C H A P T E R   1 9

Applications and Utilities

Windows 95 includes a set of applications and utilities designed to take advantage of new areas of the operating system, including 32-bit preemptive multitasking, long filenames, new Windows 95 visual elements and common dialogs, OLE, TAPI, MAPI, and other Win32 API features. This section describes some of the new applications and utilities, and the key features they provide.

The applications and utilities listed in this section have either been completely re-designed or designed from scratch so that a novice user can have a good experience using the applications for the very first time (and for many times after that). Experienced users will find them both powerful and flexible, however the applications were not necessarily designed to satisfy all the needs of advanced users—many of the applications and utilities will help to inspire third-party developers to further exploit technology included in Windows 95.

Filename: in.doc   Project: *Insert existing text here and delete this text. Do not remove the following paragraph.
Template: Author: Shane A. Gonzales   Last Saved By: Shane A. Gonzales
Revision #: 2   Page: 315 of 12   Printed: !Unexpected End of Expression

File Viewers

File Viewers are a new capability included in Windows 95. They allow users to view files in most popular file formats without using the application used to create the files. File Viewers provide a real convenience when looking at attachments sent in electronic mail messages, or browsing files on a network. Figure 1 shows the right-click context menu with the Quick View menu item selected, and the resulting Quick View window showing the contents of a Microsoft Excel worksheet.
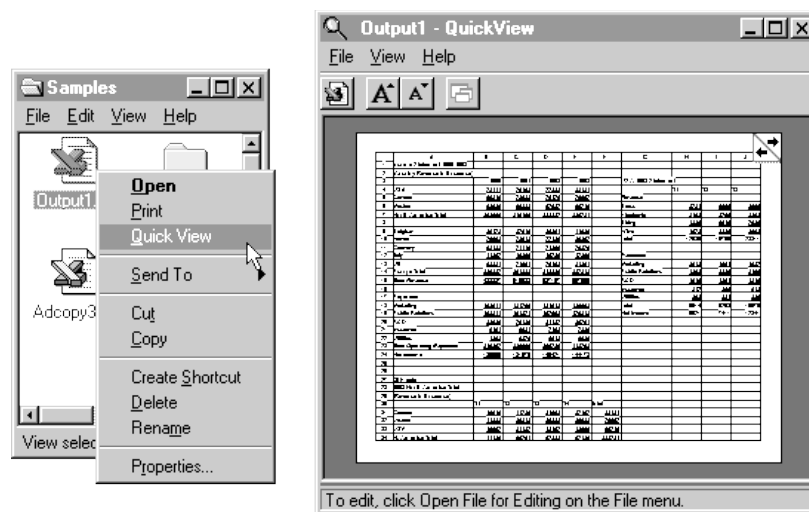
Figure 1. Quick View of a Microsoft Excel Worksheet

File viewers also support the ability to drag and drop of a file from the Windows Explorer or desktop onto an open file viewer (Quick View) window. If the extension of a document is not associated with a known application, the "Open With" dialog allows user to specify either viewing the file using QuickView or opening the selected document with an application.

Users can also specify the default open command for any file type to be QuickView in the View Options dialog (in the Windows Explorer), which is convenient for users who look at a particular file type a lot but do not have the application on their hard disk. Users can also customize the quick view display in several ways:

u   Can view files in standard view or page view, both landscape and portrait layout modes

Filename: in.doc   Project: *Insert existing text here and delete this text. Do not remove the following paragraph.
Template: Author: Shane A. Gonzales   Last Saved By: Shane A. Gonzales
Revision #: 2   Page: 316 of 12   Printed: !Unexpected End of Expression

u Can view files in different fonts, point sizes

u Can rotate bitmap files so things like fax messages can be moved to the correct orientation

Jointly developed by Microsoft and Systems Compatibility Corporation (SCC), Windows 95 includes Quick Viewers for popular file formats. (SCC offers additional viewers and features in their Outside In for Windows product.) In addition, ISVs are being encouraged to ship their own Quick Viewers for the file formats they support to work with future releases of their software.

Windows 95 will provide Quick Viewers that support the following file formats (third-parties and ISVs will provide support for additional file formats—users can also assign different extensions to applications to choose QuickView format):

.ASC	ASCII file
.BMP	Windows Bitmap Graphics File
.CDR	Corel Draw files
.DOC	Word for MS-DOS ver 5, 6; Word for Windows ver 2, 6; WordPerfect, ver 4.2, 5, 6, 6.1
.DRW	Micrographix Draw
.EPS	Encapsulated PostScript files
.GIF	Compuserve GIF File
.INF	setup files
.INI	configuration files
.MOD	Multiplan v 3, 4.0, 4.1 File
.PPT	PowerPoint, ver 4 files
.PRE	Freelance for Windows
.RLE	Bitmap Files (RunLengthEncoding)
.RTF	Rich Text Format File
.SAM	AMI and AMI PRO files
.TIF	Tiff File
.TXT	Text File
.WB1	Quattro Pro for Windows spreadsheet files
.WK1	Lotus 1-2-3 v 1 & 2 Files
.WK3	Lotus 1-2-3 v 3 File
.WK4	Lotus 1-2-3 v 4 spreadsheet and chart files
.WKS	Lotus 1-2-3 File or MS Works v 3 File
.WMF	Windows Metafile
.WPD	WordPerfect demo files
.WPS	Works Word Processing Files
.WQ1	Quattro Pro for MS-DOS File
.WQ2	Quattro Pro v 5 for MS-DOS File
.WRI	Windows 3.x WRITE files
.XLC	Excel 4 Chart File
.XLS	Excel 4 Spreadsheet and Excel 5 Spreadsheet and Chart Files

Filename: in.doc   Project: *Insert existing text here and delete this text. Do not remove the following paragraph.
Template: Author: Shane A. Gonzales   Last Saved By: Shane A. Gonzales
Revision #: 2   Page: 317 of 12   Printed: !Unexpected End of Expression

WordPad

WordPad is a 32-bit application that replaces Write and Notepad, provided in Windows 3.1, as a single editor. WordPad is a completely rewritten application and was written as a good example of the user interface style that applications written for Windows 95 should use. While not a full-blown word processor, WordPad does make it easy for users to create simple documents and memos. WordPad also utilizes the new common dialogs in Windows 95 for opening files, saving files, and for printing—the new dialogs make it easy for users to use long filenames.

As an OLE server and client application, WordPad provides easy integration with other OLE-enabled applications provided with Windows 95, or available from third-parties. WordPad uses the same native file format as Microsoft Word for Windows version 6, but also supports reading and writing rich text files (RTF) and text files, and reading of Write .WRI files.

WordPad also is MAPI-enabled, so it's easily integrated with Microsoft Exchange to allow users to send files over electronic mail, or by fax, directly from within WordPad.
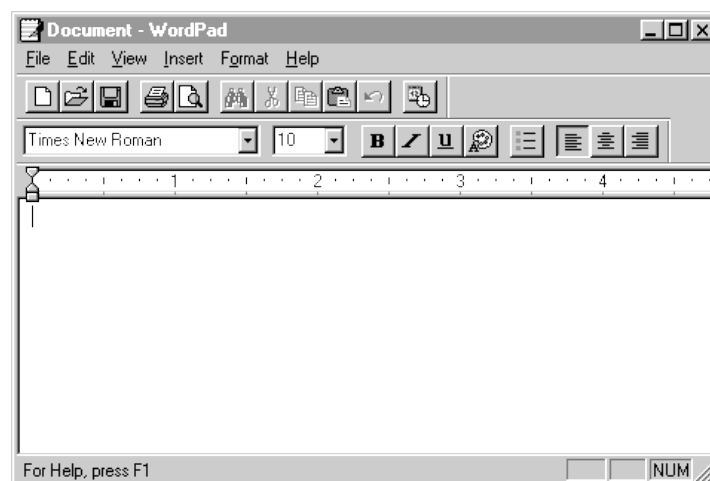
Figure 2. WordPad Application Provided in Windows 95

Filename: in.doc   Project: *Insert existing text here and delete this text. Do not remove the following paragraph.

Template: Author: Shane A. Gonzales   Last Saved By: Shane A. Gonzales

Revision #: 2   Page: 318 of 12   Printed: !Unexpected End of Expression

Paint

As with WordPad, Paint in Windows 95 is a new 32-bit application that replaces it's Windows 3.1 counterpart, Paintbrush. Paint is an OLE server, allowing the creation of OLE object information that can be embedded or linked into other documents. Paint is also MAPI-enabled, thus making it easy to integrate with Microsoft Exchange to send images as electronic mail messages, or as a fax message.

The combination of Paint and WordPad operating on the system provide a good way for novices to see the interaction of good 32-bit applications written for Windows 95.
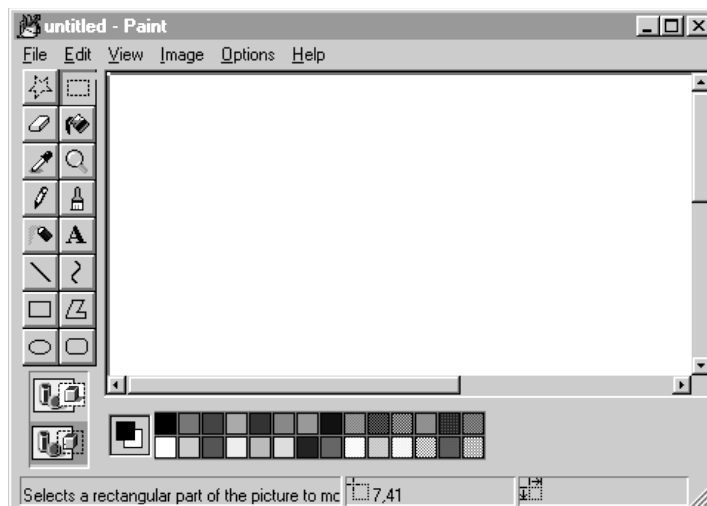

Figure 3. Paint Application Provided in Windows 95

Filename: in.doc   Project: **Insert existing text here and delete this text. Do not remove the following paragraph.
Template: Author: Shane A. Gonzales   Last Saved By: Shane A. Gonzales
Revision #: 2   Page: 319 of 12   Printed: !Unexpected End of Expression

Backup

Backup is a new 32-bit application for Windows 95 that makes it easy for users to "back up" information on their computer to another storage medium such as floppy disk or to tape. The user interface in the Backup application takes full advantage of new Windows 95 user interface, and uses standard controls such as the tree and list view controls to make it easy for novices and users familiar with the controls in Windows Explorer as part of the Windows 95 shell. Usability studies have shown that the user interface is easy for novice users to understand and use, and thus will make it quick and simple for backups to be performed. Backup includes the ability to drag and drop file sets and backup sets onto a link to the Backup application which can be placed on the desktop to make starting a backup operation much easier—this allows users to just "click and drag" to start a backup procedure. Access to the Backup application can also be invoked by explicitly running the Backup application, or by choosing the Backup option from the Tools tab on the Disk Property sheet.
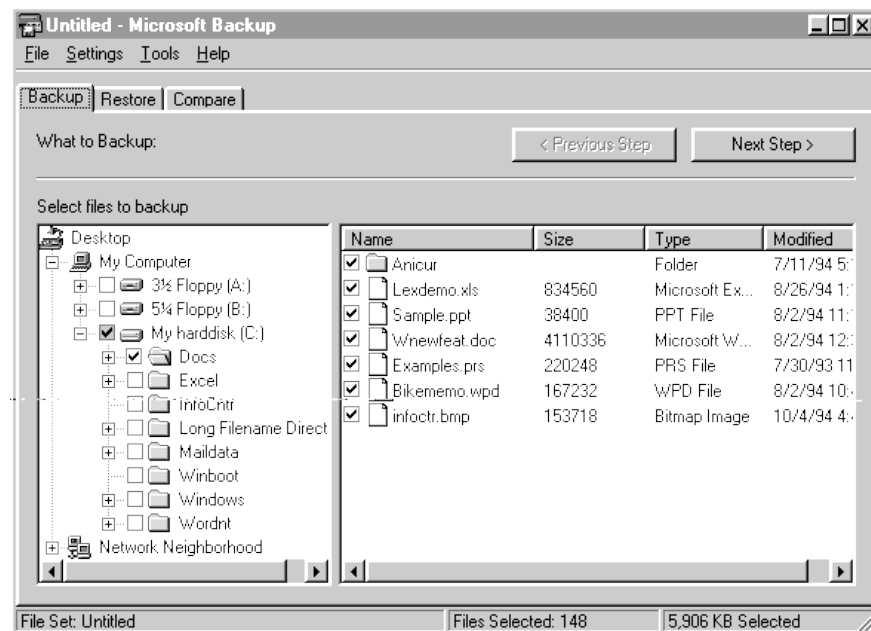
Figure 4. Backup application provided in Windows 95 can backup local hard disk, floppy disks, or network drives

Filename: in.doc   Project: *Insert existing text here and delete this text. Do not remove the following paragraph.
Template: Author: Shane A. Gonzales   Last Saved By: Shane A. Gonzales
Revision #: 2   Page: 320 of 12   Printed: !Unexpected End of Expression

Backup is extremely flexible, and allows backup, restore, and compare of files using hard disks, network drives, floppy disks, and QIC 40, 80, 3010, and 3020 tape drives which are connected to the primary floppy disk controller, and the QIC 40, 80, and 3010 tape drives manufactured by Colorado Memory Systems which connect to the parallel port. Backup also supports compression of files to maximize storage space. The on tape format is the industry standard QIC-113 format. The Backup application can read tapes created with other backup applications which also use this standard QIC-113 on tape format, both with file compression and without file compression.

Other standard options include differential and full backup, re-direction of files on restore, and always erasing floppies or tapes before a backup. Backup includes a full system backup/restore feature which allows the user to simply select the full system backup file set (automatically created for user when backup is first launched), do a backup, and then, later do a restore. This works even if the user has replaced their hard disk with a completely different type of hard disk. The Backup application does all the necessary merging of registry settings and management of replacing files in use so a novice user never has to understand all of the technical details associated with this fairly complex operation.

HyperTerminal

HyperTerminal is a new 32-bit communications application provided with Windows 95 that provides asynchronous connectivity to host computers such as on-line services, or other PCs. HyperTerminal replaces the Terminal application provided in Windows 3.1, and is a completely different application, providing advanced features and functionality not supported in Terminal.

HyperTerminal represents a good communications application written for Windows 95, and is completely integrated with, and takes full advantage of, the new Telephony API (TAPI) and UNIMODEM subsystems built into Windows 95. HyperTerminal uses the new 32-bit communications subsystem and provides error-free data transfer by leveraging the new architecture components in Windows 95, including multithreading and preemptive multitasking. The user interface in HyperTerminal focuses on the document centric nature of Windows 95, and is centered around the communications connection that users make, rather than around the main application. As with the other applications and utilities provided with Windows 95, HyperTerminal uses the new common dialogs and supports the use of long filenames

Filename: in.doc   Project: *Insert existing text here and delete this text. Do not remove the following paragraph.
Template: Author: Shane A. Gonzales   Last Saved By: Shane A. Gonzales
Revision #: 2   Page: 321 of 12   Printed: !Unexpected End of Expression

HyperTerminal makes connecting to remote computers easy for both novices and experienced PC users. Through the use of innovative autosensing technology, complex communications settings such as baud rate, number of stop bits, parity, and terminal emulation type, are automatically determined by the HyperTerminal application, so the user doesn't have to deal with these settings at all. This results in a significant usability improvement.

HyperTerminal provides mainstream communications program functionality, including terminal emulation and binary file transfer capability. Terminal emulation support includes emulation of ANSI, TTY, VT52, and VT100 terminals. Binary file transfer protocol support includes Xmodem, Ymodem, Zmodem, and Kermit file transfer protocols.
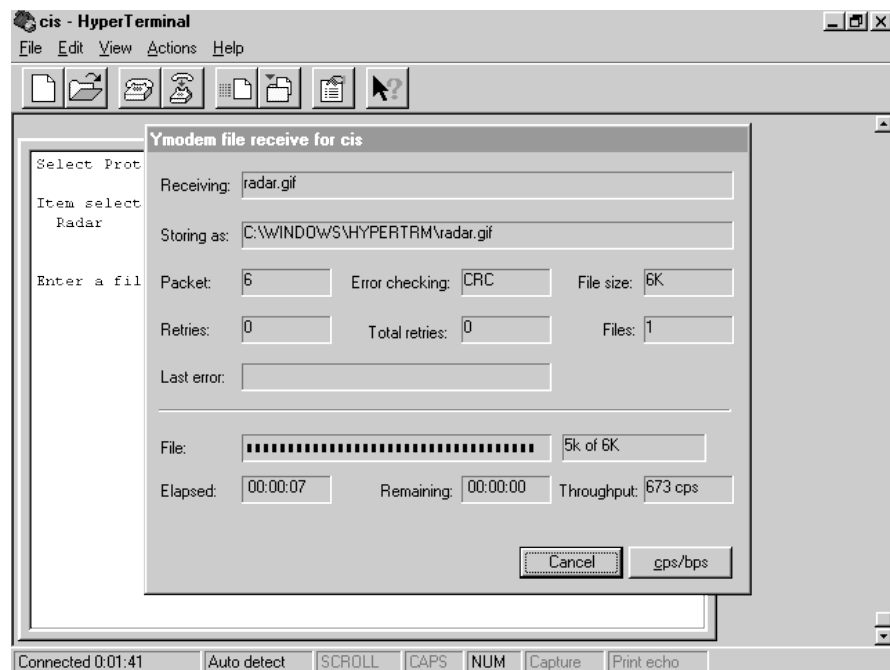
Figure 5. HyperTerminal application in Windows 95 makes it easy to connect to host computer services and perform error-free downloading of files

Filename: in.doc   Project: *Insert existing text here and delete this text. Do not remove the following paragraph.
Template: Author: Shane A. Gonzales   Last Saved By: Shane A. Gonzales
Revision #: 2   Page: 322 of 12   Printed: !Unexpected End of Expression

New MS-DOS–based Edit.Com

Windows 95 also includes a new version of the MS-DOS–based text editor, EDIT.COM. Enhancements were made to the editor provided with MS-DOS to make it easier for users to work with text files in case the Windows 95 shell can not be loaded for some reason.

Users of MS-DOS will find the Edit program very familiar, however there are some dramatic improvements. Edit will allow users to open up to 9 files at the same time, split the screen between two files, and easily copy and paste information between files. Users can also open files which are approximately 4 MB in size. Another key feature in the new Edit program is that it also supports long filenames—users can open filenames and navigate through their directory structure just as they do under the Windows 95 shell. Edit is also smaller and faster than it's MS-DOS predecessor.

Figure 6. New Edit.Com in Windows 95 supports split screen, and using long filenames

Disk Utilities

Windows 95 includes a collection of disk utilities designed to keep your system performing optimally and error-free. In addition to the DriveSpace Disk Compression Tool discussed in the Architecture section of this guide, Windows 95 also includes a disk optimizer tool, and a disk checking and repair tool.

Disk Defragmenter (Optimizer)

The Disk Defragmenter (optimizer) tool in Windows 95 makes it easy for users to optimize their hard disk by rearranging information so it's better organized. This helps to minimize the area on which Windows 95 will need to look on your disk to load information that you request. Unlike the disk defragmenter utility provided with MS-DOS, the Disk Defragmenter utility in Windows 95 is a graphical application that runs within Windows 95. Users can defragment their disks in the background while other applications are running on their system, making it convenient for them to optimize their system. Additionally, users can see details of the defragment process and watch the progress being made by the utility, or can display a minimal status, as shown in Figure 7, that simply shows the status of the optimization process.
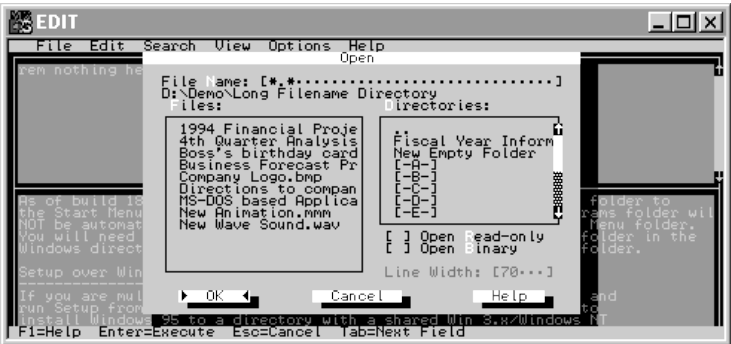

Figure 7. Disk Defragmenter utility in Windows 95 helps users optimize their disk performance

Filename: in.doc   Project: *Insert existing text here and delete this text. Do not remove the following paragraph.
Template: Author: Shane A. Gonzales   Last Saved By: Shane A. Gonzales
Revision #: 2   Page: 324 of 12   Printed! !Unexpected End of Expression

ScanDisk (Disk Checking and Repair Tool)

The ScanDisk (disk checking and repair tool) provided with Windows 95 is designed to help users check the integrity of their disks and to remedy problems that are detected. Unlike the Scandisk utility provided with MS-DOS, the ScanDisk utility in Windows 95 is a graphical application that runs within Windows 95. Users have the option of either running a standard scan, where ScanDisk will only check the files on the user's system for errors, or a thorough scan, where files are checked for errors and a disk surface test is performed to check for additional errors. As with the Disk Defragmenter utility, users do not need to exit any running applications to run the ScanDisk utility making it easy and convenient for users to check the integrity of their disk system, and thus prevent possible catastrophic errors in the future.
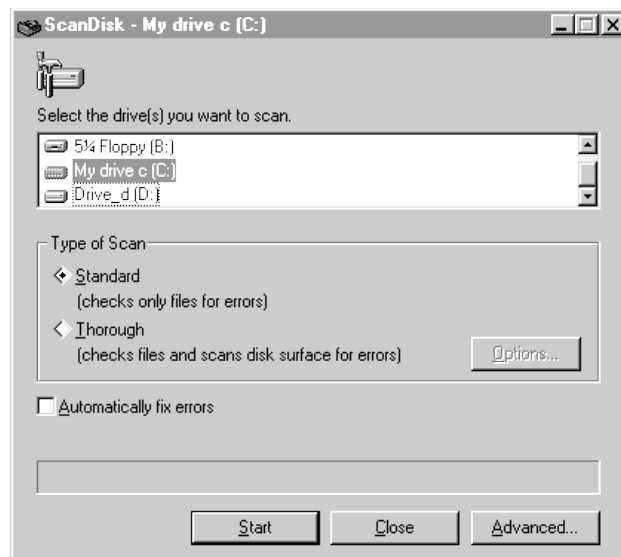
Figure 8. ScanDisk utility in Windows 95 allows users to perform a standard or thorough scan to check the integrity of their files and disk

Filename: in.doc   Project: *Insert existing text here and delete this text. Do not remove the following paragraph.
Template: Author: Shane A. Gonzales   Last Saved By: Shane A. Gonzales
Revision #: 2   Page: 325 of 12   Printed: !Unexpected End of Expression

<u>BLANK PAGE</u>

IMPORTANT: This text will appear on screen, but will not print on a PostScript printer.

This page should be the last one in this file; it was inserted by running the InsertBlankPage macro.

Do not type any additional text on this page!

Filename: in.doc   Project: *Insert existing text here and delete this text. Do not remove the following paragraph.
Template: Author: Shane A. Gonzales   Last Saved By: Shane A. Gonzales
Revision #: 2   Page: 326 of 12   Printed: !Unexpected End of Expression