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WHAT'S INSIDE

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WindoWatch The Electronic Windows Magazine of the Internet
Volume 1 No. 6 August 1995

The Electronic SuperHighway Evolving

It's an International Flea Market in the making! Let your fingers do the walking and let your modem carry you into the virtual yellow pages. It can become the newest edition of the Home Shopping Channel hawked by main line vendors of reputation and capital. As in life, the one thing we can count upon is change, and when on the Internet, change is very rapidly. To some, unregulated change will lead to chaos while others equate regulation of the Internet with destruction of the Internet .

My own evolving view is that if the Internet is going to shrivel and shrink, it will be of *trite* with commerce fueling the banal and commonplace. There were those who warned us very early in the game that the demands and practices of business was going to "do in" the Internet. It was this group who insisted that no advertising be allowed and probably invented the term spamming with commercialization in mind. The Web browser was born and they lost the good fight!

Remember the great hope of television with the expectation of educational and cultural opportunities? TV became many things unpleasant but mostly it became boring and predictable! Hence the birthing of cable.

It's much too early to say that the Internet as we know it, is defenseless and is going to crumble. It's not too early to suggest that perhaps the Internet is not an Electronic Super highway but rather a short interstate with promising features like a very large international mall. It must be our responsibility to protect users of the Internet from the hucksters, -of sex, sedition or stupidity, by speaking out. It is also our responsibility to understand that the Internet is going to change....many times, to meet the demands of the growing numbers of users who also have every right to quit and start their own. At this writing, the Federal government has plans to do exactly that for itself and its agencies including State and local governments who wish to participate.

There will undoubtedly be many highways with differing goals connected through gateways each serving their own clientele. As long as the Internet provides access to the many and seeks to continue its effort to disseminate information, it will have the vitality to fend off this upcoming assault with its familiar threat of the marketing of trite!

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Building a Small Delphi Application

© 1995 by *Herb Chong*

Borland’s Delphi is one of the Windows programming tools being marketed as a Rapid Application Development (RAD) toolkit. You are supposed to be able to build applications faster with RAD systems than with traditional development tools like C and C++, even with their spiffy new interfaces and IDEs. What distinguishes a RAD tool from other quick, easy to use tool building environments like Visual Basic is that a RAD tool has much more power built into it from the beginning. However, it’s not enough to just be able to put together applications quickly. You have to be able to build applications that can solve tough, real-world problems quickly and efficiently. Visual Basic is great for prototyping look and feel, but as soon as you start to use it on larger projects, its limitations become painfully obvious.

Code reuse is difficult, and speed just isn’t there unless you write lots of DLLs or VBXs, defeating the whole point of going with Visual Basic in the first place. Visual Basic 4.0 promises to help with some of the group programming problems, but fundamentally, Visual Basic is not an object oriented programming language and that means you have to use components that you can’t modify or derive from.

In this tutorial, we’re going to build a small Delphi application. It won’t do much, mostly because if you need to work through tutorials,

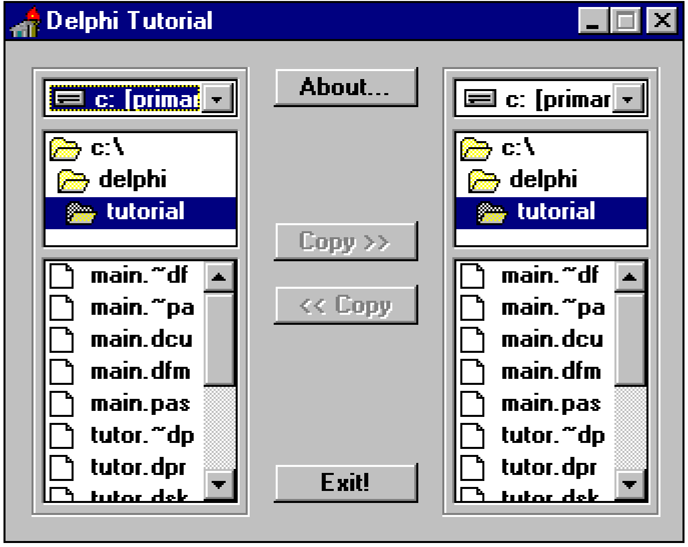
you're not ready to do much yet. The program is going to copy files from one place to another. That doesn't sound very hard, and it isn't. Writing this article took about four times as long as it did to write the program. But that's not the point. The point is to get you started with a small program that is just a little beyond the introductory tutorials in the Delphi manuals and into areas they don't cover.

Getting Started

Like all GUI tool building, when you program in Delphi, you need to think about what kind of interface you want for your program. Once you have your user interface worked out, much of the rest of the programming falls into place. It doesn't make the details any easier, but at least you have a better idea of where to start. Object oriented programming in general requires that you think much harder about how your application needs to work before you can begin coding.

The interface I chose for this tutorial program is simple. The user sees either list and copy from one list to another. Each file list can be from files in the same directory or in different directories. For simplicity of programming, they can select only one file at a time. Figure 1 shows a screen shot of the finished program. (Note: all the screen shots for this article were done on Windows 95.) We'll spend most of the time building this user interface appearance before actually writing any code. The finished program is only 129 lines of Object Pascal code, and most of it is generated by Delphi itself. With Delphi, you spend more time thinking about the problem than writing code.

Figure 1



To get started, you need to create a directory for your new project. I like to keep all the work I do in separate directories under the \DELPHI subdirectory. I have one called \DELPHI\PERSONAL and within it, I keep all my projects. So, create a directory where you want to keep this tutorial program and launch Delphi. If you have used Delphi before, you'll come up with the last project you loaded. Since we are beginning a new project, click on File|New Project. When you've done this, you should end up with a screen that looks something like Figure 2. It shows the Object Inspector, which lets you set object properties, and the main form for the program. Underneath it, just barely visible, is the Object Pascal code for the form. Now, save the project using File|Save Project As. Specify the name you want use for the first form's files. If you want to, give the project file a name too, like "tutorial.dpr".

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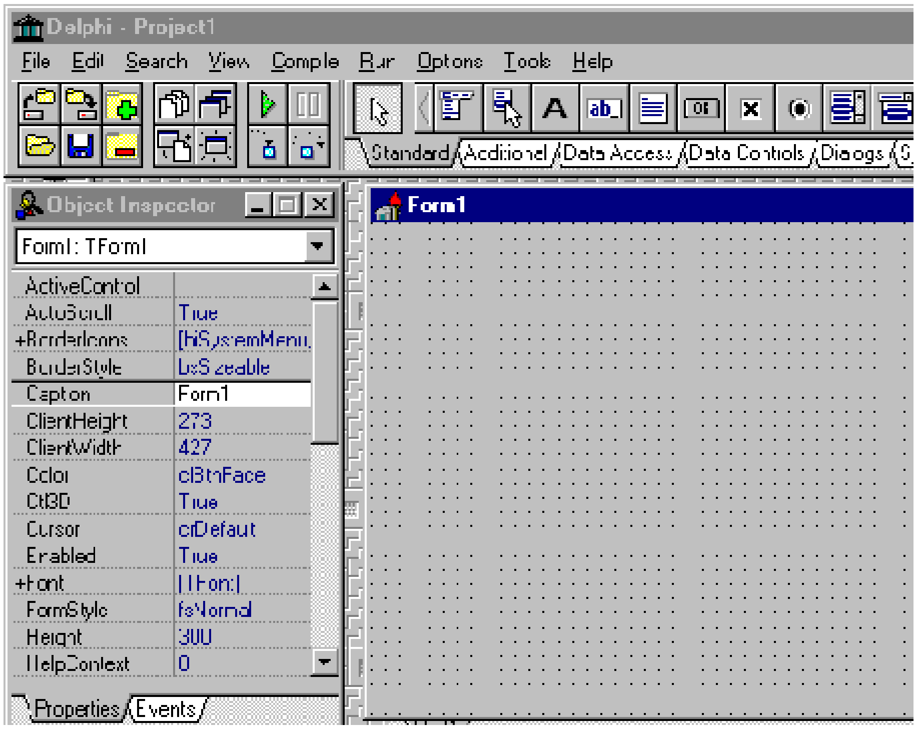
Figure 2



Form1: TForm1

ActiveControl	
AutoScroll	True
+BorderIcons	[biSystemMenu,
BorderStyle	bsSizeable
Caption	Form1
ClientHeight	273
ClientWidth	427
Color	clBtnFace
Ctl3D	True
Cursor	crDefault
Enabled	True
+Font	(TFont)
FormStyle	fsNormal
Height	300
HelpContext	0

Before we do anything else, run the program to see what a completely empty form looks like. Press the F9 key, or use Run|Run to compile the code and launch the program.

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You get a completely empty default form, as shown in Figure 3.

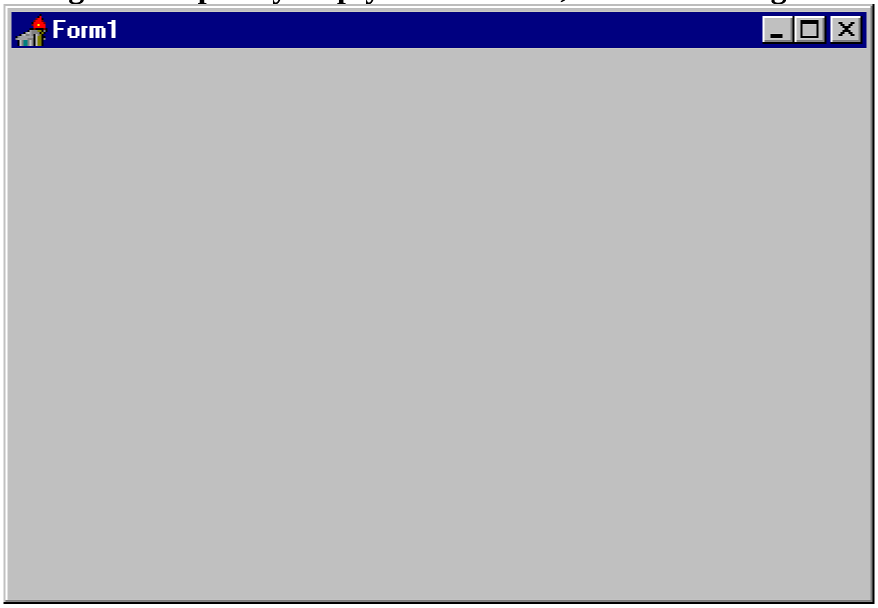

Figure 3

Although it is hard to tell because of the default color scheme in Windows 95, there are several undesirable characteristics of this form. The first is that there is a maximize button. This sample application doesn't resize its controls, so allowing the user to click on maximize is not a good idea. The other thing is that resizing borders are on the form too. They also allow the user to change the size of the form window. We need to get rid of both. You do this changing the form's properties using Object Inspector. See Figure 4.

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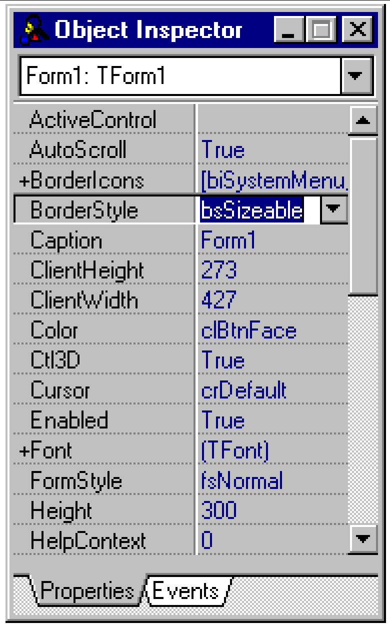
The top drop-down listbox shows which component you have selected. In this case, it's Form1 and it is of type Tform1. We need to change the border icons and the border style flags. If you click on BorderStyle, you'll see that there is a drop-down listbox of possible settings. Change the BorderStyle property to bsSingle. The ' + ' character next to the BorderIcons property signals that there are several settings grouped together under this property. If you double-click on the property name, you will see that there are three sub-properties.



Form1: TForm1

ActiveControl	
AutoScroll	True
+BorderIcons	[biSystemMenu,
BorderStyle	bsSizeable
Caption	Form1
ClientHeight	273
ClientWidth	427
Color	clBtnFace
Ctl3D	True
Cursor	crDefault
Enabled	True
+Font	(TFont)
FormStyle	fsNormal
Height	300
HelpContext	0

Figure 4

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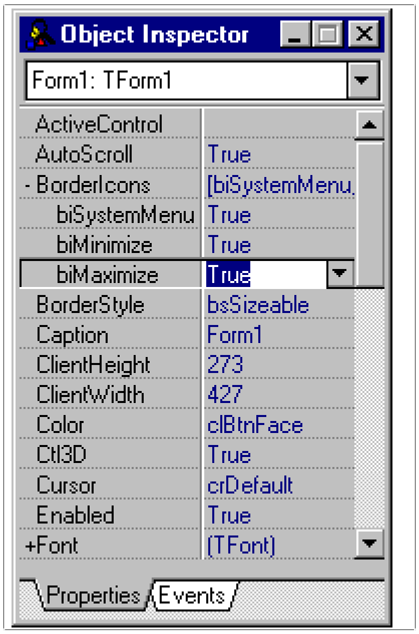
In figure 5 on the right, the system menu is the icon shape on the left of the title-bar (this is new in Windows 95). The minimize and maximize buttons are on the right, next to the close button new in Windows 95. It’s OK to minimize this application, but not to maximize it. Click on the biMaximize property and change its value to False. The remaining thing to do is to change the form Caption property.

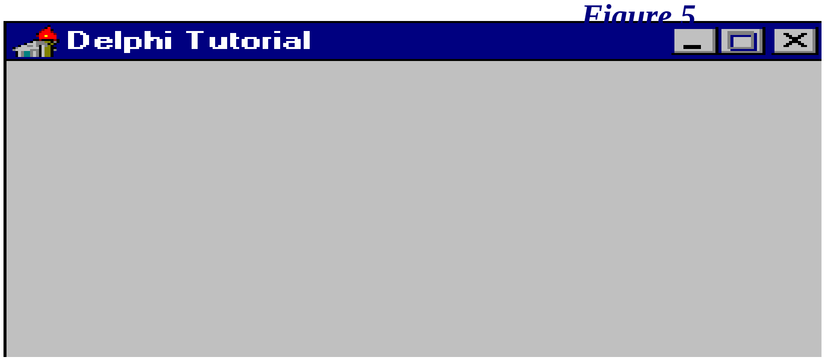
This is the text that will appear in the title bar of your form. Once you do this, run the program again and see what it looks like. It should appear something like Figure 6 below.



Form1: TForm1

ActiveControl	
AutoScroll	True
- BorderIcons	[biSystemMenu,
biSystemMenu	True
biMinimize	True
biMaximize	True
BorderStyle	bsSizeable
Caption	Form1
ClientHeight	273
ClientWidth	427
Color	clBtnFace
Ctl3D	True
Cursor	crDefault
Enabled	True
+Font	(TFont)

Figure 5



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Well, there you have it, a complete Delphi application that does nearly nothing. You haven't entered or changed any code, and you have a full fledged application. What you have done is change properties for a form so that it runs the way we need this application to run. It prevents the user from doing things that it's not prepared to handle. The next step is to put the controls onto the form.

Getting the Visual Appearance Right

Once the basic form properties have been set, it's time to draw the controls on the form itself. No code need be attached at first. The basic visual appearance needs to be right first. To add controls to a form, you need to use the Delphi main Menu bar. See Figure 7. The three groups of buttons on the left allow you to manage Delphi files, projects, and debugging using the integrated debugger. In the middle and right portions of the window are the Visual Component Library components, arranged into groups by tabs. The controls we need at first are from the Standard tab, which is shown highlighted in gray on Figure 7. If you hold your mouse pointer over any one of the icons in the tabbed bar, you will see the name of the component.

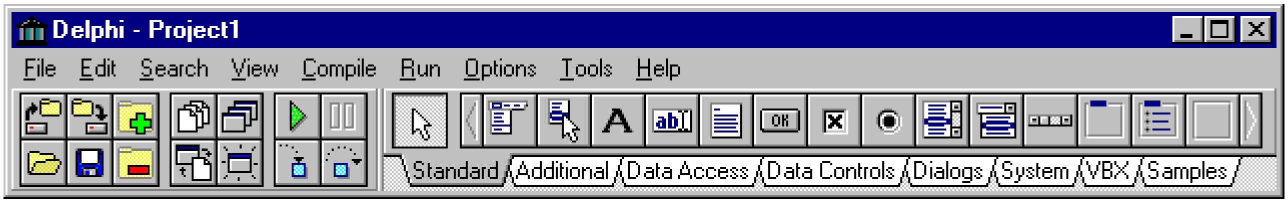

Figure 7

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Find and click on the Panel component. The icon indents. This tells you that when you drag the mouse cursor on the form, you will be creating a panel where you drag. Create a panel that looks like Figure 8 below. Make sure the size is approximately what is shown in the screen shot as we need to fit some buttons and another one of these later.

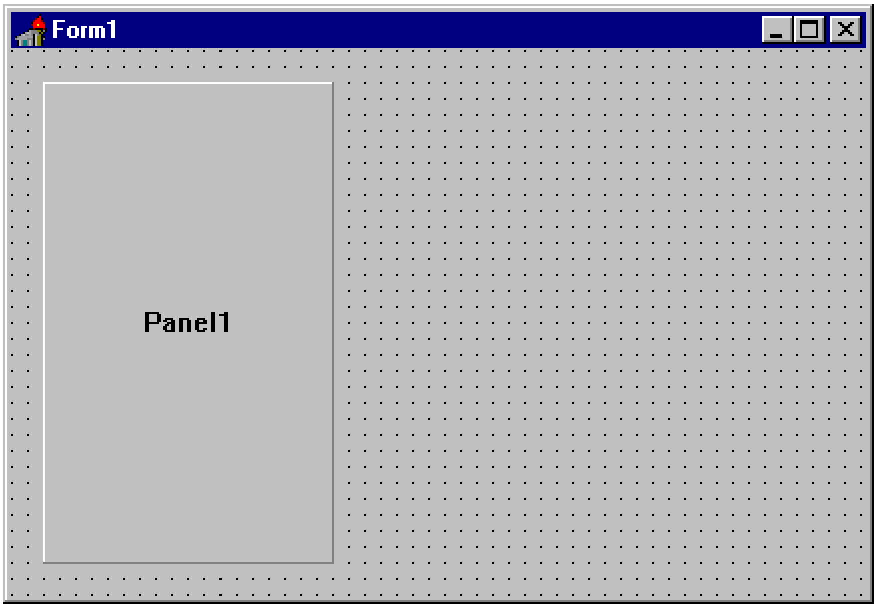

Figure 8

Although this is a fine looking panel, it's not got the look we want. Click once on the panel. The Object Inspector now changes to show the properties for the panel. The panel is colored such that it appears to be "popped out" from the form. This isn't what we want. Instead, we want the panel border to look like an indentation into the form

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with the surface of the panel the same height as the rest of the form itself. To make these changes you need to change the BevelInner and BevelOuter properties. BevelInner needs to be bvRaised and BevelOuter needs to be bvLowered. After making these changes, you'll see a form that resembles Figure 9.

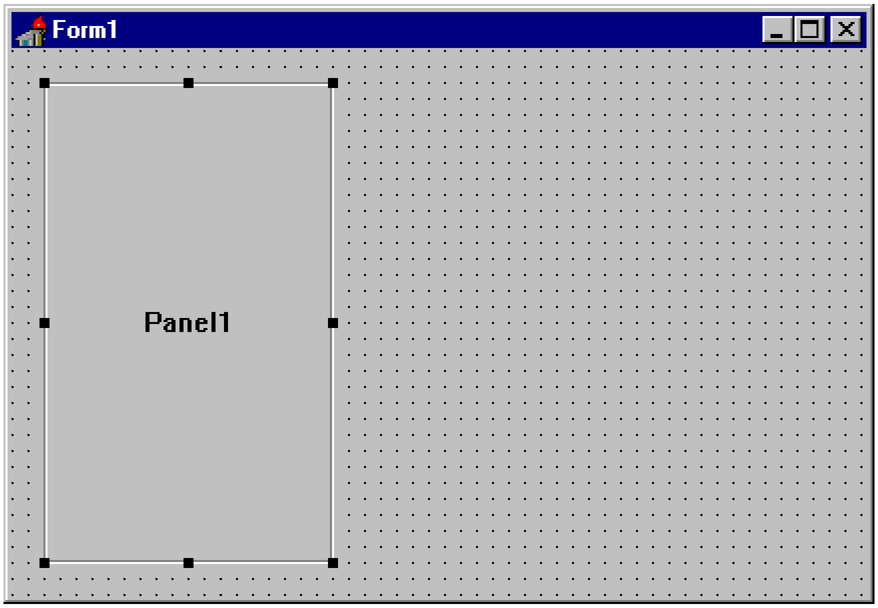

Figure 9

In our application, each part of the file selector has a way to select the drive, directory, and file that the user wants to copy. We need to put these controls into the panel we just created. These components are located under the System tab. See Figure 10.

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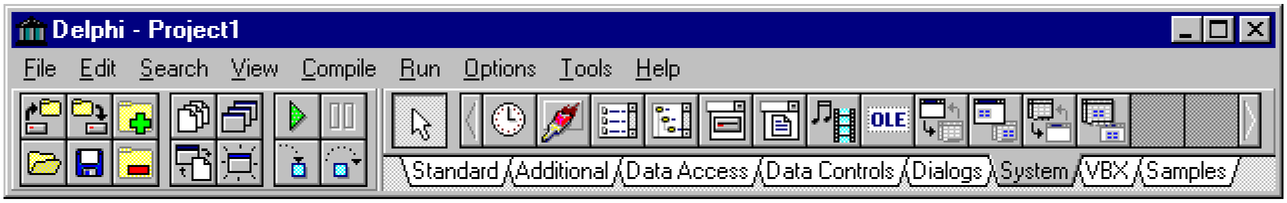

Figure 10

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We will need the DriveComboBox, DirectoryListBox, and FileListBox components. They also have to be grouped together with the panel that we just created. Make sure that the panel is selected, just as shown in Figure 9. Then select each type of component and create them inside the panel.

When you're done, you should have something that resembles Figure 11. Select the panel and drag it left and right to make sure that the other three components are enclosed properly by the panel control. If any are not, moving the panel will leave them behind. If this happens, cut the component using Edit|Cut, select the panel, and then Edit|Paste it. This makes sure that the component is contained within the panel. Make sure to size the FileListBox component slightly taller than half way so that the panel's caption is hidden. The other thing to do is to change the panel's caption to an empty string.

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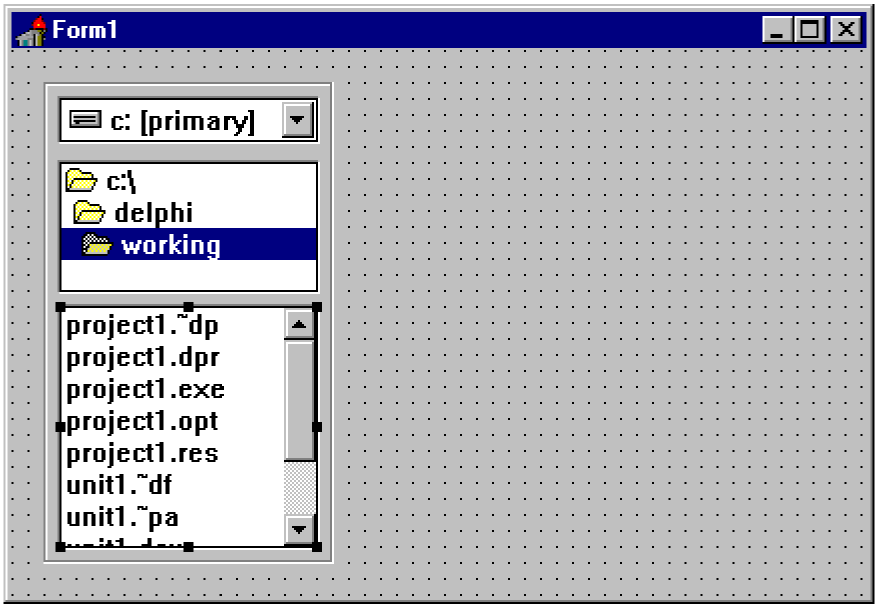

Figure 11

Once you have all the components arranged properly, select the panel and do Edit|Copy. Then click on the form so that it is selected, and the do Edit|Paste. You'll end up with another panel and set of controls pasted on top of your other panel and controls. See Figure 12. Click on the group of controls and drag it into position on the right hand side of the form. When you're done, you'll see something like Figure 13.

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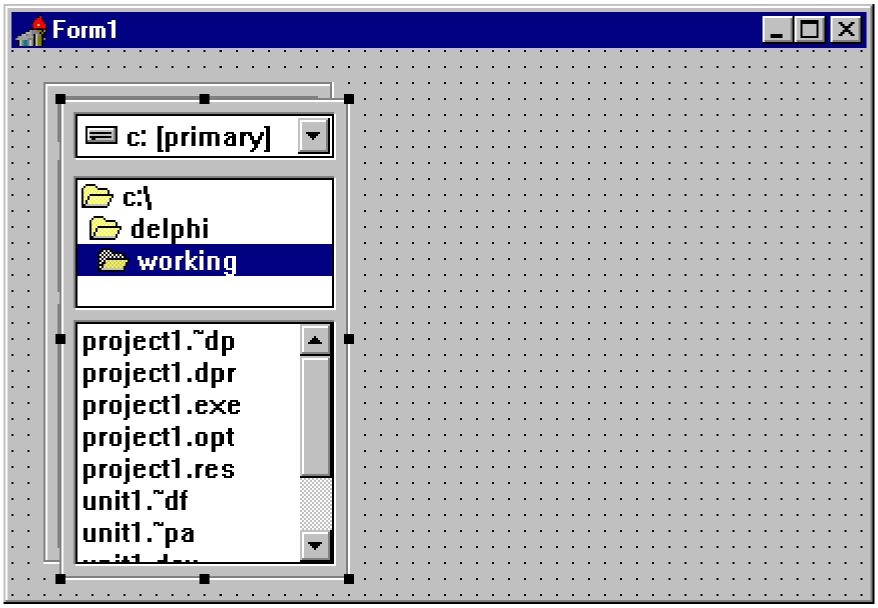


Figure 12

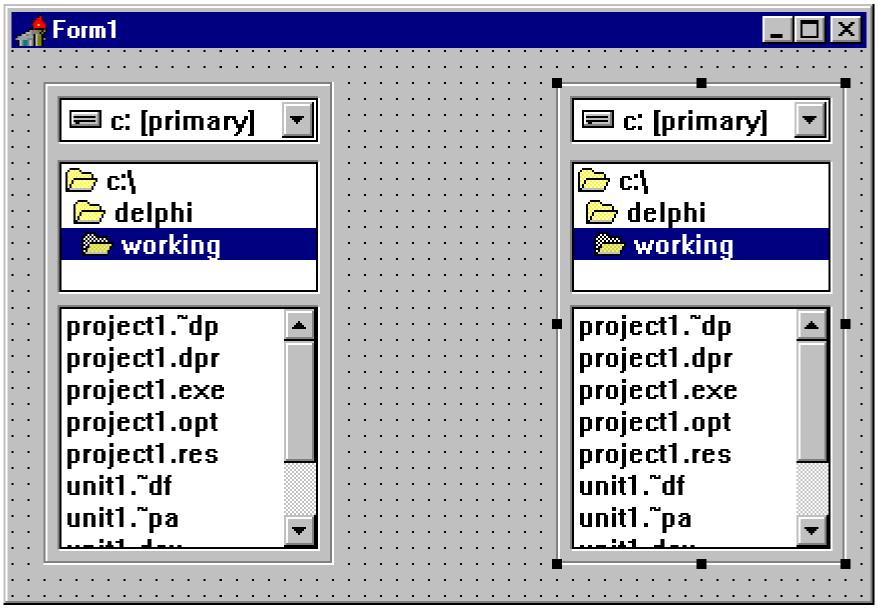
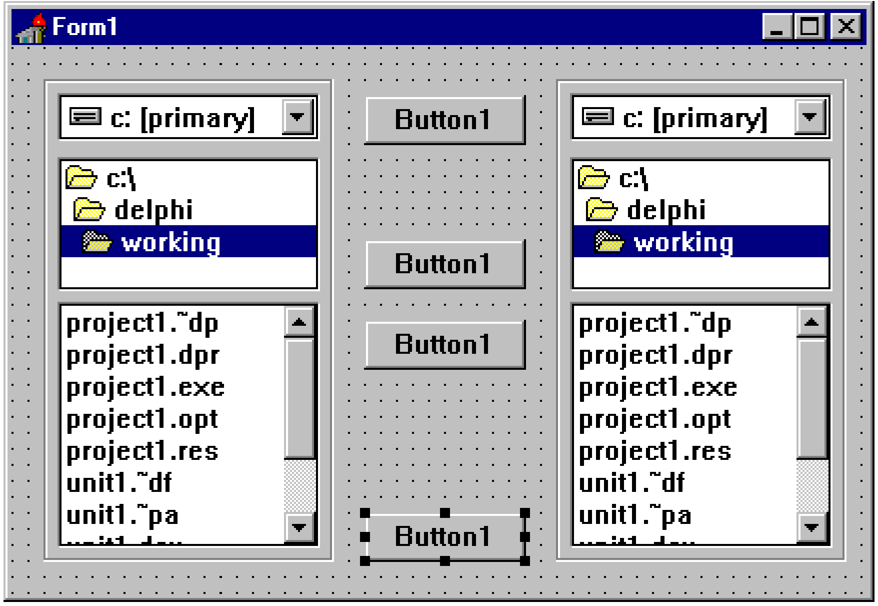


Figure 13

Click on the drop down listbox in Object Inspector and scroll thru the list. You should see two of everything except the form itself in the list. These are all the components in your project. Their component names are based on the type of component they are. For a project of this size, it makes little difference what you name your components because there are so few of them. For a larger project, you will give them more descriptive names that identify the purpose of the control better. For this project, we will leave the control names alone. After we add four buttons we are done with the visual appearance of the program. Buttons are located on the Standard tab of the Visual Component Library tab bar. Select it and add four buttons from top to bottom, arranged as in Figure 1. The easiest thing to do is to create one button of the right

Figure 14



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size and clone it three times by copying the first and pasting it three times. Once you have pasted the buttons and moved them, you should end up with a form that looks like Figure 14.

The button captions aren't right, so you'll need to edit them. The top button is named "About...", the next one is "Copy >>", the next "Copy <<", and the final one "Exit!". Make these changes and save your work. Click on File|Save Project and make sure that the project is saved into your working directory. Then press F9 and run your program. If you did everything as you should have, the application should pop up with a window that looks like Figure 15.

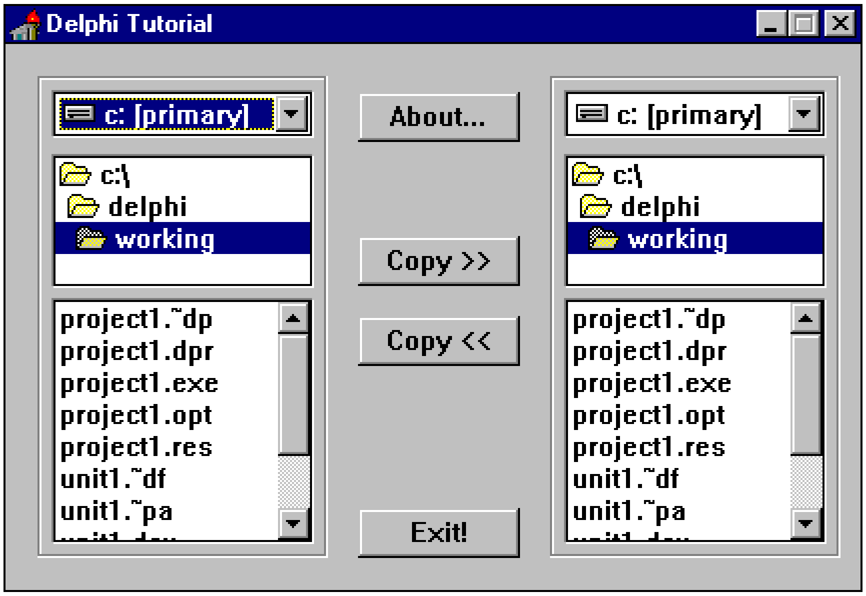

Figure 15

Experiment with the program as it's running. You'll see that you can click on all the buttons and controls and some things happen. What happens isn't what needs to happen yet, but you can scroll the listboxes, select things, and see buttons go down when you click on them. The visual interface is done. The only visual aspect left to do is to not highlight the Copy buttons unless there is a file selected in the corresponding FileListBox controls. To do that requires writing Object Pascal Code. That's what we will do next.

Making It Work for Real

All the visual interface design that you did before was fairly easy and frequently represents most of the design time in a complicated application. For this application, it probably represents about half the time if you are familiar with Delphi. The other half of the time will be spent putting in the right code to make the application work. The first thing we'll do is to make the Exit! button work. You can do this by double-clicking on the Exit! button. Up comes the code editor window. Once it appears, you can edit the code. The code for the Exit! button consists of one statement, "Close;". See Figure 16.

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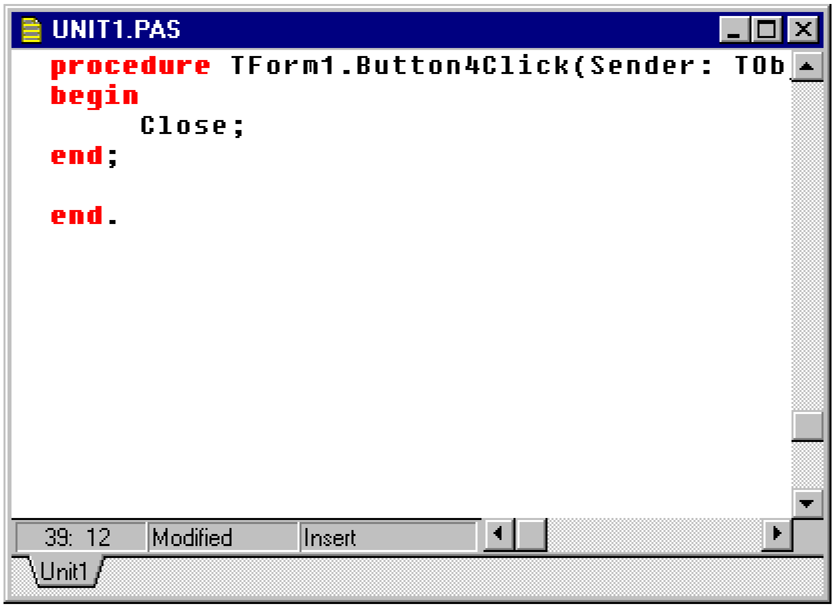

```
procedure TForm1.Button4Click(Sender: TOb
begin
     Close;
end;

end.
```

Figure 16

In the same way, you will add the code for the About button. Bring the form design window to the front again and double click on it. Add the statement shown on the next page in Figure 17 to implement the About dialog. Save the project and run the program again. You should be able to click on the About button and see the message box. You should also be able to click on the Exit! button to exit the program.

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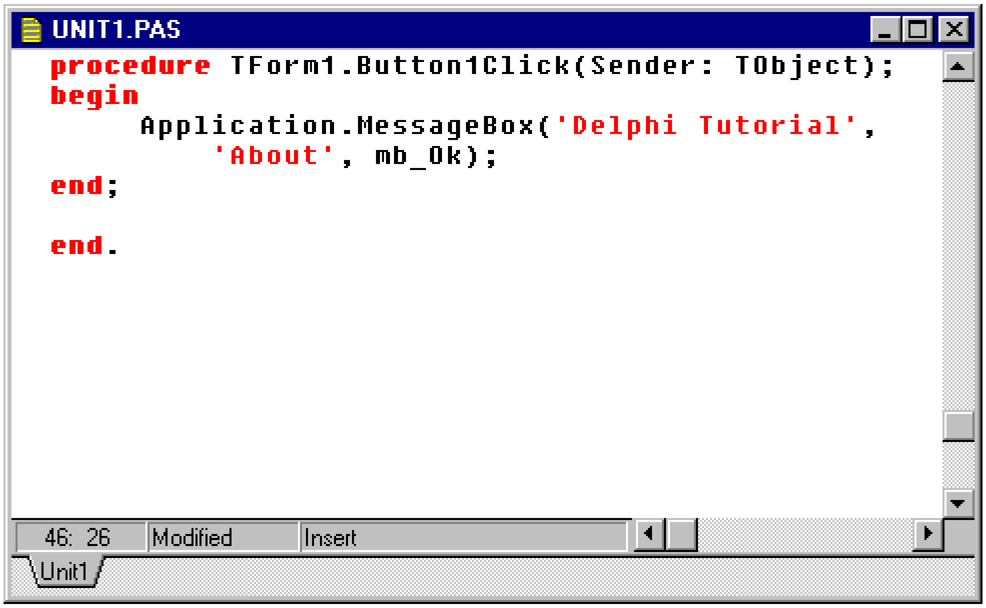

```
procedure TForm1.Button1Click(Sender: TObject);
begin
     Application.MessageBox('Delphi Tutorial',
         'About', mb_Ok);
end;

end.
```

Figure 17

Well! It’s getting closer to being something real. The next thing to do is to make the drive, directory, and file components work together. If you tried them in the version of the program you have now, you will see that changing the drive letters or directories did not have any effect on each other nor the file listbox. We’re going to add some code to make them work together. Double click respectively on the left DriveComboBox, and DirectoryListBox and add the lines of code shown in Figure 18 to your project.

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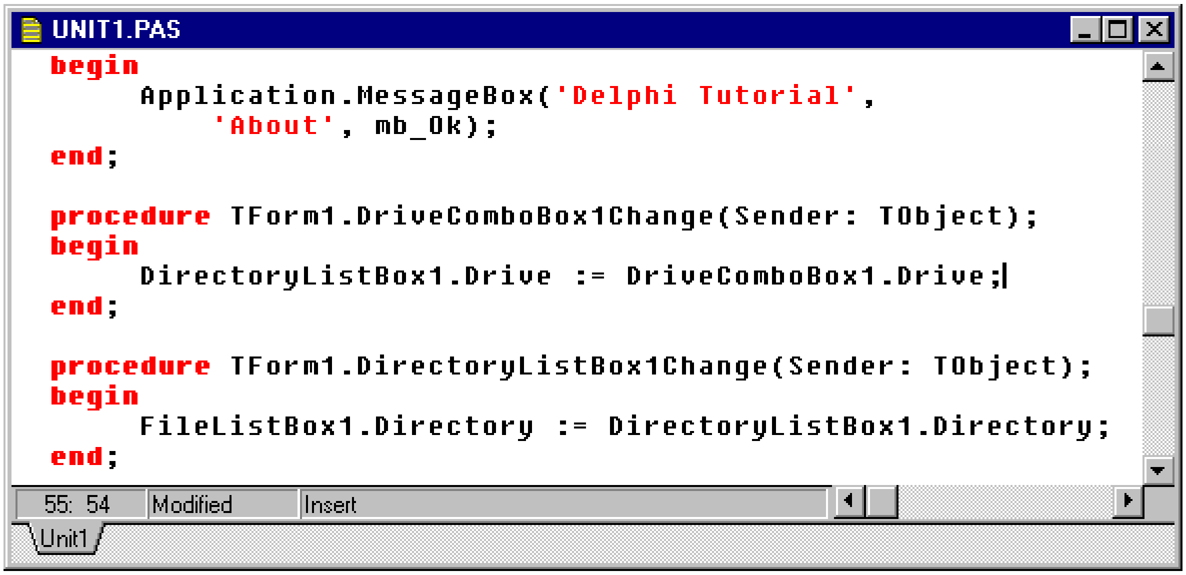

```
begin
     Application.MessageBox('Delphi Tutorial',
         'About', mb_Ok);
end;

procedure TForm1.DriveComboBox1Change(Sender: TObject);
begin
     DirectoryListBox1.Drive := DriveComboBox1.Drive;
end;

procedure TForm1.DirectoryListBox1Change(Sender: TObject);
begin
     FileListBox1.Directory := DirectoryListBox1.Directory;
end;
```

Figure 18

Do the same for the DriveComboBox and DirectoryListBox on the right. You should be adding the lines of code as shown in Figure 19. Save the project and run the program again. This time, when you change drives or select a new directory, the file listbox contents should change. Hard to believe it, but we are almost done.

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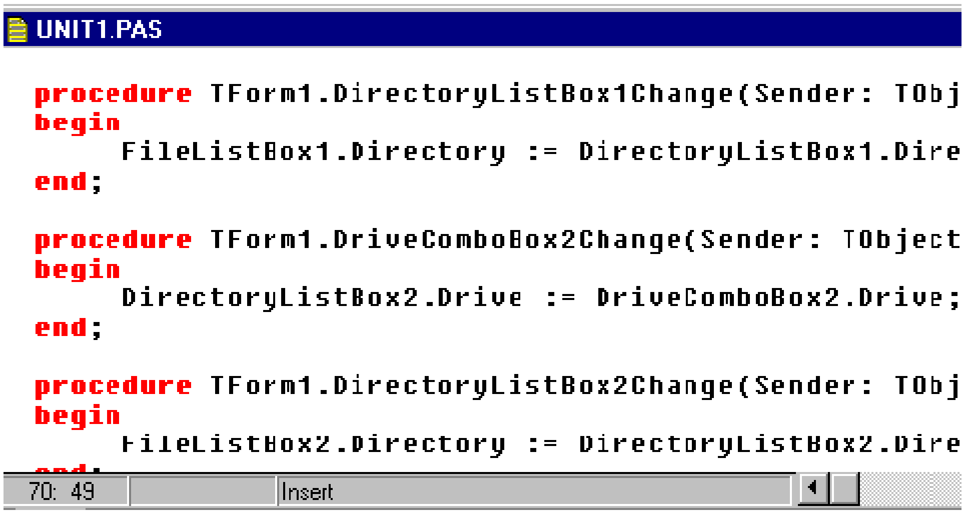


```
procedure TForm1.DirectoryListBox1Change(Sender: TObj
begin
    FileListBox1.Directory := DirectoryListBox1.Dire
end;

procedure TForm1.DriveComboBox2Change(Sender: TObject
begin
    DirectoryListBox2.Drive := DriveComboBox2.Drive;
end;

procedure TForm1.DirectoryListBox2Change(Sender: TObj
begin
    FileListBox2.Directory := DirectoryListBox2.Dire
```

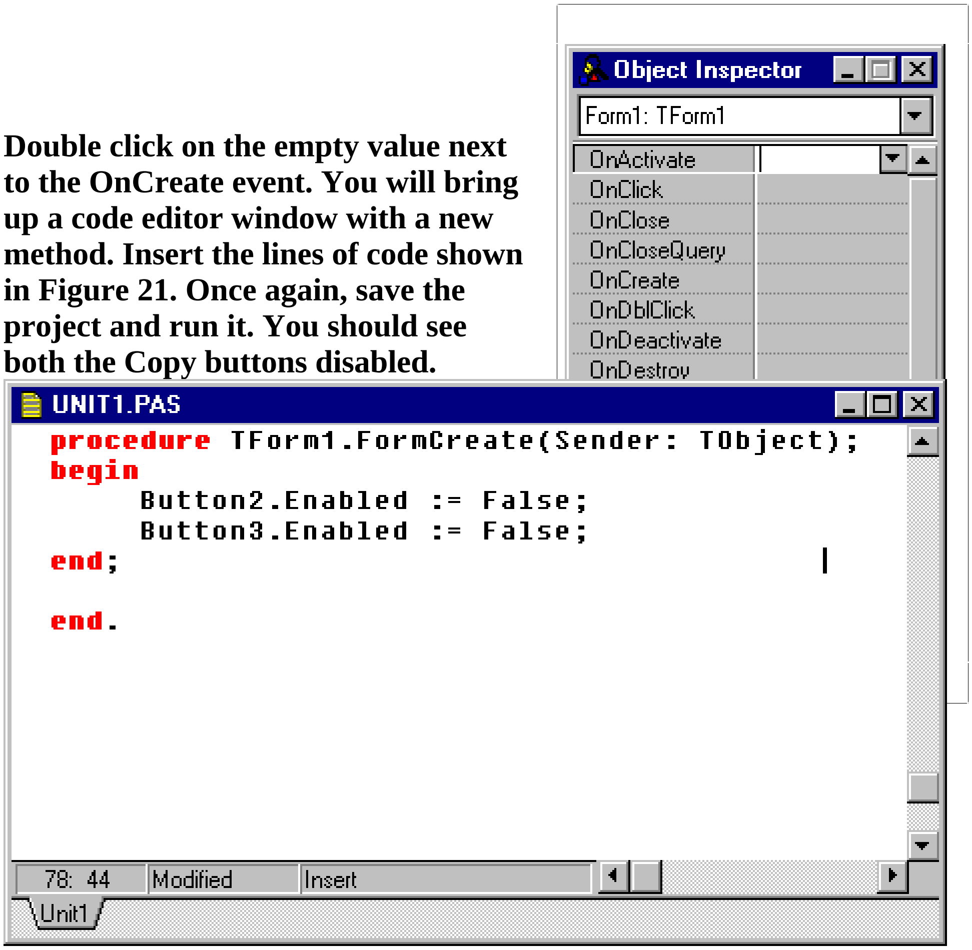
Figure 19

Look at Figure 1 again, where we show the finished application. Notice that the Copy buttons are both grayed out. This happens whenever there aren't any files selected in either file listbox. If a file is selected, the appropriate Copy button is supposed to become enabled. If a file is selected in each listbox at the same time, both buttons are supposed to be enabled. To do this, your application has to both initialize the buttons to be both grayed, but also to enable and disable the buttons as appropriate.

First, lets get the button states started properly. To do this, you need to modify one of the form's events, the OnCreate event. Select the form and bring the Object Inspector window to the front. You will see all the form's properties by default. If you click on the Events tab at the bottom of the Object Inspector window, you will see the events list. See Figure 20. Note that no events have event handlers assigned to them.

This means that every event that the form receives is handled by a default event handler.

Double click on the empty value next to the OnCreate event. You will bring up a code editor window with a new method. Insert the lines of code shown in Figure 21. Once again, save the project and run it. You should see both the Copy buttons disabled.



```
procedure TForm1.FormCreate(Sender: TObject);
begin
     Button2.Enabled := False;
     Button3.Enabled := False;
end;

end.
```

Figure 21

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So, now we have disabled the buttons at startup. How do we enable them? Well, the buttons should be enabled when a file is selected in the correct file listbox window. Click on the left file listbox to select it. Now, in Object Inspector, double click on the OnClick event for the component. And add the code for FileListBox1as shown in Figure 22. Do the same for the right file listbox. Save the project and run the program again. The Copy buttons should enable themselves when you selected a file in their connected file listbox. In Figure 1, each file listbox has the ShowGlyph property set to True so that an icon appears next to each file name identifying the file type. Can do that at this point in the program. Note that when you make this change to the properties for each listbox, the contents change right away so that you can see the effect of the change.

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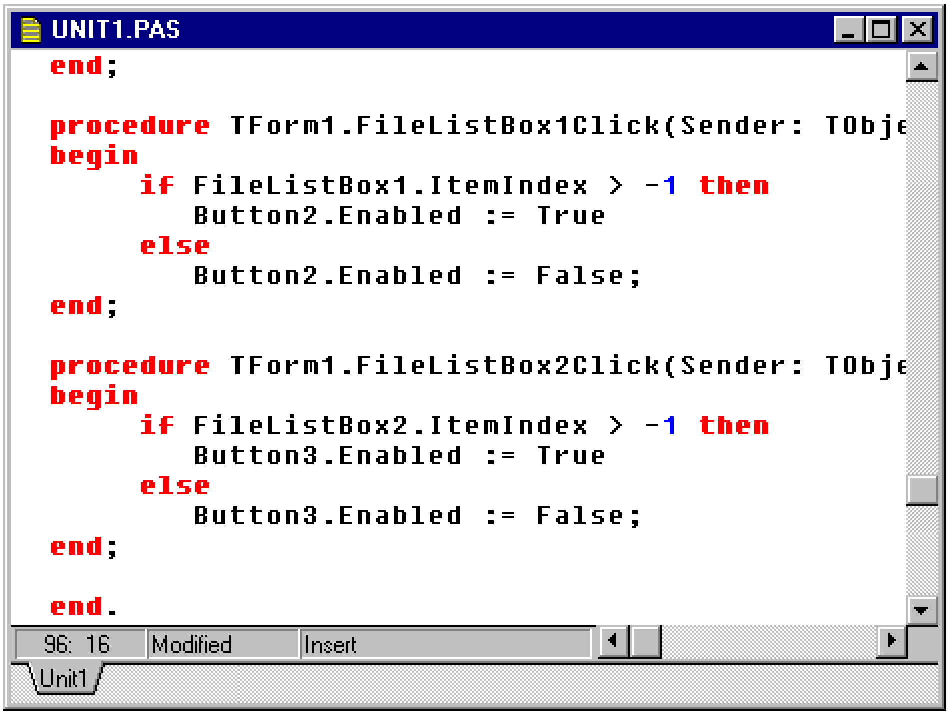

```
end;

procedure TForm1.FileListBox1Click(Sender: TObje
begin
     if FileListBox1.ItemIndex > -1 then
        Button2.Enabled := True
     else
        Button2.Enabled := False;
end;

procedure TForm1.FileListBox2Click(Sender: TObje
begin
     if FileListBox2.ItemIndex > -1 then
        Button3.Enabled := True
     else
        Button3.Enabled := False;
end;

end.
```

Figure 22

The only thing left to do now is to make the copy buttons actually do something. Once again, you will be modifying the default OnClick handlers, but for the two Copy buttons. Double click on the event handlers list to create and add the code shown in Figure 23 to the code in the edit window.

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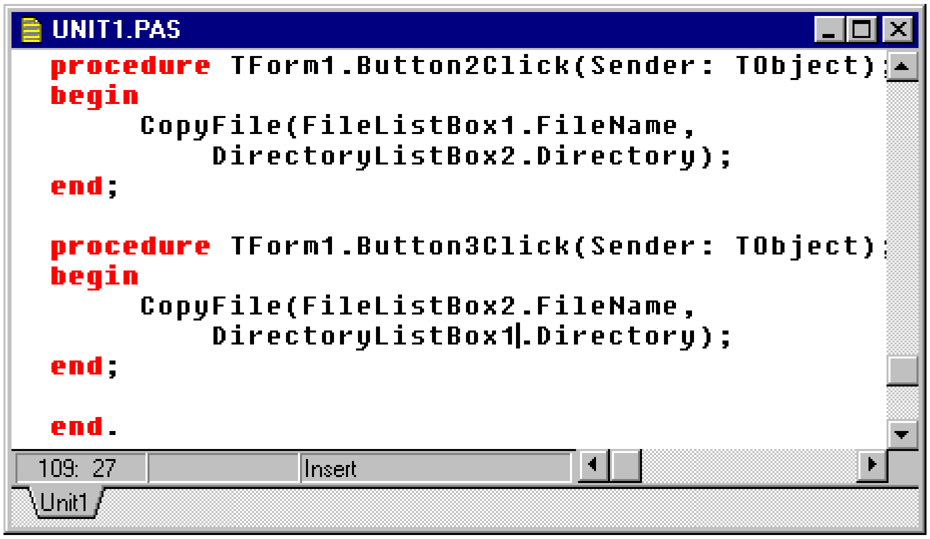

```
  procedure TForm1.Button2Click(Sender: TObject);
  begin
       CopyFile(FileListBox1.FileName,
           DirectoryListBox2.Directory);
  end;

  procedure TForm1.Button3Click(Sender: TObject);
  begin
       CopyFile(FileListBox2.FileName,
           DirectoryListBox1.Directory);
  end;

  end.
```

Figure 23

Since the copy operation is the same for both buttons, but the strings used to decide which to copy where are different, I've decided to use a simple helper function to do the real copying operation. CopyFile takes two string parameters as input, the file to copy and the directory to copy it into. Scroll upwards in the code edit window until you get to the section of code for private declarations. Add the function forward declaration shown in Figure 24.

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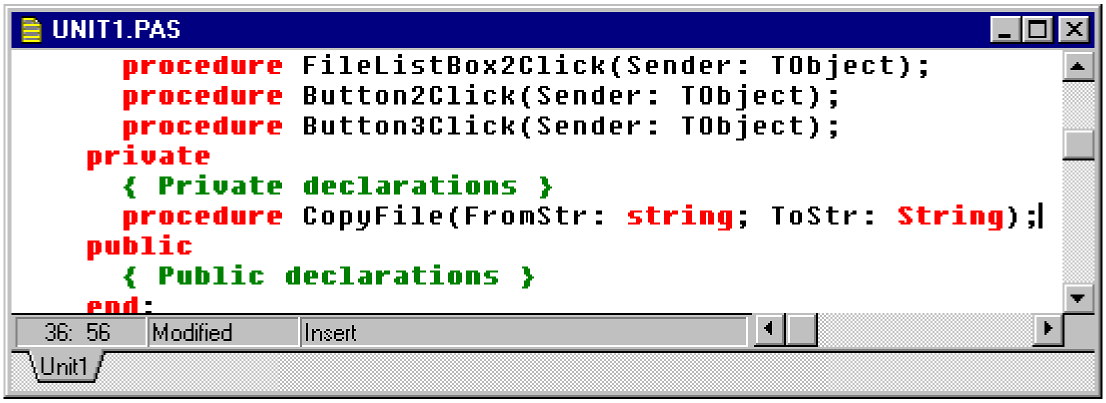

```
    procedure FileListBox2Click(Sender: TObject);
    procedure Button2Click(Sender: TObject);
    procedure Button3Click(Sender: TObject);
  private
    { Private declarations }
    procedure CopyFile(FromStr: string; ToStr: String);
  public
    { Public declarations }
  end;
```

Figure 24

Now you have to add the code to actually do the copying. Now is where we do something sneaky. Object Pascal doesn't have a function that copies a file from one place to another, and neither does the Windows API, strictly speaking. However, there is an obscure function seldom used by most people which does do file copying, and has a bonus function, it uncompresses files from normal Windows setup disks! It's called LZCopy, and you need to add LZExpand to your uses clause in the form. See Figure 25.

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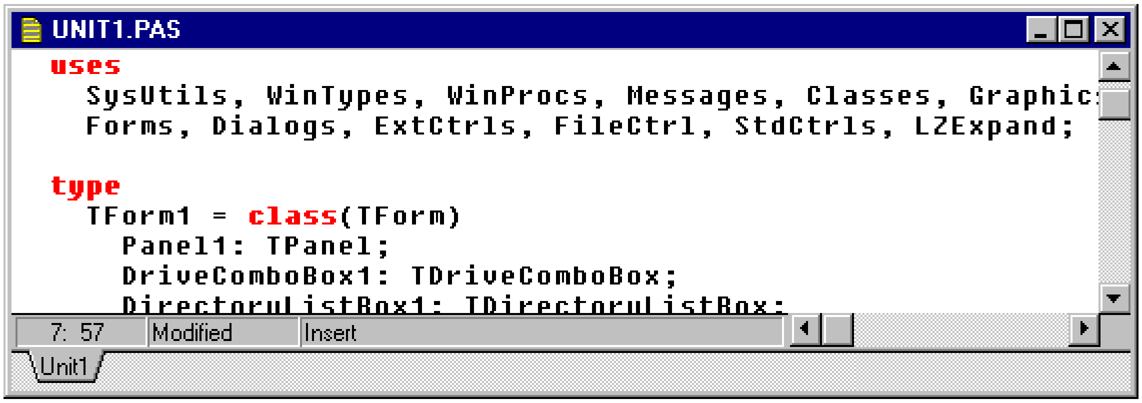

```
uses
  SysUtils, WinTypes, WinProcs, Messages, Classes, Graphic
  Forms, Dialogs, ExtCtrls, FileCtrl, StdCtrls, LZExpand;

type
  TForm1 = class(TForm)
    Panel1: TPanel;
    DriveComboBox1: TDriveComboBox;
    DirectoryListBox1: TDirectoryListBox;
```

Figure 25

Because it is a Windows API function, it can’t use Object Pascal strings directly. We’ll have to convert the strings to Windows API null terminated strings. Delphi has functions to do this. Add the procedure shown in Figure 26 to your code. The code allocates several structures and variables needed to interface with the Windows API. It then converts the name of the input file and opens it using the LZOpen API call.. Next, it builds the output file name and opens it too. Then it calls LZCopy to do the real file copying. Finally, it closes the files and exits. That’s all there is to it.

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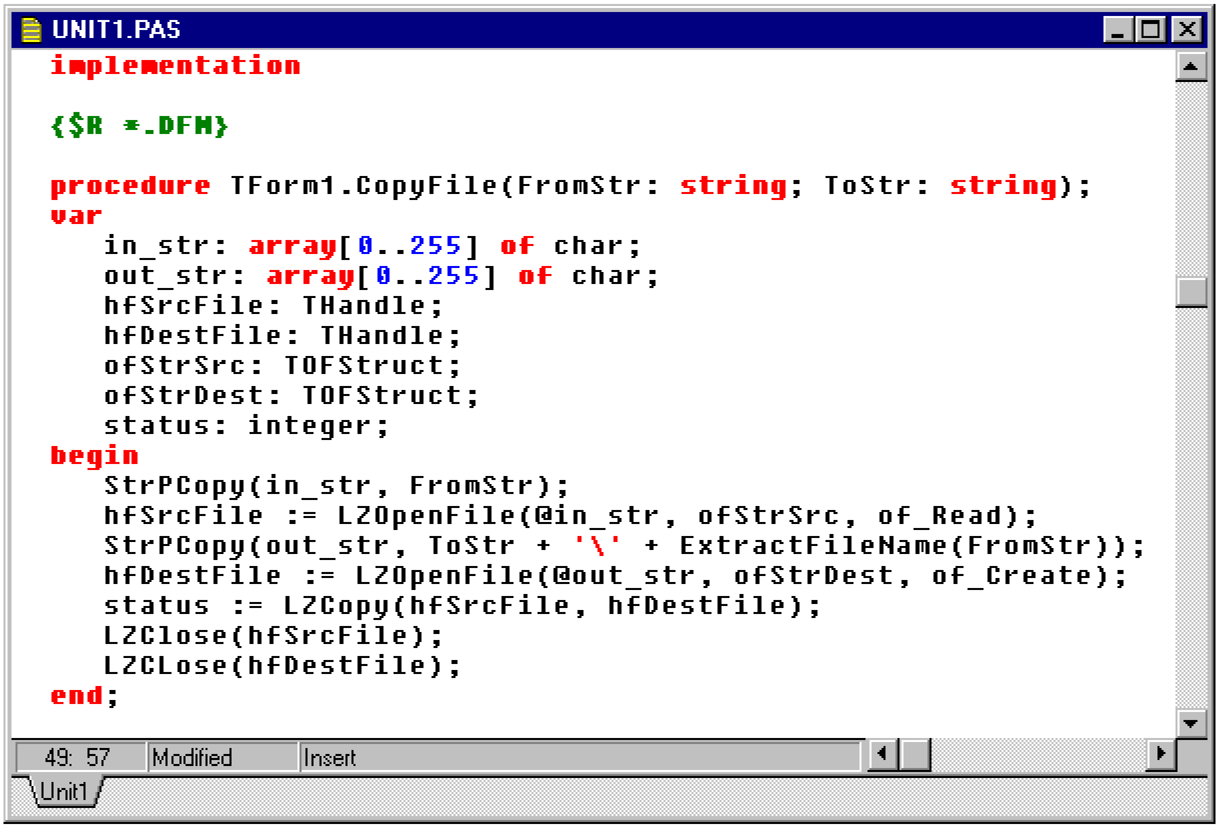

```
implementation

{$R *.DFM}

procedure TForm1.CopyFile(FromStr: string; ToStr: string);
var
   in_str: array[0..255] of char;
   out_str: array[0..255] of char;
   hfSrcFile: THandle;
   hfDestFile: THandle;
   ofStrSrc: TOFStruct;
   ofStrDest: TOFStruct;
   status: integer;
begin
   StrPCopy(in_str, FromStr);
   hfSrcFile := LZOpenFile(@in_str, ofStrSrc, of_Read);
   StrPCopy(out_str, ToStr + '\' + ExtractFileName(FromStr));
   hfDestFile := LZOpenFile(@out_str, ofStrDest, of_Create);
   status := LZCopy(hfSrcFile, hfDestFile);
   LZClose(hfSrcFile);
   LZCLose(hfDestFile);
end;
```

Figure 26

Summary

Although it took me about an hour to research, write, and debug the program, it took more than 4 hours to write this article. Most of it was spent getting the screen shots right and really describing all that I did. If I was writing this program without the need to prepare for a

tutorial, it would have taken less than an hour to have a completely working implementation. I’m not a Delphi expert by any means. I am a good Windows programmer and know what things are supposed to do. I probably spent less time designing the program than most people would because I have designed many things like this before. Delphi is extremely easy to use for people who are familiar with Visual Basic. It’s a bigger change for people who have been using Borland Pascal or any of the C++ programming tools. Even, so, with only a few hours experimentation, you can become very productive in Delphi.

For Further Development

The program we built was a small one. It and this tutorial supplements the introductory material included with Delphi. If you want to extend this program to make it into a truly useful utility, you need to make the window and controls resizable, and perhaps even include multicolumn listboxes for the file list display. You can also put in checks for copying over the same file name, renaming on conflicts, selecting multiple files, and so on. There are dozens of things that could be done to enhance it. I’ll leave most of them up to you. This small program is the beginnings of a file manager/viewer application, much like what ended up being called File Manager in Windows.

Herb Chong has many credits in his vita. It’s always a treat to carry his work because he understands what is needed to communicate and teach. His many contributions include articles in Windows Sources, The Cobb Group’s Inside Microsoft Windows and of course, WindoWatch. Herb is the WindoWatch Contributing Editor.

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<TITLE>HTML Editors</TITLE>

HyperText Markup Language is, in simple terms, the "programming language" of the World Wide Web. But don't let that reference to programming scare you away. HTML is really very simple and straightforward. All it does is "markup" an ASCII text file with "tags" which tell a Web Browser -like Mosaic or Netscape- how to display the file.

Let’s look at a quick example. Here is a very simple HTML tagged file:

```
=======================================================
<TITLE> A Simple HTML File</TITLE>
<H1>This is a Level One Heading</H1>
This is the first paragraph.
<P>And this is the second.
=======================================================
```

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The HTML tags are enclosed in brackets like this: < > and will not be displayed by a browser while the remaining text is what will show on the screen. Displayed in a browser, the above HTML text would look something like this:

===

A Simple HTML File

This is a Level One Heading

This is the first paragraph.

And this is the second.

===

More complex markups can allow the browser to display lists, definitions, forms, pictures, etc. As very specific standardized tags must be used to generate each of these elements, the casual user might be discouraged from trying to write HTML. But, with the explosive growth of the Internet and the escalating interest in the Web, increasing numbers of people want the ability to create their own Home Page - either for personal or corporate use. To ease that process, a growing number of commercial, shareware, and freeware tools have appeared. These tools relieve the user of much of the burden of learning long lists of tags and markup rules.

HTML tools fall into three broad categories. The first of these are "template tools". These packages are designed to work with a specific Windows-based word processing program. Typically, they act as an

"add-on", integrating themselves with the program, providing additional menu selections, and using many of the host program's text formatting and display capabilities. Currently, the vast majority of such tools are designed to work with Microsoft's Word 6.0 although template tools for Word 2.0, AmiPro, and WordPerfect also exist.

The second category of tools are the "stand-alone" editors. These tools are actually mini-word processors. They have basic text editing capabilities, and their menus and button bars concentrate on providing the user with a quick and easy method of "marking up" text.

The third category are the converters; these are usually mini-programs that read in a file in one format and output a file in another. While similar features are *part* of several of the Word 6 template tools, these programs are generally designed to work with files that are not in a specific word processor format. Most are based on converting from Rich Text Format or PostSript to HTML.

The primary focus of this article will be on the second category of HTML tools, the stand-alone editors. Other articles, in this and future issues of *WindoWatch*, will highlight some of the other HTML tools available.

Most of the standalone editors allow you to import -or type- a plain text document. Using the menus or buttons available in the specific program, you then highlight a given section of text and “mark” it in accordance with your menu selection. In the simple example at the beginning of this article, for example, typing “This is a Level One Heading”, highlighting it, and selecting “Heading Level 1” would

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cause the <H1> and </H1> tags to be placed on either end of the highlighted text.

Unless otherwise stated in the individual descriptions, each of these editors has the ability to insert into a text document the markup tags for all basic HTML functions as prescribed in the *current* HTML 2.0 specifications. Such tags include those marking Head, Body, Title, Paragraph, Heading (size), Lists, Links, Anchors, etc. They do not necessarily support insertion of all styles, forms, special characters, or other less commonly used elements of the 2.0 specifications; those that support these elements will be specifically identified. Similarly, those that support the as yet incomplete HTML 3.0 specifications or the special Netscape extensions to the 2.0 specs will also be identified below.

Sources of information about or copies of each of the editors described are included in URL (Uniform Resource Locator) format, in brackets, for use in checking out any programs that appeal to you.

HTMLed 1.2e

This comprehensive $39 shareware program by Peter B. Crawshaw is available from [ftp://pringle.mta.ca/pub/HTMLed/]. The author has provided several means of entering just about every HTML tag used under the 2.0 specification with one notable exception - forms. Besides comprehensive menus, the program has buttons for the most common markup tags and has the ability to utilize multiple “floating button bars” that can overlay the document being edited. One of the unique features of this editor is its ability to load and save files in either DOS or UNIX format, the latter saving one very important step in creating a document that must reside on a UNIX-based system. Creation and

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use of a template for standardizing HTML documents is also supported. Other menu selections include Elements, Lists, Links, Styles, and Entities. This latter menu offers the unique capability of formatting entry of not just common characters, but allows the user to input any ASCII character by value, supports the extended character set of foreign language characters, and even handles various accent markings such as Umlaut and cedilla. Other menu selections include the capability to define the displayed fonts (for editing purposes only), create a custom floating toolbar - on which one can include some tags not otherwise included in the program, and conversion of the MOSAIC.INI file into an HTML document.

The program does no error checking of its own, but does allow linking to a user-selected Browser. This allows you to quickly see the effect of any markup and correct it if necessary.

The unregistered shareware version is fully functional, but includes no HELP file. Its weaknesses are primarily in its lack of direct support of the form function of HTML 2.0 and both the proposed HTML 3.0 and Netscape extensions to HTML 2.0. While this limits the fancy stuff, a user with a basic knowledge of HTML would be hard pressed to find a more comprehensive stand-alone editor for basic HTML documents.

HTML Assistant 1.4

The freeware version of a commercial program, HTML Assistant is written by Howard Harawitz; information may be obtained from [http://fox.nsth.ns.ca/~harawitz/] and the program itself is available for download from [ftp://ftp.cs.dal.ca/htmlasst/]. The freeware version is limited to files no larger than 32k, a generous size. This program has a relatively limited menu, but a wide array of buttons, including all the basic functions. An optional second button bar contains quick picks for further functions. One special button is called “User Tools”. It comes defaulted to a Form tool and has the capability of adding in other user designed tools as desired. This feature allows the program to adapt to newer HTML tags which are not directly supported in the basic program.

Like most of the other programs reviewed, HTML Assistant can call up your favorite browser to “check” your markup. A nice feature of the editor is an option to “Autosave before test”; this ensures your current working text is saved in a temp file to be used whenever you call up your browser to view the effects you have created. The program also has the ability to Autoconvert both Mosaic.ini and Cello bookmark files to URL lists which may then be pasted into your HTML text. A detailed HELP file for the program eases the process of creating HTML text for new users although the program itself performs no err0r-checking.

The $99.95 commercial version adds several features to the freeware version including automatic page generation - this version was not reviewed.

A surprising weakness of the program is the lack of a pre-defined capability to insert special characters, foreign characters, and accents. Nor does the program support HTML 3.0 or Netscape enhanced functions in its basic form. The “User Tools” capability will make up for some of this, but presupposes that the user knows enough about HTML to properly build such tools. Despite several nice features, the program requires a fairly extensive knowledge of HTML to be used effectively to construct more than just basic Web pages. If you have that knowledge, however, its interface offers you a speedy and fairly powerful tool to put that knowledge to use.

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HTML Writer

Version 0.9beta4a is the most recent version of this program which may be obtained from [http://lal.cs.byu.edu/people/nosack]. The author, Kris Nosack, labels the program “donationware”; there are no time restrictions or other limitations on its usage but you are encouraged to send a donation, in an amount of your choice, to the author. The version number gives a clue that it is still “under construction”, but what has been built so far is quite comprehensive.

An extensive button bar contains all the common HTML markup functions - including a Test button to call your favorite browser to check your work and a “Strip” button which will remove all HTML tags from the page. The menu includes virtually every HTML 2.0 feature which is not directly supported by buttons, including forms. Many selections open dialog boxes that are used to construct the desired element. The program even has a unique “URL Builder” function that helps ensure the all-important syntax of this item is properly done. An extensive list of special and foreign characters complements the other features of the program.

The program contains a template feature, allowing the user to create up to four different templates for “boiler-plate” items of text. It also offers the user the ability to save files in UNIX format, should that be needed, as well as the option of an “auto-save on test”. One of the nicest features for a beginning user is a brief HTML tutorial which is included in the program’s HELP file!

While the program appears virtually all-inclusive in its support of the HTML 2.0 standard, it does not support any of the proposed HTML 3.0 or Netscape features nor does it offer the user the capability of “adding in” such support - as several other programs do. But, with the comprehensive support of the 2.0 standard and the “beta” status of the program, it is likely that such features will be forthcoming in future versions. All in all, it is a well-done program particularly for beginning-to-intermediate HTML users.

HoTMetaL 1.0+ (SoftQuad)

Another freeware version of a commercial program, HoTMetal is available from [http://www.sq.com/]. Of the editors mentioned in this article, this one is unique in providing a quasi-Browser view of the HTML source document without the necessity of running an external browser. Although the view is not truly WYSIWYG, it is a pretty realistic depiction of what a true Web Browser will present. Unfortunately, it has another distinction: its size. Unlike most of the other editors discussed here, which typically ZIP to less than 200k and consume less than ½ meg of disk space in use, HoTMetaL’s self-extracting ZIP is almost 2.2megs and, unzipped, its main executable alone is 1,870k! So any space saved by not requiring a Browser to preview/check your work is lost to this program itself. The program can also call an external browser to see *exactly* what your output will look like on the Web.

HoTMetaL is best described as a rule-based HTML editor; its default is to accept *only* those tags that are fully compliant with its standards. Unfortunately, its standards do not *seem* to fully comply with HTML 2.0 - leaving the user in the unenviable position of not knowing whether a given error is caused by “bad HTML” or just a rules interpretation by HoTMetaL. Yet the user must either create the HTML file in this program or import a previously marked up file through the rules checker to see the quasi-WYSIWYG output while editing. If the document doesn’t pass the rules checker, the user can

either import it as a text document -losing the WYSIWYG view- or allow HoTMetaL to strip the document of any markup it doesn't understand, an action that can render the document unusable if the program and the document's author don't quite see eye-to-eye!

Unlike most of the other editors discussed here, HoTMetaL has no button bar and its menus are relatively limited. The principal insertion means is the use of the Markup, Insert Element (Ctrl-I) menu selection. This brings up a window with a comprehensive scrolling list of HTML elements, including those for both forms and tables. Another menu selection, Markup, Insert Character Entity (Ctrl-E), opens a window listing virtually every symbol, foreign character, and accent possible. One click on the desired symbol causes the appropriate markup to be inserted.

The program includes a basic tutorial on HTML - written as a series of HTML documents - and instructions on how to modify the rules used by the program to allow it to accept most of the extensions to HTML 2.0 used by Netscape. This process, unfortunately, requires editing the program's INI file.

While this program has its strengths, its size, finicky rules interpretations, coupled with a fairly slow and cumbersome method of marking up text, make it one of the less desirable editors for general use.

WebWeaver 4.0a

This is a relative newcomer to this field and information on it may be obtained from its author Mark McConnell at [http://www.tufts.edu/~mmcconne/]. WebWeaver displays a fairly limited button bar across the top of the screen and a second series of

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buttons down the right side. Along the top you have buttons for Bold, Italic, and Underline, three types of lists (Bulleted, Numbered and Descriptive), Levels 1-6 of Headings, Paragraph and Horizontal Rule. The Right Buttons are for Link, Picture, Anchor, View, and Strip. What makes these few buttons different is that many of them open up large dialog boxes specific to the function selected. For example, clicking on the Descriptive List button opens a dialog box in which the entire list is constructed. Several buttons are used to mark appropriate elements and even a mini-help section is visible. When the selection is complete, the Done button inserts the entire selection into your document at the current cursor position. This allows the construction of these parts of your document in a clear and straightforward manner, as a separate element.

While the buttons are limited, they do cover the more common elements of most HTML documents. The menu selections cover most of the remaining ones. A couple of points worth noting: This is one of the few editors that includes selections for such HTML elements as <ISINDEX>, <NEXTID>, <LINK>, and <BASE>. It also has a menu selection for a variety of Netscape-specific elements such as <CENTER> and <BLINK>. It is, however, *severely* lacking in its capabilities to insert special characters or foreign language letters and accents.

Clearly this program is a “work-in-progress”. Many of the menu selections bring up a dialog box stating “This is not available in this version”. Its shareware registration price of $8 reflects this fact. While I cannot recommend the program in its current form, its innovative usage of dialog boxes marks it as one to watch in the future. The author is currently at work on a new version, which might be available when this is published.

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WebWizard 1.1 (ARTA Software)

This fascinating program is included here by default. It is, after all, a stand-alone. But unlike the other software discussed above, WebWizard is not an editor. It is, rather, an automatic HomePage generator! Modeled on the "wizards" included in much new software, WebWizard takes you through a multi-step, menued process which actually creates a basic HomePage, properly formatted and tagged. The program allows you to enter your own personal text, a picture, and links to your favorite Web sites. While you have no choice on the layout of the resulting file, the end product is a highly usable - if somewhat plain - Web HomePage. Using the WebWizard creation as a starting point, the more advanced user can edit the HTML file further to modify or expand the basic page as desired. The program might best be described as “optional shareware”; while there is no *requirement* to register, a $10 contribution to David Geller, the author, brings the user the promise of information on updates and enhancements. The program itself is available from [http://www.halcyon.com/webwizard/].

Recommendations...

As I examined each of these programs, I could not help but think how very nice it would be to have *this* feature from Program A plus *that* feature from Program B plus... But that *may* be possible. Most of these programs are under on-going development and most are available for free or a very small cost. Thus a user can easily get and try several programs to get the comprehensive features he or she desires. Better yet, most of the authors are easily reachable via Email. A message to one requesting a missing feature or suggesting a better way to handle

an existing one is far more likely to receive consider-ation than a similar message to Microsoft or IBM - particularly if it accompanies a registration <GG>!

Do you really need one of these programs to write HTML? No, you don't need one; as both the text and the markup tags are ASCII, any editor -even Notepad- will do. One can markup a text file in Notepad, save it, and launch a Browser to view the result. Then why get one (or more)? Because each of them makes it easier to ensure that you have properly entered the tag that does what you want done. You don't need to remember long lists of markup codes; the editor does that for you.

Clearly, for the total novice, David Geller's WebWizard is the place to start. It will construct a basic HTML HomePage for you without requiring any special HTML knowledge on your part. At that point one of the nicest features of HTML becomes available: you can look at what it has constructed and learn from its example. Open the file WebWizard has created in any of the other editors -or even Notepad- and you will see the tags that have been inserted to markup your text. This same capability of learning from others can be a great tool to improving your abilities with HTML. Whenever you see a Web page that intrigues you - "How did they do *that*?" - just save it with your browser and examine it with one of the editors. You may even be able to cut-and-paste the desired feature right into your own document.

The HTML editors I've reviewed are similar to limited, special-purpose versions of full-featured word processing programs such as Word Perfect and Word for Windows. Just as users develop fierce personal loyalties to one word processing program, you may find the features of one of these editors appeal to you more than any of the

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others. I've tried to point out the principal features and limitations of each, but the final judgement is yours. Fortunately, all are easily available on the Internet for your testing. Pick one -or more- and give it a try. I look forward to seeing some of your newly-constructed HomePages in my journeys through cyberspace.

Paul Kinnaly* *is a government bureaucrat from nine-to-five. The rest of the time he enjoys exploring new ways to use his computer. HTML and the Web are his latest playthings. He also beta tests Windows95, makes occasional posts to the Ilink and RIME Windows conferences, and -when the editor can catch him- assists with writing and proofreading* *WindoWatch*. *He can be reached at "paul.kinnaly@channel1.com" or via his HomePage, "http://www.channel1.com/users/paulk/".

The editor caught him this time! Paul sat in the editor's chair for our HTML feature. I shouldn't brag but I will! Well done! lbl

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TOOLS FOR THE INTERNET

CREATE YOUR OWN WEB HOMEPAGE

© 1995 by *Jerome Laulicht*

The surge of interest in having one's own Web page has spawned a rash of related software accompanied by a river of trade publication commentary . Creating a Web site has been seen as a daunting task requiring the use of arcane codes and commands which demand rigid conventions and reliance upon experts. According to its developer, you can now you can satisfy this urge more easily, working alone with WebAuthor, the "easy way to create HTML documents" so claims its creators, Streetwise Software and Quarterdeck. As an aside, Microsoft has a competitive tool in beta version called Internet Assistant. Both piggy-back upon the Windows standard --Microsoft's Word for Windows. As of this writing WebAuthor can only be used with the 16 bit edition of V. 6. Similar tools are, or are being made available for other mainline word processors like Wordperfect and AmiPro.

Start With a Simpler Tool

If you are new to *creating* homepages, I suggest starting with Web Wizard, a shareware tool for easy construction of a no frills home-page. This software is a useful introductory tutorial on the HTML language while getting your creative feet wet. Do *not* start by reading anything else lest you seek confusion. In my first reading I could have been scanning Latin. To learn first by doing, use Web Wizard until

you have mastered it well enough to produce several test pages. You do this by answering questions generated by the program to create from scratch a file containing the HTML commands. Check out the results using the browser on your own computer and then correct, revise and test it again.

One can also use Notepad to study the completed HTML files and learn by editing and inspecting the results. This will give you a notion of what is required to become adept at building Web pages, aside from considerations of design or layout. This experience also provides a sensible basis for deciding whether you *want* to purchase WebAuthor now because Web Wizard may meet your current needs.

There isn't much more to say about Web Wizard since its use is so self evident. You can include text and a graphic along with a limited number of URL links. Visitors will not be able to use your homepage as a jump-off to many sites. It is a bare bones approach which gets you started and teaches you quickly. You might decide to settle for this but many people will want more. Some Internet access services are making similar easy homepage tools available to their customers. However, if you do want to become a full Internetnaut, you will make the choice between full control using most of the HTML authoring options or a happy compromise which acts as a buffer between you and the HTML standard.

Evaluation Criteria for WebAuthor

Quarterdeck's claim of more ease with WebAuthor permits a simple evaluation framework. Quarterdeck talks of (1) "point-and-click document construction"; (2) "absolutely no HTML experience necessary"; and (3) "being able to use Word's features." I'm a fair

model for potential users since I have long used Word and Windows, have never created a Web document and have been turned off by the idea. The main lesson I learned from several HTML programs was that they were difficult and boring to learn and use with almost useless documentation . Nor am I a novice since I have enough understanding of the Internet, hypertext, URL paths, browsers, etc. to follow what's happening. Therefore, I should qualify as someone able to learn and use these tools. I planned this article with a positive but ambivalent bias because of the frequent failure of even excellent software houses to communicate well. I sweated unsuccessfully to use the beta version and decided to await an upgrade. It was only when it too did not work that I finally guessed that it was incompatible with Word's 32 bit version. There were no evident hints in error messages or anywhere else. Quarterdeck is promising a 32 bit version soon.

The Hope for HTML Tools

Quarterdeck is one of the outfits counting on the continued surge of homepage growth. It, like other developers, are betting that Web Author and the integrated suite of Internet tools will be in demand by individuals as well as organizations. One must conform to the HTML standards for presentation so the browser programs to decode your material and display it on anyone's screen. Most people probably want to focus on content and prefer a tool to handle the tedious rote tasks involved in publishing their information. The ideal is to make it at least as easy to learn to publish on the Web as it is to learn a word processor. When making the decision to finally purchase this kind of tool, demand only a minimum of incremental learning for the HTML program and rule out the need to learn a special language. Emulate the strategy of presenting choices in plain language in dialog and list boxes, with pop-up definitions. For example, if you want to create a list, you either highlight the word “list” or click the list icon. The program writes the commands as is done in Web Wizard.

Another hope is that many people who never heard of HTML would agree that if they can create documents with Word, they will easily learn how to create documents for the Internet. Those who wish to publish on the Internet, will ideally keep doing so and will look for better and fuller featured tools (upgrades). Perhaps this not very far-fetched when one realize that other developers are betting that a lot of people will want to create films with their computers. This syllogism about WebAuthor is interesting although the odds are difficult to estimate. The fact is that both WebAuthor and Microsoft’s Internet Assistant are far easier to learn than any of the five or six HTML programs found on the Internet or BBS’s in 1994. The speed of evolution of these tools is, indeed, remarkable.

The final hope, of this is the sale-closing argument, is that you will be hooked because you will be able to ignore the syntax rules and other esoteria of the HTML standard. WebAuthor formats your creations into HTML documents semi-automatically. Its rather like saying that more computer users would become at least amateur programmers if only they did not have to learn so much programming esoteria.

Learning WebAuthor: The Tutorial

To start learning how to use this program, put off reading the manual and the on-line help. The tutorial is intended to give you the “flavor of a hypertext document web by having you create links between files on your own computer or network.” Plan to go through the tutorial two

or three times. Since there are many ways to make errors, go through the entire sequence to get an overview rather than struggling to get everything right immediately. You can then learn the procedures by starting to catch and correct your errors. Your first few efforts will very likely fail when you check them with the browser. The process is not as easy as the hopes and the hype, but this should be no surprise. Marketing people, programmers and tutorial writers have quite different goals and problems.

By the second or third try you should be editing to achieve perfection. Think of this process as writing several drafts of a paper. It is difficult, in fact, to go very far after making an error without being made aware of it. Technically the tutorial is well put together and fairly easy to follow and use.

Although the tutorial is good overall, its no surprise that it can get a bit goofy at times and it does have problems. The very first instruction is an attention-catching example. "Open Word and select new in the file menu". Of course it is difficult to imagine how anyone could do the WebAuthor tutorial without already having done these things. Sometimes one gets the impression that no-one seriously critiques training materials before they are made part of a package. At other times the instructions are so cumbersome that they imply a procedure is more difficult than it actually is. For example, six steps are listed to teach you how to have large icons in the toolbar. It's as if someone was providing a recipe for a person who has never cooked and it's unclear why this even makes any difference. The instructions could easily be listed as two steps. The real joker is that you only learn to determine whether the "HTML large" box is checked as it should be, and, if not, to make it so. One look in the right place and then a single click. Really helpful and necessary! There are some other less glaring

examples of this clumsy approach but fortunately these two examples are not typical of many similar witticisms.

Two hints which are not clearly stressed will make the tutorial an easier and more valuable experience ...simpler to use and more pleasant to learn!

Open what is called the *style window* when you want to create an HTML document. Else it is very easy to make silly errors which will further bedevil you by leading to more errors. This can be tedious to correct--take it from someone who did not follow this hint. Failure to do this in a consistent way throws away some important practical advantages of the program. It is a way to avoid basic structural errors in working directly with HTML codes. Look up ‘style’ in the on-line help before you start the tutorial.

Use the *“Help on top option”* to avoid being driven slightly batty. It is easy to miss this option when you first bring up the tutorial window because it is not standard in Windows programs. This choice is in the options menu. The tutorial may be quite annoying to use without it invoked as you switch focus back and forth between the instructions and the Edit window where you do the work. Also make the Edit window smaller than the entire screen or the help window will not reliably stay on top.

This minor but near-essential feature of an on-line tutorial, does *not* work nearly as reliably as you would like to expect. The help window too often ends up disappearing to the taskbar when using Win 95, or when you click a menu or change focus between windows. As you go through a string of directions showing buttons to choose in dialog

boxes, and switching focus frequently, this defect is distracting and makes problem solving harder.

Wanted. An inventive programmer who can make this technique work well and make it easy to incorporate in any program help file. In their spare time, they could also try to devise methods other than large graphics files to improve on-line tutorials.

Also Wanted. Some discussion of whether there is some need for a consortium of developers to encourage and support efforts to standardize help tools, the results being made available to all comers.

After completing the first five steps in the tutorial, you might begin to think that you have a program primarily intended for handling headings, to link graphics to your page and your page to other sites. When you reach that point it all becomes very easy because you are typing words and making rather simple choices. The only obvious difference from working with Winword is that you are using the WebAuthor mode and the toolbar looks quite different. When you finally see your copy converted to look like a Web page, the sun breaks through the clouds and all is fairly obvious. Indeed, the HTML language is primarily about being able to publish on the Internet with a cross platform focus, that is, readable from a large variety of computers using different browsers and having different kinds of monitors.

The tutorial does get trickier but it does indeed make the task look easier. However, the tutorial omits many of the more difficult points and makes little effort to help you understand. This is something you will have to get elsewhere than from the program’s manual and the on-line help.

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The software does include capabilities for advanced users who wish to use and understand the more difficult and esoteric elements and to add important features to their HTML documents. It helps create the links easily and correctly to all the components of your site as well as to other sites by checking your accuracy and providing feedback. You can add new jumps and links readily, edit the text files and get quick feedback while trying out different modes of presentation.

A new user does have to be careful when learning how to take advantage of the feature to switch a document back and forth between HTML and Word. This provides the ability to carry out different functions in each while exploiting the strengths of the combined tools simultaneously. However, the penalty is greater complexity! Again we see that this tool is not for the faint-hearted but this is still true for many tools of the Internet.

No sensible argument can be made that WebAuthor is real easy to use; only that it is easier to use than many other programs. It should not surprise anyone who has looked with care at many Web sites to hear that WebAuthor demands meticulous care and precision to achieve accuracy and some measure of elegance and quality. There is very little or no tolerance for error and the program does not hesitate to confront you with messages stating your errors. A simple example: what is called the style *must* be correctly labeled for each line or paragraph or you have only a mess, and this is just the start. Even hitting the enter key at the wrong time can put the wrong tag or code on a line or a paragraph. This is not meant to discourage you but only to caution you to see beyond the marketing noise. WebAuthor falls within the tradition of complex word processors and sophist-icated spreadsheet programs, to take but two examples. Were they ever easy

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to learn unless of course, you restricted your usage to letters and analyses of your weekly allowance when you were a teenager.

Web Wizard, V1.1 Shareware. Registration=$10
Arta Software, David Geller
davidg@halycon.com or Compuserve 72667.1312
http//www.halycon.com/webwizard

Web Author for Word for Windows, V1.0 $100
Quarterdeck and Streetwise Software

Jerry Laulicht* *is early retired from the University of Pittsburgh. He keeps his teaching skills tuned by training local people to use computers.

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More HTML tools:

HoTMetaL Pro 2.0 - Etc: An Update

© 1995 *Phil Leonard*

A few comments on the brand new release of SoftQuad's HoTMetaL Pro 2.0 (http://www.sq.com) for publishing HTML documents on the Web. My original copy of HoTMetal Pro 1.0 with its companion CD, was bundled in a book called HTML Publishing on the Internet by Brent Heslop and Larry Budnick for $49. HoTMetaL Pro 1.0 was priced at $199 and 2.0 is the same price, however, quite reduced in price as an upgrade for $59.

My original impression was that 1.0 was hard to use. It is a *rules* based Word Processor. You make a mistake and HoTMetaL barfs. It *is* intimidating. The authors of this book loved it, so I persisted. In truth, I came to love the program as well even though it was not quite polished.

With HotMetaL Pro 2.0, not only is the program quicker and more user friendly, it now automatically chooses what it thinks would be acceptable when you make an error. So instead of being confronted with "YOU CAN'T DO THAT STUPID!!!", it now elegantly inserts tags where you probably meant to put them and then asks you if this is what you meant.

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I've only used Pro 2.0 briefly, but as one quite familiar with HTML Writer and I have to wonder aloud at the blatant similarity between them. There are now three break-away button bars. Almost every feature is now supported with hot-keys AND buttons. It will open up unlimited browsers for previews. It will open and convert almost any word processor format. And it will PUBLISH, that is, find and replace all of your file:///c:/gifs with http:///yourname/gifs, instantly opening and previewing your document in Netscape. I am quite impressed. It supports HTML 2.0, HTML 3.0, and Netscape. It does an SGML document check and tells you each instance where you break the HTML 2.0 rules,and with what rule, whether it is with Netscape or HTML 3.0.

Hot Dog!

In the midst of looking at HoTMetaL Pro 2.0 another contender grabbed my attention. Hot Dog touted by many, looks as good as everyone says. It actually resembles HoTMetaL Pro 2.0 in many ways. Even so, I didn’t spend much time with Hot Dog because it became immediately apparent, at least from my point of view, that three important elements are missing.

First and most important, Hot Dog does not appear to show in-line images. Anyone who has coded HTML knows that long and complicated forms can get very confusing. I find it helps immensely when I can see all of the images and what HREFs are attached. Next, the HREFS in HoTMetaL Pro are colored and labeled with hot keys. They really stand out and separate themselves from the normal text. Just much easier to sort out. And finally, HoTMetaL pro converts all tags into small graphical images, like pentagons. The tags are much easier to see, and hide all of the tag code unless you press a hot key or icon.

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Hot Dog seems to have tons of options. I did not go through them all. I think it is much more user configurable than HoTMetaL. Whether it is familiarity with the product or just a good fit I find HoTMetaL's selection of options is exactly how I want it to work. When comparing the two programs I have to lean towards HoTMetal probably because I just prefer it.

Phil Leonard is a veteran Internet surfer who has developed a keen interest in HTML authoring tools for the Internet. This is his first contribution to WindoWatch...we hope not his last! He can be reached at pleonard@cybercom.net

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Microsoft Does HTML

Creating HTML with Internet Assistant

© 1995 by Jim Plumb

If you use MS Word 6 and you want to create HTML documents you might be interested in picking up a copy of Internet Assistant, a free add-on template for Word 6.0a available from Microsoft's Web server at http://www.microsoft.com/msword/ia.

I've used this product from time to time since it was in beta test and I've found it a handy tool for creating HTML docs from scratch and also for converting other Word documents to the HTML format. And of course you can't beat the price. However, you do need some power to run Internet Assistant. Microsoft recommends a 386 with 8 mgs of ram. I soon discovered, you will need those 8 mgs.

Internet Assistant (IA) comes as a self-extracting archive, which should be extracted into a temporary directory. Use the File/Run menu to run setup which puts IA in a sub-directory of Winword. It also asks if you want to install the internet browser capability. You need to have an internet connection to run the IA browser. IA is a Winword template, which in this case means a set of styles, macros, dialogs, buttons, and must be run under winword.

There are two modes of running IA, Edit and Browse Mode, which can be reached from the File menu or by a button with a pair of eye-glasses for Browse and a pencil for Edit. Browse mode lets you cruise the net or cruise your interoffice network, whichever way you hyper-

links direct you. IA comes with an very adequate help file which will be all you'll need to get up and running. I did find that one of the URL's listed in one of Help's FAQs was out of date and directed me to another one.

Browse is where your 8 mgs of ram come in handy. My home computer has 4 mgs and it took a long time for the browser to download HTML files and display them to the screen. I'll stick with Netscape thanks. Edit mode is where you create HTML documents. You can create the doc as you would in Word. HTML attributes can be applied to your document as you would apply styles. This version of IA only supports HTML 2 and didn't see any mention of support for HTML 3 on the Internet Assistant Web page.

When you finish your document save it as HTML and voila you are a Web publisher. What I like about this is that while you are editing the HTML file you can switch to browse mode and check the links to see if they actually go anywhere. If you are browsing you can push a button to copy the present URL to the clipboard, switch back to edit mode and paste it in to your document.

One thing you need to watch out for when browsing, especially if you are low on ram, is that IA opens each hyperlinked document in its own window and keeps them on the desktop They can build up fast and use up your free resources in quite a hurry.

IA can convert many kinds of documents to HTML, basically anything that can be opened by or pasted into Winword can be saved as an HTML document. It's my opinion that this one of its strong points. However you are creating your HTML document, you now have a good head start on your work. If you want to try this out, make sure

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your MS Word is 6.0a or greater. If it is 6.0, you can download the upgrade from the IA Web page.

***Jim Plumb** is the **WindoWatch** homepage editor and our resident Acrobat expert. He can be reached at jplumb.user1.channel1.com*

Bellying up to the Web for Fun and Profit

© 1995 by Lois B. Laulicht

Anyone who frequents the business pages of the New York Times or reads the Wall Street Journal is acutely aware of the high level of business interest generated by the “Electronic Super Highway”. News stories of exploratory agreements, emerging partnerships, recent Congressional telephone legislation, and Administration involvement have focused full media attention upon the spectacular growth of the Internet. The locus of this activity is the World Wide Web....the graphical point of engagement.

For whatever it’s worth, both new and experienced Internet users, are scurrying about trying to figure a way to make a buck out of the Web. The promise of large numbers of ordinary people owning computers is becoming a fact of life. Most of these boxes are now sold with internal modems already setup. The most inexperienced computer users now have a *leg up* to bop around the World Wide Web first time out. Should they have the good fortune of finding a hardware vendor working with an Internet provider who packages pre-configured browser software, it is a win-win for everyone and an old business gets a new twist.

Once a user accesses the Web, they become a potential customer for anything sold in the real world of credit cards, automobile show-rooms, fine art, and mail order catalogues. It is the increasing volume of this activity which becomes the fodder to create and do business. In spite of the public promise of riches and glory there continues to

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remain a huge leap from enthusiastic expectation to that of real world bank deposits.

The Reality of the World Wide Web

It has been said by some that “*the Web is a cornucopia of information and an encyclopedia of places to go”. The fact of the matter *is* that this very interesting place called the World Wide Web with its scads of information on a wide range of topics is almost more than what most people can absorb and/or utilize. As a result, the search for and compilation of data spread around so many different sites has created a rash of new browsers, search tools, and data base software, to name just a few categories. The plethora of homepages represent an expanding center of speculation of what and how one can market goods and services. We can read these in English or French, etc., but the Internet language of choice is originally written with HTML, the Hypertext Markup Language.

After one gets into the thick of Web activity it’s almost impossible to avoid the queries for information, yells for help, and words of advice on how to create your very own homepage. The best advice I ever got on the subject was from my Sysop, Brian Miller of Channel One, about a year ago. He told me to learn to use HTML...yesterday!

I frankly stalled as would any sensible person with too much to do, until I no longer had a choice. If I wanted to be a part of the new wave of on-line publishing, learning this language is a necessity. Not that HTML is hard. It isn’t. Not that we publish an entire issue of WindoWatch using HTML...we don’t. However, if you want to have a presence on the Web and want to diddle and experiment with your own homepage, nothing beats a hands-on approach. For the moment

at least, HTML is the language of the homepage and is the very guts of the Web. All of which could change tomorrow when a better mousetrap is written and released.

A Minimalist Approach to HTML

Given that I have no need or desire to become an HTML expert, were I to start all over, I would tackle the vagaries of HTML quite differently. I do have to edit copy and recommend changes and additions to those who have primary HTML responsibility. I care very much, not only about the voice we present but also about the public "clothes" we wear. Mine is not the role of a technician but rather one of a nit picker.

My revised game plan would focus upon careful perusal of many samples of working HTML documents that I liked. I would examine them using a familiar tool, my trusty DOS ASCII editor, to get a feel for the language. Using Netscape or Mosaic one can view the original document and then experiment with the HTML tags in ASCII. Changing the copy and then looking at those changes using a browser gives one immediate feedback along with the freedom to experiment. By keeping the edited and revised copy within the confines of a single working subdirectory, one can create the feel of really being on-line. With practice and experimentation, one develops sufficient skill to do the rudimentary tasks as well as greater proficiency with the tools.

Some tips. . .

Graphics are gorgeous and allow one to do very creative things on a homepage. Nonetheless, GIFs take time to bring up and view in a

browser. On-line time costs your potential audience money. A 14400 modem is quite slow. Once surfers learn to keep track of costly on-line time it becomes a short step to upgrade to the faster 28800. The modem upgrade combined with a 32 bit operating system like Windows NT or Windows95 along with the appropriate amount of on board cache is the difference between snowplowing down a hill and good, tight parallel skiing.

Keep the material on your page fresh. Create a schedule to replace material that has been on your homepage too long. I don't spend much time on sites with teeny notices saying "Last Reconstruction --May 10, 104 BC"(before computers). We try to change content at least every two weeks. The operative word here is try. Would you bother to return to a page with an old update sign and too often read information?

Try to find out who your visitors are. If you can, convince them to fill out a brief form to help you understand the constraints of their hardware/software, their level of interest and knowledge of your homepage offerings, and where they heard about you. What was it that brought them to your homepage? Would they visit your home-page again? Do you offer free software or special prices on goods and service? While freebies and gimmicks are pretty transparent to savvy users, good fun can be a service to be enjoyed by all. My favorite gimmicky fantasy is a WEB tutorial, in the form of a WindoWatch scavenger hunt. One way to find out if your readers would participate is to ask them and then use the forms feature for feedback and actual signup for the online event.

Organize your page for ready access to information using links to other pages or other places and be prepared to check out those links often for continued quality. Use variations of font size, texture and

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color to help keep the page visually interesting . Background textures, while interesting, also slow down the time to read files.

While visual appeal is important , we try to emphasize content, not fluff.

Hits and Misses

There’s a lot of chatter about the numbers of visitors who stop by a given site. One of the functions where computers excel is in the area of counting. When a computer on a BBS counts the number of times a particular file is downloaded it is recorded within a piece of software charged to count each of the downloads. There can also be automatic counters installed on a Web site to count the number of visitors. Unfortunately the numbers are not always accurate and can be deceptive in terms of what they represent.

Here is an example of why most people should be very wary of raw homepage statistics. There are three individuals working the WindoWatch homepage. I log on at least once a day and sometimes more often than that. I assume the others are counted as often. Our counter was tied to users with graphical browsers so it didn’t register people coming on in text mode. Therefore, to be honest, I must reduce the final monthly count by 3 X 30 or 100 visits per month and increase it by an unknown number of people using text browsers. WindoWatch, like other fledgling organizations, would get more juice if we inflated that number. Obviously, many of the ozone layer numbers touted about are highly suspect. Notwithstanding the pros and cons, a count is a useful estimate, if reasonably interpreted and used primarily to track increases and decreases of visitors over a given period of time.

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Security

The second biggest issue on the Internet is that of assuring secure business transactions. Given the horror stories of hacker intrusion into allegedly secure systems, it is not surprising that no one is willing to get too heavily involved in untested credit card transactions. I certainly wouldn’t want to take the responsibility for abuse of a customers credit card account and can understand the worries and constraints of international commerce where patents and inventions are at stake.

One of the obvious drawbacks of HTML is its ease of replication. One of the limitations of existing browsers is the simplicity of grabbing anyone’s work and calling it your own. And finally, the notion of giving away ones creativity to the very open forum of the Internet is not exactly conducive to business to do much more than use the Web as an extension to their marketing department.

It will be interesting to reassess my own conclusions in this area six months from now. I am also quite sure that the industry is creative enough to turn up a surprise or two. But it is business who has charged ahead in some of the most important areas we’ve discussed. The recently released Server version of Netscape will go a long way in providing a secure environment for clients. Mastercard and Visa are preparing to make available secure credit card options as early as September of 1995. Agreements have been made between Adobe and Netscape relating to compatibility issues of the Portable Document Format of Adobe’s Acrobat (their established authoring tool) and the Netscape browser. Costs for an Internet connection continue to drop and become more competitive daily.

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Whatever else happens in this area, more and more folks will be sharing the rapidly narrowing bandwidth of the Internet. Many will also come to share my conclusions and will learn HTML because they must. Hopefully, they will be very aware that the WEB is rapidly changing place. The challenge to users is to keep up with emerging trends which quite often lead to the development of new tools.

Although HTML is *now* it is not necessarily tomorrow. We must all remain flexible and ready to give up that old model T? Do you know anyone still using Edlin?

Lois Laulicht is the Editor and Publisher of WindoWatch. She lives with her husband and their German Shepherds in the West Virginia hills.

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Looking for Information....

Search and Ye Shall Find.....Maybe!

©1995 by *Peter Neuendorffer*

What it means to search for information on computers and the Internet can be illustrated by using real-life comparisons. Much of this search article is about common sense that is rooted in experience and has been incorporated into computer programming theory and practice.

A central problem of the information explosion, new or old, is how to find specific information. I have a consultant friend who had to uninstall a program that he couldn't find because the user had put every single file into a single large directory on the hard disk. Liken this to having a big warehouse with no shelves. As files proliferate on computers, file names and extensions don't give a clue as to what's inside an individual file. So what that Windows95 has come up with the long file name? Just another elusive title and not much else!

There are a number of important reference points for a search and for search tools which include knowing what you are looking for, which ballpark it probably is in, and how much time and work space you have. How much *stuff* you will have to search - the size of the search space -, and what you know about how it is organized are all relevant. That's a lot to keep track of and to understand for most people. The noted information scientist Norbert Wiener is quoted as asking "Am I walking to lunch or coming from lunch? I don't know!" Not only did he not know what he was looking for, he probably didn’t even know where he was!

Finding one’s sense of direction when undertaking a search can be crucial. The other day I mislaid my house keys. I knew what I was looking for. Surely they were in one of the correct obvious places. I ransacked the apartment, to no avail. This called for logic. Could I reconstruct exactly what I did when I last came in? It came to me that as I was unloading my bundle of bathroom sundries the telephone rang. Sure enough, my keys were behind the toilet paper in the broom closet. A likely place. I had the What, and the time and space, but not the Where, nor had I accounted for human error.

Indexing of information is common from your local phone tickler to the largest mainframes. One technique, hashing, involves storing information not randomly one item after another, but in mathematical order that makes retrieval faster.

Searching keywords on the Internet can be a pain, because you don’t have the What. If you do, you don't have both the time and space, as a field of 200000 entries pops up for the word *computer*. How do you find what you’re looking for if the search system doesn't understand what you want? Even in these crude searches, Internet searches are indexed. The search engine knows something about the data it is searching and how it is organized - in addition to just how to search it. A simple tool in computer science for searching lists is taken from how we search for a name in a paper phone book, the Binary Search.

The Binary Search must have an alphabetized list to succeed so it *knows* that the list is in alphabetical order.   It uses this logic: When

we look for *Jones* in the phone book, we unconsciously turn to the middle -actually to the left of middle- of the book. If we come up with *Friendly,* we unconsciously turn halfway further in the book. And back and forth by large chunks till we get the *Jones* page. This search is a lot faster than starting at the first name on page one and then proceeding. We are cutting the book in powers of 2.

This algorithm has an *O* of less than one. Many problems in computer science are *non-complete* since it would take longer to solve them than there is time in the universe. For example, because it is so hard to find very large prime numbers, one company was able to patent two of them. Having devised a search method, they own the rights to the numbers. Finding out the exact location of Earth relative to Mars in 1000 years is the *three body problem* that is deemed not solubable unless we wait 1000 years.

Fortunately, we are not usually looking for such weighty information, but rather, something more like our Aunt Martha's phone number in our personal information manager. With such a small field to search on our computer, it is fast. We know the where, the what, have the time and work space, and the software knows a lot about how the PIM warehouse is organized.

However, when we get out into the bigger world, it is not simply who owns the information but who is able to find it that is the important key. Just talking to the IRS or Social Security can be a trial as you wait endlessly through a hold pattern with recorded messages like *Please do not hang up, or your call will be further delayed. or Don't give up, we'll be with you momentarily.* Maybe!

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If we attempt to index large amounts of information, that's OK, but we will have tobe prepared to update the index constantly. When I worked for a department store, we were constantly counting inventory as shipments came and went and merchandise was sold. The stock numbers were set up differently for every type of item and vendor. Certainly the POS system is a vast improvement, indexing the lists. If only discount coupons didn't bog down the supermarket checkout line, violating all of my time, space, and know what you are looking for rules.

People question the computer's accuracy , discounting the answer, and this is another story. ***That can't be right, check again*****. or** ***I hate computers, they're always wrong*****. If people get their information and then misread it or don't use it or reject it, what is the use of it all? The famous case in point in science is the cold fusion Stanford experiment, which astounded scientists because it would mean the ancient Alchemists were right about turning lead to gold. Unfortunately, the certainty of their results were deemed to be in the** ***noise zone*****, or not much better than fiction.**

I have a friend who works as an order picker in a warehouse. He punches stock changes into a computer when he physically moves items around. But what if the store's information gets out of kilter with reality? Sales go up, inventory goes down some on paper, but actually there is much less in the warehouse than anyone realizes. Although the information was wrong, it was assumed to be right. The cozy computer system then was consistent but only with itself, not with the real stockroom! it was supposed to reflect That essential match was going to pot. Somewhat like President Hoover's famous remark shortly before the Depression "Prosperity is just around the corner."

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According to Newsweek magazine, a state-of-the-art automated warehouse for running shoes ground to a halt. The workers found that they could not move anything into or out of the facility, even though conveyer belts kept spewing out merchandise for non-existent orders. We live in the real world, not inside a computer. Information not matching reality is garbage, at best a theory or *modelling*.

That method of organization was described in Lewis Carroll's Alice in Wonderland. At the tea party, the Mad Hatter ordered everyone to move down the table when the dishes were dirty. Garbage in, garbage out. But still, if you are not playing with a full deck, you can pose a search question which is perfectly reasonable and still get garbage for an answer. Its like dealing with one of those Bostonians who are noted for firmly giving patently wrong street directions to passers-by who have lost their way.

What if the search system doesn't have the foggiest idea of where the item that you're looking for is located in your search space ? It knows nothing about it's warehouse except that it contains files which are in text format. You are looking for the word *computer* on your hard drive. It has an equal probability of being in the first line of the first file, or the last line of the last file. You could index the drive, but that takes a lot of time, and some space.

Without an index to use, you start out with a zero probability of finding a match, but, as you move ahead, you are more sure of finding your answer. By the end, you have a 100% probability if it's there at all. If you skip to the middle to start, this is just like rearranging your warehouse and will still take the same time--actually longer-since you have to rearrange the warehouse.

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The fruitless search takes the longest. If you asked a sales person to look for an item in the color and size you want, he may come back 15 minutes later to report that "We don't have it." It takes so long precisely because they do not have it. It's either there or it isn't but he had to search the entire stockroom to find the answer. One assumes that most stockrooms are well-organized and is surprised when this is not the case.

Let’s get back to searching your PC for text and presume you do not have an index. You are starting from scratch. Your work space and time are constant. You only have till three o'clock, and the hard drive only has so much free disk and memory space to work with. You can narrow down the size of the search space by looking only for DOC files and ignoring categories of files like programs. Or perhaps start the search in a subdirectory that is likely to have your information, like \DOC. The file names do tell you something about how the data is organized, but they are like labels on packages with the contents imprecise. Somewhat informative, but not detailed as that would take up much more space. Unfortunately, searching for a lower case *a* is different than searching for a upper case *A* because words like *alice* and *ALICE* are stored differently on the computer.

Another way you can narrow down the search is picking what you are looking for carefully. *Computer* is not going to be very descriptive on a computer. In the middle of a lake, looking for a *computer* would be very helpful because it is a rarer item then on land. A rarer item on the computer might be *EISA motherboard.* We can also search for more than one thing or field at once, using Boolean Logic.

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Boolean logic involves using AND OR NOT like arithmetic. A Boolean expression is either true or false. In other words, we search for ALICE AND COMPUTER. Both words must be found near each other in our files to evaluate as true. If Search_it (ALICE and COMPUTER) then "we have a match". It turns out that you can string together combinations of the operators AND OR NOT. Of course on the computer, you have to have software that does this. In real life you use these conditions all the time without realizing it. "If it's lunch time and I'm hungry then I think I'll eat."

One of the fundamental aspects of computers is being able to perform different actions based on the result of a condition.

IF BEFORE LUNCH THAN EAT BREAKFAST ELSE EAT LUNCH.
Or, IF THE_COMPANY_SHOWED_A_PROFIT than PAY_STOCKHOLDERS
Else FILE_BANKRUPTCY.

Each of the actions above could be the name for a procedure, module, or program that does all the necessary processing.

A Boolean condition could be ALICE and (COMPUTER or GROCERY). This match would be a mention of the word ALICE and also one of the others, either COMPUTER or GROCERY. Structured Query Language searches utilize this type of searching; they also extract records that have common fields. But remember in our search, we know very little about how our information warehouse is organized.

It turns out, luckily, that Boolean conditions can be chopped in two,

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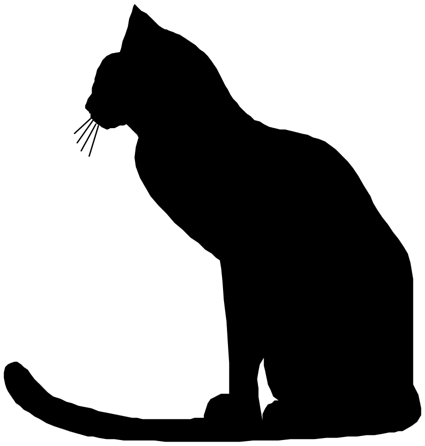
and each half treated separately. This is like cutting the cards, and then cutting them again, and can produce the same kind of speed increase as the phone book example above. If we are searching for two things at once, say ALICE and COMPUTER, as soon as we know that Alice isn't there, we don't have to check for Computer.

In searching, time and space are at a premium. You give up one for the other and must compromise. The ready availability to a great variety of knowledge bases opens up information *if* one has the ability to use search tools and learn to use those tools efficiently and with minimum cost. Although it is currently gauche to say, not all of us will live forever. It would be nice to know that we will find what we're looking for before the end!

***Peter Neundorffer* is a regular *WindoWatch* contributor. He is the creator of Alice and a DOS and Windows programmer. Peter has very recently released a text search program for Windows he calls Bool Text Searcher which can be retrieved as ABOOL11.ZIP"**

The Cat's Out of The Bag!



**The twenty pound black and
white furry Windows expert!**

Bob Miller's
Stanley Does
Windows

Dear Stanley,

I'm confused. How much memory do I really need for Windows 95?

Dear Confused,

Microsoft says that you need a 386 DX machine with 4 megs of ram (and some people have been known to use an SX). In reality, such a machine is so slow as to be unbearable. The minimum real system is a 486DX2-66 with 8 megs of ram but 16 megs is better.

Dear Stanley,

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I'm going to be upgrading to Windows 95. Will my copy of WinWord 6.0 still work?

Puzzled

Dear Puzzled,

Yes but WinWord 7.0 either as a stand alone or as part of Office 95, is *far* better. I'm using it and I love it almost as much as tuna fish.

Dear Stanley,

I am still using a CP/M machine with 64 KB of ram and I am having difficulty getting programs for it. I see all these new programs for something called Windows 96 or some such. Can I run that on my machine?

Old Timer

Dear Old (and you are),

Not unless you get the add on for CP/M users. This file is available from the international CP/M support board in Ulan Batur, Mongolia. The file is 123,421 MB in size but unlimited downloads are available to first time callers after just filling out the twelve page questionnaire -- in Mongolian, of course. The Board has two of the newest, state of the art modems. One is a 110 baud and the other a blazing 300 baud. The first 200 downloaders will receive a chance to win a fur lined

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bathtub trimmed with barbed wire and filled with 200 pounds of rancid yak butter.

This is also the support board for Turbo Edlin for Windows 95 and all 173 patch files can be obtained here. Good hunting!

Purrfectly yours,
Stanley

Bob Miller really does have a Stanley! Stanley is a very computer literate cat who has been generously providing advise to his large world of computer users. He has been recently nominated to that most sought after award The Microsoft Magnificent Mousekiller Mission. The prize is a litter box filled with the most recent IBM offering- Warp bundled and shredded with Lotus Notes!

A Product Review... System Commander

The Operating System Manager: A Challenge

© by *John M. Campbell*

The current crop of new operating systems has tempted the more adventurous among us to give the various offerings a spin. Now, it isn't too difficult to try different OSes, one or two at a time. For instance, running, DOS, Windows 3.x, Windows 95, OS/2 Warp and Linux at the same time represents a challenge over and above the obvious need for a humongous amount of hard drive space. Yet, it is difficult to evaluate several new systems unless they can be used alongside a standard reference system. Three or more OSes can co-exist on one machine, but a successful installation requires considerable planning, keeping in mind the need to easily switch back and forth among them.

All OSes depend on a small area at the beginning of the hard drive reserved for the "Master Boot Record." Among other things, this critical area holds the code needed to start the OS. Some systems, such as OS/2 Warp, Windows NT and Windows 95, have built-in features that make it possible to move back and forth between that system and DOS. But no OS that I am aware of carries the built-in capability to switch back and forth among multiple systems. Enter System Commander, from V Communications.

System Commander can manage over 100 different operating systems in primary and logical partitions, or as many as 32 different FAT

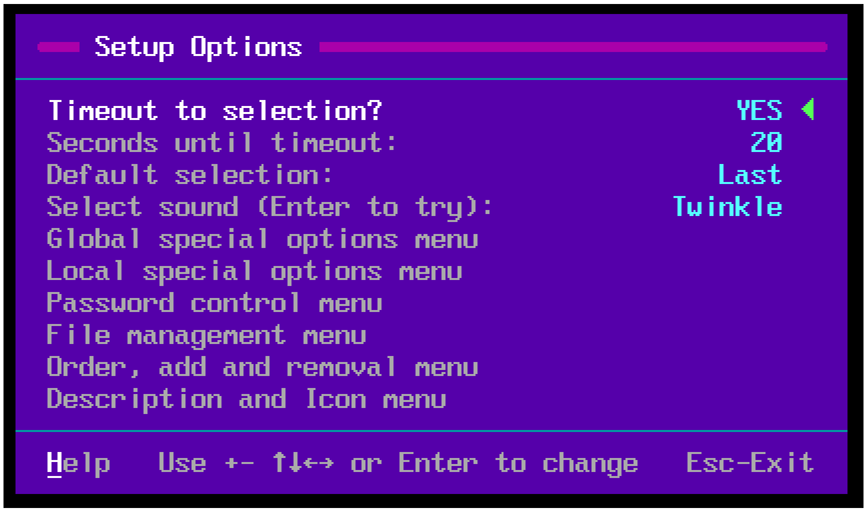
compatible OSes in a single primary DOS partition! I can't imagine anyone in their right mind attempting to run 100 OSes, but it's nice to know the capability is there!

The program offers a lot of useful features that will be summarized at the end of this article. For now, let's see how it works and go through an actual installation.

System Commander works its magic by writing its own unique boot record to initiate the boot process, then replacing it with the code for the desired OS, which is selected from the System Commander menu. The boot process then continues under the control of the selected system. If the chosen OS uses its own AUTOEXEC.BAT, CONFIG.SYS, COMMAND.COM and/or other unique files, images of these files are stored in a special directory, then swapped to the root directory of Drive C when that OS is selected. The inset is a typical SC image file directory structure that might exist after loading three OSes:

```
C:(Root)
         |
 |----MSDOS622
 |----COMMAND.COM
 |----CONFIG.SYS
 |----AUTOEXEC.BAT
             |
WIN95
 |----COMMAND.COM
 |----CONFIG.SYS
 |----AUTOEXEC.BAT
 |----MSDOS.SYS (Win95
      configuration file)
             |
WINNT
|----BOOT.INI
```

The installation itself is straightforward. The program comes on a single diskette. Typing INSTALL, then following a few on screen instructions, sets up System Commander. When the computer is

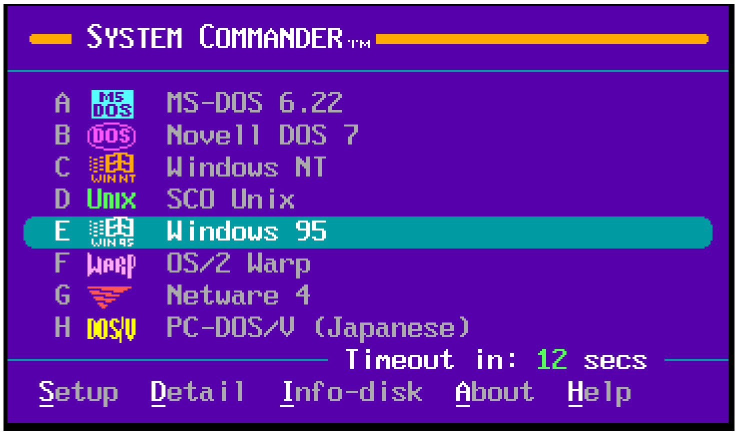


```
Setup Options

Timeout to selection?                         YES
Seconds until timeout:                         20
Default selection:                           Last
Select sound (Enter to try):               Twinkle
Global special options menu
Local special options menu
Password control menu
File management menu
Order, add and removal menu
Description and Icon menu

Help    Use +- ↑↓←→ or Enter to change    Esc-Exit
```

rebooted, the program saves system information for whatever OSes it finds, then it presents the SC menu. Every installed OS should be listed. The order, description, and other functions can be changed at this point by pressing ALT-S for a Setup menu.

If new OSes are installed after System Commander, they may not appear on the SC menu when the machine is rebooted. Or, SC itself may not appear. Windows 95, for example, overwrites the boot sector code, in this case, SC's, with its own during the install process. The developers have taken these possibilities into account. The Setup menu permits adding the new OS to SC's menu, and a separate utility, SCIN, is provided to deal with Windows 95 and the Japanese DOS/V, which also destroys SC's code in the boot sector. Running SCIN from DOS reinstalls SC's master boot record.
Now for the additional features. There are quite a few. First, there is optional boot security protection. A password can be chosen to prevent access to the hard drive(s), and make it impossible to boot from a

floppy. Passwords are internally encrypted for additional security. A second password can be used to prevent unauthorized persons from accessing SC's own setup menu, or from using certain HD partitions.



It is possible to run multiple versions of DOS, or to run DOS with various AUTOEXEC.BAT and/or CONFIG.SYS configurations. Each configuration can be a separate menu choice.

If you are so unfortunate as to be stricken with a boot sector virus, it can be easily removed by rebooting. SC will detect the changed code and ask if a new OS has been installed. Selecting *bypass* on the SC menu will cause the boot sector and the hidden system files to be over-written with the fresh, hopefully uninfected, copies that SC keeps in the image directories. Of course, all this is dependent upon using anti-virus software to detect the problem in the first place!
Another neat trick SC offers is the ability to create multiple primary partitions and make any of them bootable, something FDISK can't do. Consider Windows 95. Normally, you have the choice of install- ing it over version 3.x, so that Windows applications will migrate, or you

can install 95 into a fresh directory, in which case apps will have to be reinstalled. One choice mangles DOS making it impossible to return to the earlier Windows version; the other involves a lot of application reinstallation.

What if you had two computers? You could install Windows 3.x and your DOS and Win apps on both machines, then install Win 95 on the second machine only. With System Commander, you can, in effect, do something similar on a single computer, if you have unused disk space. First, using FDISK and SCIN, create a second bootable partition from the unused space. This becomes Partition 1. The original bootable partition is Partition 0.

Here is one example. Remember that DOS assigns Drive C to whichever partition is bootable:

```
partition 0  | DOS/Windows 3.1   |
 (drive C:)  |                   |
             |___________________|
partition 1  | DOS/Windows 3.1   |
 (drive C:)  | with Windows 95   |   _________________
             |___________________|  |                 |
partition 2  | Extended          |---|Logical DOS Data |
 (drive D:)  | partition         |   |_________________|
             |___________________|
```

In this layout, when you boot into partition 0, you can run Windows 3.1 on drive C. Drive D is on the logical partition, which contains application data. Partition 1 can either be hidden by System Commander or will appear as drive E, at your option.

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When you boot partition 1, Windows 95 will appear as drive C, and drive D is the same logical partition as appears when booting DOS/ Windows 3.1. Partition 0 can either be hidden or you can elect to have it appear as drive E in our example.

Another feature of System Commander is the ability to make either Drive A or B bootable, although this does not work with certain BIOSes, or with operating systems that bypass the BIOS.

SC has still another useful feature. Actually, this one is vital. SC detects any change in the root directory configuration files by comparing them with its saved images. Normally, if you manually change your AUTOEXEC.BAT or CONFIG.SYS files, on the next boot into the same OS, SC will overwrite the images with the new versions. This may not be what you wanted to do.

To overcome this problem, SC can be set up to prompt the user before overwriting its image copies. If the prompt is answered *no*, the boot proceeds using the files that are already in the root directory, thus sparing the images SC keeps. You can then manually restore the root directory AUTOEXEC/CONFIG to the originals. (I use a handy utility called Autocon to manage multiple configurations.) Of course, SC can be set up to use multiple versions of DOS configuration files. Each version would be a separate SC menu item, as mentioned earlier. That would seem to be the most logical way to go, if you really need multiple AUTOEXEC.BAT or CONFIG.SYS files for different applications.

This is not covered in the manual, but I have found it useful to keep a second copy of all image files in a separate directory. Several times, I inadvertently told SC to overwrite its images. And on one occasion, I

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let Win95 run an unruly DOS game in Single Application DOS Mode. The game hung up the computer, so I could not exit back to Win95. I had to reboot. Since Win95 adds a line to its AUTOEXEC.BAT to run a DOS app in SA mode, System Commander kept bringing up that changed file, and the game kept loading, and hanging my machine. That’s when I learned the wisdom of keeping a fresh copy of the proper file stashed away somewhere, so that I could replace the image in the SC directory. Yes, I had also, dumbly, allowed SC to overwrite the image file with the version that ran the game!

System Commander does sometimes misbehave. I discovered a problem when I upgraded the program, after I had installed OS/2 Warp and Windows 95. When SC's menu appeared, Win95 was listed three times! All attempts to delete the extra entries using SC's own utilities failed. A V Communications' technician was able to talk me through the process, which was not something the average user would be able to figure out on their own. It seems that Win95 adds code to the boot record of every partition. This confused SC into thinking I had multiple installations of that OS. The technician also told me how to bypass the OS/2 Boot Manager menu that had been appearing when I chose Warp from SC. So now, I don't have to see the extra menu and make the OS/2 choice there also.

I believe System Commander to be a unique and useful program for managing multiple operating systems. The manual is well written and offers a wealth of information about different OSes and hard drive partitioning. There is an extensive troubleshooting section. The installation disk even includes several typical main menu screens in PCX format, and a utility for capturing the user's actual menu.

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System Commander (current version - 2.11)
V Communications, Inc
4320 Stevens Creek Blvd., Suite 120
San Jose, CA 95129
(408) 296-4224

John Campbell, again, provides a down-to-earth, step-by-step, description of a complex installation procedure. He is employed by the State of West Virginia's Unemployment Compensation Board as it's local office manager. John is a regular contributor to WindoWatch.

Programming Notes **A *WindoWatch* feature**

Window Aspect: A Scripting Language

A Tutorial: Part Five Ghost BBS v3.20

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First.... I'm sorry that I missed writing a column last month. I was smack in the middle of finishing off GHOST BBS 3.20 for public release, and found myself in need of two additional hands, and at least twice as much time on the clock as there is normally. I tried putting Windows CLOCK.EXE on my DoubleSpaced drive, but even then, when I ran it, it still only had 24 hours in a day - but it was worth the try .

As a result, I simply ran out of time, and could not finish this column before deadline. Lois was mean and nasty about it, and laid a guilt trip on me that you wouldn't believe, but even then, I just did not have enough time to do everything. And since, through registration fees, GHOST BBS pays me, and Lois doesn't... well, you get the picture....
< Large and noisy yawn....>

In any case, GHOST BBS 3.20 is now finished, and I can get back to doing this, before Lois *really* gets nasty, so here we go....

There is an old Polish saying that my mother used to use. Since I have begun writing scripts, I have been partial to using myself. I can't remember the Polish, and thus, won't inflict *that* on you, but the English translation was something along the lines of...

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"The amazing thing is not how well the Dancing Bear dances... what is amazing is the fact that he dances at all!"

GHOST BBS, in particular, is a "Dancing Bear". To me, at times, the amazing thing about that script is not how well it does some of the things that it does, but rather, that it does them at all. (Such modesty! Some of this is due to his remarkable coding ability? The life of an editor *is* filled with temperamental writers!) A lot of what GHOST BBS can do is tied in with the use of the Windows INI file.

I know that you are all familiar with the basic INI files used by Windows for it's own configuration information, and you all know that the various applications that you run under Windows usually have their own INI file for their configuration information.

But the term *configuration information* can actually have a wide latitude in meaning. If we look at INI files as being files to store information, rather than just configuration data, where does that take us?

To store information that a script application needs, we could use a text file. Wasp has the commands necessary to do that. But to store information in the file, we have to open the file (creating it if necessary, using different commands for each case, so as not to destroy previously stored information) for writing, locate the end of the file, and then write the information we want stored using some form of identification so we can locate it when we need it.

To retrieve information, we have to open the file for a read, read a line from the file, and compare it's *indicator* to that of the information we need. If it doesn't compare, we have to read the next

line, and go through the same process again, until we find what we want. All of this, both writing and reading, takes multiple lines of code, multiple if/then statements, and time while the script tries to locate the information needed.

If, on the other hand, we use an INI format file, and note, the extension doesn't need to be INI... it can be anything, so as long as we specify the full name, and, if the file is not in the \WINDOWS directory, the full path. The procedure becomes so much simpler. Writing to an INI format file involves the single command, PROFILEWR. If the INI format file doesn't exist it is created. If it does exist, the line being written is simply added to the file.

Reading from an INI format file is equally as simple, involving a single command, PROFILERD. Using this, we can read either a string or an integer. If the *locator* for that particular line to be read doesn't exist, we are then returned a null string if reading a string, or a minus integer value, or an integer value. Otherwise, we are quickly and simply returned the value we need, within split seconds of time.

To see how this might be of use to us, let's look at the INI format files which GHOST BBS 3.20 uses. This will show some ways they can be used, and perhaps help develop ideas for you....

1) GHOST.INI - This one is the basic INI format file used by GHOST to store configuration data re: various run time parameters, file locations, etc. *BUT* this file also stores a huge variety of information for GHOST. That information can include the name and city of the last person to call, filenames and so on, to pass to the virus scanner feature, text information which become lines in a DOS batch file used to open a door, and even the information regarding how your system

was set up under PCP/Win before GHOST began running. This last makes it possible for GHOST to use it later in order to restore the system to that same state it found when it shuts down.

2) LANG#.PMT - These files, and there may be multiple ones, have the # replaced by a language number from 1 to 99. They store the various prompts which GHOST uses on the screen while it is running, utilizing each of any number of languages from 1 to 99. These files also include sections which are *translation* tables, so that GHOST can receive a prompt like *O*, as in the French *Oui* for yes, and understand that this is the equivalent in this language, of the basic prompt response *Y* for *Yes* in the default English mode.

The prompts stored in this file can contain certain pre-defined variables in the form of *@ONLEFT@* which GHOST will replace with information determined while it is running. Since it has two main sections, one for ANSI mode, and the other for non-ANSI mode, they can also contain ANSI codes to change items like the colours, bold or flashing, and so on.

3) GHOST.USR - this little critter is the basic user record file. Windows has a limit on the size of an INI format file of 64K, and storing user information in such a file can quickly go beyond that size. GHOST always checks the size of the actual user record file (see below) before writing a new user into it, and if the file is getting too large, it starts a new one. This *USR* file contains only one line per section, that being the information telling GHOST where the actual records for that user are located. That is, in which of what might be multiple user record files, is the information for a specific user stored.

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4) USER#.REC - This is the INI format file which actually contains the information for a particular user which is *pointed to* by the GHOST.USR file. The first file used by GHOST is USER1.REC. As a GHOST user record database grows, and exceeds the pre-defined *safe* limit set in GHOST, new files are created, with an incremental number in them, for GHOSt to use.

In this file is a section for each user, with the information they gave to GHOST when they first logged on and completed the new user questionnaire. Along with the user's default transfer protocol (if set), there is information defined by the sysop re: security level, access to private areas on a GHOST system, and so on.

Based upon the above, you can see that it is possible for an application to have, and use, more than one INI format file. This can be handy to keep configuration information separate from data used while the application is running and to modify what appears on screen, etc. GHOST BBS stores the different kinds of information it needs, in different INI format files, and the Wasp code simply uses the PROFILEWR and PROFILERD commands to access the correct file, as instructed.

Those two commands are simplicity themselves to use, once you understand the format of an INI type file. Basically, an INI format file stores information in various groups or sections, distinguished by a section header, shown in the file as a name enclosed in square brackets, such as [Start Up], or [Last User]. In each section are lines which are the actual information stored, in the format of info_name=data with, obviously, the text to the left of the = being the data *indicator* used to locate it, and the text or number to the right of the = being the data stored there.

The PROFILEWR command is a really remarkable little fellow, which combines the equivalent of a file open, create command, with a file open, append type of command. The format of the command is...

PROFILEWR filename section_name indicator data

1) filename can be any legitimate DOS file name. If it does not include a drive/path, the file is assumed to be in the \WINDOWS directory. If no extension is included, it is assumed to be INI. If, however, you want the file located in a particular directory, with a particular extension, then simply specify the full drive\path\filename.ext. Filename can be either a string constant specified for each PROFILEWR command (such as "f:\ghost\prompts\lang1.pmt") or a string variable containing such a filename.

2) section_name is whatever name you want for a given section. Don't get too carried away with this. Remember, the maximum size of a string variable is 255 characters, so use something reasonably descriptive for your purposes. As example, in GHOST.INI, the information GHOST uses when it starts to determine certain run time parameters is in the [Start Up] section of GHOST.INI. Again, this can be a string constant, or a string variable, whichever suits your needs in the script.

3) indicator is a string representing whatever is to the left of the = in an INI format file section line. Again, this can be whatever you want, but the same rules apply... don't make it too long, but do make it something descriptive to you as to purpose and use, etc. Remember, an INI format file is a text file, and can be read in any text editor. If you make things descriptive, it makes it easier to check for particular

settings in that INI format file, and easier for you to remember, in code, what it is you want to write.

4) data is of course, the data that you want written to the right of the = in this line. It can be a string, or an integer, and can be a constant or a variable.

As example of using this, suppose I want to have my script change the value of the line in GHOST.INI that controls whether autobaud detection is on (1) or off (0). It is on now, and we want to turn it off. In GHOST, the GHOST.INI file is pre-defined as string variable S0, for a variety of reasons we won't go into here, the command to change this entry might be

```
PROFILEWR S0 "Start Up" "autobaud" 0
```

Or it could as easily be

```
PROFILEWR S0 sec_name line_name autoval
```

..where sec_name is a string variable set to "Start Up", line_name is a string variable set to "autobaud" and autoval is an integer variable determined by a setting in a dialog box, in this example, 0.

But the power of this command goes beyond just being able to write a value into a line in a file.

If the file named doesn't exist, PROFILEWR will create it. If the section specified doesn't exist, PROFILEWR will create it. If the indicator line specified doesn't exist, PROFILEWR will create it. So, even if the file GHOST.INI does not exist, if my script issues the command above, I will end up with a file called GHOST.INI in my \ASPECT sub-directory (which is what S0 specifies), that contains the following...

```
[Start Up]
autobaud=0
```

I don't have to check for it's existence, because PROFILEWR will create it if it doesn't exist, and append to it, if it does exist. Same goes for the section names in that INI format file, and even the lines in that section.

All of this done with a single command in Wasp!

The PROFILERD command is as equally remarkable in it's own way. The format of that command is almost identical, except that the last item (data) must be a variable of the correct type to receive the information read from the INI format file. But the other entries in the command can be of the same nature as in PROFILEWR, or PROFILERD filename section_name indicator data_variable which makes the command to READ the value of the autobaud setting in GHOST.INI something like

```
PROFILERD S0 "Start Up" "autobaud" autoval
```

So what's remarkable about this? If the value being read is a string, and the line containing that data is not in existence, Wasp returns a null string for the variable. If you are reading an integer, and the line doesn't exist, Wasp returns a - value (generally -1) to indicate that the line doesn't exist.

An integer stored in an INI format file isn't an integer.... if you use

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a string variable to receive the contents of the "line", then you get a string consisting of the number stored there. If you use an integer variable, you get the number itself, as an integer.

This means that you can store an integer into an INI format file, and use it as a string in a dialog box if you need a string there, or as an integer, depending upon what kind of variable you use to read the data.

And PROFILERD is fast. There is no need to search through the lines read from a text file or compare them to some value for an *indicator* that this is the right line, and so on. That's all done by PROFILERD. It opens the INI format file for a READ, searches for the section name included in the command and then searches under that for the line name included. It then reads the value of that line into the variable, using but one command...*one single line of code* instead of the multiple lines that would be needed to get the same data from a standard text file!

But how can this be used, other than in the normal way, to set configuration parameters, etc.??

Wasp 2.0 greatly diminishes the memory restraints we worked under with Wasp 1.0. Global variables are no where near the problem they were under Wasp 1.0, but there still are limits on them. Even without those constraints, they take up global memory in the data tables, etc. Additionally, global variables can sometimes be tricky to deal with, especially in a longer script with many sub-procedures. You just might, inadvertently, modify the value of that global variable in one procedure, only to find that modified value plays hell with another procedure that uses the same global variable.

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However if you use a local variable in a procedure that sets the original value of what used to be a global variable, and then write it to a section in an INI format file, the other procedure which requires that value can also use a local variable. In other words, creating a PROFILERD command to set precisely the value you want for that variable, without worries about what another procedure might have done to the global variable.

An INI format file can also give you the ability to pass data from one script to another. As you know, you can normally only do this using the internal global variables, such as S0, I0, and so on. But there are only ten of each type of variable in this category, and that may not be enough. You also have to be so very careful with those variables, since they are available to any script that you run, and any script can change their values. Those designaated values do not remain if you shut down PCP/Win and start it up again.

If you store the values that you want to pass to another script in an INI format file, on the other hand, they are at that *value* unless/until you specifically change it in another script. And there isn't a ten variable limit on the data that can be passed. All you have to do is have one script write values to the INI format file, and the secondary script read them. It doesn't matter if the secondary script is run during this PCP/Win session, or another one. The values written to the INI format file remain, and can be read and used by any script you wish, at any time. Talk about being able to pass data from one script to another!

Well, I see by the clock on the wall -and the expression on Lois' face-

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that I'm getting long winded here. I find INI format files to be fascinating, simple to use, and quite valuable in script writing, and tend to show that. But if I let this column go on any longer, Lois or Paul will be redlining it to cut it down in size, and we can't have that. We'll continue with some further discussions of using INI format files in the next column.

***Gregg Hommel* is our resident Aspect and Procomm for Windows guru. As the Co-Host for the RIME Windows and Procomm conferences many have met him online where he modestly helps users solve problems. He's the author of GHOST and serves on the *WindoWatch* editorial board.**

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Your Internet Provider: Is NetCruiser by NetCom in your future?

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By now you've probably heard more about the Internet than about O.J. Well, maybe not *that* much, but it's been the hottest topic in the computer world for some time now. If you haven't already found an Internet provider, you're more than likely looking for one, assuming you haven't been turned off by the odious smarm of those Gramercy Press commercials. One choice to consider is NetCom, a nationwide company providing Internet access in about 250 cities. This article will review NetCruiser, the proprietary software that NetCom provides to users for a basic account.

Before getting to NetCruiser, however, let me make clear that NetCom will sell you a Point to Point Protocol (PPP) connection, as well as a Serial Line Internet Protocol (SLIP) connection, which will allow you to use any Internet software, like Netscape, WSFTP, Eudora, Chameleon, and others, for about the same price as a NetCruiser account at $19.95 a month. But NetCom's bread and butter comes from its sale of NetCruiser accounts. Here's what you get when you subscribe.

First, NetCruiser software is free. NetCom gives it away to entice you to get started. I've seen stacks of them given away at computer shows, but if no such events occur near you, you can write to NetCom at 3031 Tisch Way, San Jose, CA 95128, call them at 1-408-983-5970, or fax them at 1-408-983-1537, and they'll send you an attractive little package that contains a single floppy with NetCruiser and a booklet of

tips about navigating around the Internet, with suggestions for sites to visit on the World Wide Web, Gopherspace, and ftp archives. NetCruiser is also sometimes sold for a nominal fee ($5 is what I've seen) at computer stores.

Of all the pieces of Internet software I've tried, NetCruiser is by far the easiest to install and use. Before you start, however, your system must meet some minimal requirements. You need at least a 386 with 4 megabytes of RAM, DOS 5.0 or later, Windows 3.1, and 4 megabytes of free disk space. Assuming you have all that, once you get your NetCruiser disk, put it in your floppy drive, select *RUN* from Program Manager in Windows, then type A:setup (or B:setup), and follow the directions. You'll be prompted for your modem type (if your brand isn't on the list, Generic works well), its COM port, and its baud rate, so you need to know at least that much about your system. But unlike Mosaic or Netscape or Chameleon, you don't need to know anything else. One of the beauties of NetCruiser is that you can be a complete dummy and yet set it up and operate it with no sweat.

Once you've gone through the initial setup steps, you'll be presented with a menu of phone numbers from which to choose your local server. With access sites in more than 250 cities and more being added nearly every day, you're sure to find one near you. Once installed, it presents you with a toll-free 800 number to call to register. You will get one free month, with 40 hours of peak time (Monday - Friday, 9am -midnight) and unlimited non-peak hours. This is quite a good deal. If you decide to keep your account, you pay a one-time $25 connect fee and $19.95 a month. If you don't want to continue, then you owe NetCom nothing.

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Now, what do you get for that? Once you connect to NetCom, a simple but tidy tool bar with eleven icons appears across the top of your screen listing menu items above it. If you move your cursor over the icons, messages at the bottom of the screen tell you about each one. To launch any of them requires only a single click, a work saving feature for those who don't have a mouse with one of its buttons configured for a double click. Let's take a brief look at all eleven.

The first icon is a question mark, which is naturally the Help feature. It is quite extensive. Not only do you get explanations about each of the other icons, but Help includes discussions about the Internet, its etiquette, interesting sites to visit, and sections about how to operate NetCruiser, how to configure your modem, and how to use the menu items above the icons. It is also remarkable, in comparison to other software programs, for its dry sense of humor. In the section detailing how to configure your modem, for instance, you are warned that if NetCruiser is not set a certain way, "You will have unpleasant things happen."

The next icon is Reading E-mail. With a NetCom account you get an Internet address where anyone can send you Internet e-mail. You choose the name you want to use and it doesn't have to be your own. Your *alias* could beTallTexan or HotMama, if you like, and so long as no one else at NetCom has that string of letters, it's yours, followed by @ix.netcom.com. You'll have some mail from NetCom the first time you log on that basically glad-hands you for having the excellent taste to try NetCom. Upon clicking the Read E-Mail icon, you get a dialog box with a choice: your inbox, which will look for your newest mail, and your saved mail. A single click on either of them brings up the desired result.

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Once you have a message open to read, NetCruiser provides an additional tool bar of icons that perform e-mail functions. These include responding, forwarding, saving, reading the next selected message, and a garbage can for deleting messages. When you choose to respond to an existing message to you, NetCruiser gives you the choice of whether or not to quote that message in your reply. Once you choose that, you'll get a screen that includes some additional icons. You can choose your address book, or to add an attachment, send a message, or finally cancel, cleverly represented by an envelope torn in two. This screen is exactly the same as the one you get in tool bar icon number 3, which is Send E-Mail. You would use this, of course, when you were sending a new message that wasn't a reply to one you received.

The one thing the Send E-mail function doesn't allow you to do is import text into your mail. That means all your responses have to be done online, which is a hassle. You can send some pretyped text as an attachment if you really need to send something you just don't have the time or patience to type out while logged in, but the absence of an import feature is a severe handicap for NetCruiser. You can, as I mentioned earlier, log into NetCom with NetCruiser after you've configured it to autoload NetCom's winsock.dll, minimize NetCruiser, and then call up Eudora for your mail. If your mail-writing demands are heavy, you'll no doubt want to do that. On the other hand, the programmers at NetCom are constantly working on new versions, 1.6 is the current one. This is sure to be a feature they will want to refine.

The World Wide Web icon is next. When you click it, you're transported to NetCom's home page. It contains a number of things you'll find useful, such as a FAQ about using NetCruiser and a downloadable version of Accessing the Internet by David Peal, published by Sybex, which uses NetCruiser as its model. You are also given the option to take tours to Health, Education, Government, Business, and

Scientific destinations on the WWW. If you already know where you'd like to go, at the top of the screen is a command line with the http address of NetCom. You can put your cursor there and type your desired address. Otherwise, you can take any of the tours of sample spots NetCom provides and go from there.

The Web browser has its own series of icons, of course. They include opening a local file, saving the current document, opening your bookmark file to save the current site or go to one you've previously saved as a bookmark, and a search feature that will look for any string in the current document. The command line itself has a drop-down arrow that you can use to revisit any of the addresses you've visited that session. So if you've gone ten steps down some series of menus and would like to go back to the first one, you can find it with this menu, click, and presto! you're back to the earlier screen. Icons also exist for returning to the NetCom home page and two that resemble the forward and backward signs on VCRs and tape machines to move you to the next document or the previous one.

You can post articles to UseNet through the Read UseNet Groups program as responses to articles you read there, or you can click the Post to UseNet Groups icon to send new articles that aren't responses. I've never done the latter, so I can't tell you about the problems or happy circumstances surrounding that feature. I've answered messages I read, for which the procedure was much like the Send E-Mail part of NetCruiser, that is, easy to do with self-explanatory icons.

For those who want to download uuencoded image files (and you know who you are!), you may be disappointed to learn that NetCruiser, as currently implemented, does not decode your pictures automatically. It will save them as 00000001.msg, 00000002.msg, etc. You have to do the decoding yourself. There is a way, however, with a program called

WinVn, to decode such images automatically while they are downloading. It involves the same procedure I mentioned above of starting NetCruiser with its own winsock.dll and minimizing it once connected, then starting WinVn.

You can find out exactly how to do this and many other similar procedures, such as using Netscape, Eudora, and Wincode with NetCruiser, by contacting Lee Johnson, self-styled as "the HelpnHand." He has prepared a series of instructions on where to find those programs and how to set them up to work with NetCruiser. You can contact him at lrj@ix.netcom.com. He is one of those rare souls who seems to live in order to help others. Ask him for the instructions on whatever of these issues you're concerned about and you'll get an answer right away, along with a list of all the other issues on which he has prepared instructions. He can also usually be contacted most nights on IRC channel #newu at 9 pm CST.

Which brings me to the last icon. I can also tell you very little about Internet Relay Chat. NetCruiser's IRC gives you a choice to connect to EFnet or to NetCom's local IRC network. Because I don't really care about chatting, I've only tried it once, just so I could write about it in this article. Either because I had only the slightest idea of what I was doing, or maybe because I called at 4 AM on Saturday morning, I got no answer from anyone.

Let me add also that I rarely had any trouble logging onto NetCom. I've heard others complain that too often the lines were busy or down, preventing them from getting online. This has occurred to me only a couple of times in three months. I tend to log on in what Hamlet refers to as the very witching time of night, when churchyards yawn and Hell itself breathes forth contagion to this world. There is naturally less traffic at these hours, so my experience may not be representative of more normal practice. But no doubt every major provider has

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occasional trouble keeping all its lines open, so NetCom is probably no worse than others.

So, if you're looking for a complete package of Internet tools in an easy-to-set-up, easy-to-use form, NetCom's NetCruiser fills that bill of fare quite well. It would also be a good choice for people of markedly different computer skills who want to share the same machine. So if you're a computer whiz, but your husband is a computer klutz, NetCruiser would be a good choice for the two of you. You could use all your favorite but hard to set up programs, while he could use the easy NetCruiser menus. Unless you're expert enough to set up your own TCP/IP stacks, configure your software to accept the IP addresses of your provider, take advantage of the very best program for each Internet activity, and you can get a cheaper price for a provider, NetCruiser isn't something you'll want to ignore. All in all, it's worth a serious look.

Kyle Freeman, a former teacher, now works as a computer consultant in the San Francisco area. He is a regular WindoWatch contributor.

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A Product Review.... **TIME and CHAOS**

THERE'S NOT A MOMENT TO LOSE!

© 1995 by *Frank McGowan*

Backward, turn backward, O Time in thy flight.

Alas, much as Shelley implored -or was it Keats? I never have been able to keep them straight-, there's no reversing the inexorable transit of time toward its inevitable end. In a society with such a negative attitude towards what's gone before, as exemplified by the deplorable insult, "You're history!", the only important time is that which is yet to arrive.

Time is such a baffling concept, that it's been the subject of innumerable poems, essays, philosophical discussions, and studies by theoretical physicists. Why is it, as Einstein mused, that ten seconds sitting on a hot stove is so much longer than ten seconds listening to Mozart -or was it Bach ? To the pragmatist, time and money are interchangeable: wasting time is tantamount to burning greenbacks. Businessmen/women would rather have their BMW repossessed than squander precious moments that could be used cooking up schemes for adding to the bottom line.

It is no surprise then that the bright minds of the software industry are putting so much effort into designing programs they hope will appeal to the hard-headed strivers in the ranks of middle management. Not for them Walt Whitman's dictum to "loaf and invite the

soul”! These poor souls haven’t a moment to spare. You could probably consider them “Type A-plus.” It is for them that the software sub-genre of “personal information managers” has been created. PIM’s (to use the current TLA) purport to help the overburdened executive do what humanity has hankered to do since we first understood that our existence is temporal: manage time.

As you may have inferred, I am a hardened skeptic when it comes to time management. My idea of a nifty time management device is a pocket large enough to hold a bunch of paper slips with illegible notes scribbled on them, and a small daily calendar (for things too important to entrust to one of my little slips of paper). The little slips of paper usually wind up on top of my bureau in an untidy heap, anchored by the daily calendar so they won’t blow all over the bedroom, thereby driving Sue to distraction. As long as the papers stay on the bureau, she’s able to turn a blind eye to the mess, though it takes some effort. Nevertheless, I try to keep an open mind (why are you cocking your eyebrow, Sue?), so when I was asked to try out a time management program called Time and Chaos, I agreed. After all, I had plenty of time on my hands...

Okay, I hear you all protesting: “Maybe you’ve got gobs of time to spare, but I don’t. Get on with this! Please get to the point! Quit annoying us with pseudo-intellectual noodling. Is ‘Time and Chaos’ worth checking out or not?”

Yes.

Satisfied? If not, read on......

Time and Chaos (or T&C) makes a lot of sense even to such a “show me” person as myself. I like it so much that I’ve stuck it into my

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Startup group in place of the Calendar file I had put there a few months ago. The only big drawback is that you need to have your computer handy to use it -it doesn't quite fit into my pants pocket. Since most of you are, obviously, never too far from your PC, this isn't such a major flaw. And besides, you can print out what you need, stick it on top of your bureau and drive your mate to distraction just like me!

The designers of Time and Chaos have clearly studied their predecessors and competitors closely and have found a good balance between richness and usability. There are enough "cool" features on Time and Chaos to satisfy the nerdiest, but they're only there if you want and/or need them. The Help files provide all the guidance you need to get up to speed quickly. For the most part the interface is reasonably intuitive, although the Done button on the Todo list led me astray. I thought it meant I was done entering items to the list, but it really means the item has been "done." The screen is organized nicely into four main sections: calendar, shown as the current month (upper left); appointment list (upper right); Todo list (lower left): and Phone book (lower right).

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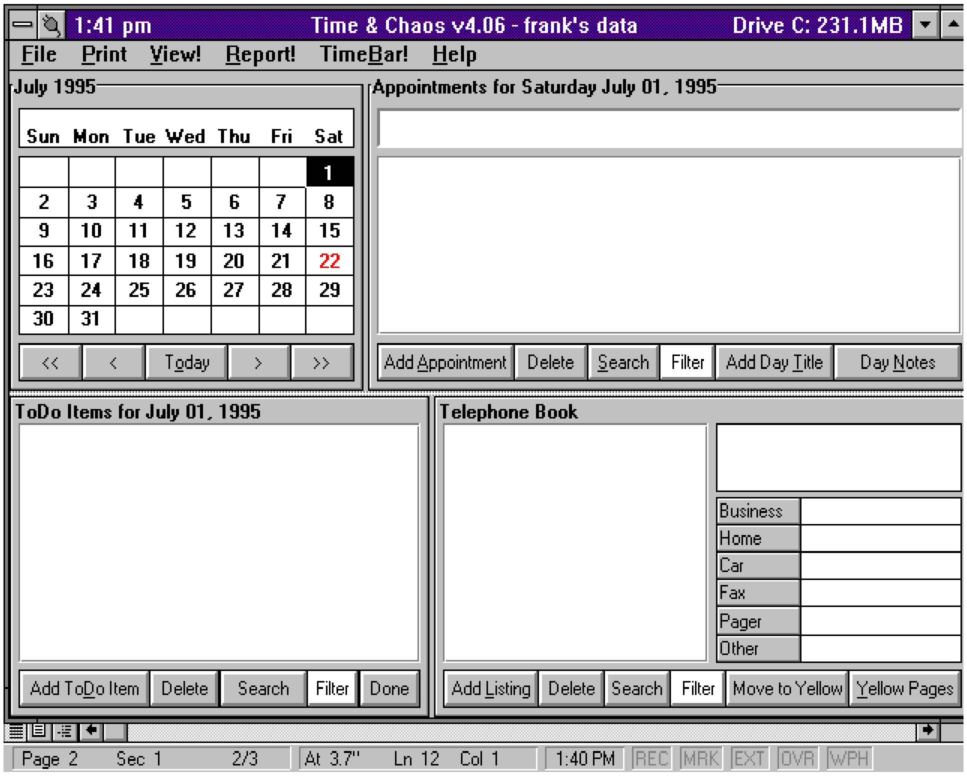

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

The calendar section is where you select the day/month/year you want to schedule. To get to another day in the current month, you just point and click. Any appointments or todo's for that day show up. Arrows and double arrows let you jump forward or backward to prior or subsequent months or years. I suppose if you have a major anniversary coming up in two years, it might be prudent to note that as a safeguard against letting it slip past. The backward move is helpful when you need to remember where you were or what you were doing at a

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particular moment on any given day. (I must be watching too much O.J.)

Adding chores to your Todo list is pretty simple, and you even get to rate them from Critical to Work it In (my version would be If I Feel Up To It). Delete them as you do them, too, by selecting the item, then pressing the Delete tab on the Todo window. The program even nags you a bit by asking “Are you sure?” If you have any chores on the Todo list you didn’t get around to, they carry over to the next day and the next until you finally get them done or, if you’re out of patience, delete them.

The Phone Book feature includes, among many pleasing options, the ability to split your phone directory into white and yellow pages. You can create different categories for your listings, to keep social numbers separate from business numbers. As you would expect, the program has an Autodialer function, if you have a modem. (If you don’t have a modem, how are you reading this?) There are a slew of other goodies included in the Phone Book function that should make life a lot easier, if no less complicated. There’s even an integrated word processing function built into the Phone function that supports Windows versions of AmiPro, WordPerfect and Word. I don’t know if they’ve thought of *everything*, but they’ve come pretty darned close.

You can create appointment lists and move around quickly to set up schedules literally months or years in advance (for some reason a scene from Casablanca comes to mind - Barfly: *What are you doing tomorrow night, Rick?* Rick: *I never plan that far ahead*.) To enter an appointment, you select the day, then click the button labeled Enter New Appointment, and you’re all set.

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You can also set an alarm for each appointment. After all, it’s no good having an appointment scheduled with your dentist who’s 45 minutes away, if you don’t remember it at least 45 minutes ahead of time. You can also connect appointments to your phone book, so you can see all appointments you have with any particular person listed there.

A feature I especially like is the Timebar. If you want to see how high your stress level will go over the next few days or weeks, or you want to understand why it’s as high as it’s been lately, click this Menu. Up pops a grid, laid out for last month, this month and next month, showing you your time blocks for each day of each month. The more blue bars, the higher the stress, at least that’s my way of interpreting this data. And it’s right there in front of you. One suggestion: I think it would be a good idea for different colors to be used, so you could differentiate “good” time blocks from “bad” ones. So, if I’ve set aside five hours next Saturday for golf, that might be shown in green. But if I’ve set aside two hours for a meeting with a difficult client, that ought to be displayed in red.

One or two minor cavils: Why no shortcuts on the menus? Sure, once I’ve opened the File menu I can see that Ctrl-X would have gotten me to Exit without opening the menu, but why no x in Exit now that I’m there? And *please* run the Spell program on your message files. “Permenently”? You may be hooked on phonics, but your spell checker isn’t.

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Other than that, I think Time & Chaos is a winner, though I remain unpersuaded that a computer is a more convenient time manager than scraps of paper. I am willing to grant that it’s a lot neater. It’s still not as easy to stuff into my pants pocket, though. Time and Chaos is produced by:

iSBiSTER International, Inc.   CompuServe ID: 74017,3424
1111 Beltline Road, Suite 204   BBS Support: 214-530-2762
Garland, Texas 75040 *   Fax: 214-530-6566
Voice 214 495-6724

The price is $29.95, plus shipping.

Frank McGowan is a computer consultant and college teacher. A former science writer, he brings his considerable talents to WindoWatch as one of our regular contributors.

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A WindoWatch feature

IDIOTS-REDUX © 1995 by Bob Miller

More idiotic ramblings from the PC Press.

PC World - August - page 124

[regarding MSN] Never before has client software for an online service shipped in the same box as an operating system.

Ever hear of Apple? How about Warp?

PC World - August - page 31

Everyone wants a CD-ROM drive on their desktop.

English 101 anyone? Everyone wants ... on HIS desktop.

PC World - August - page 88

For one thing, the option to have a permanent swap file – which in the past could permanently occupy 20 MB or more – no longer exists.

You shouldn't use it but it exists. And only morons (or those doing full color graphics) have 20 MB PSF's.

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Some silliness in the Summer 1995 issue of GE2k:
the Gateway 2000 Magazine. Page 10.

Most files downloaded from a BBS, or other online service, come in the form of a self-extracting file which normally has an .exe extension.

Not the BBS's that I frequent. Indeed, you would be very hard pressed to find any BBS -except a manufacturer's- that had .exe files on it. ZIP is the standard except for the diehards who prefer ARJ.

Summer 1995 GE2k Page 35.

If you are planning on placing the TEMP directory in a RAM drive, you should have at least 8 MB of RAM......With 8 MB of RAM, you can set up a 3 MB RAM drive and still have plenty of memory left for other resources.

Rarely have I seen such a short paragraph with so many errors. If you are planning on using a RAM drive, TEMP is the last thing you should use it for. Most programs don't use temp files and those that do, use large ones. Try printing a three page WinWord document with two fonts, two point sizes and a graphic. The temp file Print Manager generates can be over 10 MB in size. If the RAM drive fills up, the system will crash _hard_ and you will lose any unsaved work. 8 MB is the bare minimum for WFWG to even run in with any degree of stability. You are going to steal 37% of that precious memory for a RAM drive? For TEMP files?

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Ridiculous in the extreme. If you must use a RAM drive with Windows, the absolute minimum amount of memory you need is 24 **MB** ***(16 for Windows and its apps plus 8 for the RAM drive). And it is still silly.***

From the paragraph preceding that one:...these files will not be deleted. Why is this bad? Because over time, these .TMP files will accumulate [true enough] and suck up your system resources, which can lead to those "out of memory" messages.....

No, Mr. Technical Consultant and Mr. Senior Project Manager, files (of any kind) do _not_ "suck up" system resources. 5 files or 50,000 files use exactly the same amount of system resources. Zero.

Windows Magazine August Page 241

Fax cards supporting the emerging class 2 standard.....work better with ......Windows 95. Only V.34 devices offer class 2 fax.

Please don't tell that to my old Aceex 14,400 modem. It has been using class 2 for a couple of years and I'd hate for it to stop.

PC Mag August Page 422

I'd like to be able to check whether a particular disk drive has sufficient space before beginning to use an application. Can you do this with a batch file?

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The good news is there is an easy way .... The bad news is that you have to enter the number of bytes in hexadecimal...... [followed by a lengthy batch file and an explanation of hexadecimal calculations].

Something is wrong with DIR? It seems to give me the disk space remaining without such silliness.

Windows July Page 277.

We had problems with the video drivers supplied by Number Nine.....dropped more than two thirds of the total frames averaging 9.3 out of 30, in a test. Number Nine sent new drivers....the video results immediately improved. ... However, the new drivers repeatedly caused General Protection Faults..... Overall, ... ranked first in our testing.

How bad could the others have been if this was number one?

Windows July Page 248

Make sure MSCDEX is the last item listed in your Autoexec.bat file. Otherwise, it will simply take over the whole upper memory space and everything else will get dumped into conventional memory.

It will? Gee, that must be news to the 40,000,000 intelligent people who load it early so that Smartdrive can cache it. And our other stuff still loads high.

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Windows June Page 118

Try using an 8 MB swap file for 12 MB RAM.

Try using 4 - it will work much better.

Windows Page 119

If you run standard Windows 3.1 and don't see the "enable 32 bit disk access" check box, it means that your disk controller isn't compatible with this feature.

It does no such thing. Maybe your Windows was installed from a SCSI drive or your hard disk isn't set up right in CMOS or someone used odd partitioning software or several other possibilities. An incompatible hard disk is just one of several choices.

Windows Page 182

If your app supports a temporary swap space (Adobe Photoshop does) ......your second option is to create a RAM disk for use as temporary file space.....that should boost performance.

Since that program likes 30-70 MB as a swap file, that would be quite a machine that has that large a ram disk.

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Windows Page 188

Many applications have their own print spooling utility.....Turn off Print Manager to eliminate this double spooling.....Remember to turn Print Manager back on...or your system will hang up waiting for Print Manager instructions.

Really? Every time I turn PM off, my system works just fine. Indeed, I have some difficulty in figuring out how a program that is off can be sending instructions.

Windows Page 211

MS DOS wants about 45 KB of the 64 KB HMA.....if you use Double-space, it'll gulp about 12k of the HMA. The Command interpreter will sip about 2 KB. All this leaves only about 3 KB which is just enough space for six buffers. Fortunately, MS-DOS itself includes 15 buffers by default, so under the above conditions you can write a BUFFERS=21 to soak up that last drop of the memory pool.

Really? MS DOS does **not** ***include 15 buffers, and only 17 will fit in the above scenario. Why not try something before you write about it?***

Same article

If you use SmartDrive, you may not need any of them.

Correct - as long as you want hopelessly slow floppy access**.**

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PC World July Page 52

As of March, we're paying $30 per user to run the pre-release version of the software [Win 95 Preview] on the machines of an additional 30 users.

Gee, the rest of the world only paid $32 per FIVE users to participate.

PC Computing July p.53 Hall of Idiot's Fame Star John Dvorak

A friend who said "I have it from deep within the Windows 95 programming group that the real product [Win95] will not be ready until November. Period!"

Does this bear any resemblance to a virtually identical comment (although attributed directly to a source rather than a friend) that appeared last month in a different publication? Could it be that his record of 2153 consecutive wrong predictions on the future of computing have so bewildered him that he is starting to repeat himself?

Infoworld July 12 page 3.

You have chosen to go with Microsoft Office when a package like Claris Works would do the job for most of your users.

This is too silly to even discuss. Claris Works is a competitor for MS Works (and nowhere near as good). To say that it will "do the job for most of your users" boggles the mind unless you have very low level workers.

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InfoWorld July 3 Page 54

The Gateway system locks with a password, not a case lock

InfoWorld July 3 Page 56

Password protection or keyboard lock? Gateway: both.

***Confused, are we? Or did the system lock vanish between* pages?**

The Grand Prize Idiot of The Month Award, however, goes to Robert Cringly for his totally moronic column in Infoworld in which he claimed that Win95 would be shipped with a hardware dongle.   That one is very hard to top. OTOH, Dvorak will, no doubt, come roaring back next month.

***Idiots Redux is the invention of Bob Miller who has a huge collection of Conference Host assignments from both RIME and Ilink. His newest is the Ilink Windows95 conference . A very knowledgeable Windows writer, Bob is the head of a Mental Health Agency and can be found at* bob.miller@channel1.com *He and Stanley are regular WindoWatch* contributors.**

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Super Programmers

©1995 by *Peter Neuendorffer*

Some of my friends, those that I have left... grin slyly, when I say I'm a programmer and say "Oh, you write viruses, ho ho" or "I bet you have sex on the Internet." So I have decided once and for all to put the record straight about the life of the information jockey.

It was just the end of another day in the life of me, a super programmer. Single-handedly I had discovered a completely undocumented loop processor so that I could let Windows process events that were waiting. In VB it was called *do events* but it was called something completely different in Delphi. And I'm not telling anyone what it is. You'll never find it. It’s hidden deep in a help file forever.

All day the phone rang off the hook. People begged me to solve their hardware, software, and personal problems, and I made polite noises, hardly containing my eagerness to return to typing at my computer.

By 3 PM I had foiled the dreaded longint parameter pass that had threatened to disable my file searcher. Then, the smug realization that Dot and Dot Dot directory referents were potentially recursive and led to endless loops. Conquering null-terminated strings was close at hand.

As the sun sank, I checked my mailbox and found no checks. But there was yet another missile [sic] from Microsoft about Windows 95. This one was even more colorful and glossier than the last. I found myself saying, "No, that's not it." I was kind of hoping since they think I'm a

developer that they would send me a $500.00 developer package. But I dream. As I turned to go back upstairs, mild mannered computer programmer Peter Neuendorffer, clutching my fifth cup of coffee of the day in my sweat-soaked fingers, I heard a whimper behind me, presumably at eye-level, but possibly a mere transient phantom of memory.

It was none other than Captain Alice, commandeer of the programmers action starship, fellow super-programmer, arriving from another cyber virtual hacker userfriendly UNIX WWW interactive newbie adventure in Interface. She was in town covering the covered bridges convention, and dropped by to sweep my porch, or so she claimed.

She was covered in high ASCII and not too stable. She frantically brushed off several Constucts that were clinging to her, exclaiming "These wild pointers are hell on my allergies." Then she stepped out of her ship, a XX 10 Googolgoogol with a detachable edible hard drive. She says the traffic out on the suprahighway is murder what with all the Nintendo players graduating. At first she made little sense, but together we initialized her speech variables and the garbage level subsided.

She says that today, she was able to save the day, and yet again, TV guide will arrive somewhat on time, Federal Express will drive it's trucks tomorrow, and the ATM's will work. Though they won't temporarily process certain requests. She says actually, there are Daemons out there whose job it is to disable certain computational functions in order to prevent a manual override inherent in simplex based systems. It's a UNIX thing. I waited at the doorway as Alice decontaminated herself of foul test data used in the day's structured design march. I helped Alice unload several hundred pounds of client specifications down the cellar steps.

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Alice cleaned up, we went out ballroom dancing, then settled down to creating a temporary universe in which we could meditate and get some respite from the exigencies of reserved word conflicts. Although neither of us are Slackers, we both are disenchanted with the corporate life, and sooner or later hope to settle down in a depressed area and open a small greasy spoon. If you care to join us, write us a note care of petern@channel1.com.

(c) 1995 Peter Neuendorffer

Peter and Alice can be found on CDROM doing their thing. When Alice was first discovered on the Internet she took the surfers by storm with her modest and unassuming demeanor. She is much beloved. She urged Peter to develop Windows95 many years ago, but he just wouldn't listen.... After Gates introduces '95 late this month she promises to forget about Peter's goof but until then the beat goes on as we will hear in the following:

I got a letter from the noted Present-ist and my friend, Alice A. today. She has been vacationing on the Isles of Shoals, ten miles off of Portsmouth, New Hampshire. She says that everyone there has Windows 95, the final release, and questioned why I didn't. Again!

On Star Island, they are a special test site to install printer drivers in the surf and mist, and under adverse weather conditions. She says that all has gone well so far. She has taught the whales to install their own wallpaper, and has successfully installed the entire Yellow Pages for Greater Portsmouth and made an animated feature about starfish.

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Alice says she is at last free from DOS command lines, and will never ever look an extension in the face again - or "bad command or file name." Mr. Parchmont, custodian of the Grand Hotel on Star Island, has seen the light for the first time, and is ordering a complete Office Suite for his box. She has to restrain him, however, because he keeps trying to sign up for the Microsoft Network, and will talk of nothing else but Windows 95's ease of use, neglecting his chores such as fixing the hotel rainspouts.

Alice says she is working on a new on-line service. With one mouse click you can get a new operating system. Up in the Isles of Shoals they are not worried about restraint of trade. In fact, up until the advent of the modem, everything that came onto or off of Star Island was brought by the ferry from the Mainland.

There is a treacherous breakwater between Star Island and Appledore. Alice has successfully installed Windows 95 while sitting on this breakwater at low tide. She promises to send herself to me by modem soon, as soon as she figures out how to use the communications package that came with the modem. With the advent of Windows 95 at the Isles of Shoals, once more the townsfolk can converse with the seagulls. Me, too! Alice has such a long memory....

Peter Neuendorffer creates Alice adventures when he is not creating new software.

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A Brief History of the Computer

© 1995 by *Jim Gunn*

Today we take the ubiquitous computer for granted. It and the software we've come to depend on, are an everyday appliance. It is important to look back through the years at all the people and companies that contributed to the success of our beloved industry.

1642

A nineteen year old hacker named Blaise Pascal, - we're not sure if that was his real name or his handle - invents the original computer. This pioneering system had no graphical interface and used a stylus for the command line. While Blaise had high hopes, it did not catch on as well as he hoped.

The basic problem was with technical support. Neither the telephone nor *on hold music* had been invented yet. Messenger pigeons were tried but many of them croaked while in a holding pattern for the single tech rep. Thus when things went wrong, there was no practical way to call for help.

Now-a-days, this problem doesn't exist since "on hold music" has become commonplace. We can listen to in on almost any technical support line for as long as we want.

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1692

Gottfried Wilhelm von Leibniz invents the math co-processor. The computer could then multiply and divide as well as add and subtract. Leibniz's invention was quickly adopted by all the mail order outfits of the time. They in turn created the *list price* versus the *real price* marketing gimmick.

1833

Charles Babbage proposes the first supercomputer. He conned the British government into footing part of the bill, but mostly spent his own fortune on it. Nine years and 27,000 pounds later, the whole project was kaput and nothing ever really came of it. In modern times Seymour Cray has subsequently perfected this process.

1842

Augusta Ada Lovelace invents the first computer hobbyist magazine. She read a description of Charlie Babbages's system, written by an unknown Italian engineer. Augusta promptly copied this, made up a whole lot of extra stuff that was all theory and published it. Lovelace made all the profits while the engineer had to go into consulting to earn a living.

Her publication enjoyed widespread popularity for a while. Then it seems that she proceeded to promote the super computer as a means of predicting the outcome of horse races and actually constructed and used the thing. The readership believed all this because, after all, they had seen it in writing, so it must be true.

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When the results turned out to be not quite as accurate as desired, she tried to pull a cover up. However, throughout Europe there was a network of pages, outriders, and messenger pigeons which quickly spread the word that the super computer was flawed. Augusta was eventually forced to admit that there was a problem and had to implement a replacement program which cost most of the profits from her endeavor. On her deathbed, she still contended that the erroneous calculations only occurred in a minuscule number of instances.

1944

Harvard University unveils the Mark I Automatic Sequence Controlled Calculator. This, at last, was a true electronic calculating machine and is considered the first computer as we know it today. Features included being slower than the user wanted, miscalculating and it stayed broken most of the time. IBM actually paid for it and the modern age had arrived.

1946

ENIAC (Electronic Numerical Integrator and Computer) is introduced. The age of the vacuum tube had arrived. ENIAC built upon the success of the Mark I by introducing the "bug" while maintaining all of the former's features.

1951

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Remington Rand introduces the UNIVAC computer. Now the computer was commercially available to businesses but hobbyists would still have to wait a bit. In reality all they had done was purchase the ENIAC, renamed it, and began selling copies. Later this would be termed *cloning*.

1954

IBM enters the computer fray big time with the 752. This is significant for some reason or other. The author, having toyed briefly with one is not too sure why. There was a 751, but it was just another ENIAC.

The commercial computer age was fully upon us at this point. Instances of how useful the computer had become were everywhere. For example, in the previous decade, an aircraft would take six to nine months to design and reach production. Now that time period was shortened to three to five years with the aid of a computer. In only two more decades, advances in computational power would be such, that the period would be further reduced to seven to fifteen years. Progress was inexorable.

1959

Jack Kilby and Robert N. Noyce invent the microprocessor. This begins a whole new era for the computer industry. Noyce goes on to found Intel corporation. Intel releases a new microprocessor model every few weeks from then on. Thirty-five years later it finally becomes useful with the release of the registered version of DOOM.

1964

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IBM introduces the concept of *If you can get one, it's obsolete,* with the shipment of their 360 series computers. The system/360 revolutionizes the computing industry. Everything that had been previously programmed no longer worked. Many companies not only installed the new systems, but actually paid extra for "emulator" packages which allowed their programs run. IBM secretly authorized sales people to treat customers to alcoholic beverages even though there was a strict corporate policy to the contrary.

1976

Stephen G. Wozniak and Steven Jobs invent the Apple computer in their garage. They were attempting to repair the transmission on a '59 DeSoto at the time.

The first model was named *Lisa* after one of their daughters, the later version was named "Mac" after one of their trucks. They succeeded mightily with their invention. Millions were sold, hundreds were used. Having only a single button on their mouse was the only limitation.

The main result of all their efforts was a really neat-o Super Bowl ad.

1981

IBM introduces the Personal Computer (PC). This was wildly successful and eventually reached a market share of 75%. Considering that IBM was the only manufacturer at the time, this was indeed a

notable achievement. Only the near bankruptcy of the early 90's will ever surpass this in the corporate annals.

In addition, the PC provided computing capabilities to the average citizen.

Growth was slow at first, but as time passed, the number of individuals having a computer on their desk or in their den reached epidemic proportions. Nothing useful has been accomplished ever since.

1990

Microsoft introduces their hugely successful version of Windows, 3.0. Suddenly every PC in the world has a graphical user interface - suddenly every PC in the world is underpowered. Taking the industry by storm, icon collecting became the national pastime.

A significant side effect is the growth of bulletin board systems. From the beginning of the home computing age, bulletin boards had been the territory of an elite cadre of highly sophisticated computer enthusiasts. With the introduction of Windows 3.0, this changed entirely. Like Sam Colt's revolver, all men were now *equal*. Anyone could send electronic messages stating the stupidest things possible with Windows as the core subject. Everyone had a computer, Windows, an opinion; no one had a clue.

A couple of years later, Windows was revised to version 3.1. The significant changes were: TrueType font collecting replaced icons as the hobby of the masses and all UAEs (Unexpected Application Errors) were banished by the introduction of the GPF (General

Protection Fault). Everyone was relieved that they no longer experienced UAEs and considered the new version extremely stable. A clue was still not included.

1992

Gateway 2000, a dairy farm in South Dakota, finally perfects "on hold" music. It is now available continuously via an 800 number.

1995

Microsoft Windows 95 appears. It is impossible to find a 5081 punched card.

Repent, the end is near.

Jim Gunn is a weird guy who has been dabbling with computers pretty much forever. His main hobby is being president of Sterling Consulting in Salt Lake City (a.k.a. Salt Puddle), Utah.

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Reflections of a Modem Junkie

© 1995 by Leonard Grossman

This may be the greatest moment in the history of online communications. Right now internet access is relatively cheap and, for those who have enough interest in computers to read this magazine, it is relatively easy. . . .and then again, it may not last!

Basic internet accounts range upwards from $10 a month for a shell account to slightly more than twice that amount for full access. With the advent of new software utilities like Slipknot, which enables Web access even from a shell account, almost everyone can afford to get online. And right now the internet remains, for the most part the relatively open system that has made it such an efficient and effective means of sharing information and infotainment. But both cheap access and the very openness of the system are under attack!

In addition to the local and national Internet access providers like MCS, InterAccess, Netcom, WWA, the older large commercial online services like Compuserve, Prodigy and America Online (AOL) are really getting into the act. The competition is hot. On some usenet groups the current joke is that some of us have received enough promotional discs containing the front end software for America On Line that we could back up Win95, or even OS/2. It seems a new disk is in the mail every few weeks. Every few days one of the major services announces additions to its internet services.

Why are the older providers working so hard to hook us now? Because Win95 is now scheduled for release on the 24th of August of this

year. Whether or not it is actually released on time, its release will be one more factor in the great sea of change in the world of online communications expected to occur in the next year or so. Just as almost every machine sold today has Prodigy or AOL already installed, as well as DOS and Windows, within a few months every new machine will contain Win95 and with it the online software for the Microsoft Network (MSN). When you boot up Win95, the MSN icon will be waiting on the desktop. Just click and you can register online - if you have your credit card handy!

If the Justice Department allows it, the advent of MSN will provide incredible competition to the old providers. But, how will all this effect delivery of services? First, the major services do not yet have wide availability of fast modem connections. Second, the big services charge by the minute or by the message while most access providers charge by the month or even longer periods except for the most basic accounts. Even if you can get high speed access to one of the big boys you are not home free. Compu$erve charges even higher rates for higher speed access.

On the other hand, with the major service providers, the end user doesn't have to do much more to get their machine ready than to install the provider's access software and log on. The options will all be on the provider's server. With direct access it's usually up to the user to assemble a suite of software that will do everything the user desires. This method offers greater freedom but can be fraught with frustration. Loss of freedom is what is really threatened by the encroachment of the major providers and MSN. The user is forced into their selection of internet clients, their interface and their options. But there are two greater threats to the internet.

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The big threat everyone worries about is censorship. With Congress pandering to the lowest common denominator and the squeaky wheel, there is real risk that in an attempt to prevent the one or two percent of the online world who are children from access to pornography, or to silence the distribution of unpopular and perhaps even hateful literature and ideas, it is possible that the net itself will be destroyed. The entire concept of the net is open architecture and easy access to systems and servers.

Every firewall, every barrier, every "protection" built into the system reduces its effectiveness as a medium of communication. What a pleasant surprise to hear Newt Gingrich's comments on this issue. (I feel better, now, about that "*newt*" icon appearing on my screen every time I load Chameleon.)

Here, my objections to the big providers may prove to be wrong headed, for if they can provide front end software which will permit the end user, read "parents", with the ability to restrict access on the user end, we may have the best of both words. Open systems with user control. Ahh fantasy land.

But the real threat to the system isn't from the censors but from a new breed of on line entrepreneurs. After all what, they say, “is the net for if not to make money?” That last statement would have been anathema a few months ago. Remember the outcry when a lawyer spread his advertising over the net. That seems long ago indeed.

Just a few months ago, virtually, no pun intended, every site on the World Wide Web could be accessed. Just click on a URL (Universal Resource Locator) and within a few seconds you were connected. It was fascinating. More amazing were the number of commercial

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publications which offered free and unfettered access. Time Magazine, Ziffnet, the New York Times.

But slowly that’s changing. It seems they were just getting us hooked. While few sites actually charge for access, there are a number of sites which require registration and passwords. No longer can I merely click. Now, to read the NandO Times, an excellent source of national and international news, I have to get down my little card file and look up my user name and password. At least I didn't have to provide a credit card number as I did for MSN, even though there’s no charge yet.

Commercial charges for online information are nothing new. Lexis and WestLaw have long charged outrageous sums for access to what is essentially public information. But now there are commercial sites on the Web itself. Paid subscriptions required. There is no free lunch, but for the moment there is a very inexpensive ride. Who knows what it'll be like next year.

A FINAL THOUGHT

It's a gorgeous summer day. Temperature in the 70's. Gentle breeze blowing. It's time to let the modem cool off and get some fresh air. And I'm sitting at the keyboard writing this column.

Actually it isn't that bad. We just returned from a 5 day weekend in Michigan -- early breakfasts, long hikes before lunch. Long naps in the afternoon, with a good novel to fall asleep over. And then a walk on the pier or a good dinner in the evening. No keyboard, no modem. Just good conversation and that novel by one of my favorite authors, Richard Powers, whose "Three Farmers on Their Way to a Dance," blew me away a number of years ago.

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I should have been forewarned. Even the dust jacket makes it clear that the new book, "Galatea 2.2" ((Farrar Straus Giroux, NY) involves a confrontation with a computer. It's an attempt to enable a computer to compete with real students in a "Turing Test" and pass a masters degree exam in literature. Real danger lurked when I read the words with which the book opened, "It was like so, but wasn't. I lost my thirty-fifth year. . . ."

Within a few pages we learn that the narrator had free access to what he calls the world web. I've lost at least a year that way too. Just published, the book is set in that time, seemingly light years ago, but really not much more than a year, before the advent of the graphic browser, but still the author-narrator's excitement mounts as page after page he describes the addictive delights of connecting to machines all over the face of the earth. "The web: yet another total disorientation that became status quo without anyone realizing it."

The novel is much more than technobabble, it is a fascinating tour of the subject of intelligence, literature and love. Logoff, pick up a copy and a tall cool one. Sit out on the deck and enjoy.

Leonard Grossman is a lawyer with the Department of Labor and is a regular WindoWatch contributor. He can be reached at grossman@mcs.com or leonard.grossman@syslink.mcs.com

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Why Winzip?.... A Retrospective © 1995 by Bernie

Good reader "this piece is meant to be accompanied by a musical score beginning about mid-article, starting out at as a soft, almost imperceivable volume and ending fortissimo. I hear a patriotic piece... perhaps the Battle Hymn of the Republic... Go back and try it! Now see what you've done... Ya got me started again. I'll have to cancel my patient load AGAIN for today.......

DAMN IT!"

Thanks to all for the overwhelming number of replies regarding the musical question "Why should I use Winzip?" I have been very surprised... veritably shocked at the lack of enthusiasm for this ubiquitous utility, which has been evident in the feedback to my query.

I would not have guessed that there would be about a 6 to 1 ratio of comments against. Either this unscientific survey means that Winzip is truly held in quite low regard, or that I have somehow struck a chord with the subversive element of this Windows NewsGroup, whose agenda would be to function as the nidus for a return to the days of real blood and guts computing... none of this cartoon stuff with little pictures serving as replacements for intellectual thought... yes, even for truth, justice and the American way. Today heralds a throw-back to the days when cashiers gave change by counting rather than obeying the mindless orders of the change-calculating cash register. A return to the time of phonics and order in schools... to a time when you could leave your doors unlocked, when gasoline was 39 cents a gallon, when gay meant happy (no letters please... no slur intended), when

funny little plastic glasses were given out in theater lobbies to view 3-D movies. In short, a return to the *good old days*.

Little did I think when asking this question, that, one day in the future.... our children and our children's children will look upon this day, the day of the response to my question on Winzip, as the beginning... yea the genesis of a the new era, the turning point, the rebirth of the return to sense, to personal responsibility, to integrity, to everything that is good and wholesome and, yes... we were there... we were there together.

Mine eyes fill with tears and my voice chokes with emotion as I dwell upon this, and I can only say, with the utmost of humility, that I could not have done *all* of this alone. No one person could have achieved *all* of this alone. It was *you*... you renaissance people out there in cyber-land who, in joining with me in this revolution, deserve so much of the credit..... *YOU* are the ones who are never to be forgotten, of whom stories will be told and songs will be written. *YOU* are the sentinels of the new time, the bravest of the brave, the wisest of the wise! God bless you folks. God bless you one and all.. real good!... and God bless DOS 6.

Bernie **(I have only 1 name like Cher, Fabian, Pauline. and Fabio)**
bernie11@ix.netcom.com
July 12, 1995 -how fitting.. between the 4th of July and Bastille Day!
Bernie No-last-Name..You are the hero! The best of the best! The finest and truest of us all. You make me proud.....

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PLUG OF THE MONTH

Games and puzzles are one of the easiest ways to get the uninitiated computer user hooked! Our Plug this month is a computerized version of one of the oldest games known to mankind. It has many computerized versions most of which use the accouterments of the game and very little else. This is the real thing and is as addictive and fun in front of the computer as it was at a gaming table.

The version I looked at is shareware as is our policy for this column. The registered version has important features that make this game even more challenging with the additional ability to save one's game.

So let's cut to the bone and stow the palaver...

WindoWatch's

Plug of the Month is....

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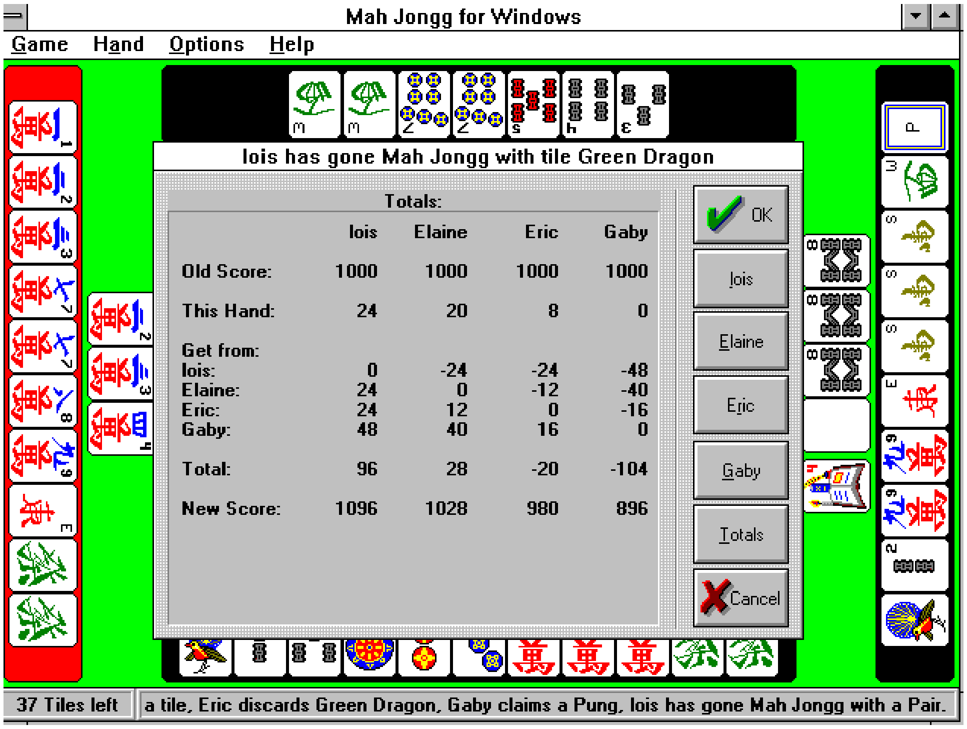

lois has gone Mah Jongg with tile Green Dragon

Totals:

	lois	Elaine	Eric	Gaby
Old Score:	1000	1000	1000	1000
This Hand:	24	20	8	0
Get from:				
lois:	0	-24	-24	-48
Elaine:	24	0	-12	-40
Eric:	24	12	0	-16
Gaby:	48	40	16	0
Total:	96	28	-20	-104
New Score:	1096	1028	980	896

37 Tiles left

a tile, Eric discards Green Dragon, Gaby claims a Pung, lois has gone Mah Jongg with a Pair.

MahJongg for Windows

The price for the registered version of this software is US$ 29.95 or 150 French Francs plus US$ 5 or 25 French Francs for posting and packaging . I did NOT like the instructions for ordering the product so check with the authors at CompuServe . Their address is:

Name:Berrie Bloem
CIS: 100545,2530

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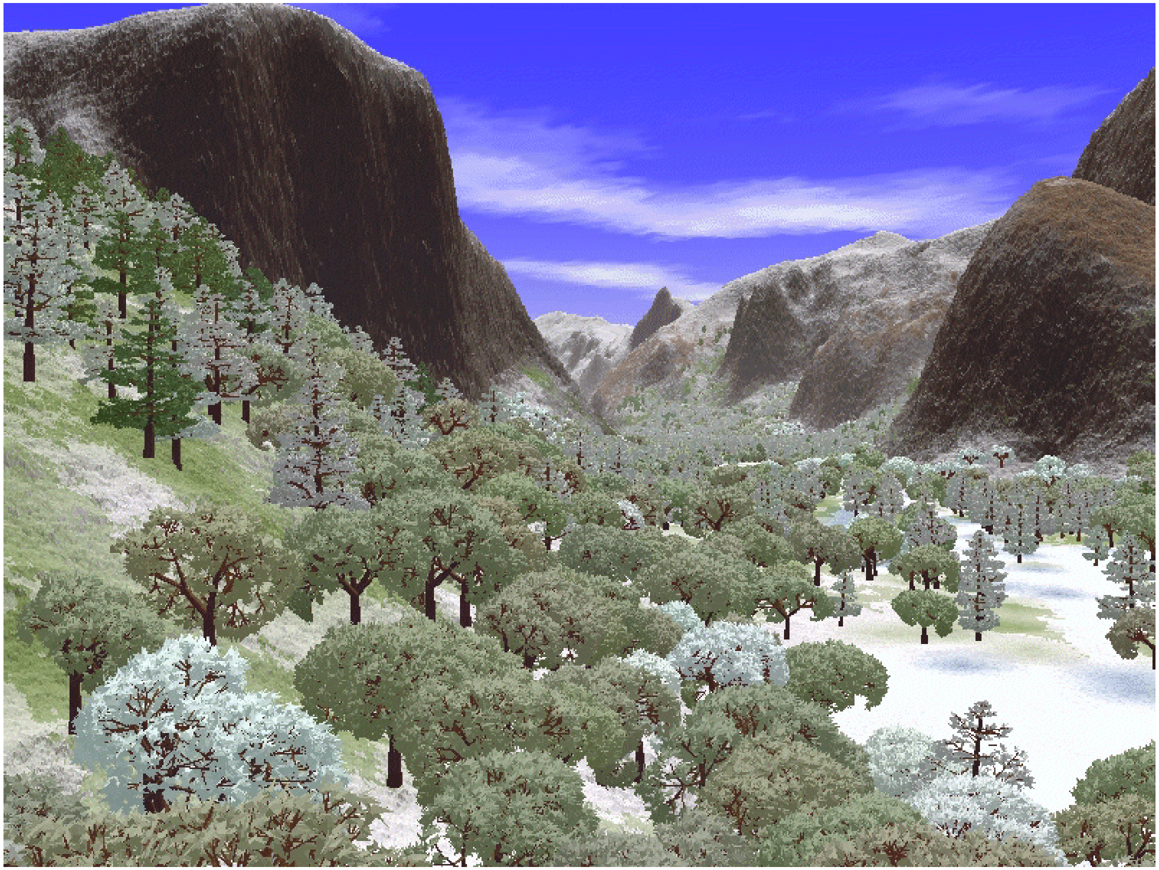
Herb’s Art Gallery



Herb Chong contributed this GIF. He has new toys. Perhaps we can persuade him to tell us about them...