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# MASTERING PARADOX<sup>®</sup> 4 FOR DOS<sup>®</sup>

Alan Simpson

- What's New in Version 4
- Create Custom Reports
- Manage Multiple Tables Simultaneously
- Develop Your Own Paradox Applications

User Levels **BEG** **INT** **ADV**

Book type **HOW TO** **REF**

**#1**  
BEST SELLER



# MASTERING PARADOX<sup>®</sup> 4 for DOS<sup>®</sup>

ALAN SIMPSON



*San Francisco ♦ Paris ♦ Düsseldorf ♦ Soest*

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## PARADOX SPECIAL KEYS

TO DO THIS...	PRESS THIS KEY...	SEE CHAPTER
Check-Descending (Queries)	Ctrl-F6	7
Check Mark (Queries)	F6	7
Check-Plus (Queries)	Alt-F6	7
Close Active Window	F8	5
Close All Windows	Alt-F8	5
CoEdit a table	Alt-F9	4
CrossTab	Alt-X	10
Do-It!	F2	4
DOS (shell out to)	Ctrl-O	13
DOS Big (maximum memory)	Alt-O	13
Edit table	F9	4
Editor	Alt-E	18
Example Element (Queries)	F5	15
Field View	Alt-F5 or Ctrl-F	4
Form Toggle	F7	4
Help	F1	2
Instant Graph	Ctrl-F7	10
Instant Report	Alt-F7	8
Instant Script Play	Alt-F4	11
Instant Script Record	Alt-F3	11
Maximize/Restore Active Window	Shift-F5	5
Menu Bar (move cursor to menu bar)	F10	2
Move/Size Active Window	Ctrl-F5	5
Next Image	F4	16
Next Window	Ctrl-F4	5
PAL Menu	Alt-F10	11
Previous Image	F3	16
System Menu (≡)	Alt-Spacebar	5
Zoom	Ctrl-Z	2
Zoom Next	Alt-Z	5

## **MAIN FEATURES OF THE PARADOX SCREEN**

### **1. Menu Bar** (Chapter 2)

*Mouse:* Click any menu name (or the ≡ symbol for the System Menu).

*Keyboard:* Press F10 and the first letter of menu name, or highlight menu name with arrow keys and press ↵. (Press Alt-spacebar to open the System menu.)

### **2. Close/Cancel** (Chapter 5)

*Mouse:* Click to close window. To save changes first, press the Do-It key (F2).

*Keyboard:* Choose ≡ ► Close. To save changes first, press the Do-It! key (F2).

### **3. Window Title Bar** (Chapter 5)

*Mouse:* Drag title bar to any location on screen to move window.

*Keyboard:* Choose ≡ ► Size/Move.

### **4. Column Right Border** (Chapter 5)

*Mouse:* Drag to narrow or widen column.

*Keyboard:* Choose Image ► ColumnSize.

### **5. Speedbar** (Chapter 2)

*Mouse:* Click any option. *Keyboard:* Press specified key.

### **6. Maximize Window** [↑] (Chapter 5)

*Mouse:* Click to maximize window to full screen size. Button changes to Restore (an up and down arrow), which you can click to restore window to previous size.

*Keyboard:* Choose ≡ ► Maximize/Restore.

### **7. Vertical Scroll Bar** (Chapter 5)

*Mouse:* Click arrows or bar, or drag scroll box to scroll up or down.

*Keyboard:* Press ↑, ↓, PgUp, or PgDn.

### **8. Size Window** (Chapter 5)

*Mouse:* Drag to size window.

*Keyboard:* Choose ≡ ► Size/Move.

### **9. Horizontal Scroll Bar** (Chapter 5)

*Mouse:* Click arrow or bar, or drag scroll box to scroll left or right.

*Keyboard:* Press →, ←, Tab, or Shift-Tab.

### **10. Status Bar** (Chapter 2)

Look here for information and instructions pertinent to the current feature or operating mode.

## INTRODUCTION



Simply stated, Paradox is a powerful database management system that anyone can use. Historically, database management systems have been programming-language oriented and thus best used as tools by programmers and sophisticated computer users. The need to remember numerous commands, functions, data types, syntax rules, file structures, and so on made the older database-management systems unwieldy for the neophyte and casual computer user.

Then came Paradox—a new approach to database management that freed the user from having to memorize complex commands. With Paradox, even the casual computer user can effectively store, retrieve, sort, print, change, and ask questions about data by selecting options from the menus and “filling in the blanks” on standardized questionnaires.

So what's so paradoxical about Paradox? The paradox is that even though it's easy to use, it does not compromise on power or flexibility. You can still ask complex questions about several interrelated tables of data without any programming.

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## WHO THIS BOOK IS FOR

This book is designed for the experienced computer user who is a novice to working with databases—a user who has never used Paradox or any other database-management system. Even if you're not exactly sure what a database management system *is*, or what it's used for, you're in good hands. The first chapter in this book will get you acquainted with what database management with Paradox is all about.

Like all books in the SYBEX *Mastering* series, we do want to stick with the topic at hand, namely Paradox. So we won't be spending lots of pages teaching you how to use a mouse and keyboard. In fact, we've geared this book toward people with *some* computer experience. In particular:

- ◆ Any prior experience with a word processing, spreadsheet, or other program will be helpful—any program that's already taught you enough to feel comfortable with the keyboard and perhaps a mouse.
- ◆ Along these same lines, you should already be comfortable with how information is organized on your hard disk into *files*, *directories*, and *drives*.

If you are not already familiar with such concepts, you can get a quick introduction from any small book on DOS, such as my own *Up and Running with DOS 5* or *The ABC's of DOS 5*, also published by SYBEX.

On the other hand, you may be at the opposite end of the spectrum, and already be familiar with database management and earlier versions of Paradox. If so, you might want to refer to Appendix B near the back of this book for a quick summary of what's new in Paradox 4.0 for DOS.

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## WHICH VERSION OF PARADOX?

This book is specifically written for Version 4.0 of *Paradox for DOS*. If you're using an earlier version of Paradox, such as Version 3.0 or 3.5, this book

won't help you much, because of significant changes and improvements in this newer version. If you'd like to upgrade your earlier version of Paradox to Version 4.0 for DOS, you can do so for the nominal upgrade cost (which is always subject to change, so I won't give an exact dollar amount here).

If you're a Windows fan, you should be aware that *Paradox for DOS* and *Paradox for Windows* are two entirely different products, and this book is specifically written for *the DOS version*. While Paradox for DOS sports a "Windows-like" interface, and can certainly be used on a computer that has Windows on it, only the Paradox for Windows product takes full advantage of the graphical interface that Windows offers.

For minimum hardware and memory requirements, please refer to Appendix A, "Installing Paradox."

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## FEATURES OF THE BOOK

This book is designed both as a tutorial and as a reference to the many features of Paradox 4.0 for DOS. Special features of the book, designed to simplify and speed your mastery of Paradox, and to provide easy access to information when needed, include the following:

**Endpapers** Inside the front and back covers you'll find a quick reference to the techniques for performing common tasks.

**Margin Notes** Margin notes provides cross-reference to where related features are covered in the book, tips for added insight on creative ways to use features, and cautions about problems that can occur when using a feature.

**Fast Tracks** The Fast Tracks at the beginning of most chapters provide a quick summary of techniques for using specific features, when you just need a quick reminder rather than a lengthy explanation.

**Optional Companion Disk** You can purchase a copy of the various sample tables, reports, forms, and the membership management application presented in this book in ready-to-use form on a disk. The disk is not required to use this book, but it may come in handy if you want to use some of the examples as a starting point for your own work, without having to key in everything from scratch. See the coupon near the back of the book if you're interested.



## STRUCTURE OF THE BOOK

This book is designed to supplement the densely packed and somewhat technical manuals that came with your Paradox package. The purpose of the Paradox manual is to document every available feature in great detail. The purpose of this book is to show you how to use Paradox and put it to work for your own purposes, whatever they may be.

To make things easier for you and to help you focus on information that's relevant to your own use of Paradox, I've divided the book into four parts:

**Part One: The Basics** Teaches you what Paradox is all about, and how to create tables, forms, reports, and graphs for viewing and printing your data. Techniques for sorting and querying (asking questions of) your data are also presented here. The focus here is on managing a single table, since this is the easiest way to learn to use these various features.

**Part Two: Managing Your Projects** This part of the book deals with more general aspects of Paradox, such as simplifying your work with scripts, customizing Paradox, and managing your files. You may only use a small number of the many features presented in this part of the book, so feel free to refer to it on an "as-needed" basis.

**Part Three: Managing Related Tables** One of the real advantages that a relational database management system, like Paradox, offers over word processors and spreadsheets is the ability to efficiently store information in multiple related tables of information and then "mix and match" that information as necessary. Though not required by everyone, working with multiple tables is useful for managing the business of running a business, such as managing orders, inventory, accounts, and so forth. Part Three focuses on managing data in separate, related tables.

**Part Four: Developing Paradox Applications** In some cases, the ultimate goal of a database management endeavor will be to develop a custom *application* that automates and simplifies all aspects of managing data stored in Paradox tables. Paradox offers two tools for creating applications: *Workshop*, designed for nonprogrammers; and the *Paradox Application Language (PAL)*, for those who are into or want to learn about programming. This book focuses on Workshop. If you're interested in becoming a PAL programmer, you might want

to “graduate” to a more advanced book that focuses on PAL after you learn the more basic and intermediate information presented in this book.

**Appendices** The appendices at the back of the book present somewhat more technical information on Paradox for installers and network administrators, and include a discussion of what’s new in Paradox 4.0 for experienced Paradox 3.5 users.

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## CONVENTIONS USED IN THIS BOOK

As with most modern programs, you can use a mouse or the keyboard to interact with Paradox. We’ll get into specific techniques in detail starting in Chapter 2, but for now, suffice it to say that this book uses the following conventions to present keys, combination keys, and menu selection sequences:

↑, ↓, →, ←, **PgUp**, **PgDn** Arrow and other special keys such as **Ins** (Insert), **Del** (Delete), and ↵ (Enter) are shown with the symbol commonly displayed on the key. If your keyboard is designed so that these keys are only on the numeric keypad, remember that the Num Lock key must be turned off for these keys to work properly.

**Combination Keys** Combination keystrokes, starting with **Ctrl**, **Alt**, or **Shift**, are separated with a hyphen. To press these keystrokes, hold down the first key while pressing the second. For instance, to press **Ctrl-Z**, you hold down the **Ctrl** key, type a **Z**, then release both keys.

**Menu Sequences** A series of selections that you make from the menus are displayed in an abbreviated sequence with a ► symbol separating each selection. For instance, **Tools ► More ► Add** means “Choose **Tools** from the menu bar, then choose **More** from the pull-down menu that appears, then choose **Add** from the submenu that appears.” You can use either the mouse or keyboard to choose menu options, as described in Chapter 2.

## A TIP FOR TYROS

One of the more troublesome aspects of learning to use any new program is inadvertently choosing the wrong set of menu options, and ending up in totally unfamiliar territory.

In most cases, you can simply “back out” to more familiar territory simply by pressing the Escape key (labeled Esc on some keyboards, Cancel on others), until you get to more familiar territory.

If you’re using a mouse, clicking any “neutral” area on the screen, or clicking the [Cancel] button on screen (if it’s available) serves the same purpose.

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