OS/2™

FEATURES, FUNCTIONS, and APPLICATIONS

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Standard Edition 1.0

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OS/2

This book is dedicated to those individuals whose insight and creativity will fundamentally impact the role of intelligent workstations in the world of information processing.

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Preface

THE DECISION TO WRITE this book was an easy one. Since we, the authors, are key members of the OS/2™ design team, we found ourselves with a tremendous amount of knowledge in the depth and breadth of the product. We felt that one way to put this knowledge to good use was to write a book. Unfortunately, that was easier said than done. The amount of information about the product that we have in our heads would fill many volumes. We wanted, however, to write a book that our audience could digest. Most people have real work to do but only a finite amount of time to do it in. The difficult question that we wrestled with was what kind of book we should write. *We wanted to maximize the usefulness of our detailed technical knowledge to best address your needs.* We accomplish this by selectively covering the large amount of information that is generally available on OS/2.

What you have in your hands is the result of our efforts. The book covers what we consider to be the most important aspects of *Operating System/2™: Standard Edition 1.0.* If you are a member of any of the following groups you will find this book very useful:

- Users of DOS on PCs.
- People curious about the applicability of OS/2 to their problems.
- Systems analysts.
- Systems designers.
- Systems planners.
- Application developers.

You do not need to be familiar with the details of IBM Personal Computer DOS (DOS) or Intel® 80286 microprocessors to benefit from this book. We cover background material so you can understand OS/2 and how its power can be applied. In addition, because OS/2 transcends the simple personal computer environment and provides sophisticated large system functions, we explain the operating system concepts used in this book.

This book explains why the capabilities of OS/2 are important to you. It also explains why the problems that OS/2 solves are important to you. We use the capabilities of DOS as a reference point where applicable.

HOW TO READ THIS BOOK

Because of the sheer mass of information and data available on OS/2, we have selectively chosen to describe in this book what we consider to be the most important features of the product. We have also reduced the mass of detail covering each feature to a digestible level. Once you have read this book on the capabilities of OS/2, using the detailed technical references available for the product will be a simple and productive task. We have structured the descriptions of the various OS/2 capabilities into three general levels of detail. These different levels allow you to be flexible in how you navigate through the book.

First, we describe many of the OS/2 capabilities in a generic sense so you can understand the concept, the usefulness of the function provided, and how it can be applied to real problems that you need to solve. We then take you a level deeper into the specifics of a given capability (such as memory management) by describing the corresponding application programming interfaces. At this level, we present the most important details of the interfaces so that you can see how OS/2 achieves the stated capability. This second level of detail is particularly important because it allows you to see how your specific application can be structured to utilize the capabilities of OS/2. We provide a third level of detail for those who want to see how to use the capabilities of OS/2 in actual code. We have included two chapters that demonstrate some of the key capabilities of OS/2 in actual programming examples that can be compiled and run.

By organizing the description of OS/2 into these different levels of detail, we enable you to choose your own path through this book. If you are not interested in programming examples, you can skip them entirely in Chapters 4 and 7. On the other hand, you may prefer to go directly to the memory overcommitment program example in Chapter 4 after reading the introductory discussion of the OS/2 memory capabilities in Chapter 2. After reviewing the programming example, you can then go back to Chapter 2 to read the descriptions of the OS/2 memory programming interfaces that interest you. Or, you may want to read this book from front to back to get the broadest description of OS/2 with the most detail. We have specifically structured this book to allow you to plot your own course through it, depending upon the amount of detail and the order of presentation you prefer.

Contents