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WHAT'S INSIDE

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WindoWatch **The Electronic Windows Magazine of the Internet**
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It's Only a Name!

My chin dropped to my chest when I opened the pages of the April issue of Windows Magazine and saw in the table of contents a reference to Windows Online. When I looked at the page in question my shock turned to disbelief .

The writers who contributed to that April issue of Windows magazine, page 409, are no less than the Editor-in-chief of the magazine, Fred Langa, and the well known windows writer Karen Kenworthy. It is made clear by the phrase "Compiled by Julie R. Blumenfeld" that Ms. Blumenfeld was not the author but merely the compiler of snippets contributed by others. Sorry ma'am. We know who's going to need the bucket amputation!

To finish this public lament, do I need to remind you that you are reading *WindoWatch!*

For the record: Windows Online has been traditionally associated with the work of Frank Mahaney and the Windows Online BBS. Windows Watcher is the name of Jesse Berst's respected Windows newsletter and WindoWatch is the property of Lois Laulicht.

Who says it's only a name?

The WindoWatch Homepage!

Although still under construction, we hope you'll stop by to visit the WindoWatch homepage at
http:// www/channel1.com /users/winwatch/WindoWatch.html

To welcome our visitors, we are featuring a never published before article by Herb Chong which he calls Needles and Haystacks. Those of you who wish, can grab the magazine online for download and will also be able to bop over to the Adobe homepage where the Acrobat folks hang out. WEB visitors to the Channel One homepage can get into the WindoWatch page with a click. We hope you leave us comments and suggestions.

***WindoWatch* has the experts who can help should you have questions about your Internet browsing. Paul Kinnaly will direct your query to the proper professional. Paul with Jim Plumb, the constructor and keeper of the *WindoWatch* home page, have become, in fact, the left and right arms of the *WindoWatch* enterprise.**

EDITORIAL

Editor Lois B. Laulicht
ContributingEditor: Herb Chong
Production Editor Paul Kinnaly
HomePage Editor Jim Plumb
Contributing Writer s:
Derek Buchler, Ambrose Camobell, John M. Campbell, Gregg Hommel , Paul Kinnaly; Jerry Laulicht, Angela Lillystone, Jeff Marchi, Frank McGowan, Peter Neuendorffer,, Ben Schoor, Paul Williamson.
EDITORIAL BOARD
Herb Chong, Gregg Hommel, Lois Laulicht, Paul Williamson.

SUBMISSIONS and REQUESTS
Email using **Internet**
lois.laulicht@channel1.com
windowatch@ins.infonet.net
winwatch@user1.channel1.com

Editor WindoWatch
Valley Head, WV 26294

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We publish in a Windows compatible format and soon in HTML The DOS format uses ReadRoom (*.TOC) One can also read online from the Reader Room itself - Door 48. Non-members of Channel One can download the latest WindoWatch issue by typing J Free from the main board prompt

Beginning January 1, 1995, annual shareware subscriptions at $10 per year for electronic delivery of the ASCII edition and sponsorship and contributions at various levels.

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

WINDOWS95 -Virtual Memory

An Interim Report © 1995 by Jeff Marchi

The development of WIN95 has been moving forward at a furious pace these last couple of months. The beta testers have been getting new releases at a rate of one to two a week . A number of problems have been resolved as resource usage has been enhanced and conventional memory usage greatly reduced. More fixes and internal enhancements are in the works according to Microsoft. On March 6, 1995 the Beta 3 version was completed which led to the Pre-release program in which 400,000 additional people are receiving copies of the product at a cost of $30-$35 each.

Resource and Conventional Memory Usage Improvements

Resources

With the release of Windows 95-Build 345, the product got a significant boost in resource availability. People have been reporting on the CIS beta forum that they are now seeing over 90% free resources. I did a test to see what percent resources would be free after running a suite of applications. I was running Ecco, Winpost, MS Office, Logimouse, Wave Rider, Procomm for Windows, Resource Monitor, Kfree, 2 DOS prompts, Procomm's Fax App, 2 on screen notes (separate items on task bar), cardfile and Norton Editor. 14 different tasks and I had 60% of resources left. Normally at that point with WFWG 3.11, I would have about 25% left. If I start Word or Excel I lose another 10-12%. The remaining 60% that I had left was the result of USER being at 60% and GDI resources around 80% at the time.

The report is that Microsoft is now working on reducing the amount of USER resources required under Windows so that more will be freed up in the final release. They will be using more of the Windows class structure to the 32bit heap after Beta 3 ships resulting in even more resources being available. This will allow you to run more separate Windows applications at one time. It appears that resource problems are becoming a thing of the past.

Conventional Memory

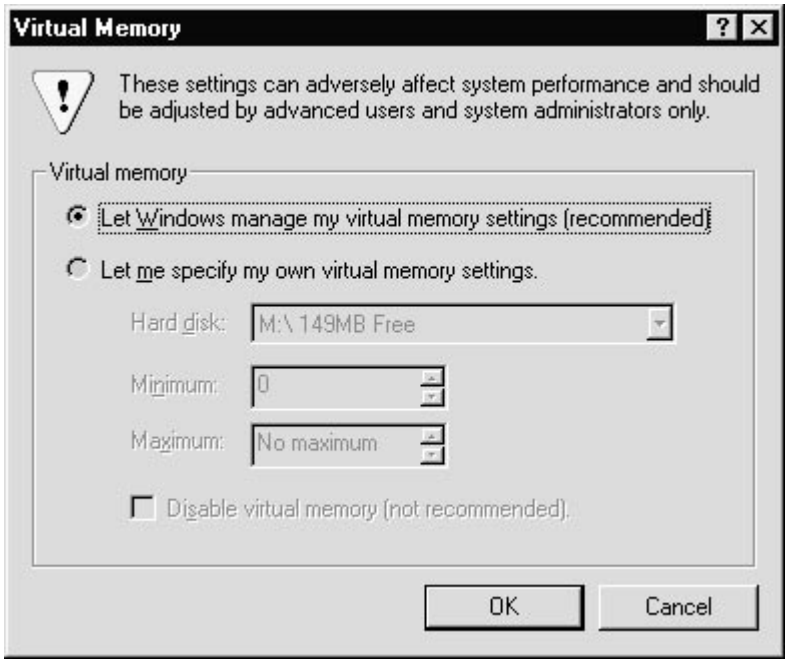
Conventional memory usage in the Windows virtual machine (VM) has been dramatically reduced. With the Windows for Workgroups 3.11 version of Windows I had less than 200K of free memory in the Windows VM, and most of the time it was below 120K. With Windows 95 I now have 540K of free conventional memory.

Prior to the end of February even WIN95 only showed about 175K free. About the same time as the release of build 337 free conventional memory shot up to over 500K. I wasn't keeping track of precisely which build accomplished the break through, so I can't be completely certain which build was actually successful. I have tried to find out if the program used to calculate this number is inaccurate but have been unable to find anyone at Microsoft that really knows what has changed. I have attempted to run a large number of simultaneous programs using a combo that caused out of memory errors with earlier builds of WIN95. I have been unable to duplicate the *out of memory* error, so it does appear as if the change is real.

Many of the areas we took for granted as critical issues for setting up a system under Windows have changed dramatically. It will no longer be necessary to discuss the size that the swap file should be, or how much cache should be allocated with Smartdrv, these two options have really disappeared with the advent of WIN95, they are hidden under the covers and allocated dynamically. This has both a good and a bad outcome.

Swap File Changes

Swap file usage has changed dramatically in Windows 95. You no longer need to worry about setting a swap file size or making it permanent or temporary. The 386 Enhanced Icon is gone from Control Panel! Configuration of the swapfile is now handled dynamically by Windows. Below are the only settings you can adjust if you want to manage virtual memory. These options are found in Control Panel/System.



As you can see from this screen capture, Windows will automatically create a swap file as needed, move it to another drive, if you choose, and permit you to limit it's allocation, or disable it completely! In this screen, note that drive M is grayed out in the background under Hard Disk. This drive, used for my Swap file, becomes available as programs demand memory. In this case, the swap file was placed on M because there is a parameter in SYSTEM.INI that specifies the paging drive be there.

device=*dynapage
PagingDrive=M:

An important detail, however, is that I didn't choose drive M for the swapfile. It was automatically selected by Windows, probably because it was the first drive on my system that actually had enough room for a swap file.

One interesting aspect of swap file management is that the swap file continually expands as you run more programs. This results in making it always appear as though all your original available memory is present for use.

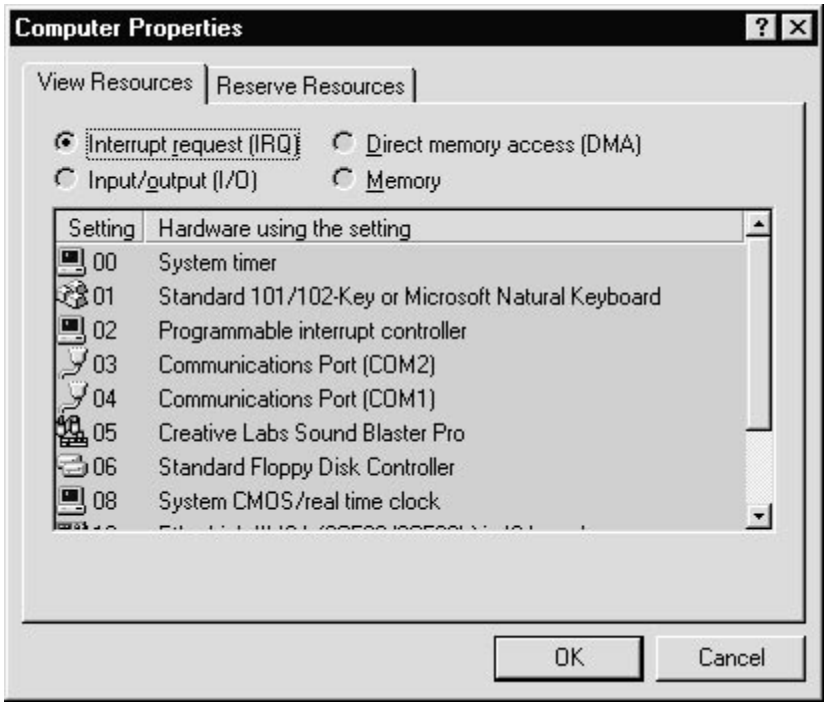
Simply shutting down applications doesn't immediately reduce swap file usage. In order to reduce the allocated swap space you need to close down most running applications, or wait a lengthy period when you are running fewer applications. Windows is then able to reorganize the swap space and reduce it's size. The swap file is used from the top down and it is during those idle periods where it can reorganize its space. Otherwise it will have large holes at the bottom and will not be able to reduce the overall size because there is data present at the top end. I have found that the quickest way to reduce it's allocation is to shut down all running applications and just wait a minute. This will allow Windows to reduce the swap down to the 4-6meg range. On my 16meg system I have found the swap expanding to over 20meg, leaving very little free disk space on my C: drive even though there is very little is running.

System Hardware Resources

Another major change that will occur when WIN95 ships, is in the area of sleuthing usage of IRQ's, DMA addresses, I/O addresses and memory, as you can see in the Computer Properties charts listed below.

IRQ Usage

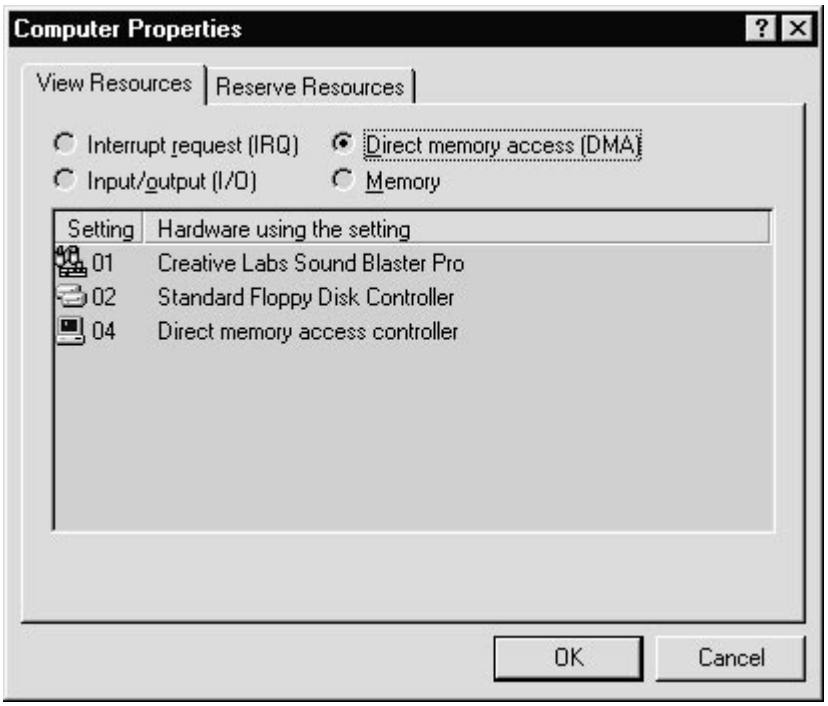
I have selected IRQ's in the following screen shot, and it shows all the IRQ's used from 0 through 8 on this page. On the next page of this display it shows the higher IRQ's that are used.



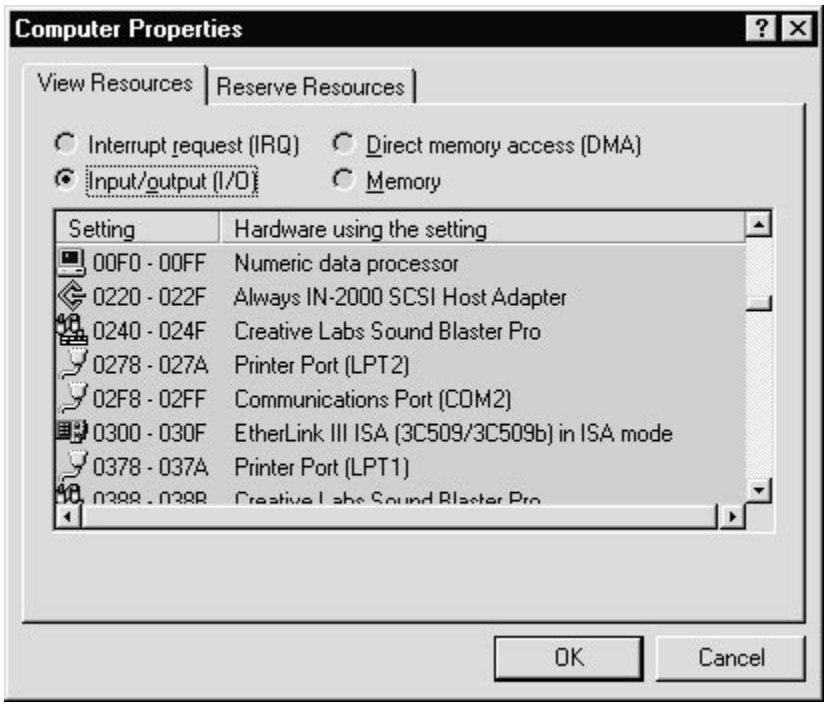
If you look closely you will see there is no IRQ5 for LPT1 or IRQ7 for LPT2. This system has both printer ports, yet Windows doesn't show them in use. I noticed this a few months ago, and wondered if they were just being ignored, as is normal with diagnostic programs, or were they truly not being used. Usually you have to put loopback plugs in the ports for them to be tested and seen, I don't have loopback plugs but I do have printers plugged into them. I contacted the Beta team and was told that IRQ5 and IRQ7 are no longer used to manage the ports and are free to reuse. As you will note, I have a Sound Blaster Pro on IRQ5. I had held off on buying a sound card for this system for a long time. After finding this out, I immediately put the card that was in my second system in here and then got a new sound card in my secondary system.

DMA Addresses

There is an additional display that shows the usage of DMA addresses so that one can tell which are free. Here is an example of we mean. As you can see there are only 3 DMA addresses in use on this system, so if I were to add a device that needed one I could easily see which ones are available.



Computer Properties - IRQ Settings

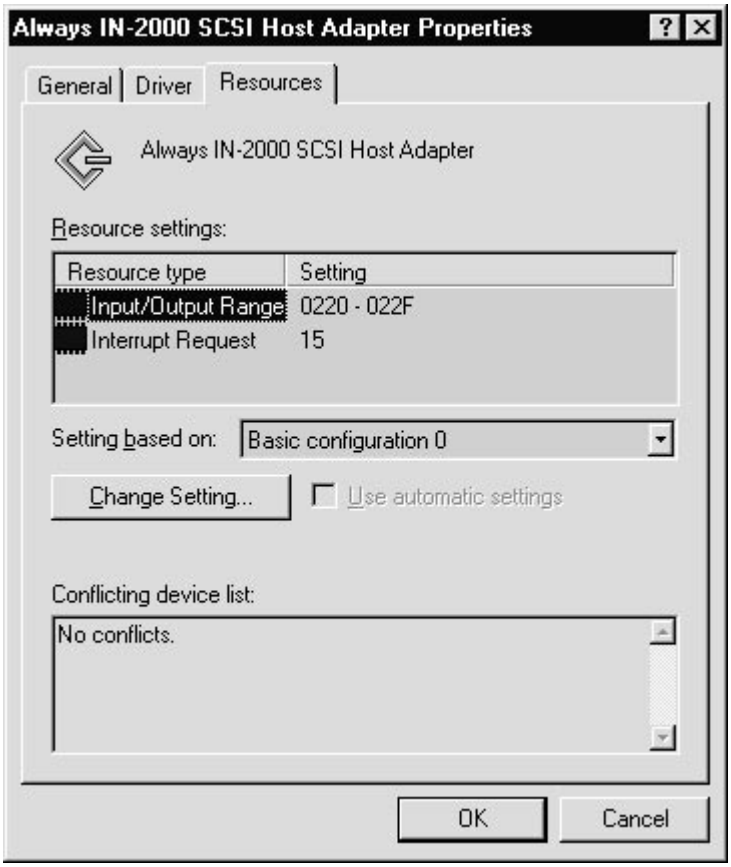


I/O Addresses

The third display above shows usage of I/O addresses. The selected portion of that display shows the addresses used by a number of the devices in my system. Note the SCSI card, Sound card, Network card, printer and com port addresses are listed. This sure takes the mysteries out of which I/O addresses are in use and which ones are free for devices you want to add.

Plug and Play Capabilities

All of these Computer Properties information screens come into play when you are adding new hardware. Windows is now able to sense most new hardware, even without plug and play motherboards and cards. If a device is added that conflicts with an existing device it will show it in the Device Manager section of the Control Panel/System settings. The device will come up showing a red circle with a line through it and indicating that it's not usable. Upon checking the Properties for that device, the Device Manager will show the specific conflicts. The next screen shot shows the Resource settings for my Always IN-2000 SCSI controller. As you can see it shows the exact resources used for the device and also has a window that shows Conflicting devices, which in this case says No conflicts.



All of these pieces of information bring much of the benefits of Plug and Play to all users. You don't need to own a PnP motherboard or I/O card to find out you have a conflict or to be able to figure out what to do to get around a resource conflict. This will make systems running Windows 95 easier to upgrade than ever before.

***Jeff Marchi** is a San Francisco computer consultant. He is very active on the CIS Win95 beta forum and is well known on both the RIME and Ilink Windows conferences. Jeff is a regular contributor to **WindoWatch**. Jeff can be found at jeff.marchi@pcgfx .com*

Programming for the Masses

Are You Going To Be a Computer Programmer Soon?

Take a look at the major applications you use on your computer! What's different about them from the applications people used five years ago? They certainly are bigger, fancier, look better, and do more things than would have been possible then. Computer processor power has grown at a phenomenal rate, and with it, the processor power demanded by applications run on the computers. Other types of changes have also happened, at least in the larger applications. A family of applications from a single vendor have finally started sharing common components so that, as the vendor hopes, when you install a family of their applications, less disk space is taken up than you would otherwise expect.

The application vendors are not doing this out of the goodness of their heart. They are doing it because it saves them money and makes them more money. Using only one component, such as a spell checker, across all their applications saves time and money during application development. Using common components also contributes to a unified look and feel. Users like that because they don't have to learn different ways of doing the same thing for each application. They will likely buy a group of applications from a single vendor than separate ones from separate vendors.

This style of application development, which I will characterize as one of using software components, is not all that new an idea. To one degree or another, programmers have been doing this since before computer programming was recognized as a separate science. It's just that the components have now both grown and separated into the kinds of objects that ordinary people can relate to, like a spell checker, a graphing package, or other such elements.

Some time after the first interactive applications were designed, it occurred to programmers that, for certain tools, not only could they design functions into the application, they could design the applications so that the ordinary user could make changes in how the application worked. At first, this was a static kind of thing. A user could change upper and lower case in text fields, decide where printed files could go to, and so on. It took a while before an ordinary user could tell the programs to do something depending on what data it had to work with. This was the beginning of end-user programming. In the personal computer industry, the one of the first, and certainly most important, example was Visicalc.

What was so special about Visicalc? It was something more than just a program that made accountant's lives easier. It was the first really widely used programmable

application. All the rules for operating on the data in the spreadsheet cells weren't made up for the user by some programmer in some other office or company. The rules were made up by the person who had the data and knew what they wanted

done to it. Every time they typed a formula into a cell, they were defining a rule for how to operate on input data and produce output data. Once the rule was entered, it didn't change until the user decided that it would be changed. The data might change often though. This notion of rules and data is the foundation on which computer programming is built. Anyone who has ever entered a spreadsheet formula is a computer programmer. In all likelihood, it includes you.

Spreadsheet users are just the earliest, and still the most ubiquitous, example of the diffusion of programming into everyday computer use. Other trends in computer software are headed that way too. Although OLE isn't quite here yet, no matter what Microsoft says, the idea of dragging and dropping components (OLE objects) into other components (documents) is also programming. Someone who does this is assembling a single, larger, piece of information from smaller pieces, and according to definite rules of assembly and interaction. The components might be passive, like a graph or a document, or active, like a database query that runs every time you open the document. It is even possible to have components update themselves based on events outside the system if they monitor communications lines or have other means of external communication whenever they need it. At is roots, this is all that is the science of programming, the formulation of rules and procedures of data manipulation.

Applications today already starting to work this way. Applications in the future are going to work more this way. Windows 95 and OS/2 are using more and more component technology to both slim down the individual parts of the system but also to make available a richer set of components for the user to build into their applications the way that they need the components to assembled. Choosing the components and assembling them qualifies as programming. The programming isn't to produce a program that manipulates data, it's to produce the kind of data needed at the time.

Component programming is the ultimate in customizable applications. Every unique combination and juxtaposition of components in a single document becomes a new application. It may not look that different from other applications, but because it performs a unique combination of data manipulation, it is a new specialized application aimed at solving one particular problem and may or may not have the programmer as its only user.

This way of programming isn't how the majority of those that call themselves computer programmers today work. Professional programmers as we know them will become more and more the designers and writers of components that other people will use. Components will become specialized into single purpose entities, like

spell checking and charting, and it will be the user's responsibility to assemble the right components in the right arrangement to solve the problem at hand. The skills needed to design and build the components is rising rapidly and will continue to rise

for quite some time to come. The skill needed to assemble components and solve problems is dropping rapidly.

So, will you be a programmer soon? If you use a computer for a living, you might already be one. If not, you'll soon become one, because applications are being designed so that the only way you can work with them is to program them.

Herb Chong** is the Contributing Editor of **WindoWatch.** He is well known on the CIS Win95 forum as well as the various BBS nets. He has been associated with Windows Sources and The Cobb Group's Inside Microsoft Windows. A brand new article of Herb's **Needles and Haystacks** can be found on the WindoWatch homepage. For those who don't have Internet access, we republish the article in Issue #5 of **WindoWatch.

http:/www.channel1.com/user/winwatch/WindoWatch.html

CREATING ACROBAT FILES: PART ONE

Adobe's Acrobat technology for publishing is relatively new and inevitably rather complex--as one would expect, with evolving software. Since I use the software daily, I want to share my experiences in a *WindoWatch* tutorial series. Although Adobe provides tutorials for some of the Acrobat tools and reference manuals for all of them, these are not always easy to follow or are they complete. The tools have mostly been used in large companies and in governement bureaus for preparing, designing and publishing documents for internal distribution. A handful of experienced people write and design the documents while the growing numbers of users require only minimal help with the viewer or reader program. This article focuses on the basic approaches used to design presentable articles for readers of *WindoWatch* from the work of our talented writers.

One of our main goals is to help people move from less amateur publication design to a more professional result for on-line publications like magazines, newsletters or catalogs. In subsequent articles, I will deal with the complete set of Acrobat tools, third party add-ons, Internet applicability, and other interesting ways to use the files created with Acrobat.

There are three crucial files with which Windows users of Acrobat must familiarize themselves in order to create compiled, fully formatted and compressed files which can be read with the various Acrobat tools.

1)The PDFWriter is the easier one to use and is probably the better choice for quick, seat of the pants, fast introduction to the tools. Its output *.pdf file size is larger than those produced by Distiller since the PdfWriter simply compiles your original document into the Acrobat format.

2)The Distiller is a two step process. One temporarily changes the default printer driver installed on your system to a postscript printer driver. Using the new system default printer driver, one can now *print* the original document to a disk file with a *.ps extension. Distiller will then compile *yourdoc.ps* into the Acrobat *.pdf format. For this you get the benefit of very much smaller files to distribute to readers, reducing transmission distribution costs and the burden on your network or the Internet. The much better compression is especially noticable with graphics and sound files. This is an important consideration when you sending a document to multiple sites and/or dealing with larger documents like a manual or magazine.

3) The third file is available to readers on BBS's and Internet sites at no cost--the viewer called Acroread.Exe. Documents which are distributed outside a closed system must inform readers of the several locations where they can efficiently obtain the various operating system flavors of the free viewer. One distinct advantage of publishing documents with Acrobat is that they can be used with a variety of operating systems.

Planning Ahead for PDF Formatting

Who your target audience is and how they will use your product is one of the primary factors affecting the formatting and layout of a PDF document. Another is judging whether the document will be read on a computer screen or will actually be printed. This decision will determine your page layout. You may need to change your usual choice from the 8.5.x11 page to the computer screen page which is primarily square or slightly larger horizontally than vertically. A square page is perfect for on-line documentation as it fits the orientation of the screen. It is apparent that users of Acrobat will often have to find compromises which best meet quite different needs, or consider publishing in more than one format. Acrobat is flexible enough for this but there are no easy obvious answers to the time and cost involved as well as the complexities of distributing several versions.

Fonts

What fonts should be used? I suggest that you start by using the fonts that come with Acrobat. Why? (1) Most of the people who get your documents will be using the Reader with its installed font package.. (2) It will prevent font substitution by your readers, a choice which can adversely affect the ease with which they can read your document. What about TrueType versus Adobe Postscript? My preference is for postscript fonts even though PDFWriter allows you to embed any outline font which can be downloaded. Once you get some experience and accumulate a growing collection of fonts, you can be more flexible and embed these fonts into your file.

One of the good things about the Version 2.0 is that both the Distiller and the PDFWriter will make font subsets. You should be clear about font subsetting and how it works with a postscript format. Normally, when you print, you are downloading fonts along with the font outline file (30k-50k each) first to the printer and then to your document. When printing to a postscript file, the process is similar. Since the computer's print service includes all the fonts needed for printing in the postscript file version of your document, your document can get quite large with several fonts. Of course, if you use Times or Helvetica you won't have to download fonts. What happens in Acrobat when you enable font subsetting?

Distiller scans the contents for the characters in the font you want to embed. If it finds less than 50% of the total font characters, it will embed only the outline information for those characters, hence "subset." If over 50% of the font characters are used, Acrobat embeds the font's complete outline information. You need to embed a font if you think much of your audience wants to actually print the file, does not have that font, and you don't want to rely on Acrobat's font substitution. Using font subsets can save much disk space and speed up transmission of files. Again, some tricky factors to take into account if you do not have a captive audience like the employees of a company.

Getting Your Hands Dirty With Distiller!

Lets turn to graphics and color. Aesthetically pleasing sheets are just as important for on-line publications as for their hard copy predecessors. For example, colored borders help keep attention focused on the document. Once you have chosen a page layout and a set of fonts, you want to create a document which demands the least effort to read on a computer screen. The document can be created with any Windows, Mac or DOS application that can create postscript files. Remember, you need the Distiller to handle postscript files, while any Windows or Mac application can be used with the PDFWriter to make PDF files. The default settings on the Distiller and PDFWriter generally work fine but you will want to enable font subsetting and font embedding whenever necessary.

What Are Those Buttons on The Screen?

When you bring up Acrobat, the opening screen which you see can be interpreted as a challenge, as an ultimate intimidation or as some odd combo of both. There are, for example, twenty-three --count them, if you can--of those tiny icons to make your work easier! The icons are the frustrating kind. There is no "click the right mouse button" feature to show yourself brief command names or annotation to bring up a narrow window listing all the icons and their labels. Some of the little graphics in the teeny icons help you to memorize their function while others do not-- the usual situation. Instead your first recourse is go into Help and choose the "Tools and Buttons" topic. Now you can simultaneously see the buttons and the one or two sentences defining each one or perhaps use the hypertext jump to get much more information. This information is often quite adequate. But instead of being in being in the standard Windows help file format you are in Adobe's PDF file format before you understand how it works. Help is at first harder to use then you might expect because you do not immediately know how to do such simple things as getting back to the point from which you jumped.

The commands are also available, of course, through the Menus. When we inspect these, we begin to get some idea of the power and complexity of Acrobat. There are

far more than the 23 commands represented by the icons. Then there are the hot key combinations, another option to facilitate your work. All of these keys are listed in the help text with the command name and information about it but this information is spread out over a number of screens under the topic Menu Commands.

Nowhere can you find a brief list of all of them for quick reference. There is little which is intuitive or obvious or which makes it easy to memorize or easy to look at any of these sets of choices. Since you do have to get one of these sets somehow lodged in your brain cells, it would be helpful to be given a little better help in future versions.

For now, we can offer you some guidance on how to get a quicker understanding of the Menu Bar buttons in Acrobat Exchange. If you do not use Exchange but are interested in understanding the Menu Bar buttons better, you can use the Acrobat Reader. Most of these command buttons are common to the two programs.

There is no particular point to showing you the opening screen here since the icons only make sense if you read the comments in the Help file associated with them. This is the time to bring up Exchange or the Reader and to scan the Tools and Buttons topic in the Help file. Note that you can search the entire Help file for specific topics with the Find tool--the binocular icon.

It may help you a bit to provide very brief definitions of the icon commands from left to right on your screen.

1. **Page Only button-- closes the overview area.**
2. **Bookmarks and Page button-- opens the over-view area and displays bookmarks created for the document.**
3. **Thumbnails and Page button--opens the overview area and displays thumbnail images of each document page.**
4. **Hand tool-- enables you to move a single document page on the screen when the page does not fit within the main window.**
5. **Two Zoom tools-- magnify and reduce the page display.**
6. **Select Text tool--enables you to select text in a document to copy to the Clipboard using the Copy command.**
7. **Select Graphics tool--located in the Tools menu- selects graphics in a document. (In the Reader, this is only available in the Tools menu, not as a button.**
8. **Note tool--lets you add notes to a document (Not in the Reader).**
9. **Link tool--enables you to create or modify a link between two parts of any PDF document (Not in Reader).**
10. **The next two buttons are for plug-ins or add-ons. (Not in Reader)**

11. **Four Browse buttons or arrow buttons--advance you to the first or last page of a document, or forward or back one page at a time.**

12. **Go Back and Go Forward buttons retrace your steps through a document, moving to each view in the order visited.**
13. **Three page-size buttons: the Actual Size button displays the page at 100 percent; the Fit Page button scales the page to fit within the window; and the Fit Width button scales the page to fill the width of the window.**
14. **Find tool--searches for part of a word, a complete word, or multiple words in a document.**
15. **Search tool--searches indexed PDF documents for single words, phrases, parts of words, or combinations of words (Not in Reader).**
16. **Search/Results tool displays results of a cross-document search .(Not in Reader).**

PDF files can be manipulated and customized with Acrobat Exchange.

Linking

One of the more rewarding ways to develop a cohesive and attractive document is by creating the hypertext links. There are two main linking mechanisms in Exchange (1) Links to other pages in a document or to other documents. (2) Links can be visible or invisible. To create a link, select the link tool and draw a box around the area you want to use as a *button* to link to another page. Then select Go To View and navigate to the page to which you want to make a link. Finish up with press Set Link.

To link to another document, select Open File, and select the path to the file. You can link to any file which has a Windows association with its extension. For example, suppose you set the link to a Word for Windows file. When the button is pushed in the PDF file, Exchange will launch Word for Windows and open up the *.doc file. Similarly, a link to a *.wk4 file gets opened by Lotus, etc. You can also launch Windows or DOS applications from the document by linking it to their executables. Conceivably you could setup a Control Panel of sorts in Windows or on a Mac to launch apps or open files.

Bookmarks

Bookmarks are those items at the extreme left of the Acrobat screen called the overview area. You click on one and it takes you to a destination and view. This means you can determine the zoom level and position of the page when you create the bookmark. There are two ways to create a bookmark.

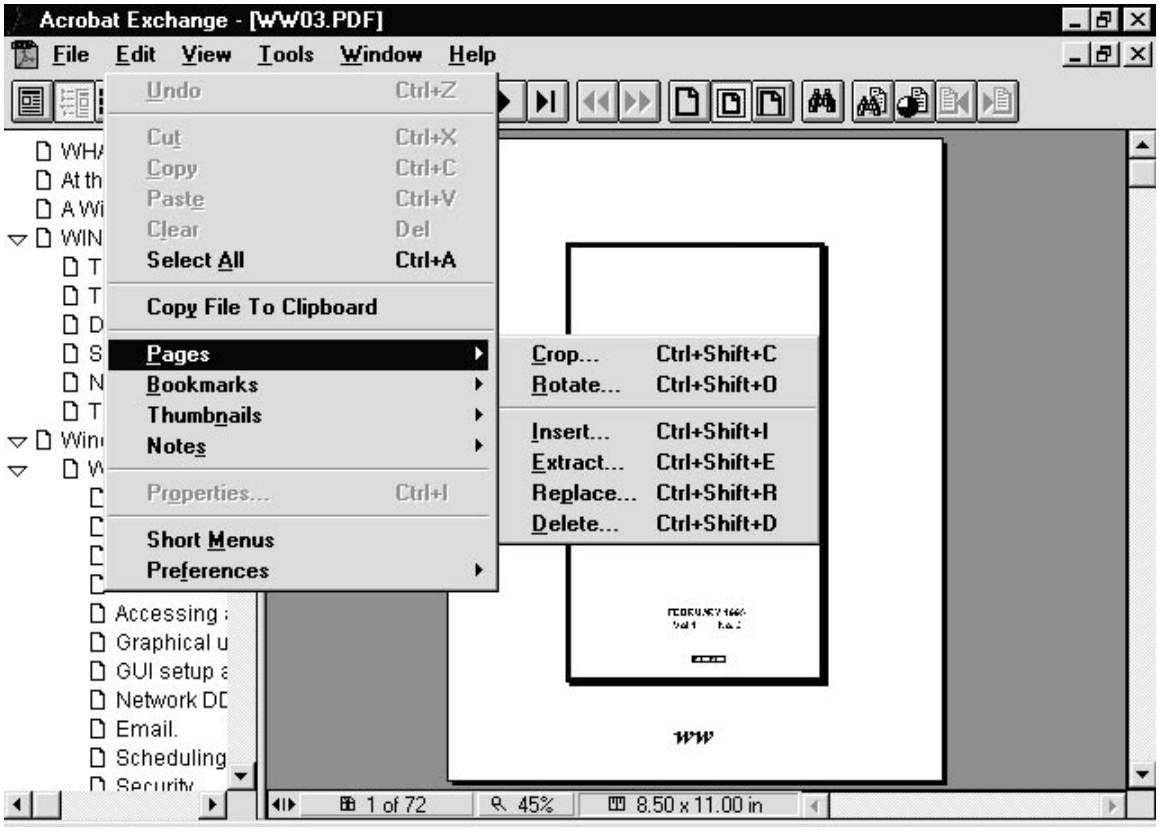
1. **Go to the page you want marked and set the view. In the Edit Menu, select Bookmarks and New. This will create a folder-like icon in the bookmark area to the left of the screen with the word "Untitled" highlighted. Simply type in the name of the bookmark. It can be a main heading or title on the page or just a note you want as a comment or reminder. You then click the mouse in the bookmark area.**

2. **Go to the page you want marked and set the view as above. Click on the Select Text menu button, and select a heading or some words for the bookmark. Copy to Clipboard , create an untitled bookmark, and paste text. Voila! There you have it.**

Page Manipulation

Exchange provides several ways to manipulate PDF pages. Pages can be deleted, replaced, inserted, cropped, rotated and extracted. Delete unwanted pages; replace out-of-date pages with revised ones; insert new pages anywhere in a document; crop selected pages to custom dimensions; rotate selected pages in 90 degree increments, left or right; extract selected pages from the PDF file and save to another PDF file.

Some examples: when putting together a master document of several sections, open the first file. Then select Insert Page from the Edit Menu and select a file to open. A dialog box will ask which pages from the file to insert and where in the open file to insert them. Put them at the end of the file. Do the same thing with the remaining sections.



Now suppose some edits have been made. Rather than rebuilding the document, make PDF files of the changed pages, select Replace Page, choose the PDF file with the new page, and fill out the Dialog box with the page number to replace.

Thumbnails

Thumbnails are miniature page views that can be displayed in the overview area. You can use thumbnails to jump quickly to a page; to adjust the view of the current page; and to move, insert, and delete pages. Creating Thumbnails is done from the Edit Menu. Select Thumbnails and Create All. There is also an option for deleting your thumbnails.

Notes

Notes are used to attach comments or other text to the PDF file. Clicking the Note button will turn the mouse cursor into a crossbar. Press the left button to draw the shape of a box on the PDF page. Release the mouse button to reveal a small window. Type or paste text into the Note window. The font and color properties of the Note are customizable. Click on the upper left corner to minimize the Note window. Notes represent a great way for several people to build a joint product by exchanging comments, additions, and criticism.

What's Next?

The next article will contain information on how to create articles, the tool to help make multi-column or small print PDF files more readable. I want to go through the rest of the tools and Search, the one and only plug-in included with the Acrobat Exchange product. The next issue will also include an article on a new plug-in for use with the World Wide Web.

I'm open to suggestions for any future articles on this subject and welcome your communications/stories about same.

Jim Plumb is the resident Acrobat expert at *WindoWatch* doing much of the actual assembling of the magazine! He is a typesetter and a contributing writer to *WindoWatch*. Jim is also constructing the soon to be announced WindoWatch homepage. He can reached at jplumb@user1.channel1.com.

An Acrobat Add-on

A Remarkable Tool! by *Jim Plumb*

Re:mark™ Version 1 (for Microsoft Windows)

Software Partners, Inc.
2013 Landings Dr. Information: 415-428-0160
Mountain View, CA 94043 Fax: 415-428-0163

Re:mark is remarkable. In Adobe Corporation's spec for PDF v1.1 (which we have with Acrobat 2.0), mention was made of certain things that could be added to Acrobat Exchange to increase versatility. Software Partner's Re:mark embodies most of those things.

Plug-ins are Adobe's term for add-ons or extensions. Adobe provides a complete spec to create plug-ins for Acrobat Exchange 2.0 and makes it a far more useful tool. One plug-in is provided with Exchange. Developers have yet to capitalize on this market, but I think they will once Acrobat Exchange is more widely used.

For those of us who do use Exchange and must pass PDF files around, Re:mark is a very handy plugin with a variety of useful tools. The setup program puts Re:mark into the acroexch plugins directory, and includes an online users guide in PDF format.

Re:mark is accessed from the button menu bar. Up pops a floating tool palette. Included tools and demonstrations of some of them:

Pop-Up Comments: Adds short text notes and attaches them to the PDF document.

File Attachment: **Attaches any file to the document. Double click the push pin to launch the attached file or to save it to disk.**

Voice Comment: **Records and plays spoken messages.**

Ink tool: **Allows you to create freeform drawings on the PDF document page.**

Text Highlighter: **Adds color highlight on top of selected text. This text has been highlighted**

Text Strike-Out: **Places a thin, colored line through selected text. This text has strike-outs**

Text Underliner: **Underlines selected text.**

Circle, Box and Line annotations:	**Inserts these resizable shapes to highlight portions of a document, and show connections between separate page elements.**
Filter:	**Allows you to view or exclude annotations by author or annotation type**
Import Re:marks:	**Allows you to import Re:mark annotations from another PDF document.**
Unselect:	**Deselects any active Re:mark tool.**
Help:	**Activates the on-line help PDF document.**

WINDOWS ASPECT: A Scripting Language

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

We left you and George with....

```
integer holding = 1

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

Have you figured this out yet? If not, don't worry as it wasn't really a fair test. I spent months working on the code that leads to and was primarily based upon one observation.

Remember last column, and the prompts that we had our little script working with? Do you perhaps recall one thing common to *all* of those prompt examples? After a month of watching my log-ons carefully, I found myself looking for an easier way to handle them and to get around the limit of three WHEN TARGET commands allowed in Wasp 1.0. I did notice something *common* in my log-ons, at least, with the two types of software I use most frequently, PCBoard and WildCat.

Care to guess what it is?

Almost every prompt on these two types of systems contain one common denominator which turn out to be a "?", appearing most often at the end of the prompt. To make matters even easier, I very rarely found a "?" being used during the log-on, which was NOT part of a prompt. It might occasionally appear in a bulletin during log-on which can be easily taken care of. In any case, how does this help us?

Putting two and two together, and coming up with five, I decided that perhaps watching for that "?", and *then* figuring out which prompt was issued would solve my problem of not enough WHEN TARGET commands. I re-discovered the

multitude of different, possible prompts on these two systems. It certainly had to be better than trying to watch for every possible prompt during a log-on.

Now that I had my suggestive five, I really needed ten! How was I to determine which prompt was sent, when I ran across that "?".....?

Fortunately, Wasp has an answer to that problem known as the TERMGETS command. The basic definition is TERMGETS reads the TERMinal screen, GETs a String from it, and then puts that string into a string variable. All I had to do was to figure out how to locate the prompt on the screen, use TERMGETS to read it into a variable, and then check to see if any *keywords* from different prompts were in that string variable.

Fortunately, PCBoard and WildCat proved to have another common *feature* to their prompts during log in. When the prompt is placed on the terminal screen, both PCBoard and WildCat (and likely a lot of other software) wait for the response to the prompt with the cursor positioned at the end of the prompt text,on the same line as the prompt. This made it easy! Just tell TERMGETS to get the string of text on the Terminal located in the current row and from the first column to the current column. Wasp made that even easier by including $ROW and $COLUMN system variables, which contain the current terminal row and column data. Since the display from the BBS is stopped while waiting for a response to the prompt, the code line...

```
termgets $ROW 0 prompt_str $COL
```

reads the text on the terminal into the variable, prompt_str, in the line the cursor is currently on, from column index 0 to the current column index of the cursor. In other words, it gets the complete line of text which makes up the prompt we are trying to handle, exactly as it is displayed on the terminal.

All we have to do now, is to determine which, of many possible prompts, is currently in our string variable, prompt_str. For that trick, we will turn to the Wasp command, STRFIND, which attempts to *find* a defined string within a target string.

Before we go on, some of you are probably wondering why we don't use the Wasp STRCMP command, instead, to compare the contents of prompt_str to the string we are looking for. The reasoning behind not doing so is fairly simple.

STRCMP requires a complete and exact match between the two strings being tested. If you use STRICMP, case is not an issue, but the match does not occur unless it is complete and identical other than case.

As example, let's say that our prompt_str contains the text "What is your password?". To use even STRICMP, we would have to test for the string"what is

your password?". No problem, you say. Let's suppose the next day, the sysop of the BBS decides to personalize things, and use your first name in the prompt which *is* possible with most BBS software. Now the contents of the prompt_str variable is "What is your password, GREGG?" and our STRICMP test fails. The resulting failure because the contents of prompt_str no longer matches completely and identically with our test string, our script doesn't answer the prompt. After three minutes, the BBS times us out and hangs up on us.

Now, let's look at STRFIND. For this to result in a match, the match does not have to be exact over the entire length of the string. It simply has to be exact over the entire length of the test string and ANY PORTION OF THE TARGET STRING. Therefore, if we were to use STRFIND to test for the keyword "password" in the prompt above, it would not matter one whit to us if the sysop changes the prompt to include our first name. Since the keyword "password" remains somewhere within the new prompt, STRFIND will locate it, and result in a match. That is all we care about for now! Well not *all* but at least enough for this column.

We now have the two basic conceptss necessary to complete at least a rudimentary log-on script for a generic system. Our original code (way back at the beginning of this column) waited for the "?" in a prompt, and when it spotted it, called a procedure "get_prompt". We can now start that procedure off, like this....

```
proc get_prompt
  string prompt_str
  termgets $ROW 0 prompt_str $COL
  if strfind prompt_str "name"
    transmit $USERID
    transmit "^M"
  elseif strfind prompt_str "password"
    transmit $PASSWORD
    transmit "^M"
  elseif strfind prompt_str "Read it"
    transmit "N^M"
  elseif   ...more code here.....

  endif
endproc
```

We're not done yet, though. In the main procedure from last column (see the top of this one), we had a little WHILE... ENDWHILE that needs some explanation. Basically, it consisted of this code...

```
  while holding
  endwhile
```

with the value of "holding" having been defined by the script as being 1. I suspect that most of you will recognize that this code would put the script into an endless loop from which it would never exit. Kind of silly, except that we won't let it happen quite that way. The code is just what the name of the variable used within it, says it is... a holding pattern. It is designed to keep the script from exiting until I want it to. That's why I used a GLOBAL variable for *holding*. As a global, I can change the value of *holding* from elsewhere in the script, and thus cause the script to be exited when I want it to stop running. Where? Well, for now, let's tell the script to stop running when it reaches the PCBoard *Main Board Command* prompt. How? That one is easy. Using the code above for our sub-procedure, we'll write it out here again.

```
proc get_prompt
  string prompt_str
  termgets $ROW 0 prompt_str $COL
  if strfind prompt_str "name"
    transmit $USERID
    transmit "^M"
  elseif strfind prompt_str "password"
    transmit $PASSWORD
    transmit "^M"
  elseif strfind prompt_str "Read it"
    transmit "N^M"
  elseif strfind prompt_str "Command"
    holding = 0
  endif
endproc
```

Setting the value of *holding* to 0 when the prompt includes the keyword *Command*, results in the WHILE... ENDWHILE construct no longer being TRUE, and the script exits. As you can see, our script will take us as far as the main prompt on a PCBoard system, and then exit.

In order to accommodate the multitude of possible prompts on a system during a log-on, we must add additional conditionals in the format of 'elseif strfind prompt_str "text"', with code to handle the response that we wish to make to that prompt. As example, many PCBoard systems offer multiple languages, and choice of graphics or no graphics at log-on. Using the standard prompts for these, when we add the following to the above code, our script could handle those also.

```
  elseif strfind prompt_str "Enter)=yes"
    transmit "N^M"
  elseif strfind prompt_str "=no change"
    transmit "^M"
```

We assume that we want the default language for the system, and that we don't want ANSI graphics.

Let's now take a look at our entire script, as it exists so far.

```
integer holding = 1

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

proc get_prompt
  string prompt_str
  termgets $ROW 0 prompt_str $COL
  if strfind prompt_str "name"
    transmit $USERID
    transmit "^M"
  elseif strfind prompt_str "password"
    transmit $PASSWORD
    transmit "^M"
  elseif strfind prompt_str "Read it"
    transmit "N^M"
  elseif strfind prompt_str "Enter)=yes"
    transmit "N^M"
  elseif strfind prompt_str "=no change"
    transmit "^M"
  elseif strfind prompt_str "Command"
    holding = 0
  endif
endproc
```

However, once we have added this code there is an element in our procedure which I dislike. Two of our conditionals send precisely the same response, i.e. "N^M". I personally dislike using extra code to do the same thing. With most BBS, it is quite possible that, during our log-on, we will receive several prompts, many of which will receive the same response. This means that our code begins getting heavy with repeats of the TRANSMIT looking for a single response to handle all of the prompts which might require that response from us.

There is a way to eliminate, or to minimize the number of times that we duplicate the same response code in our script. This is a good time to discuss the use of a function under Wasp, since that is what we will use.

In Wasp, it is possible to put multiple *conditions* in a single line, using the logical "&&" or "||" operators. However, it is rarely possible to put multiples of the SAME condition in a single line of code, such as our STRFIND commands. This is where a Wasp function can be useful, as it is quite possible to test multiple returned values from the same function on a single line.

So, what is a function in Wasp? Basically, it is a special kind of sub-procedure, which returns some kind of value to the calling procedure, as a result of whatever code is in that function. The STRFIND command actually returns an integer value for the Wasp system variable, SUCCESS, which is what our conditionals above tested. This kind of command (i.e. one which cannot be used multiple times in a single conditional, but which returns some value as a result of the command) is ideal for use in a function, such as this one.

```
func CheckPrompt : integer
  param string dummy
  strfind prompt_str dummy
  return success
endfunc
```

Notice the differences between a function and a procedure? First, it is declared as a function by the FUNC name instead of PROC. Next, in the opening line, we must not only define the name of the function, but also define what type of value that function will be returning to our calling procedure, for this case, an integer. Third, the code has to include at least one *return* statement (unlike a procedure, which doesn't require one), to tell the function which value is to be returned to the calling procedure. And last, the function ends using an ENDFUNC statement, rather than an ENDPROC.

To use this function in our script, we need to do one other thing. The variable *prompt_str*, which we have previously declared as a local string variable in the procedure *get_prompt*, must instead, be declared as a global string variable at the beginning of our script. This results in the following script.

```
integer holding = 1
string prompt_str

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

func CheckPrompt : integer
  param string dummy
```

```
  strfind prompt_str dummy
  return success
endfunc

proc get_prompt
  termgets $ROW 0 prompt_str $COL
  if CheckPrompt("name")
    transmit $USERID
    transmit "^M"
  elseif CheckPrompt("password")
    transmit $PASSWORD
    transmit "^M"
  elseif CheckPrompt("Read it") || CheckPrompt("Enter)=yes")
    transmit "N^M"
  elseif CheckPrompt("=no change")
    transmit "^M"
  elseif CheckPrompt("Command")
    holding = 0
  endif
  prompt_str = $NULLSTR

endproc
```

Notice we now have only one conditional which results in the use of 'transmit "N^M" ', as the conditional now contains two items to be tested using our function. If either one of the two function calls results in a 1 being returned (i.e. if either keyword is found in the prompt), then the conditional is met and the response sent. If neither function call returns a 1, then the response is not sent, and we continue looking for the right keyword.

I know that the above script does not truly show the advantage of using a function, so let's look at a situation which shows it off a little better. Suppose we want to make our script a little more generic, so that we can use the thing with several PCBoard systems which we call (we'll get to WildCat systems in the next column). I have been on more than a few PCBoard systems, and the *standard* prompt is not always the one being used.

As an example, for the graphics prompt, where we have used "Enter)=yes" as our keyword string, I have also seen "Enter = Yes", "Enter=(Y)" and "Enter)=default" used in the prompt. If we want to make our script generic, we would have to make sure that we handled all of these possibilities, and that all of them get the same response. To cover them all, this is where we use our function and simply add the "||" (OR) operator, and another CheckPrompt for each of these text strings.

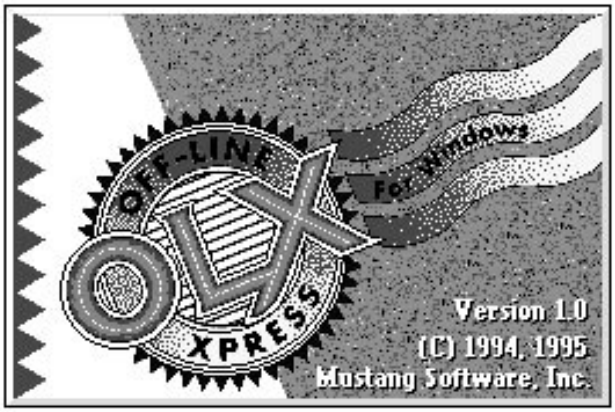
Should we log-on to a new system, and discover a variation of the keywords for our graphics prompt test, all we have to do is add another text of CheckPrompt for that different graphics prompt. By adding another text to our existing conditional recompile, and our script will handle it, instead of adding a whole new conditional with duplicated response code.

I think that George has enough to mull over for this month, so we'll stop here until next time, when we will look at WildCat systems, and how they differ from PCBoard. We'll also look at INI files, and using them to control how a script functions.

If you have any questions or comments regarding anything so far, I can be found in the Windows and Procomm conferences of RIME, ILink, NANet, and EchoNet. My FIDO net mail address is (1:229/15), my Internet address is gregg.hommel@canrem.com, and my Compuserve ID is 72537,552.

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.**

OLXWin - OLX Offline Mail Reader Goes Windows.



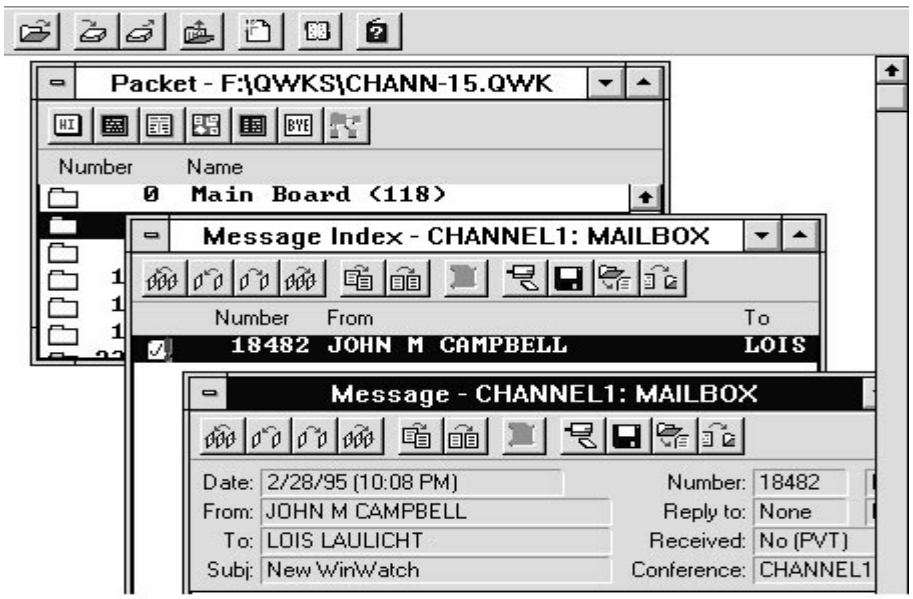
Off-line Xpress for Windows, the companion program to MSI's popular QmodemPro for Windows, is the successor to Greg Hewgill's Silly Little Mail Reader, better known as SLMR. This probably was, and may still be true, the most popular DOS-based offline QWK mail reader in existence, at least for newcomers.

Users of the DOS version, OLX, should feel comfortable with OLXWin, since most of the OLX feature set has been ported to the new version. In addition, OLXWin sports some welcome new features. Among the enhancements are uudecoding of messages and the ability to request that files chosen from a BBS listing be automatically sent with mail packets. A welcome addition is support for long conference names in the packet list window. There are some other mostly cosmetic additions - a sexy female voice announces various events, such as "you have new mail." You can attach the 20 included WAV files to various events, or choose your own favorite sounds. I especially enjoyed the "woops" the lady uttered each time the spell checker found an error.

The program sports a generous assortment of useful icons across the top of the different windows. These include Open Packet, Open In/Out box, and Compose New Message - all on the main window, and Go To Next/Previous Message or Thread, and Reply, Save and Print on the Index and Message Windows. There are icons on the Packet Window that open the various BBS files included in most packets, such as News, Session Log and New Files.

The uudecode feature, while nice to have, is awkward in its implementation. Often, Usenet messages that contain binary files are not in the proper order within the packet. The message containing part three of a file may be ahead of part two, etc. A good decoder will properly handle such transpositions automatically. With OLXwin, the various parts have to be added to a dialog box in the proper order before the uudecode function is activated. This can be a real hassle. Still, inclusion of the uudecode utility is a step in the right direction.

Message Screens with the toolbar.



The other new major feature, file request, makes it easy to retrieve files from the new files list that many users include in their QWK packets. All you have to do is highlight a file name in the listings window and press Q. A dialog box pops up to confirm that you want the file. A control message is then generated and is uploaded the next time you use the BBS mail door. The selected file(s) will be downloaded as attachments to the next QWK packet. The only problem is that not all BBS doors support this feature. Wildcat doors can be configured to work this way, but neither the Qmail nor Cam-Mail doors on Channel 1 support the feature. I have been told that the newest Cam-Mail revision does include an option to enable file transfers, so this feature may become more widely available in the future.

OLXWin's other features are already familiar to veteran OLX users, although some have been expanded in this release. There is a built-in editor with a 100,000 word spell checker; To:, From and Subject fields can handle as many as 255 characters, and multiple message packets can be opened simultaneously. There is a provision to add new words to the Spell Checker, which, by the way, operates at close to lightning speed in comparison to the OLX version. I was pleased to find that the editor still uses the venerable Wordstar commands, (OK, you can substitute another editor) besides the expected Windows key combinations to cut and paste text to the Clipboard. Still present is one of OLX's most valuable assets - the ability to search for a text string in not only the current conference, but across conferences in a packet, or even in all open packets. This is an indispensable feature that I use often in OLX. Favorite search strings can be saved for later use. There is an

address book for saving email addresses of up to 255 characters. A macro function is available that can be used to program eight different function keys.

Outgoing messages can either be saved permanently or purged at intervals in an Outbox. There is an Inbox for personal mail. Messages of interest can be saved in user-defined folders, or saved as text files. OLXWin goes a step beyond OLX in that folders can be given descriptive names. For example, I could save messages dealing with Multimedia topics to a folder called "Multimedia-related." In OLX, I would have to settle for a DOS filename for each folder. OLXWin does not store messages in a database format as do Robomail and some other readers. This means that it is not possible to easily follow threads from one packet download to another. Whether this is a serious shortcoming is something that each user will have to decide. The program does offer a versatile "twit filter" capability. Messages can be filtered out by sender, receiver, subject, or message text. However, the stuff you would rather not see still shows in the message index window - it just doesn't come up in the message window unless you explicitly select it from the index listing. Carbon copies of messages can be generated across conferences, or even to different BBSs.

OLX has a rather confusing system for managing outbasket and sent mail, and this behavior hasn't changed with OLXWin. Basically, it is not feasible to edit a message you composed after you exit the program, but before you upload it to the BBS, unless you first delete it from the Reply packet and then make the changes to the Outbox copy. Users have complained to Mustang about this awkward system for years, apparently to no avail.

I haven't been able to determine whether OLXWin fares better with message attachments than does OLX. I did receive an attachment through the Channel 1 Qmail Door, but my correspondent hasn't reported whether my attachment made it to her. Other users have reported mostly negative results with OLX, except on boards using MSI's own Tomcat door program.

One OLX deficiency has not only survived in OLXWin, but has actually become more of a problem. OLX never permitted direct entry of lower-case internet addressed in email messages. However, there was a kludge available. The lower-case text could be placed in the address book, then pasted from there into the message address field. I was disappointed to find that OLXWin neatly converts such lower-case pastes back to upper-case in the message. Mustang claims that case is unimportant in Internet addresses. There are those who will disagree.

So, is OLXWin, being the mixed bag of warts, blemishes and treasures that it is, worth considering? It all depends on your needs, and on what compromises you are willing to make. I would have to say that veteran OLX users will not find a whole lot new in terms of features, but many of them will willingly fork over the limited-time $25 upgrade price just to have the benefits (both real and imagined) of a Windows application. For people who want to move up the ladder from a more

basic reader than OLX, this new version has much to offer, especially to those who spend a lot of time on Wildcat BBSs. But more sophisticated users who demand the flexibility of a Robomail-level package, and especially those who demand the upmost in Internet/Usenet compliance, will likely look elsewhere for a Windows-based reader. Also, I must caution anyone considering OLXWin that it is a version 1.0 product. Reports of GPF's abound on the Mustang BBS conferences. I experienced several of these while evaluating the program. However, Mustang does have a good reputation when it comes to issuing fixes for problems in their software. I imagine that the first patches will not be long in coming. So you may want to wait awhile before giving OLXWin a spin.

For ordering information:
Mustang Software, Inc.
800-999-9619

John M. Campbell is a pinball freak, a contributing writer to WindoWatch and the Manager of the Unemployment Compensation Office of Elkins, West Virginia.

Cooking With Windows :

A Product Review: **MICRO COOKBOOK FOR WINDOWS 4.0**

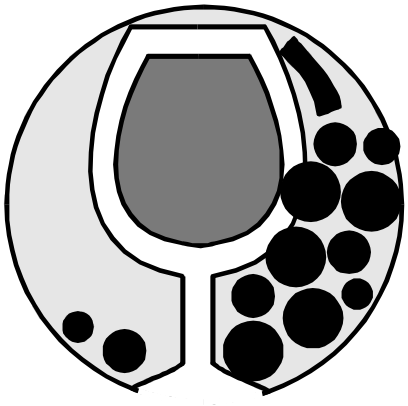
Almost 20 years ago, a very smart man who had founded a wildly successful computer company confronted the notion of the home computer. The term *personal computer* hadn't come into common usage yet and our very bright gentleman is supposed to have said that he could see no reason why anyone would want such a thing. At the opposite end of the spectrum were those who championed the home computer as a panacea, capable of freeing harried housewives/husbands from much drudgery associated with everyday living. One of the examples most often cited involved using the computer to keep track of one's favorite recipes.

As anyone who's ever sat at a computer keyboard entering data for hours on end can understand, this idea didn't exactly zoom off the launch pad. Nevertheless, the idea of keeping recipes in a computer stayed alive, and over the past several years has shown up in several offerings. Recently, one of our friends gave us a copy of the version put out by Pinpoint Publishing: Micro Cookbook. While we have yet to try any of the recipes, and are therefore unable to say much about the quality of the results, I can say that the software and the user's guide deserve several stars.

I believe that a bad manual can destroy an otherwise good piece of software. Man (person?) years of excellent software development can be wiped out by a hastily-produced, shabbily-written user guide. The Micro Cookbook's user guide is very well done. The manual manages to achieve the right level of user-friendliness without becoming treacly or insipid. It is organized sensibly, and is well indexed, despite entries, under A, for "About Cookbooks," "About Ingredients," "About Options," and "About Recipes". Does anyone ever look something up by searching for "about"? The index contains pointers to significant information rather than being a mere compilation of every occurrence of key words and phrases, so you don't waste your time going to pages that have nothing to communicate. The writers also acknowledge the fact that the book may contain factual errors, owing to last-minute changes to the software that couldn't be reflected because of the lead-time required for printing. Yet another argument in favor of on-line documentation!

Still, one has to wonder why the manual tells you to install the software by invoking *install*, when the actual procedure is done via *setup*! Surely this should have been settled early on in the development process.

The software itself is just as nicely done. Those of you with limited system resources will find that Micro Cookbook will not exert undue strain: it will run in as little as 2meg of RAM, and consumes only 5meg of disk space, a pittance compared to diskeaters like word processors and spreadsheets. Packaged with the program are a baker's dozen cookbooks, eleven of which are filled with upwards of one hundred recipes; one that contains tips on what foods go with other foods and how they can by used; and lastly, an empty cookbook where you can store your own favorites or those that have been passed down as part of your family heirlooms.



The diversity among the cookbook choices is quite impressive. One is dedicated to vegetarian cooking, another to cooking with ingredients light on fat, etc. One recipe I mean to try very soon is "Grandpa Snub's Chile," which looks downright ornery. One point I should make is that this came from a cookbook entitled America's Famous Name Foods. Yes, this one does contain shameless plugs for brand-name products, but I'm willing to over look this when the McIlhenny Company (makers of Tabasco sauce) put out a recipe as enticing as this one!

Another feature I was happy to find, was the ability to search for recipes containing specific ingredients or categories of ingredients. So, if you've got some leftover Swiss cheese and want to use it up in an innovative way, you can go to Recipe on the menu bar, clicking Find Recipe, then choosing Basic Ingredients, cheese, aged and then click among the choices till you find the one that calls for Swiss cheese (I'll give you a hint: it's Chicken Cordon Bleu).

Along with each recipe, you get nutrition facts, such as calorie count, saturated fat, protein, etc. along with suggestions on how you can cut back by substituting ingredients. The Surgeon General would be pleased. It was a bit surprising in a health-conscious product like this, to see an ingredient category for alcoholic beverages, containing 84 entries. But then, alcohol evaporates during the cooking process, so I guess there's no great harm.

Overall, I rate this a very good product, especially for someone like myself, an admitted neophyte in the kitchen with no grand illusions about my ability as a chef: it lets me browse among a broad range of cuisines without annoying others with

tedious questions, while absorbing vast amounts of cooking lore and piquing my interest in trying a few tentative experiments on the range. Best of all, I don't have to spend interminable hours watching cooking shows on television while I could be doing something more useful as in watching golf tournaments on television!

Maybe these "home computers" are good for something after all. Still, it's hard to imagine that a 3.5-inch diskette will have quite the same nostalgic value as Grandma Barr's handwritten recipe book as it's passed from our generation to our grandchildren's.

***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. Frank is a regular contributor to **WindoWatch**.*

IDIOT REDUX

Time for the latest installment in my never ending series designed to prove beyond any doubt that the average computer magazine author has an IQ approximately equal to his shoe size while the editors are not quite so bright.

The never ending saga of computer publications and the foolishness they publish.

Computer Shopper 3/95 page 54.

“Since the first safety precaution I take after opening a software box is to write protect the floppies, that puts us at an impasse [for install programs that write to the first disk]---or sends us to DISKCOPY, which in turn doesn't work with the weird 1.7MB dense-pak DMF floppy format Microsoft is now using for Office.”

While this paragraph is true, where is the mention of any program (like FDFORMAT or DCF493 or later) that can do a diskcopy of the 1.7MB disks? Is it too much to expect a solution to accompany the problem?

Windows Magazine 4/95 page 321.

“Office 4.2 for NT runs fine in 12MB on Intel systems.”

Really? Office on NT is 12MB is like Windows 3.0 on an XT. I'd rather look at GIFS of Roseanne Barr in a string Bikini!

Same issue page 38. [discussing sales on the Internet]

“Still, it won't be easy. It can take a full minute to transmit just 200KB and the technique isn't for novices.”

Excuse me? What is so difficult about downloading from the Internet?

InfoWorld 3/27/95 page 46

“The only way to cache a CD-ROM under Windows is to use a DOS-based caching program. (SmartDrive will work; most third party caches are better). ... My tests have shown that if you use the recommended number of buffers for MSCDEX, or use CORELCDX, you will not see much of an improvement from caching.

Few, if any, third party cache programs are better than the version of SmartDrive from DOS 6.2x. It substantially improves the performance of cd-roms.

PC Computing 4/95 page 37

"Here are the least expensive 1GB or larger EIDE hard drives we could find:

WD Caviar 31000	**$431**
Conner CFA1275A	**$499"**

Same issue - ad on page 258

WD Caviar 31000	**$419**
Conner CFA1275A	**$432**

If this looks familiar, it should. This is the third month in a row that this silliness has appeared here. Maybe no one in the editorial department who checks prices can be bothered to read their own ads.

Windows Magazine 5/95 Page 36

"It ain't easy being a multimedia machine. [requirements include] .5GB-1+GB RAM."

Sorry, I haven't seen too many desktop machines with half a gig or more of installed RAM. I imagine that would be a speedy machine, though. Yes, I know they meant hard disk not ram and this is more of a typo that stupid advice---but it was too good to leave out.

The month of April begins with three entries from the same columnist -- John C. Dvorak. From PC Mag 4/25/95 issue page 89

"Let's look at what it takes to buy a decent computer. I'd say get a fast Pentium for about $2,500...Add $1,500 for a good laser printer and you've shelled out $4,000. If you currently own anything better than a 286, you should be able to get $500 (or more) for your old machine and another 500 for a used laser printer. This means a net cost of $3,000 or so... Over two years, this works out to about $4 a day for a tool that is critical to most peoples work."

First of all, the going price for used 386's is closer to $300 than $500+ and anyone trying to sell an old laser for $500 would be laughed off the "for-sale" echoes. Therefore, the net cost is well over $3,000.

Further, it is not clear if he is referring to a home user or office. If for a home user, I have never met one who really needs a $1500 laser printer. If for an office, then his "$4 a day" (which is already too low) works only if one assumes that the user works 7 days a week, 52 weeks a year. A bit unlikely.

Two pages further on in the same issue.

"I made the error of not trying hard enough to get DOOM running on my OS/2 machine and got nailed by an army of OS/2 users for being a hopeless dweeb."

In fact, Doom runs just fine under OS/2 -- as long as you don't mind the fact that there are no sounds. Seems to me that is a problem even if he doesn't think so.

Same article.

"Let me reiterate the OS/2 situation for those wanting to take a look at Warp.

Advantages: **It has a superb upgrade to DOS**
It doesn't need memory managers and other pricey utilities
It crashes less often than Windows
It's fast
It has a terrific ensemble of applications bundled.

Disadvantages: **Sound card support is minimal**
Video card drivers can be flaky.
The code is still bulky and requires a cd-rom to install
You run mostly Windows and Dos programs, because third party OS/2 native applications are not mainstream and few are better then the best Windows applications.
Some poorly coded Windows applications will not work.

Yes, I use Warp on all my machines except my Toshiba Portege, and I'll probably put it there when I get it hooked to a cd-rom. So there!"

Well, if we accept his list, we should all use an operating system that has bad sound and poor video and may not run some of our apps in order to run the same apps we are now using under Windows. Does it seem to you that there is something that doesn't compute here?

From PC Computing April page 55

“ ....Unix, a niche operating system.”

I'm sure that piece of information will come as a great surprise to Sun, DEC, ATT, DG, and several million Unix users plus the tens of billions of dollars worth of Unix systems and programs in current use. Perhaps he uses a different definition of "niche". Definitions seem to be a particular problem this month as you will see later on.

Same article.

“None of this would have happened if IBM had capitalized on the PowerPC machines it's been sitting on for a year or more sans operating system. It would have been better if IBM had just shipped those machines to the market with no operating system. Then superhacks would have developed loaders and emulators in no time and we'd be using the machines as I write this.”

I am hard pressed to think of a stupider paragraph. Apparently he believes that there are thousands of people willing to pay $4-5000 a piece for computers that have no operating system and, therefore, cannot do anything except serve a paperweights. This is truly idiotic.

From PC Mag. April 25, 1995 Page 256.

“In DOS 6.2, the magic number is BUFFERS=46.”

Only if you have certain Compaq machines. For the rest of the world, it is 40-43.

PC World. April issue Page 68.

“House Bill 666: Exclusionary Reform Act of 1995
Goal: Repeal Fourth Amendment provision requiring court supervision of search warrants used by officials.”

Page 69.

“The Exclusionary Reform Act of 1995 would weaken protections against

unreasonable search and seizure by requiring law enforcement to show only good intent, instead of a court order, before searching a residence or business."
Leaving aside such mundane facts as a law cannot repeal a constitutional amendment, the bill has little or nothing to do with computers and that the two paragraphs don't agree with each other, neither one bears any resemblance to the bill in question. *Rather, they are Politically Correct frothing at the mouth. What the bill actually does is codify the English standard "That the criminal shall not go free because the constable has erred". There are differing positions on this --- but the news column of a computer magazine is *_not_ the place for them.

PC Computing - May 1995 - Page 119.

"Verdict: Yes, it's pricey for a single user desktop publishing station. But you'll save in the long run by reducing match prints."

I suppose that is literally true -- but it might be quite a "long run". The system under discussion is priced at $70,209. How many *single users* do you know who might be interested and have that amount available?

And on Page 107

"Success story. Although the e-mail and news readers weren't in place during the testing of our beta, the description provided by Quarterdeck suggests that they'll do nothing to detract from the program's success."

If I hadn't already awarded the title to Dvorak, I'd give this the Maximum Stupid award. It is akin to: "Although the engine and transmission were not available for testing, Ford's advertising leads us to believe that they will be as nice as the body work we did look at so you should run out and order one."

"We recommend disabling the Smart Quote feature in Word (who needs it, anyway?)

Only people who want nice looking output. Why not just use a typewriter?

Page 57.

"I'm a complete Luddite," he told me at the time, referring, of course, to the medieval dolt who fought to advent off all technology."

Fact checking and grammar editing anyone? "Advent" is a noun usually with religious connotations. It is not and never has been a verb and makes no sense whatsoever in this context. Ned Lud (for whom the Luddites were named) destroyed two spinning wheels in 1811. 1811 is _not_ medieval .

Page 28.

"...but don't use the Windows calculator to run it. That piece of software has its own rounding error problems. For that matter, don't use it for anything requiring accuracy beyond one decimal place."

Come on, ding-dings. That error showed up in certain subtractions only and was fixed in December. This is May (according to your cover date).

Computer Life May issue Page 72.

"To evaluate the systems' abilities to run the types of software typically used in homes, we performed application-specific compatibility tests."

Admirable. But the "typical" applications were: Doom II, Magic School Bus, Myst, PC Magazine CD, Star Trek Tech and OS/2 Warp. Why do I think that Quicken, Works or the Carmen series might be a bit more typical than OS/2 and the PC Mag CD? Could I be cynical?

All in all, a banner month.

***Bob Miller** is the Business Administrator of a Mental Health Agency. He is living proof that activity on the BBS nets is far from dead or dying. Bob is currently the Conference Host/Moderator of the following:*

RIME	ILink
Vacations	Windows
Modems	Collecting
Word	Gateway 2000
Common (acting)	

A very busy man!

**** Within the context of the Oklahoma City bombing, I'm not quite sure that I agree with Bob's position on the appropriateness of this particular statement in a computer magazine. It seems to me, that computer professionals have an obligation to understand that what they do, very often has profound social and political significance. Computer professionals read computer magazines....I hope!***

A CONSULTANT'S CATASTROPHE

Perhaps it happens to every consultant at some point. For me, it was on my second job. After I had worked with computers for several years, fixed friends' machines, upgraded parts of my own, and read lots of computer lore, I had reached that point of knowledge best characterized by the word sophomoric (Greek for "wise idiot"). I got a business license, chose a catchy name, Freeman's Almost Free Consulting, to distinguish myself from heavy hitters like Jeff Marchi (I was an English major and taught English at an Ivy League college, so I had to make some pun on my name), advertised in a local computer magazine, and waited for the calls to pour in. After the first job went pretty well, I thought this would be fun.

Then I got a call from Menlo Park, an hour train ride away from my home in San Francisco. The victim needed, among other things, a new CD-ROM installed. Although I had never done that, I'd seen one installed when I paid a visit to a local computer store to watch precisely that operation, and of course I had read lots of stuff about how to do it. I thought I could handle it without much difficulty, so off I went. After an $11 ride to Menlo Park, I set to work.

THE SUMMARY

To best describe my experience that day, I couldn't do better than to quote, sort of, the famous words of Julius Caesar (remember that in Latin v's were pronounced like our w's): veni, vidi, vaci: I came, I saw, I murdered his machine!

THE LAMENT

God, it couldn't have been a bigger disaster! Well, I suppose it could have been worse if somehow I had managed to make the damn thing spontaneously combust. Actually, it could have been a lot worse if my client weren't such a genial fellow. He not only bought me lunch at a nearby Burger King, he also paid me $50, even after I told him that he didn't owe me anything. To crown this enterprise in catastrophe, I left my sports jacket at his apartment and had to return the next day to retrieve it.

THE GORY DETAILS

Before Freeman: a defective 5 1/4" A drive with a newly purchased replacement waiting to frolic in the electronic sun; a spanking new CD-ROM itching to be

installed; and four slim 1 x 9 1MB SIMMs RAM chips eager to join the four already there.

After Freeman: a dead hunk of mocking metal, with all the aforementioned devices neatly installed and defiantly noncommunicating.

Basically, after we pulled off the cover, we had to take off the front panel, which unfortunately was still connected via a bunch of wires to the motherboard. I think that we either pulled something loose, or when we put the panel back on and squeezed those wires against some metal edges, one or more of the wires might have been damaged. At first the power wouldn't come on; then I got that fixed, but the opening beep never sounded and the monitor never showed a thing. We looked at every wire, pulled out and replaced all the cards, made sure every connection was solid, tried the old A drive again, removed the new SIMMs, disconnected the CD-ROM, listened to Edvard Grieg, and cursed a lot.

The problem was apparently the kind you could only diagnose with bench testing equipment, which of course he didn't have and I didn't know how to use anyway.

I did manage to install DOS 6.2 for him before the misadventure began. He had DOS 5, had tried to install 6.0, but it asks for 2 disks for drive A for uninstalling it, and his A drive didn't work. I knew the /G switch that bypasses that request, so I got first 6.0, then 6.2 put on through his B drive, and then erased the OLD_DOS.1 directory they make. That was the last good thing I did. On the whole I felt like drinking a warm cup of cyanide and going to bed. I was just happy to slink out of there without being sued. I knew there would be better days--there would just about have to be--but I realized then that consulting can have a dark side. My business had come dangerously close to being Freeman's Almost Fried Consulting. I spent a total of 12 hours, counting the train ride back the next day to pick up my jacket, for $28 profit. But I also profited from a lesson about humility in the face of the daunting amount of knowledge you need to make these malignant boxes purr contentedly.

I have since installed many CD-ROMs without any trouble, but when I set out on any new consulting adventure these days, I'm always aware of Alexander Pope's great line (I warned you: I was an English major),"A little knowledge is a dangerous thing."

Who is Kyle Freeman? Hah! He sent us two versions of his bio and tells us that we "can mix and match"!

"Version I - Kyle Freeman is a consultant living in San Francisco. He started his business in 1994 after buying his first computer in 1991 from his winnings on Jeopardy, where he was a four-time champion. Before that, he worked as an English

teacher at Columbia University, and as a proof- reader for two major law firms, one of which currently represents Bill Clinton in the Paula Jones affair, er, case.

Version II - Kyle Freeman is a ne'er-do-well from San Francisco. He is currently struggling to meet his rent, for reasons hinted at in his article above. Before his shaky career as a computer consultant, he worked as a teacher at Columbia University and the College of Alameda. He has been working with computers as a rank amateur for the last 6 years. He hopes to survive at least until the O.J. trial is over, so he'll go to his grave knowing that justice either was or was not done."

Always on the look out for computer professionals who can *string* two words together that make sense, I roped Kyle in with more than a bit of skill. He hangs out at the various Windows conferences on RIME and Ilink and has promised us another piece on one of the major Internet services and their proprietary software in the very near future. *lbl*

Alice Goes Surfing

I called up Alice to tell her we were going Net Surfing. When she showed up at the house in a scandalous bikini, I told her it was not that kind of surfing. "Of course, stupid" she retorted, "I am not your usual male bimbo. I'm on my way to a celebrity wedding."

"Oh," I said wordlessly.

"Press any key to continue." And we settled down to getting ready to go Net Surfing. We got Winsock and Netscape for Windows, and signed up for a trial TIA access on the Channel One BBS for the World Wide Web.

After wrestling with where to put the password (it goes in the Winsock program, not the .ini file) and thirty or forty attempts getting nowhere because the addresses were wrong, we were connected to the Mosaic Homepage. Off to Yahoo to do a search on Alizankruplatz (Alice's last name). This brought up three scholarly papers about Nebulae to be presented at Andromeda University next year. "That's my cousin Al!" Alice said gleefully. "Great search key! Not too many of us."

Next we searched on Bob Dylan and read the lyrics to his new song Dignity. Then back for a hopeless search on "Love" (12945 entries found). Then the new Star Trek Movie, which didn't work when you clicked the starship control panel. Next we went to the Central Intelligence Agency for a dry history of the CIA and a reading of the CIA credo and motto. The aerial picture of the CIA did not come through. If the omission was by design, we don't know.

We checked out the Channel One home page and noted that my program MBTA126A.ZIP was not in the FTP file directory, and I have since cajoled the Sysop there into including this indispensable item. Then we read more than we wanted to know about the Naval official time clock, that has Cesium something or

other, and saw a picture of the clock, which looked a lot like a large filing cabinet with a TV set. We did not know about the famous working Coffee Pot which is

broadcast in time slices 24 hours a day, or we would have looked for it.

We looked at pictures of the comet landing on Jupiter (or was it Saturn) that looked like orange billiard balls with little spots. We read some software sales catalog. Then we did a search on "Alice," and found this is a fruitful area with other fictional Alice's in Australia and England.

When we were all done we vowed to send off a check to Channel One for access when we got paid for our first business venture, - very soon now. Alice left for her beach wedding, as I settled down to listen to WMJX with songstress Vanessa Williams et al, and to re-read Slaves of New York.

Peter Neuendorffer is a DOS/Windows programmer. He is a contributing writer for *WindoWatch* who provides us with serious commentary on software and programming languages as well as keeping Alice's friends up to date about her doings. *Peter is putting Borland's Delphi through its paces and will be reporting on it very soon.*

Needles and Haystacks

Looking for Data in All the Right Places

Computers and electronics have brought great changes to the society. If you compare what people used to do for a living to what they presently do, you will find that a rapidly increasing number of workers manipulate information as a normal part of their work day. The amount of information people like to remember for themselves is increasing rapidly. For someone like me who does electronic mail using several varieties of on-line connections, the amount of personal mail I manage has grown to dozens of messages a day. On some days, it reaches nearly one hundred messages.

How does one cope with this information explosion? A few years ago, a category of software came into being called Personal Information Managers (PIMs). The premise is that what may be important to one set of people might not be important to another. However, all the information was considered "personal", and a wide variety of software came to be lumped under this umbrella. Today, the variation in the software has decreased. PIMs generally cannot be recognized as such unless they provide at least an address book, a telephone book, appointment calendar, To Do list, and a scratch pad for storing notes. This concept closely parallels the small personal organizer notebook/binder that people often carry. Even the electronic Personal Digital Assistants barely break out of this mode of thinking.

These types of hardware and software are totally inadequate to deal with the needs of personal information management of the future. Because many of the programs limit themselves to the metaphor of the personal organizer, they fail to realize the true potential of using a computer to manage all the information coming to us. Most PIMs still require you to group your data into categories. How you define the categories and how freely you can move information between them varies from program to program. In any case, the software forces the categories on you. Why? Because the programs do not have a good way of allowing you to search for things when you need them. Instead, you must think ahead and first decide how you want to use your information and then begin placing information into the PIM program. The need for categories means that you begin thinking of your information only in those terms. Just as the ancients thought the world consisted only of four elements and all else was composed of varying combinations and proportions of them, so too can data categories become dogma and restrict the ways that you think of your information. An avid user of Ecco would immediately leap up and say, "I can create new categories when I want to, arrange them in a hierarchy as I want to", but never realize at the same time how limited they are. Just as career military officers can

have difficulty thinking outside of a chain of command, using a PIM which requires you to think in *any* type of structure already channels your approach to using the data you manage.

The future of true PIMs lies not in the direction of more and more flexibility and granularity of definition and then placement of information into categories. But rather, the direction of collection of all the information into one place and defining the groupings of data according to immediate need. The means of defining the groupings are via the data query. This does not mean that there will not be queries which are used commonly enough to be made a permanent part of one's personal information manager, but that the information is never fixed in a particular category.

Think of what this means by using a library as an analogy. Books are stored in a library according to topic and subject matter. Somehow, a book ends up getting one, or perhaps, two or more, categories. All books with similar categories end up being together in the shelves in the library. To find a particular piece of information, you must first try to come up with a classification for that piece of information and then pull out all books that have the same classification. After that, you need to examine each in detail to see if they contain what you are after. If either the classification of the piece of information you are after is wrong, or the books are misclassified, you won't find what you are looking for.

What I have described here is essentially what happens when you go to a librarian asking for help to find a topic you are interested in. They depend upon the completeness and accuracy of library classification schemes. If something is wrong with the placement of information within the scheme, everything breaks down. If you have to manage too much information, either you have to start creating more and more categories, finer and finer divisions of categories, or begin eliminating information.

Computers allow a more sophisticated means of finding things. A data query technique to finding information depends on the notion that items of information are grouped together in large collections that are more broadly defined. Somehow, as the information is stored in the collection, the computer arranges to have descriptive and discriminative information stored about each item. Then, when you what to find something, you enter some text (a "query"), not describing what you want, but which is supposed to be "similar" to what you want. The computer calculates the same descriptive and discriminative information and compares with everything else in the collection and computes a score for each item. This score measures how closely each item matches what you entered in content. An exact match is possible only when the query is exactly contained as an item of information. It then present you with only the items the most closely match what you entered.

Right now, there are few PIMs that offer the kind of search capability that I outline here. In my day job, I work with a group of researchers trying to make this kind of information management and retrieval a reality. There are products that are started to head in this direction. The one I am most familiar with is ask Sam for Windows. Another tool which we use at *WindoWatch* to produce the articles you are reading today, Adobe Acrobat, has a component designed to index Acrobat documents and let you search for text across PDF files. Even so, these tools only hint at the capabilities to come. However, it will not be long before most PIMs will have to have advanced search features, simply to manage the ever increasing amount of information we are expected to deal with in our normal daily activities, and of course, to stay competitive in the marketplace. Once these capabilities become come commonplace, we will all wonder how we made do with the old-fashioned way of categories.

Herb Chong is the Contributing Editor at WindoWatch. He is a well known Windows author and has been associated with Windows Sources magazine and The Cobb Group's Microsoft for Windows. He is the author of Software Bloat and The Computer as an Appliance recent WindoWatch articles. This article is presently available on the WindoWatch homepage and is the first of many original pieces of work from Herb and others.

http:///www.channel1.com/users/winwatch/WindoWatch.html

Another List

Discovered by *Jim Kelly* and *Derek Buchler*

The Geek!

The Macmillan Information SuperLibrary

JANUARY TOP TEN LIST

Top Ten Signs You are an Internet Geek

10. When filling out your driver's license application you give your IP address.

9. You no longer ask prospective dates what their sign is, instead your line is "Hi, what's your URL?"

8. Instead of calling you to dinner, your spouse sends email.

7. You're amazed to find out spam is a food.

6. You "ping" people to see if they're awake, "finger" them to find out how they are, and "AYT" them to make sure they're listening to you.

5. You search the Net endlessly hoping to win every silly free T-shirt contest.

4. You introduce your wife as "my lady@home.wife" and refer to your children as "client applications".

3. At social functions you introduce your husband as "my domain server".

2. After winning the office super bowl pool you blurt out, "I feel so colon-right parentheses!"

...And the number one sign you are an Internet Geek:

1. Two Words: "Pizza's Here!".

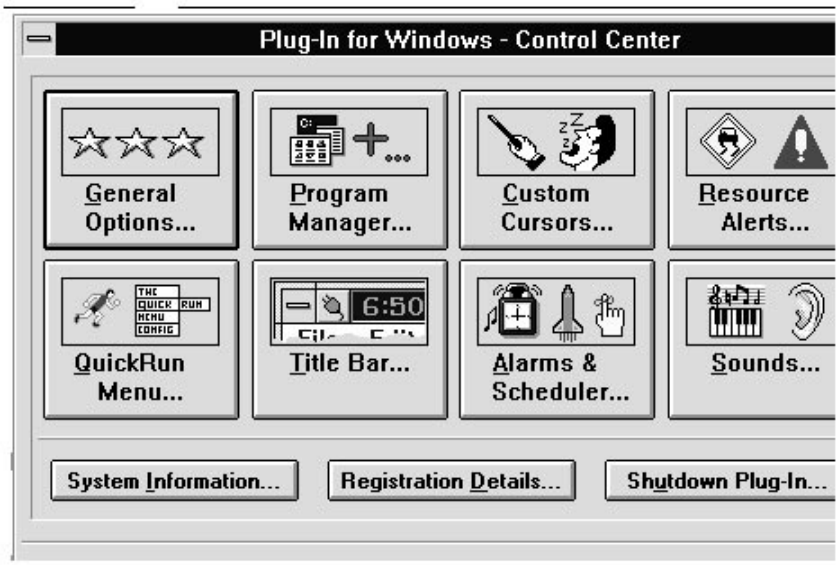
Thanks Guys!

PLUG OF THE MONTH

A Shareware SuperStar!

Frank McGowan had the fun of touting the software Plug of the Month. In the past we've tried to keep our choice a surprise....to build expectation and a bit of anticipation. He is so genuinely enthusiastic about the product that he blurted out the WindoWatch shareware Plug of the Month with absolutely no build up! His delight with the product should not be kept from our readers. Therefore, we present to our readers McGowan's entry...

PLUG-IN FOR WINDOWS



Plug-in for Windows lives up to its billing. Behind this rather dreary nomenclature lurks a real winner.

Our Plug this month, fills many missing window panes, eliminating most of the chilly drafts. While the current product runs on Windows 3.1 and 3.11, they're already working on a version for Windows 95!

The software has many features that make it an outstanding package. For one thing, you can choose among several entertaining cursors to use as pointers and wait indicators. This is worth a lot all by itself: I don't know about you, but I was getting pretty tired of that silly hourglass. My favorite is the one that reads "Please Wait (I'm trying to think)."

You can also specify icons for program groups, to make them more meaningful than the plain vanilla, and totally meaningless icons provided by Microsoft. I teach an after-hours class in Windows at a local community college, and one of the things I invariably harp on is that an icon should be so symbolic that no text is needed to discern its meaning. The program group icons that come with Windows 3.1 fail big time in that regard. For one thing, they're all the same. For another, they convey no information sans their titles. Lastly, they're boring. Plug-In makes it possible to choose icons that indicate what the program groups are about. Okay, it still takes some imagination, but at least they'll be different.

Another winner, though minor, is that you can choose an I-beam you can see when you're working in Word, or the word processor of your choice. Plug-In is well worth $20 in reduced eyestrain, in my opinion.

More significant is the QuickRun Menu feature that lets you jump from task to task quickly and with minimal fuss. As specified by Plannet Crafters, QuickRun provides rapid transit to the Task List, Accessories, File Manager, DOS prompt, something called Easy Alarm, Plug-In specific features, an improved version or Run, and a spiffier Exit from Windows (which lets you reboot the computer or restart Windows besides exiting in the usual way). You can reconfigure QuickRun to your own specifications by adding or deleting menu items. Being in the technical writing business, I found it helpful to add paths to Word and to the Print Manager. Now I can get to either of these with just two clicks, regardless of what is running at the moment. The QuickRun menu is accessible through a little icon next to the menu control button in the title bar, in the form of an electric plug (plug, get it?). You can even change the icon to a socket, if you like.

Resource Alerts is another nifty feature. We all know how frustrating and counter-productive it is to try to save a file, only to find out we don't have enough space left on the hard drive to do it. This is really maddening when you've just spent an hour or more editing the file to the ultimate in perfection, and find you are stuck with the old, extremely imperfect version. Resource Alerts will set off an alarm whenever your system's resources are about to hit the wall, which can prevent you from climbing it.

To keep you abreast of what's happening at any given moment, Plug-In lets you modify the title bar. You can put the time of day at one end and the amount of disk space at the other, for instance; or choose from several options to display, such as available system resources, date and time, free memory, evena stopwatch (especially

useful for keeping track of how long you've been surfing the net). You can even toggle among several of these displays, if you choose.

You can fiddle with Plug-In's settings any time you like, by clicking on the plug icon and selecting "Configure Plug-In" from the QuickMenu. It's always at your beck and call, yet it is surprisingly unobtrusive. For a software package with so many features, it consumes relatively little space (less than 1.5 meg).

Plannet Crafters have done a marvelous job of filling in the gaps in Windows. In the less-than-two-weeks that I've been trying Plug-In, I've become quite hooked. It's hard to imagine running Windows without it. And I've only started to dig beneath the surface. Heck, I'll send 'em the 20 just for what I've seen and used so far. For registration information:

Plannet Crafters, Inc.
P.O. Box 450
Alpharetta, GA 30239-0450
Phone: 404-998-8664
FAX: 404-998-8197

If after reading the PLUG of the Month, should you have recommendations of shareware we might look at, let Frank McGowan know!

A Sneak Attack!

Alice Confesses!

The very day Alice called me up in the afternoon and tentatively asked if I was having a good day. When she stopped over to give me a lesson in life. I was not really glad to see her. I am certain that the old bunch of floppiies she gave me were the source of my Stealth Virus. I had downloaded the excellent McAfee Scan program Scn-xxxx.zip, but was unable to call their office since it is a 900 number. (I have a 900 block on my phone.)

Alice told me she had meant to tell me, but thought I might get mad and bar her from my house. I told her I wished she had told me sooner. After I contacted the five people whom I had passed on the floppy disks to I called my bulletin board. They assured me that all my stuff was clean while I hopefully wondered aloud if this was the end of it.

I had one more system to scan and or clean. It was a rehabilitation program where I was rehabilitated. I knew they would probably give me dirty looks and make me feel like a bug. Maybe not. A weighty moral issue. Then I remembered that we are not talking about the bubonic plague and decided to contact them the next day.

Alice told me not to worry, it happens all the time. Now if I could just get my hands on the slime who originally wrote the virus. Alice told me if I told anyone it would ruin me, "So keep it under your hat ! " By the way, McAfee cleaned my disks just fine, and the bulletin board operator informed me they scan all uploads three times for viruses. No thanks to my friend, Alice!

The Breaking CIS Story:

A Quick Look at the New Compuserve

Since the media discovered The Internet, and gave it *superstar* status, software developers have been busy engineering new access packages, and Internet providers have scrambled to connect the masses to the Information Superhighway. Until recently, Internet access has not been easy. Users have been frustrated by IP Addresses, Winsocks, usernames and cryptic connection scripts.

But all of this is changing and none too soon! Compuserve is the latest service to provide a package that is intended to be *plug in and play*, and provide access at a reasonable price. CIS's WinCIM, the Compuserve Information Manager, has for some time, provided access to Usenet newsgroups, Telnet and FTP via a graphical icon-based interface. CIS has now made available PPP access by means of their Net Launcher, which consists of Spry's Mosaic, a dialer, and a graphics viewer. The dialer provides the PPP winsock connection to compuserve.com. However, it *is* necessary to have a recent version of either DOSCIM or WinCIM installed before the program will work.

To install the new utilities, it is only necessary to Go: Netlauncher, then download a single 1.2 meg file, CNL.EXE. Using Windows File Run command, the file installs everything and creates icons in the CIS Program Group for Mosaic, ImageViewer, and Dialer. All of the required initialization settings are picked up from the existing CIS.INI file used to control WinCIM.

Clicking on the Mosaic icon will then launch the browser and activate the dialer to connect to CIS, using one's regular access number. However, now, a PPP connection is made and the browser immediately goes to work downloading the Compuserve home page. That's all there is to it, or so it was intended.

Unfortunately, many users have come to grief attempting to install the program, which looks for a TEMP working directory. Lacking such a directory, install uses the DOS or Windows directory, where it may find another SETUP.EXE, and stops. I ound it amazing that so many people had no SET TEMP= statement in their AUTOEXEC.BAT file. But then, a lot of CIS users are not especially computer-literate. Still, this indicates a flawed install routine for the software. Many others have reported that their passwords were not recognized the first time they loaded Mosaic. It seems that reentering the password in the dialer's Sessions Settings

Dialog Box is the cure, but, again, this represents a bug. I had a different problem. When I ran Setup, a message appeared telling me I had insufficient disk space to continue the installation. Switching to a stripped Autoexec/Config set cured the problem.

Since Mosaic is such a well known Web browser, I won't dwell on its features. This CIS-specific version has a preconfigured *Hotlist* of many useful sites. Various sound and movie viewers can be specified to work with the browser. But, it is difficult to save HTMLs for later review of their structure, and graphic images that appear on Web pages, and that may have taken several minutes to download, disappear as soon as one exits the program. They are stored in the TEMP directory. A more serious problem is the destruction of other winsock utilities during the install process. CIS is advising users to move these out of the Windows/System directory.

These are problems that Compuserve needs to address, if the new services are to be successful. The typical CIS user is not as knowledgeable as, say, Channel 1 regulars. Some of these people become upset and flame CIS when they run into even minor installation difficulty, or at the slightest perceived or real slowdown in access speed. And at the moment, CIS is struggling to keep their news and mail servers up and running at decent speed. But, I predict that within a few weeks, things will settle down, and the Internet utilities will be working decently enough for a more fair evaluation.

The nice thing about the dialer supplied by Compuserve is that it is, in effect, a Trumpet Winsock. This opens all sorts of interesting possibilities. For one thing, users can pick and choose from among a variety of Internet tools. They are not limited to what Compuserve provides. I wasted no time in downloading and installing the Free Agent news reader. All I had to do was specify the CIS news and mail server addresses, and provide my own email address. It worked flawlessly with the CIS dialer without any further configuring. Then, I added the EWAN Telnet utility. Again, no configuration, no setup hassles. I tested it by loading our editor's home page in Mosaic, then clicking on the telnet to Channel 1 button she so thoughtfully provided. Bingo. EWAN popped up, and within a few seconds, there was Channel 1's logon screen.

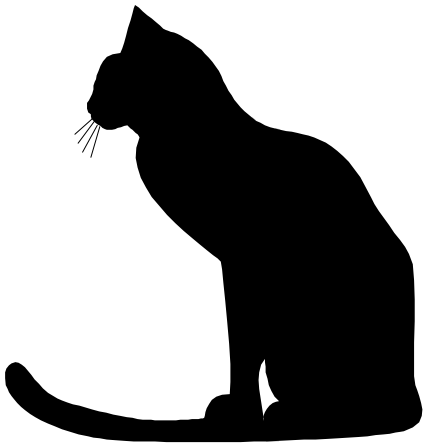
CIS's Mosaic doesn't include FTP capability. When I tried to choose an FTP site from the FedWorld Web page, nothing happened. But I suppose a utility could be added that would permit FTP, Archie searches, etc. Perhaps Compuserve will make these available as time passes. Some users have already substituted Netscape for the Spry Mosaic offering, claiming that Web browser is faster. I plan to try it soon. The OS/2 users are having some success running the CIS browser using the IBM-supplied PPP connection included in the Warp BonusPak. Win95 testers, using both beta and Preview versions, have had mixed success. I just received my Win95 preview yesterday, so I haven't tried it yet.

All in all, Compuserve's Web software is reasonably well though out, and works pretty much as advertised. They do need to clean up the installation problems, and provide more instructions for configuring other utilities to work with it. Once that is done, and the strain on their servers decreases, Compuserve will have a strong presence among Internet providers. They have already shocked some by their pricing. Three hours per month of Web access is already being included in the basic membership fee of $9.95 per month. Beginning May 1, Telnet, FTP and Newsgroup access also will carry three hours free usage for CIS members. PSI has reacted by decreasing their Pipeline access to the same price, but giving five hours usage.

These prices may not seem cheap in comparison with Internet providers such as Channel 1 BBS, but Compuserve is throwing in about 150 basic services for that fee. So CIS members are getting a bargain.

In his understated style, John Campbell has provided us an almost cookbook approach to getting up and running using the new CIS Net Launcher. For those who have struggled with scripts, addresses, and the various *.ini files, this software, and others like it, will be very good news. John bops around the Internet when he's not engaged in all things pinball.

The Cat's Out of The Bag!



Bob Miller's Stanley Does Windows

Word for Windows:

Can someone tell me how to send leading dots and justify to the right of the page using Word for Windows? In Word Perfect 5.1 I use to be able to do this. It would look like the following:

Wonderful.....Place

A piece of fish!

When you specify tabs, you can select left, right, decimal, etc. You can also pick a leader which can be ..... , ----------, _____ or none.

A Windows query!

How do I modify a screensaver to use my own choice of character?

Retrieve the file SSFLYWIN.SCR in write with *NO* conversion.

Use search and replace to Replace all instances of Flying Windows with any *14* characters. Spaces are okay. I used Flyin YingYang.

Must be fourteen characters ---> 12345678901234

This is how the screensaver will appear in your desktop list of savers.

Press CTRL-HOME to return to top of file.

FIND the word DISPLAY in all caps through the find feature in write. Highlight the character IMMEDIATELY before the word DISPLAY.

Now open your character map applet from your accessories group with the Wingding font active. Select any character that you want flying through your screensaver (I picked the yingyang symbol), doubleclick on it so that it appears in the characters to copy window, and then click on copy. Minimize character map.

Restore Write. Click on edit and then click on paste. The character immediately before DISPLAY should change. It will not appear in the wingding typeface. Save the document as SSFLYYIN.SCR. Any name will do as long as it starts with SS and has an SCR extension.

Close write, and open control panel, desktop. Look at your screensaver list, and your new screensaver should appear. Double click on it then click on test to view your new screensaver.

---Stanley!

Bob Miller really does have a Stanley! Stanley is a very computer literate cat and came to the desktop by way of main frames. He's been mousing around Bob's system for some time and has become a real expert! lbl

A WindoWatch Feature

SURFING THE NET

Every once in a while we come across a reference list from the Internet that could be useful to our readers and their friends. This is a list of Internet providers that was put together by Celestin Co., Inc

Providers of Commercial Internet Access ©1994-1995 by Celestin Company, Inc.

THE DIRECTORY Updated 15 March 1995

The latest version of this document is available at the following location:

ftp://ftp.teleport.com/vendors/cci/pocia/pocia.txt

If you have web access, try http://www.teleport.com/~cci/ for the hypertext version of this list, which includes addresses, telephone numbers, fax numbers, email addresses, and pricing.

DOMESTIC

A listing of Internet service providers in the U.S. and Canada, sorted by area code. Fields are area code, service provider name, voice phone number, and email address for more information.

Free Service Providers

Cyberspace (shell,slip,ppp) modem -> 515 945 7000 info@cyberspace.com
Free.org (shell,slip,ppp) modem -> 715 743 1600 info@free.org
Free.I.Net (must dial via AT&T) modem -> 801 471 2266 info@free.i.net
SLIPNET (shell,slip,ppp) modem -> 217 792 2777 info@slip.net

Nationwide Service Providers

ANS	**703 758 7700 info@ans.net**
Global Connect, Inc.	**804 229 4484 info@gc.net**
Informed Access Technologies Holonet	**510 704 0160 info@holonet.com**
NETCOM On-Line Communications Services	**408 554 8649 info@netcom.com**
Network 99, Inc.	**800 NET 99IP net99@cluster.mcs.net**
Performance Systems International	**800 827 7482 all-info@psi.com**

SprintLink - Nationwide 56K - 45M access 800 817 7755 info@sprint.net

Toll-Free Service Providers

Allied Access Inc. 618 684 2255 sales@intrnet.net
American Information Systems, Inc. 708 413 8400 info@ais.net
Association for Computing Machinery 817 776 6876 account-info@acm.org
CICNet, Inc. 313 998 6103 info@cic.net
Colorado SuperNet, Inc. 303 296 8202 info@csn.org
DataBank, Inc. 913 842 6699 info@databank.com
Global Connect, Inc. 804 229 4484 info@gc.net
Internet Express 719 592 1240 info@usa.net
Mnematics, Incorporated 914 359 4546 service@mne.com
Msen, Inc. 313 998 4562 info@msen.com
NeoSoft, Inc. 713 684 5969 info@neosoft.com
New Mexico Technet, Inc. 505 345 6555 granoff@technet.nm.org
Pacific Rim Network, Inc. 360 650 0442 info@pacificrim.net
Prometheus Information Network Group Inc. 404 399 1670 info@ping.com
Rocky Mountain Internet 800 900 7644 info@rmii.com
Synergy Communications, Inc. 800 345 9669 info@synergy.net
WLN 800 342 5956 info@wln.com

The Regional Diectory

Much too large to reproduce here. Suggest you FTP from their site listed above.

FOREIGN

A listing of Internet service providers in countries other than the U.S. and Canada, sorted by country. Fields are country, service provider name, voice phone number, and email address for more information.

Australia APANA +61 42 965015 wollongong@apana.org.au
Australia Apanix Public Access +61 8 373 5575 admin@apanix.apana.org.au
Australia arrakis.apana.org.au +61 8 296 6200 greg@arrakis.apana.org.au
Australia AusNet Services Pty Ltd +61 2 241 5888 sales@world.net
Australia Byron Public Access +61 18 823 541 admin@byron.apana.org.au
Australia DIALix Services +61 2 948 6995 justin@sydney.dialix.oz.au
Australia FidoNet Zone 3 Gateway +61 3 793 2728 info@csource.pronet.com
Australia Highway 1 +61 9 370 4584 info@highway1.com.au
Australia Hunter Network Association +61 49 621783 mbrown@hna.com.au
Australia iiNet Technologies +61 9 3071183 iinet@iinet.com.au

Australia Kralizec Dialup Unix System +61 2 837 1397 nick@kralizec.zeta.org.au
Australia Informed Technology +61 9 245 2279 info@it.com.au
Australia The Message eXchange Pty Ltd +61 2 550 5014 info@tmx.com.au
Australia Microplex Pty. Ltd. +61 2 888 3685 info@mpx.com.au
Australia Pegasus Networks Pty Ltd +61 7 257 1111 fwhitmee@peg.apc.org
Australia PPIT Pty. Ltd. (059 051 320) +61 3 747 9823 info@ppit.com.au
Australia Winthrop Technology +61 9 380 3564 wthelp@yarrow.wt.uwa.edu.au

Austria EUnet EDV +43 1 3174969 info@austria.eu.net
Austria Hochschuelerschaft... +43 1 586 1868 sysop@link-atu.comlink.apc.org
Austria PING EDV +43 1 3194336 info@ping.at

Bashkiria UD JV 'DiasPro' +7 3472 387454 iskander@diaspro.bashkiria.su

Belarus Open Contact, Ltd. +7 017 2206134 admin@brc.minsk.by

Belgium EUnet Belgium NV +32 16 236099 info@belgium.eu.net
Belgium Infoboard Telematics SA +32 2 475 25 31 ocaeymaex@infoboard.be
Belgium INnet NV/SA +32 14 319937 info@inbe.net
Belgium KnoopPunt VZW +32 9 2333 686 support@knooppunt.be

Bulgaria EUnet Bulgaria +359 52 259135 info@bulgaria.eu.net

Crimea Crimea Communication Centre +7 652 257214 sem@snail.crimea.ua

Denmark DKnet / EUnet Denmark +45 3917 9900 info@dknet.dk

England Compulink (CIX Ltd) +44 181 390 8446 cixadmin@cix.compulink.co.uk
England CONNECT - PC User Group +44 181 863 1191 info@ibmpcug.co.uk
England Demon Internet Services Ltd. +44 81 349 0063 internet@demon.co.uk
England The Direct Connection +44 81 313 0100 helpdesk@dircon.co.uk
England EUnet GB +44 1227 266466 sales@britain.eu.net
England ExNet Systems Ltd. +44 81 244 0077 info@exnet.com
England GreenNet +44 71 713 1941 support@gn.apc.org
England Lunatech Research +44 1734 791900 info@luna.co.uk
England Sound & Visions BBS +44 1932 253131 info@span.com
England Specialix +44 932 3522251 keith@specialix.co.uk
England WinNET (UK) +44 181 863 1191 info@win-uk.ne

Finland	Clinet Ltd	+358 0 437 5209	clinet@clinet.fi
Finland	EUnet Finland Ltd.	+358 0 400 2060	helpdesk@eunet.fi
France	French Data Network	+33 1 4797 5873	info@fdn.org
France	Internet Way	+33 1 4143 2110	info@iway.fr
France	OLEANE	+33 1 4328 3232	info-internet@oleane.net
France	STI	+33 1 3463 1919	fb101@calvacom.fr
Georgia	Mimosi Hard	+7 8832 232857	kisho@sanet.ge
Germany	EUnet Germany GmbH	+49 231 972 2222	info@germany.eu.net
Germany	Individual Network e.V.	+49 441 980 8556	in-info@individual.net
Germany	INS Inter Networking Systems	+49 2305 356505	info@ins.net
Germany	MUC.DE e.V.	+49 89 324 683 0	postmaster@muc.de
Germany	PFM News & Mail Xlink POP	+49 171 331 0862	info@pfm.pfm-mainz.de
Germany	SpaceNet GmbH	+49 89 324 683 0	info@space.net
Germany	Westend GbR	+49 241 911879	info@westend.com
Greece	Ariadne	+30 1 651 3392	dialup@leon.nrcps.ariadne-t.gr
Greece	Foundation of Research	+30 81 221171	forthnet-pr@forthnet.gr
Hong Kong	Hong Kong SuperNet	+852 358 7924	trouble@hk.super.net
Iceland	SURIS / ISnet	+354 1 694747	isnet-info@isnet.is
Ireland	Cork Internet Services	+353 21 277124	info@cis.ie
Ireland	Ieunet Limited	+353 1 679 0832	info@ieunet.ie
Ireland	Ireland On-Line	+353 91 592727	info@iol.ie
Israel	Elronet	+972 313534	info@elron.net
Israel	NetVision LTD.	+972 550330	info@netvision.net.il
Italy	ITnet S.p.A.	+39 10 6563324	info@it.net
Japan	Asahi Net	+81 3 3666 2811	info@asahi-net.or.jp
Japan	Global OnLine, Japan	+81 3 5330 9380	hahne@acm.org
Japan	Internet Initiative Japan	+81 3 3580 3781	info@iij.ad.jp
Japan	M.R.T., Inc.	+81 3 3255 8880	sysop@janis-tok.com
Japan	People World Ltd.	+81 3 5661 4130	18005044@people.or.jp
Japan	TWICS	+81 3 3351 5977	info@twics.com
Japan	Typhoon Inc.	+81 3 3757 2118	info@typhoon.co.jp

Kazakhstan Bogas Soft Laboratory Co. +7 322 262 4990 pasha@sl.semsk.su

Kuwait Gulfnet Kuwait +965 242 6729 john@gulfa.ods.gulfnet.kw

Latvia LvNet-Teleport +371 2 551133 vit@riga.lv
Latvia Versia Ltd. +371 2 417000 postmaster@vernet.lv

Lisboa Esoterica 716 2395 info@esoterica.com

Luxemburg EUnet Luxemburg +352 47 02 61 361 info@luxemburg.eu.net

Mexico Datanet S.A. de C.V. +52 5 1075400 info@data.net.mx

Netherlands The Delft Connection +31 15560079 info@void.tdcnet.nl
Netherlands Hobbynet +31 365361683 henk@hgatenl.hobby.nl
Netherlands Internet Access Foundation +31 5982 2720 mail-server@iafnl.iaf.nl
Netherlands NEST +31 206265566 info@nest.nl
Netherlands NetLand +31 206943664 info@netland.nl
Netherlands NLnet (EUnet) +31 206639366 info@nl.net
Netherlands Psyline +31 80445801 postmaster@psyline.nl
Netherlands Simplex Networking +31 206932433 skelmir@simplex.nl
Netherlands Stichting XS4ALL +31 206225222 helpdesk@xs4all.nl

New Zealand Actrix Networks Limited +64 4 389 6356 john@actrix.gen.nz
New Zealand Efficient Software Limited +64 3 4738274 bart@dunedin.es.co.nz

Norway Oslonett A/S +47 22 46 10 99 oslonett@oslonett.no

Poland PDi Ltd. - Public Internet +48 42 30 21 94 info@pdi.lodz.pl

Romania EUnet Romania SRL +40 1 312 6886 info@romania.eu.net

Russia GlasNet +7 95 262 7079 support@glas.apc.org
Russia InterCommunications Ltd. +7 8632 620562 postmaster@icomm.rnd.su
Russia N&K Company +7 86622 72167 serge@nik.nalchik.su
Russia NEVAlink Ltd. +7 812 592 3737 serg@arcom.spb.su
Russia Relcom CO +7 95 194 25 40 postmaster@ussr.eu.net
Russia SvjazInform +7 351 265 3600 pol@rich.chel.su

Slovakia EUnet Slovakia +42 7 725 306 info@slovakia.eu.net

Slovenia NIL, System Integration +386 61 1405 183 info@slovenia.eu.net

South Africa Aztec +27 21 419 2690 info@aztec.co.za
South Africa Internet Africa +27 0800 020003 info@iaccess.za
South Africa The Internet Solution +27 11 447 5566 info@is.co.za

Sweden NetGuide +46 31 28 03 73 info@netg.se

Switzerland SWITCH +41 1 268 1515 postmaster@switch.ch
Switzerland XGP Switzerland +41 61 8115635 service@xgp.spn.com

Tataretan KAMAZ Incorporated +7 8439 53 03 34 postmaster@kamaz.kazan.su

Ukraine ConCom, Ltd. +7 0572 27 69 13 igor@ktts.kharkov.ua
Ukraine Electronni Visti +7 44 2713457 info%elvisti.kiev.ua@kiae.su
Ukraine PACO Links Int'l Ltd. +7 48 2200057 info@vista.odessa.ua
Ukraine UkrCom-Kherson Ltd +7 5522 64098 postmaster@ukrcom.kherson.ua

This list was prepared by:

Celestin Company
1152 Hastings Avenue
Port Townsend, WA 98368
United States of America

voice 360 385 3767
fax 360 385 3586
email celestin@olympus.net

The Last Word

A Computer in Every Pot?

For years we've been hearing that the personal computer is finding its way into every nook and cranny of our lives. It seems that the prediction is finally becoming a reality. Needless to say, this phenomena has not gone unnoticed in the computer industry, as almost everyone involved in the business is poised to grab a piece of the home market action.

Courting the Home Market!

To increase their already considerable cash flow, Microsoft is trying to introduce to the world *Bob*, an operating environment that they seem to believe will encourage less experienced users to get onto the computer bandwagon and prop them up once they arrive.

At a vendor event a few weeks ago I was able to get some hands-on time with *Bob*. It was interesting! *Bob* is an operating environment for people who believe that it is easier to make an animated Rat cross an animated room and pick up an animated book, or phone, or whatever... than it is to double-click on an icon to launch an application.

I found *Bob* to be slow, cumbersome and only mildly amusing. If I had young children at home or perhaps was seriously computer-phobic, I might consider having *Bob* around. It seems to me, that anyone who isn't actually frightened by their very own trackball, *Bob* is just a little too simplistic and a lot more trouble than necessary, to get work done. However, I can understand using *Bob* as an introductory tool to help people become more comfortable in front of their keyboards and ease them into the admittedly confusing world of computers. Once inexperienced computer users feel comfortable about starting their applications I think it will annoy them to have to deal with the cartoon interface, no matter how friendly looking it is. I watched with amusement as fellow computer professionals took their turns with *Bob*, the majority of them tossing the mouse aside with disdain after a few minutes of interaction.

At the same time, IBM seems to be employing the questionable strategy of pitching OS/2 Warp at home users. In a collection of TV ads featuring apparent neophytes starting at what we are expected to assume is Warp in action. They never show us

the computer screen, so it *could* just be a Beavis & Butthead screensaver as they seem to imply that every home user should grab Warp and converge onto the Infobahn. Considering the not-insignificant list of incompatible hardware and that Warp installs don't go smoothly 100% of the time, expecting a computer neophyte to install Warp on their Price Club computer would seem to be an unreasonable expectation.

A local Egghead Software retail outlet confirms this suspicion; according to one of their staff, Warp is being purchased in large numbers and is also being returned in significant numbers. The returns are coming from mostly inexperienced users who got flustered with the install and didn't know that their sound card or CD-ROM drive wasn't compatible.

Will Windows 95 be the answer? I doubt it. Windows NT is making strong gains in the corporate market place but is not really designed for the home user who wants to play Doom and connect to Prodigy from their 486SX-25 with 4M of RAM.

So what *is* the solution? Time and experience is the only answer, in my opinion. We are just beginning to see the first generation of adults who grew up with Atari and Missile Command. College graduates who've had video games and/or PCs in their houses since they were youngsters are easy in front of the computer, even if their comfort level only goes as far as double-clicking on the picture of the pen to load their word processor.

The home market is growing exponentially. Nearly every office, big and small, is relying more and more on computer technology and as people spend more time with computers in school and at work the computer will seem as common and comfortable as any other appliance.

As technology advances and both new and used systems become available at extremely low prices, we get closer and closer to the prediction that every home will have a PC. I think it's obvious that none of the new operating systems are going to prove to be *the* magic pill to speed up the pace of both installation and utilization of a computer in every home.

***Ben Schoor** is a computer consultant associated with Watson/Schorr Consulting of Los Angeles. He is active on the various nets and is the Host for the RIME consultants conference. Ben is a regular contributor to **WindoWatch**. He can be reached on the Internet at ben.schorr@panasia.com or ben.schorr@bcsbbs.com*