

# Paradox 4 Made Easy

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#### Paradox 4 Made Easy

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### Introduction

In a short period of time Paradox has established itself as the number two player among database managers for IBM-Compatible PCs. Considering the intense competition in the software industry, this says a lot about the nature of Paradox. It is that nature—the ability to provide true database power along with ease of use—that this book is designed to imitate from the ground up.

Since the beginning of the PC software industry, database management programs have earned a reputation for being difficult to use. Paradox, with its highly visual interface and its query-by-example technology, is very different. It has gained a strong following among corporate users because you need not be a "programming guru" to decipher its use. And even though it is easy to use, Paradox offers a great deal of relational database management power. This book is designed to help you utilize that power.

What is in this book? Chapter 1 offers an introduction to Paradox by showing ways in which the product can be used and by describing the features and capabilities of the product. In Chapter 2, important tips are offered on the subject of database design, and you are introduced to some basic database concepts.

You will quickly begin putting Paradox to use in Chapter 3, which details how to get started with the program, how to create a database, and how to add records, perform simple queries, and print simple reports. Chapter 4 further explores the concept of managing your data, showing you how to edit

records, find and delete records, change the layout of a table, sort a table, and view multiple tables simultaneously.

Chapter 5 covers the use of custom forms, a flexible feature which allows you to display your data in a variety of formats. In Chapter 6, you are introduced to the significant power offered by Ask, the Paradox option that uses query-by-example technology to find the data you are looking for. Chapter 7 presents the basics of creating reports, and Chapter 8 covers the use of graphics. Chapter 9 describes how you can work with relational information while using Paradox.

In Chapter 10, you will learn how to use macros, called *scripts*, to automate frequently used procedures. Chapter 11 covers file management, showing how your tables can be easily modified, and describing how you can perform helpful DOS functions without exiting Paradox. Chapter 12 takes a further look at the complex subject of reporting, continuing where Chapter 7 left off by showing you techniques for free-form reports, mailing labels, invoices, and other specific report formats.

Chapter 13 introduces the Paradox Application Workshop, a feature of Paradox that writes complete applications for you. Chapter 14 provides an introduction to PAL, the Paradox Application Language, which is used for writing complex programs within Paradox. Chapter 15 provides important tips and techniques that will help you make optimal use of Paradox on a local area network. Chapter 16 provides instructions for building two sample Paradox applications.

Appendix A contains a complete, alphabetized listing of Paradox commands. Finally, Appendix B provides instructions for running Paradox under Microsoft Windows.

The style of this book encourages learning-by-doing. You will get the best results if you have your PC and your copy of Paradox at hand as you follow along with the practice sessions that are included in most chapters. However, ample illustrations have been provided, so even if you do not have a PC or Paradox, you can still become familiar with the program by reading this book.

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# 1

#### What Is Paradox?

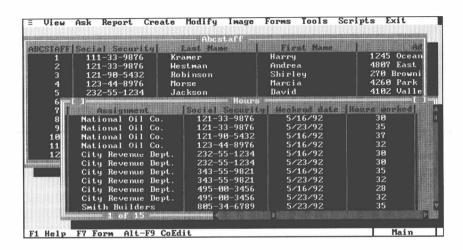
Welcome to Paradox, a true high-performance database manager for the IBM PC and compatible machines. If you have never used a relational database manager for a microcomputer before, you can feel confident that your choice of Paradox as a database management tool is an excellent one. If you have used other relational database managers prior to Paradox, you are in for a major change in expectations.

For the first decade of personal computer use, relational database managers all shared a very common trait, often expressed as "no pain, no gain." These powerful programs were universally difficult to use. While advances gradually made these programs easier to use, it was still the case that if you wanted real power in a database manager, you had to sacrifice ease of use.

Paradox has changed all that. The word "paradox" is defined as "something that cannot be, but is," and Paradox lives up to its name. High-powered database managers are not supposed to be easy to use, but Paradox is.

Paradox includes a series of well-designed menus, and offers a query-by-example feature that makes asking for specific data a simple task. Paradox normally displays information in one or more *tables*, each contained within a window, as shown in the example in Figure 1-1. The data in each table is

Figure 1-1. Paradox in use



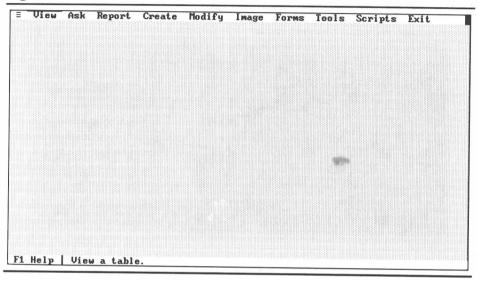
organized in *fields*, or categories. If these terms are unfamiliar to you, don't worry. They will be covered in more detail later in this chapter. You can use Paradox to create databases of tables containing the necessary fields. And by using the custom forms capability built into Paradox, you can display information in a format that best meets your needs.

#### How You Will Use Paradox

From the very start, Paradox will prove easy to use. Thanks to an automatic installation procedure, the program installs itself on your hard disk, creating the needed subdirectory for you. When you load the program, Paradox displays a main menu at the top of the screen (Figure 1-2). This menu provides access to all of Paradox's powerful features.

If you have used other Borland programs, or most any program under Microsoft Windows, you will find the Paradox menu design familiar. With these programs, you can select a menu choice by typing the first letter of the

Figure 1-2. The Paradox main menu



command or by highlighting the choice with the cursor keys and pressing ENTER). Mouse users can also click on a desired menu option. Most menu options, when selected, will display an explanation of the choice on the Status Bar, which appears at the bottom of the screen.

Creating a table in which to store your data is a simple task. After choosing the Create option from the main menu, you enter a name for the table. You then define the names and types of fields (categories) you will use. Unlike the limits imposed on you by competing programs, Paradox field names can be up to 25 characters in length and can include spaces. Six different data types can be used in Paradox: alphanumeric (combinations of alphabetic and numeric characters), memo (used to store large amounts of alphanumeric text), number, currency, date, and short number (a special type of number field that stores values between -32,767 and 32,767). Figure 1-3 shows the process of creating a table in Paradox.

Once your table exists, you can select the Modify option from the main menu and choose Data Entry from the next menu that appears. You are then ready to begin entering data into the table. Paradox lets you enter data into