

The Winsock Client Listing

February 1995

Introduction: The Winsock Client Listing

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** with an Internet provider. Some providers charge extra for this feature. If this is not available or too expensive from your service provider, the innovative program TIA (The Internet Adapter) provides another option.
3. A special communications package or a combination of *compatible* packages installed on your PC which can provide the following:
 - a. Modem **dialing capability**
 - b. Support for a **SLIP or PPP** connection.
 - c. Support for the Winsock standard (i.e. a **winsock.dll** file included).

Unfortunately most of the regular commercial and Shareware communications software commonly used to access other on-line services do not currently have these features and therefore cannot be used for a Windows connection to the Internet. This is quite surprising considering how popular the Internet has become and reflects poorly on these commercial software providers. The best communications package currently available which does work is Peter Tattam's Shareware package **Trumpet Winsock**. It has both manual and automated dialing, supports both SLIP and PPP (in the latest versions) and includes a winsock.dll file to enable Winsock compatible programs to function. The automated dialing does require you to create a suitable and rather archaic login "script", or alternatively to use a better separate stand alone dial program. See the Index for the chapter providing additional information on the very popular and widely used Trumpet Winsock.

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", a follow 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 various sections in this listing.

Why Windows ?

Typically when you sign up for an Internet account from a service provider you receive a Unix shell account. This account on your provider's server gives you access to a mail program, Usenet news, Archie, File Transfer Protocol, Gopher, etc. In fact everything you will ever need is usually available to you through your shell account. Why then Windows?

1. Reduction in some connection charges. A shell account is an on-line account - you must be logged on to use it. Some Windows programs enable activities to be done offline. For example, while you read your mail on a shell account you are paying connection charges for the time taken. Windows mail programs allow you to read and compose mail offline, connecting only long enough for uploading and downloading.

2. Windows may be a familiar environment. If you are comfortable working with Windows with other applications in the past then Windows provides a friendlier environment than Unix based programs with their archaic keyboard commands and unfriendly interfaces.

3. Freedom of choice. There is an increasingly wide variety of Winsock software available. With this freedom of choice, if one program doesn't have the features or performance you want you can look for another to install.

4. Multimedia capabilities. Sound. Graphics. Video.

5. Multitasking. You can download a file with FTP from a remote site, download your mail and be sending replies, and be browsing through newsgroup postings all at the same time with Windows software. The ability to perform multiple operations with different Winsock programs simultaneously over the same single modem connection is one of the key features of the Winsock standard. Of course if a single problem develops with just one of the programs then crash! - your whole system will probably come down. The more applications you try and run the greater this risk. This major flaw in the current Windows 3.1 operating system will be considerably improved with Windows 95.

The downside to all these advantages is the sometimes considerable setup and configuration time which may be required for each Windows package. Most of the above advantages are of course equally applicable to other graphical based platforms such as Mac and OS2/Warp. The Winsock software described in this listing is only usable with Windows, or with OS2/Warp through its Windows interface, although not all Winsock programs will work with Warp.

One final note. The Winsock standard is currently set at version 1.1. This version number refers to the documented industry standard only. Individual software programs which comply

with this standard have their own separate version numbers. For example Trumpet Winsock is available in an older version 1.0 (SLIP only) and in a newer version 2.0 (SLIP/PPP). Both of these *comply with* the Winsock 1.1 standard. The version number of any individual Winsock communications program is more a reflection of its other features and capabilities and does not change the fact that it complies with the 1.1 standard. There is often confusion between the version number of the Winsock standard and the version numbers of programs which are designed to use that standard.

Some Details About 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.

B*U*G*S. Bugs are almost inevitable 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.

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.

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. Current recommendations are:

Trumpet Winsock - dialer, SLIP/PPP, Winsock

Chameleon Sampler - starter package including dialer, SLIP/PPP,
Winsock.

WSIRC - Internet Relay Chat client

WSARCHIE - Archie file search client

WS_FTP - File transfer client

WSGopher - Gopher client

Eudora - email
Pegasus - email
Trumpet news Reader - news reader
WinVN - news reader
Netscape - WWW browser
NetDial - telephone dialer
ACDSee - image viewer
LView Pro - image viewer

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

By FTP: ftp.cica.indiana.edu: /pub/pc/win3/winsock
 oak.oakland.edu: /SimTel/win3/winsock
 mrcnext.cso.uiuc.edu: /pub/win3/winsock (CICA mirror)

By WWW: ftp://ftp.cica.indiana.edu/pub/pc/win3/winsock
 ftp://mrcnext.cso.uiuc.edu/pub/win3/winsock (CICA mirror)

These locations also carry many of the programs referenced in this listing. The CICA site is difficult to access. Mrcnext is a CICA mirror whose files are updated daily from CICA. Unfortunately it does not mirror at least two of the CICA directories I reference and that is /sounds and /graphics. For other mirror sites see the chapter appropriately titled Other Information.

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WINSOCK APPLICATIONS

1. CHAMELEON

The widespread popularity of these packages from NetManage merits their own section. One is an Internet beginner's package, available for free, which includes all the basic necessities for getting started on the Internet. The other is a full professional networking package, loaded with advanced features, but considerably more complicated, and not free.

1.1

5

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..... August 1994
AVAILABLE FROM..... ftp.netmanage.com: /pub/demos/chameleon
STATUS..... Demo.
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. These are both intended for operation under Windows 3.1 and Windows 3.11, but not Windows NT.

1.2

NAME..... **Chameleon Sampler**
PRIME PURPOSE..... Commercial sampler package with built in Slip, Winsock and basic clients.
FILE NAME..... sampler.exe
FILE SIZE..... 754,372 bytes
LATEST VERSION..... January 1995
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 over time this has proven itself to be 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 Global Phone Project**
PRIME PURPOSE..... 2 way Internet voice communications.
FILE NAME..... ig16_102.zip This is the 16 bit version. An 8 bit version igp8_102.zip is also available at the same location.
FILE SIZE..... 90,371 bytes
LATEST VERSION..... Internet Global Phone version 2.1 BETA
UMIST distribution version 1.02 December 1994
AVAILABLE FROM..... wuarchive.wustl.edu: /pub/MSDOS_UPLOADS/winsock
STATUS..... Limited Freeware.
DOCUMENTATION.... Basic start up and use instructions.
FEATURES.....
COMMENTS..... Uses voice compression technology. Messages must be recorded, compressed, then sent. Will work with a 386 processor although sound quality is better with a more powerful machine.

2.2

NAME..... **Internet Voice Chat**
PRIME PURPOSE..... 2 way Internet voice communications
FILE NAME..... ivc11.zip
FILE SIZE..... 107,613 bytes
LATEST VERSION..... 1.1 December 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..... IVC allows live two way voice communications over a network such as the Internet. It requires microphone, sound card, 386 or better processor, separate file vbrun300.dll, etc. According to the author the new version is now fully compatible with SLIP and PPP. If using Trumpet it does require version 2.0B (older versions of Trumpet are not recommended). There have been a number of other improvements made. It does yet not support multiple party conference calls.

2.3

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.

2.4

NAME..... **Sticky**
PRIME PURPOSE..... Electronic notes exchange.
FILE NAME..... sticky07.zip
FILE SIZE..... 360,009 bytes
LATEST VERSION..... .7 January 1995
AVAILABLE FROM..... ftp.cica.indiana.edu: /pub/pc/win3/winsock (or mirrors)
STATUS..... freeware.
DOCUMENTATION.... Basic installation instructions and on-line help..
FEATURES.....
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. New development of this program has been taken on by John Dovey. 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>

2.5

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.

2.6

NAME..... **WinTalk**
PRIME PURPOSE..... Two way on-line communications
FILE NAME..... wtalk12.zip

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.

3.2

NAME..... **Windows Socket Test**
 PRIME PURPOSE..... Socket tester/debugger.
 FILE NAME..... wsatest.zip
 FILE SIZE..... 83,422 bytes
 LATEST VERSION..... November 1993 ?
 AVAILABLE FROM..... ftp.cica.indiana.edu: /pub/pc/win3/winsock (or mirrors)
 STATUS..... Unknown.
 DOCUMENTATION.... None.
 FEATURES.....
 COMMENTS..... A very interesting program. It seems fairly straightforward although some documentation would have been nice. I wish I knew more about this, including the developer's name.

3.3

NAME..... **X-Ray/Winsock**
 PRIME PURPOSE..... Winsock API trace/debugger for Windows 3.1
 FILE NAME..... xraywins.zip
 FILE SIZE..... 226,343 bytes
 LATEST VERSION..... 1.2 November 1994
 AVAILABLE FROM..... ftp.netcom.com: /pub/sstinc
 STATUS..... Shareware. registration \$US 79.95
 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

File searches on the Internet are made easier through the use of **Archie** programs which can send queries to special Archie servers. The search can be done for a very specific file/program name (such as a search for "winter09") or for some fragment of that name (such as a more broadly based search for "winter"). The server will return information listing "anonymous" FTP sites which carry the corresponding file name. Most Archie servers are located in Europe, North America and the Pacific Rim. Since Archie servers are usually backlogged with a large number of requests during the local prime time hours, knowledge of world geography and time zones comes in handy in jumping to other sites elsewhere in the world which are more likely to be available. Ah yes, this is your punishment for snoozing through those grade school geography classes. Note that the information available on different Archie servers is not necessarily the same and sometimes a search of more than one Archie server may be necessary. Note also that information available on Archie servers is not complete and represents only a fraction of the files/locations on the Internet.

File Transfer Protocol (FTP) is a means of transferring files between your PC and a remote

server. Typically this is through so called "anonymous" FTP where you log on with user id "anonymous" and give your email address as the password. **Never** give your real password when logging on to an anonymous server. Anonymous FTP is a method many Internet sites use to allow users who don't have an actual account with them to access their files. Most usable file at these sites will be found in the /pub directory.

Typically you will use an Archie program to search for a known file you are looking for if you don't already know where to find it, and then an FTP program to retrieve it.

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..... **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/winsoc (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. FSP operates similar to a Web browser - it only logs on to a site long enough to retrieve necessary information and thus provides a minimal burden on that site. It's ability to repeatedly log on to a site as necessary gives it a natural ability to recover from connection interruptions. Once touted as a potential replacement for FTP, it should perhaps be renamed the "Sleeping Protocol". It just doesn't seem to be going anywhere.

4.2

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/winsoc (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.

4.3

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
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

4.4

NAME..... **WS-FTP**
PRIME PURPOSE..... File retrieval (FTP)
FILE NAME..... ws_ftp.zip
FILE SIZE..... 116,700 bytes
LATEST VERSION..... January 21, 1995. **Note:** Unfortunately the various versions to date are indistinguishable by file name, but latest version is always in the site listed below. If you are looking elsewhere for this program, check the file size or file date with my information to avoid downloading an older version.
AVAILABLE FROM..... ftp.usma.edu: /pub/msdos/winsock.files
This site can be hard to access.
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..... The best and most popular FTP program in use today. See also the matching file search package WSARCHIE above. A new version is also currently under development specifically for Windows NT, see below.

Recommended

4.5

NAME..... **WS-FTP32** [Windows NT version by John Junod]
PRIME PURPOSE..... File retrieval (FTP)
FILE NAME..... ws_ftp32.zip
FILE SIZE..... 142,534 bytes
LATEST VERSION..... January 1995
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 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. It's nice to have both the 16 and 32 bit versions installed because you can conveniently use them to initiate two simultaneous file transfers from different servers. Incidentally, there is no advantage in running this 32 bit version in a 16 bit machine even with Win32s. File transfers will not be faster.

 4.6

NAME..... **WSFTP32** [Windows NT version by Larry Kahn]
 PRIME PURPOSE..... File retrieval (FTP)
 FILE NAME..... wsftp32.zip
 FILE SIZE..... 238,289 bytes
 LATEST VERSION..... January 1995
 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..... This latest version now supports drag and drop.
 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 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. 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).

5.2

NAME..... **FINGER 2.1**
PRIME PURPOSE..... Finger query
FILE NAME..... finger21.zip
FILE SIZE..... 73,739 bytes
LATEST VERSION..... 2.1 November 1994
AVAILABLE FROM..... oak.oakland.edu: /SimTel/win3/winsock
STATUS..... Freeware (limited)
DOCUMENTATION.... Startup and use instructions.
FEATURES..... Enables multiple finger sessions at the same time - includes timer for re-fingering opened finger sessions every 1-60 minutes.
COMMENTS..... From Zoran Dukic, a contribution from Europe. Fairly straight forward and easy to use as are most finger clients.

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..... No information - not specified by the author.
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.

5.4

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.....

5.5

NAME..... **WS Finger**
PRIME PURPOSE..... Finger query
FILE NAME..... wsfng14.zip
FILE SIZE..... 62,014 bytes
LATEST VERSION..... 1.4 December 1994
AVAILABLE FROM..... sparky.umd.edu: /pub/winsock
STATUS..... Shareware \$US 10
DOCUMENTATION.... Installation instructions, on-line help. A list of Whois servers is also included.
FEATURES..... A major new rewrite. Support now included for Finger, Whois and command line fingers, Finger address book, history, save to file, etc.
COMMENTS..... From Tidewater Systems, Shareware as of version 1.2. Previous

versions Freeware. Nice new icon.

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

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..... ftp.cica.indiana.edu: /pub/pc/win3/misc (or mirrors)
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..... According to author Samuel Ross: " The goal of MUD Man is to end the laborious typing required to move around and perform actions. Once initialized, every command can be issued from the click of a button."

6.2

NAME..... **MudWin** (Mud Windows Client)
PRIME PURPOSE..... MUD client
FILE NAME..... mudwin.zip Unfortunately the exact same file name continues to be used for each new version released.
FILE SIZE..... 68,804
LATEST VERSION..... 1.0.5 beta January 1995
AVAILABLE FROM..... Try: ftp.microserve.com: /pub/msdos/winsock
STATUS..... Copyright by the author but no mention of any charges for use.
DOCUMENTATION.... Extensive start up and usage information.
FEATURES.....
COMMENTS..... Nice graphical toolbar. Continues to be developed by author Sam Denton.

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.... Basic installation and use instructions.
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.

6.4

NAME..... **MUTT(tm) Lite** (Multi-User Trivial Terminal client)
PRIME PURPOSE..... MUD/MUSH/MU* client.
FILE NAME..... mutt_01i.zip
FILE SIZE..... 34,436 bytes
LATEST VERSION..... .1i December 1994
AVAILABLE FROM..... caisr2.caisr.cwru.edu: /pub/mud
ftp.graphcomp.com: /pub/msw/mutt
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 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. More information on MUTT is available through the WWW from:
<http://www.graphcomp.com>

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.

6.6

NAME..... **VWMUD Master**
PRIME PURPOSE..... MUD client
FILE NAME..... vwmud110.zip
FILE SIZE..... 57,821 bytes
LATEST VERSION..... 1.1 December 1994
AVAILABLE FROM..... xmission.com: /pub/users/kslewin
ftp.primenet.com
STATUS..... Basic package now Freeware. Optional registration brings 6 months of support and updates for \$US 15. Source code \$US 50.
DOCUMENTATION.... Start up instructions and on-line help. On-line help includes Scott Geiger's listing of 340 MUDS, MUSHES and MOOS.
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.

6.7

NAME..... **WinWorld** (formerly Winfugue)
 PRIME PURPOSE..... MU* client
 FILE NAME..... wworld02.zip
 FILE SIZE..... 72,771 bytes
 LATEST VERSION..... .2 alpha November 1994
 AVAILABLE FROM..... ftp.mgl.ca: /pub/winworld
 STATUS..... Donationware - contributions welcome but not mandatory.
 DOCUMENTATION.... Very basic startup and installation instructions.
 FEATURES..... Auto-login, multiple simultaneous worlds - but only one world
 displayed at a time (no window clutter!), definable function keys, built
 in bug report mailer (doesn't require any other software)
 COMMENTS..... Program formerly known as Winfugue. 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

Perhaps because Winsock is such a new standard, outside the MUD grouping there have been few games developed so far. In time we can expect to see others. Perhaps someday even.....DOOM.

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.

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.....

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..... According to the program's author: "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 friendly **menu based system** to take us to places we would otherwise have difficulty reaching. The Gopher system was originally developed at the University of Minnesota.

Gopher programs also provide easy access to a number of sites which contain Veronica search programs which enable you to do a broadly based search for all information, files, graphics etc. which correspond to the search word. The results of the search are listed and specific selections can then be retrieved/viewed/saved. This search and retrieval is more broadly based than the Archie/FTP system in that search words in the Gopher system do not have to correspond to a file name, and the results displayed include document based files which would not be picked up by Archie.

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.

8.2

NAME..... **Gopher Book**
 PRIME PURPOSE..... Gopher search tool
 FILE NAME..... gophbook.zip or gophbk11.zip (at CICA)
 FILE SIZE..... 888,666 bytes
 LATEST VERSION..... 1.1 May 1993
 AVAILABLE FROM..... ftp.cica.indiana.edu: /pub/pc/win3/winsoc (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

LATEST VERSION..... 1.2 December 1994
 AVAILABLE FROM..... dewey.tis.inel.gov: /pub/wsgopher
 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..... This is one of the better gopher clients currently available although it does not support firewalls. Works with Windows NT Daytona and OS/2 Warp.

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.

9.2

NAME..... **NSLOOKUP**
 PRIME PURPOSE..... Name server 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.

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.....

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/winsoc (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. Unfortunately, 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 1,210,593
 amadeus2.zip 1,336,528
 amadeus3.zip 425,323
 LATEST VERSION.... .83 beta January 1995
 AVAILABLE FROM.... iicm.tu-graz.ac.at: /pub/Hyper-G/pc-client/amadeus.083
 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 scrolling down the pages with 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 development of electronic mail (email) and its rapid deployment and availability to the general public will have an enormous impact on our lives for years to come.

System info stuff. There are two types of servers necessary in most mail systems: **SMTP** and **POP**. The SMTP (Simple Mail Transfer Protocol, or as I prefer: Send Mail To People) server is primarily used to deliver mail. When you originate an email message it is sent via your local SMTP server which passes the message on to a chain of SMTP servers in other locations which route the message to the end destination. Unfortunately, the SMTP servers are only capable of delivering mail. If you are not connected to the network when delivery is attempted they will go away and try again later, perhaps repeatedly every few hours for several days or for however long they have been programmed. Eventually they give up and bounce the mail back to the sender as undeliverable. To overcome this problem most sites also use a POP mail server (current vintage POP3). The POP (Post Office Protocol, or as I prefer: Post Office Pickup) server acts like a mailbox, receiving incoming mail and storing it until such time as the user initiates retrieval/viewing.

In connection with email one issue cannot be emphasized enough. **There are major security risks with the current Internet mail system.** There are three points worth remembering. Let's call these the three monkeys, or perhaps more appropriately, the three mail monkeys:

Monkey #1. There is no guarantee that any mail to or from you will not be intercepted and read by others while it is in transit. Remember that it may pass through many sites, many potential "hands" while in route. Even when it reaches its destination it may be vulnerable to hackers while stored on the POP server. For this reason confidential information such as credit card numbers should never be sent through the Internet without some type of secure encryption system which can guarantee confidentiality. Lack of any current universal standard on the Internet for this is a limiting factor for companies trying to do business on the Internet.

Monkey #2. There is no guarantee that any email message you send will ever reach its destination, and no guarantee that that anyone will ever be notified of the delivery failure. Normally, undeliverable mail will be bounced back to the sender. Normally.

Monkey #3. There is no guarantee that that any email message (or newsgroup posting for that matter) is really from the person listed as the sender. There is no user authentication system to confirm that person's real identity, and false identities are easily created and have been used from time to time by people on the Internet.

One feature to watch for in email programs 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 and better 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. **BinHex** is a Macintosh standard for file attachments, handy if you expect to be communicating with *those people*.

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. The two top programs are **Eudora** and **Pegasus**. Eudora is easy to learn and to use and is fairly stable but

the free version is lacking in features. Pegasus is more feature rich, but this complexity takes longer to setup and to become familiar with and in turn is also more likely to suffer problems.

11.1

NAME..... **Eudora**
PRIME PURPOSE..... Electronic mail
FILE NAME..... eudor144.exe
FILE SIZE..... 292,942 bytes
LATEST VERSION.... 1.4.4 December 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. Information about this is now included in this latest version in the Help menu under About Commercial Eudora.

DOCUMENTATION.... Minimal documentation including lack of on-line help can be a problem in the unregistered version. See the additional information in one of the sections near 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. Qualcomm continues to slowly update this program and now provides documentation for it, but they will no longer directly support users of this free version.

Recommended

11.2

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

11.3

NAME..... **Pronto/IP**
PRIME PURPOSE..... Electronic mail [Demo]

FILE NAME..... prontoip.exe
 FILE SIZE..... 1,114,879
 LATEST VERSION.... 1.0 December 1994
 AVAILABLE FROM.... commtouch.com: /pub/commtouch/windows
 STATUS..... This is a 30 day evaluation copy. Registration \$US 69. Just in case you couldn't find the price anywhere in the documentation or on the order form, now you know.
 DOCUMENTATION.... On-line help.
 FEATURES..... Supports MIME, UUencode and MAPI. Automated installation. Toolbar can be customized by adding or deleting toolbar icons - a rare feature in Internet mail programs to date.
 COMMENTS..... From CommTouch Software. This will work with Pronto/Remote 2.0 to be released in January which will enable it to access mail through your shell account without SLIP. Presumably Pronto/Remote will add to the cost.

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).

11.5

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

11.6
NAME..... **WinBiff**
PRIME PURPOSE..... Windows mail notification utility (for Pegasus Mail and others).
FILE NAME..... wnbff20c.zip
FILE SIZE..... 67,665 bytes
LATEST VERSION..... 2.0c January 1995
AVAILABLE FROM..... oak.oakland.edu: /SimTel/win3/mail
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.

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.

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. The 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.

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

The Usenet news system has become one of the cornerstones of the Internet. Technically speaking it is really not part of the Internet, but for all practical purposes if it walks like a duck and quacks like a duck then it must be an Internet duck. Anyway, Usenet is like a series of thousands of electronic bulletin boards, each oriented to a specific area or topic of interest where users can post messages or respond to other postings. You subscribe to specific groups which interest you and your news program retrieves all the articles associated with those groups. Typically Usenet news is accessed by logging onto your service provider's news or NNTP (Network News Transfer Protocol) server.

There are some good on-line Usenet News 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. There have been two new readers within the last few months: News Xpress and Tetrix Reader Plug (TRP). One comes from Hong Kong, the other from Ireland. Both in their own ways have interesting features, but both being so new are like a fine wine - excellent potential but not quite ready yet.

12.1

dMail for Windows
NAME.....
PRIME PURPOSE..... Usenet news, mail (send and receive)
FILE NAME..... dmailwin.zip
FILE SIZE..... 339,018 bytes
LATEST VERSION.... 1.0b (July 1994)
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..... nx10b2.zip
FILE SIZE..... 108,911 December 1994
LATEST VERSION..... 1.0 beta #2
AVAILABLE FROM..... ftp.hk.super.net: /pub/windows/Winsock-Utilities
Note: The same filename also exists on another Hong Kong server, ftp.cuhk.hk, but this file does not contain any documentation and should be avoided.
STATUS..... Public Domain
DOCUMENTATION..... On-line help. Or perhaps not. The earlier beta #1 came with a help file, but there is no documentation at all in this newer version.
FEATURES..... Supports threads. Built in UUencode/UUdecode.
COMMENTS..... An very 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 (on beta #0). It was also pretty buggy, but nonetheless an impressive debut. This beta #2 version is actually the third release, issued within a couple weeks of the first beta #0 and #1 to correct more bugs. No word wrap yet.

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.

12.4

NAME..... **Tetrix Reader Plug (TRP)**
PRIME PURPOSE..... Usenet news, mail (send only)
FILE NAME..... trp104.zip
FILE SIZE..... 490,284 bytes
LATEST VERSION..... 1.0.4 December 1994
AVAILABLE FROM..... frp.internet-eireann.ie: /pub/ie_access/dos/winsock
STATUS..... Shareware \$US 30
DOCUMENTATION..... Start-up information and on-line help.
FEATURES..... UUencoding, supports file drag and drop.
COMMENTS..... There have been problems with dynamic IP addresses - unknown in Ireland where this program originates. Lots of potential here, but needs more time. Good graphics!

12.5

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.
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.

Recommended

12.6

NAME..... **WinDis**
PRIME PURPOSE..... See Features.
FILE NAME..... windis1.zip and windis.txt
FILE SIZE..... 119,604 and 9,942 bytes
LATEST VERSION..... 1.0 November 1994
AVAILABLE FROM..... disabuse.demon.co.uk: /pub/ibmpc/winsock/apps/windis
STATUS..... Freeware. Source code available.
DOCUMENTATION.... Comprehensive documentation separate from the program, but available in the same directory in both text and Word 2.0 versions.
FEATURES..... NNTP News Client - downloads news for reading with an off-line reader.
SMTP Mail Client - downloads waiting mail for an off-line e-mailer.
SMTP Mail Server - uploads mail as individual e-mail, or to a news group.
Finger Client - fingers servers as appropriate.
Time Client - gets server time.
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. Originally developed by Ewan Kirk, other programmers have now joined together to provide additional support. A new version (v2) about to be released will have a built in gateway to Pegasus mail and on-line help.

12.7

NAME..... **WinNET Mail and News**
PRIME PURPOSE..... Mail (send and receive), Usenet news reader.
FILE NAME..... wnmai230.zip
FILE SIZE..... 644,549 bytes
LATEST VERSION..... 2.30
AVAILABLE FROM..... oak.oakland.edu: /SimTel/win3/internet
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. Registered users get additional features including higher modem speeds. Appears to be a nice package, but the registration costs are a bit steep.

12.8

NAME..... **WinQVT/Net**
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 qvtw3988.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 difficult site to access.
FILE SIZE..... 390,960 bytes
LATEST VERSION..... 3.98 December 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 capable of supporting up to 15 simultaneous virtual terminal sessions. 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 which allows direct receipt of mail for network users who are always logged on or for those who don't have POP mail. An rcp server allows file transfers to and from the remote user's Unix command line.
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.

12.9

NAME..... **WinVN**
PRIME PURPOSE..... Mail (send only) and Usenet news reader.
FILE NAME..... wv16_93_11.zip
FILE SIZE..... 261,848 bytes
LATEST VERSION..... .93.11 December 1994
AVAILABLE FROM..... ftp.ksc.nasa.gov: pub/winvn/win3
STATUS..... Public Domain
DOCUMENTATION.... Installation instructions and on-line help included.
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 controversial newsreader which is getting intensive development effort.

Recommended

13. MISCELLANEOUS

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

13.1

NAME..... **Panda**
PRIME PURPOSE..... Mostly a mail program and newsreader at the moment.
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.

13.2

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/beta/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, in effect a two way data speedometer. 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. I believe that this is designed to work only with Trumpet Winsock.

13.3

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..... bode.ee.ualberta.ca: /pub/dos/win3/winsoc
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. This version has now

essentially been replaced by Winapps2.

13.4

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.

13.5

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.

13.6

NAME..... **Windows Sockets Net Watch**
PRIME PURPOSE..... Host checker.
FILE NAME..... ws_watch.zip
FILE SIZE..... 61,844 bytes
LATEST VERSION..... Alpha 11 January 1995
AVAILABLE FROM..... ftp.usma.edu: /pub/msdos/winsock.files
STATUS..... May be freely distributed and used, but not sold.
DOCUMENTATION.... Basic startup instructions.
FEATURES..... Lookup, Finger and Whois tools now added. Traceroute and Ping support only if you are using the Microsoft TCP/IP 32 stack.
COMMENTS..... This is a working alpha version of a graphical network monitor for Windows NT, Windows 95 and Windows 3.1 with Win32s. It is designed to monitor the status of hosts and other equipment connected to a small network. It is experimental and still at an early

stage of development.

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..... 421,487
LATEST VERSION..... 3.2 December 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.

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..... oak.oakland.edu: /SimTel/msdos/nfs
Lwfws1.uni-paderborn.de: /pub/xfs
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. It does NOT operate over a SLIP connection.

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..... oak.oakland.edu: /SimTel/msdos/nfs
 Lwfws1.uni-paderborn.de: /pub/xf3
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. It does NOT operate over a SLIP connection.

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.

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..... **ICMP Ping for Windows** [32 bit]
PRIME PURPOSE..... Ping Client
FILE NAME..... wsping32.exe
FILE SIZE..... 71,680 bytes
LATEST VERSION..... January 1995
AVAILABLE FROM..... ftp.usma.edu: /pub/msdos/winsock.files
STATUS..... Freeware
DOCUMENTATION.... None
FEATURES.....
COMMENTS..... From John Junod

16.2

NAME..... **WSNWUTIL**
PRIME PURPOSE..... Echo, Ping, FTP clients, Echo Server
FILE NAME..... wsnwutil.zip
FILE SIZE..... 163,824 bytes
LATEST VERSION..... January 1995
AVAILABLE FROM..... rmii.com: /pub2/mclouden (very latest version)
STATUS..... Freeware (limited) - may not sold.
DOCUMENTATION.... Installation instructions and on-line help.
FEATURES.....
COMMENTS..... Previously called WSNWDEMO this new release does not include the Finger client and server which are planned for a future release. Interesting product worth looking at. It is being actively developed by its author Mark Clouden.

16.3

NAME..... **WS Ping** (Window Sockets Ping Client)
PRIME PURPOSE..... Ping client
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..... 213,290
LATEST VERSION..... 3.0 December 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.

17.2

NAME..... **Windows LPR Spooler**
PRIME PURPOSE..... Network printer spooler for Microsoft Windows.
FILE NAME..... wlprs40c.zip
FILE SIZE..... 216,548 bytes
LATEST VERSION..... 4.0c December 1994
AVAILABLE FROM..... ftp.cica.indiana.edu: /pub/pc/win3/winsock (or mirrors)
STATUS..... Shareware. 30 day evaluation. Registration cost available by contacting the authors.
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.

See also WinQVT in the MAIL and NEWS section.

18. RCMD, RCP, RSH and TAR

18.1

NAME..... **Windows Socket rcp client**
PRIME PURPOSE..... RCP client
FILE NAME..... wrcp091.zip
FILE SIZE..... 55,734
LATEST VERSION..... .91 January 1995
AVAILABLE FROM..... stoner.eps.mcgill.ca: /pub/windows/winsock
STATUS..... Freeware.
DOCUMENTATION.... Basic installation and start up instructions.
FEATURES.....
COMMENTS..... Author Steve McCauley.

18.2

NAME..... **WinRSH / WinRSH32 - Remote Shell for Windows**
PRIME PURPOSE..... Remote shell for Windows.
FILE NAME..... wrsh16.zip
FILE SIZE..... 146,005 bytes

LATEST VERSION..... 1.6 November 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.

18.3

NAME..... Winsock RCMD.DLL
 PRIME PURPOSE..... Remote command function.
 FILE NAME..... wrcmdl14.zip
 FILE SIZE..... 46,917
 LATEST VERSION..... 1.4 January 1995
 AVAILABLE FROM..... oak.oakland.edu: /SimTel/win3/winsock
 STATUS..... Shareware \$US 29.95
 DOCUMENTATION.... Startup and usage instructions.
 FEATURES.....
 COMMENTS..... "Winsock RCMD.DLL provides a function similar to the Berkeley Sockets "rcmd" function for Windows Sockets. This provides the ability to initiate Unix commands from within your Windows program and process any output from that command. Winsock RCMD.DLL is a Dynamic Link Library (DLL) callable from almost any language that allows DLL calls, such as C, C++, or Visual Basic." From Denicomp Systems.

18.4

NAME..... Winsock RCP.DLL
 PRIME PURPOSE..... RCP client
 FILE NAME..... wrcpdl14.zip
 FILE SIZE..... 59,784 bytes
 LATEST VERSION..... 1.4 January 1995
 AVAILABLE FROM..... oak.oakland.edu: /SimTel/win3/winsock
 STATUS..... Shareware \$US 34.95
 DOCUMENTATION.... Startup and usage instructions.
 FEATURES.....
 COMMENTS..... "Winsock RCP.DLL provides a function that allows you transparently copy files to and from remote hosts or between two remote hosts from within your programs, just like the "rcp" command. Winsock RCP.DLL is a Dynamic Link Library (DLL) callable from almost any language that allows DLL calls, such as C, C++, or Visual Basic." From Denicomp Systems.

18.5

NAME..... Winsock RCP/RSH
 PRIME PURPOSE..... RCP/RSH clients
 FILE NAME..... wrcprs14.zip
 FILE SIZE..... 88,007 bytes
 LATEST VERSION..... 1.4 January 1995
 AVAILABLE FROM..... oak.oakland.edu: /SimTel/win3/winsock
 STATUS..... Shareware \$US 29.95

DOCUMENTATION.... Startup and usage instructions.
 FEATURES.....
 COMMENTS..... "Winsock RCP, or Remote Copy, copies files from your Windows PC to a Unix system, from a Unix system to your PC, or between two Unix systems. You can copy individual files or recursively copy entire directory trees. Winsock RSH, or Remote Shell, runs a specified command on the Unix system. " Requires vbrun300.dll not included. From Denicomp Systems.

18.6

NAME..... **Winsock RSHD**
 PRIME PURPOSE..... Remote Shell Daemon (server)
 FILE NAME..... wrshd11.zip
 FILE SIZE..... 168,162 bytes
 LATEST VERSION.... 1.3 January 1995
 AVAILABLE FROM.... oak.oakland.edu: /SimTel/win3/winsock
 STATUS..... Shareware \$US 34.95
 DOCUMENTATION.... Startup and usage instructions.
 FEATURES..... Security mechanism to allow/deny access for hosts and users
 COMMENTS..... From Denicomp Systems. Requires vbrun300.dll not included. It has been tested on the following TCP/IP stacks: Microsoft 32-Bit TCP/IP for Windows, Wollongong Pathway Access and Novell LAN Workplace for DOS Version 4.2

18.7

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.

19. TELNET

For many users nothing has provided more frustration than the search for a good telnet program (the "Holy Grail"). Fortunately during 1994 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 A preliminary beta of the next version is also available at the same location under file name comt105b.zip. You must have an existing version already installed in order to use this upgrade.

FILE SIZE..... 115,842 bytes

LATEST VERSION..... 1.04 January 1995

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..... According to this program's developer: ". . . .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 deservedly proving to be popular.

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..... 429,995 bytes

LATEST VERSION..... 3.1 December 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.

19.3

NAME..... **EWAN**

PRIME PURPOSE..... Telnet (terminal emulator)

FILE NAME..... ewan105.zip

FILE SIZE..... 252,802 bytes

LATEST VERSION..... 1.05 December 1994

AVAILABLE FROM..... ftp.lysator.liu.se: /pub/msdos/windows
http://www.lysator.liu.se/~zander/ewan.html

STATUS..... Freeware. Email support available for governments and institutions

for a fee.

DOCUMENTATION.... Simple startup instructions and on-line help.
FEATURES..... ANSI/VT52/VT100 emulation. Automated installation. Each stored site can have a customized configuration associated with it.
COMMENTS..... First released in early 1994 Ewan continues to be improved by its author and has developed a strong following. Both ANSI and now VT52 terminal emulation have recently been added. Window sizing problems found on earlier versions should be fixed now. A short description on how to create emulations for EWAN is available in a Windows Write format through the WWW from:
<http://www.lysator.liu.se/~zander/ewan.html>

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..... No charge for use.
DOCUMENTATION.... Minimal, no on-line help.
FEATURES.....
COMMENTS..... Not supported, not currently under development.

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: 102,873 bytes
LATEST VERSION..... Freeware (limited): 3.2e October 1994
Shareware: 2.0 November 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 2.0. For the best features get the newer Shareware version which is being very actively developed by its author.

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).

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: /ftp/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.

19.8

NAME..... **UNIBOL/Desktop Terminal**
 PRIME PURPOSE..... Telnet (terminal emulator) [DEMO - Function or time crippled]
 FILE NAME..... unitel.zip
 FILE SIZE..... 559,815 bytes
 LATEST VERSION..... 1.3 December 1994
 AVAILABLE FROM..... ftp.unibol.com: /pub/demo
 STATUS..... Demo trial version with an expiry date.
 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.

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.

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..... bode.ee.ualberta.ca: /pub/dos/win3/winsoc
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).

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/winsoc (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.

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

20. TCP / IP

Things primarily for network groupies. Modem users can fast forward. TCP/IP = Transmission Control Protocol/Internet Protocol. This is the networking standard used by the Internet for the transfer of data packets. It's a standard which essentially allows two computers to talk to each other.

20.1

NAME..... **Internet-Connect**
PRIME PURPOSE..... TCP/IP networking package
FILE NAME..... inetv2.zip
FILE SIZE..... 952,299 bytes
LATEST VERSION..... Version 2 January 1995
AVAILABLE FROM..... cais.com: /pub/lvuong
STATUS..... Evaluation copy.
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 very full featured package is intended to provide a powerful platform primarily oriented towards network professionals and developers.

20.2

NAME..... **Microsoft TCP/IP-32 for Windows For Workgroups 3.11a**
PRIME PURPOSE..... TCP/IP networking package
FILE NAME..... WFWT32.EXE
FILE SIZE..... Approximately 678,000 bytes
LATEST VERSION..... 3.11a November 1994
AVAILABLE FROM..... ftp.microsoft.com: /peropsys/windows/public/tcpip
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. This update has just been released to fix bugs.

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 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!

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/winsoc (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.

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/winsoc
 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 Winsoc.

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.

See also ModemSta in the Modem Accessories section.

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. For most users synchronization with your local server is more than adequate for most purposes. If you have a critical requirement and 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). A detailed list of other high precision sites is found in the document `clock.txt` available by FTP from location: `louie.udel.edu` in directory `/pub/ntp/doc`.

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.

23.2

NAME..... **Tardis**
PRIME PURPOSE..... Time synchronizer
FILE NAME..... `tardis2a.zip`
FILE SIZE..... 36,602 bytes
LATEST VERSION..... 2.0a January 1995
AVAILABLE FROM..... `ftp.cica.indiana.edu: /pub/pc/win3/winsoc` (or mirrors).
STATUS..... Shareware \$US 20, site license \$US 40
DOCUMENTATION.... Startup instructions and on-line help included.
FEATURES..... Can run in the background checking at defined intervals. Contains an variable maximum adjustment filter.

COMMENTS..... Well done. A noticeably improved version from the first release. I was particularly impressed with the author's simple solution to the time zone problem this time around (a notable problem in the first release). Authors of other similar programs should emulate (steal) this idea.

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 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.

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
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.

23.5

NAME..... WinSNTP
PRIME PURPOSE..... Time synchronizer.
FILE NAME..... wsntp15f.zip
FILE SIZE..... 157,926 bytes
LATEST VERSION..... 1.5f November 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 an information search system which has never become very popular. In addition to these specific clients, WAIS searches can also be done through WWW browsers.

24.1

NAME..... **EINet 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..... Shareware \$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.....

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.

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. WEBSTER DICTIONARY

For on-line spell checking or looking up word definitions, here's a unique Winsock program.

25.1

NAME..... **WinWebster**
PRIME PURPOSE..... A Webster client for accessing a network Webster dictionary server.
FILE NAME..... wwebst06.zip

FILE SIZE..... 39,365 bytes
 LATEST VERSION..... .6 December 1994
 AVAILABLE FROM..... stoner.eps.mcgill.ca: /pub/windows/winsock
 STATUS..... PostcardWare - send a postcard to the author.
 DOCUMENTATION.... Basic installation and start-up instructions.
 FEATURES.....
 COMMENTS..... Written by Steeve McCauley. To use this, or even to find out if it's even usable on your local server you'll have to talk to your local support people for server and port information. There is one globally accessible site at:
 webster.cs.indiana.edu port 2627

26. 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.

26.1

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.....

26.2

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.

27. 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*.

What's the most popular Web browser? If you were to go to a bookstore and read through sections in books devoted to Web browsers you would form the firm conviction that Mosaic is THE Browser to have, an overwhelming favorite on the Internet. Unfortunately, while this was true 6 months ago when such books were being written, there has been a dramatic change since then. Numerous bugs in Mosaic, long intervals between new versions, and the annoyance of having to install Microsoft's Win32s 32 bit extension in order to run any recent versions of Mosaic by themselves would not have been sufficient for it's fall in popularity if not for the appearance of this variety of competing products. The current most popular Windows browser in use is now Netscape, released by former Mosaic developers. This popularity was noted in Jayfar's survey (<http://www.netaxs.com/~jayfar/sursays.html>) where Netscape was also the most popular Macintosh browser. Although the sample size is small and there is no claim of scientific accuracy, the results do tend to be confirmed by Newsgroup postings. Questions, discussions and controversy centered on Netscape dominate the postings.

27.1

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
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.

27.2

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. Getting quite a bit dated now, a new version is imminent.

27.3

NAME..... **InternetWorks Lite**
PRIME PURPOSE..... WWW Browser
FILE NAME..... netlite.exe
FILE SIZE..... 1,529,647 bytes
LATEST VERSION..... Beta 4 December 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. Multitasking support with separate windows created for each activity.
COMMENTS..... The browser's background color (which will be white on most machines) is tied to Windows desktop settings and is not separately adjustable. 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. The demo version works with SLIP only - there is no PPP support.

27.4

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.

27.5

NAME..... **NCSA Mosaic (32 bit)**
PRIME PURPOSE..... World Wide Web (WWW) Browser
FILE NAME..... mos20a9.exe (self extracting)
FILE SIZE..... 947,877
LATEST VERSION..... 2.0 alpha 9 January 1995
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..... Addition of Tables and a number of new tags, stand alone mode which does not require a winsock.dll on your system. This new version alpha 9 also now displays text before downloading inline images similar to what Netscape does. New right mouse button menu options.

COMMENTS..... This new version requires a special OLE compatible version of Win32s which must be installed on your system before installing this newer version of Mosaic. Details on it in the Miscellaneous Non-Winsock/Win32s section much further down this listing. Fortunately your existing .ini file will be retained with this installation so you won't have to re-edit all over again to add viewers. This new version may not run well if you only have 4 meg RAM memory.

Note: When trying to run the alpha 8 version of Mosaic if you get one of the following errors: "Win32s. Initialization of dll failed. Process is terminating abnormally" or "Unexpected DOS error 21" change the international settings of Windows (with control panel) to show language "English (American)" and NOT Finnish or Swedish or Norwegian etc. This solution comes from a news posting by Timo Juntunen in Finland who noticed that most of the bug reports were coming from Scandinavia and concluded that the problem was somehow language related. Nice bit of detective work. I'm not sure if this has been fixed in alpha 9. Anyone?

Note: When running the alpha 9 version if you get an error message concerning msvcrt20.dll not working, check your system to see if you have more than one copy/version of this file. You'll have to experiment by temporarily removing one at a time to see if the remaining one works.

27.6

NAME..... **Netscape** ("Mozilla")
 PRIME PURPOSE..... WWW Browser
 FILE NAME..... ns16-100.exe
 FILE SIZE..... 706,929
 LATEST VERSION..... 1.0N (16 bit public beta version) December 1994.
 AVAILABLE FROM..... ftp.mcom.com: /pub/netscape/windows
 ftp.digital.com: /pub/net/infosys/Netscape
 stones.com: /pub/netscape

STATUS..... Free for use by students or employees in non-profit companies. All others may use this for an evaluation period only before paying the registration fee. There is no time limit specified on the evaluation period.

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. 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 39. 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.

Security: As of version beta .93 Netscape implemented a new RSA based security feature in its browser. Secure connections to a server (where available) must be addressed with a URL beginning "https" instead of "http". The key icon displayed in the lower left hand corner of their browser screen appears broken into two pieces during normal unsecured connections, and in one solid piece during secure connections. You can test making secure connections to the Netscape home page through the following accesses:

<https://home.mcom.com/info/security-overview.html>

<https://home1.mcom.com>

Needless to say, this security feature only works with the Netscape browser and server combination at present.

Additional files: At the Netscape home site ftp.mcom.com in directory /unsupported/windows are the files: mozilize.exe, mozilize.txt, mozock.dll and mozock.txt. Mozilize is a experimental DOS program for converting NCSA Mosaic ini (bookmark) files to Netscape bookmarks. I guess this is for anyone considering dumping Mosaic and going over to Netscape - those Netscape people are so thoughtful! Mozock is a nullsock which can be used to operate Netscape (and perhaps other Winsock programs?) offline without a network connection or a winsock.dll present. See the corresponding text files for information. These programs are not supported.

27.7

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.

27.8

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.

NOTE: An interim upgrade to version 1.05 is available from interport.net under file name snup105.zip (221,277 bytes). Place the **unzipped** file in the directory /slipknot/download. Make sure that the SlipKnot program is shut down and then click on the "new" icon in the slipknot program group (created during the original installation of version 1.0) which will launch the installation process. A new version 1.1 is imminent and some of the documentation with this 1.05 upgrade has already been changed to reflect the 1.1 release. These instructions are from the developer Peter Brooks.

27.09

NAME..... **WinWeb**
PRIME PURPOSE..... World Wide Web (WWW) Browser
FILE NAME..... winweb.zip
FILE SIZE..... 598,873 bytes
LATEST VERSION..... 1.0A2.1.1 December 1994
AVAILABLE FROM..... ftp.einet.net: /einet/pc

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.

28. 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."

28.1

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 with OS2 and Windows NT.

28.2

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.....

28.3

NAME..... **WaX500**
PRIME PURPOSE..... X.500 DUA (Directory User Agent)
FILE NAME..... waxr202b.zip
FILE SIZE..... 458,584 bytes
LATEST VERSION..... 2.02 beta January 1995
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.

28.4

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.....	ftp.sunet.se: /pub/x500/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 UTILITIES

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

40. DECODERS - BinHex, MIME, UU, and XX

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 should quickly replace UU in the email area. UU continues to totally dominate the newsgroups. BinHex is an encoder format for the Mac world. All of these different formats are of course not compatible with each other - silly of you to ask.

40.1

NAME.....	PC BinHex [DOS]
PRIME PURPOSE.....	BinHex encoder/decoder
FILE NAME.....	binhex13.zip
FILE SIZE.....	45,638 bytes
LATEST VERSION.....	1.3 March 1993
AVAILABLE FROM.....	oak.oakland.edu: /SimTel/msdos/mac
STATUS.....	Not mentioned.
DOCUMENTATION....	Basic information.
FEATURES.....	
COMMENTS.....	This is from the University of Minnesota. Compatible with the Macintosh version of BinHex.

40.2

NAME.....	UU [DOS]
PRIME PURPOSE.....	UU 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
 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.

40.3

NAME..... UUCODE
 PRIME PURPOSE..... UU and XX 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.

40.4

NAME..... UNMACIT (UNSIT and UNHQX)
 PRIME PURPOSE..... Mac BinHex (HQX) decoder and file decompression (SIT)
 FILE NAME..... unmacit.zip
 FILE SIZE..... 64,434 bytes
 LATEST VERSION.... n/a
 AVAILABLE FROM.... disabuse.demon.co.uk: /pub/ibmpc/unmacit
 STATUS..... Freeware
 DOCUMENTATION.... Introductory comments only.
 FEATURES.....
 COMMENTS..... A pair of no frills Windows programs for decoding and decompressing Macintosh formats.

40.5

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/util (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.

 See also VuePrint in the VIEWERS-GRAPHICS-STILL PICTURE section.

41. DECOMPRESSION - 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.

41.1

NAME..... **ACZAR**
 PRIME PURPOSE..... File zip/unzipper and all purpose file decompression shell.
 FILE NAME..... aczar220.zip
 FILE SIZE..... 1,299,346
 LATEST VERSION..... 2.2 September 1994
 AVAILABLE FROM..... ftp.cica.indiana.edu: /pub/pc/win3/util (or mirrors)
 STATUS..... Shareware \$US 35. Lots of bonuses upon registration
 DOCUMENTATION.... On-line help
 FEATURES..... Built in ZIP/UNZIP. Windows shell support for other compression schemes such as LZH, PAK, ARC, ARJ, SQZ ZOO, and HYP but only if you have the individual DOS programs for these installed on your system - they are not included in this program. Extensive drag and drop features. This program was designed to be kissed by your mouse - you might never have to touch the keyboard. Nicely done automated installation and configuration process.
 COMMENTS..... If you work with a lot of different compressed file formats this program is easy to use and can potentially simplify your life. I am however bothered by its size (installation doesn't make it any smaller), the system resources required to run it (recommended minimum of a 486 processor with a graphics accelerator), and the fact that for all this the ZIP functions are the only ones built in - you will still have to find and add extra programs (usually DOS versions) for the others. This is a bit of a pig suitable only for those who can afford it.

41.2

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.

41.3

NAME..... **WinZip**
PRIME PURPOSE..... File unzipper
FILE NAME..... wzbeta56.exe and wznt56.exe (for Windows NT)
FILE SIZE..... 295,475 and 288,383 (NT) bytes
LATEST VERSION..... 5.6 beta January 1995
AVAILABLE FROM..... ftp.winzip.com: /winzip
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. The new version 5.6 adds the capability to handle Z and TAR formats.
COMMENTS..... Some incremental features such as encryption are not built in and are only supported if a copy of pkunzip (DOS) is also installed.

41.4

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/util (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.....

42. DECOMPRESSION - OTHER

Although ZIP has become an overwhelming favorite and the standard compression format for the DOS/Windows world, there have been other efforts at introducing alternate compression schemes, including some which are very popular on other platforms such as Unix. These can cause serious heartburn when unexpectedly encountered, unless of course you have the right utility handy. Although not always indicated, many of these have dual compression/decompression capabilities and sometimes optional features like password protection.

42.1

NAME..... **ARCE** [DOS]
PRIME PURPOSE..... File decompression - ARC files
FILE NAME..... arce.com
FILE SIZE..... 5,223 bytes

LATEST VERSION..... 4.0g April 1991
AVAILABLE FROM..... Try: dorm.rutgers.edu: /pub/DOS_Uncompress
STATUS..... \$US 15 donation to the author suggested.
DOCUMENTATION.... Basic use instructions by typing (in DOS): arce (return).
FEATURES.....
COMMENTS..... Rarely used any more.

42.2

NAME..... **ARJ** [DOS]
PRIME PURPOSE..... File compression and de-compression - ARJ files.
FILE NAME..... arj241a.exe
FILE SIZE..... 223,856 bytes
LATEST VERSION..... July 1993
AVAILABLE FROM..... Try: ftp.utas.edu.au: /pc/dos/util/archiver
STATUS..... Shareware. No charge for individual use. For commercial, business, government, single license \$US 40.
DOCUMENTATION.... Very extensive with a large user manual.
FEATURES..... Archives can span multiple diskettes - handy for backups, password encryption. Numerous other features.
COMMENTS..... This program provides a good alternative to PKZIP, although it will never achieve the latter's popularity.

42.2

NAME..... **COMPRESS** [DOS]
PRIME PURPOSE..... File decompression - Z format
FILE NAME..... comp430d.exe
FILE SIZE..... 35,354 bytes
LATEST VERSION..... 4.3d March 1990
AVAILABLE FROM..... Try ftp.utas.edu.au: /pc/dos/util/archiver
STATUS..... No information.
DOCUMENTATION.... Instructions included, self extracting.
FEATURES.....
COMMENTS.....

42.3

NAME..... **DECOMP** [DOS]
PRIME PURPOSE..... File decompression - Z format
FILE NAME..... decomp2.zip
FILE SIZE..... 17,384 bytes
LATEST VERSION..... March 1990
AVAILABLE FROM..... oak.oakland.edu: /SimTel/msdos/compress
STATUS..... No information.
DOCUMENTATION.... Instructions included.
FEATURES.....
COMMENTS..... Simple command line operation: "decomp file.z newfile.out (return)"

42.3

NAME..... **GZIP** (GNU zip) [DOS]
PRIME PURPOSE..... File decompression - Z and gz format
FILE NAME..... gzip124.zip
FILE SIZE..... 116,919
LATEST VERSION..... 1.2.4 August 1993
AVAILABLE FROM..... oak.oakland.edu: /SimTel/msdos/compress
STATUS..... freeware
DOCUMENTATION.... Some basic documentation included.

FEATURES.....

COMMENTS..... The zip in the name is unfortunate since it really has nothing to do with the well known DOS standard ZIP format. Typical DOS command to decompress a file with this program is: gzip -d filename.z

The original compressed file will not be preserved when this is run. Typical files seen on servers which can be uncompressed with this program might be: filename.Z and filename.gz

42.4

NAME..... **LHA** [DOS]
PRIME PURPOSE..... File decompression - LZH files.
FILE NAME..... lharc.exe
FILE SIZE..... 34,283 bytes
LATEST VERSION..... 2.13 July 1991
AVAILABLE FROM..... Try: dorm.rutgers.edu: /pub/DOS_Uncompress
STATUS..... No charge for non-commercial use.
DOCUMENTATION.... Basic use instructions by typing (in DOS): lharc <return>.
FEATURES.....
COMMENTS.....

42.5

NAME..... **ZOO** [DOS]
PRIME PURPOSE..... File decompression - ZOO files.
FILE NAME..... zoo.exe
FILE SIZE..... 67,192 bytes
LATEST VERSION..... 2.1 July 1991
AVAILABLE FROM..... Try: dorm.rutgers.edu: /pub/DOS_Uncompress
STATUS..... No information.
DOCUMENTATION.... Basic use instructions are obtained by typing (in DOS): zoo (return) and zoo H (return).
FEATURES.....
COMMENTS.....

43. 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.

43.1

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.

STATUS..... Shareware \$US 10
DOCUMENTATION.... Start up documentation.
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.

43.2

NAME..... **ModemSta**
PRIME PURPOSE..... Modem status lights.
FILE NAME..... modsta15.zip
FILE SIZE..... 128,978
LATEST VERSION..... 1.5 December 1994
AVAILABLE FROM..... oak.oakland.edu: /SimTel/win3/commprog
STATUS..... Shareware \$US 10
DOCUMENTATION.... Start up documentation.
FEATURES..... Automated installation now. 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 tracks connect time. 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. Shows com port summary with configuration, UART info etc. for DOS and Windows.
COMMENTS..... Developed by Ted Johansson. For use with internal or external modems on any port. Further information and file download is available on the WWW from:
[http://www-bprc.mps.ohio-state.edu/cgi-bin/hpp?](http://www-bprc.mps.ohio-state.edu/cgi-bin/hpp?ModemSta.html)
ModemSta.html

43.3

NAME..... **WinModem**
PRIME PURPOSE..... Modem status lights.
FILE NAME..... wnm4.zip
FILE SIZE..... 165,705 bytes
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?

44. MISCELLANEOUS

If you have a curious nature and like to try out a variety of Shareware programs to find the ones you like best, even with the best of efforts at cleanup a certain amount of junk begins to accumulate, clogging your hard drive. The following program, while perhaps straying far from the subject of Winsock, is nonetheless worth noting.

44.1

NAME.....	FDDLLS
PRIME PURPOSE.....	System cleanup utility.
FILE NAME.....	fddlls.zip
FILE SIZE.....	64,193 bytes.
LATEST VERSION.....	1.0 October 1994
AVAILABLE FROM.....	ftp.cica.indiana.edu: /pub/pc/win3/util (or mirrors).
STATUS.....	No charge for non commercial use.
DOCUMENTATION....	Basic usage instructions with appropriate warnings.
FEATURES.....	
COMMENTS.....	One nasty habit which Windows programs suffer from is the tendency to dump files - primarily DLL files - into the Windows directories where there is no means of identifying which programs they support. These files will almost always be left behind after the original program is deleted. FDDLSS helps you find unused DLLs on your system by finding, sorting and classifying Windows executable files on your hard drive. FDDLSS can list the EXE and DLL files on your system by name, extension or reference count. It will identify both duplicate and <i>apparently</i> unneeded files. Use with caution. First published in PC Magazine December 6, 1994. Pop quiz: How many copies of vbrun200.dll and vbrun300.dll do you have on your system?

45. 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.driv 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 (up to 4 times). Note also that a number of commercial communications software packages such as Winfax Pro also now sometimes include similar replacement drivers for optional installation. Replacement drivers 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.

45.1

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.

45.2

NAME..... **Fix16550 Device Driver**
PRIME PURPOSE..... To fix problems with AMI BIOS and 16550 UARTS
FILE NAME..... fx16550d.zip
FILE SIZE..... 3,915 bytes
LATEST VERSION..... 1.05 November 1993
AVAILABLE FROM..... oak.oakland.edu: /SimTel/msdos/io_util
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).

45.3

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, possibly because some of its parameters are adjustable. From Delrina (WinComm Pro and WinFax) this was originally included in WinFax Pro 3.0 for optional installation.

46. 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.

46.1

NAME..... **Dialer**
 PRIME PURPOSE..... Telephone dialer
 FILE NAME..... dialexe.zip
 FILE SIZE..... 31,072 bytes
 LATEST VERSION..... 2.0a May 1994
 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.....

46.2

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/winsoc (or mirrors)
 STATUS..... Free for non-commercial use.
 DOCUMENTATION.... Negligible.
 FEATURES..... Auto logon with easy to use scripts. Automated setup. Supports multiple configurations. Configuration 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 other sites under filename goslip11.zip. It was very functional and stable, but the inability to handle dynamic IP's limited it's appeal.

46.3

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: /pub3/win3/winsock
disabuse.demon.co.uk: /pub/ibmpc/winsock/apps/netdial
STATUS..... Shareware \$US 20
DOCUMENTATION.... Very comprehensive documentation, much of it in a MS Word format.
On-line help also 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. Many other features.
COMMENTS..... 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, albeit a rather large 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. This program is being actively developed
and there is at least a minor version change every few weeks. This is
the best stand alone dialer currently available. It works very well with
Trumpet Winsock/SLIP. I have not tried it with PPP yet.

Recommended

46.4

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.

47. VIEWERS - MOVING PICTURE - MPEG

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. The 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. Yup, this means that you must have Microsoft's

Win32s extension installed to Windows 3.1 in order to use most of these.

47.1

NAME..... **MPEGPLAY** [32 bit]
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..... Shareware \$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 or better installed before you attempt to
install/use this. See the listing for Win32s further down in this section.

47.2

NAME..... **VMPEG** [32 bit]
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.

47.3

NAME..... **Xinglt!**
PRIME PURPOSE..... Moving picture player, MPEG (.mpg) format.
FILE NAME..... mpegview.zip
FILE SIZE..... 190,672
LATEST VERSION..... 1.0 August 1993
AVAILABLE FROM..... oak.oakland.edu: /SimTel/msdos/graphics
STATUS..... Demo
DOCUMENTATION.... Start up instructions and on-line help.
FEATURES.....
COMMENTS..... An increasing rarity for those with regular Windows - a 16 bit MPEG
player. A DOS MPEG player is also included.

48. VIEWERS - MOVING PICTURE - OTHER

QuickTime is a proprietary format for storing and viewing moving pictures and corresponding sound developed and controlled by Apple Computer. Files can be stored in either an Apple format or a DOS/Windows format (.mov) to enable viewing on either platform. The Windows version must be created as a special "flattened" file and this creation and editing can only be done on Macintosh based software. Once the picture file has been created and saved in the Windows format it can be incorporated into other Windows applications (through OLE embedding in word processing, spreadsheet or presentation documents for example). QuickTime sound cannot be played through the PC speaker - a sound card is required.

AVI is Microsoft's video format (.avi) which competes with Apple's QuickTime. It supports up to full color (24 bit), any screen resolution, 1 to 30 frames per second, and sound. It has not proven as popular as Quicktime.

FLI/FLC are older Autodesk Animator formats with limited resolution, colors and frame speed. There is no sound.

48.1

NAME..... **AVI Pro**
PRIME PURPOSE..... AVI video player
FILE NAME..... avipro2.exe
FILE SIZE..... 491,467
LATEST VERSION.... 2.01 July 1994
AVAILABLE FROM.... ftp.cica.indiana.edu: /pub/pc/win3/desktop (or mirrors)
STATUS..... Shareware \$US 15
DOCUMENTATION.... On-line help panel to explain all functions and controls.
FEATURES..... Automated installation, continuous loop function, zoom function.
COMMENTS..... Console display imitating a VCR or tape player with functioning controls if you like that kind of thing. Has a 15 second time delay at bootup but not otherwise crippled. All files located in one directory (yes!) instead of being scattered, for an easy delete.

48.2

NAME..... **QuickTime for Windows**
PRIME PURPOSE..... QuickTime movie player for Windows .mov files.
FILE NAME..... qtw111.zip
FILE SIZE..... 659,400
LATEST VERSION.... 1.11 January 1994
AVAILABLE FROM.... bitsy.mit.edu: /pub/dos/web/helper-apps
STATUS..... No charge for personal use.
DOCUMENTATION.... Startup and on-line help files.
FEATURES.....
COMMENTS..... From Apple Computer, a Windows player for the popular QuickTime format. There are some large sample files available in the same directory as this program. A minimum of a 386 processor is required. There are incompatibilities with some sound and video cards. The newer version 2.0 of this player is currently only available from CompuServe for a \$US 9.95 fee and may be found bundled in some commercial applications. It is not legally available from any FTP site. I have no information on the advantages of the newer version 2.

48.3

NAME..... **QuickTime**
PRIME PURPOSE..... QuickTime add-on movie player for Windows .mov files.

FILE NAME..... qtw11.zip
FILE SIZE..... 325,867 bytes
LATEST VERSION.... June 1993
AVAILABLE FROM..... ftp.cuhk.hk: /pub/mov
STATUS..... Unknown.
DOCUMENTATION.... Almost nothing - very brief installation info only.
FEATURES.....
COMMENTS..... This program adds QuickTime capability to the Windows media player. This is not to be confused with the Apple QuickTime player above, which is totally different, in spite of similar file names. This is also available through one of the NCSA/Mosaic WWW page on auxiliary viewers.

48.4

NAME..... **Video For Windows**
PRIME PURPOSE..... AVI video player
FILE NAME..... vfw11d.exe
FILE SIZE..... 1,417,764
LATEST VERSION.... 1.1d September 1994
AVAILABLE FROM..... ftp.microsoft.com: /Softlib/MSLFILES
STATUS.....
DOCUMENTATION.... On-line help.
FEATURES..... Automated installation.
COMMENTS..... This Video For Windows Runtime file is required to enable the media player included with Windows 3.1 to play AVI files.

48.5

NAME..... **VIDVUE**
PRIME PURPOSE..... A comprehensive multimedia player.
FILE NAME..... vidvue31.zip
FILE SIZE..... 525,015
LATEST VERSION.... 3.1 September 1994
AVAILABLE FROM..... Try: ftp.fcu.edu.tw: /pub2/PC/uploads/graphic
STATUS..... Shareware \$US 35 for US locations, \$US 45 for non-US locations.
DOCUMENTATION.... Start up documentation and on-line help.
FEATURES..... VIDVUE supports GIF87a/GIF89a, JPG/JIF, BMP/DIB, PCX, TIFF, TGA, DCX, WPG, EPS, PICT and WMF still picture formats. It also plays AVI video, WAV audio, MIDI music, FLI/FLC animation files and Apple Quicktime MOVies.
COMMENTS..... Note that most of the moving picture formats for this program do require additional drivers and software which you must obtain from various sources if you don't happen to already have them on your system. A certain amount of configuration trial and error may also be required. Needless to say, all this is a bit of a nuisance. The program also requires vbrun300.dll which is not included, but which is widely available and if you've installed any number of other Shareware programs you should already have somewhere on your system. Non-USA residents may not be too excited at their stiffer registration cost.

48.6

NAME..... **WinFly**
PRIME PURPOSE..... FLI video player.
FILE NAME..... winfli.zip

FILE SIZE..... 21,892 bytes
 LATEST VERSION..... 1.0? October 1993
 AVAILABLE FROM..... ftp.cica.indiana.edu: /pub/pc/win3/desktop (or mirrors)
 STATUS..... Shareware, but no charge for this version. Version 3.0, which comes with an improved user interface and hi-res FLC support is \$5.00
 DOCUMENTATION.... Basic information.
 FEATURES.....
 COMMENTS..... A simple one format player.

49. VIEWERS - 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 on the Internet 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. There are several variations of JPEG, the most common of which is more properly called JFIF (JPEG File Interchange Format). JPEG images support full 24 bit color (gazillions of colors) as opposed to the more limited 8 bit (256 color) 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 in. JPEG images cannot be used as in-line images in HTML documents (only X-bitmaps (.xbm), and Gifs are supported for in-line images). The JPEG format can be extremely compact, easily exceeding a compression factor of ten, but this is accomplished partially by discarding insignificant color detail and for this reason is known as a "lossy" compression method. It exploits the human eye's poor ability to distinguish small changes in color to limit the information being stored and produce a smaller file than could otherwise be obtained. A file stored with this format will no longer exactly match the original, although the difference might be unnoticeable. This format does allow the compression ratio to be adjusted, balancing size versus acceptable image quality.

Both JPEG and GIF are capable of being stored and viewed (with appropriate viewers) in the so called progressive or interlaced methods better known as venetian blind effect. Currently it is very rare for JPEG, but GIF images are commonly seen like this on CompuServe using its WinCIM software and on the Netscape home page when using the Netscape browser.

Enough? If not, see also the section in Other Information titled The Unisys / CompuServe / GIF

Mess.

49.1

NAME..... **ACDSee**
PRIME PURPOSE..... JPEG/GIF graphics image viewer.
FILE NAME..... acdsee121.zip
FILE SIZE..... 164,966 bytes
LATEST VERSION..... 1.21 January 1994
AVAILABLE FROM..... wuarchive.wustl.edu: /pub/MSDOS_UPLOADS/win_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 (JPEG). New version now also supports GIF/PCX/TGA and has resizable windows, drag and drop, and ability to open a multiple copy of the program for each image. Supports 4DOS file descriptions.
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. It does however allow you to grab oversized JPEG pictures with the mouse and quickly move them around on the screen. This program has just recently been released and is based upon original source code from the DOS viewer Q-Peg. GIF image display is similarly fast. The main menu screen is a bit difficult to like, with control buttons at the bottom of the screen, but the thumbnail image display feature which has just been added is extremely handy.

Recommended

49.2

NAME..... **LView & LView Pro**
PRIME PURPOSE..... Graphics image viewers
FILE NAME..... lview31.zip & lviewp1a.zip (both 16 bit software)
FILE SIZE..... 224,210 and 304,843 bytes
LATEST VERSION..... LView: 3.1 September 1993
 LView Pro: 1a January 1995
AVAILABLE FROM..... oak.oakland.edu: /SimTel/win3/graphics
STATUS..... LView: Freeware.
DOCUMENTATION.... LView Pro: Shareware, single registration \$US 30 plus shipping.
 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 now supports interlaced GIF87a and GIF89a variations. The freeware version is

considerably more limited.
COMMENTS..... LView is a very popular graphics viewer used primarily to view GIF and JPG picture formats commonly found on the Internet. Both versions have many features but are not noted for speed. 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

49.3

NAME..... **VuePrint**
PRIME PURPOSE..... Multipurpose image viewer and sound player.
FILE NAME..... vuepri33.zip
FILE SIZE..... 218,419 bytes
LATEST VERSION..... 3.3 December 1994
AVAILABLE FROM..... ftp.cica.indiana.edu: /pub/pc/win3/desktop (or mirrors).
STATUS..... Shareware, 15 day evaluation period. Registration \$US 40 includes free upgrades, email support.
DOCUMENTATION.... On-line help file.
FEATURES..... Supports GIF, BMP, DIB, PCX, TGA, and JPG fixed images, WAV, MID, and MCI sound files and SLI slide show files. It has a built in screen saver and has UUencode and UUdecode capabilities. Contact sheet capability (multiple images in a window).
COMMENTS..... Requires a minimum of a 386 processor. Not especially fast, but there are a lot of nice features in this program. Automatic installation/de-installation.

49.4

NAME..... **WinECJ**
PRIME PURPOSE..... JPEG viewer
FILE NAME..... winecj20.zip
FILE SIZE..... 68,108 bytes
LATEST VERSION..... 2.0 January 1995
AVAILABLE FROM..... ftp.cica.indiana.edu: /pub/pc/win3/desktop (or mirrors).
STATUS..... Freely distributed for private use. A more full featured version is available for a license fee.
DOCUMENTATION.... Startup instructions and on-line help.
FEATURES..... Slide show feature handles up to 12 images. Fast preview mode.
COMMENTS..... Requires a 286 or better and Windows in a minimum 256 colors. This is a very basic JPEG viewer. A version of this program is also found bundled with the WinWeb WWW browser. Released by Expressed Compression Laboratories.

49.5

NAME..... **WinGIF**
PRIME PURPOSE..... Graphics image viewer.
FILE NAME..... wingif14.zip
FILE SIZE..... 72,049
LATEST VERSION..... 1.4 August 1991
AVAILABLE FROM..... ftp.cica.indiana.edu: /pub/pc/win3/desktop (or mirrors).
STATUS..... Shareware \$US 15
DOCUMENTATION.... On-line help.

FEATURES..... Displays GIF, PCX, BMP, and RLE images.
COMMENTS..... A bit dated now, but notable for one feature in particular: the ability to both create and view GIF interlaced images.

49.6

NAME..... **WinJPEG**
PRIME PURPOSE..... Graphics image viewer.
FILE NAME..... winjp265.zip
FILE SIZE..... 340,207
LATEST VERSION..... 2.65 July 1994
AVAILABLE FROM..... ftp.cica.indiana.edu: /pub/pc/win3/desktop (or mirrors).
STATUS..... Shareware, \$US 25, subsequent upgrades \$US 5. Initial registration provides latest version, a user manual and some sample JPEG images.
DOCUMENTATION.... On-line help
FEATURES..... Displays JPEG, TIFF, Targa, GIF, PCX, OS/2 Windows BMP, PPM, and IFF images. Slideshow capability.
COMMENTS..... This is a 286 processor version only and is very slow. A much faster version for 386+ processors is available upon registration.

50. 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 was reportedly not included because of some potential hardware incompatibilities. Anyway, 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

MCI - Multimedia Command Interface Files

MID/MIDI - I do not believe that this format can be played with the PC speaker driver.

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

50.1

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/win3/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.

50.2

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.

50.3

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. Note that the speaker does interrupt other system
activities when being used which could cause a problem in some
situations.

50.4

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.... ftp.cica.indiana.edu: /pub/pc/win3/sounds (or mirrors).
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.

50.5

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.

See also VuePrint in the VIEWERS-GRAPHICS-STILL PICTURE section.

51. 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 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. The OLE version in particular must be installed for the most recent Mosaic versions.

51.1

NAME..... **WIN32S** (non-OLE version)
PRIME PURPOSE..... 32 bit enhancement to Windows 3.1
FILE NAME..... PW1118.EXE
FILE SIZE..... 1,244,633
LATEST VERSION..... 1.20 October 1994
AVAILABLE FROM..... ftp.microsoft.com: Softlib/MSLFILES
STATUS..... Distributed free to licensed users of Windows 3.1 or Windows For Workgroups 3.11
DOCUMENTATION.... Minimal
FEATURES.....
COMMENTS..... This Microsoft Win32s 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, *except* the latest alpha 8 version.). 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. 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.

Note: Regarding IBM's new operating system OS/2 Warp and
the various versions of Win32s and associated applications:

Windows/Win32s115 - versions 1.0 up to this version 1.15
are supported under Warp

Windows/Win32s115a - not supported under Warp although
some applications may still run OK.

Windows/Win32s120 - not supported under Warp.

51.2

NAME..... **WIN32S** (OLE version required for latest Mosaic browser, alpha 9)

PRIME PURPOSE..... 32 bit enhancement to Windows 3.1

FILE NAME..... w32sole.exe

FILE SIZE..... 2,240,063 bytes

LATEST VERSION..... 1.20 with OLE 2.02 January 1995

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

This is in the same location as the corresponding new version
of Mosaic, and so both can be conveniently downloaded at the same
time. For modem users it might be a good idea to begin these
downloads at the beginning of your lunch time.

STATUS..... Distributed free to licensed users of Windows 3.1 or Windows For
Workgroups 3.11

DOCUMENTATION.... Negligible.

FEATURES.....

COMMENTS..... Because the new version of Mosaic is now an OLE compatible
application, Mosaic users must have this version, Win32s 1.20 with
OLE 2.02, installed on their system first before trying to install or use
the new Mosaic if they have Windows 3.1 or Windows For
Workgroups 3.11. The regular Win32s version 1.20 is no longer
adequate. Windows 95 and Windows NT do not require this because
the OLE function is already built in to those packages. This file is a
self extracting file which should be placed in a temporary directory
and exploded. There are instructions in the Mosaic package which
describe how to install this. Note this must be installed before
installing Mosaic and note that this contains updated a new updated
OLE version - if you had previously installed Win32s with OLE for
Mosaic alpha 8 that version is no longer adequate. Personally I'm
getting a little tired at having to download and install a new 2 meg
(zipped) Win32s file every single time a new version of Mosaic comes
out.

OTHER RELATED INFORMATION

60.0

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.

60.1 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 1994 89,796 bytes. It is currently available by FTP from:

cap.gwu.edu: /pub/internet/slip-ppp.txt

60.2 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. A text version of this complete document, updated December 1994 (57,546 bytes) is available by anonymous ftp from:

nebula.lib.vt.edu: /pub/windows/winsock/wtcpip06.asc

A hypertext version is available at:
<http://learning.lib.vt.edu/wintcpip/wintcpip.html>

60.3 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.

60.4 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 5,430 bytes and **starter2.exe** at 1,426,082 bytes.

60.5 **WINSLIP COMPLETE**

This is a newly created package from George Saunders with the best Winsock Shareware and Freeware applications. There is one program for each application along with an installation program and additional information. Available from:

ftp.netusa.net: /pub/winslip/prophet

There are four files in that directory to be retrieved and the main one, winslip.zip is 5,425,146 bytes. The others are all just a few kbytes. George has selected the best programs available, and plans to update this monthly with the latest versions.

Caution: This is an extremely large file. If retrieving this to your shell account make sure you have adequate disk storage space allocated to you by your service provider.

60.6 **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 about 2,800,000 bytes.

60.7 **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 Fraese 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.

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.

61.1 Bernard Aboba's "comp.protocols.tcp-ip.ibmcp 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/ma/mailcom/IBMTCP/ibmtcp.zip (79,454 bytes)
WWW: http://www.zilker.net/users/internaut/update.html (approx. 219 kbytes)

61.2 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)

61.3 "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.

61.4 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>

61.5 Those with Windows NT machines might want to check out the **Windows NT Internet FAQ** by Steve Scoggins and Tom Baltrushaytis available from:

WWW: <http://www.luc.edu/~tbaltru/faq/>

62.0

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

disabuse.demon.co.uk: /pub/ibmpc/winsock/stacks/trumpwsk
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.

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

63.0

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, the Center for Innovative Computer Applications:

HOST NAME:	ftp.cica.indiana.edu	(US)
IP NUMBER:	129.79.26.27	
DIRECTORY:	/pub/pc/win3/winsoc	
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.ij.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)

64.0

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 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/docs

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.

65.0

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 best 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 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. Unfortunately this does not always appear work, especially with the more recent versions of Mosaic.

66.0

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.

66.1 NEW! A Windows version of the manual is finally available from Qualcomm Inc. by FTP from:

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

It's currently 376,851 bytes.

66.2 A third party HTML version manual for the PC and Mac versions is accessible through the WWW from:

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

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. The manual covers versions 1.4.2 and 1.4.3b1.

For North American's, there is a mirror site at:

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

66.3 A variation of the previous Staffordshire manual is also available. Leopoldo Saggin took an older version of 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>

This Italian site can be difficult to access (slow) from North America.

66.4 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.

67.0

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.

68.0

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 generating 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.

Compression

SLIP-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.

PPP-Yes. Automatically negotiated as part of the connection process.

Connection Configuration

SLIP-Manual effort required for IP settings, or separate programs running to configure these (such as in a dialer log-in script). This is mostly a problem with servers using dynamic IP allocation.

PPP-IP configuration part of the connection process and is transparent to the user. PPP software will be more complex than SLIP.

Error Detection

SLIP-None. Slip is vulnerable to noisy lines, although error correcting modems will usually cover for this deficiency and the user will not be affected.

PPP-Built in error detection.

Industry Support

SLIP-

PPP-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

SLIP-IP only.

PPP-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

SLIP-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-PPP is an official Internet standard protocol.

Transmission circuit

SLIP-Asynchronous lines.

PPP-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.

THE WORLD WIDE WEB

80.0

WINDOWS WWW BROWSER COMPARISON - IMAGES

BROWSER & VERSION	<u>Inline Image</u> <u>GIF87a</u> <u>Normal</u>	<u>Internal Support</u> <u>GIF89a</u> <u>Transparency</u>	<u>Support</u> <u>JPEG</u>	<u>Supports</u> <u>Interlaced</u> <u>Images (GIF)</u>	<u>Normal</u> <u>Background</u> <u>Colors (RGB)</u>
Air Mosaic demo 1.1 Oct/94	yes	yes	no	no	Gray 192,192,192
InternetWorks Lite Beta 4 Dec/94	yes	yes	yes *	no	White 255,255,255 **
NCSA Mosaic32 2.0a7 Sept/94	yes	no	no	no	Gray 192,192,192
2.0a8 Dec/94	yes	yes	no	no	Gray 192,192,192
Netscape 1.0 Dec/94	yes	yes	yes	yes	Gray 198,198,198
SlipKnot 1.0 1.0 Nov/94	yes	no	no	no	Gray 192,192,192
WinWeb 1.0a2.1.1 Oct/94	yes	no	no	no	Gray 192,192,192

* JPEG image appeared "dirty".

** Background color is actually default color of Windows desktop - not separately adjustable.

ISSUES

90.0

The Unisys / CompuServe / GIF Mess

A story.

In 1987 CompuServe first introduced the GIF format as an efficient means of storing and downloading graphics files from their on-line service. They continued to develop GIF and although they retained control over the standards they allowed universal free use of the format. In subsequent years independent developers were attracted to GIF and wrote many programs to create and display it. It became widely accepted and was used elsewhere such as on the Internet where it is the prime image format for Web pages and browsers.

Unfortunately, a key component of the GIF format was the Lempel-Ziv-Welch (LZW) compression algorithm which CompuServe had used mistakenly thinking that it was in the public domain. In reality Unisys had applied for, and received a patent on it in 1985, which according to Unisys covers both compression and decompression applications. CompuServe had based GIF development on technical information from a magazine article which had failed to mention the patent. During a 6 year interval Unisys claims they were not aware that LZW was a component of the GIF format and CompuServe claims that they did not know that LZW was patented.

It was not until GIF had essentially become a world wide standard that Unisys contacted CompuServe, with negotiations over the patent issue beginning in January 1993. Some time later, in June of 1994 CompuServe settled with Unisys to avoid being sued, and signed a licensing agreement allowing it to continue using the algorithm in the GIF format on their network, paying an undisclosed sum for that right. Since Unisys had a valid patent and was protecting its property which it had a right to do, CompuServe's options in this matter were limited. The Unisys patent had already apparently been challenged once, and upheld by the US Patent and Trademark Office.

In late December 1994 CompuServe announced that effective almost immediately, under terms of its agreement with Unisys, it would in turn begin issuing sub-licenses and collecting royalties from software developers on the CompuServe network who were using the GIF format in their programs. By promptly obtaining a license from CompuServe developers did not need a further license from Unisys. A subsequent statement issued by Unisys indicated that there would be no attempt to collect back royalties for the years of past use prior to 1995 from any developers since usage had been unintentional (an "all is forgiven" grandfather statement). This licensing and royalty agreement is only enforceable by CompuServe against developers of GIF programs which are primarily used in connection with the CompuServe network.

Developers of GIF software elsewhere (not tied to CompuServe) are not affected. They can however expect to be approached by other on-line networks they are involved with, or Unisys directly. Unisys has clearly indicated that in enforcing its patent rights against CompuServe and associates that it intends to vigorously enforce its patent rights against other users of the LZW algorithm. The patent is both technically important and financially valuable, and has in fact been licensed out to over 100 other companies to date for other non GIF applications.

Unisys has publicly stated that licensing and royalty fees are not required for non-commercial non-profit GIF applications (e.g. Freeware), whether used for on-line services or not. As well, they have clarified the licensing requirement to include only new products or product enhancements introduced beginning 1995. The licensing/royalty does not apply to end users since such users are paying indirectly when they buy a commercial software package or pay registration fees for Shareware. The developers and sellers of such software will be licensed and will pay the appropriate royalties on each copy sold.

Although the royalties payable to CompuServe/Unisys are not significant (typically 1 - 1.5 %)

they are an aggravation for developers, as is the bookkeeping and paperwork required to track sales on which royalties are based. For those not being licensed through CompuServe the alternative is a license directly from Unisys where fees are negotiable - and may be better or worse.

It is likely that the GIF format has no future now and will be replaced with a non-proprietary equivalent on the Internet, although there is no obvious candidate at the moment. CompuServe has already announced its intention to work with graphics developers to develop a "free and open" replacement standard to succeed GIF. The new format would be a 24 bit (16 million colors) lossless standard replacing the 8 bit (256 color) GIF. CompuServe has rejected the use of JPEG as an option because it is a lossy standard and this is unacceptable in a number of applications.

End story (?).

91.0

DICS: DOES THE END JUSTIFY THE MEANS?

Today's case study.

One of the more popular mail and news programs in the UK has been DICS (Dialup Internet Connection Services). It is a batch mail and news transporter intended for use with a separate offline reader program. It has many features including MAPI capabilities and a Time client, works well, and has developed an enthusiastic following in that country. DICS officially became Shareware as of October 1994 and has a fairly standard 30 day evaluation period with single user registration starting at UKP 19.95.

In late 1994 allegations were made that the developer of this program had built in a back door to the program unknown to its users and not mentioned in any of the documentation. Specifically it was alleged that the program was sending unauthorized email to the developer of the program, unknown to the users of the program who had installed it on their machines. Furthermore, it was alleged that the developer was also subsequently sending email commands to prompt the program for additional information and that it was responding with more email information back to him. After an initial silence when these allegations were made public in local Demon newsgroups, the program's developer Mark Gibbons publicly responded with the following information (summarized):

When DICS is installed for the first time or upgraded to a new version, the first thing it does is to register itself by email with the developer, supplying basic site information only. This information is fed into a database and tracked for two purposes:

1. The information is useful in providing technical support for users who sometimes neglect to identify or to properly identify the version of the program they have installed and are having problems with. Some problems are very version specific.
2. Most importantly, the database is used as a means of tracking abuses of the Shareware license under which the program is made available. The database is used to identify particular sites which are repeatedly installing newer versions of DICS but never registering them over a cumulative period of time greater than the 30 day evaluation period. In such cases a message is sent to the DICS program at that site, which, if it is still active, will be prompted to return a status

report. This communication takes place between the program on the user's machine and the developer without the user's awareness. This response is confirmation that the site is in fact still using the program and is violating the Shareware agreement. In other words, a software piracy has been confirmed. A letter is now sent to the user at that site clearly identifying that the developer is aware that the program is active at the site and requesting that the program be immediately registered and the Shareware fee forwarded. The method by which the information has been obtained is not identified in the letter.

A storm has erupted over the issues raised. There are two areas of concern:

1. All communication between the program and its developer, including the initial installation notification, is done without the user's knowledge. Nothing of this is mentioned in any program documentation. The information has been withheld. Awareness of these capabilities might have allowed a user to decide not to install the program. The stealth which was used to secretly monitor the program's users has left a bad taste.

2. The potential for abuse is enormous since there is nothing to prevent such a program from stealing confidential information including passwords from a user's PC and sending this to outsiders. Can such a program be considered a virus? In this particular case there has been no indication that any such thing has happened. There is nothing to indicate that the developer used the program other than has been stated - to protect his rights from software piracy. The issue is more along the lines that allowing such an undocumented "feature" in a program offers an enormous potential opportunity for abuse from someone unscrupulous and in general ought not to be allowed for this reason. A user has been given no knowledge of this back door and no defense against it if improperly used.

The controversy continues in the UK in local newsgroups. The developer steadfastly maintains that his actions were essential to prevent the piracy of the program. His delay in publicly responding to the initial allegations in the first few weeks has somewhat damaged his credibility. On the other hand some of the critical outrage is being offset by admissions from people that they were in fact illegally using the program.

While insisting that his actions are justifiable and that he has done nothing wrong Mark Gibbons has agreed to add the necessary information to the program's documentation so that users will at least be informed of what is happening and will have the up front option now of not installing the program if this is unacceptable to them. This should satisfy some of his critics. He has however no intention of making any other changes.

The back door as it currently exists is very limited in capabilities and cannot apparently be used by hackers seeking entry into a system. There is the issue of whether or not what has been done violates any British laws or regulations, and this has not been clearly resolved yet. The service provider, Demon, which makes this program available on their FTP server intends to continue offering it and will remove it only if it is found to be illegal.

Questions

1. Could the developers intent not have been equally well accomplished through the normal nonintrusive methods employed in other Shareware programs without opening this can of worms? These methods have typically consisted of time limit or feature crippling to encourage registration. How far can a developer go to protect his property rights?

2. Would you consider what has been done with DICS to be an acceptable and necessary practice to fight piracy? Would you be in favor of it being implemented by other software companies, including commercial software companies?

3. Knowing what you now know about this program, would you be prepared to install DICS on your PC?

End case study.

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Errors and Omissions: Every effort is made to ensure completeness and accuracy of the above information. Corrections are appreciated, and will be incorporated into a subsequent update.

This file has been uploaded to the prime sites:

ftp.cica.indiana.edu: /pub/pc/win3/winsoc
oak.oakland.edu: /SimTel/win3/winsoc

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Final note: This document is about Windows software only and is distributed in formats readable by anyone who has Windows. If you do not have Windows, or access to Windows then this document is of no use to you anyway. Since I do not like Ascii text (flame bait), no text version is, or will be made available.

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