## Chapter

4

About Access 97, Office 97, Windows 95, and the Internet

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## About Access 97, Office 97, Windows 95, and the Internet

icrosoft Access 97 for Windows 95 is tightly integrated with Windows 95 and Microsoft Office 97 for Win-

dows 95. In this chapter we highlight the most important integration features and point you to places where you can get more details. We'll also give you a brief overview of the new features that let you share Access data via the Internet. If you're completely new to Access and Microsoft Office, you might want to skim through (or even skip) this chapter and come back to it when you find yourself asking questions such as, How can I make the most of what I know about Windows 95 and Microsoft Office 97? and How can I make the most of my Access data?

#### Making the Most of Windows 95 and Access 97

Microsoft Access is designed from the ground up to provide full support for all Windows 95 features. Listed in alphabetical order below are some of the most important Windows 95-like features that you'll find in Access.

**32-Bit Application** - Microsoft Access for Windows 95 is a 32-bit application, which means that it runs in its own protected computer memory area. Therefore, Access won't grind to a halt if some other program on your computer decides to misbehave. Access also takes advantage of the multithreading capabilities of Windows 95, something programmers will appreciate; the Jet database engine, Microsoft Access, and modules

written for Visual Basic for Applications all run in separate threads. (On high-end Windows NT machines, multithreading allows several CPUs to cooperate on a single Access application at the same time.)

**Briefcase Replication** - Access for Windows 95 takes advantage of the Windows 95 Briefcase feature, which enables you to work remotely with replicas of your database and later merge the changes into your master databases. Any design changes made to the master databases also will be propagated to the replicas. Replication is ideal for managing remote changes to data and balancing the load over a network. See Chapter 17.

Database Explorer - The database window in Access 97 for Windows 95 looks and acts a lot like Windows 95 Explorer, as well as windows that appear when you open My Computer or Network Neighborhood. To view database objects as large icons, small icons, a list, or a detailed list, choose options on the View menu; or click on appropriate Database toolbar buttons; or right-click on an empty area inside the database window and choose View options from the shortcut menu. To arrange icons by name, type, creation date, or modification date, choose options on the View ➤ Arrange Icons menu, or right-click on an empty area inside the database window and choose Arrange Icons options from the shortcut menu. See Chapter 1 and Figure 4.1.

Long File Names and UNC Paths - Like all programs designed for Windows 95, Microsoft Access 97 for Windows 95 supports long file names and universal naming convention (UNC) paths. UNC paths let you refer to files on a remote computer by supplying the computer name, rather than by permanently mapping a drive letter to the remote computer. For example, an Order Entry database file located in the My Documents folder on drive C of a computer named Hanley might have a tongue-twisting UNC name of \\Hanley\c\My Documents\Order Entry.mdb.

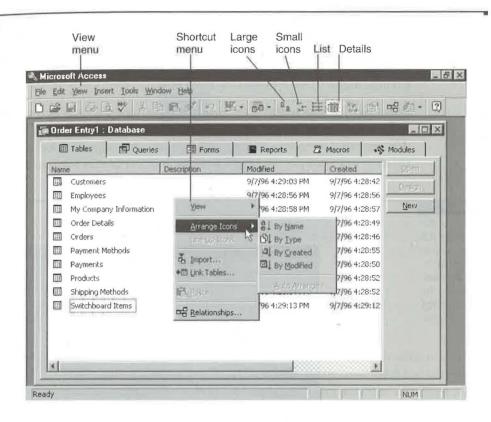
**Plug-and-Play Screen Resolution** - Plug-and-play screen resolution lets you change your screen resolution on the fly. To use it, minimize Microsoft Access and any other programs that are covering the Windows 95 desktop. Next, right-click on any empty area of the desktop and choose Properties. Finally, click on the Settings tab in the Dis play Properties dialog box, use the slider control below the Desktop Area option to set the screen resolution you want to use, and then click on OK. Respond to any prompts that appear and then click on the Microsoft Access Taskbar button to return to Access

**Shortcut Menus** - Windows 95-style shortcut menus are available throughout Access Simply right-click wherever you want to see a shortcut menu and then click on (or right-click on) the shortcut menu option you want to use (refer to Figure 4.1).

**Special Effects** - Access for Windows 95 and its forms and reports can display the same sunken, raised, etched, chiseled, shadowed, and flat special effects you often see in Wir dows 95 programs and dialog boxes. See Chapter 13 and Figure 4.2.

#### FIGURE 4.1

The Access 97
for Windows 95
database window lets you
view object
names and
arrange icons
much as you do
in Windows 95.



#### FIGURE 4.2

An Access 97 for Windows 95 form that uses various Windows 95-style special effects.

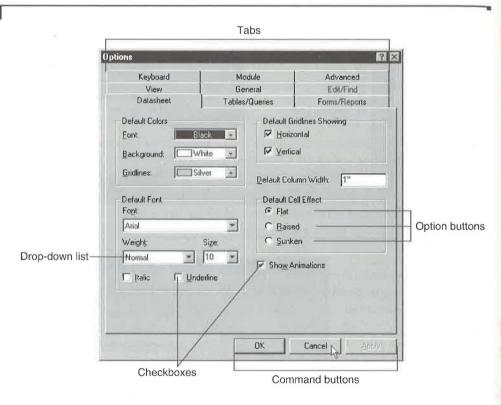
indow	s 95 Special Effects
Flat	
Sunken	ABC Corporation
Raised	Andy
Etched	Adams
Chiseled	87 Polk St Suile 5
Shadowed	San Francisco

Windows 95 Look and Feel - Access for Windows 95 uses all the standard Windows 95 controls you've grown to love, including tabbed dialog boxes, option buttons, drop-down lists, command buttons, and new checkmark-style (✓) checkboxes. So once you've mastered Windows 95 skills, working with Access will seem easy and natural. Figure 4.3 shows a typical Access 97 for Windows 95 dialog box.

**Windows 95 Shortcuts** - Creating a desktop shortcut to any Access object is similar to creating shortcuts in Windows 95. Simply drag and drop an object from the Access database window to your desktop and then use the dropped object as you would any shortcut. For example, double-click on the shortcut to start Microsoft Access and open

#### FIGURE 4.3

Access 97 for Windows 95 uses all the familiar Windows 95 conventions for quick learning and ease of use.



the associated object; or right-click on the object to open a shortcut menu (see below) that offers a host of possibilities for working with the object. (See Chapter 1.)



#### Making the Most of Microsoft Office and Access

Microsoft Access 97 for Windows 95 shares many common features with other programs in the Microsoft Office 97 for Windows 95 suite, especially Microsoft Excel and Microsoft Word. So if you've installed all or part of Microsoft Office, you can take advantage of these common features immediately. We'll take a look at some of these shared features next. Later in this chapter, we'll discuss convenient ways to share data across programs in Microsoft Office.

#### The Microsoft Office Shortcut Bar

The Microsoft Office Shortcut Bar shown below lets you launch and switch between programs, open files, and more.



#### Displaying and Hiding the Office Shortcut Bar

The Microsoft Office Shortcut Bar usually appears at the upper-right corner of your desktop. If it doesn't appear, click on the Start Taskbar button and then choose Microsoft Office Shortcut Bar from the Start menu. Or click on the Start Taskbar button, choose Run, type the command line "\MSOffice\Microsoft Office Shortcut Bar.lnk" (with the quotation marks), and then press Enter.

#### Handy Ways to Use the Office Shortcut Bar

Here are some things you can do when the Office Shortcut Bar is visible:

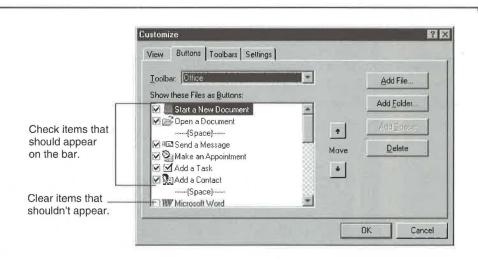
- To find out what an Office Shortcut Bar button is for, move your mouse pointer
  to the button. A SmartTip will appear near the pointer to explain the button's
  purpose.
- To choose a button on the Office Shortcut Bar, click on the button.
- To display the Office Shortcut Bar as a floating palette of buttons, move the
  mouse pointer to any empty area between buttons and then drag the bar toward
  the middle of the screen.
- To dock the floating Office Shortcut Bar at the upper-right corner of the desktop, double-click on the Office Shortcut Bar's title bar.
- To open the Control Menu for the Office Shortcut Bar, click or right-click on the Office Shortcut Bar's Control Menu icon and then choose any of the options shown below:



- To choose or hide bars on the Office Shortcut Bar, right-click on an empty area between buttons on the bar and select (check) or deselect (clear) the name of the bar you want to display or hide, respectively.
- To switch to another bar on the Office Shortcut Bar when multiple bars are selected, click on the button for the bar you want to use.
- To customize the currently selected bar on the Office Shortcut Bar, right-click on an empty area between buttons on the bar and choose Customize, or double-click on an empty area between buttons. Then choose an appropriate tab from the Customize dialog box (see Figure 4.4), complete the dialog box as needed, and then click on OK.

#### FIGURE 4.4

The Customize dialog box for the Office Shortcut Bar after we clicked on the Buttons tab. (Don't worry if the Customize dialog box on your computer differs slightly from this example.)



- To add an Office Shortcut Bar button that will launch a program (including Microsoft Access) or open a document or folder, select the bar that should contain the new button. Next, use Start ➤ Find or My Computer or Windows Explorer to locate the program, document, or folder name you want to add as a button. Then drag the program, document, or folder name to any button on the Office Shortcut Bar (when the mouse pointer displays a small + sign, you've hit the right spot on the Office Shortcut Bar and can release the mouse button). Your new shortcut button will appear at the end of the Office Shortcut Bar.
- To remove a button from the Office Shortcut Bar, right-click on the button and choose Hide Button.
- To exit the Office Shortcut Bar, click or right-click on the Control-Menu icon at the top-left edge of the Office Shortcut Bar, and then choose Exit.

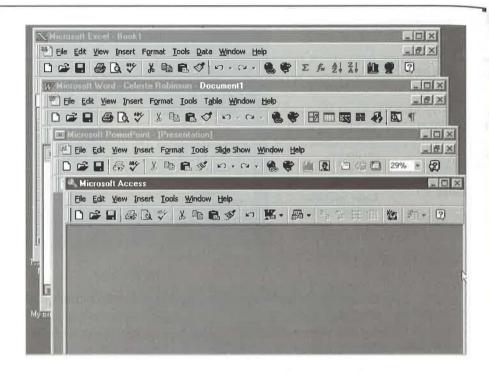
For more details on using the Microsoft Office Shortcut Menu Bar, see your Microsoft Office documentation; or click or right-click on the Control Menu icon at the top-left edge the Office Shortcut Bar and then choose Microsoft Office Help Topics.

#### **Common Bars**

Common menu bars and toolbars appear throughout the Microsoft Office suite, so you won't have to waste time hunting for options you use often. Figure 4.5 shows the Microsoft Excel, Word, PowerPoint, and Access program windows opened on the desktop. Notice the similarities among their menu bars and toolbars.

#### FIGURE 4.5

The Microsoft
Office suite offers
common menu
bars and toolbars to speed
your learning
process.



#### **Common Dialog Boxes**

Many dialog boxes—including New, Open/Import, Page Setup, Print, and Save—work the same way in all Microsoft Office programs. In Figure 4.6, for example, you see the Open dialog box for Microsoft Word. Figure 4.7 shows the very similar Import dialog box for Microsoft Access.

#### **Common Office Tools**

You'll also find common tools that work in identical (or similar) ways throughout Microsoft Office. Table 4.1 briefly describes each tool and tells you which Microsoft Office programs offer it.

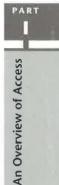
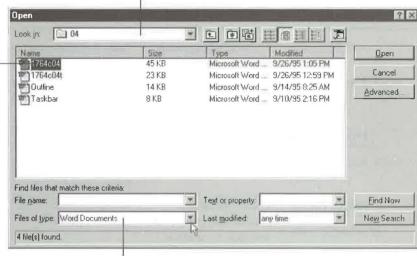


FIGURE 4.6

An Open dialog box in Microsoft Word. 3.Double-click on a file name.

1. Choose the disk and folder to look in.

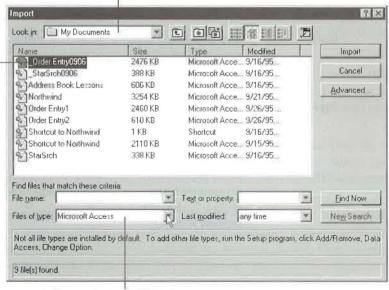


2.Choose the type of file to open.

#### FIGURE 4.7

An Import dialog box in Microsoft Access. 3.Double-click on a file name.

1.Choose the disk and folder to look in.



2. Choose the type of file to import.

TABLE 4.1: COMMON MICROSOFT OFFICE TOOLS				
FEATURE	WHAT IT DOES	MENU OPTION OR SHORTCUT	WHERE YOU'LL FIND IT	
AutoCorrect	Corrects typing errors automatically.	Tools ➤ AutoCorrect	Access, Excel, Power- Point, Word (Chapter 9)	
AutoFormat	Formats a document automatically.	Format ➤ AutoFormat	Access, Excel, Word (Chapters 11, 12, and 13)	
Export/Save As	Saves objects with a new name or format.	File ➤ Save As/Export or File ➤ Save As or File ➤ Export or File ➤ Import and Export	Access, Excel, Exchange, PowerPoint, Outlook, Word (Chapter 7)	
Format Painter	Copies the appearance of one control or selection to another.	Format Painter toolbar button	Access, Excel, PowerPoint, Word (Chapter 13)	
Import/Link	Imports or links data from other programs and formats.	File ➤ Get External Data ➤ Import, or File ➤ Get External Data ➤ Link Tables, or File ➤ Open, or File ➤ Import File ➤ Import and Export	Access, Excel, Exchange, Power- Point, Outlook, Word (Chapter 7)	
Insert	Inserts date and time, page number, picture, object, and more (depends on program).	Insert menu options	Access, Excel, PowerPoint, Word (Chapters 8 and 13)	
Options	Customizes default settings.	Tools ➤ Options	Access, Excel, Exchange, Power- Point, Outlook, Word (Chapter 15)	
Print	Prints objects and documents (some programs also offer a preview feature).	File ➤ Print (Ctrl+P) or File ➤ Print Preview	Access, Excel, Exchange, Power- Point, Outlook, Word (Chapter 9)	

MENU OPTION WH				
FEATURE	WHAT IT DOES	OR SHORTCUT	FIND IT	
Properties	Displays and changes properties of the active document or database.	File ➤ Database Properties or File ➤ Properties	Access, Excel, Exchange, Power- Point, Outlook, Word (Chapter 5)	
Send	Sends the active document or object using electronic mail.	File ➤ Send	Access, Excel, Exchange, Power- Point, Outlook, Word (Chapter 7)	
Spell Check	Checks for and replaces spelling errors.	Tools ➤ Spelling (F7)	Access, Excel, Exchange, PowerPoint Word (Chapter 9)	

#### Tapping the Microsoft Knowledge Base and More

Every Microsoft Office program offers many sources of help. For example, you can look in the *Getting Results* book, the Answer Wizard, the Help Index, the Help Contents, and the Readme file that come with most Microsoft Office programs. But that's not it by a long shot! You also can get in-depth technical help on a variety of Microsoft products from these resources (which are listed in alphabetical order):

- Microsoft Download Service (MSDL) The MSDL is a bulletin board service that
  contains Microsoft Software Library (MSL) articles and support files for you to
  download to your computer. Using your modem, dial (206) 936-6735 in the
  United States, or (905) 507-3022 in Canada.
- Microsoft Fast Tips This service offers recorded or faxed answers (in English) to common technical problems and lets you order catalogs, Application Notes, and popular articles from the Knowledge Base (KB) via fax or mail. Call (800) 936-4100 from any touch-tone telephone.
- Microsoft Knowledge Base (KB) The KB contains a comprehensive set of articles (updated daily) with detailed answers to how-to and technical support questions and lists of bugs and fixes. The KB is available on America Online, CompuServe, GEnie, Internet (via World Wide Web, FTP, or Gopher), Microsoft Developer Network, Microsoft TechNet, and the Microsoft Network. From the World Wide Web and Gopher sites, you can do full-text searches of KB articles and download files automatically.

- Microsoft Press publications Microsoft Press offers development kits, resource kits, and a variety of books about Microsoft products and related technologies. Call (800) MSPRESS or (800) 677-7377.
- Microsoft Software Library (MSL) on America Online, CompuServe, GEnie, Internet, Microsoft Developer Network, Microsoft Download Service (MSDL), Microsoft TechNet, and the Microsoft Network. Here you'll find a collection of binary (nontext) files, including device drivers, utilities, Help files, and technical articles for all Microsoft products.
- Microsoft TechNet and Microsoft Developer Network (MSDN) CD-ROMs These subscription services offer KB, MSL, and other information on CD-ROM. To subscribe to these services, call (800) 344-2121 for Microsoft TechNet or (800) 759-5474 for MSDN.
- Online support forums Online support forums are frequented by end-users, third-party developers, and Microsoft support staff who can answer many of your questions quickly. You can find Microsoft forums on America Online, CompuServe, GEnie, the Internet, and the Microsoft Network.

You can reach the KB and MSL at these Internet sites:

- Microsoft World Wide Web at www.microsoft.com
- Microsoft Gopher at gopher.microsoft.com
- Microsoft FTP at ftp.microsoft.com (supports anonymous logon)

You can reach the KB, MSL, or Microsoft forums from CompuServe:

- To reach the KB, type GO MSKB at any! prompt or choose equivalent menu options from your CompuServe navigation program.
- To reach the MSL, type GO MSL at any! prompt or choose equivalent menu options.
- To reach the Microsoft forums, type GO MICROSOFT at any! prompt or choose
  equivalent menu options. To reach the Microsoft Access forum directly, type GO
  MSACCESS or choose equivalent menu options.

To reach the KB from America Online:

• Choose Go To ➤ Keyword and type Microsoft in the Enter Word(s) box. In the Microsoft Resource Center, click on Knowledge Base.

To reach the KB from the Microsoft Network:

- 1. Log on to the Microsoft Network.
- Click on the Start button on the Windows Taskbar and then select Find ➤ On the Microsoft Network.

- 3. Type Knowledgebase in the Containing text box and then click on Find Now.
- 4. Double-click on the topic that appears.

For more information about all the resources mentioned above, look up *Technical Information* and its subtopics in the Help Index of any Microsoft Office program. If you're a member of the Microsoft Network, you can connect to many of these resources by choosing Help > Microsoft on the Web from any Microsoft Office program's menu bar.

#### Sharing Access Information with Other Office Programs

Imagine having to retype all the names and addresses that you've painstakingly stored in your Access database—just to send form letters from Microsoft Word. And who in their right mind would want to retype data stored in Excel worksheets after deciding that a database table offers a more efficient way to store that information? None of that tedium and wasted effort is necessary when you use Windows 95 technologies and the integrated Microsoft Office suite. In the next few sections, we'll summarize ways to transfer information to and from Access and point you to places in this book where you can get more details.



If you get messages about difficulties in starting programs or establishing links between programs, chances are that your computer does not have enough memory to complete the job you're trying to do. To solve this problem, respond to any messages that appear and restart your computer (Start ➤ Shutdown ➤ Yes). Then launch only the program or programs that absolutely must be in memory at the same time and try the operation again. If you still have problems, you may need to install more memory on your computer. (Access itself requires about 12MB of memory, and you'll often need at least 16MB to perform tasks that involve multiple Office programs.)

#### **Using Import and Export**

You can use file *import* or *link* techniques to create an Access table from data stored in an external file, such as an Excel worksheet. To get started, go to the Access database window and choose the File ➤ Get External Data ➤ Import or File ➤ Get External Data ➤ Link Tables commands.

To convert data in an Access table (or other object) for use in another program such as Excel or Word, use the *export* feature. After exporting the Access data, you can start the other program, open the file you created, and use it normally. To start exporting data from Access to another format, go to the database window and click on the table, query, form, or other object that contains the data you want to export. Then choose File ➤ Save As/Export.

Chapter 7 explains how to create Access tables from files stored in these formats: Access, Excel, Paradox, text files, dBASE, FoxPro, Lotus 1-2-3, ODBC databases, and HTML. There you'll also learn how to export data from Access to these formats: Access, Excel, Paradox, text, dBASE, FoxPro, Lotus 1-2-3, Rich Text Format, Microsoft Word Merge, ODBC databases, and HTML. See Chapter 7 for information on how to use the Publish to the Web Wizard to set up dynamic links between an Access database and the Internet.

#### **Using OLE**

Windows 95 OLE technology offers many ways to share selected data or entire files between Microsoft Access, Microsoft Office, and other Windows programs. Chapter 8 provides step-by-step instructions for using these techniques to put data into Access tables, including OLE fields. But let's take a quick peek now at what's available.

#### Using the Clipboard

The cut-copy-and-paste technique offers a versatile way to exchange selected data between programs. If possible, the original formatting is preserved when you complete the paste operation. (When you paste rows from a Microsoft Access datasheet to another program, the field names also come along for the ride.)

In a nutshell, the cut-copy-and-paste procedure is as follows:

- **1.** Select the object you want to move or copy using the standard selection methods for the program you're copying or moving from.
- Choose Edit ➤ Copy (Ctrl+C) or Edit ➤ Cut (Ctrl+X), or click on the Copy or Cut toolbar button if it's available. Your selection will be copied (if you chose Copy) or moved (if you chose Cut) to the Windows Clipboard.



The Windows Clipboard is a scratchpad area in your computer's memory. Each time you copy or cut a selection to the Clipboard, the new selection replaces the previous contents of the Clipboard. Data on the Clipboard usually stays around until you exit Windows.

- **3.** Start the target program and open the document, table, or other object where the copied or moved data should appear. Then put the cursor where the data should appear.
- **4.** Paste the data from the Clipboard by following one of these steps and then answer any prompts that appear.
  - Choose Edit ➤ Paste (Ctrl+V) or click on the Paste toolbar button.

П

- Choose Edit ➤ Paste Special (if available), complete the Paste Special dialog box, and then click on OK.
- In Access only, choose Edit ➤ Paste Append to add records to the end of the table shown in the current datasheet or form.
- **5.** The pasted material will appear on your screen.

#### **Using the Insert Menu Commands**

You also can use commands on the Insert menu to insert all or part of an object into the current document, presentation, OLE Object field, or other object. The steps for inserting and the appearance of the inserted data depend on which program you're using when you insert the data, which Insert command you choose, and which type of data you insert.

Here, for example, are the steps for inserting Access table data into a Microsoft Word document. The inserted data becomes a standard Word table that's independent of the original Access table.

- 1. Start Microsoft Word and open the document that should contain the Access table data.
- 2. Choose View ➤ Toolbars ➤ Database and then click on the Insert Database button.
- 3. Click on Get Data under Data Source: in the Database dialog box.
- **4.** Click on the change *Files of Type*: to MS Access Databases (\*.mdb) in the Open Data Source dialog box and then locate the database you want to use. In the next dialog box, select the table you want to include in your document.
- **5.** Click on the Query Options button if you want to select fields and values to insert. Click on the Table AutoFormat button to choose a format for the inserted data.
- **6.** Click on the Insert Data button, complete the Insert Data dialog box that appears, and then click on OK.

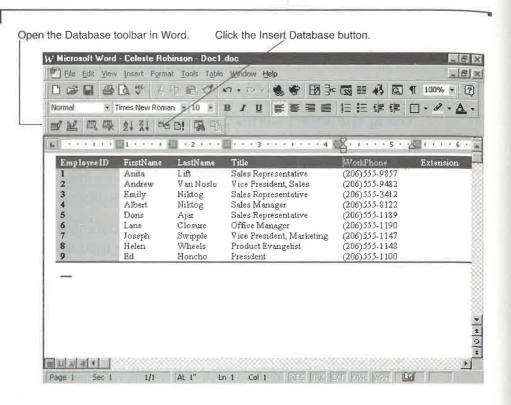
Figure 4.8 shows the screen after we inserted the Employees table data from our sample Order Entry database into a Microsoft Word document. In this example, we chose the Classic 2 Table Autoformat style and hid the table gridlines (Table ➤ Gridlines).

In most Office programs, you can use the Insert ➤ Object command either to insert a new object that you create on the fly or to insert an existing object that's stored in a file. Chapter 8 takes you through the steps for inserting objects into OLE Object fields in Access, so we won't repeat them here. (The steps for inserting an object are similar whether you start from Access, Excel, Exchange, PowerPoint, or Word.)

If the program can do so, it will show the inserted data with its "real" appearance; otherwise, the inserted data will appear as a "package" icon. (A *package icon* is simply an icon that represents the file the inserted data is part of.) In Figure 4.9, for example, we

#### FIGURE 4.8

Here we used the Insert Database button on the Database toolbar in Word to copy the Employees table data from our sample Order Entry database to a Microsoft Word document.



inserted the bitmap file named arcade.bmp from the \Windows folder into the Word document from Figure 4.8. Next to the bitmap file, we inserted the Address Book Lessons sample database. Notice that the bitmap file appears as a picture, but the Address Book Lessons database object appears only as a package icon, because Word can't display an entire database at once. To open either inserted object for viewing or editing, simply double-click on the object's picture or icon.

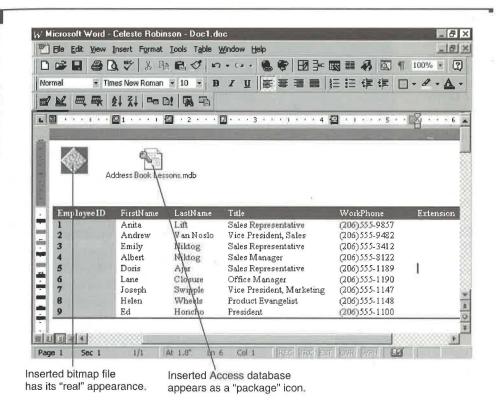
When you're done working with the inserted object, do one of the following:

- If the object opened within the main program window, click outside the object. The hashmarks and sizing handles around the object will disappear, and the main program's tools and menu bar will reappear.
- If the object opened in a separate program window, choose File ➤ Exit from the object's program window. You'll be returned to the main program window.



#### FIGURE 4.9

The Microsoft Word document window after we used Insert Object commands to insert a bitmap file and an Address Book Lessons database into the document.



#### **Dragging and Dropping**

The drag-and-drop technique is a convenient way to copy or move selected data from one open program to another. You can't drag and drop between all Windows programs, but a little experimentation should quickly reveal what's possible. Figure 4.10 shows the basic drag-and-drop procedure.

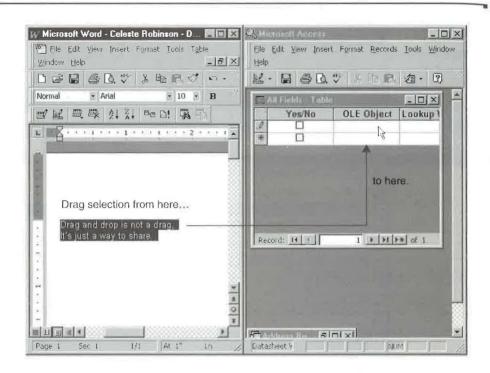
Here's how to reproduce the example in Figure 4.10:

- 1. Start Microsoft Word and Microsoft Access; then open a Word document that contains some text and an Access table that contains an OLE Object field. Next, tile the programs vertically on the screen by right-clicking on an empty area of the Windows Taskbar and choosing Tile Vertically from the shortcut menu.
- 2. Select the text you want to copy in the Microsoft Word document.
- **3.** Hold down the Ctrl key while dragging the selected text from the Microsoft Word window to the OLE Object field in the Microsoft Access window. When the mouse pointer reaches its destination, release the mouse button and Ctrl key.

These actions will *copy* the selected text to the OLE Object field. To *move* the selection, rather than copy it, do not hold down the Ctrl key while dragging.

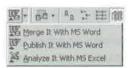
#### FIGURE 4.10

We dragged and dropped selected text from a Word document to an OLE Object field in an Access table. In datasheet view, the copied text in the OLE Object field appears simply as Microsoft Word Document; in a form, however, the copied data will look much as it does in Microsoft Word.



#### **Using OfficeLinks in Access**

The OfficeLinks feature in Microsoft Access provides a nifty way to copy Access data to other Microsoft Office program formats and to immediately start the appropriate Office program. To use OfficeLinks, select a table, query, form, or report from the Access database window and then choose options on the Tools ➤ OfficeLinks menu or on the OfficeLinks drop-down toolbar button (shown below).



Chapter 7 covers the OfficeLinks features in more detail, but in case you're curious now, your options are as follows:

Merge It Merges your Access data with a new or existing Microsoft Word document and starts Microsoft Word. This feature is especially handy for creating form letters and mailing labels from Access tables and queries.

Analyze It Saves your Access data as a Microsoft Excel file and starts Microsoft Excel. This feature is perfect when you need to examine Access data with the sophisticated analysis features that Excel offers.

**Publish It** Saves your Access data as a Microsoft Word Rich Text Format (RTF) file and starts Microsoft Word. Use this feature when you want to dress up your Access data or mix it with word processing text and pictures.

#### **Using Access Data from Microsoft Excel**

Microsoft Excel and Microsoft Access have a special relationship because they both can interpret and display data in a tabular row-and-column format. Excel offers several ways to use Access data without ever leaving Excel itself.



Chapter 14 explains how to create PivotTables, which are special Excel objects that are embedded within an Access form. To create and use PivotTables that display Access data, you must start from Access, not from Excel.

#### Converting a Worksheet to an Access Table

You can import the current Excel worksheet to an Access table in a new or existing database. After you complete this procedure, the Excel worksheet and imported table will be independent of one another (that is, changes to the worksheet in Excel won't affect the Access table, and vice versa).

Open the worksheet you want to convert (in Excel, of course) and then:

- **1.** Delete any blank rows in the worksheet. Then put the cursor into any cell within the worksheet.
- 2. Choose Data ➤ Convert To Access.
- **3.** Choose whether to convert the data to a New Database or an Existing Database whose name you supply at the prompt and then click on OK.

After a brief delay, the Import Spreadsheet Wizard (described in Chapter 17) will guide you through the remaining steps, and your new table will appear in the Tables tab of the Access database window. You can then use the table as you would any normal Access table.

#### Creating an Access Form or Report from an Excel Worksheet

You also can create an Access form or report for use with the current Excel worksheet. The resulting form or report will reside in the Access database, and the Excel worksheet will be *linked* to a new Access table in that database (that is, changes you make in Excel will update the linked table in Access, and vice versa).

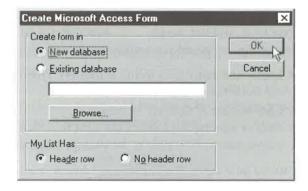
To create the form or report, start from Excel and follow these steps:

- 1. Open the worksheet you want to view with the form or report. If your worksheet contains any blank rows, delete those rows. Then put the cursor into any cell within the worksheet.
- 2. To create a form, choose Data ➤ MS Access Form.

Or

To create a report, choose Data ➤ MS Access Report.

**3.** If your worksheet isn't already linked to an Access database, you'll see a Create Microsoft Access Form or Create Microsoft Access Report dialog box (an example appears below). Choose whether to store the form or report in a New Database or an Existing Database whose name you supply, choose whether the worksheet has a Header Row or No Header Row, and then click on OK. If you choose to create a new database, the new database will have the same name as your Excel file.



**4.** Follow the Form Wizard or Report Wizard instructions and complete the remaining steps.

Your Excel table will be linked to the Access database, and your new form or report will appear in the Forms or Reports tab of the Access database window and on the screen.

From Access, you can use the linked table and form or report normally. To use the form or report from Excel, click on the View Access Form or View Access Report button that appears near the right edge of your worksheet (see Figure 4.11).



From Access, you can add records to linked Excel worksheets and change records, but you cannot delete them. From Excel, you can add and delete worksheet rows and change cell data as you would in any normal worksheet.

To learn more about the AccessLinks add-in program that creates Access forms and reports (or to find out what to do if the Data ➤ MS Access Form and Data ➤ MS Access Report commands don't appear in Excel), look up *AccessLinks Forms And Reports* in the Excel Help Index. See Chapter 7 for more about linking and using Excel worksheets in Access. Chapter 11 explains how to use the Form Wizard, and Chapter 12 covers the Report Wizard.

#### FIGURE 4.11

A sample Microsoft Excel spreadsheet named Employees, after we used the Data > MS Access Form and Data > MS Access Report commands in Excel. To view the Access form or report without leaving Excel, click on the View MS Access Form or View MS Access Report buttons, respectively.

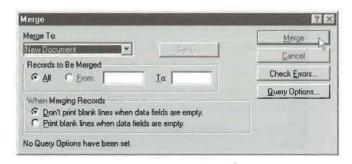
Click on these buttons on the Excel worksheet to view the data from within an Access form or report.

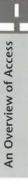
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}	Andrew	Lift	V.P. Sales	(206)655-5432	A		
4	Emily	Niktog	Sales Rep	(206)555-1234			
5	Albert	Niktog	Sales Manager	(206)555-4367			
6	Doris	Ajar	Office Manager	(206)555-8721			
7	Lane	Clozure	V.P. Marketing	(206)555-2030			
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#### **Using Access Data from Microsoft Word**

As we mentioned earlier, you can start from Access and use the Office Links feature to merge Access data with a new or existing Microsoft Word main document. You also can start from Microsoft Word and merge data from an Access table or query into a form letter, mailing label, envelope, or catalog main document. Here's one way to do the job, starting from a blank document window in Microsoft Word:

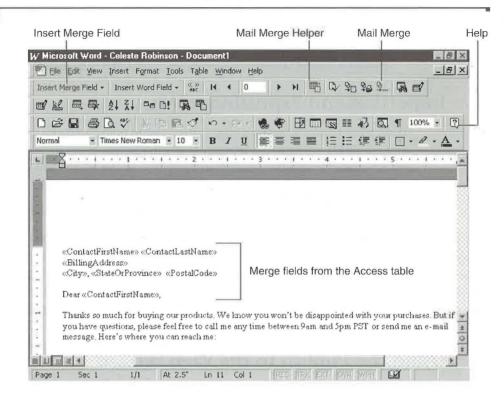
- 1. Choose Tools ➤ Mail Merge. The Mail Merge Helper dialog box will appear.
- 2. Click on the Create button in the Mail Merge Helper dialog box and select the type of main document you want to create (Form Letters, Mailing Labels, Envelopes, or Catalog). When prompted, click on the Active Window button.
- **3.** Click on the Get Data button in the Mail Merge Helper dialog box and then choose Open Data Source.
- **4.** Choose MS Access Databases from the Files Of Type drop-down list in the Open Data Source dialog box. Then locate and double-click on the database you want to use.
- **5.** Click on the Tables or Queries tab in the Microsoft Access dialog box and then double-click on the Access table or query that contains the data you want to use.
- **6.** Respond to any prompts that appear. When you reach the main document window in Microsoft Word, use the Insert Merge Field button on the Mail Merge toolbar to insert the merge fields that contain the data you want to display and type any text that should appear between fields; press Enter after inserting fields as needed. Figure 4.12 shows the document window after we added fields and some text for a form letter.
- 7. Start the merge: Choose Tools ➤ Mail Merge (or click on the Merge Helper button on the Mail Merge toolbar) and then click on the Merge button; click on the Mail Merge button on the Mail Merge toolbar; or click on the Merge button in the Mail Merge Helper dialog box.
- **8.** Complete the Merge dialog box (shown below) and then click on Merge. Word will merge the latest data from your Access table or query with your main document and output it to the location you specify in the Merge To drop-down list.





#### FIGURE 4.12

A sample form letter that uses fields from an Access table.



- **9.** Print the results of the merge and close the merged results file without saving it (if you merged to a new document).
- **10.** Save your main document (File ➤ Save) and close it if you wish (File ➤ Close).

The next time you want to merge your main document with the latest Access data, just open the main document in Word (File ➤ Open) and repeat steps 7 through 10 above.

If you need help setting up merge fields on your main document, click on the Help button on the Standard toolbar in Microsoft Word and then click on the Insert Merge Field button on the Mail Merge toolbar. Or look up *Mail Merge* and its subtopics in the Microsoft Word Help Index.

#### Sharing Access Information via the Internet

Microsoft Access 97 for Windows 95 has new features for sharing Internet data. You can

- Import data that's already in HTML format.
- Export an Access table or query to HTML format.

- Use a hyperlink to jump to information on the Web or in other Office programs.
- Use the new Publish to the Web Wizard to create static or dynamic links between an Access database and the Internet. You can even publish "parameter" queries that let a person choose the Access data they'd like to browse.

#### Importing and Exporting HTML

HTML is the special formatting that's often used to prepare data for publication on the Internet. HTML controls the appearance of information as it's browsed and includes tags for characteristics like bolding and font size. Access 97 lets you import data files that include HTML code. With a database open, choose File  $\triangleright$  Get External Data  $\triangleright$  Import and change the *Files of Type* drop down to HTML. Select the .htm file you want to import and click OK to start the HTML Import Wizard.

Exporting an Access table or query to an HTML file is just as easy. First highlight the table or query you want to export in the Database window. Then choose File ➤ Save to HTML/Web Formats ➤ Save to HTML. Access will convert the data to an .htm file and open it in an Internet Explorer window. By default, the .htm file is created in \My Documents. To find out how to change the HTML template and other details about importing and exporting HTML data, see Chapter 7.

#### Using the Publish to the Web Wizard

The new Publish to the Web Wizard lets you publish Access data to the Web with static or dynamic output. *Static output* is published to the Web once and doesn't change until you decide to update it. *Dynamic output* reflects changes made to the Access database each time it is browsed. Dynamic output allows users to view data they select by returning the results of a query. We'll explore the process of publishing Access data to the Web in Chapter 7.

#### For Programmers and Techies Only

Two features in Microsoft Access, Microsoft Office, and other programs for Windows 95 will dazzle and delight programmers and application developers. These features are *OLE Automation* and *Visual Basic for Applications*. For a *Reader's Digest* condensation of what these features mean to you, please read on.

#### **About Visual Basic for Applications (VBA)**

Visual Basic for Applications (VBA) is a consistent programming language for building programs across Microsoft Office, and it replaces the Access Basic language that came with Access 2.0. The beauty of VBA is that you can reuse code written for Access in Microsoft Excel, Visual Basic, or Project with only minor changes.

Chapter 25 introduces you to VBA. For online help with the language, look up *Visual Basic* and its subtopics in the Access Help Index. Or go to the Access Help Contents, double-click on the *Visual Basic For Applications* book and then explore the additional books and subtopics that appear.

#### **About OLE Automation**

OLE Automation is a standard technology that programmers use to expose their OLE objects to development tools, macro languages, and other applications that support OLE Automation. From Access you can use VBA to manipulate OLE Automation objects. You also can use OLE Automation to manipulate Access objects from other programs, such as Microsoft Excel.

We'll introduce you to OLE Automation in Chapter 27 of this book. For more information on the topic, look up *OLE Automation* and its subtopics in the Access Help Index.

#### Where to Go from Here

This chapter has introduced you to the many ways that Microsoft Windows 95, Microsoft Access for Windows 95, and other programs in the Microsoft Office for Windows 95 suite can work together to help you get the most from your Access data. It also gave you a bird's eye view of the new Access 97 features for working with data from the Internet. In the next chapter, you'll learn how to create instant databases and ready-to-use applications with just a few clicks of your mouse.

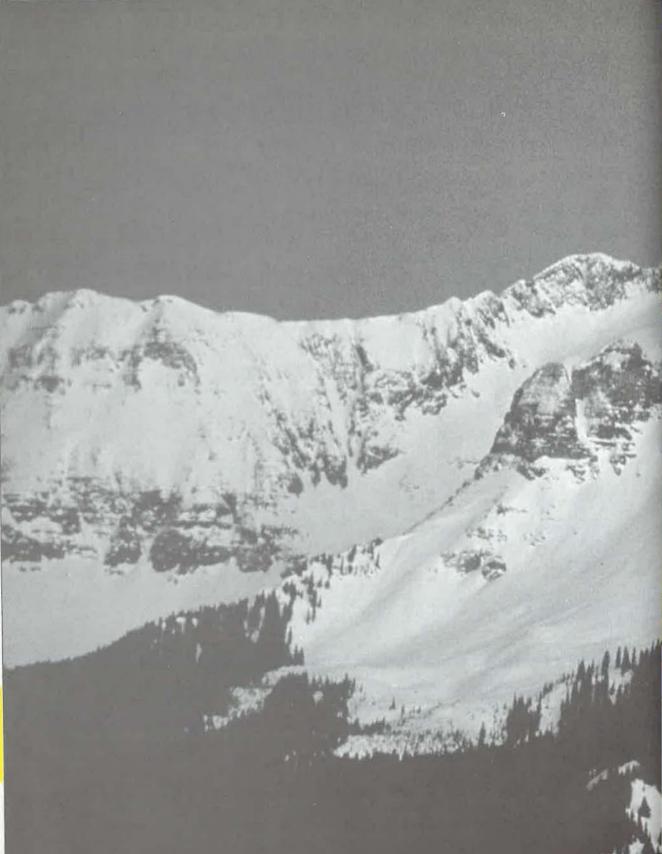
#### What's New in the Access Zoo?

Some data-sharing features such as import and export, OLE, and Office Links were available in earlier versions of Access (although they weren't as easy to use as they are in Access 97). The menus and toolbars of older Office programs also had common commands and buttons. However, all the toolbars and menu bars have been revamped to make them easier to use. The biggest addition to Access 97 covered in this chapter is the ability to share Access data via the Web.

Creating a Database

## LEARN TO:

- Create a database and application
- Create Access tables
- Link, import, and export data
- Add, edit, and view data
- Sort, search, filter and print Query tables
- Create forms and reports with Wizards



Chapter

5

Creating a Database and Application

## FEATURING

Creating a blank database	135
Creating a database with the Database Wizard	138
Using the sample databases	142



## Creating a Database and Application

t's terminology time again! An application is a computer-based system that lets you perform useful tasks,

such as managing orders, accounts receivable, product inventory, and other types of information. A turnkey application enables you to enter and use information with the turn of a key; that is, without worrying about how everything is put together behind the scenes. Finally, an Access database is a file that holds all the objects for a single application, including the tables, forms, reports, queries, modules, and macros. In this chapter you'll learn how to create databases and more than 20 different turnkey applications.

If you haven't tried the hands-on lessons in Chapter 3, you should do so now. Those lessons take you through creating a database and turnkey application and give you practice using Access Wizards.

After creating your database, you can use the Database Splitter Wizard (Tools ➤ Add-Ins ➤ Database Splitter) to split it into one file that contains the tables and another that contains the queries, forms, reports, macros, and modules. A split database can run faster than a single-file database over a network because only the table data is kept on the server. Form and report designs and other database objects reside on each user's local computer so traffic over the network is minimized. See Chapter 18 for details.

#### A Database Is Not a Table

If you're an experienced "xBASE" user, you might think the term database is synonymous with the term table. However, Access follows the more formal database terminology in which database refers to all the data plus all the objects you use to manage that data. Remember that you

don't need to create a new database each time you want to create a table or some other object. Instead, put all the tables and objects that make up a single application into one database. That way, objects that belong together will be stored in the same database.

#### Getting Started

The first step to creating any application is to set up the database file. Often the best method is to start with a blank database if you plan to import or link most of your tables from data stored in other computer files (see Chapter 7) or if you're a developer who prefers to create most database objects from scratch.

Beware! Starting with a blank database can be more work than starting with a Wizard-created database of predefined objects. Taking the from-scratch route usually involves these general steps:

- 1. Create the blank database (see "Creating a Blank Database" in this chapter).
- 2. Create, import, or link the tables (see Chapters 6 and 7).
- 3. Create data entry forms (see Chapters 11 and 13).
- 4. Enter data using data entry forms or datasheet view (see Chapter 8).
- **5.** Create additional forms, reports, and queries as needed (see Chapters 10 through 13).
- **6.** Use programming techniques, form buttons, macros, and other tricks to assemble the objects into a turnkey application (see Parts Four and Five).

If you plan to let Access Wizards create your database and application automatically, your work is done almost before you start. In fact, you often can get by with just three main steps:

- **1.** Use the Database Wizard to create a database and a turnkey application (see "Creating a Database with the Database Wizard" in this chapter).
- 2. Enter data (see Chapter 8).
- 3. Print reports as needed (see Chapters 3 and 9).

Of course, you might need to tweak the turnkey application throughout its lifetime. The rest of this book will show you how.



By studying the sample applications created by the Database Wizard, you can more quickly learn techniques for designing and customizing your own applications. For example, you can study database objects in design view to find out what makes those objects tick. You also can study the relationships among tables in the database using techniques discussed in Chapter 6.

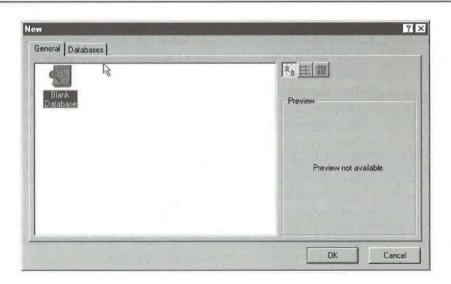
#### Creating a Blank Database

To create a blank database

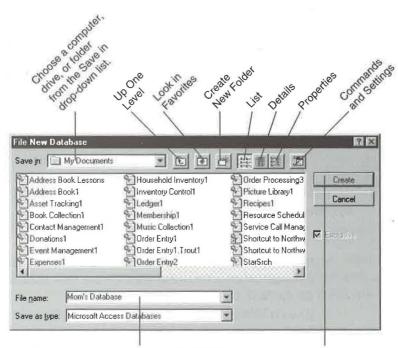
- 1. Do one of the following:
  - If you're starting from the Microsoft Access main menu, choose File ➤ New Database or press Ctrl+N or click on the New Database toolbar button. You'll see the New dialog box, shown in Figure 5.1.
  - If you're at the Microsoft Access startup dialog box (see Chapter 1), choose Blank Database and click on OK. The File New Database dialog box, shown in Figure 5.2, will open. Skip to step 3.

#### FIGURE 5.1

The New dialog box lets you create a blank database (General tab) or any of more than 20 predefined turnkey applications (Databases tab).



Use the File New
Database dialog box to
choose a name
and location for
your new database. You also
can create new
folders and
delete unwanted
databases from
this dialog box.



Type a file name or accept suggested name.

Click on Create to create the database with the specified File name.



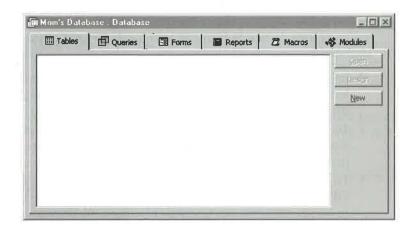
Blank Database

- **2.** Click on the General tab (if it's not selected already) in the New dialog box and then double-click on the Blank Database icon (shown at left). The File New Database dialog box will open (see Figure 5.2).
- **3.** Type the new database file name (or accept the suggested name) in the File name text box. Your file name can be any length, and it can include spaces and most punctuation marks. Examples: Order Entry, My Videotape Collection, Mom's Database.
- **4.** Save the database. Access usually suggests that you save the database in a folder named My Documents on drive C. To save the database to a different drive or folder, choose that drive or folder from the Save in drop-down list. For more details, see "Using the File New Database Dialog Box" later in this chapter.
- 5. Click on the Create button.

Figure 5.3 shows the blank database window that appears next. From here you can start adding new tables as explained in Chapter 6.

#### FIGURE 5.3

The database window for a new blank database named Mom's Database.





Access databases have the file extension .mdb. However, this extension—like that of most other files on your computer—usually is hidden from view. To show file extensions in dialog boxes that display file names, right-click on the Start button on the Taskbar and choose Explore (or double-click on My Computer on the Windows desktop). When the Exploring or My Computer window opens, choose View > Options, click on the View tab in the Options dialog box, deselect (clear) Hide MS-DOS File Extensions For File Types That Are Registered, and click on OK. Close the Exploring or My Computer window.

## Using the File New Database Dialog Box

The File New Database dialog box (refer to Figure 5.2) is similar to the Open dialog box described in Chapter 1, and the easiest way to learn about this dialog box is to experiment with it. These tips will help you choose a location and file name for your database:

- To choose the computer, drive, or folder where the database should be stored, click on the Save in drop-down list button and then click on the appropriate item.
- To open objects shown in the list below Save in, double-click on the appropriate object icon or name.
- To open the folder that's just above the currently selected folder, click on the Up One Level toolbar button in the dialog box; or click anywhere in the list below Save in and then press Backspace.



To find out the purpose of any toolbar button in a window or dialog box, move your mouse pointer to that button and look for the SmartTip near the mouse pointer.

- To display a list of Favorite databases and folders, click on the Look in Favorites toolbar button. The list below Save in will then show your favorite folders and databases only.
- To create a new folder within the current folder, click on the Create New Folder toolbar button. In the New Folder dialog box that appears, type a folder name and then click on OK. Open (double-click) the new folder if you wish.
- To enter a drive, directory, and/or file name manually, type the appropriate information into the File name text box at the lower-left corner of the File New Database dialog box or choose an item from the File name drop-down list.

Here are some other things you can do in the File New Database dialog box:

- To change the appearance of the list below Save in, click on the List, Details, or Properties toolbar buttons as needed.
- To explore the current folder (in Windows Explorer), control folder sharing, display folder properties, and more, right-click on an empty area in the list below Save in and then choose options from the shortcut menu.
- To display or change properties for an item selected in the list below Save in or control the order in which file names are listed or map a network drive, click on the Commands and Settings toolbar button and choose a menu option.
- To manage an existing database file (for example, cut, copy, delete, rename, or view its properties), right-click on that file in the list below Save in and choose an appropriate option from the shortcut menu.

When you're finished using the File New Database dialog box, click on Create (to create the database shown in the File Name text box) or click on Cancel (to return to Access without creating a database).

## Creating a Database with the Database Wizard

Chapter 3 explains how to use the Database Wizard to create a turnkey application for managing address information. Here's the Cliffs Notes version of the steps to follow for creating any of more than 20 turnkey applications in Access:

- **1.** Do one of the following:
  - If you're at the Microsoft Access startup dialog box, choose Database Wizard and click on OK.

- If you're at the main Microsoft Access window, choose File ➤ New Database from the menu bar or press Ctrl+N or click on the toolbar's New Database button.
- **2.** Click on the Databases tab (see Figure 5.4) in the New dialog box and then scroll to the icon for the type of information you want to manage. When you've found the icon you want to use, double-click on it and the File New Database dialog box will open (refer to Figure 5.2).
- **3.** Type a database name (or accept the suggested name) in the File name text box. If necessary, choose a drive and folder from the Save in drop-down list. Finally, click on the Create button.

When you complete step 3, an empty database window will appear briefly, followed by the first Database Wizard dialog box. Here's how to finish the job:

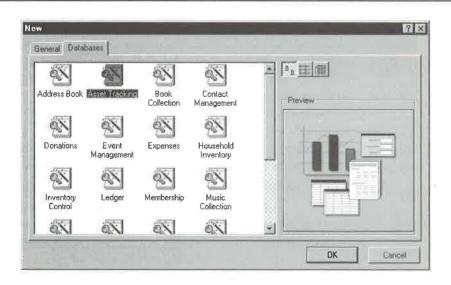
**4.** Read the description of the new database in the first Database Wizard dialog box and then click on Next to open the second Database Wizard dialog box (see Figure 5.5).



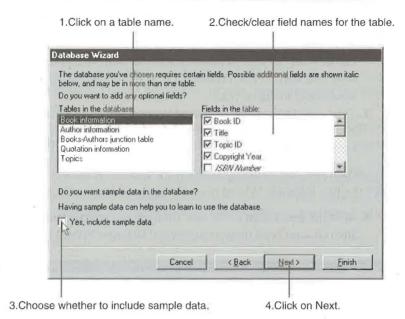
You'll find standard buttons at the bottom of each Wizard dialog box. These include Cancel (cancels the Wizard and returns to wherever you were before you started the Wizard), Back (returns you to the previous Wizard dialog box), Next (continues to the next Wizard dialog box), and Finish (goes to the last Wizard dialog box and assigns default settings for any dialog boxes you skip).

#### FIGURE 5.4

The New dialog box with the Databases tab selected.



Use the second Database Wizard dialog box to choose which fields to include from each predefined table and whether to include sample data.



- **5.** Use the guidelines below to choose which fields to include in each table and to tell the Wizard whether to include sample data. When you're finished, click on Next to continue with the third Wizard dialog box.
  - To choose a table to work with, click on the table's name in the tables list at the left. Then, in the fields list at the right, select (check) the fields you want to include and deselect (clear) fields you want to omit from the table. Optional fields are shown in italics. Required fields are checked initially and shown in normal (roman) type. (You won't be allowed to clear required fields.) Repeat this step as needed.
  - To include sample data, select the box next to Yes, include sample data. To omit the sample data, deselect that box. Including sample data can help you learn to use the database more quickly. Once you've played with the database a bit, you can delete the sample data or delete the database itself and create a new one without sample data.
- **6.** Choose a background color and general style for database forms (also called screen displays) in the third Database Wizard dialog box. The left side of the dialog box will show a sample form that reflects your current choice. Click on the Next button to continue.

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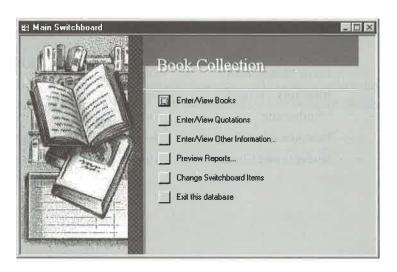
- **7.** Choose a style for printed reports in the fourth Database Wizard dialog box. Again, the sample area will reflect your choice. Click on Next to continue.
- **8.** Specify a title for your database and pick a picture for use on reports in the fifth Wizard dialog box. (See Chapter 3 for pointers on choosing sample pictures.) After making your selections, click on Next to go to the last dialog box.
- **9.** Choose whether you want to start the database after the Wizard builds it in the last dialog box. If you check Yes, Start The Database, you'll be taken to a Switchboard form that lets you work with your database immediately; if you clear this option, you'll go directly to the database window, bypassing the Switchboard. You also can choose whether to display online help about using a database. Again, refer to Chapter 3 if you need more details.
- **10.** Click on the Finish button to create the database and its turnkey application form, named Switchboard.

That's all there is to it. Wait patiently for a few moments while the disk drive whirls and the Database Wizard creates an entire database of tables, forms, reports, and other objects. (You'll see progress bars as the Wizard completes its tasks.) When the Wizard finishes its job, you'll either see the main Switchboard form for your database or the database window, depending on your choice in step 9. Figure 5.6 shows the sample Switchboard form for the Book Collection database, and Figure 5.7 shows the Tables tab on the database window for this same database.

Now you're ready to explore your new database and fill it with useful information.

#### FIGURE 5.6

The Switchboard for a Book Collection database created by the Database Wizard.



The Tables tab of the database window for the Book Collection database.



The next section explains a little about each database that the Wizard can create automatically. For information on three other sample database applications that come with Access, look up *Sample Databases And Applications* in the Access Help Index. Not sure how to navigate the database window? See Chapter 1 for help. Finally, refer to Chapter 3 for pointers on creating a new turnkey application.

# About the Sample Databases

If you already have an application in mind, Access can probably set it up for you automatically. The Database Wizard can create these business and education databases:

Blank Database Asset Tracking
Contact Management Donations
Event Management Expenses
Inventory Control Ledger
Membership Order Entry
Resource Scheduling Service Call Management

Students and Classes Time and Billing

and these personal and household databases:

Blank Database

Address Book

**Book Collection** 

Household Inventory

Music Collection

Picture Library

Recipes

Video Collection

Wine List

Workout

The following sections describe each database the Database Wizard can create and list key tables, forms, and reports in each database. (Pay special attention to the Key Reports in each list because they give you clues about the kind of information you can get out of the database.) The brief descriptions presented here can help you decide which databases you can use right out of the box and which you can use as a starting point for your own custom databases.

Rather than listing every table, form, and report in each database, we've described key objects only. In general, you should use the Switchboard forms—and not the database window—to maintain data, fill in forms, and print reports in these databases. Certain reports, such as invoices and purchase orders, aren't listed in the Key Reports sections below because you must click on a button on a form in order to preview and print those reports properly. You'll find an asterisk followed by the type of report printed—for example, (\*Invoice)—next to the names of key forms that have special Preview/Print buttons.



You'll also find these databases—complete with sample data—on the CD-ROM disk that accompanies this book. See Appendix B for details.

#### **Blank Database**



Blank Database This database is for Access application developers and other people who want to create objects from scratch or to import or link objects from other computer databases (see Chapter 7).

Key Tables None.

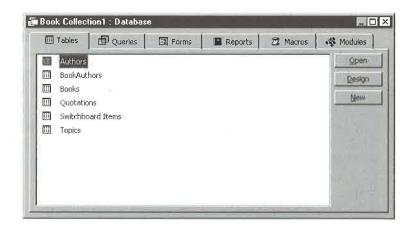
Key Forms None.

Key Reports None.

PART

Creating a Database

The Tables tab of the database window for the Book Collection database.



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Resource Scheduling Service Call Management

Students and Classes Time and Billing

and these personal and household databases:

Blank Database

Address Book

**Book Collection** 

Household Inventory

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#### **Blank Database**



Blank Database This database is for Access application developers and other people who want to create objects from scratch or to import or link objects from other computer databases (see Chapter 7).

Key Tables None.

Key Forms None.

Key Reports None.

PART

Creating a Database

#### **Address Book**



Address Book

Use the Address Book database to keep track of names, addresses, phone numbers, and other vital statistics. Chapter 3 took you on a step-by-step tour of this database and showed you how to customize it.

Key Tables Addresses.

Key Forms Addresses.

**Key Reports** Addresses By Last Name, Birthdays This Month, Fact Sheet, Greeting Card List.

#### **Asset Tracking**



Asset Tracking

Use the Asset Tracking database to track information about your company's assets. Great for businesses that own valuable stuff!

**Key Tables** Asset Categories, Assets, Depreciation, Employees, Maintenance, Status.

Key Forms Asset Categories, Assets, Employees, Status.

Key Reports Assets By Category, Assets By Date Acquired, Assets By Employee,

Depreciation Summary, Maintenance History.

#### **Book Collection**



Book Collection Bibliophiles, students, teachers, and librarians will love the Book Collection database, which lets you keep track of your favorite books, authors, and quotations.

Key Tables Authors, Books, Quotations, Topics.

Key Forms Authors, Books, Quotations, Topics.

Key Reports Quotes By Author, Titles By Author, Titles By Topic.

#### **Contact Management**



Contact Management Everyone who hands you a business card or buys you lunch is a potentially valuable contact. Use the Contact Management database to record information about your contacts, track phone calls you make to them, and dial calls automatically using your computer's modem.

Key Tables Calls, Contact Types, Contacts.

Key Forms Contact Types, Contacts.

Key Reports Alphabetical Contact Listing, Weekly Call Summary.

#### **Donations**



Charitable organizations, nonprofit corporations, and starving book authors can use the Donations database to track contributions and fund-raising campaigns.

Key Tables Contributors, Donation Campaign Setup, Pledges.

Key Forms Campaign Information, Contributors.

Key Reports Campaign Summary, Pledge Listing, Unpaid Pledges.

#### **Event Management**



Event Mangement Managing administrative details for large events such as seminars, training classes, meetings, and concerts is a snap with the Event Management database.

**Key Tables** Attendees, Employees, Event Types, Events, Fee Schedules, My Company Information, Payment Methods, Payments, Registration.

**Key Forms** Attendees (\*Invoice), Employees, Event Types, Events, Fee Schedules, My Company Information, Payment Methods.

Key Reports Attendees Listing, Sales By Employee, Sales By Event.

#### **Expenses**



Expenses

Filling out employee expense reports is easy when you use the Expenses database to do the job. Throw those tedious paper forms in the recycling bin and fill out those expense reports quickly on your computer.

Key Tables Employees, Expense Categories, Expense Details, Expense Reports.
 Key Forms Expense Reports By Employee (\*Expense Report), Expense Categories.
 Key Reports Expense Report, Expense Report Summary By Category, Expense Report Summary By Employee.

## **Household Inventory**



Household Inventory Perfect for insurance purposes, the Household Inventory database helps you keep a room-by-room inventory of every valuable item in your home. (Be sure to keep a backup copy of this database in your bank safety deposit box or some other place that will be secure in case a natural—or unnatural—disaster strikes.)

Key Tables Categories, Household Inventory, Rooms.

Key Forms Categories, Household Inventory, Rooms.

**Key Reports** Inventory By Category, Inventory By Room, Inventory By Value, Inventory Details.

## **Inventory Control**



Inventory Control The Inventory Control database offers everything you'll need to manage your company's product inventory.

Key Tables Categories, Employees, Inventory Transactions, My Company Information, Products, Purchase Orders, Shipping Methods, Suppliers.

Key Forms Categories, Employees, My Company Information, Products (\*Purchase Order), Shipping Methods, Suppliers.

**Key Reports** Product Cost Comparisons, Product Purchases By Supplier, Product Summary, Product Transaction Detail.

#### Ledger



Ledge

Use the Ledger database to maintain a chart of accounts and transactions against each account.

Key Tables Account Types, Accounts, Transactions.

Key Forms Account Types, Accounts, Transactions.

Key Reports Account Summary, Summary By Account Type, Transaction Listing.

## Membership



Membership

The Membership database is perfect for organizations that must track information about members, committees, and dues payments.

**Key Tables** Committees, Members, Member Types, My Organization Information, Payment Methods, Payments.

**Key Forms** Committees, Member Types, Members (\*Invoice), My Organization's Information, Payment Methods.

**Key Reports** Alphabetical Member Listing, Committee Members, Invoice, Listing By Membership Type, Outstanding Balances.

#### **Music Collection**



Music Collection If you're a music fan with many recordings in your library, you can use the Music Collection database to store information about your albums/CDs, favorite recording artists, and the locations of your best-liked music.

**Key Tables** Music Categories, Recording Artists, Recordings, Tracks.

Key Forms Music Categories, Recording Artists, Recordings.

**Key Reports** Albums By Artist, Albums By Category, Albums By Format, Track By Album.

# Creating a Database

PART

#### **Order Entry**



Order Entry

If your business processes orders from customers, you'll want to try the Order Entry database, which has all the tools you need for managing customer, product, order, payment, and shipping information.

**Key Tables** Customers, Employees, My Company Information, Order Details, Orders, Payment Methods, Payments, Products, Shipping Methods.

**Key Forms** Employees, My Company Information, Orders By Customer (\*Invoice), Payment Methods, Products, Shipping Methods.

**Key Reports** Customer Listing, Receivables Aging, Sales By Customer, Sales By Employee, Sales By Product.

## **Picture Library**



Picture Library

Photography buffs can use the Picture Library database to list and describe pictures on each roll of film in your library. Great for tracking the thousands of shots you took at the Louvre!

Key Tables Photo Locations, Photographs, Rolls Of Film.

Key Forms Photo Locations, Rolls Of Film.

**Key Reports** Photographs By Date Taken, Photographs By Film Roll, Photographs By Location, Photographs By Subject.

#### Recipes



Recipes

If you use the Recipes database, you'll never have to wonder where you stashed your recipes for Cheez Whiz a la Orange and Twinkies Au Gratin. This database helps you plan, shop for, and whip up nourishing meals.

Key Tables Food Categories, Ingredients, Recipes.

Key Forms Food Categories, Ingredients, Recipes.

Key Reports Recipe Details, Recipes (Sorted Alphabetically), Recipes By Category.

## Resource Scheduling



Resource Scheduling Use the Resource Scheduling database to schedule the use of company resources such as meeting rooms, cars, overhead projectors, airplanes, and other equipment, and to assign each resource for use with a certain customer at a specific time.

Key Tables Customers, Resource Types, Resources, Schedule, Schedule Details.

Key Forms Customers, Reservations, Resources Types, Resources.

**Key Reports** Resource Schedule, Resources By Type.



Service Call Management

#### Service Call Management

Service companies that send technicians to customer sites can use the Service Call Management database to track customers, employees, work orders, invoices, payments, and more,

**Key Tables** Customers, Employees, My Company Information, Parts, Payment Methods, Payments, Workorder Labor, Work-order Parts, Workorders.

**Key Forms** Employees, My Company Information, Parts, Payment Methods, Workorders By Customer (\*Invoice).

**Key Reports** Finished Workorders In House, Revenue Entered By Employee, Sales By Month, Unfinished Workorders, Workorder Summary.

#### **Students and Classes**



Students and Classes

Teachers and school administrators will like using the Students and Classes database to track students, classes, assignments, and grades.

Key Tables Assignments, Classes, Departments, Instructors, Students.

Key Forms Classes, Departments, Instructors, Students.

**Key Reports** Class Listing By Department, Class Results Summary, Results By Assignment, Results By Student, Student Schedules, Students.

#### **Time and Billing**



Time and Billing

The Time and Billing database can help consultants, lawyers, and other professionals who bill their time by the hour to manage their businesses more efficiently.

Key Tables Clients, Employees, Expense Codes, My Company Information, Payment Methods, Payments, Projects, Time Card Expenses, Time Card Hours, Work Codes.

**Key Forms** Clients (\*Invoice), Employees, Expense Codes, My Company Information, Payment Methods, Time Cards (\*Time Sheet), Work Codes.

Key Reports Client Billings By Project, Client Listing, Employee Billings By Project, Project Billings By Work Code.

#### **Video Collection**



Video Collection The Video Collection database can help film and television aficionados avoid being buried in the brown tape of a large video library. Use this database to store information about videotaped programs and movies.

Key Tables Actors, Program Types, Video Programs, Videotapes.

Key Forms Actors, Program Types, Videotapes.

**Key Reports** Alphabetical Program Listing, Program Listing By Actor, Program Listing By Type.

#### Wine List

Oenophiles rejoice! The Wine List database can help you keep your wine cellar inventory under control. Never again will you confuse that mellow Muscat Canelli with a fine Fume Blanc, and you'll always know the vital statistics of each precious bottle.

**Key Tables** Wine List, Wine Purchases, Wine Types.

**Key Forms** Wine List, Wine Types.

**Key Reports** Wine By Type, Wine By Vintage, Wine By Vintner.

#### Workout



Tracking each activity in your exercise regimen and each day's progress toward physical perfection is no sweat with the Workout database.

**Key Tables** Exercise Types, Exercises, Units, Workout Details, Workout History, Workouts.

**Key Forms** Exercise Types, Exercises, Units, Workout History, Workouts.

Key Reports Exercise Listing By Type, Workout History By Exercise, Workout Stats By Month.

# Changing the Database Properties

You can view, change, and define properties for your database by choosing File ➤ Database Properties from the menu bar, or by right-clicking on the database window's title bar (or any gray area on the database window) and choosing Database Properties. Figure 5.8 shows the database properties for an Order Entry database that we created with the Database Wizard. Here's a description of the tabs in the dialog box:

**General** Displays general information about the database.

**Summary** Displays and lets you change summary information, including a Hyperlink base path (see Figure 5.8).

Statistics Displays file statistics, including date created, modified, accessed, and printed.

**Contents** Lists all the tables, queries, forms, reports, macros, and modules in the database.

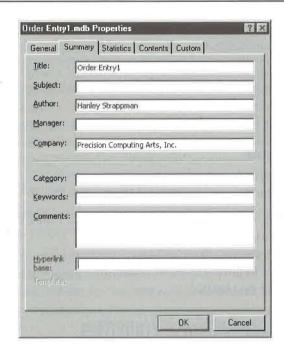
**Custom** Displays and lets you add and delete custom properties that can help you find a database quickly.

Click on the appropriate tab in the Properties dialog box; then view and change the properties as needed. When you're finished, click on OK to return to the database.

PART Ш

Creating a Database

The database properties for the sample Order Entry database with the Summary tab selected.



Why customize database properties? Because you can use them later to find a database if you've forgotten its file name or location. To look for and open a database based on its properties, choose the File ➤ Open commands in Microsoft Access, Word, or Excel. When the Open dialog box appears, click on the Advanced button, specify the properties you want to look for in the Define More Criteria area of the dialog box, and then click on the Find Now button.

To learn more about database properties, search for the *Properties, Database* topic and its subtopics in the Access Help Index. For details about searching for specific database properties in the Open dialog box, look up *Advanced Find Dialog Box* in the Help Index.

# Where to Go from Here

Once you've set up a database, you can start using it. For your next stop, go to the following chapters in this book:

• If you created a blank database and none of your data exists on a computer, continue with Chapter 6.

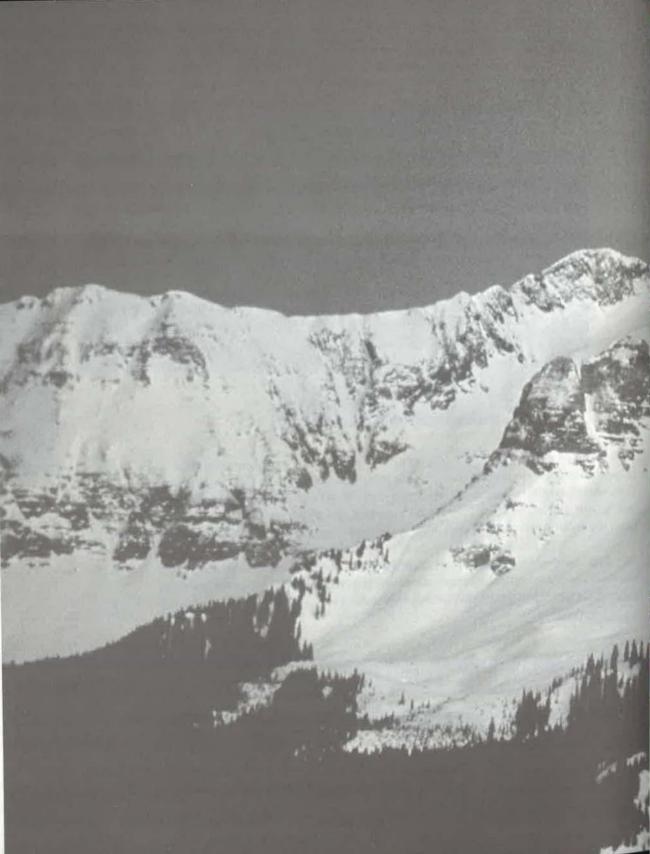
Creating a Database

- If you created a blank database and some or all of your data exists on a computer, continue with Chapter 7.
- If you used the Database Wizard to create a database, continue with Chapter 8.

# What's New in the Access Zoo?

Creating databases is easier and more flexible now than it was in Access 7. Major improvements include

- The Database Wizard has new easyto-use features that adapt a template to your own needs.
- The Intelligent Assistant recognizes the field types for columns you add to a table in Datasheet view, even the new Hyperlink field type.



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Creating Access Tables

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