

Windo Watch



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At the Forum: Like many of the 40,000 thousand beta testers that Microsoft uses, I've had an opportunity to have an intimate look at Win95. As each new build appears, traffic on the CIS Beta forum increases - if recent usage means anything! The sell out crowd is spilling over and most expect the crush to increase even more as MS nears its final release . The private club feel of the place has great ego stroking appeal, but of greater consequence, is the serious work being reported. Given the aura of splendid high powered systems, I should be green with envy and ashamed...but I'm not!

My teeny two node network is anything but high powered! As I write this my partner is shouting the praises of this system while working from an ISA bus with 8MG of ram on a 386 DX 40. He is accessing the computer I am working from with no deterioration to either his computer or mine. I am using Word6 with ProWin bringing in a mail packet in the background. My machine has a VLB bus with 16 MG and a 486 DX 66 installed. All four of the hard drives, two in each computer, are plain vanilla Western Digital Caviars of various sizes -arranged in unconventional fashion on top the internal CD-ROM drive. When the CD-ROM drive was installed the modification done to the old AT case with my trusty hack saw is yet another story! That tale often brings shock to the faces of strong men at my skinflint approach to bleeding edge technology. The 386, Speedy(?), machine has an aging Zenith 1490 flat screen VGA, that doesn't owe us a dime, running one-half a megabyte of video ram on an old STB card. While the 486 uses a matronly KLH with a Cirrus VLB card having 1 MG of memory. Win95 build 324 runs like a tamed lion ignoring the limitations of long gone state of the art hardware without a single error message .

Our hastily compressed C: drive left a series of footprints in the Config.sys, Autoexec.bat, and a few other basic Stacker files. With some Beta tech help and our fundamental ease with operating systems we were able to sidestep much of this pain. It appears that these errors are easily corrected as familiarity with Windows95 increases. The ability to tinker and get one's hands dirty again pays big dividends. The second installation, build 324, was as smooth as a newborn's bottom.

One must marvel again at the growth of Windows. From Windows 2 to Windows95 in just a few short years! There are many more Windows users since those days of aggravating dumps, long hangs and slow responses. The promise is being fulfilled and 32 bit software is moving into the hands of ordinary computer users. It is they who will continue to fuel the growth of this operating system as they flock into the market place. There is no going back!

EDITORIAL

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Comments, letters, and requests can be sent to us at various locations. Postlink to Lois Laulich ->15 tagging the message "receiver only" and on the Internet lois.laulicht@channel1.com

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A Windows in Your World!

Stay With the Old or Go With the New -
Microsoft Operating System ?

© 1995 by *Herb Chong*

Nineteen ninety-five will be a threshold of sorts for most of you reading this column. This is the year that another version of Windows is coming out and you'll have to decide whether you want to upgrade to Windows95, do nothing, or perhaps even move beyond, because even Windows95 won't quite do what you need out of a desktop system. In this issue, we have hands on reports on two operating systems that might be in your future, Windows95 and Workgroups for Windows 3.11.

Windows95 is the 32 bit system for the average user, who wants the advantages of a 32 bit operating system while still using much of their existing system hardware. To upgrade systems, it needs resources that are not too expensive to come by and not too hard to locate. It is supposed to run well on a 4M system with a 386 processor and enough hard disk space to install your software onto. It sports a brand new, "object oriented", interface that is supposed to be easier to use for new users, more powerful for experienced users, and handle more day to day chores directly without the need for third party products. The system is supposed to configure itself whenever you change your system hardware, take care of detecting conflicts, and make intelligent choices about how to use your system's resources to best advantage. Although we are looking at a beta operating system here, there is enough in place to say that there won't be any surprises between now and the final release of Windows95.

According to Microsoft, Windows95 is going to take the world by storm, sell more copies in one year than any other operating system in existence, do everything except make your coffee in the morning, and incidentally, make a lot of money for Microsoft. The marketing that Microsoft has done proclaims that it is a brand new, ground-up rewrite of the code and doesn't depend on DOS anymore. It's supposed to be easy to use, support all your existing software, hardware, and run just great compared to what you run today. However, this is marketing. Just where does the truth fall? What does Windows95 really do and how does it really run? I've been running it myself for about 2 months. It really does work, but it really does take getting used to too. Jeff Marchi tells us what is really like. He has been running it for almost a year and has lived through both the joys and the frustration of using a beta operating system.

Windows 3.11 also represents an important upgrade. Paul Williamson has taken us through the many features of version 3.11...all of which are tried and true...and very comfortable. It is a faster and more stable version of Windows 3.1, with improved file and disk access while providing many of the networking bells and whistles using familiar tools. The security of the WGFV version leaves more than a bit to be desired, but for client services or work group functions it will perform very satisfactorily with NT, Windows95 and Novell. For those not ready to move on to Windows95 for a variety of reasons, including comfort level, Work Group for Windows will be a viable contender for upgrade from Windows 3.1. Familiar DOS is still very much present for those who really prefer working from the command line. Given the prediction for future changes in hardware, WorkGroup is a very excellent option until most of the hardware and software bugs are shaken loose.

Windows NT is the system for power users and corporations. Its user interface is almost identical to that of Program and File Managerthe one we have grown familiar and annoyed with, in Windows 3.x. Despite the outward similarity to Windows 3.x however, Windows NT 3.5 is radically different underneath. It provides pre-emptive multitasking and multithreading, capabilities that are essential to server operating systems supporting an enterprise, and features that help improve responsiveness of the system even when there is but a single user. Although you can run your current Windows applications in Windows NT, to really get benefits from the system's advanced features, you need application specifically written for Windows NT. Ambrose Campbell is not your average user. He likes to use a dual-Pentium™ system with 96Mb of memory and more disk space than you can shake a stick at. From time to time he will share with us some of his problems and successes with NT.

Although a 486/66 with 16M can run NT adequately, to really let it shine, you need to give it serious amounts of resources. This is one of the most important differences between NT and Windows 3.x. With Windows 3.x, there comes a point where adding more memory won't make any significant difference in what you can do. With Windows NT, the more memory you have, the more you can do. Windows NT was first marketed as the solution for Windows power users. Once 3.1 came out though, all the marketing in the world couldn't convince people that it really did run OK in 16M of RAM or on a 386. You had to give it serious resources to let it run well, resources that even most power users couldn't afford. Even so, it gained a loyal, but small following among those power users who simply could not get enough of their work done using Windows 3.x. Windows NT 3.5 helped by requiring less memory to run well, having better optimized code, and equally important, significantly larger amounts of CPU and memory for the dollar available. If you consistently hit against the limitations of Windows 3.x that stop you from doing what you need to do to make a living, you need to look at Windows NT.

WINDOWS95

Installation and Beyond

© 1995 by Jeff Marchi

There have been dozens of articles published about WIN 95, and I am sure almost everyone here has read at least a few of them. I decided that I would not do a rundown of features and how they work. Instead I will give a first hand report of how Windows95 actually installs and runs and then describe the features I found that I really like. I also included a section about the new interface where I covered some issues that I haven't seen mentioned very much in print. At the end of the article I will discuss some of the reasons that appear to be roadblocks in getting the product released on time.

The Various Builds

As I write this in January 1995, the current Beta of Windows 95 is Beta 2 and is build number 224. Generally they do a new build every day so the number rises rapidly. Beta 1 was Build 164. Just last week I received 285 for a test, but that's a another story which we'll discuss at another time.

In June I installed Beta 1 of Win 95 on my test system. It was a 386-33 with 8meg that has since been upscaled to a 486-66. The first install went smoothly. Even the Bernoulli Insider 90 worked just fine with it's drivers loaded. I was quite pleased with the performance, ran it for about a day and realized it was capable of running most of my software without a problem. I decided to put it on my main system, a 486-66 with 16meg of memory, since it seemed capable of running all of my major programs without crashing. Additionally, the information from the beta forum had been positive about the how very stable '95 was for most people. I had prepared by backing up my main system. I then copied my regular Windows directory and all its subdirectories) to another drive and renamed it WIN311. I edited every INI file in the k:\win311 directory and changed every c:\windows reference to now point to k:\win311. I tested it once by changing *AUTOEXEC.BAT* and *CONFIG.SYS* to point to k:\WIN311, and then brought up the system with WFWG 3.11 for a test of my major applications. They all worked just fine in the newly created directory, so I was confident I could easily go back to WFWG (Windows for Workgroups) 3.11 if it was necessary.

The Installation

To install Win 95 you are supposed to get into Windows, shut down all programs and then install over the existing version. It creates an emergency disk as part of the beginning install procedure. You can always boot from that disk if you have a problem. As most have heard, the Windows Beta disks come in a new DMF format

that gives you about 1.7meg on a disk. This reduced the number of disks for beta 1 to 14. The first disk is normal HD 3.5" format. It loads the driver for the DMF format and starts the install. You can not copy the disks without using special 3rd party drivers in the current version of DOS. They are however readable in Windows 95, without the special driver.

When the install was completed my system came up and announced a 6251 error. With WIN95 *log* files are automatically created to let you know what went wrong. The *ios.log* file said my ASPI driver was incompatible. I was stuck with *real mode* disk access as a result. After checking the beta conference on CompuServe, I noted that others with the IN-2000 had the same problem, and that there was a fix in the form of the latest ROM from Always. I called Always and they sent me the ROM upgrade free as I had bought an upgrade just six months before. When it arrived I removed my ASPI driver, and had full 32bit support for my SCSI drives. The system clearly runs a *lot* faster than WFWG with full 32bit support. Under WFWG I could only get 32bit file access so the performance boost with WIN95 was immediately noticeable. I tried all the normal programs I use, Procomm, Waverider, Word, Excel, Quicken, Corel, Foxpro for Windows, and Foxpro for DOS. They all came up and worked just fine. When I tried my CD, no response! Time for another bug report. Unfortunately, after getting the ROM fix the CD still didn't work. Since this was Beta 1, I could live with it for a while as I can dual boot from WFWG when I need to...at least that was my strategy at the time!

Device Drivers

Checking the beta forum showed that CD problems were not uncommon. A number of people have reported problems getting the combo of CD's and controllers working. Over the period of the beta many of these problems have been fixed, but my CD is still not working. I told one Tech person at Microsoft that I was thinking of sending it back to be upgraded as Texel has an upgrade for my model. They asked me to wait so that they could properly deal with that particular problem.

Microsoft is really trying to make as many devices and device drivers compatible as can be reasonably handled. To underscore this point, they offered to send me a working controller and CD if I send them mine in exchange. They are willing to go that far to get the various interfaces working properly. However, this is one of the major areas which result in the delay of shipment of the product. Microsoft is insisting that the install process go smoothly to meet the various issues of a large and diverse installed user base.

Most video cards work quite well. There are a small number yet to have drivers written and not all drivers compare well to their Windows 3.1 counterparts. Nonetheless, there are a large number of drivers available for almost all the major cards and chip sets. SCSI support is quite robust and most manufacturer's

controllers get 32bit support with or without drivers. Since there is so much interest in SCSI we are including a list of the controller manufacturers supported in Beta 2.

Adaptec	AMD	Always
Buslogic	Compaq	DPT
Future Domain	IBM	Iomega
NCR	NCR/Acculogic	New media
Trantor	Ultrastor	Zenith Data Systems

Some of the features I really like about Windows 95:

Resources shortages don't seem to be much of a problem any more. Once in a while I may notice they are low, but I really have to run a lot of apps before resources get below 30%. The mix I used to run with WFWG 3.11, that would leave me at 25%, now leaves me at around 50%, so I have a lot of room left without having to shut applications down.

I have wanted on screen Icons, that don't require a 3rd party product, for YEARS. WIN 95 has this built in. I can just drag an Icon on the desktop with the right mouse button, select create shortcut, and an icon is right there on the screen. It's quite convenient when I want to test a program for a while, or have a program I want to get to quickly. When you drag an Icon (or file) from Explorer to the desktop with the right mouse button it gives you a choice to move it to the desktop (the Desktop is simply a directory), copy it to the desktop, or make a link to the original file so that it doesn't have to be moved but can be directly executed.

When you are at a DOS prompt you can start a Windows or DOS program without worrying what kind it is. I find this especially convenient when installing programs. I always have a DOS screen open. Instead of selecting Start/Run I just select the DOS window and run the install program. WIN95 will figure out what type of program it is and start the program in the right environment, without any problems. In those cases where you aren't sure whether the program is DOS or Windows, Win95 will figure it out for you. No more messages saying "This program requires Microsoft Windows".

You can setup a DOS window so that it's able to quickly Edit/Mark by just dragging the mouse, like Windows 3.0 worked, without having to use the Control menu. You can do this selectively, one DOS Icon can have it enabled and the next can have it work just like Win 3.1 where you must select the Control Menu and then edit/mark. I always have a DOS window running so that I can quick cut and paste data from my information database. With this option I have a hot DOS screen there, but other DOS apps will correctly support the DOS mouse for that application.

One major problem with many systems is the stability of communications and printing. I have found both to be improved considerably with WIN95. I just don't get errors any more with background communications. I am only using a 16550, but it seems to be all that is needed to get error free 3325-3350 CPS file transfers with a 28.8 modem. I have been able to start and stop other applications and do some pretty intensive work while background transfers went on error free. Printing in the background is barely noticeable now. It's no longer a pain to do network printing because the load on the system that is acting as the print server is so much less.

Resource usage of some Win apps like Excel, can get high, but when the 32bit version exits it releases all its resources. It's interesting to watch the seconds go by, after a 32bit app has been terminated. The GDI and USER percentages creep back up to the pre-startup level. It's nice to exit Word or Excel and get all my resources back. Excel in particular has been notorious as a resource eater that doesn't return them on exit, that problem is over. With future 32bit apps this should be quite a time saver. People should not have to restart their system just to get back the resources eaten up by poorly written programs. Unfortunately some 16bit Windows apps can still eat up resources which can require you to do a restart when they get too low.

All DOS windows now have an option to have a toolbar on top with copy, cut, paste, full screen, properties, Background, exclusive and a couple of different font options. Makes it a lot easier to manage a windowed DOS application.

New Interface

The new interface for Windows, while distinctly different in many respects is still quite similar to what people are already used to. Program Manager isn't the place to start applications any more, unless you want to use the limited version which is included for backwards compatibility, but the new interface is so easy to use that it won't take Windows users more than a couple of minutes to get acquainted. The start button at the lower left corner of the desktop (it's movable) is now the place to go to start most of your applications. You can just click once on the button and it brings up a list of all installed programs, a list of the most recently used documents, as well as options for Control Panel, Printers, customizing the running task bar, start button options and more.

An interesting thing about the new interface is how it manages icons. All the old Program Manager icons now reside in subdirectories under the WINDOWS\START MENU\PROGRAMS directory. You go into that directory in Explorer and you see all the groups you used to have in Program Manager. One benefit if this is that there is no longer a limit to the number of icons in a group or the number of icon groups. You want a new group, you just create a new sub directory, want a new Icon, just

drag it into the right directory and there it is. Icons that have been placed on the desktop, end up as files in the \WINDOWS\DESKTOP directory. It makes it a lot easier to manage things this way.

The replacement for Program Manager and File manager is called Explorer. It display's files similarly to how files are displayed on a Macintosh. They can be represented by large Icons, Small Icons, list mode (essentially the same as Small Icons) or with full detail showing a small Icon and all the file information like Date, size, type (a text description of what type of file it is), and date (Last modified date, not created date). Unfortunately it also hides some of the files, so you end up having to go to DOS tools or reverting to the included File Manager if you really want to see everything in every directory. This has been done to make it easier on the novice, that really doesn't want to see or know about more than they have to. Many file extensions don't show up any more, so it can be difficult to differentiate between a PIF and a shortcut to an application, without checking the Properties of the file by clicking on it with the right mouse button and selecting properties from the pull down, or using a tool other than Explorer to display the directory.

One thing that has really changed is the heavy use of the right mouse button. Click on an Icon with the right button, select properties and you can see a lot of information about a file.. You can see what date a file was created, what date it was last modified and the date it was last accessed, some of which is information that just wasn't available prior to Win 95. Depending on the type of file it is, there is a lot of other information available such as attribute settings, the new long name and the old 8.3 style DOS name and more. With Win 3.1 you had PIF files for DOS applications and you had to set up the PIF and then set Program Manager with an icon that points to that PIF. With WIN 95 it's easy to change the characteristic of a DOS application. If you are using an old PIF from Windows 3.x or just clicking on the EXE to start it, you just go to the directory in which the PIF or EXE resides, select Properties for the Icon/File, and it will bring up a list of all the settings that used to be in the PIF, plus more. No more PIF editor.

The right button is also used to bring up the Desktop Properties, you just click on a blank spot on the desktop, select properties, and you can change the wall paper, screen blanker, video driver and any other characteristic that used to be in Desktop option of Control Panel. There is also a Display icon in Control Panel which you can use to get to the same Desktop options, but it's even easier to get there with the right mouse button.

Overall it's a lot easier to get to and manipulate the Windows environment as a result of these changes.

The Delay of WIN95

Most people have already heard that Win95 has now been delayed until August 95 - *maybe* ! Over the last couple of months I have become more and more concerned with the promised shipping date of May 95. I really never really believed in the Dec. 94 date, once I had received the beta, because the software didn't appear to be either complete or sufficiently robust to be shipping that early. When comparing it to the first WFWG 3.11 beta it seemed a little less complete, but it was stable and reliable enough to run as my main OS. Unfortunately it has not moved forward fast enough. There are a number of problems that have been addressed and fixed but there are a lot of other things left to complete and then they have to be tested.

I realize I said it would be out in May as promised, at one time. This was after seeing two previous beta's that ran very well. Both of those previous betas also shipped about 9 months after the beta had started. Unfortunately this new version of Windows is taking a lot longer to get complete. So many changes have been made in the product that debugging has become a much larger job than expected.

The following is a short list of just some of the incomplete pieces:

- There is still no Clipbook, there is no way to pass clipboard information from system to system or do I have any idea what it will look like or when it will be available.
- DAT support is one thing that will be disappointing if it isn't improved. There is presently no native DAT support. It will be necessary to run drivers in CONFIG.SYS to support your DAT, ASPI drivers at least and possibly CAM drivers. Because almost all ASPI drivers are now supported you don't lose 32bit support when you have to do this, but it does take up UMB space (upper memory).
- Scanner support, especially for Twain, is pretty weak. Windows 95 does not directly support SCSI scanners. Like DATs it's expected that people use real mode drivers to support them.
- CD support has to be improved, many CD's still don't work properly, if at all. Many others work just fine.
- There are a number of applications that still don't work quite right. Microsoft is hard at work resolving these type of problems as they are reported.

I have seen people comment about how much they are annoyed at the delay of Win 95. All I have to say is that you would be even more annoyed if it was released in

May and didn't install properly or didn't support the hardware most people are using.

Hopefully the information I have provided here will give a lot of people insight into what is going on with Windows 95. It's definitely going to be a product worth using. If you have an opportunity I would strongly recommend you get a copy of the pre-release of the product, which will be available around March for \$30. Contact Microsoft to see if you can be one of the 400,000 people that will participate in this pre-release.

Jeff Marchi is the owner of MIS Services a Computer Consulting firm in San Francisco, CA. with over 24 years of computer experience. Prior to starting his own business, he worked for major companies like Chevron in the capacity of Manager of a communications group, Fireman's Fund, Bank of America and DCA (Digital Communications). He is an experienced IBM mainframe programmer and has been doing software development and trouble shooting on IBM PC's since 1985. He has beta tested Microsoft Windows including v 3.1, WFWG 3.1 and 3.11 as well as WIN95. Jeff is a new contributing writer to [WindoWatch](#).

Windows for Workgroups - An Introduction

by Paul Williamson

This article is intended to provide an introduction to Windows for Workgroups (WfWg) version 3.11. It is *not* a product specification, but describes features, capabilities and requirements of Windows for Workgroups.

It must be noted that the functions and features described herein are subject to change without notice.

What is Windows for Workgroups, the Product?

Microsoft Windows for Workgroups is the latest released version of Windows, based on Windows 3.1, providing information sharing, communication and workgroup application capabilities, improved stability and increased performance to Windows users. WfWg is based on Windows 3.1, and therefore inherits all the capabilities, features, and applets of Windows 3.1 and runs all Windows 3.0 and 3.1 applications. WfWg's new features are described below. For current users of Windows 3.1 there is an "add-on" version of WfWg at a lower price that just adds the new functions and features.

 **32-Bit File Access.** 32-bit file access provides a faster way to read and write to the disk cache in Windows for Workgroups 3.11 than SMARTDrive can provide. It provides a much higher disk access performance boost on compatible hard drive controllers when running Windows for Workgroups 3.11 by utilizing a 32-bit cache as opposed to SMARTDrive's 16-bit cache. However, SMARTDrive is still used for caching floppy drives with Windows for Workgroups 3.11. By default, 32-bit file access is not enabled.

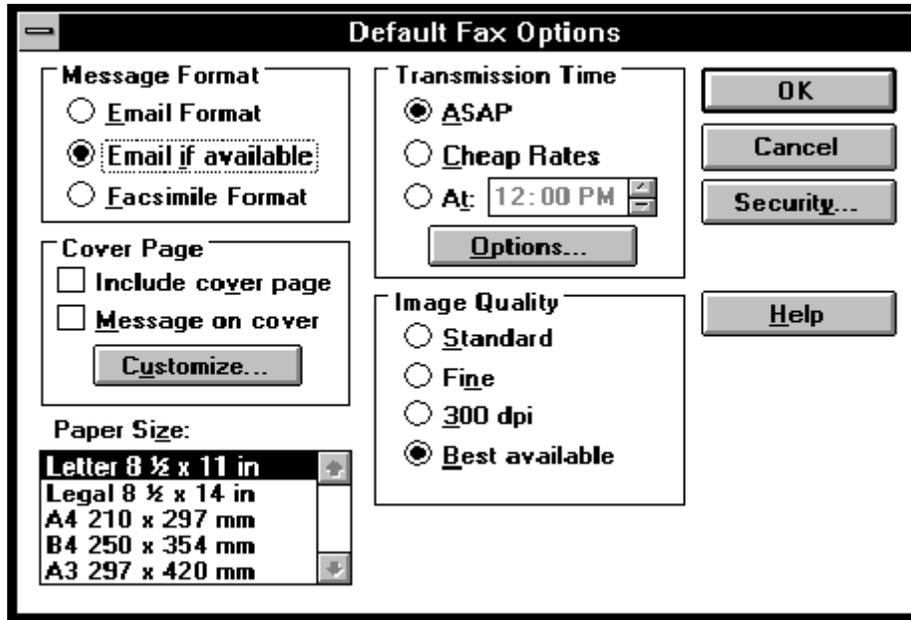
 **Microsoft At Work.** A set of modular software technologies designed to make office devices easier to use. These devices include copiers, telephones, fax machines, printers, and hand-held computers. Users will realize the benefits of *Microsoft At Work* because graphical user interfaces on office devices will make all equipment features easy to access and use. Additionally, users will be able to control office equipment directly from their PCs.

Microsoft At Work fax provides many benefits over standard fax messaging, including the following:

Extending the capabilities of fax by enabling the transmission of richer document formats. Microsoft At Work fax allows users to send binary files, such as word processor files and spreadsheets, as easily as they send them via e-mail today. This capability will extend the workgroup to include anyone with Windows and a fax card. For example, Microsoft At Work fax will enable geographically separated groups to co-author and edit documents, or roll up financial statements. Companies can also use Microsoft At Work fax to automate mission critical tasks, such as automating the purchase order and billing processes with subsidiaries. While a data communications package could be used to send binary information point-to-point, Microsoft At Work fax simplifies this exchange of information by using a familiar e-mail interface rather than a complex communications application.

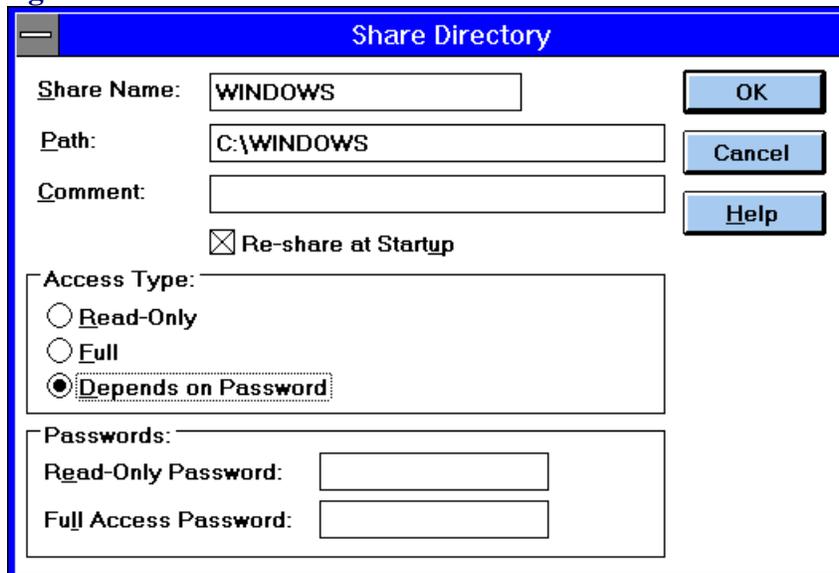
Fax options that can be configured include identifying the time of transmission, cover page options, image quality, and security settings.

Windows for Workgroups - An Introduction



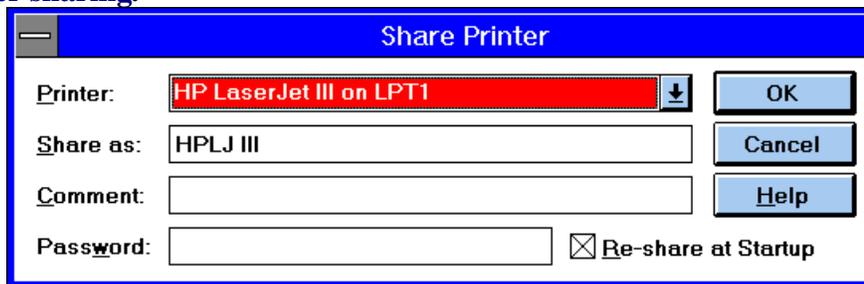
Microsoft At Work fax is completely compatible with the 21 million installed Group 3 fax machines. Note that the advanced services described above (binary file transfer and security) are not available when communicating with Group 3 fax machines.

File sharing.



WfWg users can share files on the hard disks of their PCs with other users. Once a directory is "shared", all files *and subdirectories* in that directory are accessible by other users, depending on the security permissions the user has set up. Users "share" directories from the *File Manager*.

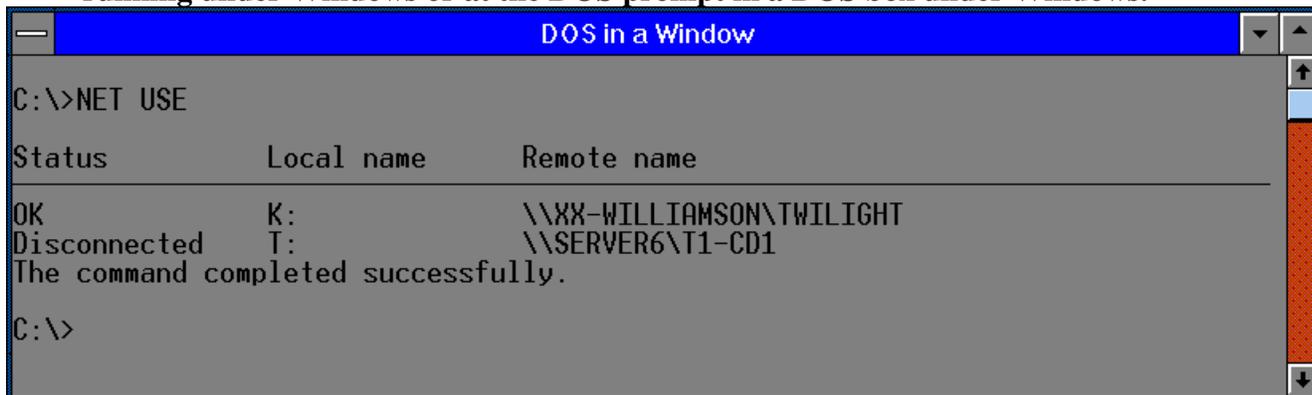
Printer sharing.



WfWg users can share printers attached to their PCs for use by other users. Once "shared" other users can send print jobs to that printer. Users "share" printers from the *Print Manager*.

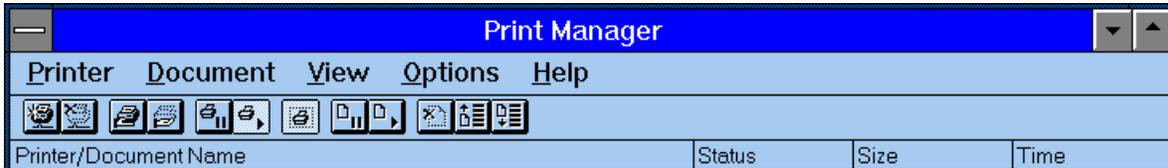
 **Accessing and using shared files and printers.** WfWg users can connect to shared directories or printers. Once connected to a directory, the files can be copied, read, executed, or modified depending on security permissions set by the user when he or she shared it. Similarly, once connected to a shared printer attached to another PC, users can send print jobs to that printer. Connecting and managing the access of shared directories and printers takes place through the *File Manager* and *Print Manager*.

Access to shared directories and printers is also available to DOS applications running under Windows or at the DOS prompt in a DOS box under Windows.

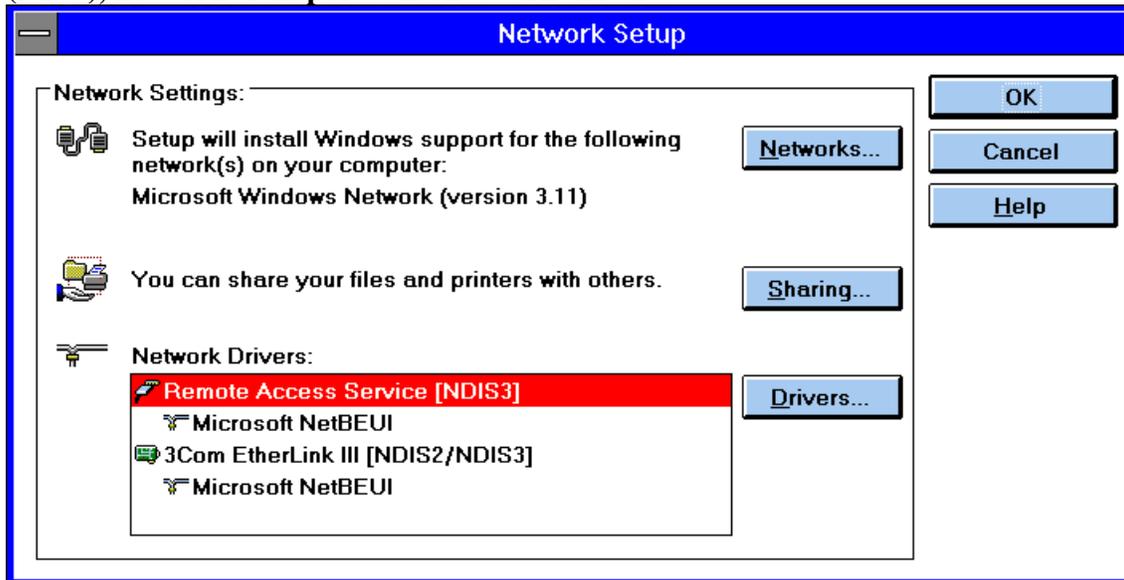


 **Graphical user interface (GUI) for managing network operations.** All network operations (sharing a directory or printer, connecting to a shared directory or printer, sending electronic mail, scheduling group meetings, etc.) are executed through the Windows graphical interface. In particular all directory and file operations are conducted in the *File Manager*, and all printer operations in the *Print Manager*. *File* and *Print Manager* have been enhanced to include a Tool Bar that has icons for commonly used commands and network operations like sharing and connecting. Connecting to shared files and printers can be done with point and click operations.

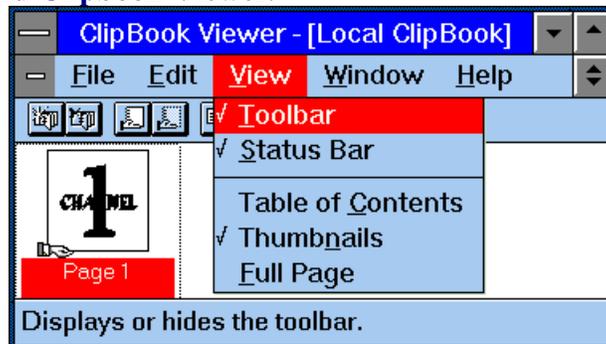
Windows for Workgroups - An Introduction



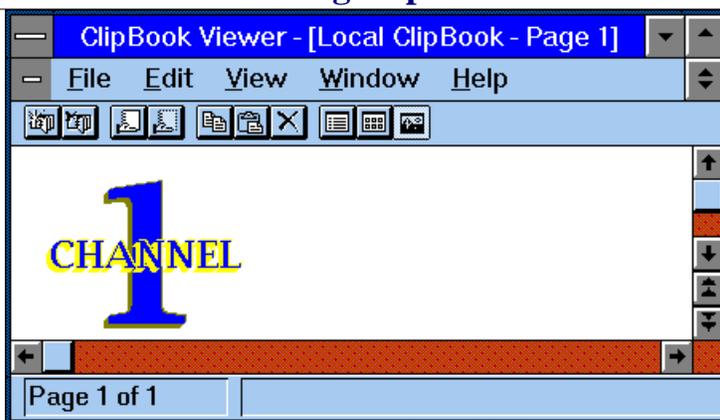
 GUI setup and configuration for network hardware and software. The Windows for Workgroups setup program will attempt to detect the installed network card at setup and present the user with intelligent defaults for network card settings. WfWg setup can configure the user to run with access to multiple networks simultaneously. The *Network Setup* applet allows users to install and configure Network Interface Cards (NICs), network transports and network drivers.



 Network DDE and Clipbook Viewer.



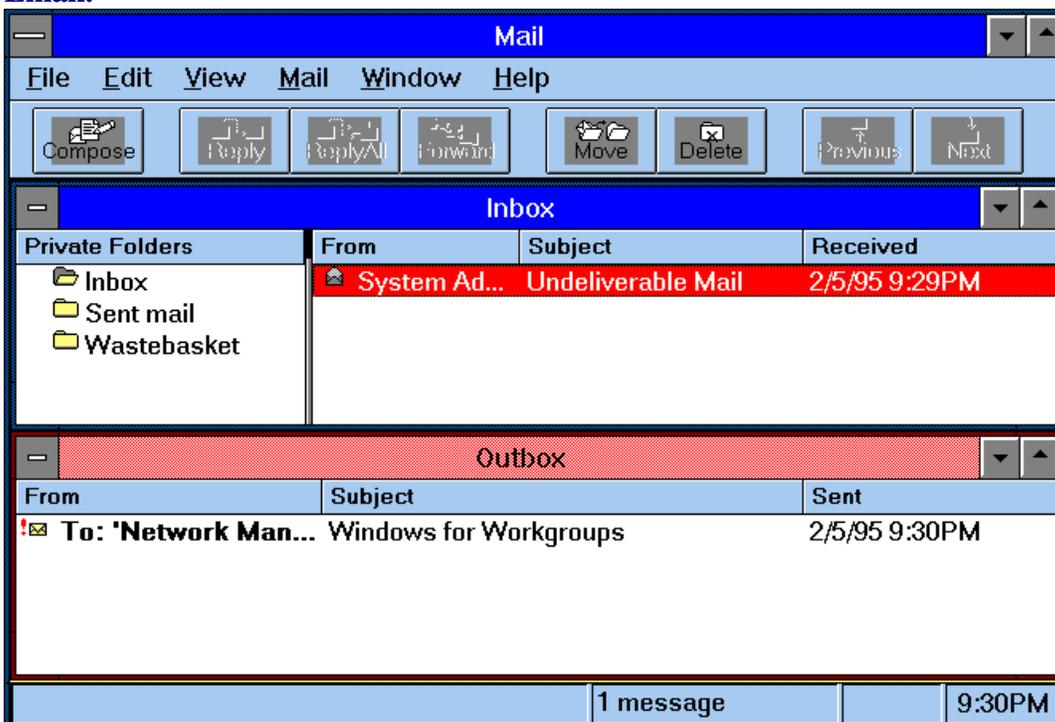
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The Dynamic Data Exchange (DDE) protocol is extended to work over the WfWg network. This allows users to share DDE items across the network and other users to "connect" to them to create live links between documents on different PCs. The Clipbook Viewer (an enhanced version of the Clipboard, providing multiple clipboard pages rather than a single DDE element) is an application that allows users to share DDE items (parts of a file, for example a cell range in an Excel spreadsheet) and connect to shared DDE items over the network. Once users connect to a WfWg user's Clipbook, any shared DDE item in that Clipbook can be copied into the users local Clipboard and then can be pasted into any application (that supports DDE) to create "live" links across the network. When data is linked in this fashion changes to the original data are automatically propagated to the linked items on other PCs. This feature requires no changes to existing applications that support DDE



Email.



MS Mail 3.x client, a full featured electronic mail application, is included and integrated into WfWg. *MS Mail 3.x* allows users to read, compose, forward and reply to electronic mail messages, as well as to manage messages they have received.

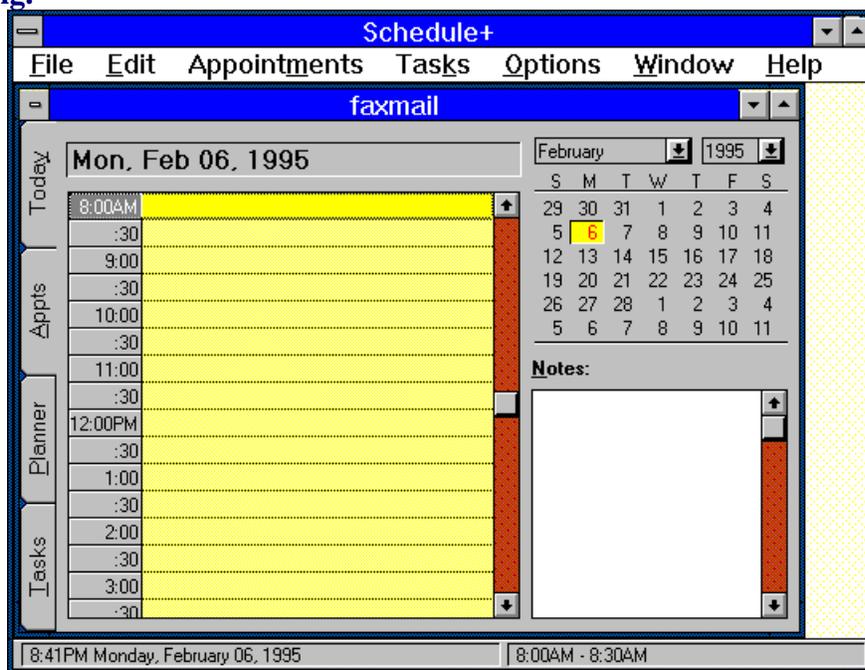
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Received messages can be ordered by Sender, Date Received or Subject, or can be stored in folders created and named by the user. *MS Mail 3.x* features a "point and click" address book that makes it easy to address email messages. Messages can have file attachments or include OLE objects. Users can easily attach files to messages by selecting the file in the *File Manager* and using the "Send Mail" Tool Bar icon. This opens the email compose window with the selected file attached to a new message ready to be addressed.

WfWg comes with all the features necessary to send electronic mail to other members of the WfWg workgroup who use the same Workgroup Post office (one of the PCs in the workgroup running WfWg acts as the Workgroup Post Office). WfWg will automatically set up a Workgroup Post Office if one does not exist, and will also allow users to add their accounts to the Post Office the first time they want to send mail. To send electronic mail to multiple post offices, or via email gateways (available separately from Microsoft), a mail connectivity upgrade package will be required



Scheduling.



The *Schedule +* application is included and integrated into WfWg. This is a full featured graphical scheduling application that allows users to schedule group meetings, and manage their daily calendar and task list electronically. Users keep their calendars and task lists by adding meetings and tasks with drag and drop operations. Several views allow users to view and print out their appointments by day, week, month. Similarly tasks can be arranged by project, priority, and due date

To schedule meetings with other WfWg workgroup members, users access the address book (same as from email application) and add desired members to the attendees list. *Schedule +* looks up the free and busy information for each member on the attendee list and fills in a calendar view with the free and busy information for the user and all requested attendees. This allows the user to find a common free time for all attendees. Then the user can request a meeting which will send an email request to

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each member of the attendees list asking for confirmation to meet at the requested time. Attendees can accept, reject or tentatively accept the meeting request. If accepted these meetings get added to the calendars of the users and an acceptance (or rejection) email is sent to the meeting

Schedule + stores information at the Workgroup Post Office. The WfWg setup program automatically configures the Workgroup Post Office to handle the calendar information, if selected.



Security.

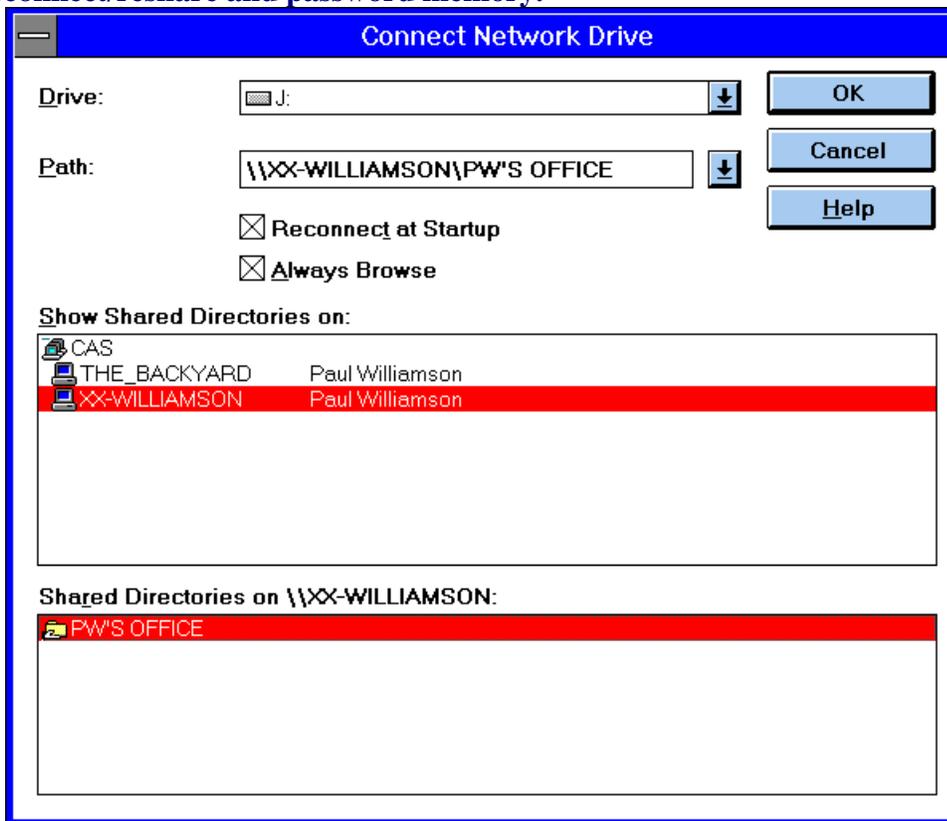
The screenshot shows the 'Share Directory' dialog box. The 'Share Name' field contains 'WINDOWS', the 'Path' field contains 'C:\WINDOWS', and the 'Comment' field is empty. The 'Re-share at Startup' checkbox is checked. Under the 'Access Type' section, the 'Depends on Password' radio button is selected. Below this, there are two password fields: 'Read-Only Password' and 'Full Access Password', both of which are currently empty. On the right side of the dialog, there are three buttons: 'OK', 'Cancel', and 'Help'.

WfWg allows users to password protect their shared directories, printers and DDE items. The access controls allowed are "Read Only" and "Full Access". When creating a shared directory (or printer, etc.) users specify which of these access controls apply to the shared item. The user can also choose to apply a password which a connecting user must submit to gain the requested access. The user can choose to allow both "Read Only" and "Full Access" for a given shared item, and specify different passwords to each access control. Then, users that gain access with the "Read Only Access password" only get read access, and those that gain access with the "Full Access password", get full access (i.e. read, write, delete, modify, etc.). Access controls and passwords are specified per shared item, not user. Any user with the correct password can gain access to a shared item. The default access control for all shared items is "Read Only" with no password. Access controls and passwords are set by the user when the item is "shared".

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Auto-reconnect/reshare and password memory.



When connecting to shared items, or sharing items, users can choose to automatically reconnect or reshare those items at start-up. When WfWg is restarted it automatically attempts to reconnect or reshare all items so marked. If the item is not available, the connection can be “ghosted” (setting up the connection even though it doesn’t really exist) for persistent network connections.

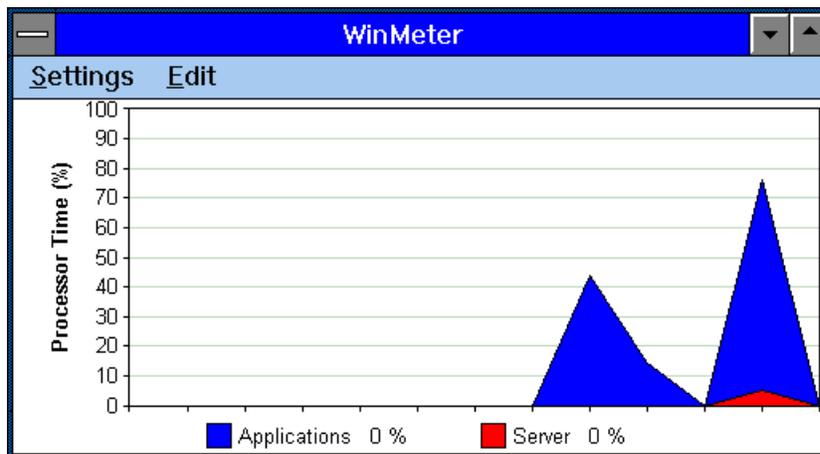


Each time a reconnection is made to a shared item set with a password, the user must provide the correct password to complete reconnection successfully. The first time a user supplies a password for a shared item, WfWg records that share and password in an encrypted file on the user's local disk. When an attempt is made to reconnect to that share, WfWg uses the password in the encrypted file. If the password is still valid (i.e. the sharing user hasn't changed the password), WfWg will automatically reconnect without prompting the user for a password, thereby "remembering" passwords. Password memory cuts down on the number of times a user will be prompted for a password during the reconnection process.

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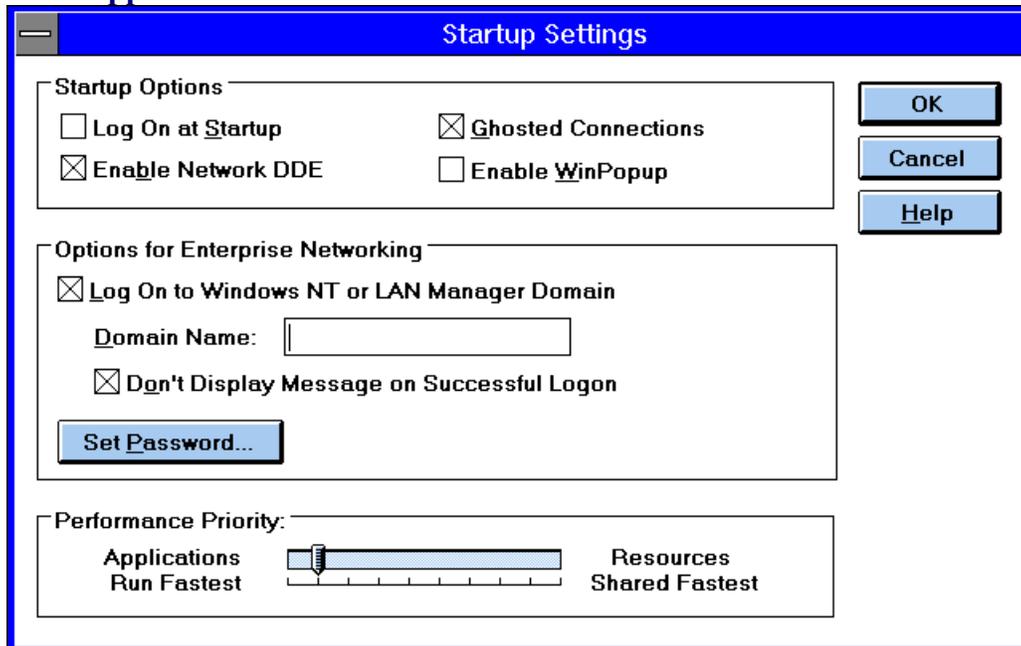
The encrypted file with the passwords is "unlocked" by the user login name, meaning that a foreign user cannot "use" the password file unless they have the correct user name/password pair.

WinMeter.



WinMeter is an applet included with WfWg that enables users to see what percent of the CPU utilization on their PCs is being used for their own local applications, and what percent is being utilized to service requests of other WfWg users (i.e. users connecting to that PC for file, printer or other access). *WinMeter* sits on the WfWg desktop and shows a colorful graph indicating the CPU resource usage both as a window (shown above) and as an icon when the applet is minimized..

Network applet in Control Panel.



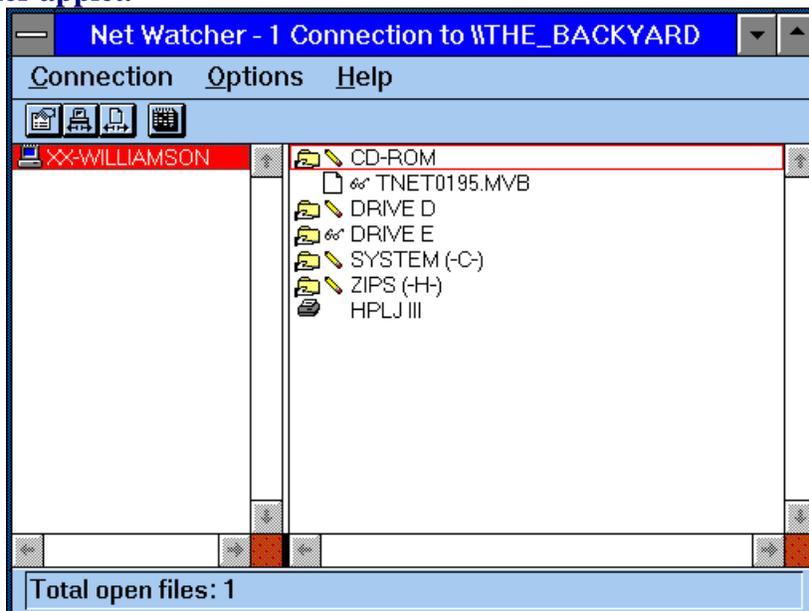
The network applet in *Control Panel* has been enhanced with the following capabilities:

- Ability for the user to log on and off the network and change passwords.
- Ability to set and configure parameters for network card settings and network protocols.

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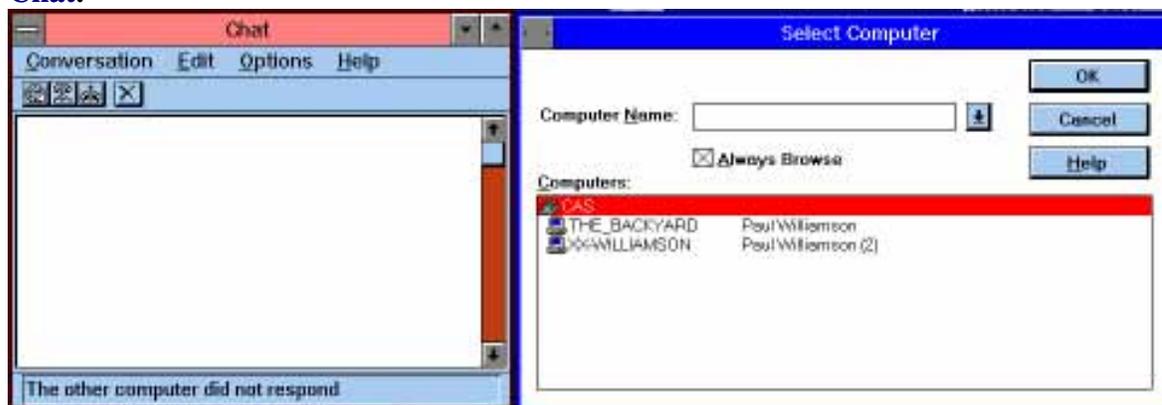
- Performance slide bar to optimize CPU utilization. Setting slide bar to one side prioritizes local applications, thereby maximizing the performance of the user's local applications. Setting the slide bar to the other side maximizes response to other users' requests (file, print, etc.), thereby slowing down local applications when requests come in. Settings in between allow the user to compromise between local and remote performance.

NetWatcher applet.



The NetWatcher applet allows users to see who is currently connected to their PC, and what directories, and what files they have open. Also, users can disconnect users with NetWatcher, and view their length of connection and idle time. NetWatcher can also be set up to log user connections over time and record them for future reference.

Chat.

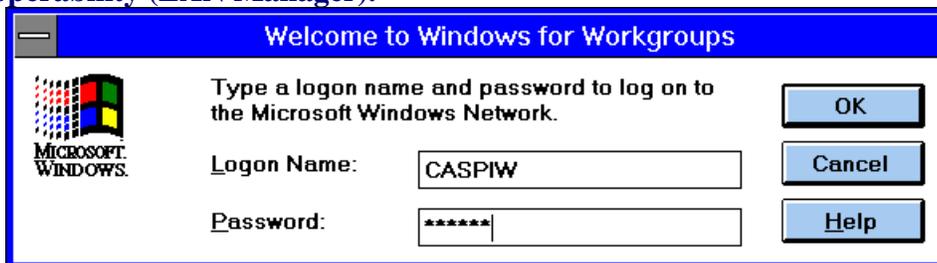


A chat application for real time one-on-one messaging over the network is included. This graphical application allows users to "call" and connect to other WfWg users. Once connected, both parties can simultaneously type into windows on each other's screen carrying on a two way real time conversation.

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Interoperability (LAN Manager).



WfWg is interoperable with Microsoft LAN Manager, Windows NT server products, and the future Windows 95. WfWg PCs are clients for LAN Manager servers, meaning they can access LAN Manager servers without any additional software, and LAN Manager clients can access WfWg PCs. This interoperability is enabled because WfWg uses the same networking protocols, NetBEUI and SMBs, as LAN Manager and Windows NT. WfWg also supports all LAN Manager APIs, including client-side named pipes, and WfWg users can log into LAN Manager servers and have their LAN Manager log-in scripts executed properly, as long as their WfWg user name and password correspond to their LAN Manager server user name and password.

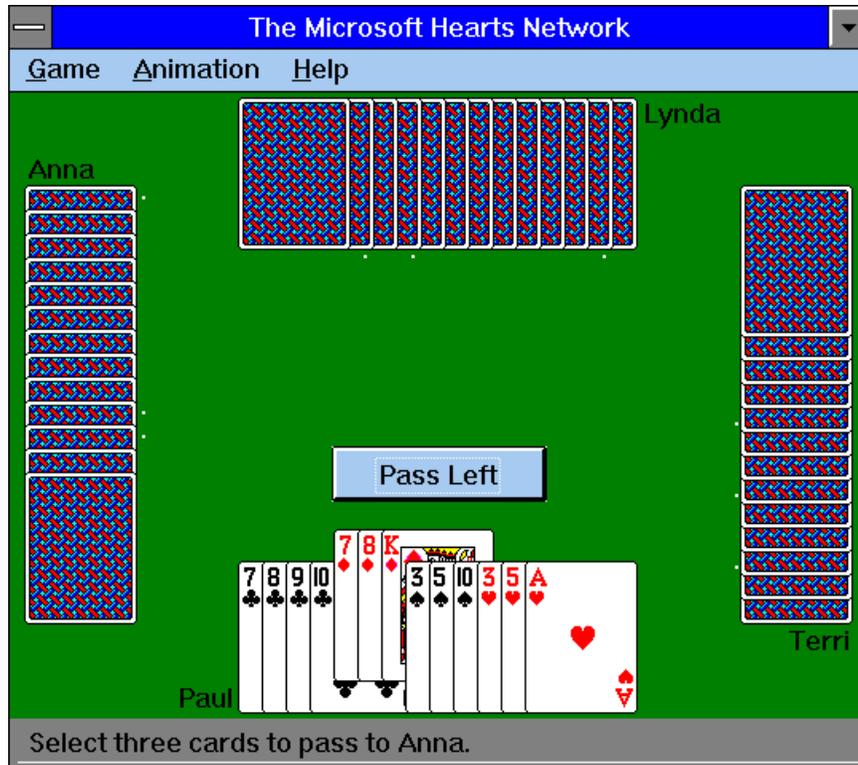


Co-existence with server networks (NetWare). WfWg can co-exist with server networks based on Novell NetWare. This means that WfWg users can simultaneously access WfWg PCs, as well as NetWare servers over the same network card and cable. This is done via the "dual redirector" technology which allows multiple networking protocols to be run over the same network card and cable.

Windows for Workgroups ships with the NetWare client software in the box (Novell code, same as in Windows 3.1), and the WfWg setup program will install the NetWare client software on a "virgin" machine (not currently a NetWare client) as an installation option. NetWare clients cannot connect to WfWg PCs, just NetWare servers on the same physical network.

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Games.



WfWg includes a graphical version of the card game Hearts which enables users to play other WfWg users over the network.

Product Requirements

 **Windows for Workgroups (as a networking product) requires a cabling solution.** WfWg is a networking product, and if used as such requires a physical network to connect the workgroup PCs. WfWg supports network cabling solutions of all types by adhering to the NDIS standard. NDIS is an industry wide standard that specifies how a network card (and network transport) must be designed so it works with WfWg. NDIS has been widely accepted and there are network card adapters of every type, from every major manufacturer, that support the standard. WfWg ships with a large number of NDIS drivers, and the full set is available on the Windows Driver Library.

In practice this means that the customer may purchase any of the popular net cards like Twisted Pair EtherNet, Coax EtherNet, Thick EtherNet, and the cabling schemes that go with them, or the various cabling types supported with Token Ring and ArcNet, for the wiring of a WfWg network. Of course if a network cabling solution is installed, WfWg can be set up to use it, as long as the network adapter cards in the WfWg PCs have NDIS drivers available for them.

WfWg supports connecting 2 PCs via their serial ports and comes with special drivers to enable this. This configuration can be set up via the Network Control Panel applet.

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-  **Network transport protocol support.** WfWg will run with any NDIS compatible transport. By default it installs a protected mode version of NETBEUI (interoperable with LAN Manager NETBEUI) as its standard network transport protocol, but any real mode NDIS transport, such as LAN Manager TCP/IP, is fully compatible. Other real mode NDIS compatible transports are available from third parties and after installation can be configured.
-  **Networking Performance.** Windows for Workgroups is designed for small to moderately sized work group networks (50 users or less) with moderate network traffic load. Performance for these networks is as good as or better than competing products such as NetWare Lite and LANtastic.
-  **Windows for Workgroups (as a standalone product) provides increased stability.** WfWg, when used in a standalone (non-networked) environment, provides for greater robustness as well as all the enhanced features, such as the performance increase due to the 32-bit file access capability, improved performance and usability of the *File Manager*.
-  **Hardware requirements.** WfWg requires a 386SX or better, with 4 MB of RAM and 10M of hard disk.
-  **Memory consumption.** The network components of the WfWg run in Windows protected mode memory (above 1 MB), thereby leaving a small footprint in DOS memory (typically less than 20K below 640K in the default configuration with protected mode NETBEUI).

Paul Williamson is an on-site consultant for Chase Manhattan Bank. He is the host of several DOS conferences on both RIME and Ilink. Paul serves on the WindoWatch editorial board as a regular contributor.

As Microsoft has changed the release date of Windows95, the developers of various 32 bit software packages have pulled back and reduced the level of expectation and enthusiasm relating to their beta software. Some of the developers have even requested the return of their software and removed them from beta till a later time.

As I saw this happening, I had to think of what my contribution to WindoWatch should be. With the arrival of the NT resource kit we can now delve into the inner workings of NT and discover how to maximize NT performance and then report our findings.

A quick perusal of the resource kit index led me to the place where I could learn how to disable OS/2 support. I find that with OS/2 support disabled, there is a slight performance gain and that memory resources are freed up for other tasks. OS/2 support can be disabled by editing the registry and the path statement of

HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\SessionManager

Change the value of the GlobalFlag to 20100000

For the change to take affect the Workstation will need to be reset.

I also found the messages from network printing to be annoying as these messages are the type that cannot be ignored and force action to end the sequence. To kill the network popup messages edit the registry path under

HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\Print\Provides

Upon reaching the path select edit, add value. Name the value "NetPopup" and the data type as REG_DWORD, after selecting ok enter a value of zero (0)

For the change to take affect the Workstation will need to be reset.

Microsoft has announced an incremental update to Windows NT Workstation 3.5. The update, NT 3.51, will be released for beta test, probably by the time this article is published, and will feature: multithreaded OLE, PCMCIA support, data compression for the NTFS, Windows 95 common controls, Windows 95 help desk support interfaces and support for the IBM PowerPC 604 platform.

I am in the process of developing a fact sheet on the NTFS plus ways to increase performance of the NTFS by using register entries....but that's for next time.

The Skeptic: Another Microsoft Acquisition Author Unknown

Discovered by *Derek Buchler*

In a surprise move, Microsoft chairman Bill Gates announced yesterday that he has purchased the entire calendar year of 1995. 1995 will be replaced instead by "Year-M" to be followed by actual 1995.

"Windows 95 was not going to ship on schedule," Gates said. "But we couldn't change the name again... people were starting to get confused. So instead of spending a lot of time and money on a new marketing campaign we decided just to buy 1995. That way we get an extra year to debug Windows and get it shipped for what will be the new 1995."

Microsoft arranged this coup by leveraging its financial assets to bail out the Federal Government and pay off the national debt. The IRS is being disbanded for next year, but taxes will be collected as usual with one change: all checks must be made payable to "Bill Gates."

A side benefit of this purchase is that Gates now owns the judicial branch for the duration of "Year-M." Speculators stated that Gates would likely use this opportunity to dismiss the numerous lawsuits pending against Microsoft. Gates apparently feels this would be cheaper than actually hiring lawyers to represent his rickety cases.

In a related story, God has filed suit against Gates because of his purchase, claiming time to be the sole property of God. In a countersuit, Gates claims God is a monopoly and demands that he be broken up into "deity conglomerates."

"Gosh," said Gates. "They broke up AT&T... why can't we break up God?"

Inside sources at Microsoft said that Gates was looking for an early resolution to the suit by hiring God as a programmer. Evidently, God has the exact profile that Gates is looking for in a programmer: he doesn't mind rainy climates, doesn't need any money, isn't married, and can work for at least 6 days without sleeping.

"If we could just get some employees like that," Gates lamented, "we would be able to ship Windows 95 on time."

Computers As An Appliance:

How Long Must We Wait?

© 1995 by *Herb Chong*

Are you a computer expert?

The fact is, that if you were able to get the file to read this article - `Acroread.Exe` - without help, from the same place that you get *WindoWatch*, you can safely be called a computer expert! That puts you within the small group of people who read and think about how computers work. It also means you have memorized an arcane set of rules on how to behave when sitting in front of a computer. You also know what a mouse is and what it does, at least in general terms! And at least some of the time, you can make reasonable deductions about how to do something or what something means when you encounter a situation you have never confronted before. In short, even if you don't like to think like a computer, you do understand how to!

Just what does it mean to think like a computer?

Thinking like a computer means being very literal minded. Computers don't try to interpret what you mean, - *yet!* Instead they do exactly as they are told, nothing more and nothing less. Someone doing the programming has to anticipate every action you are going to ever want to take when you try to do something and *then* make it happen as reasonably as possible.

Think about learning about something from a file that you know is stored on your computer. How many different types of ways are there to read a file? First, there's the old reliable DOS *type* command. You say *type filename*, and if you are in the right directory, the file is in ASCII and is small, *and* you can read very, very fast, you can read the file. Obviously, there are many drawbacks to this way of dealing with files. For one thing, you have to know what a command is and in particular, what the *type* command is and what it does and doesn't do. Next, you have to know either where the file is on your computer or know how to find it. Then, you have to understand how the computer stores the file. Directories and ASCII are just two of the "hows". Finally, you have to know all the things that might happen and how to manage them. If you don't think this is a lot, try explaining all of this to your Aunt Martha's friends. Good luck trying to explain how to use Lotus 1-2-3 for DOS 2.0 and WordPerfect 4.0 in the same day.

Further, if you believe Microsoft, the Graphic User Interface (GUI) made all this intuitive. All you have to do is sit with Aunt Martha's bridge group in front of a computer with Windows running on it and ask them to find the letter you were going to write to them, but never sent.

What's a GUI?

In truth, a GUI is anything but intuitive. If you have had a chance to work with GUI systems other than Windows, you will quickly find that no two of them agree exactly on what the mouse buttons do or even how windows react when you move the mouse over them. The real thing that GUIs are, at least if you use only one at a time, is that they are much more consistent about how they work. The consistency comes about for two reasons: one is that the default GUI shell more or less works consistently within itself. Program Manager and File Manager do more or less work in much the same way. Reason two is that the vendor or designer of the GUI has a strong vested interest in making sure that applications written by others follow the same conventions.

What does looking up a file and reading something from it mean in a GUI like Windows? Assuming that you are running what most people do when they have Windows, you find the file in File Manager and double click on it to load an application that can read the file. What does this *really* mean? You wave this light colored thing that looks vaguely like a bar of soap with a wire sticking out of it all over your desk, pressing on the buttons whenever you find that this pointy thing on the screen is on some picture or another. After a few dozen clicks or so, a bunch of words suddenly appear on the screen, surrounded by some white space so that the words look a little like they are on a piece of paper, and there are all these weird pictures all over the edges outside the white stuff. Do you think I'm exaggerating? Just ask Aunt Martha and her bridge buddies?

Okay! To those of know who know Windows, what we really did was bring up Program Manager from being minimized on the desktop, go to the Main Group, launch File Manager, change the directory to where the file was, and double-clicked on it to launch the application that created the file. Besides knowing what files and directories are when working in Windows, just like in plain DOS, you have to know the graphical metaphors and conventions used by the GUI to represent objects and ideas, and how to manipulate them to cause certain actions to happen. These manipulations are more or less conventional; for example double-click with the left mouse button usually meaning open or launch. These conventions are not hard and fast though. Those of you with a Logitech 3-button mouse frequently program the middle button to be a left double-click. What that really means is that *click* on middle mouse button to open or launch something. You still call it a left double-click because that is its effect in a language that everyone else understands.

The Computer as an Appliance!

Continuing this line of thought, let's fast forward a few years, about three hundred and fifty in fact, or at least, to someone's vision of what computers will be like in three hundred and fifty years. Captain Picard wants to read something that he

saved or put away a while ago. “Computer, show me the treatise on ancient beer brewing techniques of Europe during the late twentieth century that I was reading last week.” Just what did he have to know about computers to get what he wanted? He had to know what he wanted, and ask for it. The user interface Captain Picard has to deal with is that of a person. He, and just about any human alive, knows how to deal with people. One could say that most of our lifetime is spent learning to deal with people. Why make life complicated by requiring too many special rules to get the job done? The computer portrayed in Star Trek is very nearly human in understanding and interpreting what is wanted of it. It’s fairly safe to say that this isn’t going to happen to us any time soon.

Let’s look at some things a little more mundane, but exist in the here and now. Take your average microwave oven. It’s a pretty fancy gadget compared to most gadgets found in your mother’s time and in her kitchen. It’s got a computer inside it that manages a lot of things, though certainly not as complex as what you have in the computer that you are reading this with. The VCR or stereo receiver is probably as complex, but is as ubiquitous today as those in the personal computer industry would like to see their wares become. Each of these three gadgets in your home share some common characteristics. Each of them has a limited user interface. There isn’t a way to do something that isn’t allowed. Each interface is focused in a small problem domain. The programs inside the gadgets solve a very specific problem and don’t try to solve everything else that need solving. Finally, the user interfaces don’t connect with other things. Each gadget works all by itself and don’t have to worry about other things interfering.

Computers, as you well know, are more complicated beasts. For one thing, because there are so many aspects of computer management that the computer doesn’t do itself, you have to know all about the inner workings of each part. Why did it take so long for the computer to figure how big your hard disk is and configure itself when it powers up? The drives have always known how big they were. It took almost ten years before someone thought of asking the drive instead of the user and actually doing it. Another thing is that computers are designed to solve such a huge variety of problems that there isn’t a well-defined way, yet, of managing and disallowing *stupid* things that are harmful. What is harmful to one person is a necessity to another. Finally, the software and hardware in computers is component-oriented, yet there are not any standards on how to share a computer’s internal resources like IRQs and DMA channels. Plug and Play promises to solve this problem, but not any time soon. Huge amounts of software just *know* that COM1 is always on IRQ 4 and that sound cards are on IRQ 5. In some senses, it’s just lazy programming, but in other senses, it’s a sign of both the inflexibility and immaturity of personal computers. Why should it matter what IRQ something is on, so long as everyone agrees what it is. More importantly, why should a human care when a computer does a much better job of remembering things like this?

VCRs and microwaves are relatively recent inventions of the information age. If we go back a little in time, we come to the invention of the automobile. From the time Daimler-Benz put out their first horseless carriage until everyone agreed that steering should be done by a wheel, was a period of some thirty years. It took perhaps another thirty or forty years after that, until the baby boom of the fifties, that automobiles became an appliance. There were too many things that were inconvenient to do without an automobile, too many young couples with enough money from their savings to buy an automobile, too many wooing automobile companies from Detroit, and too many mechanically-inclined young veterans not afraid of the needs and skills needed to guide an automobile safely through our streets.

Growing Pains

By comparison, the personal computer is barely out of babyhood. The huge growth rate in the personal computer industry doesn't reflect innovation and genius as much as simply that anything, almost no matter how bad, would have been accepted, because anything was better than nothing. The industry is still trying to figure out basic things like what to do with the right mouse button, or even how many buttons there should be on a mouse. Like the first years of the automobile, the plethora of ways of interacting with a computer, of adding things, of even placing things like On/Off switches, is still evolving. Also like those early pioneers of the open road and freeways yet to come, we are putting up with all kinds of things that, years from now, we will look back with both nostalgia and relief that computers and their various devices are no longer so primitive.

Returning back to the idea of computers as appliances - - just what is it that would make a computer an appliance? For one thing, it would take care of itself most of the time. You plug in a new part and it works. If it doesn't, it's defective. The computer will tell you so. Maybe we'll use voice input and talk to our computers like they do in Star Trek, but I doubt it. Most likely, we will still type or use a mouse, but we will talk to our computers and they will listen. The computers will have to be more like the VCRs and microwaves of today. They will work so well that you just assume that it'll be there whenever you need it, and if it's not able to be, you will need to call in expert repairs. That will happen so seldom that it'll become more cost effective to junk the computer than repair it. They will also have to be more than a passive, inert beast, taking from us whatever we give it. If we plug in three sound cards, not only should it use all three, but maybe it should ask us whether this is really a good idea or not and be able to explain why or why not.

Today, people still need to become computer *experts* to effectively use their systems. They have to learn enough about how they work inside to understand simple things like looking for files and running programs. When tasks get more complicated, like trying to figure out what is wrong, or even recognizing that there is something wrong, the computer systems just sit there and wait. Just like the early automobile

pioneers, there are no idiot lights to say that there is a loose connection or that there is a structure to the files that you have to understand. Those early pioneers literally had to know enough to be able to disassemble their car and put it back together again, which they sometimes had to do, just to go for a country drive and expect to return. We, as early pioneers of the computer age, have to know how take apart our computers and put them back together again to be a competent user.

What does the future hold for us? Computers as appliances need to work more the way people work. Sure, you and I will still have to learn the nuances of dealing with a computer, but that learning should be only a variant of dealing with a person. People get a lifetime of training dealing with people just by being alive. Someday, we will be able to talk to our computers like Captain Picard does. In the meantime, we have to make do and learn like the automotive pioneers did. We created computers to help us solve our problems, entertain us, and help us become better people. To do that well, computers will have to become more like people. Otherwise, people will have to become more like computers. I don't know about you, but I don't want to become an Abort, Retry, Fail.

Herb Chong is a contributing writer to [Windows Sources](#) and [Inside Microsoft Windows](#). He is the Contributing Editor of [WindoWatch](#) and serves on its Editorial Board. Herb can be found on the Internet:herb.chong@channel1.com

Hang on, Pardner!

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The first wave of a new generation of computer interfaces is upon us. The Magic Cap operating system for Personal Digital Assistants (PDA's) was among the first to use a familiar physical environment, an office, as its metaphor. As a continuation of this trend, Microsoft is wrapping up the development of Bob, a Windows shell designed for first time computer users.

Bob represents yet another leap forward: the center of attention is the user, rather than the computer or the task at hand. Bob joins the growing list of offices, shopping malls and town squares with a new twist: its interface is a home, and a highly customizable one at that.

Not everybody likes the idea of computers trying to mirror real life. Originally I felt a little silly seeing a living room on my monitor screen every time I entered my office. Yet, there is something to be said for this approach. I showed Bob to a number of people without previous computer experience. Once they were able to make the computer *their own*, or in other words, more familiar, their apprehension disappeared. Above all, after they had learned how to use a mouse they were up and running, for the only skill needed to navigate Bob is the ability to read.

Home Is Where The Heart Is

My first hour with Bob wasn't very productive because I was busy designing my house. With unprecedented flexibility each household member can design rooms of their own. Several architectural styles, each having its own flavor of graphic design, offer different types of rooms to choose from. An array of furniture and decorative items makes sure that no two rooms will look alike. My first creation was a post-modern living room overlooking Manhattan at night. Later I added a contemporary sunroom by the ocean. I spent an hour dragging around furniture and wavering over the choice of one chair over another. I was pleased with my new home after I had added two cats and some plants.

Microsoft has taken the successful concept of wizards one step further by making animated guides an integral part of Bob. There are several cartoon characters to choose from, who offer various degrees of assistance. I chose Java, a little dragon and espresso aficionado, whose nose get's stuck in the espresso cup every so often. Other characters include a dog, a cat, a cool generation-X teenager and a delightful fire fly. Your guide occupies the lower right hand corner of the screen along with a startup menu. Your companion, who addresses you by your name, pops up the

balloon style menus, including context sensitive ones where appropriate. Those characters are quite entertaining with their varying animation and sounds.

People Centric Applications

Bob comes with several Microsoft Home applications: an alarm clock, a calendar, address book, Letter Writer, a check book, MCI e-mail (which one needs to sign up for) and the educational game "GeoSafari." A comprehensive household guide and a financial guide round out the offerings. All applications are beautifully designed and extremely well integrated.

The Household Manager offers you a place that allows for keeping track of anything from car maintenance to fishing logs. Expert advice accompanies a variety of subjects and each category comes with ready-to-go, yet customizable, databases. Additionally, you can set up lists of your own. But the application goes beyond what one would expect. When choosing the Home Maintenance category, for instance, my guide queried me on the design of my *real* house. Next he set up a to-do list in my calendar that contained all maintenance jobs required. One can drag the intelligently spaced out due dates directly into the calendar for definitive scheduling.

Similarly, the calendar will automatically alert you a week in advance to birthdays recorded in the address book. You can also schedule events for other household members. The same level of integration exists between Calendar and Checkbook. The calendar also offers a display region that let's you choose between the phases of the moon, tips for the environmentally conscious, important historical dates and rarely used vocabulary. Letter Writer, which comes with clip art, fonts, borders and sample letters, gives you a choice of either printing your document on paper or sending it as email. While each application can operate by itself, their integration is what turns them into useful tools.

Truly astounding is the level of attention Bob's designers gave to assist first time computer users. There are several layers of help to choose from. The most helpful guides will take you by the hand for such tasks as how to move from one database field to another. For example, should you try typing a digit in a fixed length field that contains a default value, a message pops up, informing you that a digit needs first be deleted before you can add a new one. Bob never leaves you to your own devices as to what to do next. Learning such details tends to be the most frustrating experience for new users. Especially adults tend to struggle along alone, embarrassed by what they consider stupid questions that offend their sense of competence. The help Bob offers is rarely patronizing, but I found some of the guides a little too enthusiastic about my having successfully completed a task.

You Can't Take Off The Training Wheels

Bob does not limit you to the use of the build-in Microsoft Home applications. When you are ready you can add your own DOS and Windows programs to the shell. Decorative frames and boxes make the program icons blend in with the environment. This indicates that Bob adjusts as your skills are progressing, but this impression is deceptive. At least the beta version we reviewed falls short in offering an environment enjoyable to a more experienced user. For once, the process of adding applications is tedious, taking you through several layers of menus. You can choose to navigate without a guide, but I found no way to disable the verbose startup menu. This balloon tells the user how to find and start the programs. It won't take long until even the slowest learner will know how to do that.

Bob takes good advantage of today's hardware. To get the full benefit you will want a monitor capable of displaying 256 colors, a mouse, modem, sound card and speakers. Bob is a speedy performer under Windows 95, but the performance of beta 1 was unacceptably slow under Windows for Workgroups 3.11. While the 486/33 with 16 MB of RAM exceeded the minimum system requirements by 8 MB of RAM, I ran out of system resources several times. Once performance started degrading I was unable, for instance, to open the Checkbook. The shell itself remained unaffected: there were no noticeable slowdowns in screen redraws when moving from one room to another. As computers become faster and more capable and prices keep falling, developers can finally afford to dream up technologies that were unthinkable only a few years ago.

Surely Bob's animated characters are going to look like crude prototypes a few years from now. Yet Bob is a step in the right direction. Once these types of interfaces become more common, user feedback will be invaluable in shaping the direction environments such as Bob, Magic Cap and others currently in the works are going to take. Learning how to effectively use a computer and its software requires digesting a lot of information. While the text screens in Bob work well, you would not want to expand them to explain some of the more advanced features of Windows. Obviously this represents an inherent dilemma. Already, Microsoft is planning on integrating speech recognition. Computer technology has always been exciting. What Bob promises is that the future is also going to be a lot more fun.

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A review of Visual Basic 3.0 A Programming Language from Microsoft Corp.

When I was a boy I rarely got up for school when the clock read 7:30. However, I always got up when my mother yelled upstairs "C'mon - get up *now* ! I've had enough!" My mother's yell was an event not to be missed. And Events are what the Visual Basic programming language is about.

The language, I'm told, bears little relationship to object oriented programming. The objects in Visual Basic are graphical, like text boxes and list boxes. Lucky for me, I knew learning Visual Basic (VB) would be a drastic change from my plodding through computer science. I had been building up steps of code over time, laboriously adding and patching routines, and reinventing at every turn. So, I bought two huge volumes on Visual Basic. When my copy of Visual Basic arrived, complete with books and an hour-long installation, I was prepared.

Many people profess complete ignorance of computers, even though everybody uses computer controlled devices every day. Some people, however, are driven to look into the logical "wires" that instruct computers, and write programs. Even though Microsoft's language Visual Basic 4 is about to be released, this is a *new* Windows programmer's review of the current version which I recently began to use.

Old style or traditional DOS programming to me is like electrical wiring. It means matching up the program instructions - what I call *wires*, and *color coding* them. One then tries to jam them into little logic gates and modules in such a fashion that: (1) the program worked and (2) if we dropped dead someone else could maintain the program. Over time, a developed program's code is affectionately called spaghetti, due to all the point to point fixes and adaptations. With VB, more seems to be done moving ideas around and storing them in their proper place, like putting inventory into bins at a warehouse. Code is thought to be activated by the user rather than part of a grand stream.

Everything has it's proper place in the scheme of Visual Basic. The end user goes through a VB program, deciding what to use, and leaving the rest. In my mind there are two ways that people organize their life:

1. Leave everything around in piles. When you trip over them-take care of them!
2. Everything is in it's place and a place for everything.

Since my eyesight is very poor, the second method appeals to me. I would like to talk first about a typical session in VB, and then about what I like and don't like about VB. I'll then finish up with a bit about what I hope to learn in the future.

A VB Session

I have decided I want a new option to show my database graphically. I fiddle around deciding where to put the button that loads it. I can simply drag a blank command button, the kind you press to say OK, around my main screen. I then press Alt-W-O to bring up the Properties Window. This button has a bunch of attributes or *properties* that are attached to the button for whatever its life span may be in my program. List boxes, text input boxes and other items carry *properties* with them as well. When I make the caption "Chart" and the word appears on the screen. I am designing a screen.

So far in this session, I have not written one line of code. When I double click on the button, I get to the button's Event code. It is here that I tell my program what to do if the user clicks the button. Quite a bit like walking through the **Employees-Only** entrance at Disney World. I tell Visual Basic to fire up (**Load**) a new Window (**Form**).

From there I draw the new option screen with the mouse and write the code that will execute when the user clicks in this case, - drags - certain boxes. The whole business can be thought of as "**Here's what it looks like**" and "**If the user does this then here's the code that will be run.**" Straight-forward, except for one thing. I have to juggle the events in such a way that first things get done first. It doesn't do much good to try to get on the elevator if the elevator is on the next floor.

All the while, the compiler (interpreter) is complaining to me that it doesn't know what I'm talking about. But when the program I'm writing finally works, it works beautifully. However, management of data is up to me until I learn how to use the Data Control that comes with the Professional Edition.

What I like:

Draw a screen, and it's a Windows program! One doesn't have to worry about managing memory, writing off the screen, or getting from here to there. In the event driven language the code is centered on itself and you don't have to patch one long logic stream. It is the user who decides the order in which things are done.

You have a surprising control over the look and feel of the objects like list boxes and text boxes. When I had to write these items in the Pascal language, it was a major production just to get them to work at all. In VB you just push them around and load them up. Automatic sorting of lists in list boxes was a platinum luxury before now.

Your event driven interface keeps things moving and leads to a program that appears to be where the action is. In Pascal, I sometimes ended up with complicated screens that just sat there. My users would say "Yeah, so? What am I supposed to do with this?" At which point I would get very angry and read them the mad scientist speech from Young Frankenstein.

The ease and speed of program development with Visual Basic is staggering. Mouse code is transparent. Window management is transparent. Visual Basic has the ability to juggle multitudes of programming tools and multiple program Windows. Memory management is transparent. Graphical objects are Windows standard. The BASIC language code is acceptable, if you use something called Option Explicit to make sure it enforces your spelling. The way VB groups statements is surely superior to the Pascal **begin/end** where you go crazy looking for lost "End" words.

The help system is context sensitive. The Visual Basic Knowledge Base, an indexed help file, is a great addition. It is available on the Internet by anonymous ftp from [ftp.microsoft.com /softlib/mslfiles/Vbkb_ft.exe](ftp.microsoft.com/softlib/mslfiles/Vbkb_ft.exe). Although a very hefty file at almost five megabytes, it is well worth the download.

What I don't like:

Not much is going to happen in your program until the user clicks or types something. If you want the program to be active, you are going to have to find a user event to hang the code on. This means that if just want to "do something" you have to give a lot of thought about where you will put it, which you don't do using old-style languages. Before, a program followed a logical path. Now the program sits there waiting to be activated, sometimes not in the order you would wish.

Nifty as the editor is, I sometimes wish I could just get to write my program. I do not want to play an arcade game of mouse clicking just to find my code. And code will disappear into thin air if the object assigned to it is temporarily deleted from the design space. I learned fairly quickly that to find code I should bring up the screen itself and double click on an object. There is a main procedure menu, but it is not presented very well.

And why, - why, does the internal "Run" feature decide that the current directory is the Visual Basic directory? My data files are in my program's directory. I suppose you have to be a programmer to appreciate what a real pain this is. Maybe I can change that, I just don't know!

And another thing! If I'm designing a full screen window, I can't very well see all the parts of the VB environment, and have to do some fancy footwork to get at them. Managing the Windows can lead to a very cluttered DeskTop, especially because the Program Manager can be peeking out.

I learned to change my default beep and exclamation ways to "silence" after a bad bout of listening to a mooing cow and clanging bell every time I made a mistake in the editor. I *know* my line is half finished, give me some breathing room! All these complaints may seem obscure, but when you're trying to build a program from scratch, the problems can be annoying.

One gripe I have, is more centered on the Internet conference (comp.lang.basic.visual.misc). I find that 250 people or so a week ask questions there and then take off. And the questions are either stuff that is practically printed on the side of the box, or fancy stuff that they shouldn't even be doing because they haven't even read the side of the box.

Soon in the future, I hope to learn more about the API, which is the interface to Windows itself, much like the DOS interrupts. Also OLE , -where you can operate and share resources with other programs. And DDE is where you can share data with other programs. I have looked at some of the spiffy 3D controls that ship with the Professional Edition. However, I need to learn more about writing a setup program, in lieu of a lot of talk that the shipped setup program is buggy. (SETUPK.EXE from ftp.microsoft.com is supposed to fix those.) These other graphic controls require additional .VBX files in a program's installation.

More at another time.....

Peter Neuendorffer is a former DOS programmer who is developing expertise with Microsoft's Visual Basic 3 for Professionals. He is also the creator of Alice *the* electronics maven.

PROGRAMMING NOTES

A WindoWatch Series

WINDOWS ASPECT: A Scripting Language

A Tutorial - **Part Three** for Procomm for Windows v.2
GHOST BBS v.3.20 © 1995 by *Gregg Hommel*

We return to our intrepid script writer, George!

Ol' George has gone about as far as he can with the little script we gave him to start out, and now, he wants to progress a little further in automating his tasks with Procomm Plus for Windows.

To refresh our memories, this is the script George has been using to log on to the BBS he uses.....

```
proc main
  waitfor "name?"
  transmit $USERID
  transmit "^M"
  waitfor "password?"
  transmit $PASSWORD
  transmit "^M"
endproc
```

This, of course, is fine, as far as it goes, but it is far too limited to be really useful. It assumes that only two log on prompts will occur, and that those two will always occur. But, in reality, we all know that this simply is not the case.

When we log onto a BBS, rarely, if ever, are there just two prompts which require a response from us. Often, a system will present differing prompts depending upon whether this is the first log on for the day or not, whether there is mail waiting or not, or whether we are on node 1 or node 50. Luckily, Wasp allows for this *conditional* type of prompting and that is what we are going to look at now... the Wasp WHEN command....

The Wasp WAITFOR command is useful, but is also limited in its capability. It does exactly what it says... it waits for a text string a given amount of time, and then lets the script continue to wait for just a single occurrence of the target string. Our

script for George does not present any type of condition on the response it sends. If the *target* string is not received within 30 seconds - the default time for a WAITFOR, unless a different time is specified, it still sends the response we have programmed. Whether the BBS does anything with it or not, the script doesn't care.

We can, however, re-write the script so that it only sends a response if the *target* is received. The Wasp WAITFOR command is a SUCCESS/FAILURE command, which sets a Wasp internal variable called SUCCESS to 1 if the *target* is received, or the Wasp internal variable called FAILURE to 1 if the *target* is not received. We can test these variables using Wasp conditional statements (IF/ENDIF), and thus, can re-write the script as...

```
proc main
  waitfor "name?"
  if success
    transmit $USERID
    transmit "^M"
  endif
  waitfor "password?"
  if success
    transmit $PASSWORD
    transmit "^M"
  endif
endproc
```

This would ONLY respond with the UserID IF the target string "name?" was received, and the same sort of action for the "password?" prompt. However, even this can be simplified, as Wasp allows the use of a sort of *shorthand* notation for testing the value of the SUCCESS variable, as in the following version of the above code...

```
proc main
  if waitfor "name?"
    transmit $USERID
    transmit "^M"
  endif
  if waitfor "password?"
    transmit $PASSWORD
    transmit "^M"
  endif
endproc
```

This is the method of writing code which I prefer, and which we will be using in the rest of these tutorials. When we are testing the SUCCESS state of a command, we

will dispense with the "IF SUCCESS" conditional and instead, use the format of "IF command".

However, we still haven't allowed for anything other than our original two prompts to appear. We need more than this, if we want to make our script for George into something a little more *generic*. This is where the Wasp WHEN TARGET command comes in.

WHEN TARGET watches continuously, until explicitly turned off, for a particular *target* string, and *whenever* that string is received, calls a procedure to perform a given action. WHEN TARGET is known as an asynchronous command, i.e. it will run in the background, without holding up script flow, and allow other commands to be acted upon while it remains active.

Let's suppose that the BBS which George is using notifies you of new mail when you log on. If you have new mail, it tells you so, and then asks "Read it now?" Since we want to read it later, we always answer N (No) to that question, at least, we do whenever it comes up. Of course, the problem with using a WAITFOR in this context is that, if the prompt does not appear, while we await it with the WAITFOR, we might miss the other prompts. Prompts such as "name?", if they appear within the 30 seconds that our WAITFOR would be actively awaiting the new mail prompt. A WHEN TARGET doesn't have this problem, as it remains active after issued, until such time as either the script ends, or we explicitly shut it off.

The format for a WHEN statement is as follows...

WHEN activity [index] [string] CALL procedure

For our current purposes, the activity would be TARGET which requires the *sometimes* [index], the [string] is our prompt string, and if *hit*, the WHEN will call a procedure called "send_no". Case doesn't matter in this, or most items in Wasp, so don't be surprised if the above appears in our script in lower case.

First, let's re-write our script, using this command, and then take a look at how it works...

```
proc main
  when target 0 "Read it now?" call send_no
  if waitfor "name?"
    transmit $USERID
    transmit "^M"
  endif
  if waitfor "password?"
    transmit $PASSWORD
```

```
    transmit "^M"  
endif  
endproc
```

```
proc send_no  
    transmit "N^M"  
endproc
```

Not very elegant! I know that "proc send_no" isn't much of a procedure, but *I don't get paid a lot for these columns* , but it does the job...while the script is running. This one, is available for no more than 60 seconds max, if the string "Read it now?" is received by the modem, our script will automatically respond with a N followed by a carriage return. If the prompt is not received, however, this won't hold up the rest of the script while we wait for it.

Suppose that the BBS also, every once in a while, has a new bulletin, telling you about the sysop's birthday, or perhaps his dog's birthday. When these bulletins are new, you are told so at log on, and asked if you want to "Read it now?". Because of our script above, we would later in the session, send an automatic "no" response . It is exactly the same prompt as the one for new mail, and even if the new mail prompt has appeared, as long as our script is still running, the WHEN TARGET will respond to that prompt in the same way.

This brings up a new item in our quest for the perfect log on script - - re-using code. A WAITFOR, as noted above, waits for a given time from a target string, and then quits. If the target string is received after the WAITFOR is shut down, or if the target string is received a second time, a WAITFOR does us no good. If there is a chance that the target text might occur more than once during the active period of the script, a WHEN TARGET is the only way to catch the prompt every time it occurs. And that, dear friends, is what *automation* is all about.

A prime example of this occurs on most of the BBS' I use. Whenever a bulletin, or message or whatever, exceeds one screen *page* or 23 lines in ANSI BBS emulation in length, I am always greeted at the end of each *page*, with a prompt which reads "Press ENTER to continue...". As a result, almost every log on script that I write includes *at least* one WHEN TARGET and a "proc send_cr", as in

```
proc main  
    when target 0 "continue..." call send_cr  
    .  
    .  
    .  
    .  
endproc
```

```
proc send_cr
  transmit "^M"
endproc
```

I never press ENTER when the BBS says to, because my script does it for me, based on the WHEN TARGET. You may have noticed, by the way, that the "target" for the above WHEN is not the full prompt that may appear. It is always faster, and generally more reliable, if you make your "target" strings the smallest possible and unique sample which you can use. For this prompt, I used the word "continue" followed by the ellipse which makes it unique to that prompt.

As you can see, I re-use that WHEN TARGET during the script. I count on it remaining active while the script is running, and let it handle the repeat occurrences of "Press ENTER to continue...", rather than using a WAITFOR for each possible place during the log on, that the prompt might appear. Much simpler, and it isn't bothered by how many there are. It just simply sends a "^M" or the code equivalent of an ENTER whenever the prompt appears, and as many times as it may appear.

Wasp 1.0 had a very *BIG* drawback, when it came to using WHEN TARGET commands to watch for recurring or conditional text strings. It only allowed THREE (that's right, 3!) of them to be "active" at any given time. If you were creative and knew the BBS well enough, you could use WHEN TARGET 0 to watch for a certain string. When you knew that string would no longer appear during log on, but another one might, change the WHEN TARGET 0 to the new string. This made using WHEN TARGET commands much more difficult than it perhaps they needed to be.

Wasp 2.0 fixed this, but in some ways, went too far. Basically, Wasp 2.0 allows a virtually unlimited number of WHEN TARGET commands to be active at any given point in time, provided that you have the available memory for all those active WHEN TARGET commands. Ten or fifteen, twenty or even thirty, are generally not a problem for most of today's Windows systems. However, even that few has a drawback in terms of the fellow doing the coding. That person has to keep track of the active WHEN TARGET commands, what each of them means, and how the script responds to them. This can be quite confusing, if one isn't careful.

A technique I developed under Wasp 1.0, to overcome the limitation of only three active WHEN TARGET commands at a given time, also happens to work just as well under Wasp 2.0 to help prevent one from losing track of how many WHEN TARGET commands are active, and what they do. Mind you, it only works with some systems, but these include PCBoard and WildCat, which are two of the more popular pieces of BBS software around. We will discuss this technique in the next column, but I'm going to be nasty... I am going to

leave you with a **PORTION** of the code, and let you see if, before the next column appears, you can figure out how it works, and what the rest of the code might be.

So, on that note, here is our "puzzler" portion of code, For those of you who have read my tutorial in Wasp 1.0 on the BBS nets, or from the Datastorm forum on Compuserve, or their BBS, need not bother trying to puzzle this out, as you already know the answers.

```
integer holding = 1
```

```
proc main
  when target 0 "?" call get_prompt
  while holding
  endwhile
endproc
```

That is basically the entire "main" procedure. Next column, we'll look at the logic behind it, and precisely what is in that silly "get_prompt" procedure.

Gregg Hommel is an active communications consultant having recently done contract work for organizations like Delrina. He is well known on the various nets here and in Canada and serves as Co-Host of the Rime Windows conference. Gregg serves as a member of the *WindoWatch* editorial board as well as writing these columns. He is *also* blatantly guilty of electronically snapping his editor's garter!

Pipeline Internaut for Windows © 1995 by *John M. Campbell*

It seems that everyone wants to cruise the *Information Superhighway*. As a result, a wide variety of vendors are scrambling to provide access to The Internet. There are a number of approaches to connect one's computer to the largesse of information that resides in Cyberspace. One approach involves finding a "host" site that will furnish a Shell or Slip account. One then wrestles with a multitude of software configuration routines to connect a PC to the provider's computer. This solution usually means obtaining a variety of utilities for retrieving and managing Usenet newsgroups, email, and file transfers. Another approach is to find an Internet service that not only provides the connection, but also the software needed to use that service. Pipeline Internaut is one of the few examples, NetCom's NetCruiser is another, of a *plug in and play* package. It is the ideal solution for those of us who don't have easy access to a local Slip/Shell provider, or who don't want the hassle of configuring Winsocks, TCP/IP, and cryptic connection scripts. Pipeline requires only Windows 3.1, or higher, (a Macintosh version is also available) and a modem - the higher the speed, the better! This review is for version 2.0.7, which is the most current as of this writing.

GETTING STARTED

When you load the Pipeline software, only a few configuration checks are needed - such as choosing a telephone number to connect to The Pipeline in New York City. Nationwide SprintNet local access numbers appear in a pick list, along with both high-speed (14.4K) and low-speed (2400) New York access numbers. There is also a 28.8 number, in case you have a V.34 modem, but that number has to be entered manually once you haunt the Pipeline newsgroups long enough to find it. There are provisions for using a Slip/PPP connection, or logging in from another Host -called *rlogin*. Additional configuration items permit changing colors and fonts, also other parameters that will be touched upon as we look at the various features.

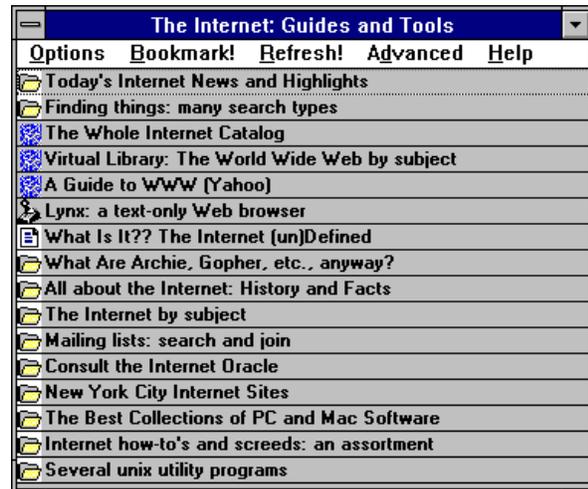
Since Pipeline Internaut is distributed as shareware, during the initial configuration process the program sets up a *demo* account, so that you can try the software without the need to first establish an account. The trial period is limited, but it gives a reasonable taste of the goodies Pipeline has to offer. Subscribing is as painless as clicking on a menu choice while on-line, then answering some questions.

Pipeline offers multitasking, using the company's own *PinkSlip* packet transfer technology. You can perform various operations simultaneously. For example, you may be downloading newsgroup items, and also FTP to a site to retrieve a file. Of course, things slow down a bit when you are performing several tasks at once. There is also a Bookmarks feature. Almost any place you travel on The Internet can

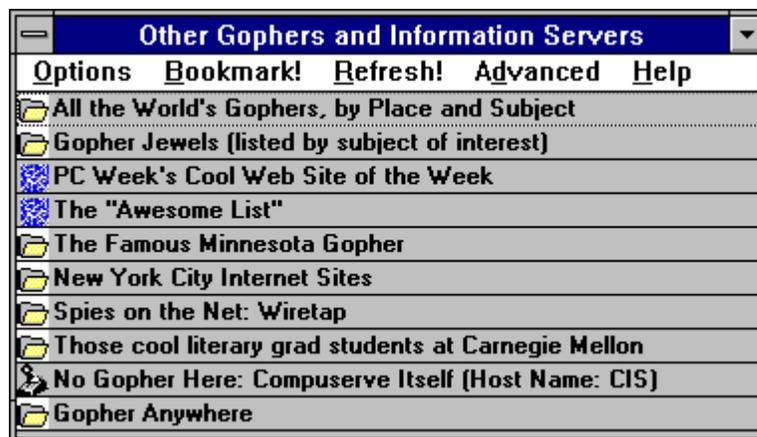
be added to the bookmark menu, whether you arrived via FTP, Telnet, World Wide Web or a Gopher menu. The menu has a tree structure. Sites can be arranged as folders, or nested as subfolders, and returning to a favorite site is as easy as clicking on its bookmark entry.

THE MAIN MENU

The Pipeline main menu appears once the configuration process is completed. It is striking in its simplicity. The developers apparently don't care for a lot of icons, choosing only a few large ones to check for and compose email, news-groups, chat, and on-line help and "today." This last produces news of interest to subscribers. Across the top of the screen are pull-down menus labeled File, Connect, Services, Internet, Bookmarks and Help. Choosing *Internet* leads to menu choices for Pipeline's own World Wide Web browser, *Find Files -FTP & Archie-*, *Search all Gopherspace -Veronica-*,



Connect to another System (Telnet), *Find Someone on the Internet (WHOIS)*, *Chat (IRC)* and *Gopher Anywhere*. Note the refreshing use of plain English descriptions preceding the Internet jargon for each choice. In the center of the screen are nine Gopher entries, which if clicked while on-line, take the user to the chosen service. These include Pipeline information, Weather, AP and Reuters News (courtesy Clarinet, which is a valuable freebie for Pipeline subscribers), a Shopping Mall, and Other Gophers. The *Other Gophers* choice leads to a more extensive menu of Gopher sites, which includes "All the World's Gophers by Place and Subject," and a constantly changing menu of specific sites that might be of interest. (Compuserve was listed when I last checked.)

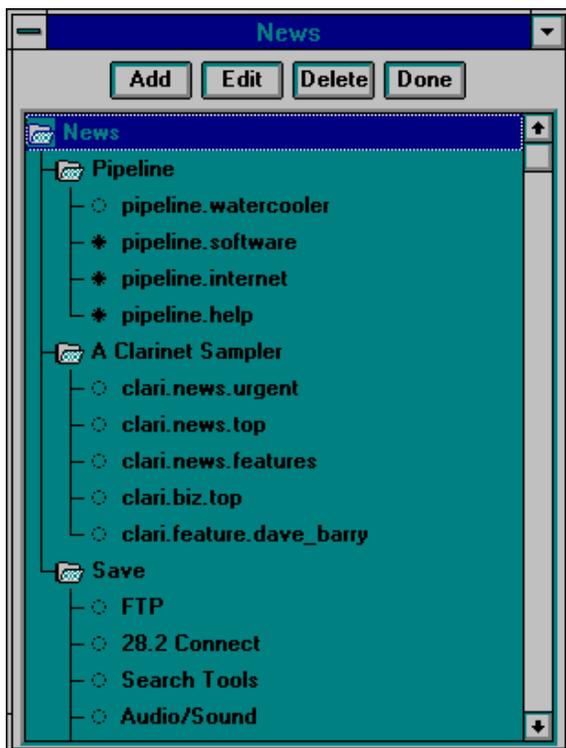


NEWS AND MAIL

Now, let's look at the main Pipeline features one at a time. Since email and Usenet newsgroups are high on most Cybernaut's list of reasons for wanting Internet access, we will start with these. Because message handling capability is so important, a more detailed description of this feature will be given than for FTP, Telnet, etc.

NEWSGROUPS

Pipeline claims to offer most of the available Usenet newsgroups, which now number over 5000. Choosing which newsgroups to set up involves using dialog boxes to pick from the available offerings, which then appear as folders in a tree structure, much like creating subdirectories in DOS. You might, for example, create a folder labeled "Multimedia," then place several newsgroups dealing with various multimedia topics under that heading. The mechanics of creating and moving headings and their subdirectories are easily learned by examining the descriptions of the various buttons contained in the "Box Management" dialog box.



Once the desired newsgroups are set up, clicking on any one of them opens a split newsgroup window. Article headers appear in the top window, article text in the lower window. Pipeline, by default, retrieves only headers when you go on-line, although this behavior can be changed in the future, when a "filters" feature becomes available. Once headers appear in the window, you have to click on the topics you want to read. The full text of selected articles will be captured immediately if you are still on-line. Otherwise, these articles will be downloaded at the start of the next on-line session.

Pipeline uses a combination of colored dots, checkmarks and letterbox icons to identify new, already read, and previously retrieved (but not selected) headers. A tree display in the header window makes it easy to follow article threads. The

header for the first article in a thread is displayed with a folder symbol - reply headers are displayed below with connecting lines to the folder.

There is considerable flexibility in the options for working with articles. You can capture the next **xxx** articles, where **xxx** is the maximum number you told Pipeline to send for a newsgroup during the configuration process or the **xxx** newest articles, old articles posted after a certain date, or all articles having a certain subject. Also, the headers display can be cleared between sessions, and new article headers can be appended to the existing tree display. Messages can be sorted by date, author or subject. A series of buttons along the bottom of the lower window is used to post replies either by the newsgroup or email, forward a reply to a different newsgroup, move the article to a user-defined *folder*, compose a new article, or delete the article. The *move to folder* option is one method for managing articles you might wish to save for further reference. There is also provision for copying or appending selected articles to an ascii file.

If you choose to post a reply or a new article, a *composer* window opens. Here, you enter the subject, for new articles, and your text. For replies, the original article appears as a quote, preceded by *in article xxxxx so-and-so says*. The quoting feature can be disabled, if desired, and a file attachment can be included, which Pipeline claims to automatically UUencode if binary characters are detected. A copy of each sent message is kept in a special folder.

Still under construction is a powerful filters feature, which can be customized for each newsgroup. When fully implemented, it will allow discarding messages from designated users, retrieving all articles from certain authors or having certain subjects, and moving articles containing designated text to other folders - all automatically. One use of filters would be to make Pipeline work like BBS mail doors. The full text of all new articles, not just the headers, could be downloaded, without the need to mark headers for article retrieval during the next on-line session. This feature has been requested by users who are accustomed to QWK-format packet downloads.

Any decent email or newsgroup software provides some means of saving addresses for later use, and Pipeline is no exception. You can add email addresses and aliases or names manually, or capture them from mail and/or newsgroup postings. Address book entries can easily be edited or deleted. Another convenient feature - if an article mentions a World Wide Web site and specifies the complete address. Highlighting the address will open Pipeline's graphical WWW browser and load the site.

Search Tools

EMAIL

Pipeline email is handled almost exactly like newsgroup articles. The user is notified of new mail waiting as soon as connection to Pipeline is established. There is a tree structure for both incoming and outgoing mail, and the same composer window, with the same features as described above, is used for replies and new messages. Separate folders can be maintained for mail from specified users, or for different topics. The filter feature, when implemented, will also be available for mail. The addressbook is available from the mail reader window.

Connecting - File Transfers and Telnet

FTP

One of the more exciting aspects of The Internet is the availability of tremendous quantities of freeware, shareware and informational files stored in computer repositories scattered all over the globe. But navigating these sites, many of which use the UNIX operating system, can be a daunting experience. Pipeline makes file retrieval as painless as possible. Usually, it is necessary to enter "anonymous" and your email ID when you reach a site that makes files available for download. But Pipeline does this for you, behind the scenes. Choosing the FTP utility from the main menu brings up a dialog box in which you enter information about the file you wish to download. Depending on how much information you provide, Pipeline either downloads the file, if you specify a site where it is located, or uses the search tool known as "Archie" to search the entire Internet for the file. As sites are found, they are displayed in a window. You can limit the number of sites to be displayed. It is then just a matter of clicking on a "hit" site to download the file. Long filenames that exceed the DOS character limit are automatically renamed during the download. Uploads to an FTP site are not supported, but Pipeline has promised this feature for a future version. One nice touch - Pipeline will display picture files stored in the more common formats when the download is complete.

TELNET

Pipeline makes it possible to connect to another computer system and have your own PC act as a terminal on that system. Obviously, Pipeline can't insulate you from whatever operating system the other site is using. Although many systems use menus to guide users, it helps to have some knowledge of UNIX if you use this

feature. Unfortunately, there is no provision for downloading files during a Telnet session, and Pipeline has not placed a high priority on enabling such transfers. I did check the terminal emulations. There are four - TTY, ANSI, VT52 and VT100.

SEARCH TOOLS

Besides "Archie," which was covered in the FTP discussion above, Pipeline offers Veronica, a tool used to search The Internet for any kind of information, not just files, and the lesser known Jughead, a more limited search tool that is Gopher-specific. Wide Area Information (WAIS) search, and WHOIS, a utility used to find email address for other individuals, are included as well. Usually, the user is not aware of the specific search tool being used to find the data of interest.

WORLD WIDE WEB

It seems that everyone is excited about World Wide Web (WWW), and justifiably so. This relatively new tool ties the varied resources of The Internet together in a way that makes it *almost* a pleasure to use. Besides the old standby text-based Lynx, Pipeline offers its own Mosaic-like browser, and it works reasonably well, although it still has some rough spots - scrolling is sometimes jerky, *forms* is not supported, meaning you can't use those WWW pages where you must enter information, and there is no provision for plugging in HTML's stored on disk. Pipeline promises that these limitations will be addressed in a future upgrade. On the plus side, any Web page that is on-screen can be added to a bookmark menu, using two mouse clicks. Another nice feature - if you have followed links to various pages, you can easily retrace your steps. This is done from a pull-down menu that shows every link you have followed during the current session. Clicking on the desired page brings it up again quickly - a neat way of quickly returning, for example, to the home page. This is possible because Pipeline holds each page you have traveled in a disk file, so there is no need to download a given page again.

Another plus - raw HTML's can be saved, in case you want to study the structure of a Web page. Probably the biggest bonus feature Pipeline offers is the ability to work with multiple WWW sites. You can open, and work with, a new site in a second window while something else is taking place in the other window (like a large movie clip download). Still to come is the ability to create and put in place your own home page on a Pipeline WWW server.

UNTESTED FEATURES

I haven't really looked at the Chat features of Pipeline Internaut. According to the on-line documentation, you can start a session with an IRC server, with the

available channels displayed in a window. It is possible to narrow the list by matching a text string with the list; *pipe* might bring up *pipedream* and *windpipe*. You can now join a channel and enjoy the conversation. You also can converse with other Pipeline users who are on-line by using a separate *talk* feature.

SOME RESERVATIONS

On the whole, Pipeline is an exciting service. PC Magazine rated it an Editors' Choice a few months back. However, it is not without flaws. Some problems have already been noted in the features discussion. Many users are complaining about the manner in which news, mail and bookmarks are stored. Pipeline uses the MS Access 1.0 database format, which means the user is out of luck if a database becomes corrupted - unless of course, he or she happens to own a copy of Access. The company has promised to completely revamp the storage format. My main gripe is a frustrating lack of real help in using some features. The on-line help system is decent enough, but too many things are left unexplained. For example, subscribers have complained that there are no instructions for playing sound and video clips that appear in WWW pages. The answers from Pipeline staff in the support newsgroup are often slow in coming or incomplete.

A FAQ explaining the proper ini settings and listing recommended sound and video players has been promised for weeks, but is yet to appear. I finally discovered how to play sound clips, but playing video within WWW seems to work only with a certain player that requires Windows NT, or a 32-bit Windows Extender. Questions about modem initialization strings for the 28.8 line sometimes go unanswered. My own question on that subject was ignored several times, except for a canned response that did not address my problem. Perhaps this lack of prompt and accurate support is due to the rapid expansion of the service. Whatever the reason, it needs to be addressed.

Don't let these reservations scare you though. Pipeline Internaut is great software. It is well worth the occasional frustration using some features can entail, and it is constantly improving. Updates and bug fixes are released at frequent intervals. Until Windows 95 hits the shelves, it may just be the closest thing to "plug in and play" that is available for Internet access.

FLASH!

As I was preparing this review, Pipeline announced that the company had been sold to PSINet, a major Internet provider. The Internaut software was already available for license to other sites, but now it appears that it will be even more widely distributed. It will be interesting to see what directions Pipeline takes under the new management.

Pipeline Internaut is distributed as shareware, and can be downloaded from major Bulletin Boards, CompuServe, or from the company's own BBS at 212-267-6432. Several subscription options are available, starting with a \$15 per month plan that includes five hours' usage. For \$35 per month, you can have unlimited hours on the service.

John M. Campbell is the Manager of the Unemployment Compensation Office of Elkins, WV. If there is a list of pinball experts, pinball machine collectors, and keepers of the pinball faith, John is among them. He is one of many rural people who have emerged into the national on-line scene contributing enormous Internet knowledge and skill.

©1995 by *Frank McGowan*

DocToHelp: An Evaluation and Review

Though no novice in computer software or in computer documentation, I am a virtual neophyte when it comes to creating on-line Help files. Not that the concept is new to me: After all, it's been one of the hot-button topics in the field of technical publications for the past several years. Nevertheless, my actual hands-on experience is virtually nil. Therefore, it was with considerable trepidation that I took on the task of using and reviewing a software program that was, to me, a trip into the vast unknown. I expected to sail off the edge of the world at any moment.

To my surprise, I'm still on solid ground. Thanks to [Doc-To-Help's](#) excellent manual, I was breathing easy just a few minutes after installing the software and starting on the "Guided Tour" recommended to all unfamiliar with the program. I mean, -how can you not like a manual that gets in a reference to Mad magazine? My thanks to the writer who typed it in and to the editor who let it stay.

Getting to this point was not without a minor glitch or two! While the process of installing [Doc-To-Help](#) is quick and easy (four 3.5-inch diskettes, and ten minutes), the first attempt failed to generate the Program Group icon. Happily, a second attempt produced the desired result, and we were on our way. Other difficulties can also crop up if you have certain anti-virus programs on your system, Norton Anti-Virus and MSAFE in particular. The workarounds are documented in the single page Release Notes included in the box.

The Guided Tour

The Guided Tour turned out to be a relatively painless introduction to the mysteries of using most of [Doc-To-Help's](#) major features. Even better, almost everything worked exactly as the manual said it would. The few discrepancies are trivial exceptions. In less than an hour I had produced a small manual and compiled a Help file. [Doc-To-Help](#) comes with a couple of canned text files you insert directly, saving much time otherwise consumed by typing. For one with limited keyboard skills, this is a very nice feature.

The Features

I was much impressed with the Margin Notes feature, very useful for guiding the reader by calling out major topics covered in a paragraph, highlighting key

information, etc. The real fun began when I decided to convert an existing document to the [Doc-To-Help](#) format and then compile a Help file based upon the converted document. Among other things, and with the help of Mike from WexTech, I discovered that both my *config.sys* and *autoexec.bat* files were in less than ideal condition for the task. I had to set my *files=* parameter to 40 in *config.sys*, and shuffle around the SET TMP line in *autoexec.bat* to avoid getting an "Out of file handles" error message during compilation. Once these housekeeping chores had been dealt with, things went more smoothly.

Being familiar with Word for Windows is a major asset, because [Doc-To-Help](#) is a Word for Windows utility that works with either version 2.0 or 6.0a. You would be advised to get that 6.0 update if you've been putting it off. A colleague at DEC once remarked that *user-friendly* referred to any software you were already familiar with. I suspect many people will find [Doc-To-Help](#) quite friendly indeed.

I chose to convert files I'd written as handouts for a class I teach at a local community college. Informal by design, they lacked such niceties as a table of contents, a glossary and an index. Nonetheless, it seemed that providing these elements would greatly enhance their value, so I opted to include them in the converted documents. Indexing in particular would be a true test of the worth of [Doc-To-Help](#), as any seasoned tech writer can tell you. I'm so seasoned I can remember using 3-by-5 cards to create my first index! The index capability of [Doc-To-Help](#) leaves little to be desired, though it doesn't include automatic permutations (e.g., "closed loop" also included as "loop, closed"), but it's no big deal to make the necessary edits as you go along. The burden of creating meaningful entries still rests on the writer/editor, but it's a much lighter burden than it had been just a short while ago.

I also chose to put in lots of margin notes. By specifying the Body Text style, you create pages with wide margins, something I need for class handouts to allow people to scribble their own notes as the class goes on. Margin notes are a convenient way to highlight the main topic of each paragraph in a manual. To include them in your Help file, you link them to a word or phrase in the associated paragraph. In fact, unless you do this, you will get a diagnostic error message when you convert the file to Help. Should you choose to convert without running the diagnostic program make sure you've cleaned up any inconsistencies in your file.

You may have noted an overall favorable outlook regarding [Doc-To-Help](#); this is not a misimpression: I truly like the product. Therefore, when it fails, I am double disappointed. In the first week or two, I worked on small files, content to manipulate a few pages. As I became more familiar with [Doc-To-Help](#) my confidence and ambitiousness increased where I began attempting larger documents. I decided to take the draft of a novel I'm working on (**shameless plug alert!**) and convert it to [Doc-To-Help](#) form. Who knows? I might be able to "publish" it on the Internet.

Things went quite well initially. The text conversion was fairly painless; I even stuck in a few facetious glossary entries, and put in some index hits, just to see what would happen. That's when things began going awry. Even though the number of index entries was small (less than a dozen), there were many occurrences. The first thing I noticed was that it was taking quite a long time to build the index, considering how few words I'd chosen to include.

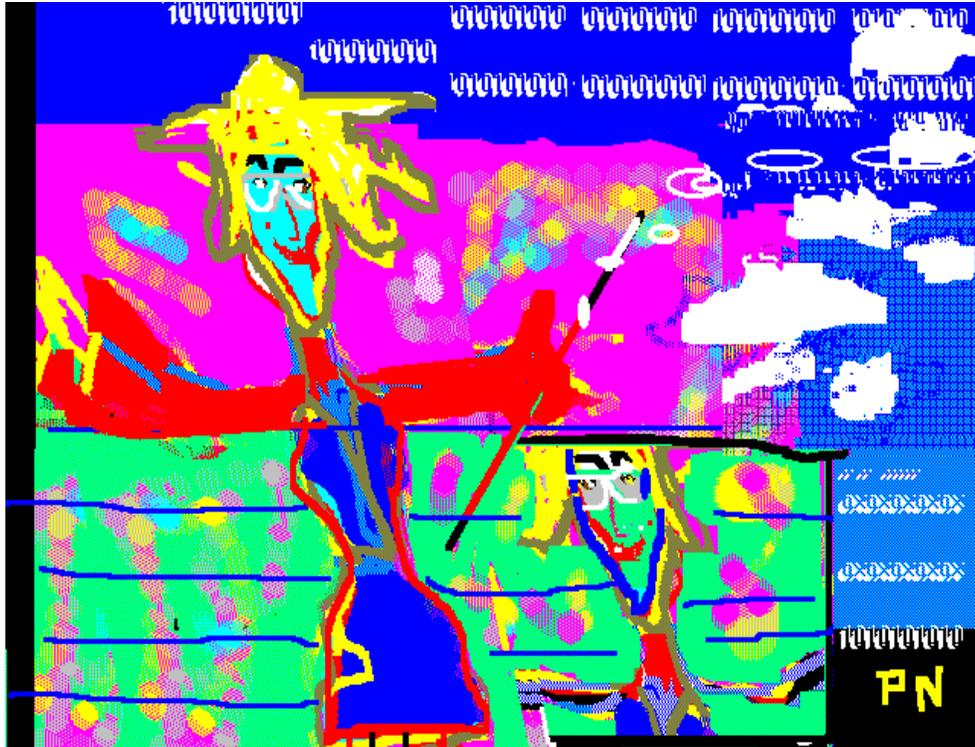
Just when I thought things might improve, I got a message from Word telling me that it had run out of memory. My system has eight meg, so this was not a problem I encounter often. WexTech specifies a minimum of two meg, but recommends four. It seems that in the process of building the index, too many "edits" were made. There did seem to be an awful lot of repaginating going on during the build procedure, come to think of it.

Like most new users, I assumed that I must have done something I shouldn't have. After all, the people who created the program are a lot smarter than I, at least when it comes to software. In this case, they were smart enough to realize that "out of memory" errors are likely to occur when large files are being processed, and to have included several pages in the User's Guide dealing with the problem. This, I needn't tell you, is reassuring. Thus reassured, I can concur with Windows Magazine's decision to rate [Doc-To-Help](#) 1.6 as one of its top 100 products of 1994 - even though they refer to [Doc-To-Help's](#) Hyperformance Tools as "Hyperforce" tools). Having got past my rookie jitters, I am comfortable using [Doc-To-Help](#) and recommend it to anyone interested in creating online help files. I do have one question of a general nature, though: Why don't Help screens come up maximized? I hate it when the vertical scroll bar is hidden at the edge of the screen.

WexTech Systems
310 Madison Ave.
New York, N.Y
212-949-9595
Internet: 71333,1400
On Compuserve: GO WEXTECH

Frank McGowan spent 25 years as a computer documentation professional at Honeywell and Digital Equipment Corporation. During that time he worked as a technical writer, taught technical writing, and managed a documentation department. Currently he works as an independent consultant in the Boston area and spends his spare time feeding two cats, honing his golf game and dabbling in music and writing fiction.

Alice Reviews Software:



© 1995 by Peter Neuendorffer

NEXT

WW

ShareWare Shenanigans

Reviewing ShareWare

by Alice A. ©1995 *Peter Neuendorffer*

I was cleaning out my hard drive the other day when I passed over several programs that are quite good and that I would never dream of deleting. Peter demanded that I write some ShareWare reviews, so it seemed like a good idea to dash this off. First, let me leave you with a recent review of one of my own works. I received this from a kind reviewer: "Productive uses for this software are unknown." It took me all of one minute to realize that what they said was my work was useless.

After a brief trip to the local rest farm, I collected myself enough to let you know what I think of several real works by my fellows. My friend Peter says he likes my program, by the way, although he doesn't have a use for it either. All of this got me to thinking about marketing. The second two programs reviewed here, Vendinfo, and Chief's Installer, create volumes of information describing the product and how you can pay for it. This in fact may have a lot to do with the success of a ShareWare program. It must at all costs give the impression "I am a professional work, by a professional firm."

Crossword Compiler for Windows

A game

by Anthony Lewis

File: CCWIN15.ZIP

Registration \$40.00

If you are a childhood puzzle book junkie, this program is for you. Easily write your own crossword puzzles. You draw the puzzle graphically, and words and clues can be modified as you go. The program can be put under games. It has a friendly fill-in-the-blanks interface. Of course nowadays, like a rabid dog, an unfriendly Windows interface is a seldom seen thing. Since the development of the Interface Rabies Shot by Microsoft in 1990, unfriendly interfaces are a rare breed.

You can develop symmetrical puzzles, a challenge to say the least. I only wish that the software could supply clues for words starting with "qkv..." In fact, wouldn't it be nice if it generated the whole puzzle at random.

There seems to be a bug involving changing a word- the number of letters given for the word does not update, which caused stern criticism by my friend the New York

Times Puzzle aficionado . He also called into question some of my definitions. I feel that Floorphobia: "fear of floors" is perfectly acceptable, given the difficulty of developing a symmetrical puzzle. You can print your puzzle as well as the answers, although it does not seem to get the page breaks right during printing. Formatting printing is a general nightmare for programmers. I was disappointed that there was no Object Imbedded (OLE) for cartoon animation, as I expect my crossword puzzles to be animated with sound. Also, no color configuration. Crossword puzzles should be multicolored, with the vowels a different color from the consonants.

Otherwise, the program is great !

The registration of \$40.00 seems a little steep, although I have discovered that a shareware author should never bank the rent on receiving registrations. Publishing a ShareWare program and then expecting money is like expecting to negotiate a facsimile check addressed to resident!

Vendinfo

Publication software

Ram's Island Software

File: VNDFNO.ZIP

(DOS interface)

Registration \$25.00 (minimum)

My local distributor insisted that I use this program when preparing programs for publication. It creates a structured file that describes the program I release in excruciating detail. I was told this is a *standard* for program distribution. Since 1992? What is more, in order to distribute the VENDINFO.DIZ file I must register the Vendinfo program. This seems like a sneaky way to get me to pay for something I try out and is frowned upon in the ShareWare user world. Authors seem to think they should be paid for their programming work, while the users frown on the idea of the work being "crippled" in any way that will interfere with the evaluation process, or the ability to use the software without paying for it.

ShareWare programs, as a result, tend to make money when they are bundled with hardware products, or create a brand new niche, such as the off line mail readers. Vendinfo gets the ShareWare author in their own pocketbook. ShareWare authors are a class of people probably least likely, at least I am, to be able to pay for ShareWare.

In any case, you fill in what seems to be an endless set of forms about your program's installation, support, use, and licensing. When you are finished, you get a really formal, professional, and readable file about your program's use, as well as a structured file that may be read with special software by distributors who are perusing and cataloging new shareware. I think it would be a great idea to apply Vendinfo to projects and people.



You could do a complete bio on someone, giving them their own VENDINFO file. This could be attached to a resume to give a human resource director They are human, aren't they? It would give a quick view of yourself and your features. Special software could be used to evaluate a VENDINFO file for an person automatically and without the *mess* of an in-depth personal interview.

Chiefs Installer Pro for Windows

Installation software

Dr Abimbola A. Olowofoyeku (the African Chief)

File: CINSTP15.ZIP

Registration \$29.00

This software creates an installation program for your Window's program release. Simply create a special text script file, and the program is customized for you. When Chiefs Installer itself is installed, a veritable array of icons is presented in your program manager, which is not surprising, as it is using it's own system to install, and probably wants to strut it's stuff. You can specify which of your files you wish to install in the Windows or Windows System directories. This is extremely useful if you are supplying .vbx or .dll files that must be compared for most recent version. Support for banners, an end of installation message and help files is included.

The format gives values to a number of reserved words in a text file which you compose. At first I thought that it would be nice to have a form program where you filled in boxes, but I now realize that you would get terribly confused about was being installed, who the installer was, and where you were on the planet. A script is much more organized.....

The Chief's Installer manual is quite detailed, explaining the syntax for the script completely. A thorough reading is recommended before you hack up the sample files. I just finished doing an installation for my latest program, and things went on without a hitch. The main thing is to BE ORGANIZED, and STAY CALM. I tried as best I could to test the feature where shared files are only installed if the date is later, and by doing so, my system complained briefly - nothing to do with the normal use of the installer, however.

The finished product is quite neat, and is free of the computerize gobbledygook that is so daunting to the new users, *and* to experienced experts like myself. Chief's Installer is definitely a must-have for the aspiring Software Magnate. I only wish the software could be applied to installation of people in new situations. Write an installation program for a new job, home, wife, husband, or pet, or any of life's new experiences.

PLUG OF THE MONTH

What Software Dreams Are Made Of?

Having the Window95 beta on our network has really forced me to look at the timeliness of the software I just *can't / won't* erase. Like most people I have my favorites that have become fixtures on my hard drive.

One does have to ask: Why the need to keep old friends on a hard disk well beyond their time of utility?

The software package I'm going to replace will be ten years old this summer. It was one of the first color programs I ever owned and, as a matter of fact, used on a monochrome display for a few years.

It is a remarkable piece of software that runs flawlessly in DOS as well as a DOS window under Window95.

But that was then and this is now!

Let me give you a hint! It's a game! It's a game that simulates human response to a given set of markers. It is a computer version one of the most sophisticated games on the face of the earth. It has been adapted, made harder, made easier, corrupted and when done well, is a masterpiece of programming, providing hours of entertainment.

Before I give away my choice for this month's plug, indulge me! My father played this games superbly. He was addicted to the point that in order to interact with him in ways that were fun for all of us...both my sister and I learned to play this game well. He had long since mastered the nuances. I expect we let him down horribly because we were rank amateurs in comparison. He was very professional and literally a master. So with that....

The *WindoWatch* shareware **PLUG OF THE MONTH** has cut the mustard for being intuitive, a quick and easy installation and just plain fun to play. With pleasure we present the **The Plug of the Month !**

Please note the following
THIS IS NOT A PAID ADVERTISEMENT BUT RATHERA PLUG

The Plug of the Month is.....

MVP BRIDGE FOR WINDOWS



c 1995 MVP Software

MVP Bridge for Windows by Steve Estvanik with Windows programming by Craig Kellog - An MVP Software Production: v. 1.2

This game is shareware. It is a fully functioning game for rubber bridge. The interface is intuitive and the bidding and scoring represent normal play with no surprises. To register the cost is \$39.95 and will include Eddie Kantar's Bridge Companion for Windows. Developed by the designers of MVP Bridge for Windows,

Eddie Kantar's Bridge Companion for Windows includes all of the following additional features:

- * Multiplayer Option**
- * Duplicate Bridge**
- * Chicago Scoring**
- * 6 Additional Conventions**
- * Standard American Bidding (in addition to Goren)**
- * Ability to enter, edit, save and play special or saved hands**
- * All new card backs and music**
- * 50 hand tutorial by Eddie Kantar.**

Whether you're a novice Bridge player or a seasoned veteran, you will learn new tricks from the world-famous Bridge expert, author, and syndicated columnist Eddie Kantar. Mr. Kantar created these special tutorial hands for Eddie Kantar's Bridge Companion for Windows. They take you through the hand in an interactive manner, as if you were playing the hand with Kantar looking over your shoulder and helping you make the best play! This is a feature no Bridge enthusiast will want to miss.

- * Expanded on-line help and documentation written by Eddie Kantar.**

The author, Steve Estvanik is a member of the Association of Shareware Professionals (ASP).

MVPBridge, the shareware edition is available for download from the following BBS'.

In Grand Rapids, Michigan -- Ryan's Bar (616) 456-1845 or (616) 456-5342

In Milwaukee, Wisconsin -- Exec-PC (414) 789-4360

In New York, New York -- The Invention Factory (212) 274-8110

In Boston, Massachusetts -- Channel 1 (617) 354-3230

In Kansas City, Missouri -- Sound Advice (816) 436-8029

In Palo Alto, California -- Space BBS (415) 323-4193

In Reston, Virginia -- World Data Network (703) 620-8900

To register your copy of MVP Bridge for Windows and receive the Kantar Bridge game, call 800-968-9684 (order line only please) from anywhere in the US or Canada, 24 hours a day, 365 days a year.

SURFING THE NET

PHYSICS SERVERS AND SERVICES AROUND THE WORLD

A renewed collection of physics and physics related resources:

The server includes:

- * Links to preprint servers, journals, books & publishers
- * Links to physics departments and institutions around the world (also non-university labs): geographical & topical lists
- * List of servers containing info about available JOBS, also other than physics
- * Conferences and meetings
- * Scientific visualization & computation, program archives, linux etc.
- * Government & funding offices & scholarships/fellowships
- * Physics news -listings
- * Physical Societies & Space Agencies Around the World
- * Links to other physics resource lists, W3 Virtual Libraries & FAQs
- * Search engine for all topics is available

<http://www.physics.mcgill.ca/physics-services>

Physics Servers and Services Around the World (McGill)

In Europe, this is mirrored at TU Vienna:

<http://tph.tuwien.ac.at/physics-services>



Scout Report:

scout@internic.net

Susan Calcari

A Taste of Issue dated January 20, 1995

- * Reports from and about the earthquake areas in Japan.
- * The Youth Music/Youth Culture page.
- * The InterNIC Net-Happenings list -- now archived at MIDnet.
- * The National Service Learning Clearinghouse for K-12 gopher
- * Colorado Mountain Bike Racing

World Wide Web

The Child Abuse Handbook is provided by the Frontenac County Board Of Education, Kingston, Ontario, Canada. The 1995 edition is now available in hardcopy, and a "Short Guide" is online. This handbook is designed to provide concise information to help education staff respond to suspected child abuse, and to disclosures by the victims.

<http://www.fcbe.edu.on.ca/www/welcome.html>

The Committee on East Asian Libraries maintains a page directed to the needs of librarians who must deal with the growing volume of Asian electronic information and should be useful for anyone interested in East Asia or in Asian studies. The site includes pointers to specific resources, such as the largest internet site for Chinese software, and links grouped by area: Japan, China, Taiwan, Hong Kong, Macau, SouthKorea, North Korea, and the Asia/Pacific Basin.

<http://darkwing.uoregon.edu/~felsing/ceal/welcome.html>

Gopher

Massachusetts Library and Information Network provides access to library catalogs, periodicals with indexes, and state and federal information.

gopher to: mlin.noble.mass.edu

The National Service Learning Clearinghouse for K-12 gopher server is part of a 3-year federal grant from the Corporation for National Service, which houses the old ACTION and VISTA programs, the new AmeriCorps program, and Learn and Serve America, the K-12 education portion of national service. The National Information Center gopher provides access to online searching of resources, programs, and organizations.

gopher to: gopher.nicsl.coled.umn.edu



The Infobahn Salon, On Air Sundays, 1080am, 10am to noon
See studio photos and a WOO at <http://radionet.com/radionet>

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R A D I O N E T 1995 Editorial Calendar R A D I O N E T

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Sponsor: The Santa Cruz Operation, Open System Software

Feb. 5

Chris Knight, VP, Visual Software, a multi-media applications developer. These tools enable artists and designers to work in 3D as easily as they have worked in 2D. Chris is otherwise known for great performances as Peter Brady on the 'Brady Bunch'!

Jim Warren, Editor, GovAccess Bulletin, an Internet mailing list dedicated to distributing government information online. Jim is a regular contributor to Boardwatch and MicroTimes magazines.

Feb. 12

**Jonathan Steuer, Online service developer extraordinaire
Steve Elston, Program Coordinator, Smart Valley, Inc. Smart Valley is helping No. California navigate toward the information age by accepting risk and building coalitions among business, government and academia.**

Feb. 19

John Pettit, Cybersource, Software purchasing directly off the Internet.

Feb. 26:

Michael Powell, discusses Pacific Bell's new project, 'Education First'.

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The Human Factor url: <http://www.human.com/scott.html>
"Describing the Internet as the Network of Networks is like calling
the Space Shuttle, a thing that flies" .. Curtis Franklin Jr. ,Sept. 1994**



User Homepages now available at the Dorsai Embassy

Long Island City, Jan 30 - (DNW) Thousands of users at the Dorsai Embassy received a weird message when they logged in today. "/html created" flashed on their screens.

What was that strange message and what service could it announce. Few knew and even less would tell. "The only word to come out of the staff, when asked, was "this is another contribution we want to make to the online community."

By late afternoon, many had sent distressed mail asking what the deal was and the minister of propaganda decided to spill the beans. "Personal homepages are now available on Dorsai," he said. With this, he announced that the last phase of testing had been done and usrs would now have the right to set-up their own home pages.

Some rules were set:

- * All pages will have to be submitted to the dorsai web team (www@dorsai.org) for testing before links to the dorsai server are created. The web staff will then test the pages to make sure that the scripts are working properly and set the pages up.
- * In conjunction with Dorsai's non-profit mission, the dorsai embassy decided that commercial homepages would not be accepted on the dorsai web server. People who are interested in setting up a commercial web page or web site should contact staff@dorsai.org for alternatives.
- * cgi scripts will not be allowed yet. This means that users can't run program from their homepages at this time. The dorsai web staff is currently trying to design a way to execute scripts without any breach of privacy or security to its users.
- * Users will be limited to homepages that are no bigger than 2.5 Mbytes.
"This is our way of providing more content on the net" said a dorsai staffer.
"We hope our users will do great work which will enhance the net in general," he added.

The Dorsai Embassy is a 501c3 not-for-profit organization which provides computer equipment, consulting, education and internet access to the disabled, the disadvantaged, other non-profits and the general public.



Subject: Re: Star Trek?

Query: Is there a Star Trek homepage?

See <http://www.cosy.sbg.ac.at/rec/startrek/index.html> for a very comprehensive page.

BETA BITS - Comments and Complaints from the Win95 Beta Testers

Actually, my wife left me somewhere between builds 122 and 189 !

Good god! Did you have a backup copy?

* * * * *

I must confess during these last days she keeps accusing me of being stupid for doing free work for Microsoft.

Yeah, I used to think that too - until we became a two-tester household! Now we just neglect our cats.

* * * * *

Tyke Takes Charge!

When you catch your toddler trying to stick build 311 into her Mickey Mouse veiw finder, you find a high-up and out-of-site spot for such valuables, anyway.

Maybe she knows something! They have those little audio clips on the 311 CD. Maybe there are video clips, too. Has anyone checked -besides your daughter?

* * * * *

Autoexec.bat

```
DIVORCE=system('echo y| erase \wife\*.*' )
```

* * * * *

I just got Build 324. Loaded it on the home machine. The CD-ROM got cracked on the trip over to Australia. In spite of this it installed OK! Maybe the claims that there is good error correction code on CD-ROM's is correct. !

ALICE COOKS DATA

© 1995 by *Peter Neuendorffer*

I was being blown down the street one cold morning, when I collided with my friend Alice the Short Order cook. She told me she got this job serving up datafiles at the Datafile Emporium and Coffee Shoppe downtown.

Although we both were in a great hurry to catch the 32 Bit Bus, we stopped long enough to exchange the usual Comm Protocol. I asked, "What is a datafile short order cook?" She said in reply that she turned data pancakes into data french toast, and vice versa. For toppings, she added voice synthesis or photo scanning. She said she had been working for the competition, but felt they were Warped.

I asked her how one got Access to her Emporium, she said it was simple, just type F1. I tried it and was surprised to find some of my questions were answered. I thanked her for helping me and was on my way.

Alice turned a corner and the wind began to blow anew. Up ahead was a sign Windows 95. I soon discovered it was just a snow mirage.

Upon returning home, I called my manufacturer and they informed me that my BIOS didn't support 32 bit access. That was strange, as I had been using it for three months!

Peter Neuendorffer is Alice's creator. Alice comes out of Boston and has been seen frequenting Harvard Yard on the arm of a recent Nobelist! She is on CD-ROM and is a WindoWatch irregular.

Acrobat Compression:

by Lois B. Laulich

Using the actual files from issue #3 of WindoWatch, it is very clear which approach to authoring documents makes the least demand upon files size. Adobe provides two drivers which convert copy into the portable data format or *.pdf. The first is PDFWriter which compresses data more rapidly than does the second, Distiller. However, the output from Distiller is a full 20% or more smaller. Suggestions to use the Microsoft Word Viewer carries with it a very heavy freight charge. The size of the viewer itself is 1448662 compared to Acroread.exe of 1,680,00. The difference in file size between Word doc files and Acrobat *.pdf files, makes comparison almost ludicrous.

File size w/Word 6	File size w/PDFWriter	File size w/Distiller
page1 .doc 13824	page1 .pdf 9231	page1 .pdf 5,737
page2 .doc 14336	page2 .pdf 5214	page2 .pdf 4,066
page3 .doc 13824	page3 .pdf 11664	page3 .pdf 8,518
page5 .doc 26112	page5 .pdf 22641	page5 .pdf 19,156
page6 .doc 3664K	page6 .pdf 292610	page6 .pdf 207940
page7 .doc 12800	page7 .pdf 5925	page7 .pdf 4,724
page8 .doc 13312	page8 .pdf 5773	page8 .pdf 4,601
page9 .doc 21504	page9 .pdf 18377	page9 .pdf 15,036
page10 .doc 15360	page10 .pdf 11444	page10.pdf 9,788
page11 .doc 17408	page11 .pdf 13906	page11.pdf 16,071
page12 .doc 19968	page12 .pdf 42637	page12.pdf 14,851
page13 .doc 196608	page13 .pdf 42686	page13.pdf 38,248
page14 .doc 16384	page14 .pdf 12939	page14.pdf 11,236
page15 .doc 303104	page15 .pdf 50138	page15.pdf 44,480
page16 .doc 322560	page16 .pdf 30276	page16.pdf 26,150
page17 .doc 16896	page17 .pdf 15959	page17.pdf 12,028
page18 .doc 11264	page18 .pdf 5365	page18.pdf 4,223
page19 .doc 11264	page19 .pdf 6939	page19.pdf 4,494
page20 .doc 13312	page20 .pdf 9647	page20.pdf 8,215
20 File(s) 4,839,936 bytes	20 file(s) 619,184 bytes	20 file(s) 464,186 bytes

The Last Word

The Tech Orientation © by *Ben M. Schorr*

It seems that more and more in the 90s, consultants have become technology oriented. While that's not always a bad thing I think that, generally speaking, it is not an advantage to the client in the long run.

Back in the 80s, when we struggled to scrape together hardware to run software acceptably, consultants were usually *solution* oriented. We'd find, write or modify the best software for the job and fine tune the hardware to get the most we could for the dollar. Today, with hardware prices falling and technology advancing it seems as though consultants are just pushing big hardware and not giving much thought to how well it's going to work or what it's going to cost.

For the next several issues of *WindoWatch* we're going to focus upon innovative solutions that really provide the client with excellent value for the dollar. Here's the first one...

At a chamber of commerce mixer one evening, I met a fellow who worked for one of the major warehouse-retailers. He was a manager for one of their local distribution warehouses and he confided in me that they were still tracking all of their inventory on index cards. That was enough to raise my eyebrows and prompt me to ask him why they haven't converted to computers for this task?

His response? "We have a corporate MIS department, but if I call them it will take them three weeks to return my call, four months to study the problems, eight months to create a solution and then we'll have something that nobody will know how to use."

I told him I thought I could help him if he was allowed to go outside the company for such things. He told me he had a discretionary budget and we arranged to meet the following Monday at his warehouse. I arrived as scheduled and we toured the warehouse while he explained their system and product to me. It turned out that they had about 9,000 bins in the warehouse and that the product in each bin can vary by type and quantity on a regular basis. After a few questions it became obvious to me that his needs were *extremely* simple and that it wasn't going to take a massive piece of programming to solve his problem.

Sitting in his office he asked me what I thought. "We can do it." I said. "How long will it take?" He asked nervously. "How's Thursday?" I replied. At this his face lit up and he asked "THIS Thursday?" I nodded and his face darkened again as he asked what it would cost.

Cost is a tricky situation when you quote a programming job. You don't want to under price yourself because A) You need to make money, and B) If you price the work too low the client will have a perception that they are not getting a quality product. However, I knew he was on a tight budget and I didn't want to price the work out of his range. "\$750." I responded. He let out a sign of relief, reached across the desk to shake my hand - and we had a deal.

Back at the office, later that day, I almost giggled as I fired up Software Publishing's Professional File database. A couple of years earlier I'd been introduced to Professional File after a partner at the law firm where I was working begged me for the easiest database on the market. Our vendor said "Professional File" so I ordered it. I was surprised at its simplicity and relatively easy interface, coupled with powerful search capabilities. The only problem with it was speed and capacity as it tends to bog down when handling too many records. Therefore, my warehouse friend was *physically* limited to 9,000 records or bins. He already had a 386DX-25 running DOS coupled with Professional File seemed a natural fit with its super-low price tag.

By Tuesday afternoon I'd completed his project after about a total of four hours of work. On Thursday, at the appointed time, I delivered and installed the software for him. It was entirely menu driven and enabled them to quickly search and locate the bin and quantity of any product they had. Reports were a snap and it was easy to customize. I handed him the documentation, *two*, typed, double-spaced pages which he quickly tossed aside. His first reaction? "Any idiot could use this!" "That was the point wasn't it?" I asked. "Yes...actually it was." He said. We both smiled as he handed me the check.

Sure, I could have charged him thousands for an intricately written database. I could have commissioned a solution in Paradox, FoxPro or Clipper. I could have done studies and sold him new hardware and forced him to a Windows solution - or worse! But he didn't need all of that. The solution I provided him was certainly not state of the art. But it *was* a tool that solved his problem in an elegant, easy to use and economical way. It was completely functional and he's still happy with it - three years later.

If you have any stories about creative or unusual solutions you've come up with for your clients or companies please drop me a message. If I use your solution in a future column I'll blow my limited budget here and send you a little gift. That's called a bribe. My E-Mail address is (ben.schorr@panasia.com) or (ben.schorr@bcsbbs.com)

Ben M. Schorr is Director of Operations of Watson/Schorr Consulting of Canoga Park, CA. He is also a regular *WindoWatch* contributing writer.