Welcome to the Windows Resource Kit: Complete Technical Information for the Support Professional for the Microsoft Windows Operating System. This manual is designed for people who are, or who want to become, expert users of Microsoft® Windows™ 3.1.

We prepared the Windows Resource Kit in response to your requests for a detailed, easy-to-read technical view of Windows, so that you can better manage how Windows is used at your site. The Windows Resource Kit also contains specific information for system administrators who are responsible for installing and managing Windows in a network or multiuser environment.

This introductory chapter presents three kinds of information you can use to get started:

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Resource Kit, so you can quickly find technical details about specific elements of Microsoft Windows.

.
present information in the Windows Resource Kit.

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flowcharts, so you can quickly find details and procedures for solving problems you might have installing or running Windows.

The Windows Resource Kit is a technical supplement to the documentation that is included in your Windows package and does not replace that information as the source for learning how to use Windows features and Windows applications.

Contents of this chapter

The Troubleshooting Flowcharts for Windows 3.1

Welcome

About the Windows Resource Kit

This guide is organized in seven parts to present specific details about Windows installation, memory management, non-Windows applications, Windows fonts and printing, networks, and other issues.

Part 1: Installation and Setup

.
the Windows Setup program, details about setting up Windows on a network, and instructions for creating a custom installation routine for automated Setup.

.
you need to create custom Windows setup information files (SETUP.INF, CONTROL.INF, and APPS.INF) for multiple installations.

.
the WINDOWS directory and the Windows SYSTEM subdirectory.

.
WIN.INI and SYSTEM.INI files, plus other Windows initialization files, and explains how you can change entries in these files.

Part 2: Configuring Windows 3.1

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information about how Microsoft Windows interacts with memory.

.
configuring your system, both for gaining optimal performance and for creating custom Windows configurations.

Part 3: Non-Windows—Based Applications

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about how to set up and run non-Windows applications under Microsoft Windows 3.1.

.
for non-Windows applications.

Part 4: Using Windows 3.1

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Windows, focusing on TrueType, the new font technology available in Microsoft Windows 3.1. This chapter also presents details about using printer fonts with specific types of printers.

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Microsoft Windows 3.1.

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overview of how Object Linking and Embedding (OLE) works in Windows applications. This chapter also describes how to update and add to the system registration database using REGEDIT.EXE.

Part 5: Networks and Windows 3.1

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using a network with Microsoft Windows, plus notes about specific networks.

Part 6: Troubleshooting Windows 3.1

.
information for troubleshooting problems with Windows, showing the key steps for isolating and solving common problems.

.
about the memory utilities and files on the diskette that accompanies the Windows Resource Kit.

Part 7: References, Resources, and Appendixes

This part of the Windows Resource Kit contains a glossary, a directory of training and other information resources, a list of hardware supported by Microsoft Windows 3.1, instructions for creating a minimum Windows “footprint,” and a comprehensive index. There is also a special section at the end of this appendix with technical articles describing Microsoft Windows for Pens, FastDisk, and other technical topics.

Conventions in This Manual

This document assumes that you have the complete Windows 3.1 documentation set and that you are familiar with using the menus, dialog boxes, and other Windows features. It also assumes that you have installed Windows on your system, and that you are using a mouse with Windows. For keyboard equivalents to actions described here, see the Microsoft Windows online help.

This document uses several conventions to help you identify information.

Document Conventions

The following table describes the typographical conventions used in the Windows Resource Kit.

Type style	
bold	or /3; section and entry names in .INI and .INF files such as [386enh] or emmexclude=; and any text that you type to carry out actions at the command prompt.
italic	example, to supply a value for a parameter that calls for a filename, you must type a specific filename such as MYFILE.EXE.
ALL CAPITALS	“WINDOWS” is used to represent the Windows main directory, and “SYSTEM” represents the Windows System subdirectory. When you type directory names and filenames at the command prompt or in a dialog box, you can use lowercase letters.

Other conventions in this document include:

.

.

W
The Microsoft Windows logo appears in the margin to indicate features that are new in Windows 3.1.

·“Windows application” is used as a shorthand term to refer to an appli-

cation that is designed to run with Windows and does not run without Windows. All Windows applications follow similar conventions for arrangement of menus, style of dialog boxes, and keyboard and mouse use.

.
to refer to an application that is designed to run with MS-DOS but not specifically with Windows and that may not be able to take full advantage of all Windows features (such as memory management).

.
commands. Typically, you see characters such as “C:\>” to show the location of the command prompt on your screen. When Windows is running, you can double-click the MS-DOS Prompt icon in Program Manager to use the command prompt.

.
sequence of keys, then press the ENTER key.

.
“Drag an icon in File Manager,” use the same meanings as the descriptions of mouse actions in the Windows User’s Guide and the Windows online tutorial.

Check the glossary at the end of the Windows Resource Kit for definitions of terms that you are unfamiliar with.

Syntax Conventions

“Syntax” refers to the order in which you must type an item such as an MS-DOS command with its switches or an entry in a Windows initialization (.INI) file. Elements that appear in bold must be typed exactly as they appear in the syntax example. Elements that appear in italic are placeholders for parameter values, for which you must supply specific information.

Unless specified otherwise, you can type commands, keynames, parameters, and switches in either uppercase or lowercase letters.

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This example shows the syntax for a SYSTEM.INI entry, with each item in the sample explained in the following table.

[section]
keyname=value, string, source, destination

Entry item

[section]
file. The enclosing brackets ([]) are required, and the left bracket must be in the leftmost column on the screen. For example, [standard].

keyname
combination of letters and digits. For many entries described in this document, the keyname must be followed immediately by an equal sign (=). For example, run=.

value

string
letters, numbers, spaces, or any other characters. Sometimes the syntax definition will indicate that the string must be enclosed in double quotation marks (" ").

source
be used as input to a command. Source can consist of a drive letter and colon, a directory name, a filename, or a combination of these elements.

destination
transferred.
Destination can consist of a drive letter and colon, a directory name, a filename, or a combination of these elements.

Note
for any MS-DOS commands such as mem and for many of the drivers such as SMARTDRV.EXE by typing the command name and /? at the command prompt (for example, mem /?). Or type help plus the command name. Type help at the command prompt to see a list of all MS-DOS commands with a brief description of command syntax, parameters, and switches.

The Troubleshooting Flowcharts for Windows 3.1

The troubleshooting flowcharts in this introduction to the Windows Resource Kit provide an orientation and quick introduction to problem-solving for Windows 3.1. Each chart presents a brief statement of the problem with a decision tree for determining the source and solution. Each chart also includes pointers to related technical details in the Windows Resource Kit.

Flowchart 1.1
System Requirements

This icon appears throughout the Windows Resource Kit to refer to a flowchart that shows a specific solution to a problem.

The flowcharts are organized in the following sequence.

Flowchart Series 1: Troubleshooting Windows Setup

Chart 1.1: System Requirements for Windows

Chart 1.2: Windows Hangs During Setup

Chart 1.3: Setup /n Fails

Chart 1.4: Known Problems with Computer BIOS

Chart 1.5: Creating ‘Clean Boot’ Floppy for MS-DOS 4 or Earlier

Creating ‘Clean Boot’ Floppy for MS-DOS 5

Chart 1.6: Reinstalling Windows Without Losing Settings

Chart 1.7: Expanding Files from the Windows Disks

Chart 1.8: Stacker

Flowchart Series 2: Troubleshooting Hardware Problems

Chart 2.1: Mouse Doesn’t Work in Windows

Chart 2.2: Serial Port Problems (Communications and Terminal)

Chart 2.3: Display Adapter Problems (Distorted Video)

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Chart 6.1: Multimedia Drivers

Chart 6.2: Media Player

Chart 6.3: MIDI Mapper

Chart 6.4: Music Box

Chart 6.5: Sound

Chart 6.6: Sound Recorder