..............	

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7.3

NAME.........................	**Winsock Chess**
PRIME PURPOSE......	Internet chess.
FILE NAME.................	wschesb1.zip
FILE SIZE...................	163,546
LATEST VERSION.....	Beta test release March 1994
AVAILABLE FROM.....	ftp.cica.indiana.edu: /pub/pc/win3/winsock (or mirrors)
STATUS.....................	Copyright freeware.
DOCUMENTATION....	Basic usage instructions.
FEATURES...............	
COMMENTS...............	"Winsock Chess is a chess implementation allowing two players to play chess over a Winsock supporting network. The program will validate moves and disallow illegal moves. Winsock Chess uses GNU Chess as a basis for checking moves and GNU chess forms the underlying engine for the program." Nice clear graphical display.

8. GOPHERS

The gophers and ground squirrels which periodically move into my front lawn love to dig mazes of tunnels which go all over and seem to pop up everywhere. In a more benign manner the computer client called Gopher tunnels throughout the Internet for us, using a menu based system to take us to places we would otherwise have difficulty reaching. A new Gopher has recently popped up, the PNL InfoBrowser. The Gopher system was originally developed at the University of Minnesota.

8.1

NAME.........................	**BCGopher** (Boston College Gopher)
PRIME PURPOSE......	Gopher search tool
FILE NAME.................	bcg08ba3.exe
FILE SIZE...................	170,469 bytes
LATEST VERSION.....	.8ba3 May 1994
AVAILABLE FROM.....	bcinfo.bc.edu: /pub/bcgopher **Note:** This is not a true anonymous FTP server, you must use "guest" as the password rather than the normal email user id.
STATUS.....................	Freeware.
DOCUMENTATION....	Start up information and on-line help file with a brief explanation of the term "Gopher".
FEATURES...............	Supports the newer Gopher+ protocol found on some servers. Support for HTML, MIME and Inline types.
COMMENTS...............	Deserves an award for best Gopher icon I've seen.

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8.2

NAME.........................	**Gopher Book**
PRIME PURPOSE......	Gopher search tool
FILE NAME.................	gophbook.zip or gophbk11.zip
FILE SIZE...................	888,666 bytes
LATEST VERSION.....	1.1 May 1993
AVAILABLE FROM.....	ftp.cica.indiana.edu: /pub/pc/win3/winsock (or mirrors)
STATUS.....................	Freeware. Winjpeg image viewer, Shareware $US 20.
DOCUMENTATION....	Installation instructions and on-line help included.
FEATURES...............	Interesting concept with menus displayed as pages in a book. Image viewer Winjpeg is included in the package as a default image viewer.
COMMENTS...............	A rather large package for a Gopher. Development seems to have stopped.

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8.3

NAME.........................	**HGopher** (Hampson's Gopher)
PRIME PURPOSE......	Gopher search tool
FILE NAME................	Found in many locations under many names: hgopher2.4.zip, hgopher24.zip, hgopher2.zip, and goph24.zip. Take your pick. It's hgoph24.zip at CICA.
FILE SIZE..................	199,833 bytes
LATEST VERSION.....	2.4 Jan 1994
AVAILABLE FROM.....	ftp.cica.indiana.edu: /pub/pc/win3/winsock (or mirrors)
STATUS.....................	No charge for non-commercial use.
DOCUMENTATION....	Good. This version now has on-line help.
	Good/bad news: huge detailed help file (739K)
FEATURES................	
COMMENTS..............	HGopher has gone commercial and is now the property of FTP Software Inc. Although version 2.4 has officially been withdrawn and will be used as the basis for the commercial version, copies of it are still widely available on many servers. Version 2.3 will remain in the public domain but will no longer be maintained or enhanced. Translation: dead gopher, avoid.

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8.4

NAME.........................	**The PNL InfoBrowser** (Pacific Northwest Laboratory)
PRIME PURPOSE......	Gopher search tool
FILE NAME................	ib105.exe
FILE SIZE..................	259,342 bytes
LATEST VERSION.....	1.05 November 1994
AVAILABLE FROM.....	ftp.pnl.gov: /pub/pnlinfo/win
STATUS.....................	No charge for non-commercial use.
DOCUMENTATION....	Installation instructions and on-line help included. On-line tutorial available through the PNL home site.
FEATURES................	Supports the newer Gopher+ protocol found on some servers.
COMMENTS..............	A Mac version is also available and a few versions for other platforms are being worked on. This program developed under contract from the U.S. Department of Energy. New.

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8.5

NAME.........................	**WGopher**
PRIME PURPOSE......	Gopher search tool
FILE NAME................	wgoph23.zip
FILE SIZE..................	120,469 bytes
LATEST VERSION.....	2.3 May 1994
AVAILABLE FROM.....	ftp.cuhk.hk: /pub/gopher/PC
STATUS.....................	No charge for non-commercial purposes.
DOCUMENTATION....	Minimal, no on-line documentation yet.
FEATURES................	
COMMENTS..............	

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8.6

NAME.........................	**WSGopher**
PRIME PURPOSE......	Gopher search tool
FILE NAME................	wsg-11.exe
FILE SIZE..................	350,050 bytes
LATEST VERSION.....	1.1 September 1994
AVAILABLE FROM.....	dewey.tis.inel.gov: pub/wsgopher
	boombox.micro.umn.edu: /pub/gopher/Windows
STATUS.....................	No charge for non-commercial use.
DOCUMENTATION....	Good. Now has an on-line help file.

FEATURES................	Supports the newer Gopher+ protocol found on some servers.
COMMENTS...............	Works with newer Trumpet betas 6 and 14, but not with any of the other betas before 14. It does not work with Windows NT although it does appear to work ok with the newer Daytona versions. This latest version, just released by its author Dave Brooks, contains numerous bug fixes. This is one of the better gopher clients currently available although it does not support firewalls.
Recommended

9. HOST LOOKUP CLIENTS

Host lookup programs do things like taking alphabetical site location information (such as ftp.cica.indiana.edu) and convert them into IP addresses (like 129.79.26.27) which for some reason computers absolutely insist on having. Or vice versa. For example, if you've been using FTP to download offensive pornographic images from that notorious and secretive site 127.0.0.1 and wanted to learn more about that location, you could input these numbers into one of these programs such as WSHost.

9.1

NAME.........................	**Hopcheck and Ghostname** [Windows NT versions]
PRIME PURPOSE......	Two programs: a route tracer and a get host name program.
FILE NAME................	hop.zip
FILE SIZE..................	24,917 bytes
LATEST VERSION.....	May 1994
AVAILABLE FROM.....	ftp.cica.indiana.edu: /pub/pc/win3/nt (or mirrors)
STATUS....................	No mention of any charges.
DOCUMENTATION....	Negligible.
FEATURES................	
COMMENTS...............	Two NT programs from Larry Kahn.

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9.2

NAME.........................	**NSLOOKUP**
PRIME PURPOSE......	Nameserver information lookup.
FILE NAME................	nslookup.zip **Note:** same file name was used for version 1.0. If downloading from a different location match file size to verify correct version.
FILE SIZE..................	110,428 bytes
LATEST VERSION.....	1.1 August 1994
AVAILABLE FROM.....	disabuse.demon.co.uk: /pub/trumphurst/nslookup
STATUS....................	Copyright, but no charge..
DOCUMENTATION....	Installation instructions, but no on-line help.
FEATURES................	
COMMENTS...............	This program is one element of Wigwam for the Internet, a commercial offline news and mail reader from Ashmount Research Ltd which has not yet been released. For more info email: ashmount@cix.compulink.co.uk.

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9.3

NAME.........................	**WORMHOLE**
PRIME PURPOSE......	DNS query utility
FILE NAME................	wormhole.exe (Do not confuse with wormhole.zip which is an unrelated and totally different program available on the Internet.)
FILE SIZE..................	32,256 bytes
LATEST VERSION.....	1.0
AVAILABLE FROM.....	Try ftp.cuslm.ca: /network/winsock
STATUS....................	Not specified

DOCUMENTATION....	None
FEATURES...............	
COMMENTS..............	

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9.4

NAME........................	**WS Host** (Windows Socket Host)
PRIME PURPOSE......	DNS query utility
FILE NAME................	wshost11.zip
FILE SIZE..................	5,124 bytes
LATEST VERSION.....	1.1 October 1994
AVAILABLE FROM.....	ftp.cica.indiana.edu: /pub/pc/win3/winsock (or mirrors)
STATUS....................	Postcardware (Freeware for non-commercial use - just send the developer a nice postcard.).
DOCUMENTATION....	Minimal, an intuitively simple program.
FEATURES...............	
COMMENTS..............	This nifty compact utility can convert an IP number into a host name, or vice versa. Everyone should have one of these in their tool box. This new version makes the program fully asynchronous, correcting a shortcoming in the original version.

10. HYPER - G

Hyper-G is a large scale distributed hypermedia information system very similar to the World Wide Web. Hyper-G is capable of accessing the WWW, WAIS and Gopher systems, and conversely WWW and Gopher clients can access Hyper-G. The big difference between Hyper-G and other networks is that Hyper-G servers track all links in their universe. If an object is deleted, the server can find and delete all links pointing to that object. The existence of a link server provides capabilities not possible in the WWW and Gopher space. Hyper-G is being developed in Europe. I don't see that it has a lot to offer. There does not appear to be any interest in it in North America which is totally preoccupied with the WWW which has probably reached critical mass now. There is only one Windows browser available for Hyper-G.

10.1

NAME........................	**Amadeus**	
PRIME PURPOSE......	Hyper-G browser.	
FILE NAME/SIZE........	amadedoc.zip	291,987 bytes
	amadeus1.zip	1,139,411
	amadeus2.zip	1,374,269
	amadeus3.zip	341,396
LATEST VERSION.....	.81.012 beta October 1994	
AVAILABLE FROM.....	iicm.tu-graz.ac.at: /pub/Hyper-G/pc-client/amadeus.081	
STATUS....................	I didn't see anything mentioned, but presumably no charge for non-commercial use.	
DOCUMENTATION....	Extensive documentation and help files included. The separate zipped documentation file is in MS Word format (.doc) and may be difficult to view unless you have a powerful word processor which handles that format. You'll also need lots of memory since it's almost a 2 megabyte file unzipped and will also be painfully slow browsing through in a less powerful PC.	
FEATURES...............	Automated installation with the choice of maximum, custom, or minimum install. This program comes with some familiar clients such as WS_FTP32 for FTP, and EWAN for Telnet included.	
COMMENTS..............	Requires Win32s which is included in the program and will be installed automatically if you do not already have it.	

11. MAIL and MAIL ACCESSORIES

One writer recently gushed that electronic mail is the killer application for the 90's. He's probably right (and you thought that it was going to be the WWW). The proper choice of a mail program depends upon availability of features that are important to you, and your comfort level with the mechanics of how the program works.

One feature to watch for is the ability to send attached documents (zip files, spreadsheets, graphics, etc.) through the Internet mail system with UUencode or MIME (Multipurpose Internet Mail Extensions). MIME is the newer Internet mail standard and is gradually displacing UUencode. However, because the two systems are not compatible a good mail program should ideally have both to be able to handle sending or receiving in either format for the time being.

The two top programs are Eudora and Pegasus. Eudora is easy to learn and to use and is fairly stable but lacking in features. Pegasus is more feature rich, but this complexity takes longer to become familiar with and in turn is more likely to suffer problems.

11.1

NAME........................	**Eudora**
PRIME PURPOSE......	Electronic mail
FILE NAME................	eudor143.exe
FILE SIZE..................	303,983 bytes
LATEST VERSION.....	1.4.3 October 1994
AVAILABLE FROM.....	ftp.qualcomm.com: /quest/windows/eudora/1.4
STATUS.....................	Postcardware (Freeware for non-commercial use - just send the developers a nice postcard.). An upgraded commercial version 2.0 is available with additional features and documentation starting at $US 65.00 for a single user.
DOCUMENTATION....	Minimal documentation including lack of on-line help can be a problem in the unregistered version. See the additional information in the appendix at the end of this document for more information.
FEATURES................	POP3/SMTP protocol. Binhex and Mime capability but does not support UUencode in the free version. Built in directory services (Ph and Finger). This latest version adds the ability to have multiple messages open at the same time.
COMMENTS...............	Very popular. Latest version also now runs under Windows NT and OS2. Some features in the free version are limited. The registered commercial version 2.0 has the capability to send and receive mail remotely via modem without SLIP.
	Recommended

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11.2

NAME........................	**IMAIL**
PRIME PURPOSE......	Send/receive mail client, POP3 server, SMTP server.
FILE NAME................	imail.zip [DEMO - Function or time crippled]
FILE SIZE..................	712,070
LATEST VERSION.....	October 1994
AVAILABLE FROM.....	ftp.ipswitch.com: /pub/imail
STATUS.....................	Demo trial version at this location has just expired on November 15, 1994 and has been removed. Check to see if they have put another demo up, which they have done in the past. Normal commercial version is $US 55.
DOCUMENTATION....	The only documentation included consists of a large manual, available in either a .ps (Postscript), a .pcl (HP Laserjet) file, and finally now a text file.

FEATURES................	MIME and some drag and drop capability. Also runs on Windows NT although only this 16 bit version is available so far.
COMMENTS..............	This trial version from Ipswitch. An interesting package which includes mail servers and clients. Information: support@ipswitch.com. This was originally developed by John Junod under the name WS_Gmail.

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11.3

NAME........................	**Pegasus Mail**
PRIME PURPOSE......	Electronic mail
FILE NAME................	winpm122.zip
FILE SIZE..................	837,801 bytes
LATEST VERSION.....	1.22 September 1994
AVAILABLE FROM.....	risc.ua.edu: /pub/network/pegasus
STATUS....................	Free! Manuals, if required, are sold by the author to support development costs.
DOCUMENTATION....	Installation instructions and on-line help included. Look for a self extracting DOS display file wguide.exe which contains some of this information.
FEATURES................	SMTP/POP3 protocol. Supports UUencode, Binhex, and MIME, and now contains a spell checker. This new version of Pegasus adds the long awaited polling feature giving it the capability to operate in the background constantly checking for mail at specified intervals. Some additional drag and drop capabilities are added and there is an improvement in the way attached documents can be sent.
COMMENTS..............	This current version of Pegasus has many features and the price is certainly just about right! This is another very popular mail package. **Recommended**

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11.4

NAME........................	**RFD Mail**
PRIME PURPOSE......	Electronic mail
FILE NAME................	Available as either rfdml123.zip or rfdmail.zip. If downloading from other sites do NOT try to use older versions such as 1.21.
FILE SIZE..................	813,495 bytes
LATEST VERSION.....	1.23 September 1994
AVAILABLE FROM.....	ftp.std.com: /customers/software/rfdmail garbo.uwasa.fi: /windows/comm Various forums in CompuServe and Genie.
STATUS....................	Shareware $US 29.95
DOCUMENTATION....	Installation instructions and on-line help included.
FEATURES................	SMTP/POP protocol (for the Internet). Automated installation. Has direct dial mail access capabilities but creating or modifying script files for this can be very cumbersome unless you are fortunately using one of the on-line services for which script files are provided. Automatic polling (background checking for mail at scheduled intervals). Does not support UUencode/MIME/Binhex.
COMMENTS..............	This package's strength lies in it's capability for dialup email access to a wide variety of service providers, from BBS's to commercial networks like CompuServe and Genie, to the Internet, and it contains all the necessary programs, scripts, instructions, etc. to support this. SMTP/POP capability has just been added with this latest version. Program seemed to hesitate too long on my machine when executing commands, and more features are needed (such as MIME/UUencode capability).

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11.5

NAME........................	**Small SMTP Client For The Winsock API**

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PRIME PURPOSE......	Electronic mail (send only)
FILE NAME................	smtp11.zip
FILE SIZE..................	15,568 bytes
LATEST VERSION.....	1.1 March 1993
AVAILABLE FROM.....	dorm.rutgers.edu: /pub/msdos/winsock/apps
STATUS....................	Public domain.
DOCUMENTATION....	Some introductory information.
FEATURES...............	
COMMENTS..............	Of historical interest only. An example of an early, simple, mail client.

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11.6

NAME........................	**WinBiff**
PRIME PURPOSE......	Windows mail notification utility (for Pegasus Mail and others).
FILE NAME................	wnbff20b.zip
FILE SIZE..................	66,781 bytes
LATEST VERSION.....	2.0b April 1994
AVAILABLE FROM.....	oak.oakland.edu: /pub/msdos/windows3
STATUS....................	Shareware $US 10, students: $5
DOCUMENTATION....	Installation instructions and on-line help included.
FEATURES...............	Adjustable polling (mail checking) interval. Optional audible alarm. Supports multiple mailboxes.
COMMENTS..............	A number of mail packages lack the ability to operate in the background periodically checking for new mail and notifying the user. This add-on utility corrects this notable deficiency on some mail clients. Usable with Waffle, Pegasus (PMail), FirstMail, Novell MHS, Mini-Host, FSUUCP, or Sendmail (with PC-NFS). No longer required for the new Pegasus version 1.2.

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11.7

NAME........................	**Winelm**
PRIME PURPOSE......	Electronic mail
FILE NAME................	winelm.zip
FILE SIZE..................	259,553 bytes
LATEST VERSION.....	Second release, March 1994
AVAILABLE FROM.....	ftp.cica.indiana.edu: /pub/pc/win3/winsock (or mirrors)
STATUS....................	No mention of any charges for using this program.
DOCUMENTATION....	Inadequate, none.
FEATURES...............	
COMMENTS..............	This package has nothing to offer.

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11.8

NAME........................	**WS-Gmail**
PRIME PURPOSE......	Electronic mail client/server.
FILE NAME................	ws_gmail.zip
FILE SIZE..................	192,176 bytes
LATEST VERSION.....	April 03/94
AVAILABLE FROM.....	No longer available, see below.
STATUS....................	
DOCUMENTATION....	
FEATURES...............	
COMMENTS..............	This software was being developed by John Junod (noted for his popular WS_FTP package) and had both client and server capabilities. This package has gone commercial now and has been released under the name IMAIL. Rights to WS_Gmail were retained by the author for Armed Forces use. Although the package is in theory no longer available for the general public, and was in fact never formally released, some early development

versions including this one can sometimes still be found and are fairly
functional. Not that you would ever do an Archie search to try and find it.

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11.9
NAME.......................... **XFERPRO**   (Information Transfer Professional)
PRIME PURPOSE...... Internet mail file transfer add-on feature.
FILE NAME................. xferp100.zip (xferp1.zip on Compuserve since they only use 6 character
filenames)
FILE SIZE................... 134,025 bytes
LATEST VERSION..... 1.0   July 1994
AVAILABLE FROM..... ftp.cica.indiana.edu: /pub/pc/win3/util (or mirrors).
CompuServe Internet forum and America On-line Telecom forum.
STATUS..................... Shareware. Registration $US 10.
DOCUMENTATION.... Includes on-line help.
FEATURES............... Fully supports Mime, UU, and XX encoding and is compatible with standard
UUencoding and decoding programs. Automated setup.
COMMENTS............... This program enables you to send text, application data, images, audio,
video, executable and compressed files, etc., through your electronic mail
program if it does not already have these transfer capabilities. Works with
both Windows 3.1 and Windows For Workgroups 3.11. From Sabasoft Inc.

12. MAIL and NEWS

There are some good on-line Usenet News (NNTP) readers here and most of these readers are
being actively upgraded by their authors. The mail capabilities are usually limited to send only to
support news postings. As far as a good fully functional offline Windows news reader goes (a single
comprehensive package), there isn't one in sight. Dream on.

12.1
NAME.......................... **dMail for Windows**
PRIME PURPOSE...... Usenet news, mail (send and receive)
FILE NAME................. dmailwin.zip
FILE SIZE................... 338,994 bytes
LATEST VERSION..... 1.0b (final)
AVAILABLE FROM..... ftp.cica.indiana.edu: /pub/pc/win3/winsock (or mirrors)
STATUS..................... Freely distributed for testing purposes.
DOCUMENTATION.... Installation instructions and on-line help included. Terminology sometimes
confusing and frustrating, especially with initial setup.
FEATURES............... Handles UUCP-g protocol (modem or TCP/IP), POP3, SMTP, and NNTP
news reading. The news reader has some very good features including
UUdecoding, and ability to sort articles by size, date, or subject and drag
and drop capability, etc.
COMMENTS............... Apparently produced somewhere in the former Soviet Union and probably
intended primarily for distribution there. There is a novel replacement for the
traditional hourglass cursor - a man digging with a shovel. The automated
installation can be a nuisance since a version of Trumpet Winsock is
included and its files may have to be deleted to avoid conflict if you already
have a version of Trumpet loaded elsewhere (especially if it is a different
version). This is a very interesting full featured package which requires extra
start up and familiarization effort.

----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- -----

12.2
NAME.......................... **News Xpress**
PRIME PURPOSE...... Usenet news, mail (send only)

```
FILE NAME................  nx10b1.zip
FILE SIZE................  102,790   November 1994
LATEST VERSION.....  1.0 beta #1
AVAILABLE FROM.....  ftp.hk.super.net:     /pub/incoming
STATUS...................  Public Domain
DOCUMENTATION....  On-line help.
FEATURES...............  Supports threads. Built in UUencode/UUdecode.
COMMENTS..............  An interesting newcomer to the newsreader ranks. It has some good
                        features, but is initially a bit awkward to get used to.  I got stuck more than
                        once trying to figure out how to do something for the first time. It is also
                        pretty buggy, but nonetheless an impressive debut. This beta #1 version is
                        actually the second release, issued within a few days of the first beta #0 to
                        correct bugs.
```

------ ----- ----- ------ ----- -----   ------ ----- ----- ----- ----- -----   ----- ----- ----- ----- ----- -----

12.3
```
NAME.......................  PC-Pine for Winsock
PRIME PURPOSE......  Usenet news, mail (send and receive)
FILE NAME................  pcpine_w.zip
FILE SIZE.................  528,763  bytes
LATEST VERSION.....  3.91  beta      October 1994
AVAILABLE FROM.....  ftp.cac.washington.edu:   /pine/pcpine
STATUS...................  Copyright, but freely available.
DOCUMENTATION....  Installation instructions and on-line help included.
FEATURES...............  Supports SMTP/MIME/IMAP/NNTP protocols, but not POP3.
COMMENTS..............  Unfortunately this Winsock version is quite disappointing because it is not a
                        true Windows GUI application but has the same user interface as the Unix
                        and DOS versions of Pine. Additional customized versions are available
                        from the same location for Sun's PC-NFS, Novell's LAN Workplace for DOS,
                        etc.
```

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12.4
```
NAME.......................  Trumpet News Reader
PRIME PURPOSE......  Usenet news, mail (send only)
FILE NAME................  wt_wsk.zip
FILE SIZE.................  96,305 bytes
LATEST VERSION.....  1.0 rev B  final beta #4   September 1994
AVAILABLE FROM.....  ftp.trumpet.com.au:    /ftp/pub/beta/wintrump
                     This Australian site is difficult to access and may not be up on weekends.
STATUS...................  Shareware $US 40. Site licenses also available.
DOCUMENTATION....  Good.
FEATURES...............  Can decode UUencoded files.
COMMENTS..............  This latest version is a very nice news reader. Be forewarned though that
                        because this is  not a final version there may be some bugs. (Yes, I know,
                        even the final versions have bugs.)
                        Recommended
```

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12.5
```
NAME.......................  WINDIS
PRIME PURPOSE......  Mail (send), Usenet news reader, SMTP server, TIME client, Finger client,
                     etc.
FILE NAME................  windis.zip and windis.txt
FILE SIZE.................  110,914 and 4,329 bytes
LATEST VERSION.....  n/a
AVAILABLE FROM.....  disabuse.demon.co.uk:    /pub/ibmpc/winsock/apps/windis
STATUS...................  Freeware. Source code available.
```

DOCUMENTATION....	Negligible.
FEATURES................	NNTP client, SMTP client and server, TIME client, Finger client.
COMMENTS..............	This was a first cut at a Windows replacement for the "DIS" program which Demon Systems distributes in the UK. Although primarily intended for Demon, it can be used with other providers. Unfortunately, due to time conflicts, this project has been abandoned by its author who is making all source code freely available to anyone who wants to take it over and try and finish it. Many of the modules are basically functional now, but there's still a fair amount of work left.

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12.6

NAME.........................	**WinNET Mail and News**
PRIME PURPOSE......	Mail (send and receive), Usenet news reader.
FILE NAME.................	wnmai220.zip
FILE SIZE..................	644,001 bytes
LATEST VERSION.....	2.20 August 1994
AVAILABLE FROM.....	oak.oakland.edu: /pub/msdos/windows3
STATUS.....................	Free if using Computer Witchcraft as your Internet provider, otherwise Shareware @ $US 99.00
DOCUMENTATION....	Installation instructions and on-line help included.
FEATURES................	Direct dialup to any system providing UUCP (unix-unix-copy) service. Note that this does not have Winsock/SLIP capability. Send and receive mail. UUencode for attached documents supported. Automated installation. Mail server daemon can be programmed to call your Internet provider and download mail on certain days at specific times. There is search capability within a single newsgroup or across newsgroups.
COMMENTS..............	This crippled unregistered version is limited to only 2400 bps. Dialup login sequence does not display on screen making troubleshooting difficult. Registered users get additional features including higher modem speeds. Appears to be a nice package, but the registration costs are a bit steep.

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12.7

NAME.........................	**WinQVT**
PRIME PURPOSE......	Mail (send and receive), Usenet news reader, Telnet, FTP file transfers, FTP/rcp server, network printer, SMTP server.
FILE NAME.................	qvtws398.zip or qvtw3983.zip (Winsocket versions). Separate packet driver and Windows NT versions are also available from the biochemistry location under different file names. This can be a very difficult site to access.
FILE SIZE..................	362,778 bytes
LATEST VERSION.....	3.98 October 1994
AVAILABLE FROM.....	biochemistry.cwru.edu: gopher/pub/qvtnet ftp.cica.indiana.edu: /pub/pc/win3/winsock (or mirrors)
STATUS.....................	Shareware $US 40, only $20 for students. Registered users receive complete set of fonts, a full 85-page user manual, and upgrades for 1 year.
DOCUMENTATION....	Installation instructions and on-line help included.
FEATURES................	VT52/VT102/VT220 terminal emulation. SMTP/POP3 send and receive mail, with polling (timed background mail checking). Capability to also operate as a server for FTP. A basic SMTP server daemon has also been added in this new version which allows direct receipt of mail for network users who are always logged on.
COMMENTS..............	Required minimum of a 386 processor. This is a very full featured package and this upgrade is welcome for the bug fixes and feature enhancements it brings.

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12.8

2
4

NAME.........................	**WinVN**
PRIME PURPOSE......	Mail (send only) and Usenet news reader.
FILE NAME................	winvn_92_6.zip
FILE SIZE..................	193,967 bytes
LATEST VERSION.....	.92.6 September 1994
AVAILABLE FROM.....	ftp.ksc.nasa.gov: /pub/win3/winvn
STATUS....................	Public Domain
DOCUMENTATION....	Installation instructions and on-line help included, although on-line help not yet fully updated with latest enhancements.
FEATURES...............	Can also send (but not receive) mail using SMTP or MAPI. Built in UUdecoding which is especially useful and convenient in downloading and viewing pictures
COMMENTS..............	A fairly popular if at times very controversial newsreader which is getting intensive development effort. A new version is expected shortly and preliminary comments from testers have been very favorable. **Recommended**

13. MISCELLANEOUS

Or more specifically, a little bit of this, and a little bit of that.

13.1

NAME.........................	**The CommSet** [DOS - not Winsock]
PRIME PURPOSE......	All purpose Internet communications package operating in DOS windows. [DEMO - Function or time crippled]
FILE NAME................	Four files: cset0033.exe, chlp0033.exe, install.exe, commset.faq
FILE SIZE..................	Approximately 762,012 bytes total.
LATEST VERSION.....	Demo, version 01, revision 0033.
AVAILABLE FROM.....	nstn.ns.ca: /pub/pc-stuff/commset cs.stmarys.ca: /pub/commset ftp.cybercon.nb.ca: /pub/commset
STATUS....................	Demo version. Commercial price is $CDN 115 which is approximately $US 84 at current exchange rates. A 50 percent educational/private user discount is available and if you do not wish to have the printed manual you can deduct $CDN 15 from the price. Site licenses and bulk purchase discounts available.
DOCUMENTATION....	Installation instructions and on-line help included.
FEATURES...............	Telnet (VT320, VT100, ANSI-BBS). FTP, POP3 Mailer, Finger, NewsReader, Gopher, NSLookup, Whois, Ping, Command Scripting language, Monitor, Serial Terminal, Fake DOS, SLIPDialer, COMMDialer, etc. It has resizable, movable, scrollable windows, and full mouse support with screen cut and paste.
COMMENTS..............	I know, I know. The day is rapidly approaching when your children will see the word "DOS" and think that it's the name of some new German car (*"...and now introducing.....the all new Volkswagen DOS!!!"*). All kidding aside, this package is worth mentioning because it is certainly full featured, and does install easily. This package is crippled and will only operate a session for 15 minutes maximum, with warnings at 5 minute marks and one literally at the last minute. From Cybernetic Control Inc. (NOTE: This is the last time this item will be included in this listing.)

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13.2

NAME.........................	**NULLSOCK**
PRIME PURPOSE......	Dummy Winsock.

```
FILE NAME................  nullsock.zip
FILE SIZE..................  3,050 bytes
LATEST VERSION.....  April  1994
AVAILABLE FROM.....  ftp.ncsa.uiuc.edu:    /Web/Mosaic/Windows/sockets/nullsock
STATUS....................  Not mentioned but presumably no charge for non-commercial use.
DOCUMENTATION....  Introductory comment only.
FEATURES...............
COMMENTS..............  This is a fake Winsock.dll that does not do any network access.
```

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13.3
```
NAME........................  Panda
PRIME PURPOSE......  Multi-function
FILE NAME................  winpanda.zip
FILE SIZE..................  244,842 bytes
LATEST VERSION.....  May 1994
AVAILABLE FROM.....  chop.isca.uiowa.edu:    /pub/Panda
STATUS....................  No mention of any charges.
DOCUMENTATION....  Almost nothing with the package, but logging on as "public" with the default
                     configuration allows you to retrieve some basic information from an Iowa
                     server
FEATURES...............
COMMENTS..............  Panda is a multipurpose customized program being developed at the
                     University of Iowa for campus network use. It will include a Gopher, Usenet,
                     mail, FTP, etc. Current version does not retain configuration setting changes
                     between sessions and is somewhat rough and unstable at this point.  A good
                     example of some of the development work taking place in one of the
                     universities. Of passing interest only.
```

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13.4
```
NAME........................  Tcpmeter
PRIME PURPOSE......  Unknown.
FILE NAME................  tcpmeter.exe
FILE SIZE..................  19,200
LATEST VERSION.....  October 1994
AVAILABLE FROM.....  ftp.trumpet.com.au:    /ftp/pub/tcpmeter
STATUS....................  No information.
DOCUMENTATION....  None.
FEATURES...............
COMMENTS..............  From Peter Tattam, the Trumpet Winsock author. This provides a chart
                     recorder type graphical readout of data flow. Received bytes/second are
                     shown from the top down in green and send bytes/second are shown from
                     the bottom up in red. Clicking right and left mouse buttons increases or
                     decreases the vertical display scale from the default 1 kbyte/second. I'm not
                     really sure of the intended use for this but possibly it might be useful for
                     monitoring the effective data transfer rates while Winsock or other settings
                     are being adjusted. The graphics are kind of neat.
```

------ ------ ------ ------ ------ ------ ------ ------ ------ ------ ------ ------ ------ ------ ------ ------ ------ ------

13.5
```
NAME........................  WINAPPS
PRIME PURPOSE......  A comprehensive client startup package.
FILE NAME................  winapps.zip
FILE SIZE..................  131,516 bytes
LATEST VERSION.....  n/a. Most of these apps date from mid to late  1993.
AVAILABLE FROM.....  ftp.ncsa.uiuc.edu:    /Web/Mosaic/Windows/sockets
STATUS....................  Shareware, but no mention of any cost for using.
```

```
DOCUMENTATION....    None.
FEATURES................    Includes  Ftp, Ping, Telnet, Archie,  Hopchk, and Chat clients
COMMENTS............    These are all very basic examples of  simple Winsock clients which are no
                       longer of any real interest although these clients are still usable and this file
                       is still found on many sites.
```

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13.6
```
NAME.........................    WINAPPS2
PRIME PURPOSE......    A comprehensive client startup package.
FILE NAME.................    winapps2.zip
FILE SIZE...................    123,743
LATEST VERSION.....    2.0 Rev A. Released October 1994 to coincide with the release of the new
                       Trumpet Winsock version 2.0. Individual clients range in date from 1993 to
                       the present. Early versions were included in the original WINAPPS package
                       listed above.
AVAILABLE FROM.....    ftp.trumpet.com.au:     /ftp/pub/winsock
                       ftp.cica.indiana.edu:     /pub/pc/win3/winsock
STATUS....................    Shareware. No mention of any charges for use, but not to be resold or
                       distributed for sale.
DOCUMENTATION....    Negligible.
FEATURES................    Includes Ping, Telnet, Archie, Chat and viewer clients. The Telnet client has
                       been available separately for a while and is listed in the Telnet section of this
                       listing.
COMMENTS..............    A basic starter package from Peter Tattam, the Trumpet Winsock author. An
                       FTP client is surprisingly absent.
```

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13.7
```
NAME.........................    Windows Socket rcp client
PRIME PURPOSE......    RCP client
FILE NAME.................    wrcp03b.zip
FILE SIZE...................    43,570
LATEST VERSION.....    .3 beta    November 1994
AVAILABLE FROM.....    stoner.eps.mcgill.ca:     /pub/windows/winsock
STATUS....................    Freeware.
DOCUMENTATION....    Basic installation and start up instructions.
FEATURES................
COMMENTS..............    Author Steve McCauley.
```

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13.8
```
NAME.........................    WinLab and NetProto
PRIME PURPOSE......    Advanced image processing/photo retouch with file transfer module.
FILE NAME.................    wlabv30b.zip
FILE SIZE...................    855,660
LATEST VERSION.....    3.0  October 1994
AVAILABLE FROM.....    hp750.dibe.unige.it:     /pub/PHD   (Prime site: Italy)
                       ftp.cica.indiana.edu:     /pub/pc/win3/desktop  (or mirrors)
STATUS....................    Shareware  WinLab: ITL 120.000 (~ 80 $US)
                       NetProto     ITL 30.000  (~20 $US)
DOCUMENTATION....    Start up instructions and on-line help.
FEATURES................
COMMENTS..............    Package contains both the image processor (WinLab) and has the capability
                       to remotely send or receive documents (NetProto)  from another machine
                       (also running NetProto) through the use of Winsock. This is fully functional,
                       but still a beta release. A commercial version is also being developed.
```

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13.9

NAME.........................	**WinRSH - Remote Shell for Windows**
PRIME PURPOSE......	Remote shell for Windows.
FILE NAME.................	wrsh15.zip
FILE SIZE...................	91,622 bytes
LATEST VERSION.....	1.5 October 1994
AVAILABLE FROM.....	datacom.ee.ubc.ca: /pub/pc/winsock
STATUS.....................	Freeware
DOCUMENTATION....	Basic start up instructions.
FEATURES...............	Now supports multiple simultaneous sessions. Both 16 and 32 bit execution files are included.
COMMENTS..............	Requires minimum of a 386 pc, and a Unix host supporting RSH or REXEC daemon. "WinRSH contains a very simple user interface to allow a Windows user to run a program remotely on your Unix box......The results of the remote execution are then displayed in a scrollable window." Written by William Cheung.

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13.10

NAME.........................	**Windows Sockets Net Watch**
PRIME PURPOSE......	Host checker.
FILE NAME.................	ws_watch.zip
FILE SIZE...................	26,987
LATEST VERSION.....	Alpha 5 November 1994
AVAILABLE FROM.....	ftp.usma.edu: /pub/msdos/winsock.files
STATUS.....................	May be freely distributed and used, but not sold.
DOCUMENTATION....	Basic startup instructions.
FEATURES...............	
COMMENTS..............	The purpose of this program is to make active checks on hosts that are listed in its database file. This program is designed to work on any Winsock DLL, however it works much better on one that supports raw sockets. Released by John Junod, this is something for network geeks to play with. This experimental program requires Microsoft's Win32s version 1.2 (the very very latest version just out - see Win32s in the Miscellaneous Non-Winsock section).

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13.11

NAME.........................	**WinTAR** (Windows Tape Archive)
PRIME PURPOSE......	Network tape drive archiving program.
FILE NAME.................	wtar122u.zip
FILE SIZE...................	135,319 October 1994
LATEST VERSION.....	1.22
AVAILABLE FROM.....	ftp.cica.indiana.edu: /pub/pc/win3/winsock (or mirrors)
STATUS.....................	Shareware. Single copy registration $US 20 or $CDN 25. Volume discounts.
DOCUMENTATION....	All instructions included in the on-line help.
FEATURES...............	
COMMENTS..............	This program uses Winsock to connect through a network to access a tape drive in order to archive files. It can either create or open files and can control the tape drive mechanism. It is not limited to just tape drives, and can also archive to a local hard drive or floppy. Nice colorful toolbar.

14. NFS CLIENTS

Ha! Fooled you! There aren't any true Winsock NFS (Network File System) clients. The current Winsock 1.1 spec apparently doesn't support NFS. Therefore there won't be any until some future

time when the spec is updated (I haven't a clue) and the new compliant products begin to appear. Best interim solution is to try and find an NFS client specific to your TCP/IP stack. This information on NFS is condensed from a variety of newsgroup postings from People Who Know About These Things. Some good possibilities for some specific systems:

14.1

NAME..........................	**WINDOWS SOCKETS NFS CLIENT ADD-ON FOR WINDOWS**
PRIME PURPOSE......	NFS (Network File System) [DEMO - Function or time crippled]
FILE NAME.................	nfs-demo.zip
FILE SIZE...................	554,760
LATEST VERSION.....	3.1 October 1994
AVAILABLE FROM.....	ftp.cica.indiana.edu: /pub/pc/win3/demo (or mirrors)
STATUS....................	Demo trial version. Registered shareware version $US 49 per user ($30 for educational users), with volume discounts and site licenses available.
DOCUMENTATION....	Startup instructions and on-line help.
FEATURES................	Automated installation.
COMMENTS..............	Runs over Microsoft Workgroups TCP/IP-32, Trumpet TCP/IP, Novell TCP/IP, TCPOpen TCP/IP, and XLink's TCP/IP. From Xlink Technology Inc. Demo version has warning messages every 20 minutes. For installation purposes the unzipped files must be located either on the main directory level of the C drive or on a diskette. If you put the files in a subdirectory on your hard disk the install program can't find them when you run it and will abort.

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14.2

NAME..........................	**XFS** (16 bit)
PRIME PURPOSE......	NFS client
FILE NAME.................	xfs186.zip
FILE SIZE...................	163,390
LATEST VERSION.....	1.8 September 1994
AVAILABLE FROM.....	Lwfws1.uni-paderborn.de: /pub/xfs
	oak.oakland.edu: /pub/msdos/nfs
STATUS....................	Shareware $US 15 for educational users and $US 25 for business users. Site licenses also available.
DOCUMENTATION....	Start up documentation
FEATURES................	
COMMENTS..............	XFS is a Network File System (NFS) client implementation for PC's running MS-DOS. It works with most recent versions of MS-DOS. It is *compatible with* Trumpet Winsock, but must be loaded first. It may also be used with Microsoft Windows For Workgroups, Microsoft LAN Manager, and Novell Netware IPX & ODI

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14.3

NAME..........................	**XFS32** (32 bit)
PRIME PURPOSE......	NFS client
FILE NAME.................	xfs32-11.zip
FILE SIZE...................	101,477
LATEST VERSION.....	1.01 September 1994
AVAILABLE FROM.....	Lwfws1.uni-paderborn.de: /pub/xfs
	oak.oakland.edu: /pub/msdos/nfs
STATUS....................	Shareware $US 15 for educational users and $US 25 for business users. Site licenses also available.
DOCUMENTATION....	Start up documentation and on-line help
FEATURES................	

COMMENTS..............   XFS32 is an NFS client for PC's running MS-DOS, Microsoft Windows For Workgroups (WFW) and Microsoft TCP/IP-32.

15. PH CLIENTS

Ph clients are used to access CSO nameservers which contain a database primarily used for the storage and retrieval of telephone and email directory information. Huh? Well, in other words, Ph is simply like an electronic phone book. Ph is another protocol similar to Finger. Ph clients are designed to access sites running a CSO server to obtain email addresses. If for example you only had a person's name and location but needed their exact email address, and there was a CSO server at that site, you could query it to obtain the necessary information. The database can also be used to store other general information such as weather data and be used for security purposes to validate users.. Ph clients are increasingly being incorporated as components of other Winsock packages such as mail packages and WWW browsers. CSO was the acronym for the University of Illinois Computing Services Office which originally developed this. CCSO = Computer and Communications Services Office, formerly known as just CSO (I guess they got a promotion).

15.1

NAME.........................	**IRL CCSO Phone Windows Client**
PRIME PURPOSE......	CCSO Windows Ph Client
FILE NAME................	irlphwin.zip or irlph23.zip
FILE SIZE..................	399,110 bytes
LATEST VERSION.....	Beta 2.3.2 September 1994
AVAILABLE FROM.....	auck.irl.cri.nz: /pub/phone
STATUS....................	Freeware
DOCUMENTATION....	Startup instructions and on-line help included.
FEATURES................	Contains both 16 and 32 bit executives, your choice, although for the 32 bit version you must have Microsoft's Win32s extension installed (and the latest version, 1.15a. See the Non-Winsock Miscellaneous section below for more info.).
COMMENTS..............	This program by Graeme Campbell.

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15.2

NAME.........................	**PHWIN**
PRIME PURPOSE......	CCSO Windows Ph Client
FILE NAME................	phwin22.zip
FILE SIZE..................	119,378 bytes If downloading from another location, watch the file size. For some strange reason useless fragments about 5k in size are found under this file name in many locations and should be avoided.
LATEST VERSION.....	beta 2.2 November 1993
AVAILABLE FROM.....	Try: ftp.cac.psu.edu: /pub/access/test
STATUS....................	Freeware
DOCUMENTATION....	Startup instructions and on-line help included.
FEATURES................	
COMMENTS..............	This program by Graeme Campbell. It appears to be an early version of the IRL CCSO Phone Windows Client listed in this section.

16. PING

Do you remember those old World War II movies where the crew of the submarine is huddled over the sonar watching the echoes coming back? Ping is kind of the computer equivalent of sonar. Ping clients are used to provide echo like checks of servers to confirm that a good connection exists. Basically, a Ping client sends data packets to a host which (if it supports Ping, and most do) bounces a reply packet back. Packets are numbered so that any dropout can be identified and the quality of

the connection determined. Nothing at all coming back = no connection. If there is a good connection you can go ahead and launch the torpedoes.

16.1
NAME.......................... **WSNWDEMO**
PRIME PURPOSE...... Finger/Ping/Echo clients, Echo server.
FILE NAME................. wsnwdemo.zip
FILE SIZE................... 100,865 bytes
LATEST VERSION..... 1.0 alpha   May 1994
AVAILABLE FROM..... ftp.cica.indiana.edu: /pub/pc/win3/winsock (or mirrors)
STATUS..................... Freeware (limited)
DOCUMENTATION.... Some good general use information, but no on-line help.
FEATURES................
COMMENTS............... According to the author a bug exists in the Finger client - you will lose data towards the end of the Finger query. The product under this name has essentially been retired. See the replacement WSNWUTIL below.

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16.2
NAME.......................... **WSNWUTIL**
PRIME PURPOSE...... Echo, Ping, FTP clients, Echo Server
FILE NAME................. wsnwutil.zip
FILE SIZE................... 194,761
LATEST VERSION..... November 10, 1994
AVAILABLE FROM..... rmii.com: /pub2/mclouden (very latest version)
ftp.cica.indiana.edu: /pub/pc/win3/winsock (or mirrors)
STATUS..................... Freeware (limited) - may not sold.
DOCUMENTATION.... Installation instructions and on-line help.
FEATURES................
COMMENTS............... Previously called WSNWDEMO (listed above in this category) this new release does not include the Finger client. Interesting product worth looking at. It is being actively developed by its author Mark Clouden.

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16.3
NAME.......................... **WS Ping** (Window Sockets Ping Client)
PRIME PURPOSE...... Ping
FILE NAME................ ws_ping.zip
FILE SIZE................... 60,496 bytes
LATEST VERSION..... Release 1   October 1994 (Note that older versions may be floating around other locations with the same file name, so match by file size to distinguish.)
AVAILABLE FROM..... ftp.usma.edu: /pub/msdos/winsock.files
STATUS..................... Public Domain
DOCUMENTATION.... Almost none
FEATURES...............
COMMENTS.............. From John Junod. Source code included. Does not work with Microsoft TCP/IP-32 and Windows NT.

17. PRINTER CLIENTS

17.1
NAME.......................... **CSMLPDW** (Computer Software Manufaktur Line Printer Daemon for Windows)
PRIME PURPOSE...... Winsock based line printer daemon   [Demo]
FILE NAME................. csmlpdw.exe
FILE SIZE................... 212,151
LATEST VERSION..... 3.0 November 1994

AVAILABLE FROM.....	ftp.eunet.co.at: /pub/vendor/csm
STATUS.....................	Demo trial version.
DOCUMENTATION....	Basic start up instructions and on-line help.
FEATURES...............	Automated installation. Supports up to 10 Printer queues on your Windows PC. RFC 1179 compliant. Uses Windows Print Manager.
COMMENTS..............	Full functional demo which ends at 50 print requests.

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17.2

NAME.........................	**Windows LPR Spooler**
PRIME PURPOSE......	Network printer spooler for Microsoft Windows.
FILE NAME................	wlprs40b.zip
FILE SIZE..................	210,257
LATEST VERSION.....	4.0b September 1994
AVAILABLE FROM.....	ftp.cica.indiana.edu: /pub/pc/win3/winsock (or mirrors)
STATUS.....................	Shareware. Registration cost not properly stated in the text documentation due to a glitch.
DOCUMENTATION....	Start up and usage instructions in postscript (.ps) or text (.asc) files.
FEATURES...............	
COMMENTS..............	This program allows an application to print to remote network printers, and to check the print queue, etc.

18. TELEPHONE DIALERS

Never got that archaic dialing script for Trumpet to work properly? Well at least there are other options. Be forewarned that as good as many of these dialers are they can't always anticipate all of the logon quirks of the various Internet service providers. Be prepared to try more than one package. The good news is that there are some significant improvements being made in some of these.

18.1

NAME.........................	**Dialer**
PRIME PURPOSE......	Telephone dialer
FILE NAME................	dialexe.zip
FILE SIZE..................	31,072 bytes May 1994
LATEST VERSION.....	2.0a
AVAILABLE FROM.....	disabuse.demon.co.uk: /pub/ibmpc/windows/utilities
STATUS.....................	No indication of any charges for use.
DOCUMENTATION....	No startup instructions or on-line help.
FEATURES...............	Easy to create logon script.
COMMENTS..............	

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18.2

NAME.........................	**GoSlip!**
PRIME PURPOSE......	Telephone dialer
FILE NAME................	goslip2.zip
FILE SIZE..................	1,237,954 bytes
LATEST VERSION.....	2.0 alpha 2 October 1994
AVAILABLE FROM.....	ftp.cica.indiana.edu: /pub/pc/win3/winsock (or mirrors)
STATUS.....................	Free for non-commercial use.
DOCUMENTATION....	Negligible.
FEATURES...............	Auto logon with easy to use scripts. Automated setup. Supports multiple configurations. Configurations options, scripts and app launch controls can be tweaked while the system is running,
COMMENTS..............	The previous version of this was an impressive Windows dialer with an easy to use scripting capability. This major new revision of this program aims to

add many features including direct handling of dynamic (randomly assigned when you log on each time) IP addresses. In alpha release at the moment primarily for testing purposes, this is currently very difficult to use and buggy, and is best avoided unless you are interested in helping with testing. A promising program which will be worth looking at when the final version becomes available. The previous version may still be available from a number of sites under filename goslip11.zip. It was very functional and stable, but the inability to handle dynamic IP's limited it's appeal.

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18.3

NAME.........................	**NetDial**
PRIME PURPOSE......	Telephone dialer
FILE NAME.................	nd250s.zip
FILE SIZE...................	640,958 bytes
LATEST VERSION.....	2.50 November 1994
AVAILABLE FROM.....	oak.oakland.edu: /SimTel/msdos/winsock
	disabuse.demon.co.uk: /pub/ibmpc/winsock/apps/netdial
STATUS.....................	Shareware $US 20
DOCUMENTATION....	Installation instructions and on-line help included.
FEATURES................	Auto logon with easy to use scripts. Supports up to 5 separate configurations. Re-dial up to 99 times. Supports modem speeds up to 256 kbps. Can run minimized with audible notification on connect. Newer version adds an optional carriage return kick when logging on which some host systems require. Automated installation. Now includes a connection logging capability which keeps track of on-line time.
COMMENTS...............	A major new upgrade now supports dynamic IP addresses (randomly assigned when you log on each time). NetDial requires a minimum of a 386 processor and a 100% Hayes compatible modem. This is a well designed, easy to use program. Biggest nuisance is that because of many changes being made recently, the upgrades are not always compatible with previous versions so a new ini file including new scripts must be recreated. There is at least a minor version change every few weeks. On the positive side, NetDial is the first dialer which I have been able to get working properly with the dynamic IP from my Internet provider. The script did however take a certain amount trial and error combined with a very careful reading of the corresponding help file documentation.
	Recommended

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18.4

NAME.........................	**Wais Dialer**
PRIME PURPOSE......	Telephone dialer
FILE NAME.................	See comments.
FILE SIZE...................	See comments.
LATEST VERSION.....	See comments.
AVAILABLE FROM.....	See comments.
STATUS.....................	See comments.
DOCUMENTATION....	See comments.
FEATURES................	See comments.
COMMENTS...............	This dialer is included with the new version of USGS WinWAIS and is now automatically installed as a stand alone SLIP dialer with its own Windows icon. It is specifically designed to work with Trumpet Winsock. This is a simple to use program with a manual script which allows maximum flexibility over time delays and time outs. Maximum modem speed 19,200. See USGS WinWAIS in the WAIS section for file information and other details.

19. TELNET

For many users nothing has provided more frustration than the search for a good telnet program (the "Holy Grail"). Fortunately over the last few months some good new ones have appeared. In addition, most of the ones in this listing continue to be worked on and improved by their authors. A unique solution comes from David Yon, whose COMt program provides the usually powerful telnet functions of your commercial communications program with access to the Internet.

19.1

NAME.........................	**COMt: the Telnet Modem**
PRIME PURPOSE......	Modem telnet interface utility.
FILE NAME................	comt.zip
FILE SIZE..................	113,692 bytes
LATEST VERSION.....	1.03 October 1994
AVAILABLE FROM.....	ftp.std.com: /customers/software/rfdmail
STATUS....................	Shareware $US 15.95
DOCUMENTATION....	Installation instructions and on-line help included.
FEATURES................	A fairly flexible package: Connect using IP addresses or host names, selectable terminal type options, baud rate options, serial port number etc. etc. Limited support for transparent TCP/IP access to modem pools. Automated installation.
COMMENTS...............	". .. ..solution to under powered Windows Telnet client programs. COMt allows you to use your favorite Windows communications program (i.e., Procomm Plus for Windows, Crosstalk for Windows, etc.) to communicate over TCP/IP. COMt does this by installing itself ahead of the standard Windows COMM driver (comm.drv), and intercepts accesses to the COM ports of your choosing, routing them to TCP/IP. Requests to access other ports are passed on to the original COMM driver, allowing you to continue to use those devices." Or in other words, COMt acts as an interface permitting the terminal emulators in your commercial communications package to access the Internet.
	Compatible with Trumpet Winsock. This latest version now works with CompuServe's WinCIM version 1.3, although it will not work with Reflections (HP). It comes from the same company which produces RFD Mail and is proving to be popular.

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19.2

NAME.........................	**CSMRLW** (Computer Software Manufaktur Remote Login for Windows)
PRIME PURPOSE......	Telnet (terminal emulator) [DEMO - Function or time crippled]
FILE NAME................	csmrlw31.exe
FILE SIZE..................	429,762 bytes
LATEST VERSION.....	3.1 October 1994
AVAILABLE FROM.....	ftp.eunet.co.at: /pub/vendor/csm
STATUS....................	Demo trial version.
DOCUMENTATION....	On-line help included.
FEATURES................	AT386 / IBM HFT(5151) / IBM 3151 / SCO (Ansi) terminal emulation. Automatic logon, windows cut and paste support, ISO to ASCII conversion. Automated installation.
COMMENTS...............	Not tested under Trumpet Winsock, but does run under a wide variety of other stacks including Chameleon. This demo version is fully functional, but has a time limit. From Computer Software Manufaktur GmbH in Austria. **Note:** If you were one of the first to download this demo, there was a flaw

which limited the demo to one terminal session. If you had this problem, then the corrected version is now available for download.

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19.3

NAME.........................	**EWAN**
PRIME PURPOSE......	Telnet (terminal emulator)
FILE NAME................	ewan103.zip
FILE SIZE..................	201,100 bytes
LATEST VERSION.....	1.03 August 1994
AVAILABLE FROM.....	ftp.lysator.liu.se: /pub/msdos/windows
STATUS....................	Freeware
DOCUMENTATION....	Simple startup instructions and on-line help.
FEATURES...............	ANSI/VT100 emulation. Automated installation. Each stored site can have a customized configuration associated with it.
COMMENTS..............	First released just a few months ago it continues to be improved by its author and has developed a strong following. ANSI recently added. If you have problems with the window size in versions 1.02 or 1.03 being very tiny, try changing to a larger default font. Window size is determined by font size! A short description on how to create emulations for EWAN (for current version 1.03) is available in a Windows Write format through the WWW from: http://www.lysator.liu.se/~zander/ewan.html

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19.4

NAME.........................	**NCSA WinTel**
PRIME PURPOSE......	Telnet (terminal emulator)
FILE NAME................	wintelb3.zip
FILE SIZE..................	55,834 bytes
LATEST VERSION.....	Unsupported beta 3 1993
AVAILABLE FROM.....	ftp.cica.indiana.edu: /pub/pc/win3/winsock (or mirrors)
STATUS....................	
DOCUMENTATION....	Minimal, no on-line help.
FEATURES...............	
COMMENTS..............	Not supported, not currently under development.

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19.5

NAME.........................	**QWS3270 EXTRA**
PRIME PURPOSE......	Telnet (terminal emulator)
FILE NAME................	qws3270.zip **Note:** if downloading from other locations match the file date or size to ensure you are getting the latest version. Each new release continues to be circulated under the exact same file name making the different releases hard to distinguish.
FILE SIZE..................	Freeware version: 73,365 bytes
	Shareware version: 95,297 bytes
LATEST VERSION.....	Freeware (limited): 3.2e October 1994
	Shareware: 1.9 October 1994
AVAILABLE FROM.....	Freeware: ftp.ccs.queensu.ca: /pub/msdos/tcpip
	Shareware: ftp.cica.indiana.edu: /pub/pc/win3/winsock (or mirrors)
STATUS....................	Shareware $US 35.00
DOCUMENTATION....	Set-up instructions and on-line help
FEATURES...............	Support for IBM 3270 and Tektronix 4010 terminals. Has 64 character type ahead buffer and support for about a dozen foreign language character translation sets, German, Danish, Dutch, French, Swedish etc. Full customized keyboard.
COMMENTS..............	Both the Freeware and enhanced ("extra") Shareware versions have been circulated with the same filename, distinguishable only by file size (without

unzipping). The Freeware version is only being supported (bug fixes and minor enhancements) for Queens University faculty and students and is up to version 3.2. The Shareware "extra" version started at 1.0 and is now up to 1.9. For the best features get the newer Shareware version which is being very actively developed by its author.

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19.6
NAME......................... **Tektel**
PRIME PURPOSE...... Telnet (terminal emulator)
FILE NAME................. tektel1b.zip
FILE SIZE................... 56,826 bytes
LATEST VERSION..... 1b June 1994
AVAILABLE FROM..... ftp.cica.indiana.edu: /pub/pc/win3/winsock (or mirrors)
STATUS..................... Public Domain
DOCUMENTATION.... Limited, no on-line help
FEATURES................ Tektronix T4010 terminal emulation.
COMMENTS............... Written in Visual Basic (requires VBRUN300.DLL, not included, but widely available and often bundled with other programs).

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19.7
NAME......................... **Trumpet Telnet**
PRIME PURPOSE...... Telnet (terminal emulator)
FILE NAME................. ttel0_07.zip
FILE SIZE................... 29,639
LATEST VERSION..... .07 alpha   September 1994
AVAILABLE FROM..... ftp.trumpet.com.au: /pub/beta/trmptel
STATUS..................... Currently copyright freeware, but eventually shareware.
DOCUMENTATION.... None.
FEATURES................ A basic VT100 now with cut & paste, font control etc.
COMMENTS............... From Peter Tattam.

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19.8
NAME......................... **UNIBOL/Desktop Terminal**
PRIME PURPOSE...... Telnet (terminal emulator)   [DEMO - Function or time crippled]
FILE NAME................. unitel.zip
FILE SIZE................... 558,949 bytes
LATEST VERSION..... 1.3   November 1994
AVAILABLE FROM..... ftp.unibol.com: /pub/demo
STATUS..................... Demo trial version. Although I didn't see any notice, I believe that this demo will expire sometime in December. A new demo with a new expire date will probably be made available then.
DOCUMENTATION.... Start up and on-line help.
FEATURES................ VT100/Uniboll100 emulation. Record/playback script capability to automate sessions, keyboard re-mapping, dual character set support.
COMMENTS............... Full featured demo from Unibol Ltd. Compatible with a variety of stacks including Trumpet. This can be a difficult site to access.

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19.9
NAME......................... **UW Term**
PRIME PURPOSE...... Telnet (terminal emulator)
FILE NAME................. See comments below.
FILE SIZE................... Approximately 20 files, 1,261,000 bytes.
LATEST VERSION..... .97g   November 1994
AVAILABLE FROM..... ftphost.cac.washington.edu: /pub/winsock/uwterm_0.97g
STATUS..................... Freeware.

DOCUMENTATION....	Good, but no on-line help.
FEATURES................	VT52/VT100/VT200 emulation. Automated installation. Features include: adjustable colors, fonts, save & restore of configurations, autologin. Multiple terminals can be active simultaneously.
COMMENTS..............	Available only as a cluster of files in a directory, all of which should be downloaded. Some of the files such as vbrun300.dl_ may create duplicates on your system and can be deleted after installation if you already have an existing equivalent version in a path directory. Slightly customized for intended use at the University of Washington and outside use is not supported by the author. **Note:** according to the author, this program does NOT work properly with Trumpet Winsock 1.0a OR the newer Trumpet 1.0b beta 6. No information on compatibility with more recent Trumpet releases such as 2.0.

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19.10

NAME.........................	**VT-220 for Workgroups**
PRIME PURPOSE......	Telnet (terminal emulator)
FILE NAME................	vt220.exe
FILE SIZE..................	552,388 bytes
LATEST VERSION.....	1.5 May 1994
AVAILABLE FROM.....	ftp.cica.indiana.edu: /pub/pc/win3/winsock (or mirrors)
STATUS.....................	Demo copy provided for evaluation purposes only.
DOCUMENTATION....	Negligible, no on-line help
FEATURES................	VT52/VT100/VT220 terminal emulation. Automated setup.
COMMENTS..............	For latest pricing etc., e-mail: sales@dart.com (Dart Communications).

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19.11

NAME.........................	**YAWTEL**
PRIME PURPOSE......	Telnet (terminal emulator)
FILE NAME................	yawtel02.zip
FILE SIZE..................	12,024 bytes
LATEST VERSION.....	.2 beta July 1994
AVAILABLE FROM.....	ftp.cica.indiana.edu: /pub/pc/win3/winsock (or mirrors).
STATUS.....................	No charge for now while being developed.
DOCUMENTATION....	Negligible, no on-line help in this early version.
FEATURES................	A VT100 emulator
COMMENTS..............	This package was designed with Mosaic in mind. Use caution since this program is being released for testing purposes and is apparently at a very early stage in development and can be expected to be buggy, but the author will appreciate feedback.

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For Telnet see also WinQVT in the Mail and News section.

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20. TCP / IP

20.1

NAME.........................	**Internet-Connect**
PRIME PURPOSE......	TCP/IP networking package
FILE NAME................	inetv2d.zip
FILE SIZE..................	940,509
LATEST VERSION.....	Version 2 beta November 1994
AVAILABLE FROM.....	cais.com: /pub/lvuong/Gallery/InetCon/Pro/Beta

STATUS....................	Copyright by Core Systems. No charge for personal use of this release.
DOCUMENTATION....	Extensive installation and use information.
FEATURES................	Full support for SLIP/CSLIP/PPP. PPP has client and server modes, userid/password authentication (UPAP), dynamic address assignment etc. There is a Windows based dialer with scripting and terminal emulation utility and Windows based automatic installation program. For developers there is Winsock API trace, Winsock developers kit, SLIP and PPP data trace etc.
COMMENTS...............	This package is still in development and is not ready for general release. Internet-Connect is being made available for testing purposes. It is intended to provide a powerful platform primarily oriented towards network professionals and developers.

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20.2

NAME.........................	**Microsoft TCP/IP-32 for Windows For Workgroups 3.11**
PRIME PURPOSE......	TCP/IP networking package
FILE NAME.................	wfwt32.exe
FILE SIZE...................	678,152 bytes
LATEST VERSION.....	3.11 August 1994
AVAILABLE FROM.....	ftp.microsoft.com: /bussys/MSclient/WFW
STATUS.....................	No charge.
DOCUMENTATION....	Primitive, but requires little. It installs as a protocol in Network Setup.
FEATURES................	
COMMENTS...............	Runs only in Windows For Workgroups. For network users. Includes the Microsoft Winsock and a few clients such as Telnet, Ping and Ftp.

21.   TELE-CONFERENCING: VIDEO AND WHITEBOARDS

21.1

NAME.........................	**CU-SeeMe**
PRIME PURPOSE......	One way / two way / multiple video(!) conferencing.
FILE NAME.................	cuseeme.zip
FILE SIZE...................	122,054 bytes
LATEST VERSION.....	W.34b4 August 1994
AVAILABLE FROM.....	gated.cornell.edu: /pub/video/PC.CU-SeeMeW0.34b4
STATUS.....................	Free.
DOCUMENTATION....	Installation instructions and on-line help included. A Frequently Asked Questions (FAQ) document is also available from the same location under the name CU-SeeMe.FAQ. Further info on reflector sites is available through the WWW from: http://www.ludvigsen.dhhalden.no/webdoc/video.html
FEATURES................	4-bit grayscale video Windows at 160x120 pixels. Audio for the PC not available yet, but being worked on.
COMMENTS...............	This was originally created for the Macintosh platform but is now available for both. It is under considerable development effort and this latest release seems considerably more stable than its predecessors. Even if you don't have the capability to send, there are several reflector sites available where you can use this package to sneak a peek. The low data transfer speeds on modem connections are a big problem, but this is nevertheless interesting. Try it!

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21.2

NAME.........................	**NCSA Audible Collage for Microsoft Windows**
PRIME PURPOSE......	Multi-platform collaboration tool.

FILE NAME.................	col_12b1.zip
FILE SIZE...................	203,546 bytes
LATEST VERSION.....	1.2 beta 1 December 1993
AVAILABLE FROM.....	ftp.cica.indiana.edu: /pub/pc/win3/winsock (or mirrors)
STATUS....................	No mention of any charges.
DOCUMENTATION....	Installation and start up instructions.
FEATURES...............	
COMMENTS...............	Collage is a whiteboard program which allows users to collaborate and share data across the three supported platforms: X-Windows workstations, Apple Macintosh systems, and Windows systems. "You must have a Macintosh or an X-Windows workstation running a server in order to use the network collaboration capabilities." Interesting.

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21.3

NAME.........................	**VIS-A-VIS**
PRIME PURPOSE......	Tele-conferencing [DEMO - Function or time crippled]
FILE NAME.................	vis.zip
FILE SIZE...................	1,386,771
LATEST VERSION.....	1.1 May 1994
AVAILABLE FROM.....	resudox.net: /pub/Vis
STATUS.....................	Demo trial version.
DOCUMENTATION....	On-line help only.
FEATURES...............	
COMMENTS...............	A slide presentation tele-conferencing package with a shared use whiteboard. Automatic session termination after 10 minutes. From WorldLinx Telecommunications Inc.

22. TIME LOGS

If you've just gotten the bill from your Internet provider and you're having serious breathing problems, you might want to look at the programs in this section.

22.1

NAME.........................	**SLIP db**
PRIME PURPOSE......	Connection time and cost log.
FILE NAME.................	slipdb10.zip
FILE SIZE...................	426,014
LATEST VERSION.....	1.01 September 1994
AVAILABLE FROM.....	ollc.mta.ca: /pub/slip
	ftp.cica.indiana.edu: /pub/pc/win3/winsock
STATUS.....................	Shareware $CDN 30.00
DOCUMENTATION....	Start up instructions and on-line help.
FEATURES...............	Automated installation. SLIP db records the date and time of each connect and disconnect from your Internet service provider. It calculates elapsed time and figures out a cost based on a per minute charge. The program has a browse mode that lets you see a log of your calls, print a report, and delete records.
COMMENTS...............	A nice all purpose SLIP bean counter. This program is specifically designed to work with a SLIP dialup connection such as is provided by Trumpet Winsock.

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22.2

NAME.........................	**UpTime for Windows 3.1**

PRIME PURPOSE......	Connection time log.
FILE NAME.................	uptime.zip
FILE SIZE...................	3,337
LATEST VERSION.....	1.0 October 1994
AVAILABLE FROM.....	ftp.cica.indiana.edu: /pub/pc/win3/util (or mirrors)
STATUS.....................	Copyright, but no mention of any charges for use.
DOCUMENTATION....	Basic startup and usage info.
FEATURES................	
COMMENTS..............	Very simple utility designed to track session logon time. Primarily intended for use with a dialup SLIP connection but not limited to that. Requires that you have the Visual Basic module vbrun300.dll (not included) on your system.

23. TIME SYNCHRONIZERS

Is the clock on your PC always wrong? Too lazy to be bothered resetting it? Here's the solution! These packages can access your local Internet server (and others) and compare their time settings to your PC, and either report the difference or, if you choose, do an automatic update for you. Features and operation vary somewhat from package to package. If you are not satisfied with the accuracy of your local server, an atomic clock is available for access at location: time-A.timefreq.bldrdoc.gov (132.163.135.130).

23.1

NAME.........................	**NTTardis** [Windows NT version]
PRIME PURPOSE......	Time synchronizer
FILE NAME.................	nttardis.zip
FILE SIZE...................	53,795 bytes
LATEST VERSION.....	1.0 September 1994
AVAILABLE FROM.....	ftp.cica.indiana.edu: /pub/pc/win3/nt (or mirrors).
STATUS.....................	Shareware $US 20
DOCUMENTATION....	Start up documentation.
FEATURES................	The Tardis Server for Windows NT implements RFC 868 (TCP only, no UDP). It acts as both a RFC 868 server and client. i.e. It can get the time from a timeserver with the 'correct' time and then make the 'correct' time available to local clients. Can run in the background checking at defined intervals. Contains an adjustable maximum adjustment filter.
COMMENTS..............	Other than the fact that both packages come from Demon country across the ocean, and they have similar names, this package has nothing in common with the Tardis, the Windows 3.1 version, listed below. Appears to be different authors.

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23.2

NAME.........................	**Tardis**
PRIME PURPOSE......	Time synchronizer
FILE NAME.................	tardis1a.zip
FILE SIZE...................	20,778 bytes
LATEST VERSION.....	1.0a September 1994
AVAILABLE FROM.....	ftp.cica.indiana.edu: /pub/pc/win3/winsock (or mirrors).
STATUS.....................	Freeware.
DOCUMENTATION....	Startup instructions included, but no on-line help. Lacks information for setting time zones outside of Britain.
FEATURES................	Can run in the background checking at defined intervals. Contains an adjustable maximum adjustment filter.
COMMENTS..............	Could use a little more work.

23.3

NAME........................	**Timesync**
PRIME PURPOSE......	Time synchronizer
FILE NAME................	tsync1_8.zip
FILE SIZE..................	399,725 bytes
LATEST VERSION.....	1.8 July 1994
AVAILABLE FROM.....	ftphost.cac.washington.edu: /pub/winsock
STATUS....................	Public domain.
DOCUMENTATION....	Setup instructions.
FEATURES...............	
COMMENTS..............	Automated setup. Timesync is a simple Winsock app that sets your PC's clock to match the time on a remote host. The remote host must be provide the Unix time service on port 37 (timesync does NOT use NTP). This should make the time setting accurate to at least 1 second.

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23.4

NAME........................	**Windows Time Client**
PRIME PURPOSE......	Time synchronizer.
FILE NAME................	wstim101.zip
FILE SIZE..................	86,527
LATEST VERSION.....	1.01 August 1994
AVAILABLE FROM.....	sunsite.unc.edu: /pub/micro/pc-stuff/ms-windows/winsock/apps
	ftp.cica.indiana.edu: /pub/pc/win3/winsock
	wuarchive.wustl.edu: /pub/msdos_uploads/winsock
STATUS....................	Freeware, all source code included.
DOCUMENTATION....	Startup instructions and on-line help included.
FEATURES...............	Last five time servers accessed are added to host menu for easy access. Option to modify local system's time or simply report time returned from the time server. TCP or UDP connection option.
COMMENTS..............	This package can access your local Internet server (and others) and compare your PC to their time settings, and either report the difference or, if you choose, do the automatic update for you. Tested only on Trumpet Winsock, but should work on most stacks. Simple to use, fast, and should be accurate to within 1 second.

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23.5

NAME........................	**WinSNTP**
PRIME PURPOSE......	Time synchronizer.
FILE NAME................	wsntp14f.zip
FILE SIZE..................	157,941 bytes
LATEST VERSION.....	1.4f August 1994
AVAILABLE FROM.....	sunsite.unc.edu: /pub/micro/pc-stuff/ms-windows/winsock/apps
	louie.udel.edu: /pub/ntp
STATUS....................	Shareware $US 25
DOCUMENTATION....	Startup instructions and on-line help included.
FEATURES...............	Will operate over a wide range of different network connections from SLIP to high speed local area networks. WinSNTP can periodically poll the NTP server in order to keep the PC clock accurate within a configurable limit. Programmable daylight savings time cut over.
COMMENTS..............	This program is an implementation of the Simple Network Time Protocol (SNTP) and is designed to keep a computer clock synchronized to the correct time with a very high degree of accuracy for critical applications. Requires access to an NTP server. A 32 bit Windows NT version is under development.

24. WAIS - Wide Area Information Server

The Wide Area Information Server (WAIS) project was initially started by Thinking Machines, Apple Computer, and Dow Jones News Retrieval. It is now being operated by the Clearinghouse for Networked Information Discovery and Retrieval. There are about 300 servers available world wide as part of the network. WAIS is a different type of information search system which has never became very popular. In addition to these specific clients, WAIS searches can also be done through some WWW browsers.

24.1

NAME.........................	**ElNet WinWAIS**
PRIME PURPOSE......	WAIS search client
FILE NAME.................	ewais204.zip
FILE SIZE...................	1,451,068 bytes
LATEST VERSION.....	2.04 June 1994
AVAILABLE FROM.....	ftp.einet.net: /einet/pc
STATUS.....................	$US 35.00 after 30 day evaluation period.
DOCUMENTATION....	Startup instructions and some on-line help included.
FEATURES...............	Automated installation procedure. Two graphics viewers (gfxVIEW and winECJ) included, or can be configured to use your own.
COMMENTS..............	

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24.2

NAME.........................	**USGS WinWAIS** (US Geological Survey WAIS for Windows)
PRIME PURPOSE......	WAIS search client
FILE NAME.................	wwais24.exe
FILE SIZE...................	591,071 bytes
LATEST VERSION.....	2.4 March 1994
AVAILABLE FROM.....	wais.com: /pub/freeware/dos
STATUS.....................	free
DOCUMENTATION....	Start up instructions and on-line help included and includes simple basic instructions/examples on how to use.
FEATURES...............	Automated installation procedure. Includes a separate optional SLIP dialer, and a VT100 telnet application.
COMMENTS..............	No graphics viewers included. See also the listing for the separate SLIP dialer, Wais Dialer, in the Telephone Dialers section.

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24.3

NAME.........................	**WAIS Manager**
PRIME PURPOSE......	WAIS search client
FILE NAME.................	waisman3.zip
FILE SIZE...................	851,085 bytes
LATEST VERSION.....	3.1 June 1993
AVAILABLE FROM.....	ftp.cnidr.org: /pub/NIDR.tools/wais/pc/windows
STATUS.....................	Free for non-commercial purposes
DOCUMENTATION....	Includes startup instructions and on-line help.
COMMENTS...............	If using the DOS program pkunzip, use the "-d" option when unzipping this file to create proper subdirectories, i.e. "pkunzip -d waisman3.zip". According to information in a recent newsgroup posting this program is apparently no longer supported by its author.

25. WHOIS

Whois clients use the Whois protocol for looking up people, hosts, and organizations in the database kept by the Network Information Center (NIC) at SRI International or at other Whois servers. The information available is limited.

25.1

NAME.........................	**WinWhois**
PRIME PURPOSE......	Whois identification.
FILE NAME................	winwhois.zip
FILE SIZE...................	37,877 bytes
LATEST VERSION.....	1.1 September 1994
AVAILABLE FROM.....	Try ftp.sunet.se: /pub/pc/windows/winsock/apps/winwhois
STATUS.....................	Copyrighted, but no mention of any charges.
DOCUMENTATION....	Minimal. There is a brief explanation of the protocol and how to use it, but there are no installation instructions or on-line help. Some additional information is available from the default server by doing a whois search on the word "help".
FEATURES...............	This version has a history feature, which saves up to the last 10 servers looked up in an ini file.
COMMENTS..............	

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25.2

NAME.........................	**WinWhois 32** [Windows NT version]
PRIME PURPOSE......	Whois identification.
FILE NAME................	whois32.zip
FILE SIZE...................	24,656 bytes
LATEST VERSION.....	Beta version 1 May 1994
AVAILABLE FROM.....	ftp.cica.indiana.edu: /pub/pc/win3/winsock (or mirrors)
STATUS.....................	Copyrighted, but no mention of any charges.
DOCUMENTATION....	Minimal
FEATURES...............	
COMMENTS..............	A 32 bit version of this program for Windows NT by Larry Kahn. It does appear to work with regular Windows 3.1 with a Win32s upgrade.

26. WORLD WIDE WEB BROWSERS, etc.

Six months ago the only Web browsers available were Cello (feature poor) and Mosaic (buggy rich). Since then we have seen the release of a limited demo version of Air Mosaic and free versions of Netscape, WinWeb and others. Each newcomer has its fans and its critics and none is ideal. We have choices we lacked before and the competition between them will provide a rapid evolution of features.   From a user point of view it's kind of like going to an ice cream store and one day finding to your surprise that instead of just vanilla they now have all of these different wonderful flavors to choose from. It may still be ice cream, but *it's different* and *it's better*.

Curiously enough the widespread choice of a large number of WWW browsers so freely available on the Internet is discouraging many companies from developing and offering their own packages. After all, what's the point in spending money to develop a product which your competitors are giving away for free? This is the ultimate buyer's market. Netscape Communications (formerly Mosaic Netscape) has wisely chosen to make their money (for now at least - their browser licensing agreement makes interesting reading) on the more controllable server side of the business and others may look for ways to emulate similar strategies. Netscape is incidentally a good choice if your looking for your first browser. In spite of its many problems it is undoubtedly the single most popular WWW browser currently in use.

26.1

NAME.........................	**AIR Mosaic**

PRIME PURPOSE...... World Wide Web (WWW) Browser   [DEMO - Function or time crippled]
FILE NAME................ amosdemo.exe
FILE SIZE.................. 1,003,793 bytes
LATEST VERSION..... 1.1   October 1994. Spry has been posting updated demo versions on an ongoing basis to correct bugs being reported.
AVAILABLE FROM..... ftp.spry.com: vendor/spry/demo/AirMosaicDemo
STATUS.................... Demo trial version.
DOCUMENTATION.... On-line help file included.
FEATURES............... Customizable toolbars, pre-configured hot lists, user definable hot lists, full screen kiosk mode, etc. Automated installation looks for an already installed Winsock stack (such as Trumpet). Program includes its own nullsock.dll file for offline viewing.
COMMENTS.............. This is a fully functional demo except for the fact that it will only allow for the viewing of up to 6 external documents. The first release versions had image display flaws but these have now been corrected. Spry has done a good job in reacting to bug problems and posting fixed versions. The uncrippled 16 bit version is available for $US 29.95. A 32 bit version of this program for that price would be more desirable.

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26.2
NAME......................... **Cello**
PRIME PURPOSE...... World Wide Web (WWW) Browser
FILE NAME................ cello.zip   (Watch out for older versions with the same file name - match file size if downloading from other locations)
FILE SIZE.................. 328,429 bytes
LATEST VERSION..... 1.01a   March 1994
AVAILABLE FROM..... ftp.law.cornell.edu: /pub/LII/Cello
STATUS.................... No charge for non-commercial use.
DOCUMENTATION.... Installation instructions and on-line help included.
FEATURES...............
COMMENTS.............. A basic WWW viewer, far easier to run than Mosaic, although it doesn't have all the features such as support for inline pictures. What it does have is fewer bugs, and it is far less demanding on your systems resources.

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26.3
NAME......................... **InternetWorks Lite**
PRIME PURPOSE...... WWW Browser
FILE NAME................ 3 files: disk1.zip, disk2.zip, readme
FILE SIZE.................. 1,336,018,   410,729, and 429 bytes
LATEST VERSION..... 1.0 November 1994
AVAILABLE FROM..... ftp.booklink.com: /lite
STATUS.................... Demo preview version. Full commercial version with working mail, news and yellow pages available for $US 99 from Booklink (which has just been purchased by America On Line (AOL)).
DOCUMENTATION.... Start up instructions and on-line help.
FEATURES............... Automated installation.
COMMENTS.............. If using pkunzip remember to unzip files using pkunzip -d option. It comes with Trumpet Winsock 2.0a which can be installed at the same time if you don't already have it. The browser's background color (which will be white on most machines) is tied to Windows desktop settings and is not separately adjustable. Pages with any kind of transparent images will look yucky. Similar to Mosaic Netscape text is displayed first allowing you to begin reading immediately while the graphics are then retrieved. The default pages provided are primarily menu driven and easy to use.

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26.4

NAME.........................   **NCSA Mosaic (16 bit)**
PRIME PURPOSE......   World Wide Web (WWW) Browser
FILE NAME.................   wmos20a2.zip
FILE SIZE...................   243,749 bytes
LATEST VERSION.....   2.0 alpha 2   March 1994
AVAILABLE FROM.....   ftp.ncsa.uiuc.edu: /Web/Mosaic/Windows/old
STATUS.....................   No charge for non-commercial use.
DOCUMENTATION....   Good
FEATURES................
COMMENTS...............   Regular 16 bit version only. This is the final release for a 16 bit Windows 3.1
                                      version. No further development planned for this version. Not compatible
                                      with WFW 3.11. See 32 bit version below. NCSA = National Center for
                                      Supercomputing Applications.

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26.5

NAME.........................   **NCSA Mosaic (32 bit)**
PRIME PURPOSE......   World Wide Web (WWW) Browser
FILE NAME.................   wmos20a7.zip
FILE SIZE...................   288,404 bytes
LATEST VERSION.....   2.0 alpha 7   September 1994
AVAILABLE FROM.....   ftp.ncsa.uiuc.edu: /Web/Mosaic/Windows
STATUS.....................   No charge for non-commercial use.
DOCUMENTATION....   Installation and setup instructions included. On-line help is precisely that,
                                      downloaded from the NCSA server as required and thus only available to
                                      you when you are logged on.
FEATURES................   New feature Kiosk Mosaic will not allow the user to change or reconfigure
                                      the option settings, ideal for protecting public access machines such as in
                                      libraries or schools.
COMMENTS...............   32 bit version for 32 bit upgraded Windows 3.1. (See Win32s in the Non-
                                      Winsock section. You MUST upgrade Windows 3.1 to the latest version
                                      1.15a of Win32s before using this version of Mosaic.) This program has
                                      been under a major development effort and recent versions in particular
                                      increase the speed and reducing the memory swapping problem. The
                                      developers successfully tested it on a 386DX33 with 4 meg RAM and a 9
                                      meg swap file. Up until now the Mosaic program has provided one of the
                                      best views into the potential future of the Internet, but continuing problems
                                      (some related to Win32s) and availability of many alternate browsers has
                                      considerably diminished its appeal. For associated viewers see MPEGPLAY
                                      and LView in the Non-Winsock section. NOTE: See the Appendix for
                                      information on "Unhandled Exception 0xC0000005" error.

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26.6

NAME.........................   **Netscape**   ("Mozilla")
PRIME PURPOSE......   WWW Browser
FILE NAME.................   ns16-093.exe
FILE SIZE...................   720,326
LATEST VERSION.....   .93 (16 bit public beta version)   November 1994. A .94 version has just been
                                      released to fix some bugs.
AVAILABLE FROM.....   ftp.mcom.com: /pub/netscape/windows
                                      ftp.digital.com: /pub/net/infosys/Netscape
                                      stones.com: /pub/netscape

STATUS....................	Evaluation copy. The next major upgrade, 1.0 beta, which completes beta development, will similarly be released free for individual use and at the same time licensed commercially.
DOCUMENTATION....	Minimal with the package. Most of the information is available literally on-line from the home site.
FEATURES................	Features document interaction (work on a document) before the entire document is downloaded. Capable of accessing multiple servers simultaneously. Optimized to run on 14.4 kbps modems. Internal support for JPEG image format. The ability to use Netscape server/client software to securely send credit card information over the Internet will help to speed the commercialization and development of the Internet.
COMMENTS...............	Released by Mosaic Communications, a new company. Netscape has many features which are bound to be popular. In this latest versions the print capability has been added and worked very nicely when I used it. Netscape is perhaps unique amongst browsers in not being able to vary the background gray color. This package has become very controversial because its developers have implemented some advanced HTML (Hyper Text Markup Language) capabilities such as text flowing around images, control over font sizes and centering. Unfortunately, these features are not part of the current HTML standard and are not necessarily going to be part of the next standards update. Documents specifically created with these features, although pleasing to view on Netscape, will not properly be displayed on the many other browsers. This program incidentally was written from scratch by the developers. The choice of Mosaic Netscape as the initial name was unfortunate and incorrectly implied a connection with the NCSA Mosaic browser. The company name has now been changed to Netscape Communications Corporation. **Note:** A commercial version of this program will be released shortly for an estimated list price of $US 99. Although the code is essentially the same, the commercial version apparently will come with a printed manual and technical support. A version of the Netscape browser will also be offered by MCI communications as one of the software packages it will be selling as part of its new Internet service recently announced.

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26.7

NAME.........................	**SETMOS**
PRIME PURPOSE......	Configuration set up utility for NCSA Mosaic .
FILE NAME.................	smosaic.zip
FILE SIZE..................	349,321 bytes The program itself is actually very small, but the zip file does contain the obligatory vbrun300.dll standard visual basic file. You probably have at least half a dozen duplicates of this scattered across your system already if you've installed any number of shareware packages.
LATEST VERSION.....	1.2 alpha September 1994
AVAILABLE FROM.....	ftp.cica.indiana.edu: /pub/pc/win3/winsock (or mirrors).
STATUS....................	Nothing stated.
DOCUMENTATION....	Negligible.
FEATURES................	Automated installation.
COMMENTS...............	This program is designed to simplify the traditionally cumbersome process of configuring the mosaic.ini file with all the necessary viewers and connection info required. The information which you input into a simple window screen is fed back and used to automatically update the corresponding sections in mosaic.ini. Although this program is very straightforward, the lack of documentation is initially disconcerting. The author Rod Potter does mention that you should use the official Mosaic documentation to understand

and determine your settings. This program represents a good idea, fairly well executed.

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26.8

NAME.........................	**SlipKnot** (NOT Winsock - operates on Unix shell)
PRIME PURPOSE......	WWW Browser
FILE NAME................	slnot100.zip
FILE SIZE..................	1,193,552 bytes
LATEST VERSION.....	1.0 November 1994
AVAILABLE FROM.....	oak.oakland.edu: /SimTel/win3/internet
STATUS....................	Shareware. $US 29 for USA, Canada, Japan, Western Europe. $US 20 elsewhere. 10% of all fees are donated to refugee relief.
DOCUMENTATION....	Start up information and on-line help.
FEATURES...............	Up to 5 different documents can be displayed on the screen simultaneously. You can ask for the retrieval of many documents, and these requests will be queued up to be activated one-by-one. For functionality reasons only X and Y protocol downloads are supported, and not Z. You are allowed to switch between WWW and your UNIX terminal session (except when downloading documents). You can choose not to retrieve the pictures embedded inside documents and speed up the downloading process significantly. Then, if you change your mind, ask SlipKnot to get the same document with the pictures.
COMMENTS..............	An interesting and innovative program, a WWW browser which uses Windows, but not Winsock or Slip. It is designed for modem users with ordinary dial-up UNIX shell accounts. It does require a 386 processor or better and at least 4 meg of RAM. As well, your service provider must have certain software on the server (e.g. lynx). It has not yet been tested on Windows NT. Current version does not support some features like Forms or Authentication and will not access Gopher at present. Released by MicroMind. This is the first release and there are some problems, but nonetheless a unique and very welcome addition to browser ranks.

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26.9

NAME.........................	**Superhighway Access For Windows**
PRIME PURPOSE......	WWW Browser/WAIS/Gopher+/CSO [DEMO - Function or time crippled]
FILE NAME................	shademo.exe
FILE SIZE..................	1,054,458 bytes
LATEST VERSION.....	1.67 October 1994
AVAILABLE FROM.....	ftp.frontiertech.com: /bbs/demo ftp.shell.portal.com: /pub/frontier ftp.cic.net: /pub/Software/pc/frontiertech
STATUS....................	Demo trial version **expires November 30, 1994.** I would expect to see a replacement with a new expire date posted then.
DOCUMENTATION....	Installation instructions and on-line help included.
FEATURES...............	This is the WinTapestry module from the Superhighway Access for Windows from Frontier Technologies and includes an integrated WWW, Gopher+, CSO and WAIS client. Internal support for both Gif and Jpeg images. Up to 30 browser sessions at one time.
COMMENTS..............	The complete commercial package includes additional SMTP/POP/MIME Email, News Reader, FTP and VT 100 Telnet functions. This demo can reportedly result in a GPF (General Protection Fault or "crash") when using Diamond Video card drivers. Solution from Diamond is to exclude video memory segment a000 - c7ff. There have been similar problems with Western Digital video cards and probably a similar solution will be required

but I have no specifics. Hmmm, there seems to be a pattern developing here.

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26.10

NAME.........................	**WinWeb**
PRIME PURPOSE......	World Wide Web (WWW) Browser
FILE NAME.................	winweb.zip
FILE SIZE...................	598,834 bytes
LATEST VERSION.....	1.0A2.1.1 November 1994
AVAILABLE FROM.....	ftp.einet.net: /einet/pc/winweb
STATUS....................	No charge for non-commercial use.
DOCUMENTATION....	Documentation somewhat weak - there is provision for on-line help but none included with this current version.
FEATURES...............	This latest version now supports loading local documents and reading them offline. All that's required is a winsock.dll file which the program can locate (e.g. Trumpet Winsock).
COMMENTS...............	A new addition to the ranks of WWW browsers. This installs easily and should run well even on less powerful machines with only 4 meg. Flexible cache can automatically adjust to use any additional memory available. The current version of WinWeb does not contain any way to launch Telnet or WAIS clients.

27. X.500 (DUA) CLIENTS

From the help file in WaX500: "X.500 is an international standard for providing on-line directory services. The easiest way to think about X.500 is as a world-wide, distributed, electronic, telephone book. The X.500 Directory can contain information about people, organizations, documents, and just about anything else. At the present time, there is a pilot world-wide X.500 Directory in which the information available is mostly about people and organizations."

27.1

NAME.........................	**piXie**
PRIME PURPOSE......	X.500 DUA (Directory User Agent)
FILE NAME.................	pixie22b.zip
FILE SIZE...................	194,165
LATEST VERSION.....	2.2b January 1994
AVAILABLE FROM.....	Try: ns.uab.es: /pub/msdos/X500
STATUS....................	Free for non-commercial purposes.
DOCUMENTATION....	Fairly comprehensive with on-line help.
FEATURES...............	
COMMENTS...............	Should also work on OS2 and Windows NT.

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27.2

NAME.........................	**Swix**
PRIME PURPOSE......	X.500 DUA (Directory User Agent)
FILE NAME.................	swix21.exe
FILE SIZE...................	223,955 bytes
LATEST VERSION.....	2.1 November 1994
AVAILABLE FROM.....	ftp.umu.se: /pub/pc/swix
STATUS....................	Public Domain.
DOCUMENTATION....	Installation instructions and on-line help included.
FEATURES...............	
COMMENTS...............	

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27.3

```
NAME........................  WaX500
PRIME PURPOSE......  X.500 DUA (Directory User Agent)
FILE NAME.................  waxr103.zip
FILE SIZE...................  189,664 bytes
LATEST VERSION.....  1.03   August 1994
AVAILABLE FROM.....  terminator.rs.itd.umich.edu:    /x500/wax500
STATUS....................  Copyright.
DOCUMENTATION....  Startup instructions and on-line help included.
FEATURES...............
COMMENTS..............  A Mac version is also available from the same site.
```

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27.4
```
NAME........................  Windows Directory User Agent (WDUA32)
PRIME PURPOSE......  X.500 DUA (Directory User Agent)
FILE NAME.................  wduainst.exe
FILE SIZE...................  718,961 bytes
LATEST VERSION.....  Release 2.0B     June 1994
AVAILABLE FROM.....  naic.nasa.gov:     /software/windows-dua
STATUS....................  Not stated.
DOCUMENTATION....  Start up documentation and on-line help.
FEATURES................  Automated installation. Both 16 and 32 bit versions included.
COMMENTS..............
```

NON - WINSOCK APPLICATIONS

Viewers, decoders, modem accessories, etc., these general purpose items are often used in conjunction with Winsock applications and are listed here for convenience.

28. DECODERS - UU

UU (Unix-to-Unix) encoders/decoders convert 8 bit binary files (which most are, such as zip, exe, com, gif, jpg, and wav files) to 7 bit ASCII text files (or vice versa). And, you ask, why would we want to do that? Well, we don't, but we have to because the Internet forces us to do it. The archaic Internet Mail and News systems were designed to handle only ASCII text format. To send anything else, such as a graphics image, a spreadsheet or a compressed zip file we have to convert these from their natural 8 bit state to 7 bit "text" which can then be mailed or posted. The process will of course have to be reversed at the other end to convert the file back to its natural and usable format. XX, MIME and Binhex are other processes for doing the same thing as UU through their own methods. MIME (Multipurpose Internet Mail Extensions) is a newer Internet standard most frequently used in email programs to send attached documents or programs. It is newer, superior to, and is quickly replacing UU in the email area. UU continues to totally dominate the newsgroups. Binhex is an encoder for the Mac world. These formats are of course not compatible with each other - silly of you to ask.

28.1
```
NAME........................  UU     [DOS]
PRIME PURPOSE......  Decoder.
FILE NAME.................  uu33.zip
FILE SIZE...................  31,165 bytes   (Unzipped the actual program is only 8,917 bytes - the rest is
                             all documentation).
LATEST VERSION.....  3.3   November 1994
AVAILABLE FROM.....  ftp.io.com:      /pub/usr/zboray/coding
                     wuarchive.wustl.edu:    /pub/MSDOS_UPLOADS/uucode
```

STATUS....................	Freeware
DOCUMENTATION....	Very extensive.
FEATURES...............	This program can be used on as little as an 8086/8088 and down to DOS 2.0.
COMMENTS..............	From author Ben Jos Walbeehm this is one of the best UUdecoders money can't buy. A very compact and very fast DOS program capable of sorting through and decoding files UUencoded by a wide variety of other packages. It is capable of dealing with some of the variations and glitches sometimes found. As much as I hate DOS, the ability to go into a directory where I have downloaded a large number of encoded files and just type uu *.* and watch it finish spitting out the viewable files in seconds makes this indispensable. It's great for chomping through Trumpet News archive folders (.mfl) and decoding and putting together coded files and pictures which have been archived from newsgroups.

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28.2

NAME.........................	**UUCODE**
PRIME PURPOSE......	Encoder/decoder
FILE NAME.................	uucod314.zip
FILE SIZE...................	177,030
LATEST VERSION.....	3.1.4 July 1994
AVAILABLE FROM.....	Try: disabuse.demon.co.uk: /pub/ibmpc/windows/uue
STATUS....................	Shareware $US 10. Manual and latest version add $US 6.
DOCUMENTATION....	Start up instructions and on-line help.
FEATURES...............	Supports UU and XX.
COMMENTS...............	UUCODE requires a minimum of a 386 processor. From Sabasoft Inc.

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28.3

NAME.........................	**Wincode**
PRIME PURPOSE......	Encoder/decoder.
FILE NAME.................	wncode26.zip
FILE SIZE...................	266,083
LATEST VERSION.....	2.6.1 October 1994.
AVAILABLE FROM.....	ftp.cica.indiana.edu: /pub/pc/win3/graphics (or mirrors)
STATUS....................	Freeware, but not Public domain. Help file available for $US 5 but should really not be required. Mailing list available for automatic program updates (Price: Postcardware).
DOCUMENTATION....	Introductory documentation only.
FEATURES...............	Supports UU, XX and MIME encoding and decoding. Drag and drop support, automated installation.
COMMENTS...............	Wincode does not have built in zip capability, but it will provide a Windows front end if you have such a program installed on your system (i.e. DOS). Released by Snappy_Inc.

29. DECODERS - ZIP

There are many standards for compressing files to save on space for storage or transmission purposes. The DOS/Windows standard is ZIP. Files ending in .zip require an unzip utility program such as these to restore them to their original usable format. Self extracting zip files can also be created which do not require the additional help to "explode". They have a .exe ending and are inconveniently indistinguishable from other execution files with that ending.

29.1

NAME.........................	**PKZIP** [DOS]
PRIME PURPOSE......	File zip/unzipper

FILE NAME.................	pk204g.exe
FILE SIZE...................	202,576
LATEST VERSION.....	2.04g February 1993
AVAILABLE FROM.....	Try: risc.ua.edu: /pub/network/netwire/novlib/02
STATUS....................	Shareware $US 47
DOCUMENTATION....	Extensive, although I really wonder how many people will have the interest to wade through the 200 page manual in addition to several other files (all in MS Word format). Or am I the only one with a short attention span?
FEATURES...............	
COMMENTS..............	Self extracting file. From PKWARE Inc., this is the real thing. Registered version contains several additional utility programs.

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29.2

NAME.........................	**WinZip**
PRIME PURPOSE......	File unzipper
FILE NAME.................	winzip55.exe
FILE SIZE...................	275,324 bytes
LATEST VERSION.....	5.5 August 1994
AVAILABLE FROM.....	ftp.cica.indiana.edu: /pub/pc/win3/util (or mirrors)
STATUS....................	Shareware $US 29.
DOCUMENTATION....	Extensive, and includes on-line help.
FEATURES...............	Unique uninstall feature give you a chance to try a program, and then, if desired, it will restore your system to its original state. The uninstall step can selectively remove files, icons, or program groups created by an install program, and can restore any altered INI files. The program will even uninstall itself! A WinZip pull-down menu can be added to the Windows File Manager for quick access. In addition to handling ZIP files, WinZip provides a Windows front end for decompression of LZH and ARJ files when the corresponding dos utilities (such as lha213.exe and arj241.exe) are installed.
COMMENTS..............	Some incremental features such as encryption are not built in and are only supported if a copy of pkunzip (DOS) is also installed.

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29.3

NAME.........................	**ZipWhacker for Windows**
PRIME PURPOSE......	File unzipper.
FILE NAME.................	zipwack.zip
FILE SIZE...................	105,183
LATEST VERSION.....	1.0 June 1994
AVAILABLE FROM.....	ftp.cica.indiana.edu: /pub/pc/win3/graphics (or mirrors).
STATUS....................	Shareware $US 9.95
DOCUMENTATION....	Start up instructions and on-line help.
FEATURES...............	ZIP 2.x and Microsoft Compress (used on distribution disks) file decompression. Unzip all files or single files. View and unzip self-extract zip files.
COMMENTS..............	

30. MODEM ACCESSORIES

In the old days hundreds of years ago modems were primarily external devices. They came in their own boxes encrusted with red and green flashing indicator lights.   No one's really sure what the lights were for but it was very reassuring to see them blinking, confirmation that something must be happening. It's reminiscent of that scene from an old Frankenstein movie where the mad scientist is shouting "It's alive!!! It's alive!!!" In those days of old telephone systems, noisy lines and not always reliable service such joys could be the hi-lite of one's day. Today things are different. Modems are

primarily internal devices squirreled away in the main computer case, out of sight and out of mind. No visible lights, no joy in our lives. Fortunately there are high tech solutions to this deplorable state of affairs.

30.1
NAME.......................... **CCLINK**
PRIME PURPOSE...... Modem status lights.
FILE NAME................. cclink.zip
FILE SIZE................... 41,312
LATEST VERSION..... 1.1a   October 1994
AVAILABLE FROM..... Available from Compuserve in the Ziffnet/Applications Forum. I do not yet know of a location on the Internet for this. If you really want a copy and don't have access to CompuServe, contact me and I'll mail (MIME only) you a copy.
STATUS..................... Shareware $US 10
DOCUMENTATION.... Start up documentation in an MS Word format (.doc) which may not be readable unless your word processor can handle this format.
FEATURES................ Monitors both serial and parallel ports. Choice of 3 different LED colors.
COMMENTS............... There are two versions included, a CCLINK and a CCLINKjr. The main version allows inputting of AT commands to the modem and making serial port speed changes. The jr version provides strictly a monitoring function which I personally was more comfortable with. The program is crippled and unregistered versions will operate only for 30 minutes before shutting down.

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30.2
NAME.......................... **ModemSta**
PRIME PURPOSE...... Modem status lights.
FILE NAME................. modsta14.zip
FILE SIZE................... 75,946
LATEST VERSION..... 1.4   September 1994
AVAILABLE FROM..... Try: disabuse.demon.co.uk: /simtel20/msdos/windows3
STATUS..................... Shareware $US 10
DOCUMENTATION.... Start up documentation.
FEATURES................ Multiple copies can be run to monitor more than 1 port. Fully adjustable RGB LED colors. Can send initialization string to the modem. On-line help. Incoming log file. Can play a wav sound file when there is an incoming ring - handy if there's no telephone hooked up such as for a fax mode.
COMMENTS...............

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30.3
NAME.......................... **WinModem**
PRIME PURPOSE...... Modem status lights.
FILE NAME................. wnmdm4.zip
FILE SIZE................... 165,705
LATEST VERSION..... 4.0   May 1994
AVAILABLE FROM..... ftp.cica.indiana.edu: /pub/pc/win3/util (or mirrors).
STATUS..................... Shareware $US 10. Site licenses available.
DOCUMENTATION.... Start up and usage instructions.
FEATURES................ Automated installation. Works with both Windows 3.1 and Windows For Workgroups (WFW) 3.11.
COMMENTS............... WinModem requires a minimum of a 386 PC. Particularly appropriate for internal modems, WinModem provides a monitor screen equivalent of the blinking lights normally seen on the front panels of external modems. The blinking status lights it displays provide you with that warm feeling that your modem is hard at work sending and receiving data for you. This is a nice

simple program, easy to install and use and it works well. The only thing missing is some optional sound effects. Well, why not?

31.   SERIAL PORT REPLACEMENT DRIVERS

At a time when a new international standard has just been established to make the 28.8 kbps (28,800 bits per second) modem speed a leading edge reality for PC communications, the contradictory reality is that Windows 3.1 was never designed to support such speeds. Not even close. When 14.4 kbps modems became popular a few years ago, a number of third party serial port drivers were produced to replace the standard Windows comm.drv to overcome some reliability problems being experienced at that speed. Keep in mind that data compression capabilities of modern modems can substantially increase the data transfer speed above the nominal rating of the modem. Note also that a number of commercial communications software packages such as Winfax Pro also now sometimes include similar replacement drivers for optional installation. These are of no value if you have a slower modem and are not needed if you have Windows For Workgroups (WFW) which apparently installs its own very good driver.

Changing software is not enough - to use these higher speed serial port drivers you must also have the corresponding hardware which is capable of handling higher speeds - a 16550 serial port UART (Universal Asynchronous Receiver/Transmitters) chip. The prime advantages of the 16550 are in its 16 byte FIFO (First-In-First-Out) buffer and its high speed. The older 16450 and 8250 UARTs only had a 1 byte buffer making them very susceptible to data overruns and errors at higher speeds. I believe that the 8250 is also the slowest of the three. Fortunately most recent better quality 14.4 internal modems come with their own 16550 serial port UART "on board" and avoid using the potentially older chip inside your systems. To find out if you have a 16550 serial port, exit Windows and run the DOS command MSD. Finding an older 8250 UART chip at the com port used by your modem is not good news if you are interested in speeds above 9.6 kbps. The MSD command also provides other useful information about your system.

31.1

NAME.........................	**CyberCom**
PRIME PURPOSE......	Windows replacement serial port communications driver.
FILE NAME.................	cyberc.zip or cyberdrv.zip In spite of different names these have absolutely identical content. The zip files have also been created with different compression ratios which adds to the illusion of two different files which can be found in various locations.
FILE SIZE..................	8,237 or 7,766 bytes
LATEST VERSION.....	1.1.0.0P November 1993
AVAILABLE FROM.....	Try disabuse.demon.co.uk: /pub/ibmpc/windows/cybercom
STATUS.....................	No charge for non-commercial use.
DOCUMENTATION....	Simple installation instructions. Once installed, usage is transparent.
FEATURES................	
COMMENTS...............	This is a replacement for the standard Windows driver (comm.drv) and enables data transfers up to 115 kbps if you have a 16550 serial port chip and operate Windows 3.1 in enhanced mode. With 28 kbps modems readily available now, this package from CyberSoft Corporation provides one solution to overcome the limitation of the standard Windows 3.1 driver. This is a fairly basic package. If you want to spend a little money, there are apparently better commercial ones which can be purchased.

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31.2

NAME.........................	**Fix16550 Device Driver**
PRIME PURPOSE......	To fix problems with AMI BIOS and 16550 UARTS
FILE NAME.................	fix16550.zip
FILE SIZE..................	3,493 bytes

LATEST VERSION.....	1.01 October 1993
AVAILABLE FROM.....	ftp.sogang.ac.kr: /msdos/sysutil
STATUS....................	Shareware $US 10
DOCUMENTATION....	Basic information and instructions. This is fairly simple to install.
FEATURES...............	
COMMENTS...............	This device driver was written to overcome a problem which occurred in systems with an AMI BIOS combined with a 16550 UART serial port chip. Under certain circumstances and on some systems a failure may occur after a soft reset when the system becomes unable to recognize the serial com port, necessitating a hard restart to clear up the problem. This driver fixes that problem and should only be installed if you have specifically experienced this. As a secondary feature, this driver also can be installed to enable COM3 and COM4 capability on older systems lacking these ports (mostly older 286 and 386 machines from certain manufacturers).

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31.3

NAME.........................	**WFXCOMM.DRV**
PRIME PURPOSE......	Windows replacement serial port communications driver.
FILE NAME.................	wfxcom.zip
FILE SIZE...................	7,556
LATEST VERSION.....	March 1993
AVAILABLE FROM.....	ftp.disabuse.co.uk: /pub/ibmpc/windows/comms
STATUS....................	Not mentioned.
DOCUMENTATION....	Installation instructions.
FEATURES...............	
COMMENTS...............	Another replacement communications port driver to replace the standard Windows 3.1 driver and allow higher speed data transfers if you have the modem capability. It is reputedly better than the Cybercom driver. From Delrina (WinComm Pro and WinFax) this was originally included in WinFax Pro 3.0 for optional installation.

32. VIEWERS - GRAPHICS - MOVING PICTURE

MPEG (Moving Pictures Expert Group) is a video compression format standardized by the International Organization for Standardization (ISO). It has become the moving picture standard used on the Internet. Prime importance for MPEG players is as an add-on clients to Web browsers (like Mosaic) to allow these files to be played when found on the World Wide Web. Unfortunately most of the MPEG players available tend to be 32 bit versions to provide the higher performance that video requires. This means that you must have Microsoft's Win32s extension installed to Windows 3.1 in order to use these.

32.1

NAME.........................	**MPEGPLAY**
PRIME PURPOSE......	Moving picture player, MPEG (.mpg) format.
FILE NAME.................	mpegw32h.zip. A faq.txt file in the same directory should also be retrieved. It supplies some more information regarding potential installation and viewing problems, the MPEG format, etc.
FILE SIZE...................	641,988 bytes
LATEST VERSION.....	1.65 September 1994
AVAILABLE FROM.....	decel.ecel.uwa.edu.au: /users/michael
STATUS....................	$US 25 single user, $US 250 site license
DOCUMENTATION....	Installation instructions and on-line help included, which also contains some interesting technical information/history on the MPEG format.
FEATURES...............	Support for the Microsoft WinG(tm) Windows gaming library.

COMMENTS...............	A good MPEG player for Mosaic. Unregistered version is crippled and will not play MPEGs greater than 1 megabyte. A sample video rocket.mpg is included. **Note:** this is a 32 bit player. You must have Win32s version 1.15a installed before you attempt to install/use this. See the listing for Win32s further down in this section.

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32.2

NAME.........................	**VMPEG**
PRIME PURPOSE......	Moving picture player, MPEG (.mpg) format.
FILE NAME.................	vmpeg12a.zip
FILE SIZE...................	154,608
LATEST VERSION.....	1.2 September 1994
AVAILABLE FROM.....	ftp.u.washington.edu: /pub/user-supported/dillon
STATUS.....................	No charge for non commercial use.
DOCUMENTATION....	Start up instructions.
FEATURES................	Includes an optional DOS version. If you have WinG installed (this is *another* Microsoft add-on for Windows 3.1) there is a Windows version included which will support it and provide faster running of MPEG files.
COMMENTS...............	This is a 32 bit program which requires Microsoft's Win32s (minimum version 1.15a) extension (listed elsewhere in this Non-Winsock section) and a minimum of a 386 processor. Minimal controls are all menu driven - toolbar buttons would be more convenient. I do not recommend using the optional WinG version unless you really need it and have adequate system resources.

33. VIEWERS - GRAPHICS - STILL PICTURE

The standard still image format commonly found on the Internet and supported by all Web browsers is the Gif format (.gif), first created by CompuServe for efficient storage and transfer of images on it's on-line service. The Gif format by definition only supports 256 colors. In-line Gif images on documents are viewable by virtually all Web browsers. The Gif format is popular because of its effective compression of data and partly because it supports transparent background images in HTML documents, although few browsers currently are actually capable of properly displaying these transparencies. (Many images which appear to have transparent backgrounds are actually pseudos - their backgrounds have been altered to match and completely blend into the browsers background gray colors providing the appearance of transparency).

Gif also supports interlaced images, where the image is both saved and retrieved in four passes. Interlaced images can primarily be seen on CompuServe with their WinCIM software, or through the Web browser Netscape which begins to display an image as it is being received (the images on their home page are of the interlaced type). Interlaced images provide a preview of the finished picture and potentially allow time saving termination if the decision is made that the picture is not really wanted. Other browsers such as NCSA Mosaic display an image in its completed form and only after all of the information has been downloaded. By then, even if it was an interlaced image, the effect is not visible.

The JPEG (.jpg) format was created by the Joint Photographic Expert Group. JPEG images support full color (24 bit) as opposed to the 256 colors (8 bit) of Gif images. The JPEG image format is popular for posting pictures in Internet binary newsgroups (smaller file size than corresponding Gif image) but is less popular on the Web where Gif is the preferred image format. Web browsers usually require auxiliary JPEG viewers such as these to display these images whereas Gif support is often built it. JPEG images cannot be used as in-line images in HTML documents (only X-bitmaps (.xbm), and Gifs are supported for in-line images).

Enough?

NAME.........................   **ACDSee**
PRIME PURPOSE......   Graphics image viewer.
FILE NAME.................   acdsee10.zip
FILE SIZE...................   164,199
LATEST VERSION.....   1.0   November 1994
AVAILABLE FROM.....   wuarchive.wustl.edu: /pub/msdos_uploads/win_graphics
                                       The same file can also be found at the same location in another directory:
                                       /pub/msdos_uploads/graphics
STATUS.....................   Shareware $US 15
DOCUMENTATION....   Installation and start up instructions. Not much required - this is a very
                                       simple program.
FEATURES................   Begins to display image while decompressing, with your choice of either one
                                       line or a block of sixteen lines at a time.
COMMENTS..............   Ok guys, no more whining about not having a fast Windows JPEG viewer!
                                       No fancy features here - this is just a straight forward fast JFIF (JPEG)
                                       viewer. I tested it against LView Pro (16 bit) on a 150k file. ACDSee was
                                       able to complete the display in 11 seconds while LView Pro took 40 (both on
                                       the same 386 machine). The performance ratio was even better on some of
                                       the smaller files I tried. This is not even factoring in the fact that ACDSee
                                       begins to display the image immediately, displaying lines on the screen as
                                       they are decompressed whereas LView does not display anything until
                                       decompression is complete. Keep in mind of course that LView is feature
                                       rich, while ACDSee is not. ACDSee's biggest disadvantage is its inability to
                                       resize pictures. It does however allow you to grab oversized pictures with the
                                       mouse and quickly move them around on the screen. This program has just
                                       been released and is based upon original source code from the DOS viewer
                                       Q-Peg.

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NAME.........................   **LView & LView Pro**
PRIME PURPOSE......   Graphics image viewers
FILE NAME.................   lview31.zip & lviewp18.zip (both 16 bit software)
FILE SIZE...................   224,210 and 297,914 bytes
LATEST VERSION.....   LView: 3.1 September 1993
                                       LView Pro: 1.8 September 1994
AVAILABLE FROM.....   oak.oakland.edu: /pub/msdos/windows3
STATUS.....................   LView: Freeware.
                                       LView Pro: Shareware, single registration $US 30 plus shipping.
DOCUMENTATION....   On-line help included. The Pro version on-line help includes some good
                                       information on the jpeg format, suitability, compression capabilities, etc. It
                                       also contains speed test results comparing the 16 and 32 bit versions of this
                                       program.
FEATURES................   A graphics viewer capable of handling a wide range of popular formats (pro
                                       version): bmp/dib/gif/jpg/tga/tiff/pcx/pbm/pgm/ppm. It supports both gif87a
                                       and gif89a variations. The freeware version is more limited.
COMMENTS..............   LView is a very popular graphics viewer used primarily to view gif and jpg
                                       picture formats commonly found on the Internet. For most casual users there
                                       is not really a lot of difference between the two versions although the Pro
                                       version does now handle more file formats. The most significant advantage
                                       of the Pro version is that if you choose to register it you can receive a 32 bit
                                       version for either Windows 3.1 (if you have Win32s installed) or Windows
                                       NT systems which should be faster than the 16 bit versions. The author,

Leonardo Haddad Loureiro, is very active in continuing to develop this program (the Pro version).
Recommended

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33.3

NAME.........................	**WinECJ**
PRIME PURPOSE......	JPEG viewer
FILE NAME.................	winecj12.zip
FILE SIZE...................	45,084 bytes
LATEST VERSION.....	1.2 August 1993
AVAILABLE FROM.....	oak.oakland.edu: /SimTel/msdos/windows3
STATUS.....................	Freely distributed for private use.
DOCUMENTATION....	Startup instructions and on-line help.
FEATURES................	Slide show feature handles up to 12 images.
COMMENTS...............	Requires a 286 or better and Windows in a minimum 256 colors. This is a very basic JPEG viewer. This program is also found bundled with the WinWeb WWW browser.

34. VIEWERS - SOUND

The popularity of the World Wide Web and the need to install auxiliary sound players to enable Web browsers to play the various sound formats occasionally discovered has significantly increased the interest in these programs. In addition, if you're like me and don't have a sound card then you'll also need to install an additional driver capable of operating your computer's built in speaker, that little extra that Microsoft neglects to include with Windows. It's also listed in this section. Basic sound formats that you're most likely to run across are:

AU - Sun, NExT, or DEC
IFF - Amiga
MAT - Matlab
SND - Raw or NExT
WAV - Microsoft Windows standard sound format
VOC - Sound Blaster

Some of these formats apparently have a number of not always very compatible variations just to make things more interesting.

34.1

NAME.........................	**GoldWave**
PRIME PURPOSE......	Sound player, recorder, editor.
FILE NAME.................	gldwav21.zip
FILE SIZE...................	281,697
LATEST VERSION.....	2.11 August 1994
AVAILABLE FROM.....	oak.oakland.edu: /SimTel/msdos/sound
STATUS.....................	Shareware $US 25
DOCUMENTATION....	Fairly extensive, and includes on-line help.
FEATURES................	Supports the following sound formats: WAV, VOC, AU, IFF, SND, MAT. Impressive real time oscilloscope to visually display and edit sounds. GoldWave can enhance or distort sounds using its filter, reverse, invert and echo, etc., capabilities.
COMMENTS...............	This program requires a 32 bit processor - it will not run on a 286 PC. A sound card with driver or a PC speaker driver is also required to play sounds.

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34.2

```
NAME.........................   PlayWave
PRIME PURPOSE......    Sound player
FILE NAME................    playwv11.zip
FILE SIZE...................    18,737
LATEST VERSION.....    1.1
AVAILABLE FROM.....    ftp.cica.indiana.edu:    /pub/pc/win3/sounds    (or mirrors).
STATUS.....................    Shareware, voluntary $US 5 if you really like the program.
DOCUMENTATION....    Start up instructions.
FEATURES...............    Can play a WAV file in a repetitive loop.
COMMENTS...............    PlayWave is a very simple little program meant to do only one thing:  be a
                           better WAV player than the Microsoft Sound Recorder.  This program has
                           not been widely tested yet.
```

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34.3
```
NAME.........................   PC SPEAKER DRIVER
PRIME PURPOSE......    Driver to operate built in PC speaker.
FILE NAME................    speak.exe
FILE SIZE...................    22,312
LATEST VERSION.....    June 1992
AVAILABLE FROM.....    ftp.microsoft.com:    /Softlib/MSLFILES
STATUS.....................    Free for personal use.
DOCUMENTATION....    Installation instructions.
FEATURES...............
COMMENTS...............    The poor man's "Sound Blaster".  It does work adequately, but don't expect
                           any kind of quality sound from that little PC speaker. The .exe file is a self
                           extracting zip file which includes basic installation instructions.
```

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34.4
```
NAME.........................   WHAM    (Waveform Hold And Modify)
PRIME PURPOSE......    Sound player.
FILE NAME................    wham131.zip
FILE SIZE...................    138,130
LATEST VERSION.....    1.31   August 1993
AVAILABLE FROM.....    Try: ftp.microserve.com:    /pub/msdos/winsock
STATUS.....................    Donations of $20 welcome.
DOCUMENTATION....    Start up information and on-line help.
FEATURES...............    Plays AU, AIFF, IFF, VOC, WAV. WHAM can also record sound if you have
                           a sound card. Waveform display.
COMMENTS...............    An older program which is still widely used.
```

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34.5
```
NAME.........................   WPLANY  (Windows Play Any File)
PRIME PURPOSE......    Sound player.
FILE NAME................    wplny11.zip
FILE SIZE...................    28,788
LATEST VERSION.....    1.1    September 1994
AVAILABLE FROM.....    ftp.cica.indiana.edu:    /pub/pc/win3/sounds    (or mirrors).
STATUS.....................    Not mentioned.
DOCUMENTATION....    Minimal. Nothing much required since this is a very simple to setup and use
                           program which operates in the background.
FEATURES...............    Plays AU, IFF, SND, VOC, and WAV sounds.
COMMENTS...............    The proper drivers for your sound card or PC speaker must be loaded prior
                           to using WPLANY.  A fairly popular program often used as  the sound player
                           for Web browsers such as NCSA Mosaic (optional -  not included with that
                           package). A copy of this is  included in the Winweb browser package.
```

35. WIN32S

Standard Windows 3.1 is only a 16 bit operating system in spite of the fact that all PC's starting with the 386 have had 32 bit capability. Abandoning the DOS boat anchor and moving forward into a full 32 bit universe would bring substantial performance benefits. Unable as yet to deliver a new operating system, Microsoft has provided an interim solution, the Win32s 32 bit extension. When installed on a Windows 3.1 system it enables that system to run certain 32 bit programs which have been specifically created for Win32s. Such programs should run faster, but not as fast or with other features (crash protection) found in true 32 bit systems like Windows NT and IBM's OS2/WARP. The most recent version of NCSA Mosaic is the best example of a program written to Win32s. It cannot be run on plain Windows 3.1 although an older 16 bit version of Mosaic is still available. Eventually when Windows 95 becomes available the Win32s extension will become irrelevant and programs written for it will presumably (?) run on Windows 95. Until then, if you want to run the 32 bit version of NCSA Mosaic and other such programs you must install this extension.

35.1

NAME........................	**WIN32S**
PRIME PURPOSE......	32 bit enhancement to Windows 3.1
FILE NAME.................	win32s115a.zip (version 1.15a)
	pw1118.exe (version 1.20)
FILE SIZE...................	1,131,707 bytes (version 1.15a)
	1,244,633 (version 1.20)
LATEST VERSION.....	1.15a June 1994.
	1.20 October 1994
AVAILABLE FROM.....	ftp.microsoft.com: /developr/win32dk/sdk-public (version 1.15a)
	ftp.microsoft.com: Softlib/MSLFILES (version 1.20)
STATUS.....................	Distributed free to licensed users of Windows 3.1 or Windows For Workgroups 3.11
DOCUMENTATION....	Minimal
FEATURES................	
COMMENTS...............	This Microsoft program adds an extension to Windows 3.1 enabling it to run some of the 32 bit programs which are beginning to appear (such as all recent releases of Mosaic). For older version 1.15a if using pkunzip with this file, remember to use the "-d" option. i.e. "pkunzip -d win32s115a.zip" which will create two subdirectories, disk1 and disk2. Shut all your other Windows apps down and then run setup.exe in disk1. As a bonus, there is a free 32 bit game "Freecell". Being able to play the game confirms that this upgrade has been successfully installed. Newer version 1.20 has a simpler automated installation and automatically removes any unnecessary files from previous versions which it finds during installation. There are few programs which require this new version yet, but if installing for the first time go with the latest version. A minimum of a 386 processor (32 bit capability) is required. One disadvantage of Win32s is the additional burden it places on a systems resources which can be a problem on lower powered (processor and RAM) machines. **Note:** If it ever becomes necessary to remove Win32s from your system, the procedure is described in Microsoft document Q120486 dated Sept. 29,1994 which should be available from ftp.microsoft.com: /developr/win32dk/kb/Q120/4/86.txt.

OTHER INFORMATION

36.0

GETTING STARTED

Unfortunately, there is not a lot of information that's available on the Internet about Winsock and SLIP, and even less that's in an easy to understand format for someone just starting out. Most documents are either strongly oriented towards the networking side of the business and/or are aimed at the systems professionals. The best exception I've seen are the following two documents one by Frank Hecker and the other by Harry M. Kriz. In a similar vein, for those who are looking for a quick way to actually get up and running with the key Internet functions there are three omnibus installation kits available, or alternatively a book which comes with a free software disk.

Personal Internet Access Using SLIP or PPP: How You Use It, How It Works
For a very thorough, very basic and at the same time non-technical explanation of SLIP and SLIP applications, this document by Frank Hecker is highly recommended. It does not contain installation or configuration instructions, but does contain many references to other useful sources. Last updated September 26, 1994, 89,796 bytes. It is currently available by FTP from: cap.gwu.edu: /pub/internet/**slip-ppp.txt**

WINDOWS AND TCP/IP FOR INTERNET ACCESS
A good explanation of the services available on the Internet by Harry M. Kriz, technical details of connecting a PC to the Internet including an explanation of Winsock, and a review of a number of basic client applications with installation instructions. This includes information on both modem and network based connections. Filename: **wtcpip05.asc**.   Available by FTP from:

nebula.lib.vt.edu in directory   /pub/windows/winsock.

Last issue: release 05, June 21 1994. A hypertext version is also available on the Web at:

http://learning.lib.vt.edu/wintcpip/wintcpip.html

SCIENTIST FRIENDLY MS WINDOWS INTERNET KIT
In an effort to provide an easier introduction to Winsock software clients there have been a few efforts to supply a "bundle" of the major client packages in an easy to install format with detailed instructions. One of these is the SCIENTIST FRIENDLY MS WINDOWS INTERNET KIT. It is available by FTP from:

sol.dmp.csiro.au: /pub/internet/all

There are two files, **internet.exe** (2,181,885 bytes) which contains all of the programs and **install.txt** (12,834 bytes) which has the installation instructions and should be read first. The package currently includes Trumpet Winsock, WINQVT, NCSA Mosaic WWW client, HGOPHER, WINTRUMPET news reader, WS_FTP, TRMPTEL terminal emulator, and some miscellaneous accessories like pre-installed Mosaic viewers. These are all Shareware and Freeware packages.

These are all fine programs of their type, but are not necessarily the latest versions. They have been chosen primarily for reliability and ease of installation. Basic Windows and Internet knowledge is required. For anyone just getting started this package is worth considering.

INTERNET SLIP STARTER KIT
This is a starter kit put together by Jean van Eeden containing Trumpet Winsock, WS_FTP, WSARCHIE, WINTRUMPET news reader, HOPCHKW, NCSA Mosaic WWW browser, PINGW, FINGER, EUDORA14 mail, and EWAN terminal emulator. These are all Shareware/Freeware packages with installation instructions included. Again these are not necessarily the latest versions but have been chosen for reliability and ease of installation. A copy of Harry M. Kriz's WINDOWS AND TCP/IP FOR INTERNET ACCESS, listed above, is also conveniently included. This kit is available from:

   aztec.co.za: /pub/win3/Slip_Starter_Kit

There are two files to retrieve: **readme** at 6,497 bytes and **starter1.exe** at 1,407,302 bytes.

HIGHWAY 1.01 (from Centerline Computers)
This is another starter kit similar to the previous two, with the difference that this is Shareware from a commercial company with a registration fee of $US 15, or $US 10 for students. User manuals are $US 12 extra. Included are the following clients: WS_FTP, WS_Gopher, Eudora (mail), WINVN (news), EWAN (telnet), Mosaic Netscape and Trumpet Winsock. Centerline Computers has done an excellent job of creating a smooth installation program and putting this package together. They have chosen fairly recent versions of the clients included, another plus.

For your money you are essentially buying the easy configuration and automated installation - the applications themselves are primarily Freeware and are all readily available on the Internet. I am a bit bothered by the lack of disclosure about this. In the initial announcement Highway 1.01 is described as "an all new Internet connectivity program..." which the installation and configuration utility portion certainly is. But the actual clients are not, and due to a lack of specific information about them I initially misunderstood what was being offered, and assumed that these were "new" as well. This might be annoying to someone who pays connect charges to download this large package only to find that he already has everything it offers, or even more recent versions already installed. Highway 1.01 is available from:

ftp.csos.orst.edu: /ftp/pub/slip/highway/testdrive

There are 3 files: highway1.exe, highway2.exe, and readme.doc for a total of 2,681,397 bytes.

WINDOWS INTERNET TOUR GUIDE
Although the bookshelves are now jammed with guides to the Internet, Internet books oriented towards Windows are still extremely rare. This one by Michael Fraase and published by Ventana Press (344 pages) covers installation and use of basic Windows clients such as mail, Gopher, FTP etc. A disk included with the book contains the Chameleon sampler package and there is a special offer at the back of the book for those who decide to move up to the full commercial version. This is a well written and easy to follow book which is selling for about $US 25.

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37.0
ADDITIONAL INFORMATION
One of the friendlier aspects of the Internet is the existence of the Frequently Asked Questions (FAQ) documents which provide not only an invaluable guide for the newcomer but a source of reference information for everyone on a huge range of Internet related topics. Specifically, for those looking for more information about Winsock, the following are available. Unfortunately, these tend to be very

technical and not very helpful for beginners. The "Demon" documentation also listed is somewhat more helpful although more oriented towards users in Great Britain. If you're already up and running and in particular you have WWW access, Craig Larsen's List provides the means of obtaining additional software and information and expanding your capabilities.

1. Bernard Aboba's **"comp.protocols.tcp-ip.ibmpc Frequently Asked Questions (FAQ)"**
Very well done, although somewhat technical and oriented towards professionals. This is mostly a TCP/IP FAQ with extensive coverage of currently available TCP/IP networking software, but Winsock is covered in a number of sections. Last update October 1994. Available through:

FTP: ftp.netcom.com   /pub/mailcom/IBMTCP/ibmtcp.zip (79,454 bytes)
WWW: http://www.zilker.net/users/internaut/update.html

2. Frequently Asked Questions About Windows Sockets Version 1.1
Fairly technical and oriented towards professionals this FAQ has been put together by Mark Towfiq and is available from:
sunsite.unc.edu: /pub/micro/pc-stuff/ms-windows/winsock
The filename is just FAQ.
Last update December 1993. (15,317 bytes)

3. "DEMON" Documentation
"Demon" is the nickname of a large Internet site located in Britain. Some of the documentation available there is worth a look, although be forewarned that it is sometimes customized with unique Demon references for their users which may not be relevant to others. Most of these documents are regularly updated. The site address is: disabuse.demon.co.uk. Directory/filename/comments:

/pub/doc/os/windows.txt   How to set up Windows software for the Internet.
/pub/doc/general/dis-meta.faq   Contains references to other documents and books.
/pub/doc/os/winmos.txt   Configuration of Mosaic for Windows.
/pub/doc/os/wintcp.txt   Advanced configurations for Windows software TCP/IP &
                                 dialing.

4. WINSOCK APPLICATION FAQ/LIST
This is a regularly updated listing of Winsock applications that are available for FTP. A more broadly based listing than mine, Craig Larsen covers client, daemon and miscellaneous Winsock software with file, source information and comments. The email route will trigger a return email copy of his listing. The WWW access is particularly recommended because it provides capability to retrieve the software being described. Available by either :

Email to: info@LCS.com
Subject: FAQS (put nothing in the letter body)

Through WWW URL: http://www.LCS.com/faqhtml.html

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38.0
TRUMPET WINSOCK

The previous release of Trumpet Winsock was 1.0a and it is available under a couple of names from different locations such as:

```
disabuse.demon.co.uk:    /pub/ibmpc/winsock/stacks/trumpwsk
twsk10a.zip    120,569 bytes

ftp.cica.indiana.edu        /pub/pc/win3/winsock
winsock.zip    120,569 bytes
```

Unfortunately, apparently due to some bugs in this version, the odd Winsock client does not properly work with this version. It has however been around for a while and proven to be fairly durable and widely popular for establishing a SLIP connection.

The newest version of Trumpet Winsock is 2.0b released in November 1994 and it is available from many locations including:

```
ftp.trumpet.com.au:    /ftp/pub/winsock
twsk20b.zip    179,015 bytes

oak.oakland.edu:    /pub/msdos/winsock
twsk20b.zip    179,015 bytes
```

This Australian site is the prime release location, but it can sometimes be difficult to access and generally can only handle 20 connections at a time. The biggest advantage of the most recent version is that it now has a functioning PPP capability if your server will support it.

This latest full release contains improvements in stability and operability. Worth noting: addition of PPP support (but no CHAP or LQP yet) and firewall support for SOCKS 4.2 . Keep in mind though that because this version is so new it is still a relatively unproved product.

This Shareware version has a registration cost of $US 25.00. The unregistered version is apparently crippled and has a limit of 20 sessions (?).

An alternative means of obtaining a SLIP / PPP connection is through the Chameleon Sampler listed in the Commercial Demo Packages section.

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39.0
OPTIMUM TRUMPET SETTINGS

There has been considerable discussion and controversy over what the optimum settings should be for Trumpet Winsock to maximize data transfer speed. There have been some efforts to calculate what the theoretical best settings should be, but the results tend to be at odds with real world observation. The best information I've seen was posted recently to newsgroup alt.winsock by Keith Rowland who conducted a series of experiments, with results as follows:

TRANSFER SPEEDS AT DIFFERENT TRUMPET SETTINGS WITH DIFFERENT FILE TYPES

TRUMPET SETTINGS			300K ZIP		330K DRV		200K TEXT	
MSS	MTU	RWIN	UL	DL	UL	DL	UL	DL
200	240	800	1.32	2.69	2.39	2.43	2.07	
512	552	2048	1.63	1.58	4.27	3.64	3.10	2.91
984	1024	2952	1.63	1.59	4.26	3.51	3.19	2.75
1024	1064	4096	1.63	1.48	3.92	4.16	3.20	2.99
1460	1500	8192		1.47	3.97			

Speeds are kilobytes/sec (kbps).
UL= upload speed
DL= download speed
ZIP = zip compressed file
DRV = driver execution type file
MTU = Maximum Transmission Unit
RWIN = TCP Receive Window
MSS = TCP Maximum Segment Size

Keith's conclusions were that *for his particular situation*, the 512/552/2048 or 984/1024/2952 values were best. These numbers are not being published here as a recommendation that these settings would be best for everyone but rather as an indication of what should be done to determine your optimum settings, since different results might be obtained with differing hardware and software. Results might also vary depending on network traffic and the servers you commonly access, your hardware setup and other software configurations.

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40.0

POPULAR WINSOCK SOURCE LOCATIONS

There are a number of Internet sites which carry a fair amount of Windows/Winsock software including most of the packages listed above (but not always the latest version). These sites can be accessed and the software downloaded through FTP. The most significant site is CICA:

HOST NAME:	ftp.cica.indiana.edu (US)
IP NUMBER:	129.79.26.27
DIRECTORY:	/pub/pc/win3/winsock
GOPHER ACCESS:	gopher.cica.indiana.edu
WWW URL:	http://www.cica.indiana.edu
COMMENT:.	A major source for Windows software in general, and often difficult to log into because of its popularity. Downloading the various README files is the best place to start to identify what's available and in which directories if interested in other areas.

As well, there are a number of other locations which "mirror" or carry a copy of the CICA directories and files. These are often easier to access than CICA which is frequently busy.

 USA Sites:
     mrcnext.cso.uiuc.edu [128.174.201.12]   (new mirror site in Illinois, updated nightly)
     wuarchive.wustl.edu   [128.252.135.4] (Missouri)
     gatekeeper.dec.com   [16.1.0.2]
     ftp.cdrom.com   [192.153.46.2] (California)
     polecat.law.indiana.edu [129.79.131.170]
     ftp.marcam.com   [198.102.216.30]

Non-USA Sites:
     ftp.cc.monash.edu.au [130.194.1.106] (Australia)
     nic.funet.fi   [128.214.6.100] (Finland)
     ftp.uni-paderborn.de   [131.234.2.32] (Germany)
     ftp.uni-stuttgart.de   [129.69.8.13]
     ftp.uni-koeln.de   [134.95.100.208]
     ftp.uni-regensburg.de   [132.199.1.17]

```
ftp.iij.ad.jp          [192.244.176.50] (Tokyo)
ftp.nectec.or.th        [192.150.251.33] (Thailand)
ftp.technion.ac.il      [132.68.1.10] (Israel)
nic.switch.ch           [130.59.1.40] (Zurich)
src.doc.ic.ac.uk        [146.169.17.5] (London)
ntu.ac.sg               [155.69.1.5] (Singapore)
nctuccca.edu.tw         [192.83.166.10] (Taiwan)
ftp.cyf-kr.edu.pl       [149.156.1.8] (Cracow, Poland)
```

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41.0

TIA - The Internet Adapter (tm)

As stated in my introduction, in order to use Windows packages on the Internet a special "SLIP" connection from an Internet provider is required. Many providers charge extra for this type of connection, and a few do not offer it at all. Recently an alternative has been offered, a commercial software package developed by Cyberspace Development Inc., which operates on a user's Unix shell account and emulates a SLIP account. This innovative product is called TIA, The Internet Adapter, and it has been very controversial.

Major Advantage of TIA:
1. Operates through the basic Unix shell account providing the user with SLIP access without the need to pay surcharges for true SLIP account. It provides access where SLIP accounts are not available or very expensive. TIA is a very low cost package to purchase.
2. Although there may be some problems setting it up and getting it to work initially, it does appear to work well and has generated strong support from many of its users.

Major Disadvantages of TIA
1. Increases the burden on the provider's server more than a SLIP or straight Unix shell account would, although to what degree is arguable (and is being argued). Although this statement is used by system administrators against TIA, supporters of TIA feel that the real truth lies is in the next item.
2. From the provider's point of view, the use of TIA deprives them of the incremental revenue gained from selling SLIP account upgrades.
3. TIA is currently not compatible with some minor Winsock packages such as Ping and CU-SeeMe, nor does it currently support PPP connections (although this is being worked on).
4. To keep costs low, technical support is only available for site licenses, and not individual users, although they do receive bug fixes when issued.
5. Because TIA is not a true SLIP connection, when logging on the user does not receive an IP number and thus it will be impossible to operate a remote server. (A permanent non-functional dummy number is used to satisfy client applications.)

Considerable documentation on TIA, including a FAQ, is available from:
FTP: marketplace.com: /tia
WWW: http://marketplace.com/0/tia/tiahome.html

This location is also accessible by gopher. TIA operating software is available from the same location although a license code is required to actually use it. Free evaluation licenses good for 14 days are available. If you then decide to buy, single user licenses are only $US 25. Host and site licenses are also available. It is suggested that as a first step you should talk to your Internet service provider to get their approval to use TIA.

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42.0

GROWSTUB ERROR

People using the Microsoft mouse with driver version 9.01 are experiencing a "growstub" error message when booting up Mosaic. The error is apparently caused by a conflict between Microsoft's Win32s 32 bit software extension program and the Microsoft mouse driver. It's just one of those cases where the left hand didn't know what the right hand was doing. Anyway, the solution is to upgrade to the version 9.01b mouse driver available by FTP from:

ftp.microsoft.com: /Softlib/MSLFILES/HD1061.exe

This file includes a new pointer.dll which fixes the problem.

An alternate solution according to Microsoft is to remove "pointer.exe" from the load= line in the win.ini file and then restart Windows.   Disabling the pointer.dll also deactivates the advanced features of the mouse driver: magnify, snap-to, screen wrap and locate.

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43.0

ERROR: "Unhandled Exception 0xC0000005"

There are widespread reports of a problem with version 1.15 of the Win32s 32 bit extension when launching version 2.0a7 of NCSA Mosaic. The result is an error message: "Unhandled Exception 0xC0000005"

Up until recently the recommended solution which seemed to work for most was to copy (copy, not move) file ctl3dv2.dll from windows/system directory to windows/system/win32s and then rename this new file ctl3d32.dll.

Concern about creating this dummy file which someday might affect other programs which really need it has led to a change in advice from the NCSA Mosaic group. It is now recommended that you obtain the real ctl3d32.dll from the NCSA FTP server and install it in your windows/system/win32s directory. Available from:

ftp.ncsa.uiuc.edu: /Web/Mosaic/Windows

Justified or not, problems such as this have considerably diminished the appeal of NCSA Mosaic.

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44.0

EUDORA DOCUMENTATION

Qualcomm Inc's mail package Eudora is one of the better and more popular Internet mail readers currently available. Although the registered version comes with full documentation, the basic free version contains almost nothing. Fortunately, most of the features are fairly intuitive. However, if needed, there are some supplementary manuals available through the Internet.

1. The Macintosh version of the manual is available from Qualcomm Inc. by FTP from:

ftp.qualcomm.com: /quest/windows/eudora/documentation/14manual.exe

It's currently about 96,851 bytes and much of its information is equally applicable to the PC version. This self extracting file is a MS Word 2.0 document so you will need a word processor capable of handling this format.

2. A third party manual for the PC and Mac versions is accessible by FTP from:

ftp.soc.staffs.ac.uk: /pub/eudora_http

There are about 30 files there in HTML format (.htm) which can be downloaded and viewed offline on a web browser such as Mosaic. The corresponding graphics images are located one level further down in subdirectory /gifs   and there are about 111 of those. Altogether there are about 660,000 bytes to retrieve. Wherever you decide to put the HTML files on your system be sure to put the gif images in a corresponding gif subdirectory one level down so that they can be located and displayed.

Mark Branigan of the Staffordshire University, School of Computing has done an excellent job of setting this up. The text is applicable to both Windows and Mac versions, but the graphics shots are all Windows.

Instead of downloading these files, if you simply want to look at them they can be accessed through the WWW at:

http://www.soc.staffs.ac.uk/eudora/contents.html

To save on connect charges overall, I would recommend downloading so they can be referred to offline as needed from time to time. There are plans by Mark Branigan to update this documentation to match the more recent Eudora releases. For North American's, there is a mirror site at:

http://www.csos.orst.edu/slip/highway/docs/eudora/contents.html

3. An updated third party manual for the PC has just become available. Leopoldo Saggin has taken the previous item and revised it, bringing it up to date with Eudora version 1.42b16. His version is available through the WWW from:

http://cribi1.bio.unipd.it/html/eudora/contents.html

Unfortunately it cannot be downloaded by FTP. This manual is still about one version behind the latest Eudora package, but fortunately Eudora does not significantly change from one version to the next. This Italian site can be difficult to access (slow) from North America.

4. Eudora Freeware vs Commercial versions. While we're on the subject of Eudora, here's a brief summary of the key incremental features of the registered version of Eudora:

- Direct Unix dialup access (no Slip/PPP required).
- Supports UUencode.
- Technical support and on-line help.
- Return receipt notification
- Message filtering.
- Multiple signatures.

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45.0

PENTIUM SERIAL PORT PROBLEMS

There have been the occasional posting from people having strange problems with pentium machines when trying to operate communications software. If you are using a pentium based machine with a 16550 UART chip and Windows For Workgroups installed and you are experiencing problems with

the system hanging when using the serial communications port then consult Microsoft Product Support Applications Note "WG101: Updated serial.386 driver for Windows For Workgroups." which provides a replacement serial driver for WFW. The product note and new driver are available from:

ftp.microsoft.com: /Softlib/MSLFILES/wg1001.exe

The product note was dated March of 1994 and so the problem is only likely for those running older versions of WFW.

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46.0
SLIP vs PPP
The most recent version 2.0 of Trumpet Winsock which was just released has added support for the PPP protocol. As well, Microsoft in announcing its future plans has indicated stronger support for PPP rather than SLIP. These events are generated widespread interest in the PPP protocol. What is it? Why is it better than SLIP? Or is it? There are some unrealistic expectations that it must surely be faster than SLIP to have picked up this support. It is important to begin with the understanding that both SLIP and PPP are protocols for handling the transmission of packetized data through a serial connection between two devices. To answer some of the questions about the differences between the two I have put together a little chart summarizing these.

CSLIP = Compressed SLIP (also known as header compression and Van Jacobson compression)
IP = Internet Protocol
IPX = Internetwork Packet Exchange (Novell networking stack)
PPP = Point to Point Protocol
SLIP = Serial Line Internet Protocol

	SLIP	PPP
Compression	None originally. Compressed SLIP (CSLIP) added later as an option which must be supported by both the client and host. Use of CSLIP requires manual intervention and configuration, although for the same client/host it need only be done once.	Yes. Automatically negotiated as part of the connection process.
Connection Configuration	Manual effort required for IP settings, or separate programs running to configure these (such as in a dialer log-in script).	IP configuration part of the connection process and is transparent to the user.
Error Detection	None. SLIP is vulnerable to noisy lines.	Built in error detection.
Industry Support		Although Microsoft out of necessity plans to support both clients in upcoming releases, only a PPP server is being implemented in Windows NT 3.5 (Daytona).
Protocol handling	IP only.	Multi-protocol handling, including IP and IPX
Speed		In the few actual tests reported

		comparing SLIP and PPP, there was no significant difference either way. A PPP frame does contain additional protocol overhead (some for error correction) which might theoretically result in very slightly slower transmission.
Standards	A "de facto" standard only. It is not an Internet standard - i.e. not controlled or reviewed by any standards group. In the early 1980's someone used it, and then other people used it and now today many people use it.	PPP is an official Internet standard protocol.
Transmission circuit	Asynchronous lines.	Asynchronous and synchronous lines.

One point to keep in mind is that the connection choice of either SLIP or PPP will have no effect on your Winsock applications. Your current Winsock programs will all function normally no matter which method you use.

Merry Christmas!

Ed Sinkovits
Internet: edsink@mail.mbnet.mb.ca
CompuServe: 73003,3065