Inside Windows NT™

Windows NT 内幕

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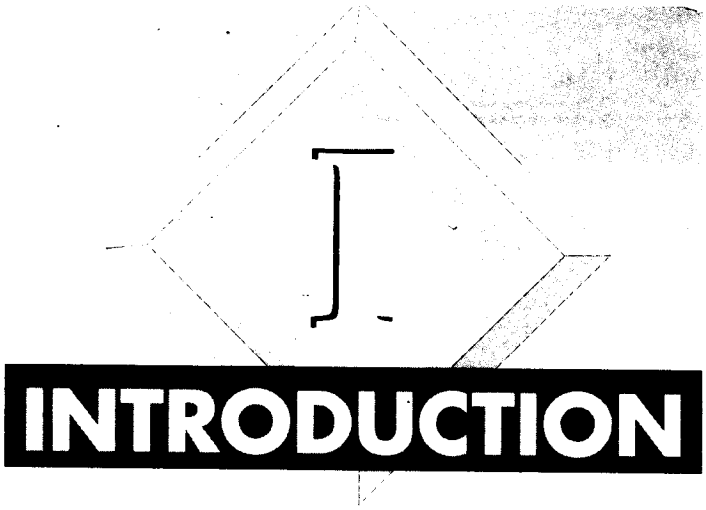

Introduction

It's finally here! After months of anticipation, thousands of reviews, hundreds of press releases, and endless speculation, Microsoft Windows NT is available for Intel-based computers.

When Microsoft released version 3.0 of the Windows operating system in 1990, PC users entered an entirely new world of computing. They were freed from the constraints imposed by the MS-DOS operating system and the underlying architecture of the original IBM PC (a computer originally conceived when no one thought that any computer user would need more than 64K of RAM).

In this new "Windows" world, PC users took advantage of all the memory their computers could access. Proportionally spaced fonts, a wide range of video and printer options, and updated screen graphics came to every desktop as a part of the operating system. Each user had a WYSIWYG (what-you-see-is-what-you-get) display, and could be reasonably assured that what was on the screen was what would print on paper. This was a brave and exciting new world.

With the introduction of version 3.1 of Windows, Microsoft updated these features and added a new font technology, more memory-management capabilities, integrated multimedia features, and advanced object-oriented data management. Shortly after Windows 3.1 appeared, Windows for Workgroups added peer-to-peer networking features to the Windows environment. The Windows world expanded greatly, becoming doubly exciting.

Since the introduction of Windows 3.1, Microsoft has been hard at work creating Windows NT, the "New Technology" that will lead Windows deeper into the nineties. This advanced operating system uses the Windows 3.1 interface, but adds significant capabilities underneath the interface.

For example, Windows NT introduces several security features: logon accounts; user privileges; and a new, optimized file system (known as the NT File System, or NTFS) that enables file-level security control and better data recovery.

In addition, this version of Windows is not intended just for the PC. Although the initial release of Windows NT runs on the Intel 80*x*86 hardware platform, versions also are available for RISC-based computers. Microsoft plans versions of Windows NT for an ever-expanding group of computer architectures. The enticing world of Windows becomes even larger!

Inside Windows NT prepares the experienced user of a command-line-based operating system—such as MS-DOS, OS/2, or UNIX—to productively enter the world of Windows NT. It helps you to make the shift from the command-line environment to the milieu of the graphical user interface quickly and easily.

Inside Windows NT teaches you the basics of the Windows graphical user interface, helping you to acquire the new working habits that such an interface demands of you. It also shortens your learning curve by introducing you to the advanced features that Windows NT offers a user of software written for Windows NT itself, Windows 3.1, MS-DOS, OS/2, and POSIX.

This book is also for the experienced Windows user making the transition to using Windows NT. It describes all the new features implemented by this new version of Windows, and it acquaints you with the differences you need to be aware of.

Most of all, *Inside Windows NT* is for real-world users of computer systems. It approaches the operating system from the point of view of the person who actually uses a computer to accomplish the tasks that make up the working day.

Many Windows NT books take a very high-level approach to explaining the complexities of the new Windows NT environment. *Inside Windows NT*, on the other hand, understands that you have a job to do and that you want to learn as much about Windows NT as you need to in order to get your work done.

With an operating system that offers the complexities that Windows NT offers, understanding the *Inside Windows NT* point of view is essential. Users easily can get lost by trying all the new features and capabilities, and easily can be intimidated by the sheer scale and power of Windows NT.

Inside Windows NT can serve as your guide to the part of the operating system that you use to accomplish work, placing all the new features and capabilities into your working perspective. *Inside Windows NT* not only shows you how to get up to speed quickly, but, more importantly, how to get your work done as efficiently as possible.

How This Book Is Different from Most Windows NT Books

Inside Windows NT is designed and written to accommodate the way you work. The authors and editors at New Riders Publishing know that you do not have a great deal of time to learn Windows NT, and that you are anxious to begin using

Windows NT to help you become more productive in your daily work.

This book, therefore, does not lead you through endless exercises in every Windows NT function, and it does not waste your time by repeating clearly obvious information. Each chapter introduces you to an important group of related Windows concepts and functions, and quickly shows you how these aspects of Windows NT relate to your computer system.

The chapters also lead you through the basic steps you must follow to incorporate each new concept and function into your own computing work. This book's tutorials are fast-paced; they help you to become productive in the shortest time possible after you understand the concepts and functions involved.

Later in this introduction, you will find descriptions of each of this book's sections and chapters. You also will find descriptions of other Windows and Windows NT books available from New Riders Publishing.

Who Should Read This Book?

Inside Windows NT is written for two types of readers: experienced users of a command-line operating system (DOS, OS/2, or UNIX), and experienced Windows users who want to upgrade to Windows NT.

Experienced MS-DOS, OS/2, and UNIX Users Who Are New to Windows NT

If you are a member of the first group of readers, you are comfortable using computer workstations (particularly with MS-DOS versions 3.3 and higher, OS/2 2.0 and higher, or

UNIX in one of its recent versions). This book assumes that you have experience using command-line applications and text-based user interfaces. This book also assumes that you are anxious to become productive with Windows NT. Specifically, this book makes the following assumptions about your skill level:

- You are an experienced workstation or PC user who knows the difference between a hard disk and a floppy disk.
- You have experience using a variety of operating system commands as you work at your workstation.
- You know that a file is the computer's basic information container and that files are hierarchically arranged in directories.
- You know that computers use different kinds of files: text, data (which may be text), executable, and so on. You are aware that file extensions typically are used to identify files of different types.
- You can type, and you know the location of the keys on the keyboard.
- You do not have the time to read long passages about computer and software basics; rather, you want to start working with Windows NT as soon as possible.

The Benefits of This Book for New Windows NT Users

If you are entirely new to the world of Windows NT and graphical computing, *Inside Windows NT* takes your needs seriously. Many Windows NT books are available, ranging from very basic books to advanced, specialized books for experienced users and software developers. Only a few Windows NT books, however, make a genuine effort to present information with comprehensive explanations, practical examples, and a minimum of hand-holding.

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