EXHIBIT 69 PART 4

Create an Online Manual

Use Word to Create an Employee Handbook, Policy Manual, or Systems Guide

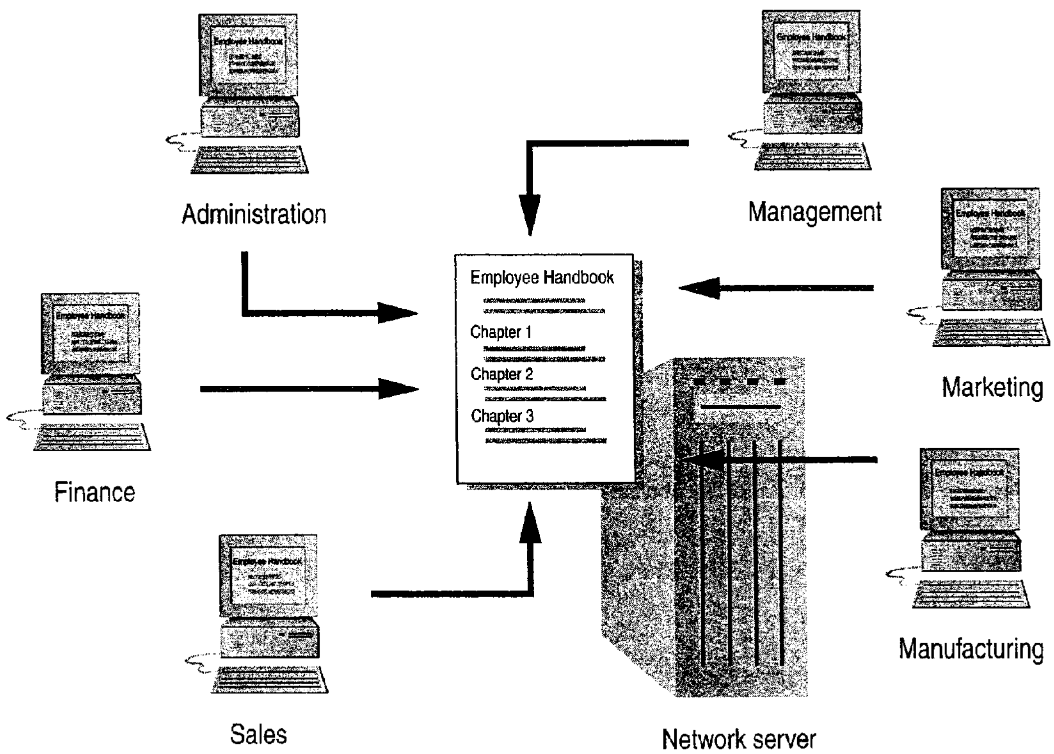
You're in charge of creating a procedures manual for your company, an employee handbook, let's say. You need to make sure the manual is universally accessible and always up-to-date. Also, you want to let users browse through and retrieve information quickly. Finally, you'd like to include color and graphics, but you don't want to pay higher printing costs.

The solution: Create an online manual and move it to a network server. This topic describes how to set up the manual's structure and design.

Key Features

- Styles
- Online Layout View
- Document Map
- Hyperlinks

Move your employee handbook to a network server so that employees in any group or location can access an up-to-date version of the handbook.



MS 114154

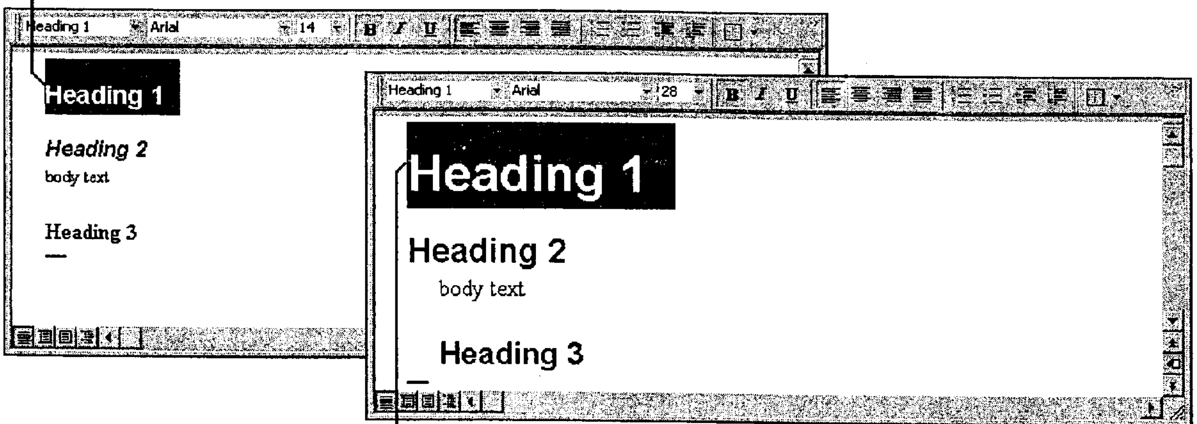
Create an Easy-to-Read Design

You want to design an online manual that's easy to read and easy to scan. Start by creating a document that sets up the fonts, colors, white space, and other elements you'll need.

Click the **New** button. Type some sample headings and body text, and then format them as shown in the following illustration.

New button

To standardize headings, apply built-in heading styles: Select a heading, and then click a heading style in the **Style** box. Repeat for the other headings.



Change the text design of a built-in style: Select a heading or body text paragraph, format it the way you want, click the **Style** box, press ENTER, and then click **OK** when prompted to update the style to reflect recent changes.

Save your document Click **Save As** (**File** menu), and then name the document.

Want to use a colored background in your online manual? Click **Background** (**Format** menu), and then click the background you want.

What Makes a Design Easy to Read?

To improve the legibility of on-screen text, use large and plain fonts, maximize the contrast between text and the background color, and use white space generously.

To highlight important information, increase the font size, indent the text, or emphasize it with underlining or color. You can even use animated text effects, such as a blinking background or text that sparkles. To add animated text effects, click **Font** (**Format** menu). On the **Animation** tab, click the effect you want.

Want to know more? Look up **Getting Results - Online Manual** in Help.

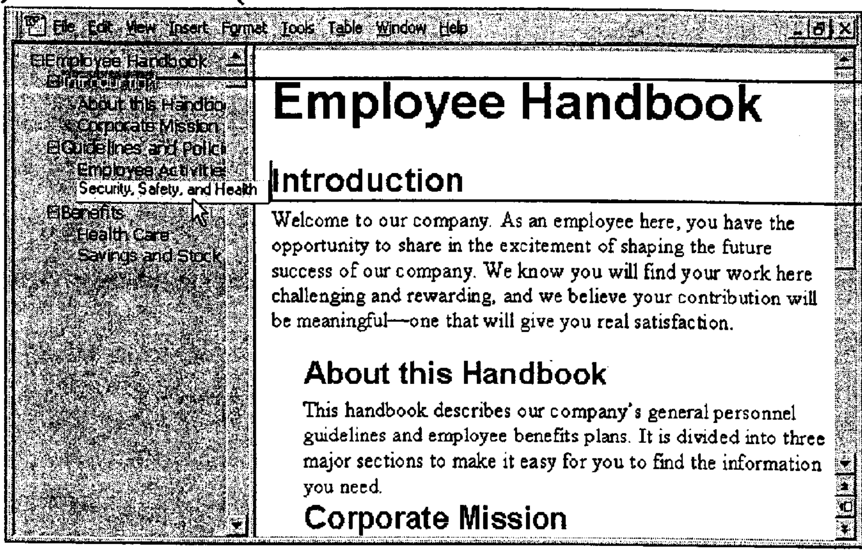
Office Assistant button

What View Should Online Readers Use?

While users can read documents in normal view or page layout view, the best view for reading online is online layout view (**View** menu).

Why? Because of increased legibility through larger fonts and more space between lines. Online layout view also hides screen elements (such as the ruler and horizontal scroll bar) that aren't critical for online reading. It also offers the Document Map, which displays an outline of the document headings.

The Document Map displays an outline of the headings in your manual.



Users can navigate within the manual quickly by clicking the title of the section that they want to read.

If a title isn't completely displayed, all a user has to do is point to the title, and a ScreenTip displays the full title.

Recommend that online readers remove toolbars Since online readers won't be editing the manual, you might want to recommend that they remove toolbars and the status bar to clear more screen space. To do so, tell users to click **Toolbars** (**View** menu) and then to click the toolbars with check marks.

Hands-Free Reading

If online readers with Word for Windows have the Microsoft IntelliMouse pointing device, you might want to point out that they can use the device to automatically scroll at reading speed. All readers need to do is click the wheel button to start the AutoScroll feature.

MS 114157

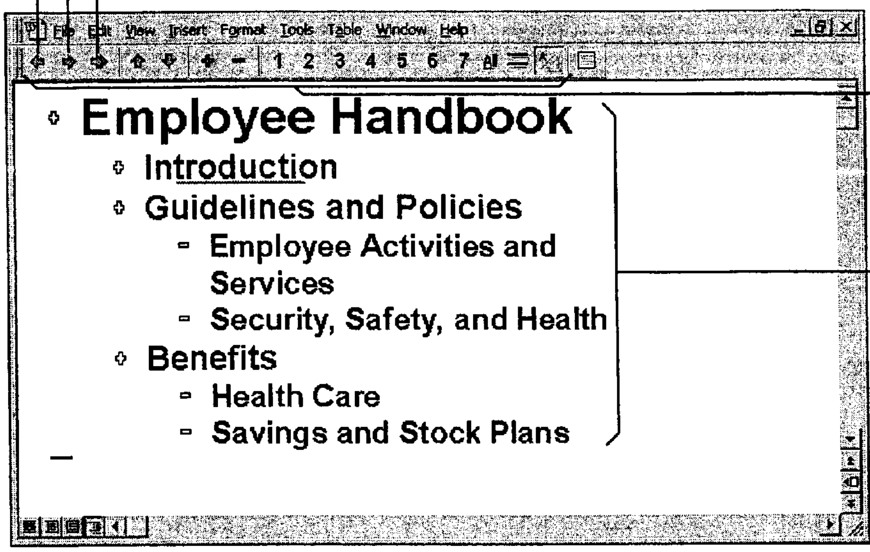
To Outline or Not to Outline?

After you start writing your manual, you may want to switch to outline view. It provides a quick way to organize your manual, and also creates the Document Map for your manual automatically. To switch to outline view, click **Outline** (**View** menu).

Click here to promote a heading (make it a higher heading level).

Click here to demote a heading (make it a lower heading level).

Click here to demote a heading to body text.



Use buttons on the **Outlining** toolbar to collapse, expand, and rearrange headings and text.

All headings in your outline will appear in the Document Map.

Even if you don't outline, you can still have a Document Map Just apply heading styles (Heading 1, Heading 2, and so on) to your headings. You can use built-in heading styles or your own custom heading styles. For more information on custom heading styles, see "Reuse Your Custom Formatting," page 144.

Change to normal view for speedier writing and editing Click **Normal** (**View** menu).

MS 114158

Want to Keep Different Versions of Your Manual?

As you develop your manual, you may have different ideas about how to organize it, or even about what content to include. Instead of saving different versions of your manual as separate documents, you can save different versions of your manual in the same document file.

Click **Versions** (**File** menu), and then click **Save Now**. To give a brief description of which version you're saving, type a comment in the **Save Version** dialog box.

? **Want to know more?** Look up **Getting Results - Online Manual** in Help.

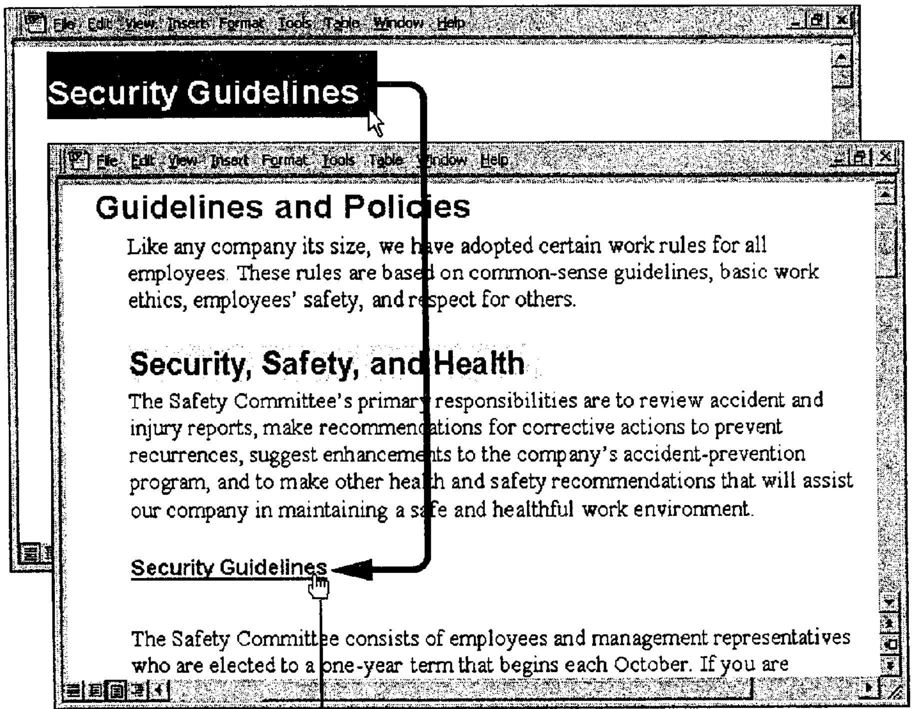
Office Assistant button

For Easy Navigation, Create Hyperlinks

After you finish writing, the next step is to add hyperlinks, which allow a user to jump from one place in the manual to another.

While the Document Map allows users to jump to the headings in your document, it's also a good idea to add hyperlinks to the text, so users can jump to related sections and to other relevant documents. For example, the section on savings and stock plans might include a hyperlink to another document that provides current stock prices. For more information on creating hyperlinks see "Office and the Web," page 442.

Copy a heading or text in your manual ...



... then click where you want to insert the hyperlink text. Click **Paste as Hyperlink** (**Edit** menu).

When users point to the heading or text, the pointer becomes a hand, indicating a hyperlink.

MS 114160

The Paste as Hyperlink command isn't available Make sure that the document that you are copying from has been saved.

Want cross-references to be hyperlinks? Just click **Cross-reference** (**Insert** menu). By default, all cross-references in the same document will be hyperlinks. Online readers will be able to jump to headings, page numbers, numbered paragraphs, table or figure references, or whatever you insert as a cross-reference.

Add graphics Word comes with a variety of clip art that you can use to make your manual more interesting. You can even create your own graphics with tools on the **Drawing** toolbar. For more information, see "Get Your Point Across with Graphics," page 159.

Want to know more? Look up **Getting Results - Online Manual** in Help.

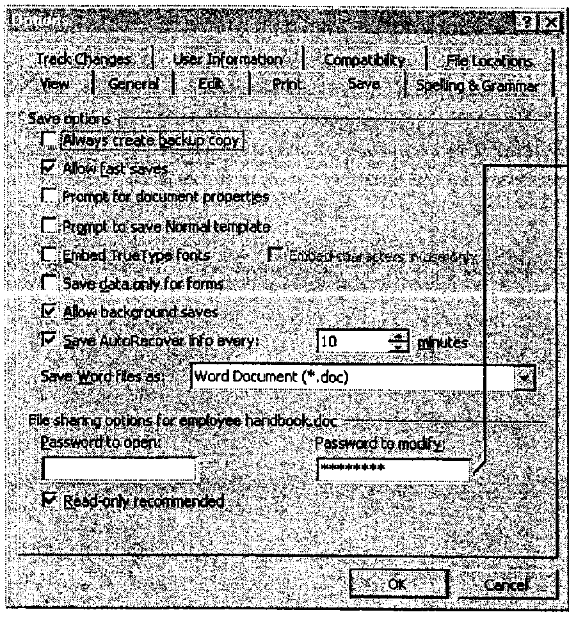
Office Assistant button

MS 114161

Save Your Document and Protect It from Changes

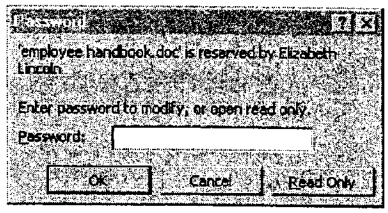
To make sure that your document is not changed by online readers, protect it by requiring a password to modify the document.

Click **Save As** (**File** menu), and then click **Options**. On the **Save** tab, type a password in the **Password to modify** box.



To allow online readers to open your manual but not make changes, use this option.

When online readers open your manual, they see a dialog box prompting them to open it as read-only.



Move a copy of your manual to a network server Send e-mail to employees to let them know the location of the manual. In your message, you might also want to strongly recommend that they read the manual in online layout view and that they remove toolbars.

Move the Online Manual to Your Intranet?

If your company has an intranet, you might want to think about converting your online manual to a Web page. For more information, see "Office and the Web," page 442, and "Create a Web Page with Word," page 458.

MS 114162

Next Steps

To	See
Use your online manual as a template for other online manuals	"About Creating and Opening Documents and Databases," page 48
Distribute the manual on your internal Web	"Office and the Web," page 442
Create a simple schedule that includes topic names, authors, current status, and future milestones	"Create a Business Contact List in Microsoft Excel," page 353
Schedule team meetings and track other tasks and appointments	"Schedule an Appointment," page 383, "Keep a Task List," page 391
Modify the manual's formats, such as fonts, line spacing, and margins	"Make Your Word Document Look Great," page 127
Solicit feedback on individual topics or on the entire manual	"Have Your Team Review a Word Document," page 406

MS 114163

Track Orders in a Shared Database

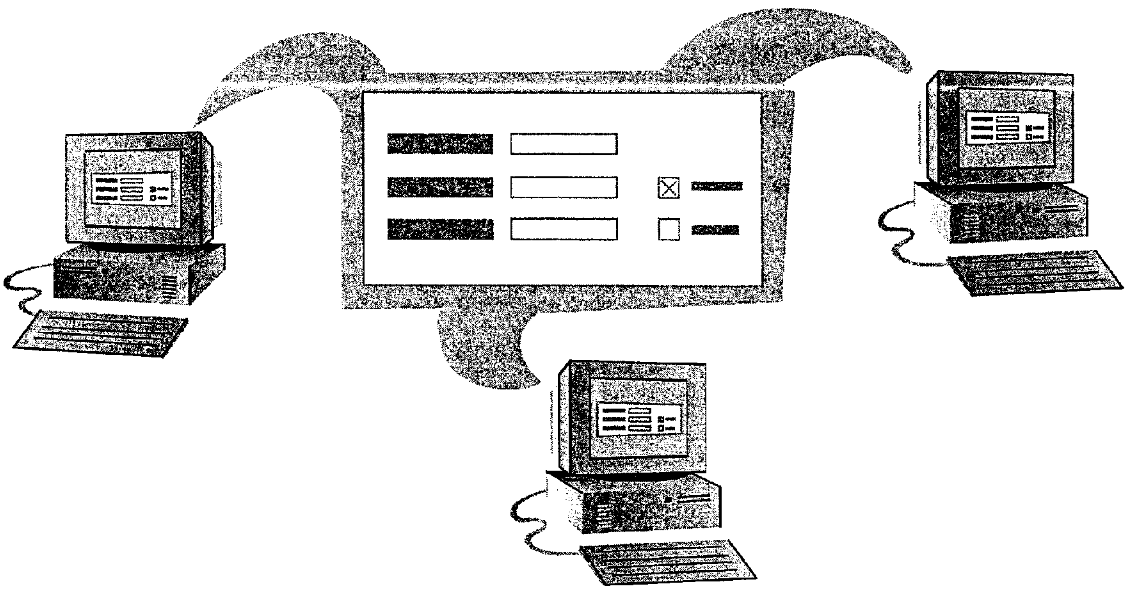
Work with a Microsoft Access Database in a Multiuser Environment

An order entry database is likely to be used by people throughout your company. For example, one person may enter an order taken over the phone, another may fill the order from inventory, someone else may pack and ship the order, and another person may check on order status for the customer. With the Microsoft Access Database Wizard, you can easily create a multiuser database that serves all of these needs.

Key Features

Database Wizard

Multiuser Options



To complete the steps in this topic you need to have Microsoft Office, Professional Edition or an individual copy of Microsoft Access installed.

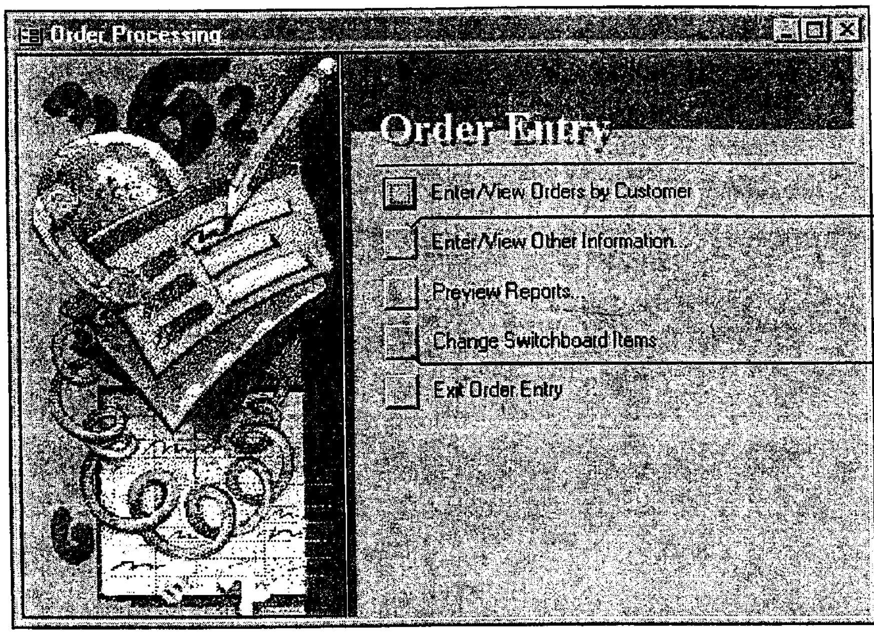
MS 114164

Create an Order Entry Database

If you need to track sales activity, you can use Microsoft Access to quickly set up a database to enter sales data and store information about your products, customers, and company. In the database window, click **New Database** (**File** menu). On the **Databases** tab, double-click **Order Entry** to start the Database Wizard. Follow the instructions in the wizard.

When the Database Wizard creates your database, it creates a *switchboard*, a form that you use to open the database's forms, tables, and reports.

The Database Wizard creates everything you need to enter orders and search your database.



Click here to open forms and reports to track company information, shipping, and payments.

Click here to change items on the switchboard.

MS 114165

Help your co-workers get started on tracking orders You can choose to have the Database Wizard include sample data when it creates your database. Your co-workers can view the sample data and replace the entries with their own data.

Want to set up other types of business databases? Use the Database Wizard to create many business and personal databases, including databases for asset tracking, event management, and resource scheduling.

Protect your database with a password Click **Security** (**Tools** menu), and then click **Set Database Password.** Type a password when prompted. When you or your co-workers attempt to open the database, Microsoft Access will ask for the password.

Want to see all the components that make up your database? Click the **Database Window** button to see your forms, reports, tables, queries and modules.

Database Window button

Want to know more? Look up **Getting Results - Track Orders** in Help.

Office Assistant button

MS 114166

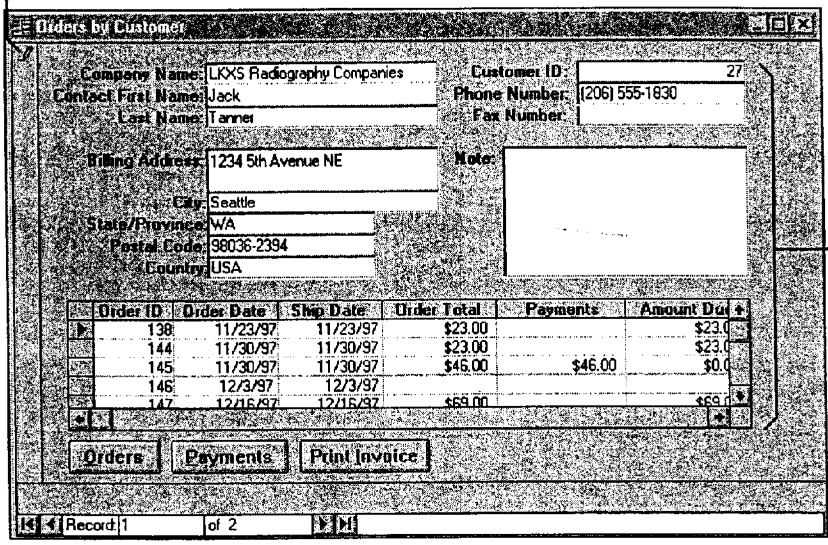
Share Your Order Entry Database

After the Database Wizard creates a complete order entry database, you can use Windows Explorer to copy or move the file to a network location where everyone can open it.

When you place the database on a network, your co-workers can use the switchboard to open its forms and reports. You can work with order prices, dates, and other important information by using Orders by Customer, the primary order entry form. To use this form, click **Enter/View Orders by Customer**.

Multiple users can enter data at the same time when working in forms. Microsoft Access saves changes every time a user presses SHIFT+ENTER or moves to the next record.

The Unsaved Record Indicator symbol shows that you are editing this record.



Several users can create new orders simultaneously, while other users view the latest status.

Prevent others from making changes to a record you are working in Click **Options** (**Tools** menu). On the **Advanced** tab, click **Edited Record**.

Does someone else need to edit while you are? Microsoft Access will notify you and give you choices about how to proceed.

View the most up-to-date changes to records Click **Refresh** (**Records** menu).

Do some users just look at orders and never make changes? These users can open the file in the read-only state. To open a database in read-only state, click the **Open Database** button and then click the database. Click the **Commands and Settings** button, and then click **Open Read Only**.

Open Database button

Commands and Settings button

Is your database slow? You can improve performance and make a database easier to maintain by dividing it into two files: one that contains your data and another that contains the queries, forms, reports, macros, and modules that you need. Click **Add-Ins** (**Tools** menu), and then click **Database Splitter**.

When You Need to Modify a Database, Open It in Exclusive Mode

Making design enhancements while others are sharing a database can be confusing to your users. For example, if other users are sharing the database and you start making changes to table designs, the other users cannot use the data stored in the tables you're modifying. If other users have opened tables, you can't modify them.

You can prevent others from using a database while you make changes. First, make sure no one else is using the database. Click **Open Database** (**File** menu), and then select the **Exclusive** check box in the **Open** dialog box that appears. Then select and open the database you want to work in.

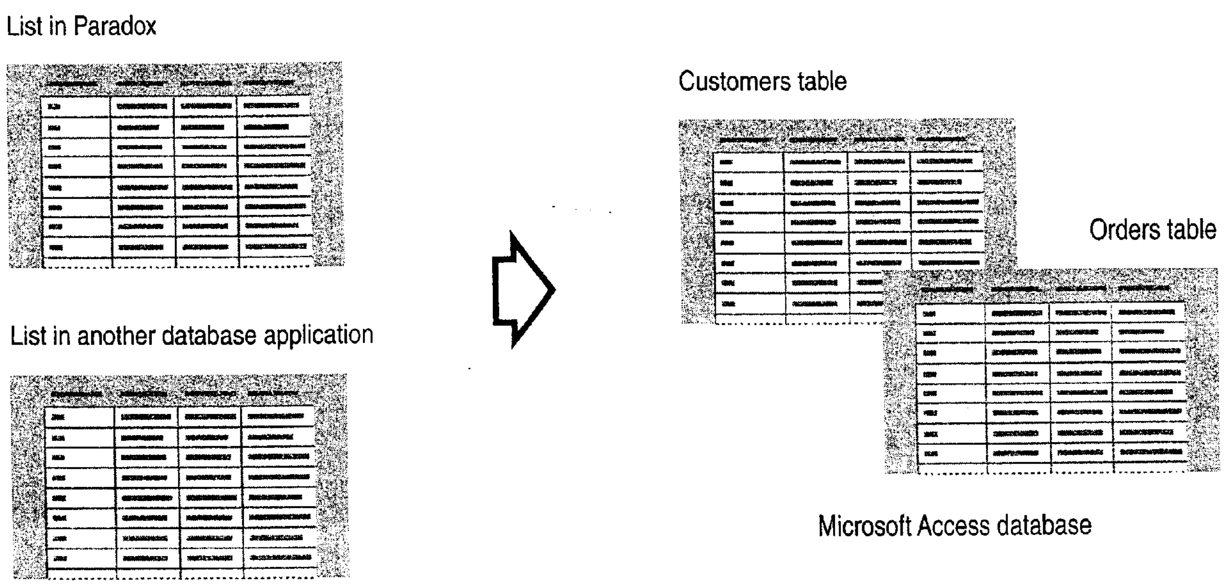
MS 114168

Use Data from Other Applications or Databases

Microsoft Access makes it easy to work with data from elsewhere on your network.

Move data permanently into your database by pasting or importing You can move several different types of data into Microsoft Access. For example, you can move data that is stored as text, in a supported database format, or as a Microsoft Excel list. Microsoft Access wizards can help you import data. To import external data into your database, click **Get External Data** (**File** menu), and then click **Import**. To create a link to external data, click **Get External Data**, and then click **Link Tables**.

View and update data stored in another application by creating links What if you want to work with data stored and maintained in a different application or in another database, such as Paradox? Create a link to your Microsoft Access database from a table in a supported database format. Users can then view and update the linked data, just as they view and update data stored in Microsoft Access. The changes are saved and stored in the original application's file, so that users who work with the data using the original application can continue to do so.



Next Steps

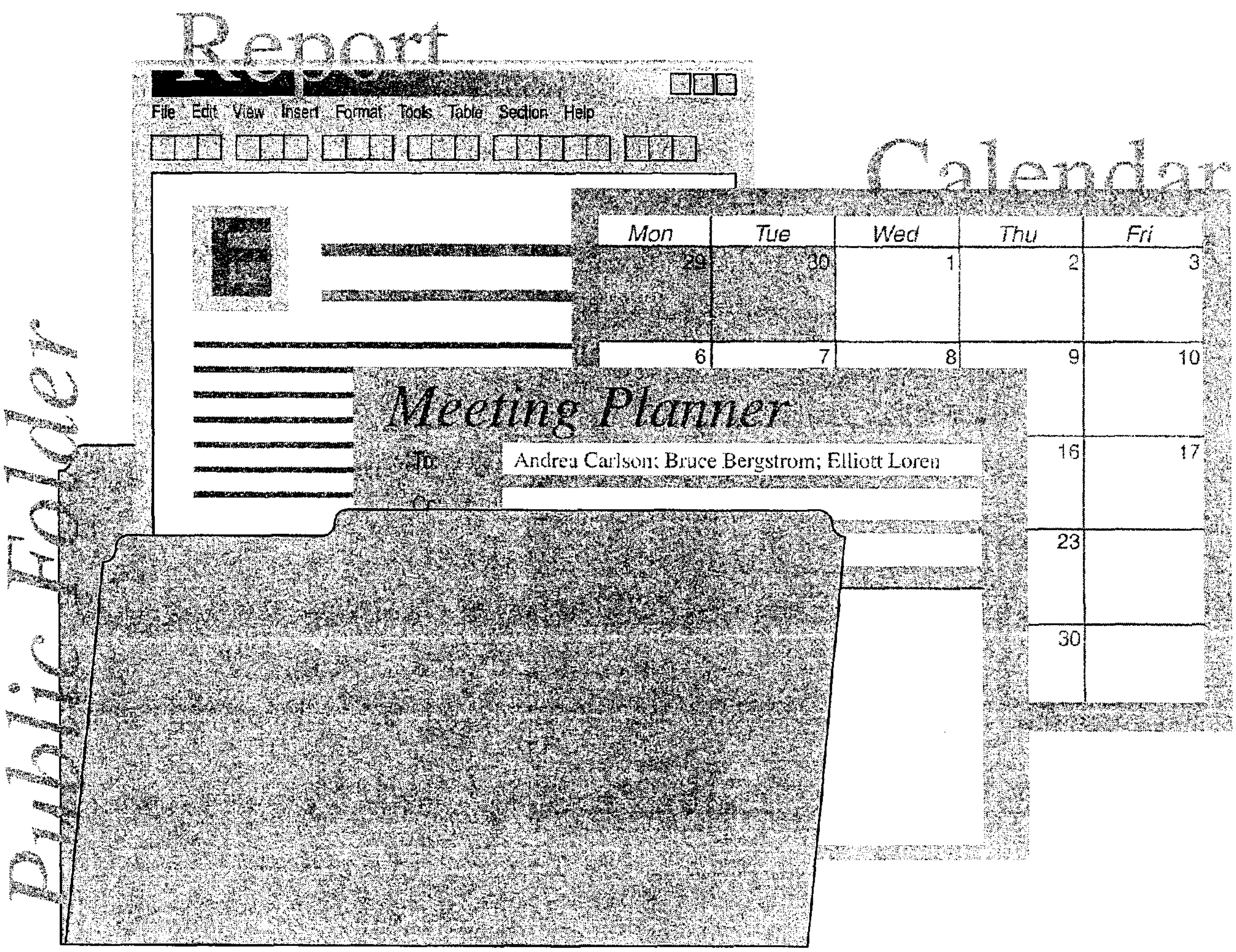
To	See
Learn more about using forms for data entry	"Use Your First Microsoft Access Database," page 104
Move Microsoft Excel data into Microsoft Access	"Move a Product List into Microsoft Access," page 493

Use Outlook to Share Folders

Suppose that you maintain a group calendar. You're constantly updating your co-workers about meetings, events, and other associated information stored in the calendar. Instead of using your private folders, you can share this information easily by using a *public folder*. Public folders are Outlook folders that are posted to a network. You can add any Outlook item, Office document, or other file to a public folder. You can assign levels of permission to a public folder so that you determine the users who can read, edit, and add information to the folder.

Key Features

- Public Folders
- Setting Permissions
- Offline Folders



To use public folders, you need Microsoft Exchange and permission to read items in a folder. See your network administrator for permission to create or add information to a public folder.

MS 114170

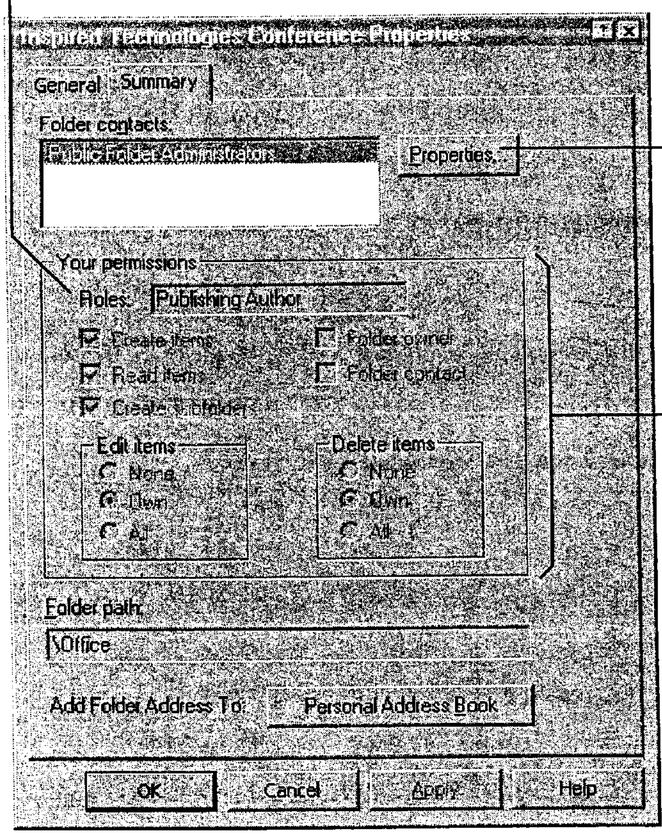
Check Permissions Granted for a Public Folder

You created a group calendar for the Inspired Technologies conference, and now you want to add the calendar folder to a public folder. Start by checking the properties of the public folder to see if you have the correct permission level.

To check the permissions set for a public folder, click the **Folder List** button and then navigate to the public folder. Select the Public Folders folder, and then click **Properties for** *folder name* (**File** menu, **Folder** submenu).

Folder List button

Your role as Publishing Author lets you create and read items in the public folder, create subfolders, and edit and delete items you create.



Click here to see a list of network administrators and the owner of the public folder.

Your level of access to the public folder is displayed here.

MS 114171

Set access levels for other users Only the owner can set permissions for a public folder. However, if you have Publishing Editor or Publishing Author privileges for a public folder, you can create a subfolder and, as the owner of that subfolder, set levels of permission for other users.

Create a Shortcut to a public folder You can add a Shortcut to the public folder. Right-click the public folder you want to add to the Outlook Bar, and then click **Add to Outlook Bar**.

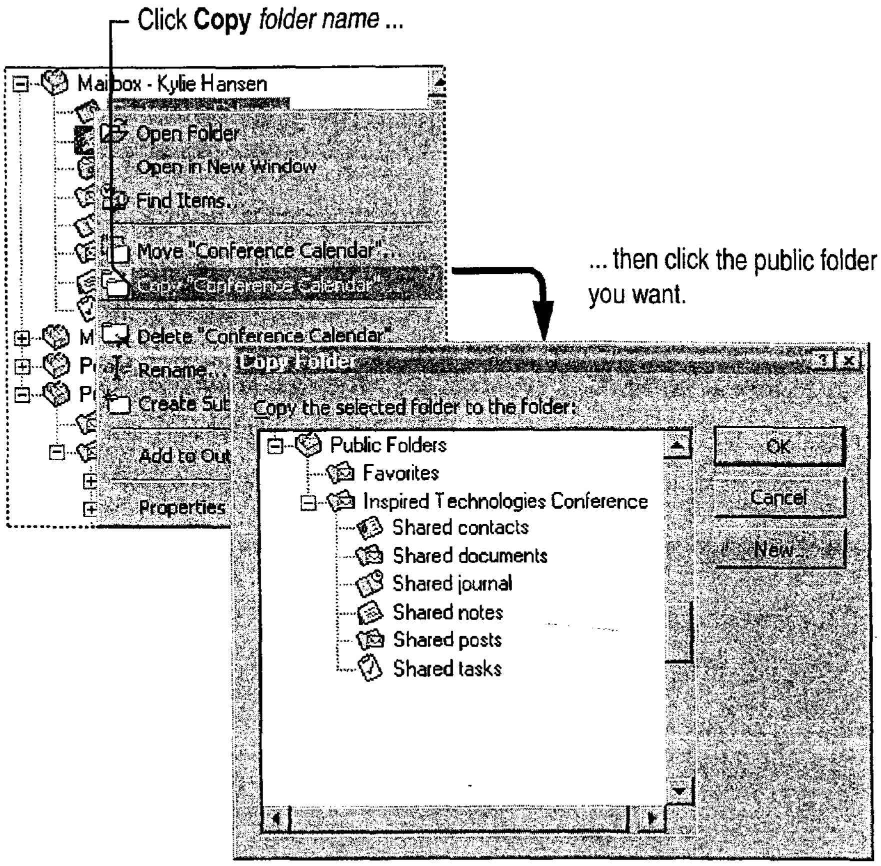
Want to know more? Look up **Getting Results - Share Folders** in Help.

Office Assistant button

MS 114172

Add a Calendar to the Public Folder

Now you're ready to copy the conference calendar to the public folder. In the folder list, right-click the folder you want to add to the public folder.



Notify other users about the public folder You can send a shortcut to a public folder to other users in an e-mail message. Create a new message, and then drag the public folder into the body of the message.

Copy information from the public calendar to your private calendar To copy an appointment or event to your personal calendar, open the appointment or event and then click **Copy to Personal Calendar** (**Appointment** menu).

Create a new folder within a public folder Instead of copying a private folder, right-click the public folder and then click **Create Subfolder** to create a new folder. You must have permission to create subfolders within a public folder.

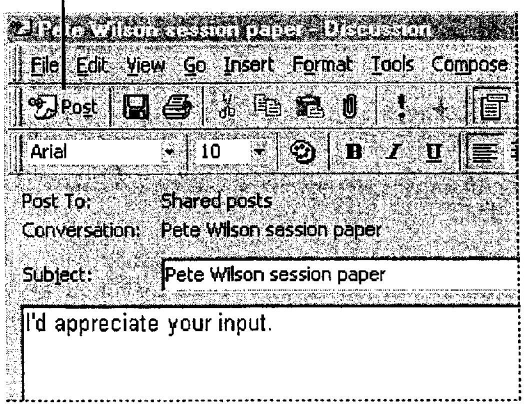
MS 114173

Start an Online Discussion

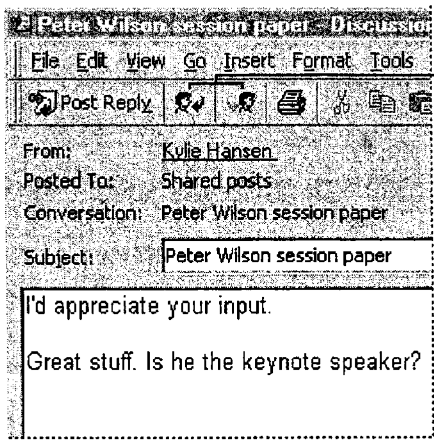
One of the speakers has submitted a paper for the conference and you'd like input from the rest of the team. You can use a public folder as a bulletin board so that members of the group can discuss the paper online. You must have permission to create items in order to post information to a public folder. Other members of the team need permission to read and post items to the folder.

Open the public folder you want to post to, and then click **New Post in This Folder** (**Compose** menu). After the item is posted, your co-workers can read and respond to the information.

Click here to add the item to the public folder.



A respondent can click **Post Reply** in the item to add the response to the folder so that others can read it.



Click **Reply** to send your response directly to the originator of the post, or click **Forward** to send it to someone else.

Create a bulletin board You must have permission to create subfolders within a public folder. Right-click the public folder, and then click **Create Subfolder**. In the **Create New Folder** dialog box, click the **Folder contains** arrow, and then click **Mail Items**.

Sort posted information Suppose the public folder contains posts about more than one session paper. You can click **By Conversation Topic** in the **Current view** box to sort posted information by conversation topic. Then open a post, click **Next** (**View** menu), and then select a navigation option to scroll through the responses in that group.

Organize how items are posted to a public folder If you have owner privileges, you can set rules to process new items posted to a public folder. For example, you can create a rule that sorts posted information by subject. Right-click the public folder, and then click **Properties**.

Want to know more? Look up **Getting Results - Share Folders** in Help.

Office Assistant button

Update a Public Folder When You're Out of the Office

If you use a computer when you're away from the office, you can still share information in a public folder if you create an *offline folder* on your remote computer. Offline folders make it possible to copy a public folder from a server location, update and modify the contents, and then update the public folder, all from a remote location. For example, you can use offline folders to send and retrieve e-mail messages.

Open the public folder you want to use offline. Click **Add to Public Folder Favorites** (**File** menu, **Folder** submenu). Open the **Favorites** folder in the public folder list, right-click the public folder you want, and then click **Properties**. On the **Synchronization** tab, click **When offline or online.** Follow the instructions that appear on the screen to create an offline folder on your hard disk.

When you're ready to update the server folder, connect to Microsoft Exchange and then open the folder in Outlook. Click **This Folder** (**Tools** menu, **Synchronize** submenu).

Next Steps

To	See
Learn more about public folders	*Microsoft Office 97 Resource Kit*, Microsoft Press
	Building Microsoft Outlook 97 Applications, Microsoft Press
Create custom views in folders	"Customize the Way You Display Information," page 366

MS 114176

PART 9

Use Office on the World Wide Web

Contents

MS 114177

Office and the Web

Make the Most of Office Applications on Your Internal Web or the World Wide Web

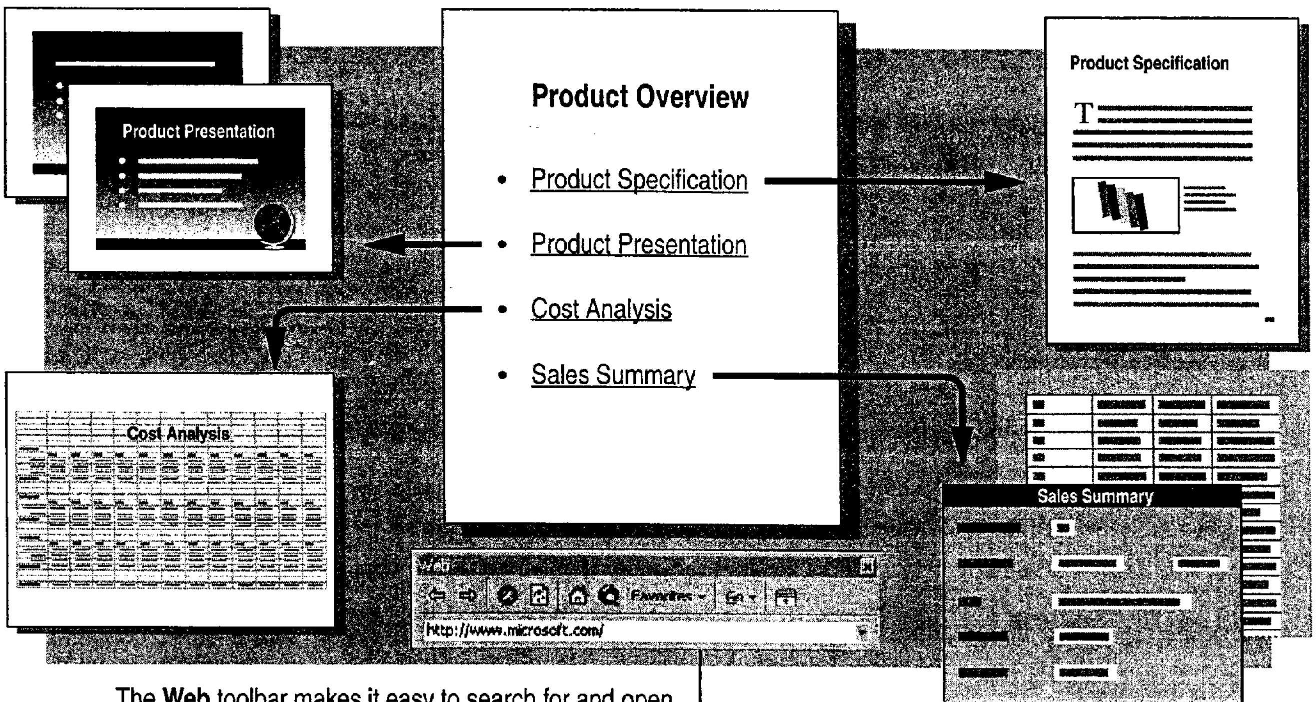
Suppose you have product specifications written with Microsoft Word that you want to share with your team, upper management, engineering, and other product teams. And you also have Microsoft PowerPoint slide presentations, a cost analysis done in Microsoft Excel, and sales summaries done in Microsoft Access. You can share information with many people (who do not all share the same applications) by adding hyperlinks to your files. If not everyone in your audience has all the Office applications, they can still jump to most files they need and view Microsoft Excel, Word, and PowerPoint files by using the special viewers with these applications.

Key Features

Hyperlinks

Web Toolbar

When you add hyperlinks to your Office files, online readers can jump to a different location in the same file, or to a site on your internal Web or the World Wide Web.



The **Web** toolbar makes it easy to search for and open Office files (such as PowerPoint presentations, Microsoft Excel worksheets, Word documents, and files that contain data created with Microsoft Access) on your internal Web.

MS 114178

About the World Wide Web and Intranets

What is the World Wide Web? The World Wide Web is a major component of the Internet, which is a vast global network of smaller networks and personal computers. *Web pages* include hyperlinks and present information in a graphical format that can incorporate text, pictures, sounds, and digital movies. Web pages are created in *Hypertext Markup Language* (HTML) format, which is a special system for tagging a file so that it can be interpreted by Web *browsers*, such as Microsoft Internet Explorer. A browser enables virtually any type of computer to read HTML files.

What is an intranet? An *intranet* is a special type of Web that is available only to the users of a particular local area network (LAN) or wide area network (WAN), such as those often used by companies and organizations for internal communication. With an intranet, employees can share confidential, work-related information without making it available to the public.

Use Office applications you're familiar with When you use Office applications with your intranet, you can work with Office files in their native format, rather than having to convert them to HTML format. For example, when you open a Word document with the **Web** toolbar, you will see the Word toolbars, and you'll be able to work with the document in the same way that you would any other Word document. You won't be limited by the viewing features of a particular browser.

? **Want to know more?** Look up **Getting Results - Web and Office** in Help.

Office Assistant button

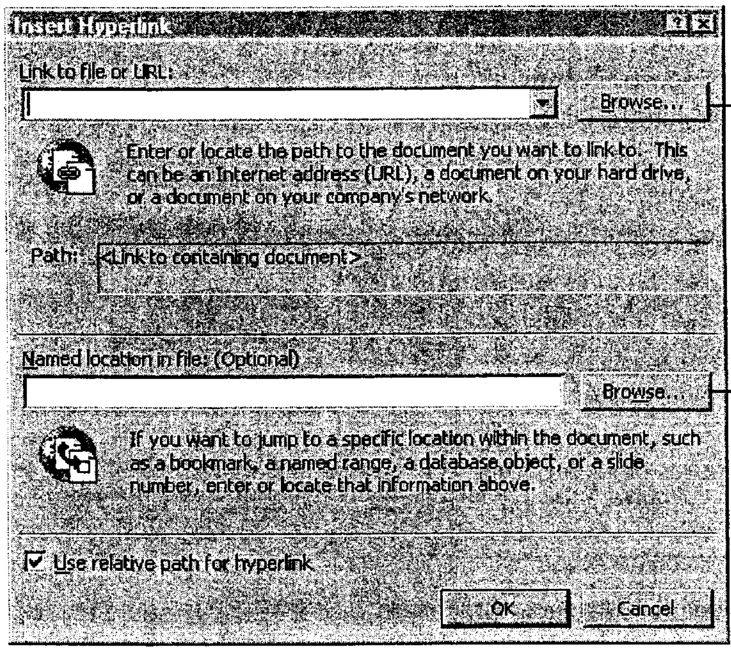
MS 114179

Add Hyperlinks to Your Files

A *hyperlink* is colored or underlined text or a graphic that you click to jump to another file, or to another location in the same file. You can jump to files on your intranet or to Web sites. For example, you can click a hyperlink to jump to a heading in Word, a cell or named range in Microsoft Excel, titles in PowerPoint slides, and table cells in Microsoft Access. If your company already has a LAN or WAN, all you need to do to make your files available to other employees is to put them on a public server and then add hyperlinks to files that you want to jump to.

In your file, click where you want to be able to jump from, and then click the **Insert Hyperlink** button.

Insert Hyperlink button



Click here to locate the file you want to jump to, or type an address in the **Link to file or URL** box.

Click here to specify a location to jump to in a file.

Jump to another location in the same file In Microsoft Excel for Windows, Word for Windows, or PowerPoint for Windows, select the text or heading you want to be able to jump to, and then right-click to drag it to the location you want to be able to jump from. When you release the mouse button, click **Create Hyperlink Here** on the shortcut menu.

Get the wrong shortcut menu? If your hyperlink text has been marked as having a possible spelling or grammar error, you must first resolve the error before you can right-click the hyperlink text and display the shortcut menu with the **Hyperlink** submenu.

Jump to a location in another file In Microsoft Excel, Word, or PowerPoint, select the heading or text that you want to be able to jump to, and then copy it. In the location that you want to be able to jump from, click **Paste as Hyperlink** (**Edit** menu).

What if online readers don't have your Office application? They can still view your Microsoft Excel, Word, or PowerPoint files on an intranet or the Web by downloading the viewer for the appropriate application from the Microsoft Web site:

http://www.microsoft.com/

Want to remove a hyperlink? Right-click the hyperlink, click **Hyperlink** on the shortcut menu, and then click **Edit Hyperlink**. In the **Edit Hyperlink** dialog box, click **Remove Link**.

Make it Easy to Create Web Pages

If you want to create a Web page by working in HTML format, you can use Word as your authoring tool. Another alternative is to save existing Office files in HTML format. For more information, see "Create a Web Page with Word," page 458, "Publish Microsoft Excel Tables and Charts on the Web," page 448, "Create a Web Presentation with PowerPoint," page 452, and "Use Microsoft Access to Retrieve and Publish Data," page 464.

Want to know more? Look up **Getting Results - Web and Office** in Help.

Office Assistant button

MS 114181

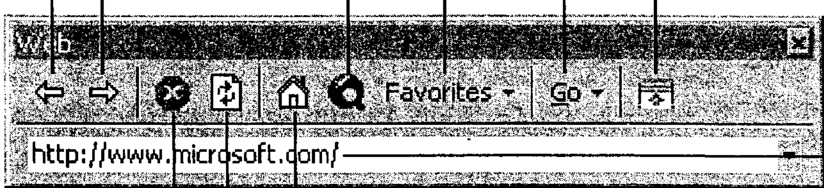
Use the Web Toolbar to Navigate Your Intranet

Web Toolbar button

After you click different hyperlinks, the easiest way to navigate among the files is to use the **Web** toolbar. In Microsoft Excel, Word, or PowerPoint, if the **Web** toolbar isn't already visible, click the **Web Toolbar** button. In Microsoft Access, click **Toolbars** (**View** menu), and then click **Web**. If you already know the file location, type it or select it from the **Address** box. If you don't know the location, click the **Search the Web** button to search for it. After you open a file, use the **Back** and **Forward** buttons to move quickly between files.

If you have certain files that you want to open on a regular basis, you can add them to your Favorites folder by clicking the **Favorites** button and then clicking **Add to Favorites**.

To make it easier to see more of the file that you've just opened, you can click the **Show Only Web Toolbar** button, which hides the other application toolbars.



MS 114182

ARENDI-DEFS00001892

Jump to sites on the World Wide Web If you have access to the Internet, you can jump to Web sites. Just type the address, or *Uniform Resource Locator* (URL), in the **Address** box. For example, type the following:

http://www.microsoft.com/

Open files on your intranet while working in an Office application In your Office application, click the **Open** button. In the **File name** box, type the address you want. For example, type the following:

http://*sales/february/report.doc*

Use Microsoft Internet Explorer 3.0 to View Microsoft Excel, Word, and PowerPoint Files

If you use Internet Explorer 3.0 to browse the Internet and then switch to viewing files on your corporate intranet, your Microsoft Excel, Word, or PowerPoint file opens in the browser just as if it were an HTML file. You can navigate between these files and files on the Internet with no loss of browsing or navigational capabilities. More important, when you're working in a Microsoft Excel, Word, or PowerPoint file, you can access the default toolbars in that application.

Next Steps

To	See
Create a Web page by using Word	"Create a Web Page with Word," page 458
Create Web content by using Microsoft Excel	"Publish Microsoft Excel Tables and Charts on the Web," page 448
Create a Web page by using PowerPoint	"Create a Web Presentation with PowerPoint," page 452
Add a hyperlink to a table and retrieve information from the World Wide Web or your intranet	"Use Microsoft Access to Retrieve and Publish Data," page 464

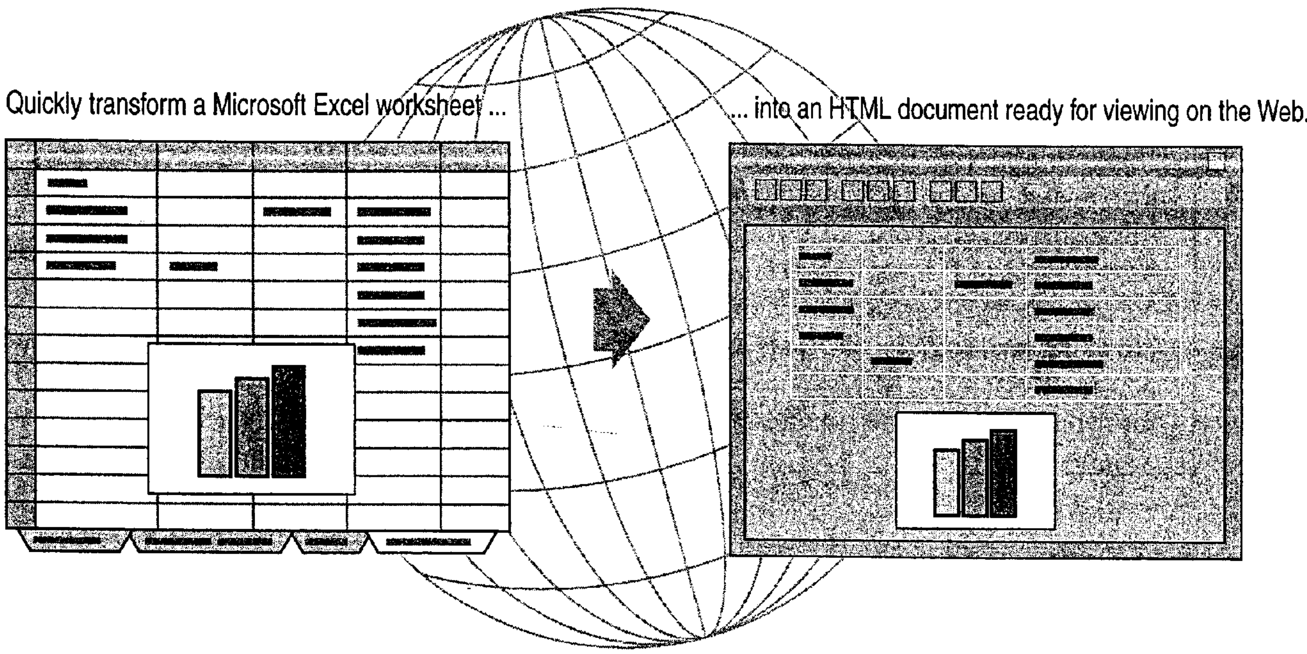
MS 114183

Publish Microsoft Excel Tables and Charts on the Web

You can use Microsoft Excel to publish information for viewing on the World Wide Web or on your company's intranet. You can take advantage of the tabular structure of Microsoft Excel to create HTML tables, you can publish your existing Microsoft Excel charts, and you can even put them together on the same page.

Key Features

Save as HTML command



Guidelines for Effective Web Pages

Keep it clean Don't clutter your worksheets with too many fonts or formats. Easy-to-read worksheets make easy-to-read Web pages.

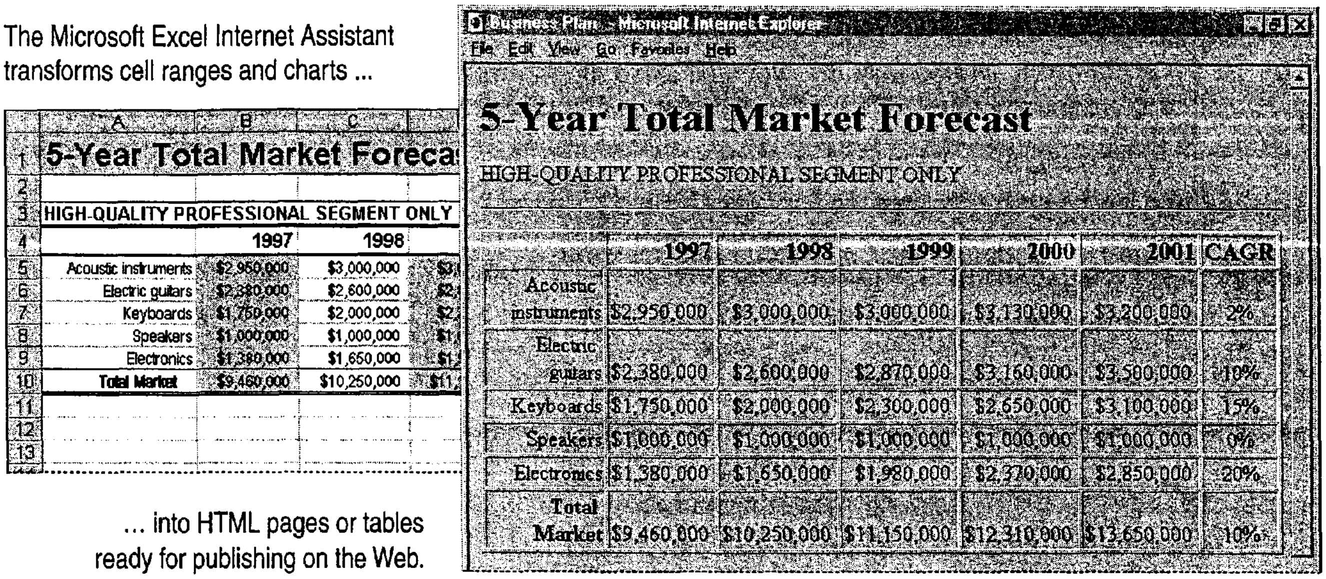
Use larger fonts Small text is often difficult to read after HTML conversion. Even though you might use a high-resolution display, you need to design your Web documents so that they can be read easily by others who don't.

MS 114184

Save the Worksheet as an HTML Document

Open the worksheet you want to publish, and then click **Save as HTML** (**File** menu) to start the Internet Assistant. The Internet Assistant can convert multiple cell ranges and charts to a single Web page, or you can insert them into an existing Web page. If this command does not appear, you need to rerun Setup. For more information, see "Add or Remove Components," page 32.

The Microsoft Excel Internet Assistant transforms cell ranges and charts ...



... into HTML pages or tables ready for publishing on the Web.

Post the HTML file If you have the Microsoft FrontPage Web publishing application, you can post the HTML file created by the Internet Assistant directly to a Web site.

Create links to information before the conversion When you run the Internet Assistant, any links created by using the **Insert Hyperlink** button are converted to HTML links.

Insert Hyperlink button

MS 114185

Insert a Table into an Existing Web Page

The Internet Assistant can either create a new Web page for you or insert a table into an existing Web page. To insert an HTML table into an existing Web page, you must first add the following HTML code to the Web page where you want the table to appear before the Internet Assistant can complete its task:

<!--##Table##-->

If you have enough memory, you can leave the Internet Assistant displayed on your screen while you edit the Web page.

Want to know more? Look up **Getting Results - Web and Microsoft Excel** in Help.

Office Assistant button

Other Web Features of Microsoft Excel

Use The Web toolbar The **Web Toolbar** button displays the **Web** toolbar. For more information on the **Web** toolbar, see "Office and the Web," page 442.

Create Hyperlinks Click the **Insert Hyperlink** button to format the selected text or object as a hyperlink. For example, to create a hyperlink to the Microsoft Web site, select a cell, click the **Hyperlink** button, and then type **http://www.microsoft.com/** in the **Link to file or URL** box. Then, when you click the hyperlinked cell, your Web browser starts and you jump to that Web site. Microsoft Excel also includes a Hyperlink function that you can use in formulas.

Open and link to files in HTTP and FTP stores in Windows You can transfer and create links to files located on Web sites that support the HTTP and FTP protocols. To do so, click **Open** (**File** menu), click **Internet Locations (FTP)** in the **Look in** list, and then click **Add/Modify FTP Locations**. To create a link to the file, copy the information you want to link to, click **Paste** (**File** menu), and then click **Paste Link**.

Create links to Web pages in Windows You can create links to files located on Web sites. To do so, click **Open** (**File** menu), click **Internet Locations (FTP)** in the **Look in** list, and then click **Add/Modify FTP Locations**.

Create Web forms You can create forms in Microsoft Excel to gather input from other Microsoft Excel users who visit your Web site. Use the **Control Toolbox** toolbar to create the form on a worksheet, and then click **Web Form** (**Tools** menu, **Wizard** submenu). If this command does not appear on the **Tools** menu, you need to install the Web Form Wizard add-in program. For more information, see "Add or Remove Components," page 32.

Next Steps

To	See
Create a Web site	"Create a Web Page with Word," page 458
Save a PowerPoint presentation in HTML format	"Create a Web Presentation with PowerPoint," page 452

Create a Web Presentation with PowerPoint

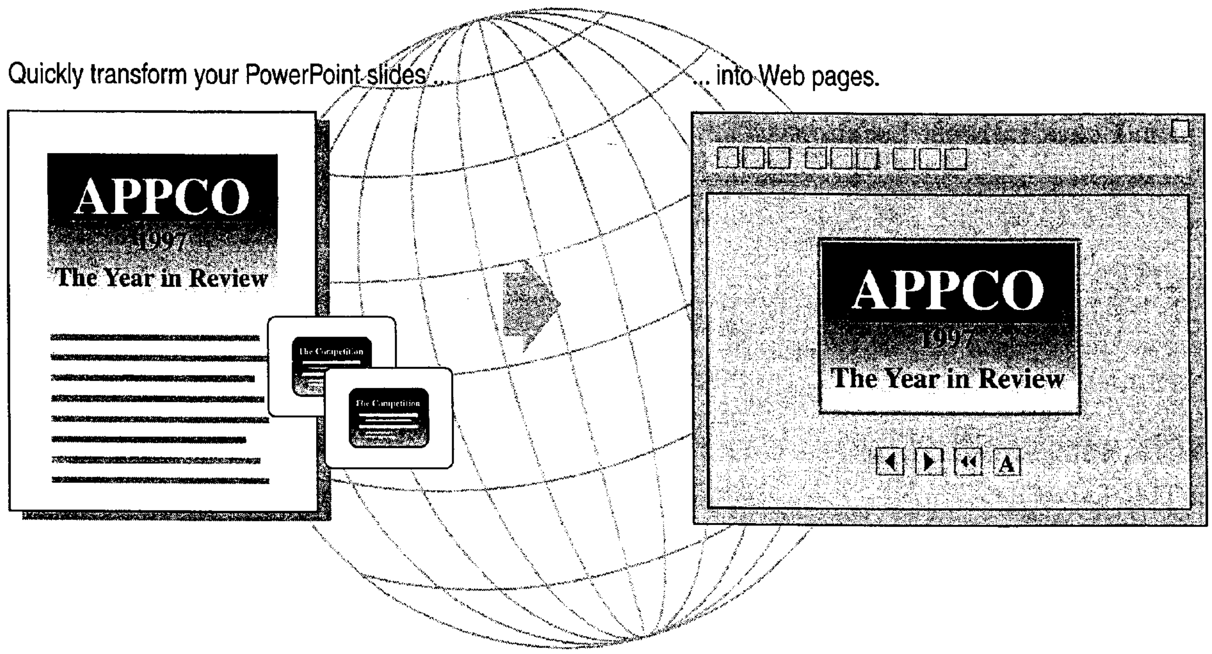
Take advantage of the graphic design power of PowerPoint to create presentations for publication to the World Wide Web, or to your company's intranet. You can use PowerPoint to create a new Web presentation quickly from scratch. Or, if you have an existing presentation you want to publish to the Web, you can convert it to Hypertext Markup Language (HTML) format so that it can be viewed by Web browsers. You can create Web presentations for a variety of purposes. Advertise your company's products by publishing press releases to the Web. Or inform co-workers about training opportunities and department procedures by publishing to your intranet. You can also use your intranet to set up an internal presentation archive with demonstration scripts and other behind-the-scenes resources. To access other Web presentations quickly, use the search and navigation options on the **Web** toolbar. For more information, see "Office and the Web," page 442.

Key Features

AutoContent Wizard

Save as HTML command

Quickly transform your PowerPoint slides... ... into Web pages.

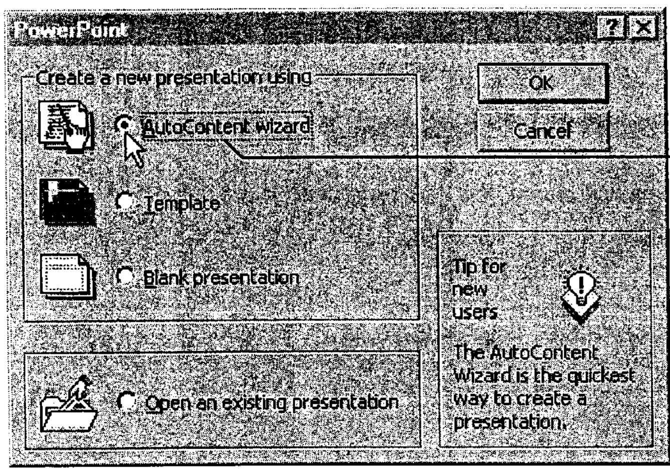


MS 114188

Create a Web Presentation

It's easy to use PowerPoint to create a new presentation that you can publish to the Web or to your company's intranet. Get a head start by selecting one of the presentation templates available in the AutoContent Wizard. To use the wizard, select the **AutoContent wizard** option when you first start PowerPoint, or click **AutoContent Wizard** (**Tools** menu) if you're already working in PowerPoint.

You don't have to start from scratch to create a Web presentation, however. You can convert any existing presentation into a format that is compatible with popular Web browsers. Either way, when you're done, just click **Save as HTML** (**File** menu) to convert your presentation for publication to the Web or to your intranet. If this command does not appear, you need to rerun Setup. For more information, see "Add or Remove Components," page 32.



Let the AutoContent Wizard help you create presentations for publication to the Web.

Want to create hyperlinks? You can format any selected PowerPoint text or object as a hyperlink. For example, to create a hyperlink to the Microsoft Web site, select the text or object, click the **Insert Hyperlink** button, and then type **http://www.microsoft.com/** in the **Link to file or URL** box. For more information, see "Office and the Web," page 442.

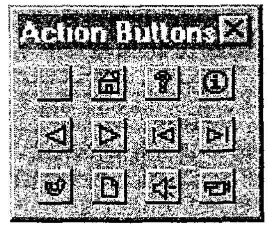
Insert Hyperlink button

Create your own image maps Click the **Insert Hyperlink** button to turn any PowerPoint shape into a hyperlink that you can click to jump to another slide, document, or Web site. These hyperlinked images remain clickable after you save the presentation in HTML format. You can create clusters of hyperlinked objects that will serve as an *image map*, a single graphic that contains multiple HTML hyperlinks.

MS 114189

Connect to additional Web publishing resources Click **PowerPoint Central** (**Tools** menu) to connect to resources on the World Wide Web designed to help you create online content. Check periodically for the latest information on Web features in Microsoft applications. To use the **PowerPoint Central** command, you need to have access to the Internet.

Quickly create navigation buttons and add them to your slides Click **Action Buttons** (**Slide Show** menu) to display a palette of buttons. Each button (such as **Back or Previous** or **Forward or Next**) has a specific action assigned to it. To add an action button to a slide, click one of the buttons in the palette, click where you want the button to appear on the slide, and then drag to draw the button. When you release the mouse button, the **Action Settings** dialog box appears.



What's the Difference Between Hyperlinks and Action Settings?

If you want to add basic hyperlinks that make it possible for users to jump from your presentation to other files, click the **Insert Hyperlink** button. However, you can also create hyperlinks associated with additional actions and special effects (such as playing sounds, returning to the last slide viewed, and running other applications and macros). To do so, select the item (a graphic or text) to which you want to apply the action(s), and then click **Action Settings** (**Slide Show** menu). Select the appropriate options in the **Action Settings** dialog box. Then, whenever someone clicks the text or graphic, the actions assigned to it will occur. You can even use the **Action Settings** command to assign additional actions that occur when you rest the pointer over an item.

Want to know more? Look up **Getting Results - PowerPoint Web Page** in Help.

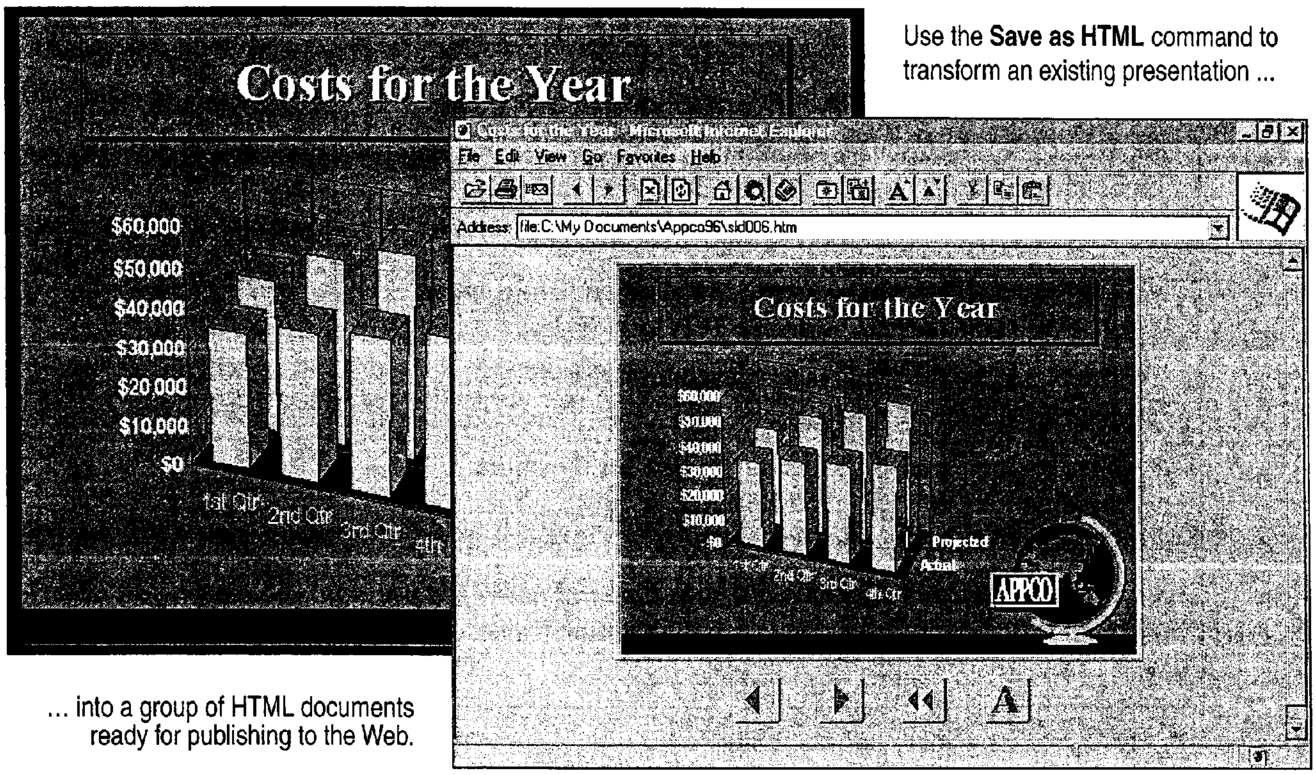
Office Assistant button

MS 114190

Save an Existing Presentation in HTML Format

If you already have a presentation that you want to convert for publication to the Web or your intranet, click **Save as HTML** (**File** menu) to start the PowerPoint Internet Assistant. Select options to choose a graphic format, place navigation buttons, add speaker notes to your Web pages, create an index page, and more. If this command does not appear, you need to rerun Setup. For more information, see "Add or Remove Components," page 32.

When your presentation is converted to HTML format, each presentation slide is turned into an individual HTML page, existing hyperlinks are converted to HTML format, and actions that you assigned by using the **Action Settings** command (**Slide Show** menu) are translated into their HTML counterparts. Then, all the necessary files are saved to a new folder that you specify.



Use the **Save as HTML** command to transform an existing presentation ...

... into a group of HTML documents ready for publishing to the Web.

Create a text-only version of your Web presentation To accommodate visitors to your Web site whose browsers might not have the same capabilities for viewing graphics, the PowerPoint Internet Assistant can create a text-only version of your presentation (while simultaneously creating a standard version that includes graphics). When it finishes, it adds an **A** button (shown to the right of the Web page navigation buttons in the preceding illustration) to the presentation. When clicked, this button launches the text-only version.

Want non-PowerPoint users to view your Web presentation as a full-screen presentation? You can click **Save as HTML** (**File** menu) and then select options in the PowerPoint Internet Assistant to make it possible for others to view your presentation as an actual full-screen slide show.

Create a Framed Web Presentation

Use the **Framed Slideshow** option in the PowerPoint Internet Assistant to create a special type of Web presentation that uses features available only in advanced Web browsers such as Microsoft Internet Explorer 3.0. A framed slide show offers more control, displaying components of the presentation and navigation controls in separate frames on the screen:

- The Slide frame contains the slide image itself.
- The Navigation frame contains standard slide navigation controls such as Next Slide and Previous Slide.
- The Notes frame displays any speaker notes for the associated slide/Web page.
- The Outline frame displays the outline for the entire presentation. You can click headings to jump to the associated slide/Web page.
- The Outline Controls frame contains **Expand** and **Collapse** buttons that control the display in the Outline frame.

MS 114192

ARENDI-DEFS00001902

Design Effective Web Presentations

To create an effective PowerPoint presentation that you can publish to the World Wide Web or to your intranet, apply the same design principles that you would use to create any other PowerPoint presentation: Divide subject matter into "bite-sized" pieces, present each piece in a graphically pleasing format, and then reveal them in a logical, predetermined sequence. Also, keep the following guidelines in mind when designing for the Web:

Keep it clean Don't clutter your slides with distractions. Clear, easy-to-read presentations make easy-to-read Web pages.

Use large fonts Typically, the PowerPoint Internet Assistant reduces the size of text in converted presentations. After you convert the presentation to HTML format, small text may be difficult to read.

Next Steps

To	See
Add a Microsoft Excel table to a Web page.	"Publish Microsoft Excel Tables and Charts on the Web," page 448

MS 114193

Create a Web Page with Word

Suppose you're the manager of a sales group. You want to broaden the audience for your sales message. You want to provide potential customers with information about your products, pricing, shipping, product support, and so on.

You've decided to promote your products through a Web page. The question is where to start. Do you need to learn HTML? Should you hire a graphic artist or a computer programmer to do the work for you? The answer is much simpler.

Work in Word, an application you're already familiar with. The Word Web Page Wizard can help you create the Web page yourself. The wizard helps you create the right Web page for the information you want to convey.

Key Features

Web Page Wizard

Web Authoring Tools

With the Web Page Wizard, you can quickly create different kinds of Web pages in a variety of styles.

MS 114194

ARENDI-DEFS00001904

Start the Web Page Wizard

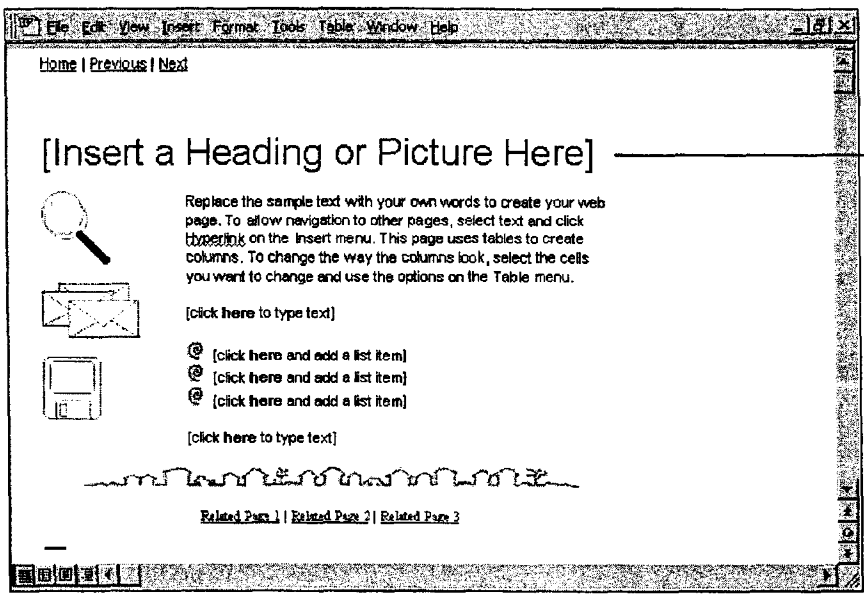
Start by clicking **New (File** menu). On the **Web Pages** tab, double-click **Web Page Wizard.**

From the list of Web pages, click one that best suits the content of the Web page you want to create. You can choose from different kinds of Web pages, such as a home page with two columns, a personal home page, a registration form, or a survey form.

After you select the type of Web page, click the **Next** button, and then select the style that you want. For business-oriented pages, for example, you may want to use styles such as Professional or Elegant. For personal home pages, on the other hand, you may want to use the Jazzy or Festive style.

If you want to try different styles to see which one looks best, just click another style name, and that style will be applied to the Web page that you've selected.

After you click the **Finish** button in the wizard, you'll have a professionally designed Web page to which you can add your content.



You'll see suggestions for adding art and jumps to other Web pages. Click the sample text to select it, and then type your own text or insert a picture.

Don't see the Web Pages tab? The Web authoring components may not be installed. To add these components, rerun Setup and then select **Web Page Authoring (HTML).** For more information, see "Add or Remove Components," page 32.

MS 114195

Want to create a Web page from scratch? Click **New** (**File** menu). On the **Web Pages** tab, double-click the **Blank Web Page** template. Create your Web page by using the commands on the menus and toolbars.

Want to create a Web page from an existing Word document? Open the document that you want to convert into a Web page, click **Save as HTML** (**File** menu), and then name the new Web page. Keep in mind that HTML, the format in which Web pages are published, does not support all of the features that Word supports. Your Web page, therefore, may look different from your Word document.

What Happened to the Toolbars and Menus?

When you work on Web pages, you will notice that the toolbars and menus are not the same as those you see when working on a Word document. This is because HTML, the underlying file format for Web pages, does not support all Word features.

Following is a partial list of Word features that HTML does not support at this time: newspaper-style columns; paragraph borders; text effects such as shadowing, embossing, and engraving; headers and footers; footnotes; and cross-references.

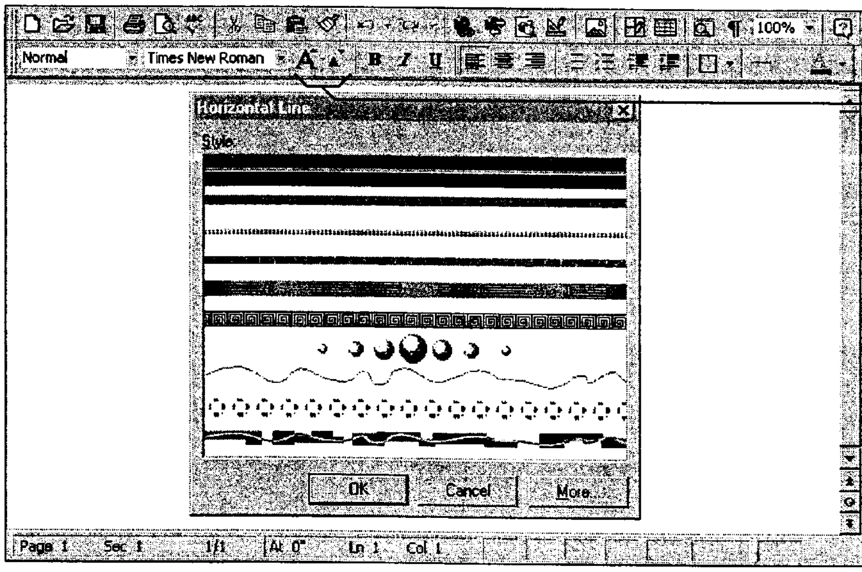
Even though these features are not currently supported by HTML, you can achieve similar effects. For example, you can use tables instead of columns, and instead of using a cross-reference, you can add a hyperlink.

For more information, look up **Getting Results - Word Web Page** in Help.

Customize Your Web Page

Whether you've chosen to create a home page or a survey form, all you need to do is add your content to the Web page that the wizard creates. Keep in mind that most Web pages are not more than one page long. However, you can include much more information by using hyperlinks to other Web pages.

You might also want to use some special tools that Word provides for working on Web pages, allowing you to add background sounds, video, scrolling text, "arty" horizontal lines, or "picture" bullets.



When you're working on Web pages, new formatting tools, such as the **Increase Font Size** and **Decrease Font Size** buttons, appear on the toolbars.

You'll also find new menu commands, such as the **Horizontal Line** command (**Insert** menu), that make it easy to add interesting visual effects to your Web page.

Publish your Web page The procedures for publishing your Web page will depend on your Internet service provider or your company's network administrator. For more information, look up **Getting Results - Word Web Page** in Help.

You've published your Web page, so why does it look different? Not all browsers (the software that opens Web pages) support the same set of features. Internet Explorer 2.0 and later, for example, support marquee or scrolling text while Netscape 2.0 does not. For more information, look up **Getting Results - Word Web Page** in Help.

Get the latest version of Web authoring tools Word automatically checks to see if there is a newer version of Web authoring tools available. If there is, Word will prompt you to update to the latest version. If you choose not to, you can update at a later time by clicking **AutoUpdate** (**Tools** menu).

MS 114197

Guidelines for Working with Web Pages

Add hyperlinks to jump from your Web page to other pages Click the **Insert Hyperlink** button. For more information on hyperlinks, see "Add Hyperlinks to Your Files," page 444.

Insert Hyperlink button

Add a picture Click the **Insert Picture** button, and then select the picture you want to insert.

Insert Picture button

Add an "arty" horizontal line Click **Horizontal Line** (**Insert** menu), and then click the line style you want.

Add picture bullets Select the text you want to apply bullets to, click **Bullets and Numbering** (**Format** menu), and then click the picture bullet that you want.

Add a background color Click **Background** (**Format** menu), and then click the color you want.

Add scrolling text Click **Scrolling Text** (**Format** menu). On the **Scrolling Text Options** tab, type the text you want and set the options you want, such as background color and scrolling direction.

Add a table Click the **Tables and Borders** button. The **Draw Table** button will be active so that you can click and drag to create the size table you want. The gridlines you see when working with tables will not be displayed when your page is opened by a browser. For more information on the Draw Table tool, see "Create a Flyer," page 222.

Tables and Borders button

Add a video Click **Video** (**Insert** menu). In the **Video Source** box click **Browse** to search for the file you want, or type the address of the video file.

Add a background sound Click **Background Sound** (**Insert** menu), click **Properties**, and then type the address of the sound file, or click **Browse** to search for the file you want.

Next Steps

To	See
Find out more about using Web pages on your intranet	"Office and the Web," page 442
Create Web content by using Microsoft Excel	"Publish Microsoft Excel Tables and Charts on the Web," page 448
Create a Web page by using Microsoft PowerPoint	"Create a Web Presentation with PowerPoint," page 452
Create a Web page by using Microsoft Access	"Use Microsoft Access to Retrieve and Publish Data," page 464

MS 114199

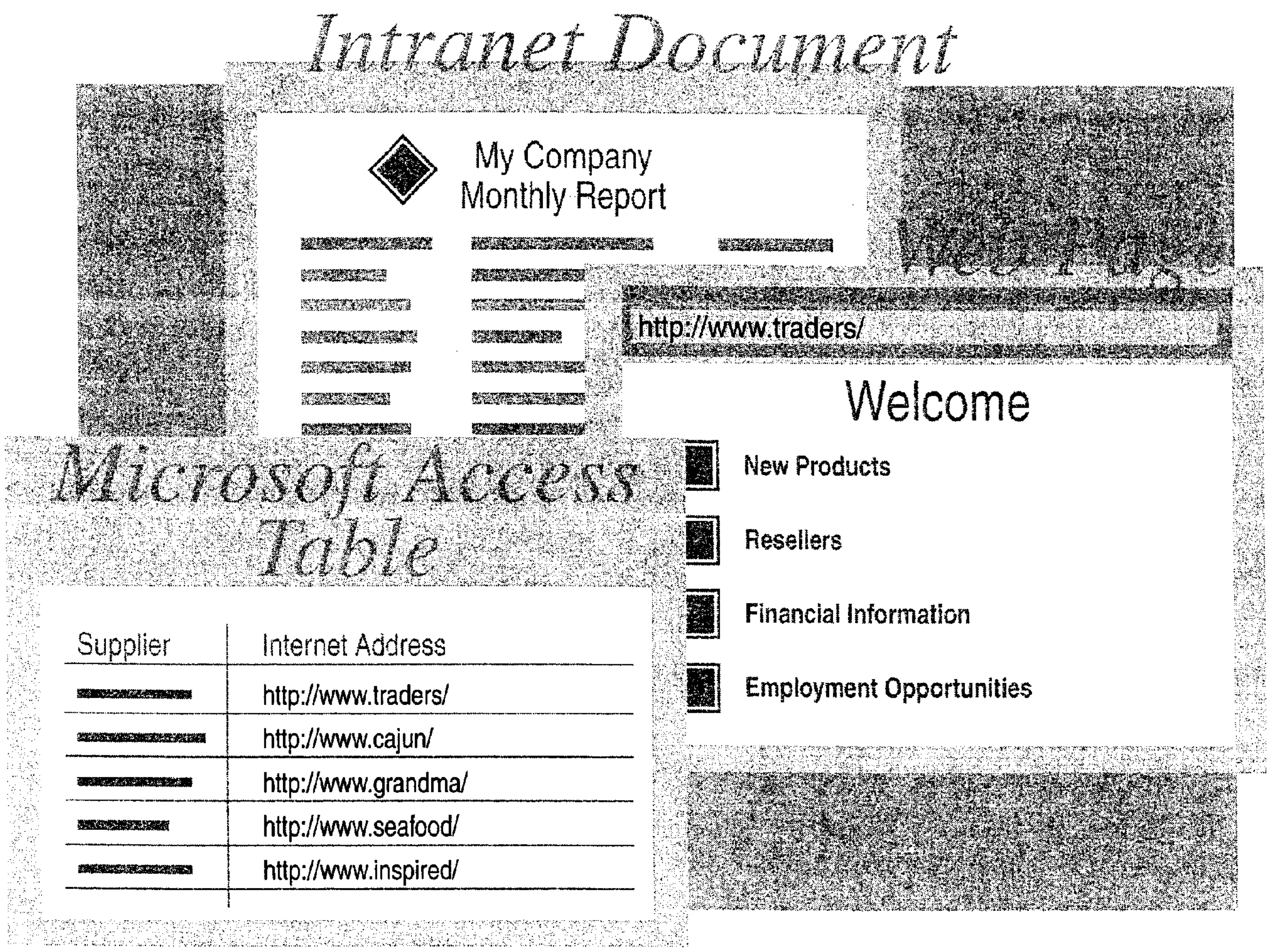
Use Microsoft Access to Retrieve and Publish Data

Suppose that you're responsible for updating product information for your company's sales force. Many of your suppliers have created sites on the World Wide Web for storing and updating information about their products. If you often jump to these Web sites, you can use Microsoft Access to store their hyperlink addresses in your database and to retrieve the product information you need. After you retrieve the latest information, you can convert it to Hypertext Markup Language (HTML) format and publish it to your company's intranet or to the World Wide Web.

Key Features

- Hyperlinks
- Publish to the Web Wizard

You can use hyperlinks to jump to another Microsoft Access database object, to a file on your internal Web, or to a site on the World Wide Web.



To complete the steps in this topic you need to have Microsoft Office, Professional Edition or an individual copy of Microsoft Access installed.

Try it out The example in this topic uses the Northwind database and other sample files included with Microsoft Access. You can use the procedures described in this topic on the Northwind database or on your own database.

Want to know more? Look up **Getting Results - Microsoft Access and Web** in Help.

Office Assistant button

MS 114201

Store a Hyperlink in a Table

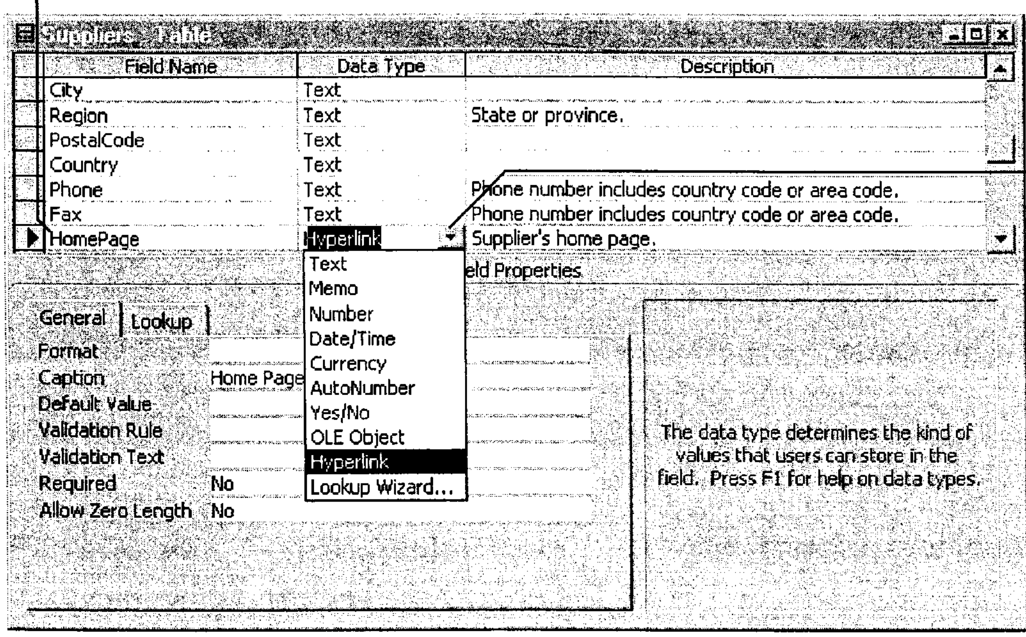
Create a hyperlink field To make it easy to jump to your suppliers' Web sites, add a field to the Suppliers table in which you can store their hyperlink addresses. To create a hyperlink field, open the Suppliers table in table design view. In the database window, on the **Tables** tab, double-click **Suppliers**, and then click **Design View** (**View** menu).

Add a hyperlink to the table Click **Datasheet View** (**View** menu). Then, if you already know the hyperlink address, just type it in the field. Microsoft Access recognizes hyperlink protocols and automatically translates the text into a valid hyperlink address. If you don't know the hyperlink address, click in the field and click the **Insert Hyperlink** button to create a link to an Internet address, to a document or database on your hard disk, or to a document or database on an intranet.

Insert Hyperlink button

Jump to hyperlinks To jump to a hyperlink destination stored in your table, click on the hyperlink field.

Type a name for the field ...



... then click in the **Data Type** column. Click the arrow, and then select **Hyperlink** from the list.

Need to modify a hyperlink address? In datasheet or form view, right-click the hyperlink field, click **Hyperlink** on the shortcut menu, and then click **Edit Hyperlink** on the submenu.

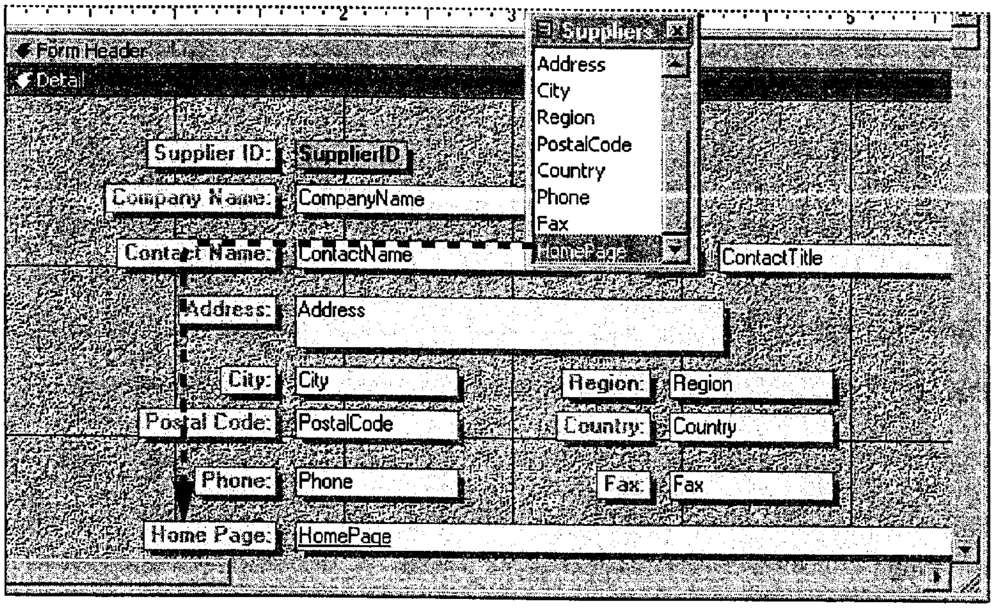
MS 114202

ARENDI-DEFS00001912

Display a Hyperlink on a Form

With Microsoft Access, it's also easy to add a hyperlink field to your Suppliers form. When you browse through individual supplier records on the form, the hyperlink address changes with each record to reflect the address of the selected supplier. To add a hyperlink field to the Suppliers form, open the form, click **Design View** (**View** menu), and then click **Field List**.

Select a hyperlink field from the list, and then drag it to a location on the form.



MS 114203

Want to add a hyperlink that doesn't change with each record? You can add a hyperlink to a form that always jumps to a specific document or database object. Click **Design View**, and then click the **Insert Hyperlink** button. In the **Insert Hyperlink** dialog box, specify a hyperlink path in the **Link to file or URL** box or specify a path to a database object in the same database in the **Named location in file** box.

Learn about the Microsoft Internet Information Server Click **Microsoft on the Web** (**Help** menu).

Want to know more? Look up **Getting Results - Microsoft Access and Web** in Help.

Office Assistant button

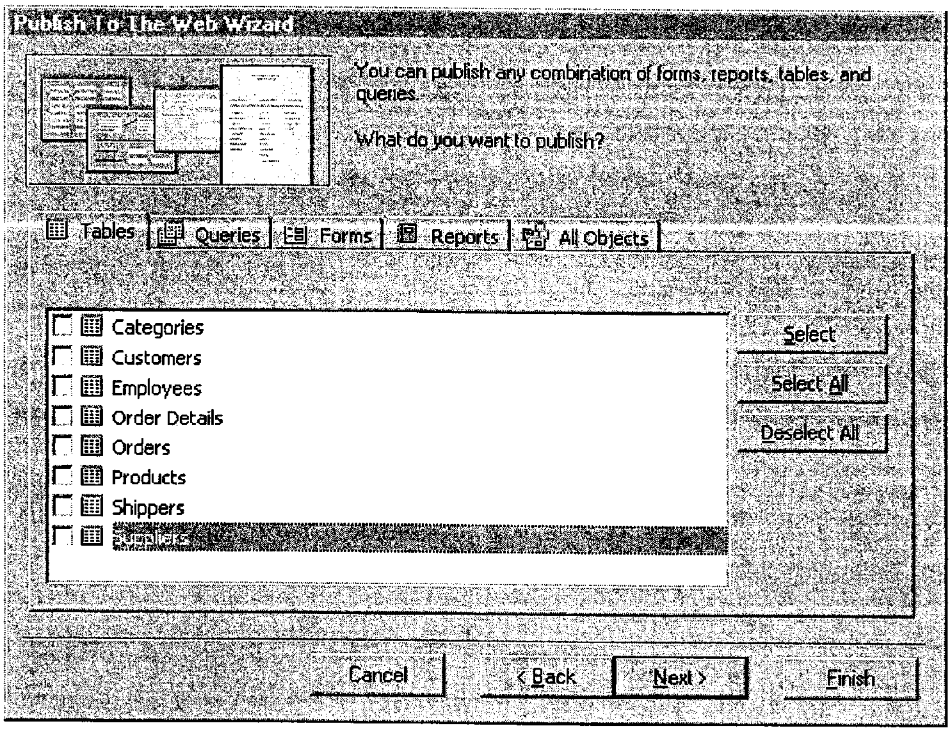
MS 114204

Publish Your Data

You can use the Publish to the Web Wizard to convert any combination of tables, queries, forms, or reports to HTML format and publish it to your intranet. You can even select a single HTML page to use as a template so that your files share the same format.

To start the Publish to the Web Wizard, click **Save as HTML** (**File** menu).

Use the Publish to the Web Wizard to convert Microsoft Access data into HTML documents.



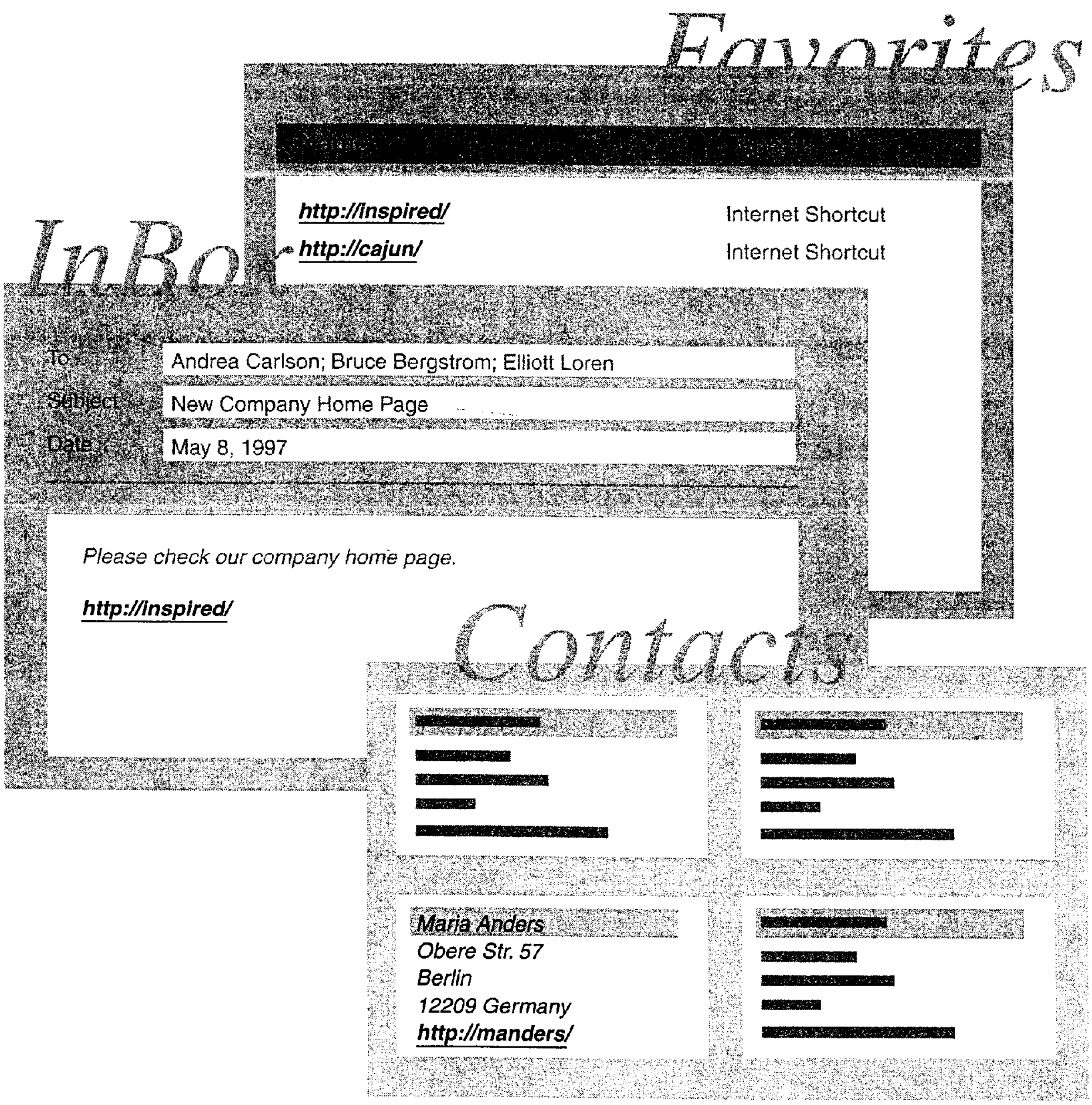
MS 114205

Open Web Addresses from Outlook

Suppose your team wants to share information that's located on your company's intranet, on a hard disk or server, or on the World Wide Web. In Outlook, you can easily add a *hyperlink* to an e-mail message or contact. A hyperlink is text or a graphic that jumps to a graphic, file, server, or Web page. You can also open your favorite Web pages from within Outlook.

Key Features

Hyperlinks



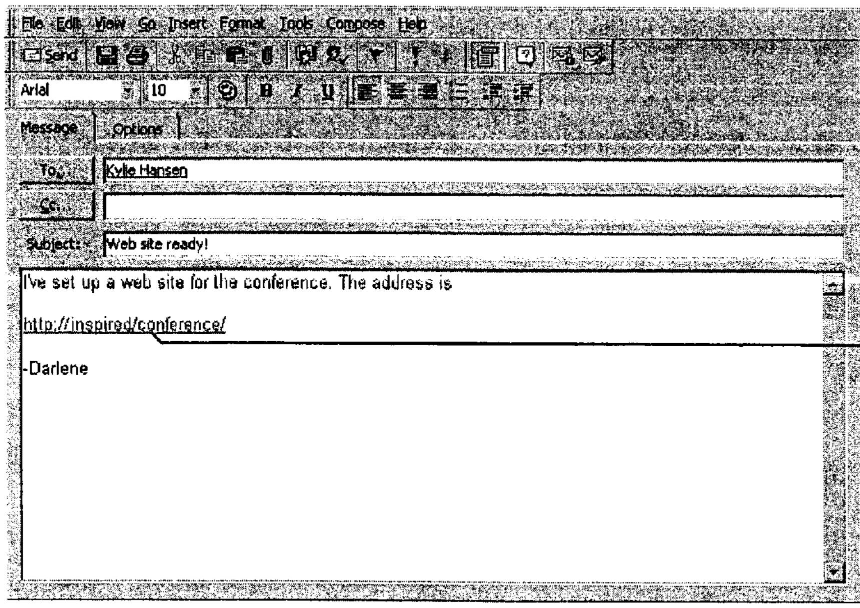
MS 114206

ARENDI-DEFS00001916

Include a Hyperlink in an E-mail Message

After you create a Web page, you want to send its address to your co-workers. When you type the hyperlink address in an e-mail message, recipients can click it to jump directly to the page.

When you type an address that begins with **http://**, **file:**, or **ftp://** in an e-mail message, Outlook turns it into a hyperlink.



Blue underlined text lets the recipients know that the address is a hyperlink.

Open a contact's Web page If you stored a Web address for a contact, click **Explore Web Page** to jump to the Web page.

Explore Web Page button

Visit your favorite Web sites If you use Microsoft Internet Explorer as your browser, you can jump to Web pages that you have designated as "favorites" from within Outlook. Click **Other** in the **Outlook Bar**, and then click **Favorites** to view Web page addresses. You can create a custom view to organize the Web pages. For more information, see "Customize the Way You Display Information," page 366.

Search for files on an intranet You can use the Web Find Fast search page to locate files that your company has stored on its intranet. See your network administrator to obtain the Web Find Fast search page.

Want to know more? Look up **Getting Results - Outlook Web** in Help.

Office Assistant button

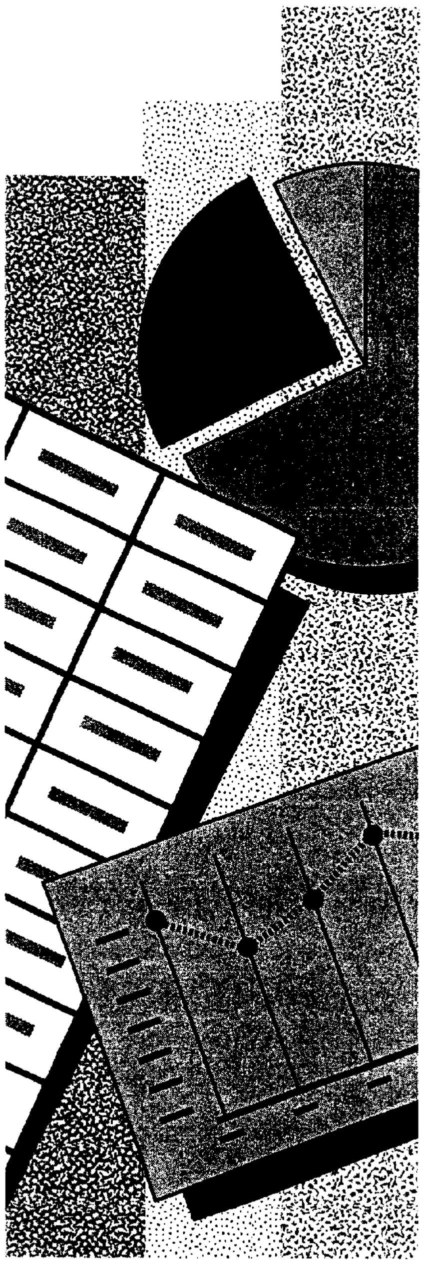
Next Steps

To	See
Learn more about Web add-ins that you can use with Outlook	**Microsoft on the Web** (**Help** menu)
Use public folders to share information	"Use Outlook to Share Folders," page 433

PART 10

Budget with Microsoft Excel

Contents



MS 114209

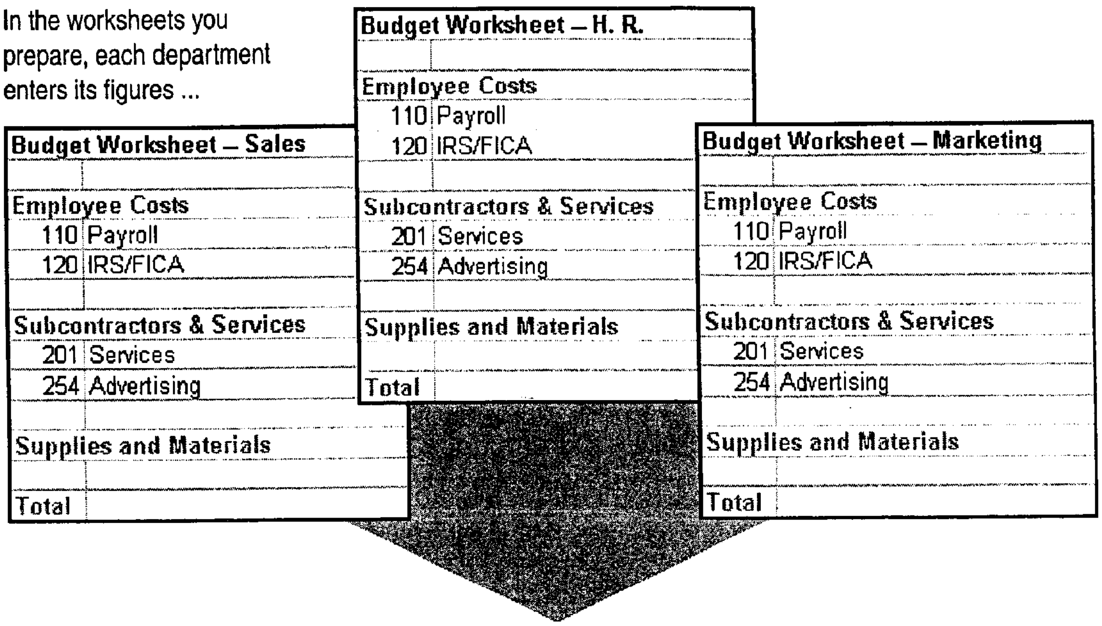
Consolidate Budget Input

Working up an overall budget requires combining the budgets for several groups or departments within your company. Determining how to allocate the available funds usually involves several rounds of proposals and reconsolidation. To project expenses and make adjustments, your department managers need worksheets from you that contain the right information. Design the worksheets so that you can easily roll up the figures you get from each department, as many times as they change.

Key Features

- Copying Worksheets to Other Workbooks
- 3-D References

In the worksheets you prepare, each department enters its figures ...

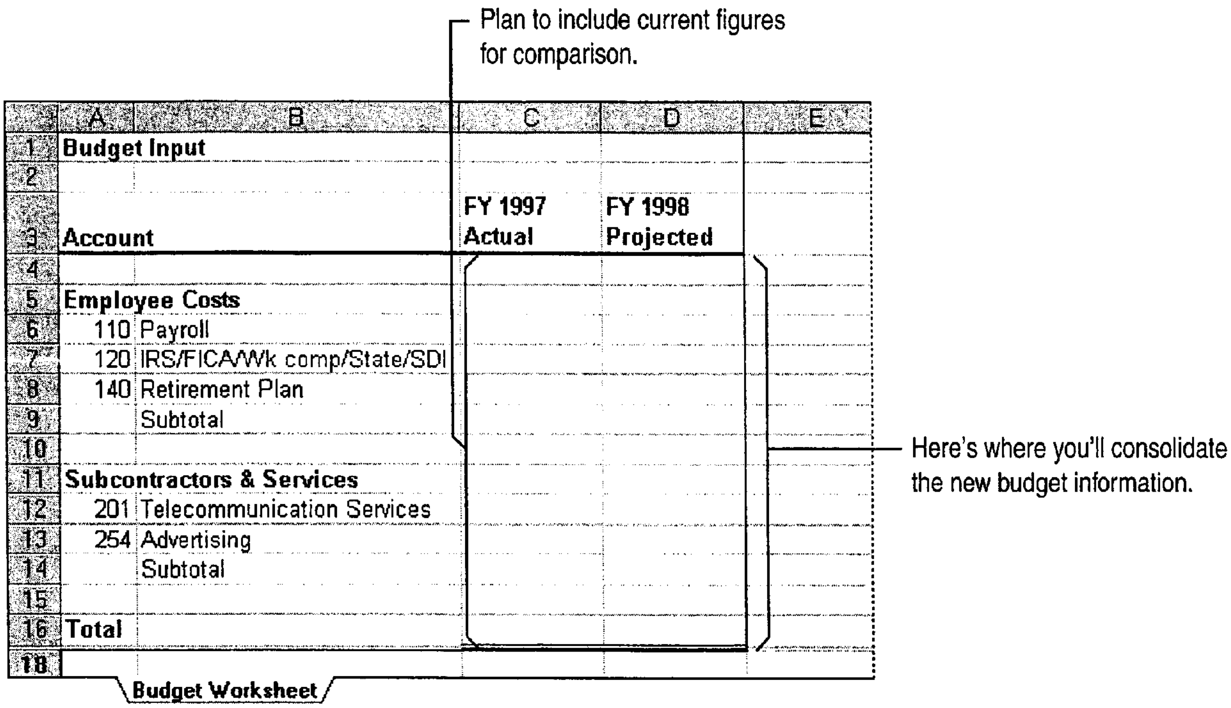


Consolidated Budget Input	FY1997	FY1998
Employee Costs	164,146	?
Subcontractors & Services	58,035	?
Supplies and Materials	902	?
Total	**223,083**	**?**

... and you combine them in a summary, the consolidation.

Prepare Your Budget Worksheet

Prepare a worksheet to use as a template. List every account to be budgeted across all departments. You'll use the template both to gather input and to consolidate it.



Do you keep the current budget or actual figures in a database? Put the external data in a Microsoft Excel worksheet so that you can copy it into each department's worksheet. You don't have to retype the figures. For more information, see "Get Sales Information from a Database," page 548.

Want to know more? Look up **Getting Results - Consolidate** in Help.

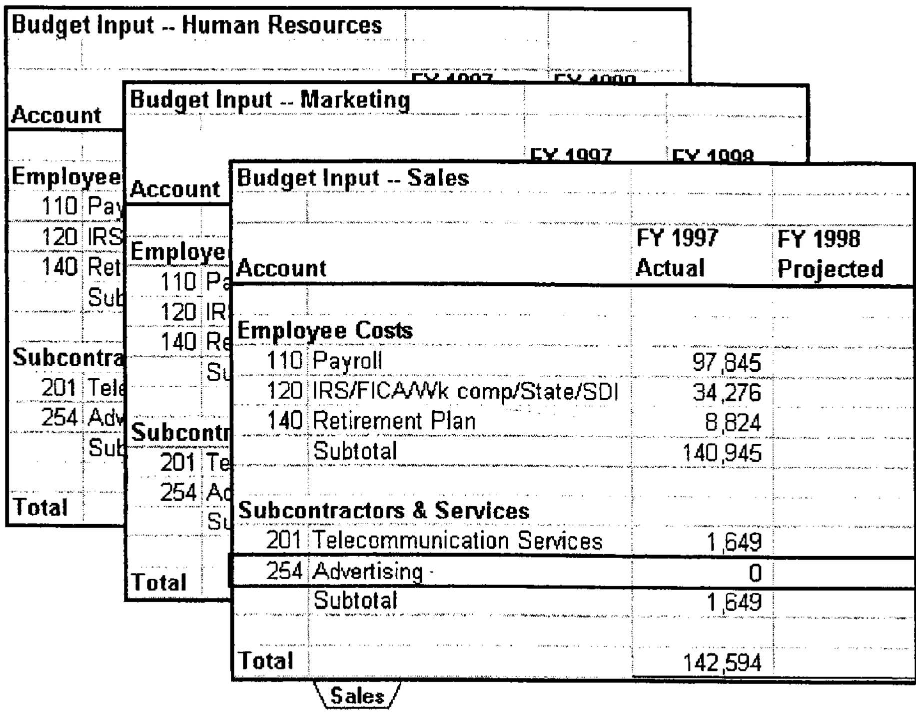
Office Assistant button

Get Budget Projections from Each Department

Each department fills in its estimates by using a copy of the template worksheet. For each department, include only the accounts needed, and provide the figures from the current year by copying them into each department's worksheet.

Keep all accounts in the same rows and columns. Maintaining the same information in the same position across all worksheets enables you to consolidate their contents.

Each department puts its figures into its own worksheet.



A department doesn't have every account? Hide the rows that won't be used. Click **Hide** (**Format** menu, **Row** submenu).

MS 114212

ARENDI-DEFS00001922

Prevent changes to the worksheet layout First, unlock only the cells to receive input. Select the cells, and then click **Cells** (**Format** menu). On the **Protection** tab, clear the **Locked** check box. Then protect the worksheet by clicking **Protect Sheet** (**Tools** menu, **Protection** submenu).

Save a shared workbook on a server Click **Shared Workbooks** (**Tools** menu) to make your workbook available to multiple users at the same time. For more information, see "Share a Workbook with a Co-Worker," page 412.

Send a workbook through electronic mail You can route the workbook to the departments, one at a time. For more information, see "Distribute Documents Online," page 396.

Want to know more? Look up **Getting Results - Consolidate** in Help.

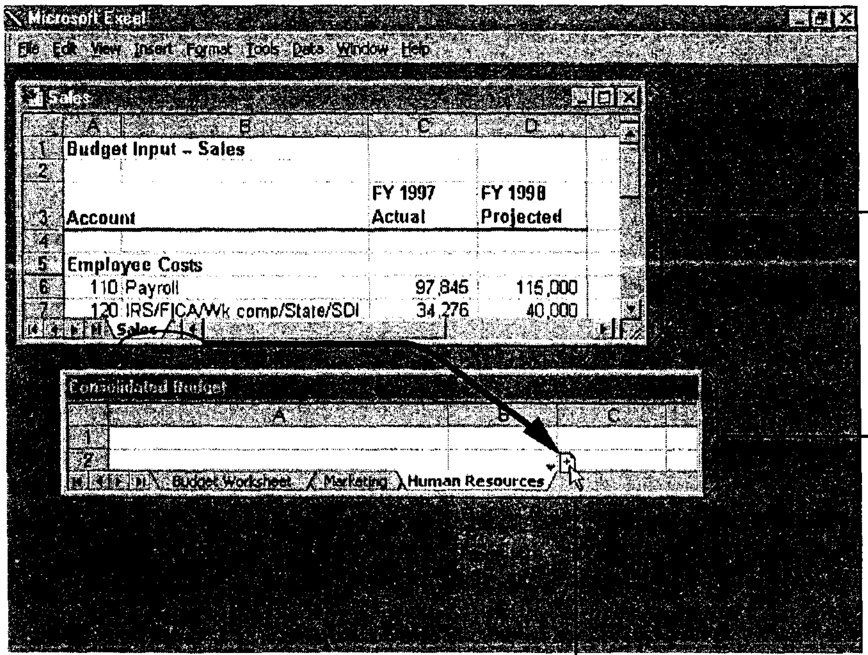
Office Assistant button

MS 114213

Combine the Input

As each department returns its completed worksheet, you need to add it to a workbook in which you can calculate the combined results. Copy each worksheet of budget projections into your consolidation workbook.

For easy access to the worksheet tabs, arrange the workbook windows horizontally.



The input from the Sales department

Your consolidation workbook

Hold down the CONTROL key and drag each worksheet into position in your workbook.

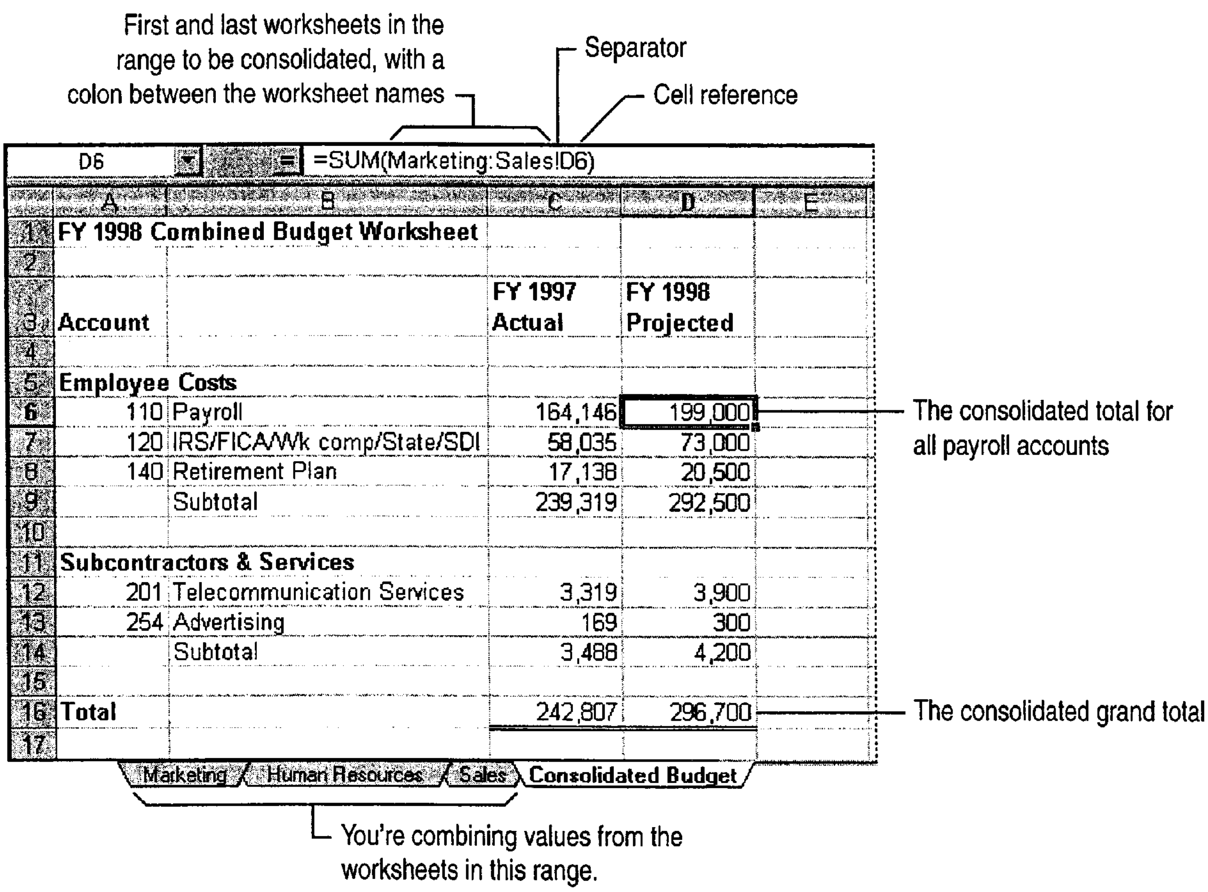
Make sure you get the right kinds of data For more control over the workbooks you distribute to your co-workers, you can set each cell to limit the allowable range of values, or to accept only a specific data type. This way you can avoid, for example, someone mistakenly entering a value that is too large for a given budget category. For more information, see "Validate Your Data as You Enter It," page 359.

View all your workbooks at once You can quickly arrange all the open workbooks on the screen by clicking **Arrange** (**Window** menu).

MS 114214

Consolidate the Combined Input

Use a copy of your template worksheet to set up the consolidation. First, create a formula using *3-D references* that totals projections for each account across all the departmental worksheets. Indicate the range of worksheets by specifying the first and last worksheet names in the formula, and include a reference to the cell on each worksheet to include in the consolidated total. The result appears on your consolidation worksheet.



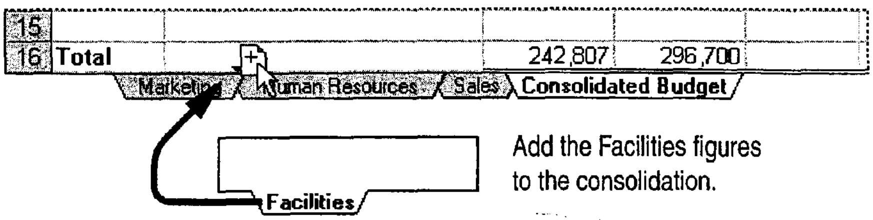
	A	B	C	D	E
1	**FY 1998 Combined Budget Worksheet**				
2					
3	**Account**		**FY 1997 Actual**	**FY 1998 Projected**	
4					
5	**Employee Costs**				
6	110	Payroll	164,146	199,000	
7	120	IRS/FICA/Wk comp/State/SDI	58,035	73,000	
8	140	Retirement Plan	17,138	20,500	
9		Subtotal	239,319	292,500	
10					
11	**Subcontractors & Services**				
12	201	Telecommunication Services	3,319	3,900	
13	254	Advertising	169	300	
14		Subtotal	3,488	4,200	
15					
16	**Total**		242,807	296,700	
17					

MS 114215

Enter the worksheet names in the formula Position the insertion point at the target location within the formula, and then click the appropriate worksheet tabs.

Copy formulas automatically After you've entered the formula to consolidate one account, you don't have to type similar formulas for the rest of the accounts. If you used a relative cell reference, dragging the fill handle or using the **Copy** and **Paste** commands (**Edit** menu) will adjust the cell references accordingly for your other formulas.

Cope with revisions and late returns If you get another departmental worksheet after you've already set up the consolidation, just drag a copy of the new worksheet between the tabs of the worksheets you refer to in the formula. The new worksheet is consolidated automatically. (Make sure you drag the new worksheet between the existing consolidated sheets. If you insert it outside the range, the new figures won't be included in the consolidation.)



Add the Facilities figures to the consolidation.

Other Ways to Consolidate Your Figures

3-D references let you design your template worksheet any way you want. But they do require that the same information be in the same place on every worksheet.

Consolidate worksheets with different layouts If the worksheets have similar data but in different areas or positions, you can give the same name to the corresponding range of cells on each worksheet. You can then combine data from ranges with the same name on different worksheets by clicking **Consolidate** (**Data** menu).

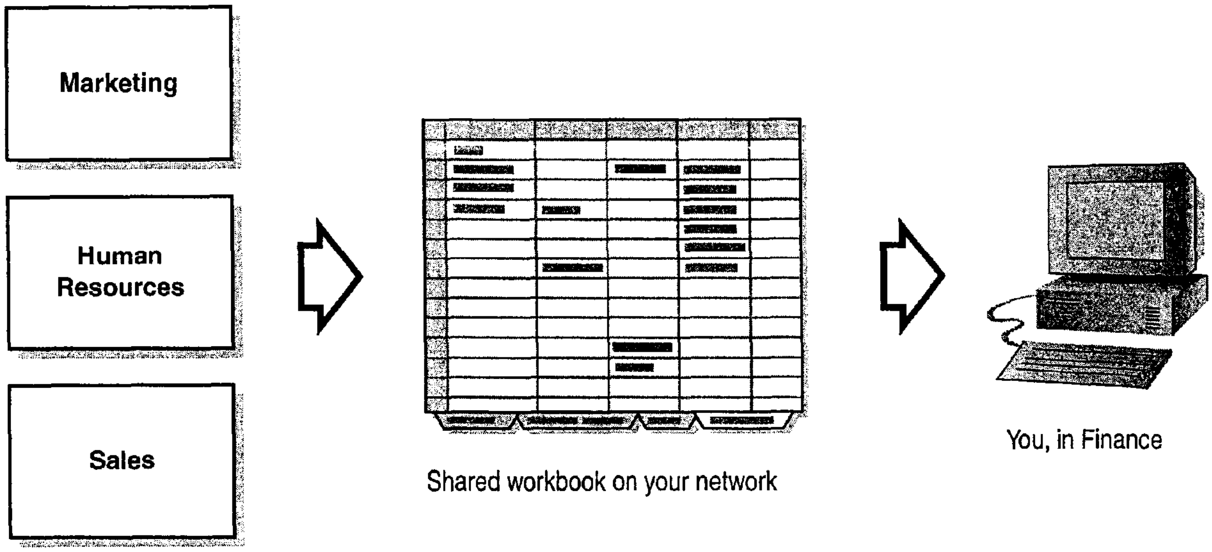
Compare figures as well as combine them You can use a PivotTable to consolidate and compare multiple worksheets. For more information, see "Create a Sales Summary," page 563.

A Shared Workbook Makes Getting the Input Easier

If your departments are on a network, you can use a *shared workbook* to speed the input-gathering process.

Create the worksheets for each department in one workbook and share it on the network. Each department updates its worksheet in this workbook. All departments can work simultaneously, and you can watch the input arrive and be consolidated. For more information, see "Share a Workbook with a Co-Worker," page 412.

Important In a shared workbook, every authorized user in the workgroup can view all of the worksheets. So use this distribution method only if it's acceptable for all departments to see each other's figures.



Next Steps

To	See
Analyze the results of the consolidation	"Develop Budgeting Alternatives," page 482
Share a workbook with others over a network	"Share a Workbook with a Co-Worker," page 412

MS 114217

Develop Budgeting Alternatives

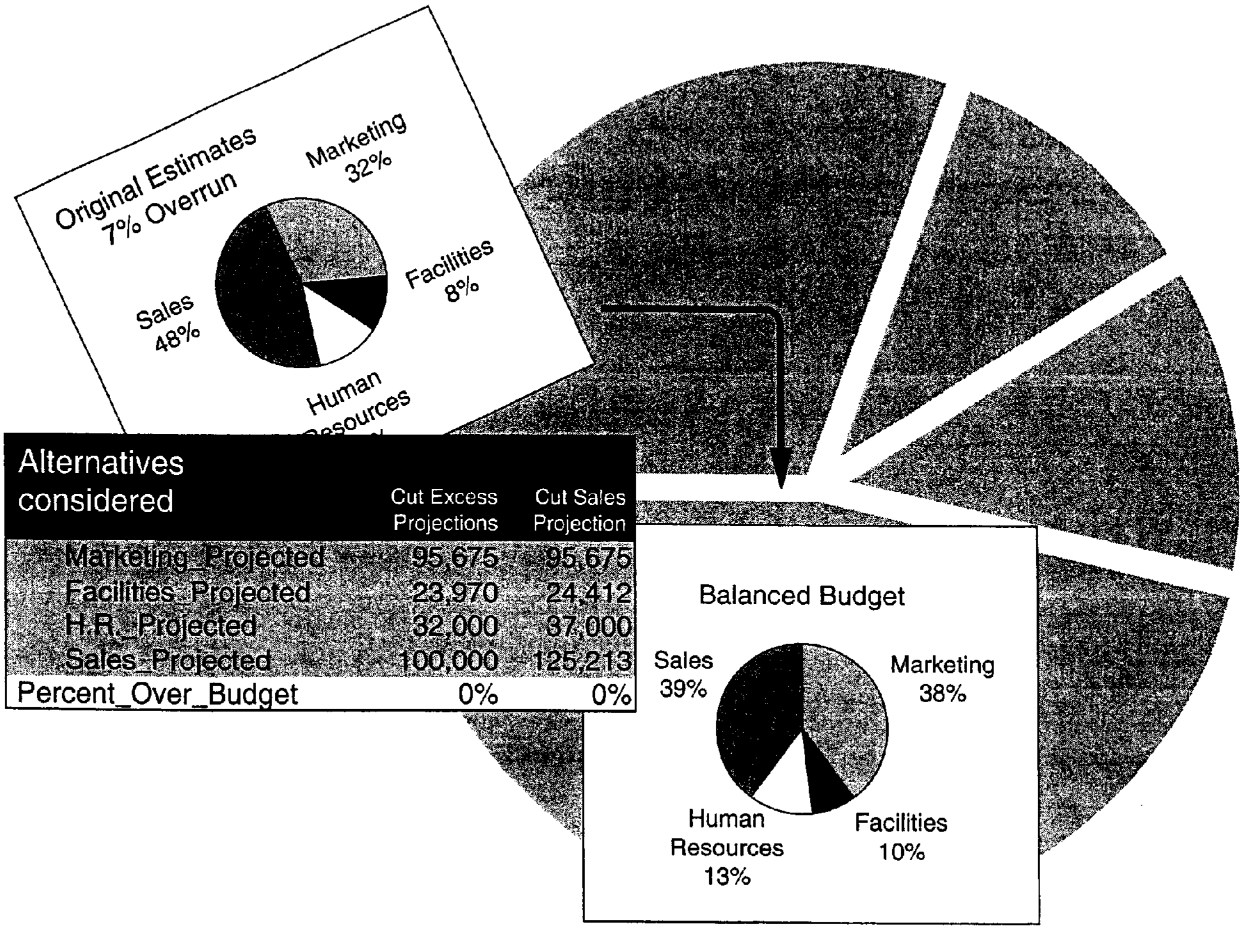
Work with What-If Assumptions in Microsoft Excel

To balance a budget, you must find the best way to allocate the available resources among departments. When initial projections exceed the available funds, you need to compare redistribution strategies. You can model different strategies in Microsoft Excel to analyze the pros and cons of different approaches. As you work through several rounds of negotiation and reallocation, you can adjust your models.

Key Features

- Conditional Formatting
- Goal Seeking
- Scenarios
- Charts

By creating summaries and charts of the strategies you tried, you can demonstrate to your departments that you reached a fair allocation.



Alternatives considered	Cut Excess Projections	Cut Sales Projection
Marketing_Projected	95,675	95,675
Facilities_Projected	23,970	24,412
H.R._Projected	32,000	37,000
Sales_Projected	100,000	125,213
Percent_Over_Budget	0%	0%

MS 114218

ARENDI-DEFS00001928

Find the Over- and Under-Budget Areas

You've rolled up account-by-account projections from several departments. Compare the projections to your target amounts: Can you correct some shortfalls by redistributing funds among accounts? Simply subtracting the allocations from the projections can show you the problem areas and the surplus funds.

Subtract the value in cell E5 from the value in cell D5 ...

F5 =D5-E5

	A	B	C	D	E	F	G
1	**FY 1998 Budget Worksheet**						
2							
3			**FY 1997**	**FY 1998**			
4	**Account**		**Actual**	**Projected**	**Allocated**	**Difference**	
5	110	Payroll	164,146	199,200	180,000	19,200	
6	120	IRS/FICA/Wk comp/State/SDI	58,035	73,000	66,000	7,000	
7	140	Retirement Plan	17,138	20,500	18,500	2,000	
8	201	Telecommunication Services	3,319	3,900	4,300	(400)	
9	254	Advertising	169	300	250	50	
10	301	Office Supplies	4,048	4,500	4,250	250	
11	304	Miscellaneous Supplies	902	1,075	1,000	75	
12							
13	**Total**		247,757	302,475	274,300	28,175	

... to see the discrepancies.

Sort it out Do you have a large number of accounts? Sort them to view the largest shortages. Click a cell that contains a shortfall amount, and then click the **Sort Ascending** button.

Sort Ascending button

More Power: The 10 Most Wanted List

If you work with long lists of data, you can use the Top 10 feature of the **AutoFilter** command (**Data** menu) to display only the 10 largest values in a column. For more information, see "Zero In on the Contacts You Want," page 357.

Want to know more? Look up **Getting Results - Budgeting** in Help.

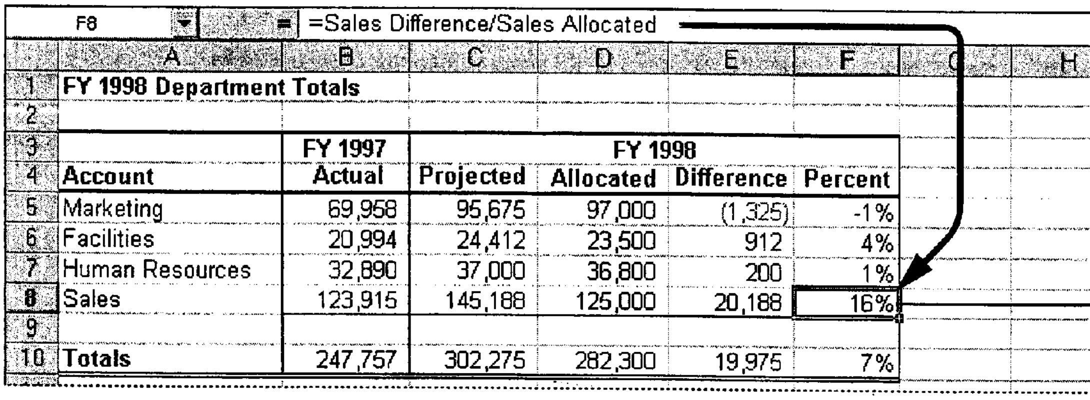
Office Assistant button

MS 114219

Set Up a Model

To determine the best resource allocation, you need to analyze where spending cuts will be most effective. For example, you might model the percentage of overrun by department and for the overall budget.

To build the formulas in your model, you can construct *natural language formulas*, using row and column labels to calculate the results. Natural language formulas are an alternative to using cell references, and can make your formulas easier to read. For more information, see "About Natural Language Formulas," page 489.


F8 =Sales Difference/Sales Allocated

	A	B	C	D	E	F	G	H
1	**FY 1998 Department Totals**							
2								
3		**FY 1997**	**FY 1998**					
4	**Account**	**Actual**	**Projected**	**Allocated**	**Difference**	**Percent**		
5	Marketing	69,958	95,675	97,000	(1,325)	-1%		
6	Facilities	20,994	24,412	23,500	912	4%		
7	Human Resources	32,890	37,000	36,800	200	1%		
8	Sales	123,915	145,188	125,000	20,188	16%		
9								
10	**Totals**	247,757	302,275	282,300	19,975	7%		

The calculated percentage over budget

Show numbers as percentages Use the **Percent Style** button.

Percent Style button

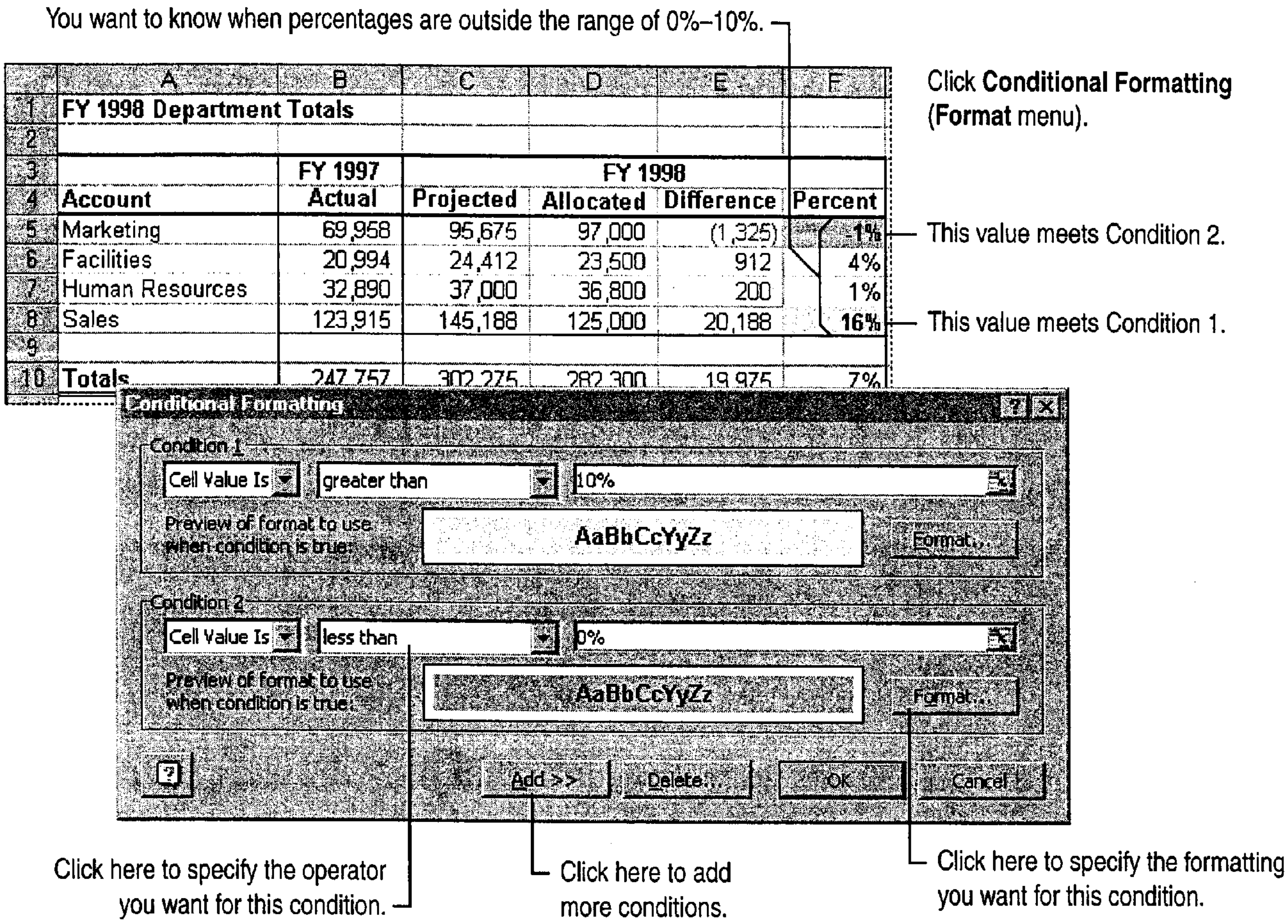
More Power: Shared Workbooks

You and your team can use the same workbook simultaneously over a network. For more information, see "Share a Workbook with a Co-Worker," page 412.

MS 114220

Build Alarms into Your Model

Need to know right away when you reach your target or when your budget falls outside an acceptable range? You can use special formatting for values that meet the conditions you specify.



Prevent false alarms It's easy to type an extra zero now and then, so make sure you don't set off your alarms because of incorrect data entry. Use *validation* to ensure that values are within specified limits. Select data-entry cells and click **Validation** (**Data** menu). For more information, see "Validate Your Data as You Enter It," page 359.

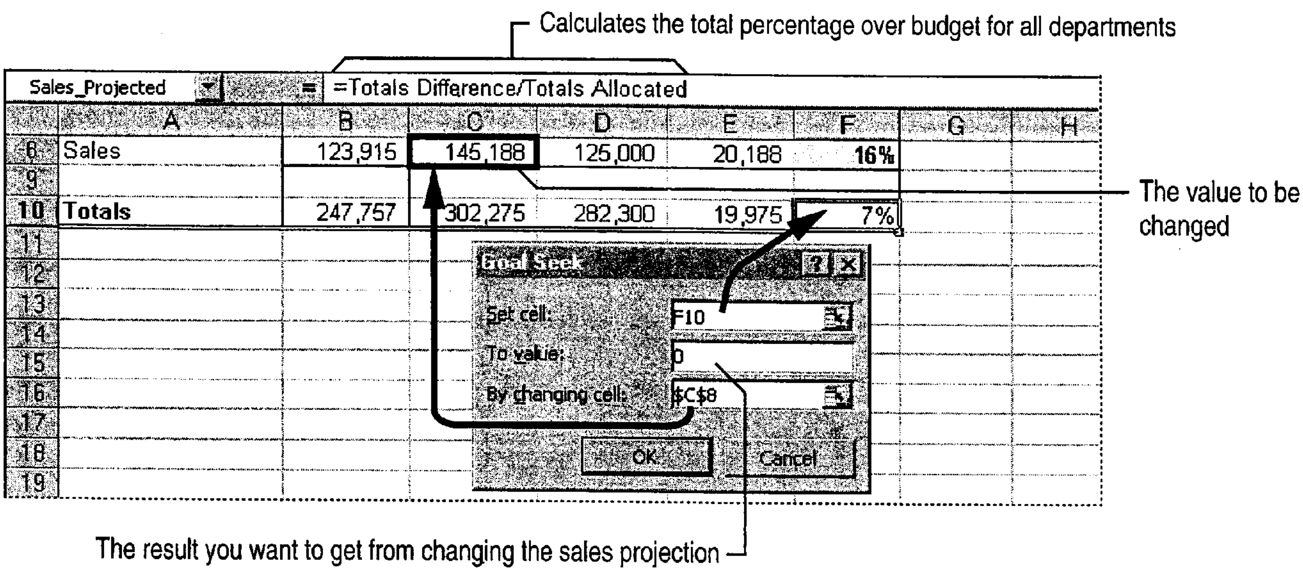
Create hyperlinks to source data Important data often deserves further explanation—especially when an alarm is triggered. Click the **Insert Hyperlink** button to create a hyperlink that jumps directly to a cell range, worksheet, or workbook containing additional information. You can even create a hyperlink to information located on the World Wide Web, or to documents created in other Office applications. For more information, see "Publish Microsoft Excel Tables and Charts on the Web," page 448.

Insert Hyperlink button

MS 114221

Test Alternative Strategies

You need to be able to see the effect of different reductions on each department and on the bottom line. Using *goal seeking*, you can adjust a projection to achieve a specific percentage over or under budget. Goal seeking lets you set a target value for a formula, then adjusts one of the cells used in the formula to calculate your target value. For example, determine how much you'd have to lower the sales projection to reduce the total budget overrun to zero. Try changing different projections to see what it takes to balance the budget.



Important The cell in which the contents will be adjusted (cell C8 in the preceding example) must contain a value, not a formula.

Change multiple values simultaneously Use Microsoft Excel Solver to perform goal seeking on multiple values at the same time.

Want to know more? Look up **Getting Results - Budgeting** in Help.

Office Assistant button

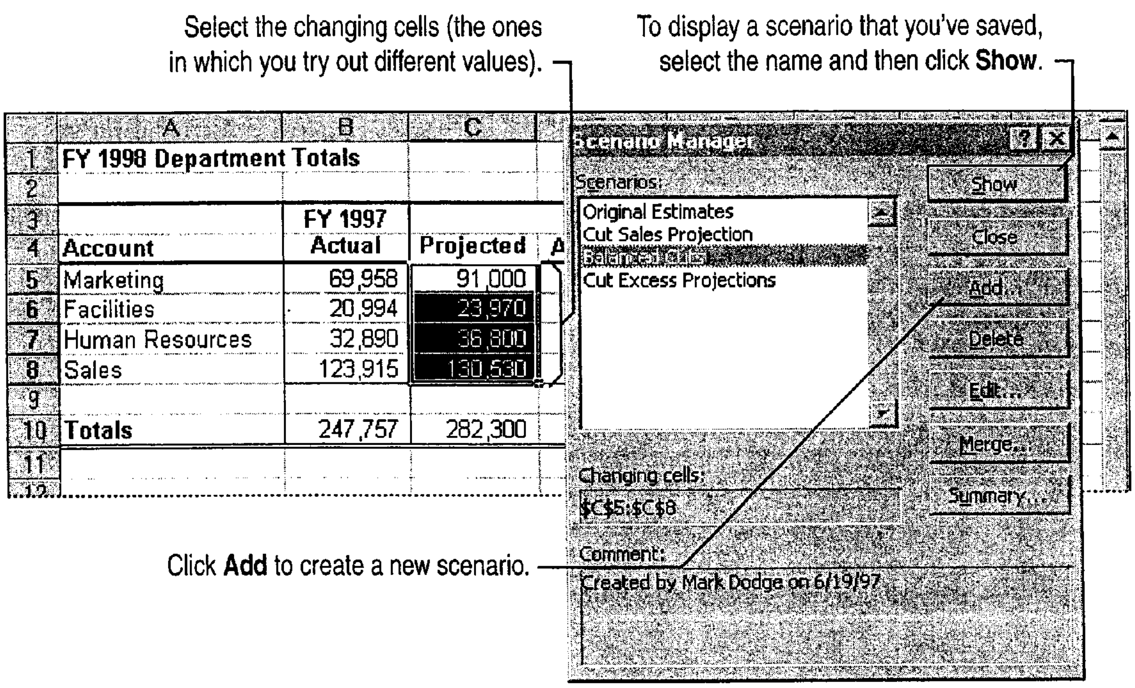
MS 114222

Compare Alternatives

As you try different strategies to reduce over-budget projections, you need to compare and refine approaches. Perhaps you have done this by saving various copies of your worksheet and viewing them simultaneously.

Another way to compare is to save different sets of projections on a single worksheet, as scenarios. Enter your values, either by goal seeking or by typing the values. Save these original values as a scenario, then enter and save other sets of values to try out other reallocation strategies. You can view all the scenarios on the same worksheet.

Click **Scenarios** (**Tools** menu) to define and display scenarios.

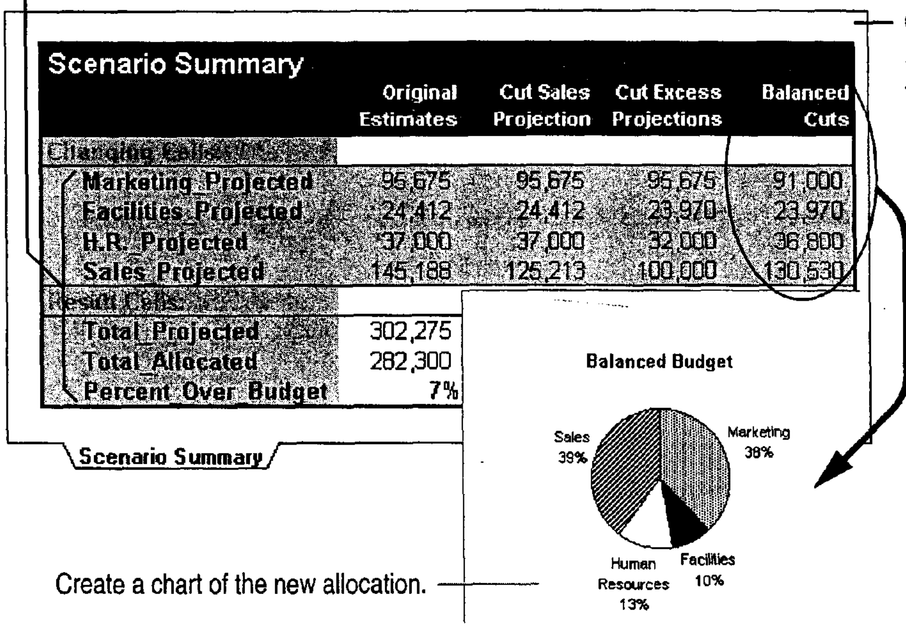


MS 114223

Reallocate Fairly

After you decide how to balance the budget, use your model and scenarios to support the results. To show the departments how you reached a decision, create a summary report showing the scenarios you considered. Demonstrate the final distribution with a chart showing the division of resources. A pie chart is a good way to show the relationship of parts to a whole, so use this chart type to show how the allocation is divided among departments. For information on other chart types, see "Create a Chart from Worksheet Data," page 260.

The summary uses the names you gave to the cells in your model.



Create a summary by clicking **Scenarios (Tools** menu), and then clicking the **Summary** button.

Create a chart of the new allocation.

Name the cells used in scenarios When you create a scenario summary report, the titles shown for result cells and changing cells ordinarily consist of cell references, such as C6. It is helpful to assign names to these cells. For example, cell C6 is named "Marketing_Projected," and appears as such in the scenario summary report. To assign names to cells, click **Name** (**Insert** menu), and then click **Define**.

Chart the original figures for comparison To justify your final choice of distribution, present the two charts together with the summary of the alternatives you tried.

Want to know more? Look up **Getting Results - Budgeting** in Help.

Office Assistant button

MS 114224

ARENDI-DEFS00001934

About Natural Language Formulas

When building formulas, you often need to stop and think about cryptic cell-reference codes when you really should be thinking about the spreadsheet model. Instead of using cell references in your formulas, you can use the row and column labels in a table, such as the one shown below. For example, it is much easier to remember the meaning of "Actual Sales" than what is in cell "B8." This makes it easier to stay focused while constructing a model and to see what a formula does long after you're finished.

Try to make your table labels as short and self-evident as possible, to make them easier to use.

For example, type **=Projected Facilities** to refer to cell C6: the intersection of row 6 (Facilities) and column C (Projected).

Avoid typing labels To save yourself the trouble of typing long label names into your formulas, you can define label ranges before you start creating formulas. First, select all the labels you want to use in a row or column. Next, click **Name** (**Insert** menu), and then click **Label.** After you define the label ranges, you can simply click cells and ranges you want to include in formulas, and the appropriate labels are inserted automatically.

F8 =Sales Difference/Sales Allocated

	A	B	C	D	E	F
1	**FY 1998 Department Totals**					
2						
3		**FY 1997**	**FY 1998**			
4	**Account**	**Actual**	**Projected**	**Allocated**	**Difference**	**Percent**
5	Marketing	69,958	95,675	97,000	(1,325)	-1%
6	Facilities	20,994	24,412	23,500	912	4%
7	Human Resources	32,890	37,000	36,800	200	1%
8	Sales	123,915	145,188	125,000	20,188	16%
9						
10	**Totals**	247,757	302,275	282,300	19,975	7%

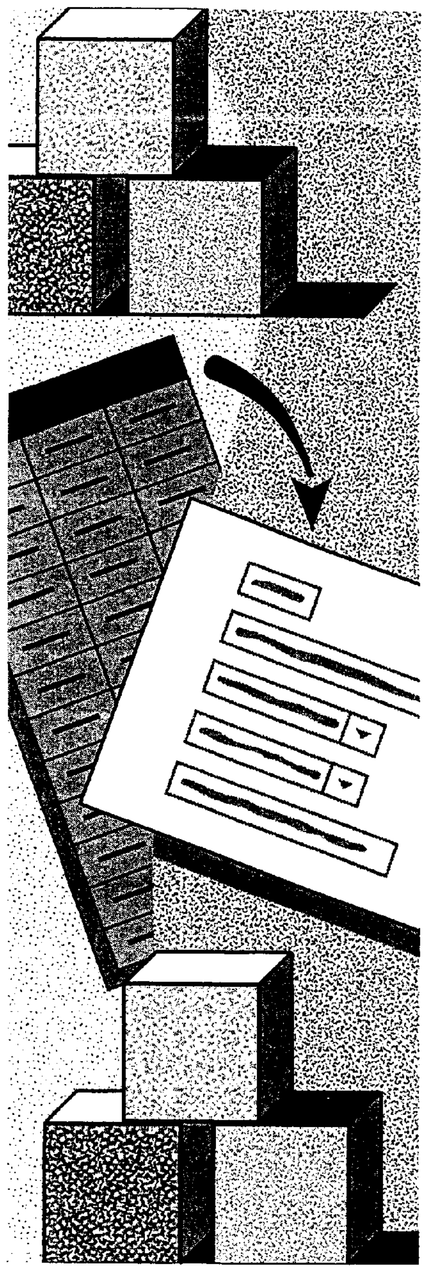
You can use row and column labels in formulas instead of cell references.

The formula shown above refers to this cell as the intersection of the Sales row and the Allocated column.

PART 11

Set Up a Custom Inventory System

Contents



MS 114226

Design a Custom Inventory Database

Create a Database Application

You can create many common databases by using the Microsoft Access Database Wizard. If the wizard doesn't create the database you need, or if you have data that doesn't fit into the tables the wizard creates, you can create a database from scratch and then design an interface to tables and forms.

The topics in this part show you how to create a custom inventory database, but you can use the examples to create any type of database, or to customize an existing database. Use the following table to decide which topic to read for more information.

To	See
Create a database by moving data, such as a large product list stored in Microsoft Excel, into Microsoft Access tables	"Move a Product List into Microsoft Access," page 493
Add a table to your database to store additional information, such as a list of your company's suppliers	"Add a Suppliers Table to Your Inventory Database," page 505
Customize tables to make data entry easier and to help ensure that data is entered accurately	"Make Data Entry Easy and Accurate," page 513
Create an attractive form to help you enter data easily	"Create a Great-Looking Product Form," page 498
Create and print reports that summarize information stored in your database	"Create and Enhance an Inventory Report," page 525
Tie the tables, forms, and reports in your database together with a custom interface	"Turn Your Inventory Database into an Application," page 519

Want the Database Wizard to create a database for you? See "Track Your Business Contacts in Microsoft Access," page 360.

MS 114227

Move a Product List into Microsoft Access

Convert Data from Microsoft Excel to Microsoft Access

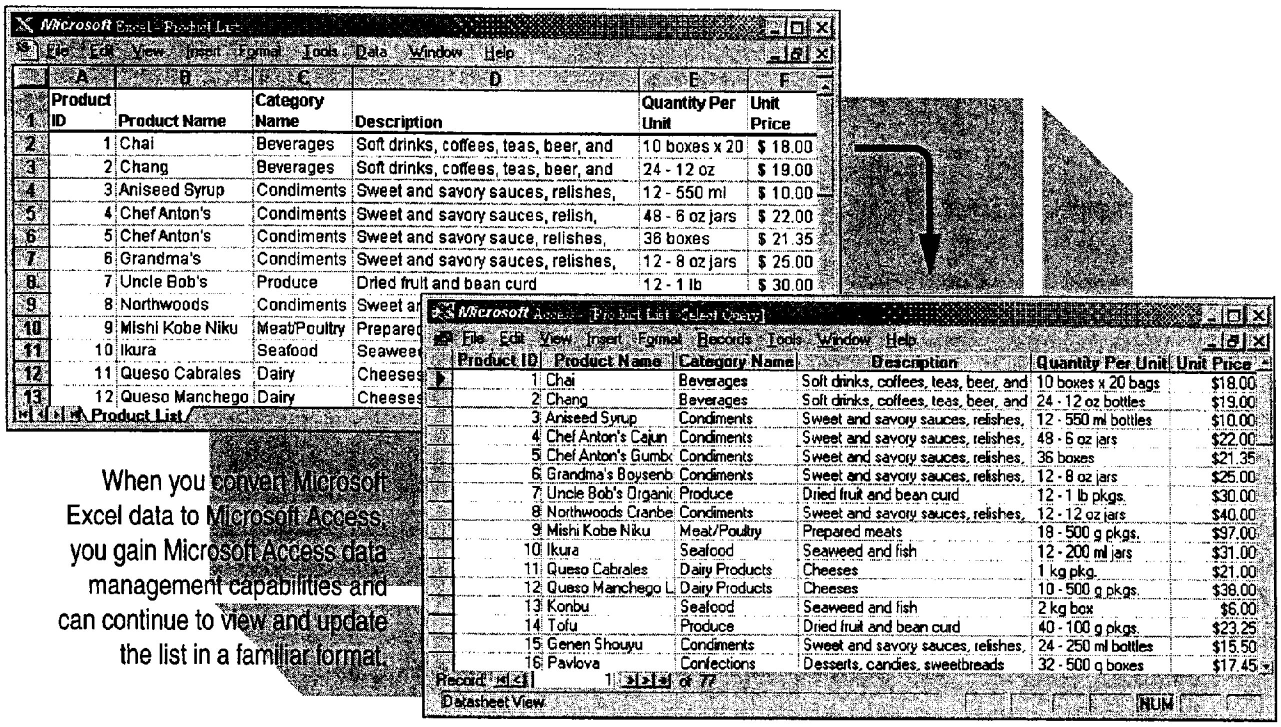
Suppose you're using a Microsoft Excel worksheet to maintain your company's list of products. A list of repeating data can grow too large and become very difficult to maintain in Microsoft Excel. For example, if you want to generate a report that includes your customers' addresses and phone numbers, you have to store the data in every row of the worksheet. You can make it easier to manage your product list by converting the worksheet to Microsoft Access and creating a database to add new entries. When you update information in one place, it's updated everywhere in the database. Microsoft Access also makes it possible for several users to work in the database at the same time. When one user updates records, the updated information is made available to all users.

Key Features

Convert to MS Access Command

Import Spreadsheet Wizard

Table Analyzer Wizard



When you convert Microsoft Excel data to Microsoft Access, you gain Microsoft Access data management capabilities and can continue to view and update the list in a familiar format.

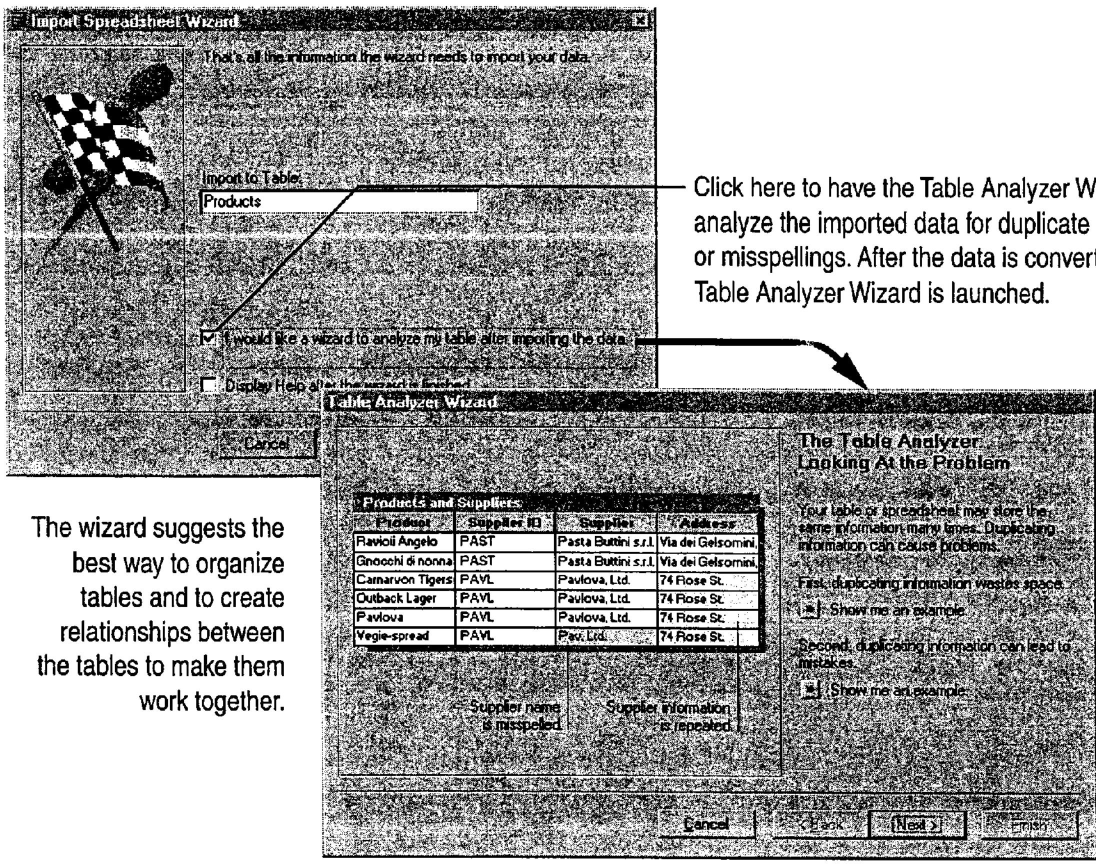
To complete the steps in this topic you need Microsoft Office, Professional Edition or an individual copy of Microsoft Access installed. You also need the Microsoft Excel AccessLinks add-in installed and enabled. Note that your Microsoft Excel worksheet must be set up as a list.

MS 114228

Convert Your Worksheet to Microsoft Access

To begin converting the product list from Microsoft Excel to Microsoft Access, in Microsoft Excel, click anywhere in the worksheet and then click **Convert to MS Access** (**Data** menu).

After the Import Spreadsheet Wizard converts the worksheet to Microsoft Access, you can have the Table Analyzer Wizard analyze the imported data and suggest the best way to organize it.



Click here to have the Table Analyzer Wizard analyze the imported data for duplicate information or misspellings. After the data is converted, the Table Analyzer Wizard is launched.

The wizard suggests the best way to organize tables and to create relationships between the tables to make them work together.

Save hard disk space by archiving the original Microsoft Excel worksheet Because you'll make all further changes directly in the new database, you won't need to use the original worksheet when you work with the database.

Want to know more? Look up **Getting Results - Move List** in Help.

Office Assistant button

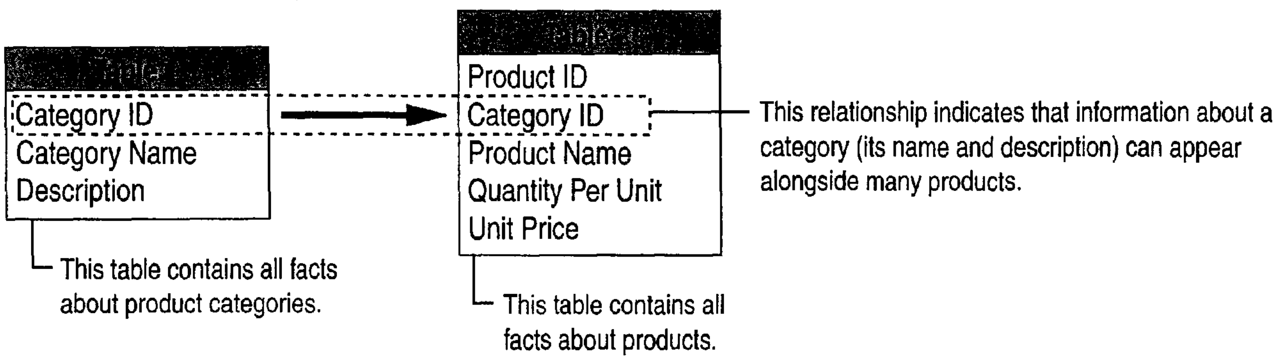
MS 114229

Use Tables to Organize Data in Your Database

After you select the Table Analyzer Wizard option, the wizard helps you organize your data into tables. For example, you can create one table to store pricing information, and another to store information about product categories. Using separate tables lets you save each fact in one place, making it easier to maintain accurate information. When you update a fact in one table, that information is updated wherever it appears throughout the database.

The wizard also suggests *relationships* between the tables to make them work together. Relationships define how the data in tables is shared. For more information, see "Use Your First Microsoft Access Database," page 104, or "View Relationships Between Tables," page 512.

The original Microsoft Excel worksheet column headings are now displayed as fields in the Microsoft Access tables.



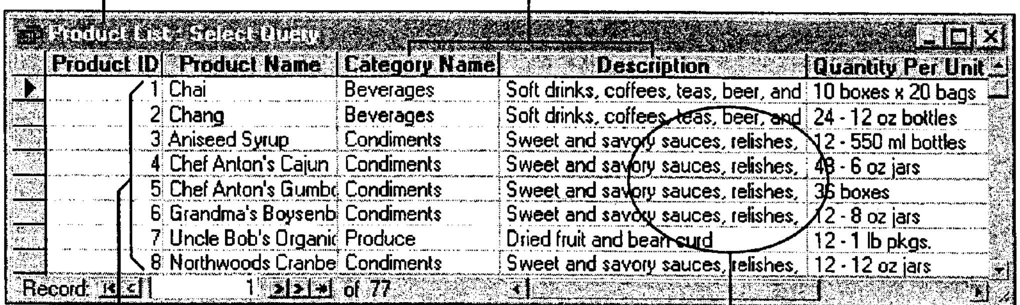
MS 114230

View and Update Your Data in Microsoft Access

After you accept the table and relationship options suggested by the Table Analyzer Wizard, the wizard splits your data into the appropriate tables and prompts you to correct errors in repeated data. Have the wizard create a *query* so that you can view and update product information in the list. Although the query looks like your worksheet, it provides the added capabilities and features of a Microsoft Access database. Change a repeating entry in one place, and it's updated in every affected record. When you enter a new product name in a new record, Microsoft Access assigns it a new, unique product ID automatically. Enter a product category name, and the associated description is displayed automatically. You can also use this query to create forms and reports.

The query has the same name as the original list.

Column headings from the original worksheet are now displayed as field names in Microsoft Access.

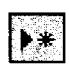


Each row from the original worksheet is now displayed as a record in the query.

The repeating data is now the same in all locations.

Want to make sure your data is set up correctly? Compare the records in your new Microsoft Access database with your original Microsoft Excel list to make sure that you made the right corrections to your data. The database records may not appear in the same order as in your original list.

Want to add a new entry? In datasheet view, click **New Record**, and then begin typing.



New Record button

MS 114231

Other Ways to Import Data into Microsoft Access

What if the data isn't in a Microsoft Excel worksheet? You can import data into Microsoft Access from many popular formats, including dBASE, Paradox, and other database applications, and even plain text from a word processor.

If your data is in a text file, you can use the Microsoft Access Text Import Wizard to convert the data to Microsoft Access tables. Click **Get External Data** (**File** menu), and then click **Import**. Click the **Files of type** arrow, and then select **Text files** from the list. Finally, select the file you want, and then follow the instructions on the screen.

What if the data needs to be kept in a Microsoft Excel worksheet? You can create a link from a worksheet to a Microsoft Access database. Click **Get External Data**, and then click **Link Tables**.

The linked worksheet is included in your database as another table. You view and update the linked data just as you would data stored directly in Microsoft Access, but the linked data remains in the Microsoft Excel worksheet.

Next Steps

To	See
Add another table to your database	"Add a Suppliers Table to Your Inventory Database," page 505
Make it easier to add data to your database	"Make Data Entry Easy and Accurate," page 513
Use a query to create forms that make it easy to view information and enter new data	"Create a Great-Looking Product Form," page 498
Use a query to create reports that summarize your data	"Create and Enhance an Inventory Report," page 525

MS 114232

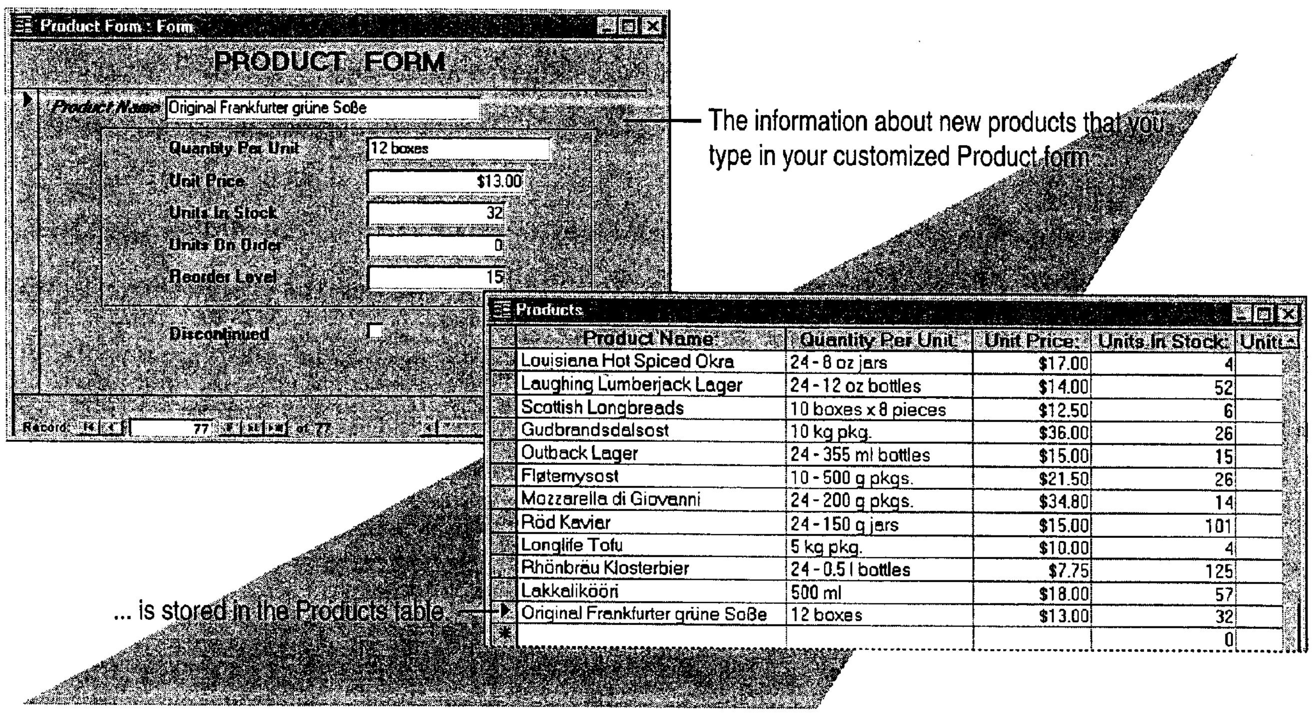
Create a Great-Looking Product Form

Create an Easy-to-Use Form to Add Data to Your Inventory Database

Suppose you've stored information about your product line in the Products table in the Inventory database. If you want a fast, efficient way for you and your co-workers to enter inventory data, you can create a Product form. A *form* displays one record at a time, so it's easy to see what to type and where to type it. To create the form quickly, use the Microsoft Access Form Wizard and then customize the form to make it even easier to work with.

Key Features

- Form Wizard
- Form Design View
- Subforms



To complete the steps in this topic you need to have either Microsoft Office, Professional Edition or an individual copy of Microsoft Access installed. You also need to create a Products table by using the procedures in "Move a Product List into Microsoft Access," page 493, or by using the Table Wizard. However, you can use the basic techniques in this topic to create customized forms for any Microsoft Access table.

MS 114233

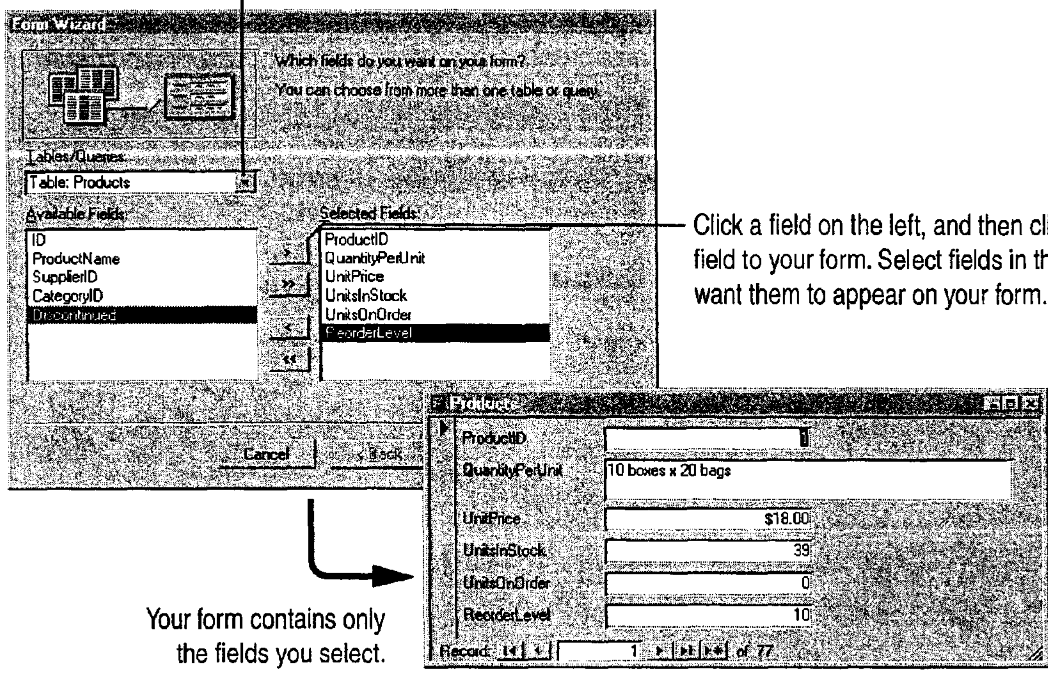
ARENDI-DEFS00001943

Create the Form

With the Microsoft Access Form Wizard, you can create a form quickly by choosing from a list of fields in your database and then adding them to the form. When the wizard is done, your form contains only the information you need, arranged and formatted to simplify data entry. To create a form, click the **New Object** arrow, click **Form**, and then double-click **Form Wizard**. Then, follow the instructions in the wizard.

New Object button

Click the arrow, and then select the Products table.



Click a field on the left, and then click here to add the field to your form. Select fields in the order that you want them to appear on your form.

Your form contains only the fields you select.

View more than one record at a time Click **Datasheet** (**View** menu).

Want a quick way to open your form for data entry? After opening the database, drag the form from the database window to the Windows desktop. To open the form from the Windows desktop, double-click the form's icon.

Want to know more? Look up **Getting Results - Forms** in Help.

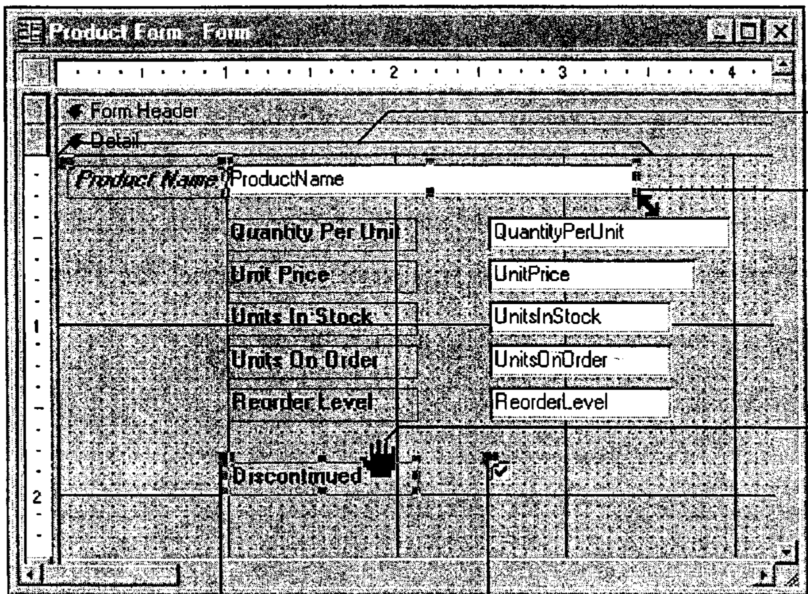
Office Assistant button

Adjust the Form's Layout

After the Form Wizard creates your product form, you can rearrange the *controls* on a form to group related items together. Anything that you add to a form—including text boxes, labels, list boxes, option buttons, command buttons, and lines—is a control. To adjust the form's layout, switch to form design view.

In the form, click the **View** arrow, and then click **Design View**. To select the control you want, click it, and then manipulate it to change the form's appearance. You can align controls to the grid, resize them, and adjust the horizontal and vertical spacing so that they are uniformly spaced.

View button



A control includes the label, or the field, or both.

Click and drag a handle to adjust the size of a control.

Click and drag a control to reposition it.

Click here to move only the label ...

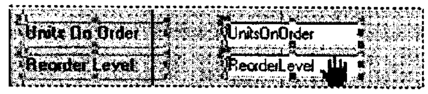
... or here to move only the field.

MS 114235

ARENDI-DEFS00001945

Adjust the placement of a control Click the control, hold down the CONTROL key, and then use the arrow keys to move the control in small increments.

Want to move or realign more than one control at a time? Click next to one of the controls, and then drag the pointer around all of the controls to select them (a box appears around the controls as you drag the pointer). Point between any two handles on the selected controls. When the pointer changes to an open hand, hold the mouse button down and then drag the controls to a new location.



Need to add a field? Click the **Field List** button, and then drag the field you want from the list to the form.

Field List button

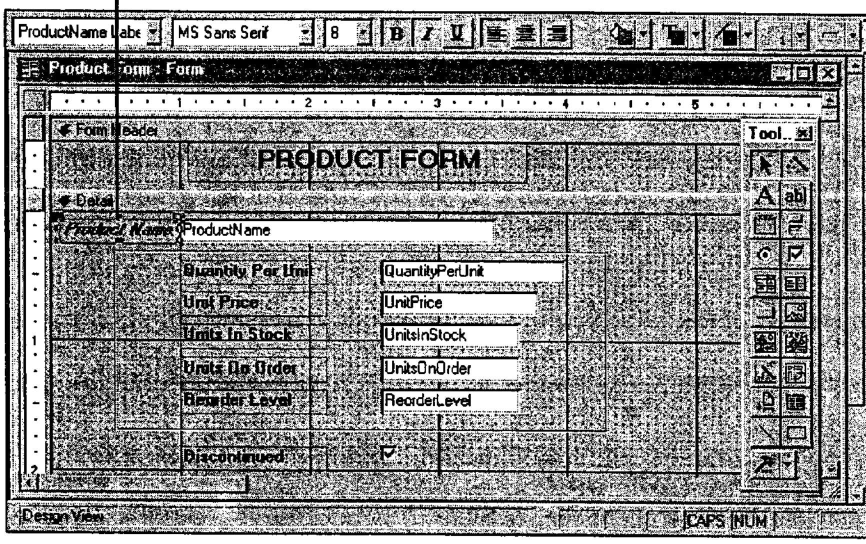
Want to know more? Look up **Getting Results - Forms** in Help.

Office Assistant button

Emphasize Important Information

You can also make your form easier to read by changing the font, font size, and style of controls. For example, you can apply bold formatting to the most important labels and make the font size larger. To change the appearance of your labels, in form design view, select one label or group of labels. Then use the **Formatting** toolbar to apply the formatting options you want.

Select the control you want to format ...



... then select the formats you want from the **Formatting** toolbar.

Guidelines for Customizing Forms

Add a title to your form In form design view, point to the top of the **Detail** section bar. When a two-headed arrow appears, click and drag the bar downward to create space between the Form Header section and the Detail section. If the **Control** toolbox isn't visible, click **Control Toolbox** (**View** menu), and then click the **Label** tool. Click and drag in the **Form Header** section to create a box for the title, and then type the title in the box. To format the title, click the label to select it, and then select the options you want from the **Formatting** toolbar.

Detail section

Label tool

Add lines to your form In the **Control** toolbox, click the **Line** tool, click where you want the line to start, and then drag to draw it.

Line tool

Copy a format quickly with the Format Painter Click the control whose format you want to copy, and then click the **Format Painter** button once to copy the format to a single control, or double-click the button to copy the format to multiple controls. Then, click each control you want to format. If you're formatting multiple controls, click the **Format Painter** button again to turn off formatting.

Format Painter button

MS 114237

Change the appearance and alignment of all controls on the form with automatic formats Automatic formats include combinations such as bold lettering, etched field names, and borders. Click the **AutoFormat** button, and then choose the format you want.

AutoFormat button

Add a border around related controls to make them stand out In the **Control** toolbox, click the **Rectangle** tool, and then drag the pointer around the controls you want to include.

Rectangle tool

Want to know more? Look up **Getting Results - Forms** in Help.

Office Assistant button

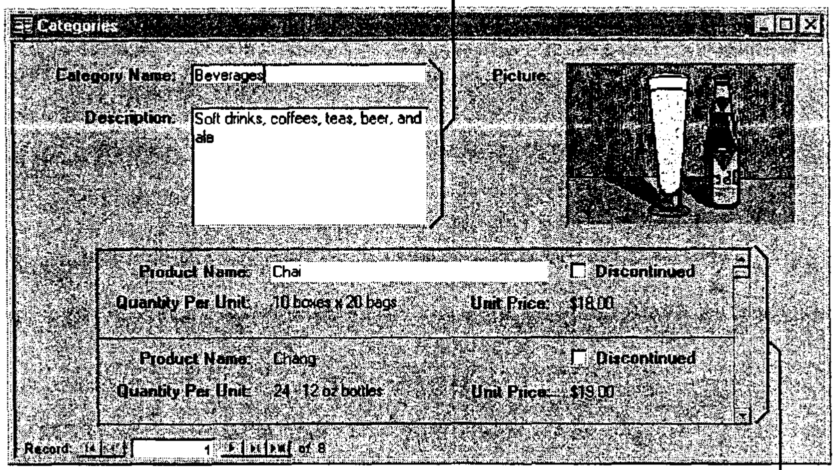
MS 114238

ARENDI-DEFS00001948

Work with Data from More Than One Table

Take advantage of the relationship that you create between tables to make data entry more efficient. For example, after you create a relationship between the Categories table and the Products table, you can create *subforms* (forms within a form) so that when you enter the name of a product category that is also a main form, such as Beverage, subforms show only the products in each subcategory. To create a form based on more than one table, click the **New Object** arrow, click **Form**, and then double-click **Form Wizard**. Follow the instructions in the wizard.

The information you type here is saved in the Categories table.



The information you type here is saved in the Products table.

Next Steps

To	See
Learn more about creating relationships between tables	"Add a Suppliers Table to Your Inventory Database," page 505
Find information contained in two or more tables	"Evaluate Sales Performance in a Microsoft Access Database," page 582

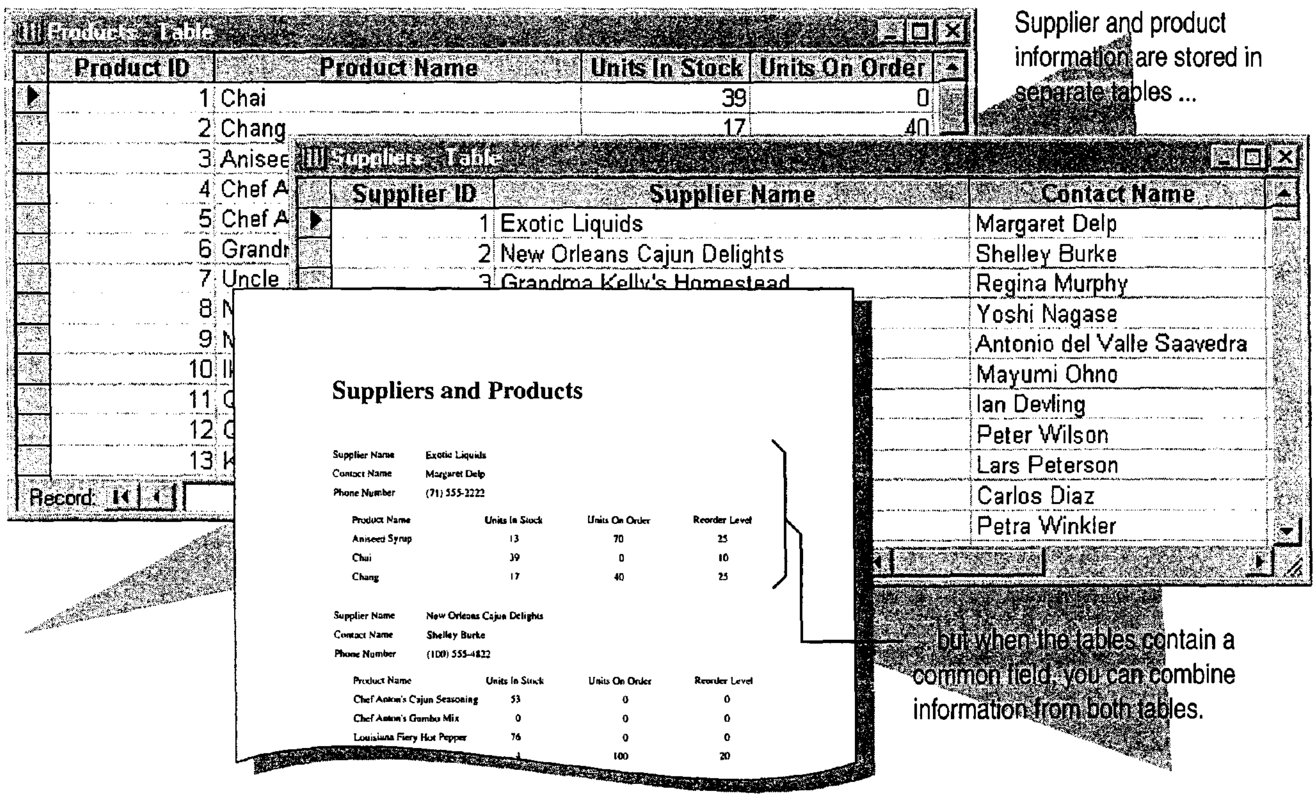
MS 114239

Add a Suppliers Table to Your Inventory Database

If you've followed the steps in the preceding topic, your inventory database contains all the tables you need to store product information. But suppose that you need to add information about the suppliers who make your products. You can create a new table with the Table Wizard and then connect this table to other tables in the database so that you can combine information from your tables in different ways.

Key Features

- Table Wizard
- Lookup Wizard
- Relationships



To complete the steps in this topic you need Microsoft Office, Professional Edition or an individual copy of Microsoft Access installed. You also need to create the Products and Categories tables, as described in "Move a Product List into Microsoft Access," page 493. However, you can follow the basic steps in this topic to add any table to a database.

MS 114240

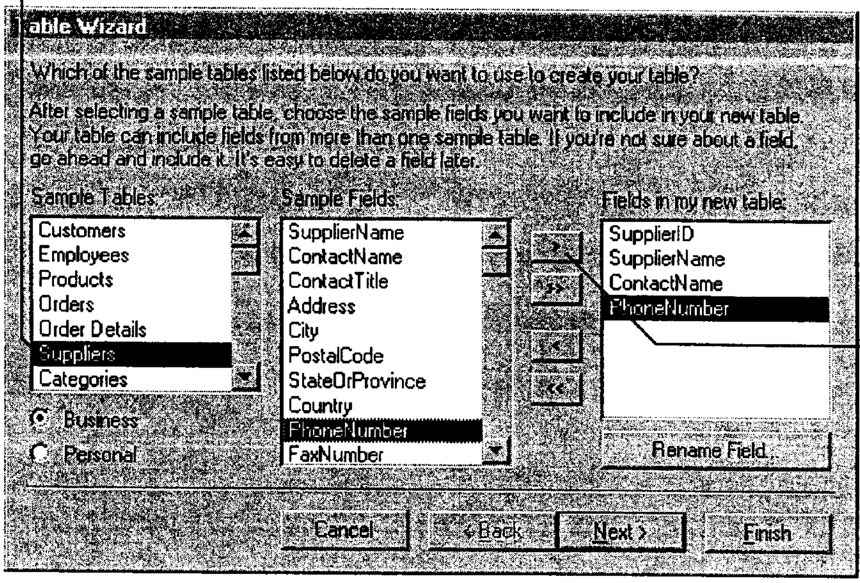
Create the Suppliers Table

When you're ready to add information about suppliers to your inventory database, create a table to store the data. The Table Wizard makes it easy to create a table. When you use the wizard, you can choose from a variety of tables and associated fields.

To use the Table Wizard, in the database window, click the **New Object** arrow, click **New Table**, and then double-click **Table Wizard**. Select **Suppliers** from the **Sample Tables** list, and then add the fields you want. After the wizard creates the Suppliers table, click **Save** (**File** menu) to add the table to your database.

New Object button

Click **Suppliers** to see the fields you can use for the table.



Click a field on the left, and then click here to add the field to your table. Add fields in the order in which you want them to appear in the table.

MS 114241

Does the table have fields in common with an existing table in your database? When the Database Wizard creates your table, you can set options to specify a relationship. For more information, see "View Relationships Between Tables," page 512.

Can't find the type of table you want in the Table Wizard? If the Table Wizard list doesn't include the table you want to create, click the **New Object** arrow, click **New Table**, and then double-click **Datasheet View**. Type the field names and data in the blank datasheet.

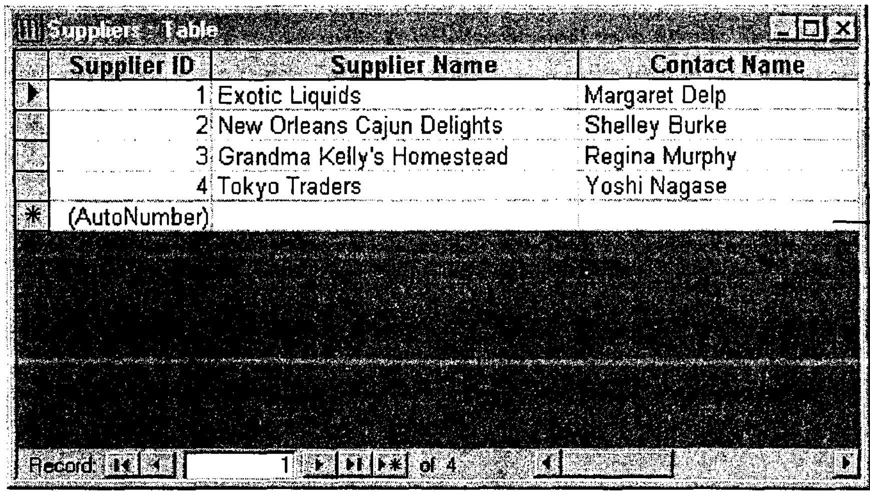
Want to know more? Look up **Getting Results - Add Suppliers** in Help.

Office Assistant button

MS 114242

Add Supplier Information

After the Table Wizard creates your table, it opens the table in datasheet view. Work in this view to type information about your suppliers.



Datasheet view displays more than one record at a time.

To add a new supplier to the table, type information about the supplier in the blank record at the end of the datasheet.

Important When you follow this example, be sure to add data to the Suppliers table that you create. You'll need this information to complete the next step in this topic.

Import existing data to your table To add data that is in another application or format, click **Get External Data** (**File** menu), and then click **Import**.

Change a field name Double-click the column header in the datasheet and type a new name. Be sure to do this before you create queries, forms, and reports, or you will have to change the field names in those, too.

Need to add another field? If you forgot to include a field, or if the Table Wizard list doesn't include a field you need, add it by clicking the header of the column that will follow the new field and then clicking **Column** (**Insert** menu).

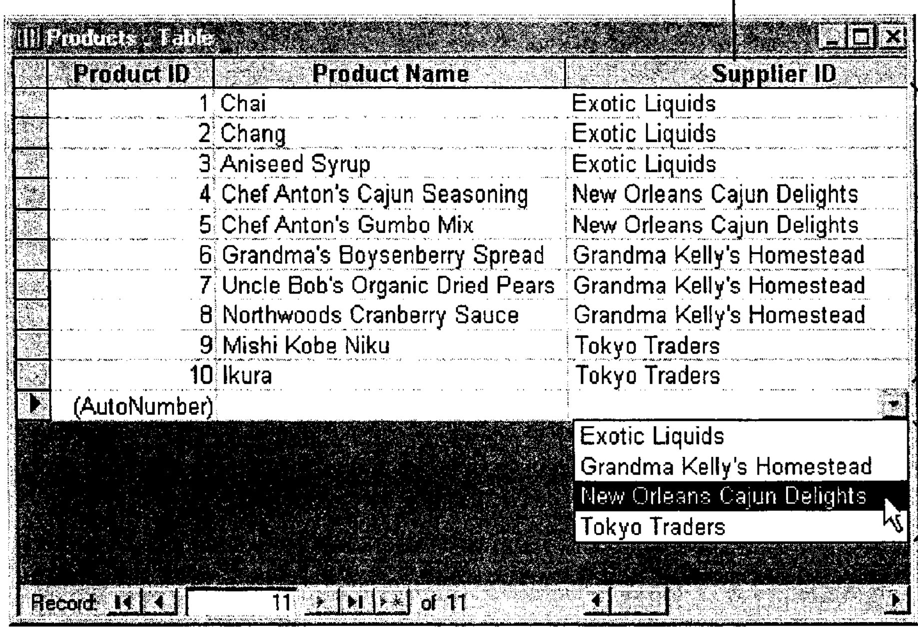
Connect Supplier and Product Information

After you create the Suppliers table, you can use the information about your suppliers to update the Products table already in the database. To connect the Suppliers table to the Products table, use the Lookup Wizard to add a *lookup field* to the Products table. The lookup field displays a list of suppliers names from the Suppliers table. With a lookup field, you don't have to spend time typing suppliers' names when you update the Products table. Instead, just select the supplier name from the lookup list to add it to the table.

While working in the Suppliers table, click the **Database Window** button. On the **Tables** tab, double-click **Products** to open the Products table and to use the Lookup Wizard. Click **Supplier ID**, and then click **Lookup Column** (**Insert** menu) to start the wizard. You'll be prompted to specify the source for the information to be included in the lookup field. Set options to have the wizard retrieve the information from the Suppliers table. When the wizard prompts you for the fields to be included in the lookup column, add the SupplierName field.

Database Window button

The Lookup Wizard adds this column to the Products table. The column displays a list of suppliers from the Suppliers table.



Product ID	Product Name	Supplier ID
1	Chai	Exotic Liquids
2	Chang	Exotic Liquids
3	Aniseed Syrup	Exotic Liquids
4	Chef Anton's Cajun Seasoning	New Orleans Cajun Delights
5	Chef Anton's Gumbo Mix	New Orleans Cajun Delights
6	Grandma's Boysenberry Spread	Grandma Kelly's Homestead
7	Uncle Bob's Organic Dried Pears	Grandma Kelly's Homestead
8	Northwoods Cranberry Sauce	Grandma Kelly's Homestead
9	Mishi Kobe Niku	Tokyo Traders
10	Ikura	Tokyo Traders
(AutoNumber)		

These names were selected from the list of suppliers below, and added to the column.

To display the list of suppliers, click the arrow. Select a supplier from the list to add it to the column.

Don't see anything in the list? If you haven't entered information in the Suppliers table, your list will be empty. Add information about your suppliers to the Suppliers table before using the list.

Want to know more? Look up **Getting Results - Add Suppliers** in Help.

Office Assistant button

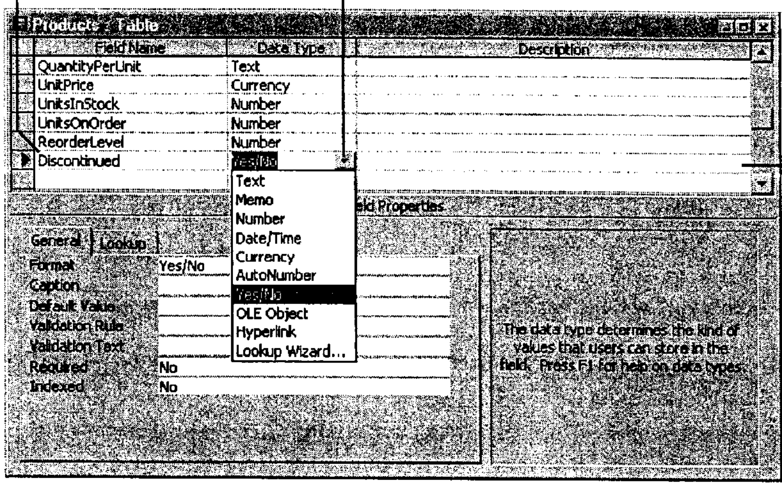
MS 114245

Add Fields to a Table

Suppose you need to add fields to a table after you create it. For example, if you want to use the Products table to track inventory levels, you can add the following four fields: UnitsInStock, ReorderLevel, UnitsOnOrder, and Discontinued. To add a field to a table, click **Design View** (**View** menu).

Click the first blank row at the end of the table, and then type the name of the field you want to add.

Click the arrow, and then select a data type from the list.



You can also type a product description. The product description you add is displayed on the status bar when you add data to the field.

Insert a field in a specific location within the table Suppose you want to insert a row for a new field between two existing fields, rather than at the end of the table. When you click an existing field and then click the **Insert Rows** button, Microsoft Access inserts a blank row immediately above that field.

Insert Rows button

MS 114246

ARENDI-DEFS00001956

View Relationships Between Tables

When you add a lookup field, Microsoft Access creates a *relationship* between the two tables, making them part of a unified database. When tables are related, you can combine data from each table in queries, forms, and reports.

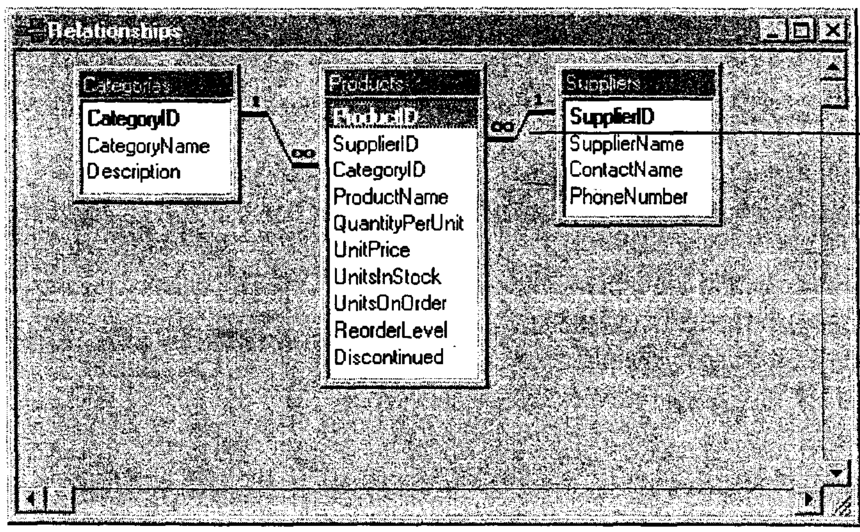
You can see the tables in your database and the relationships between them in the relationships window. To open this window, in the database window, click the **Relationships** button.

Each table is represented by a field list. The lines that connect field lists show the relationships between tables. To see a table in the relationships window, you have to add it. To add the Suppliers table, click **Show Table** (**Relationships** menu), select **Suppliers**, and then click **Add**.

For more information, see "Use Your First Microsoft Access Database," page 104.


Relationships button

The relationships window shows how the tables in your database are related.



To set options for a relationship, double-click the relationship line.

Next Steps

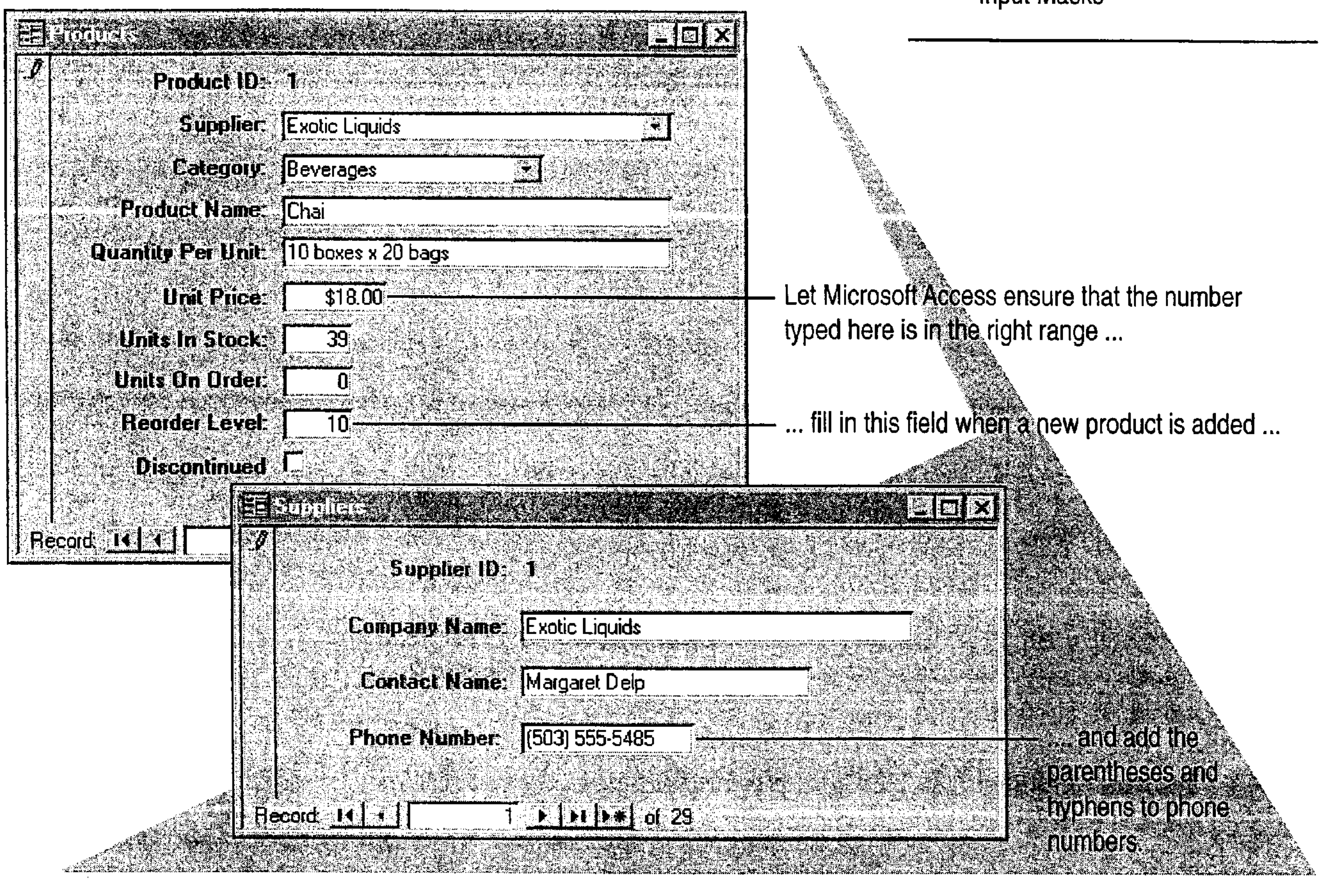
To	See
Customize tables for quick and accurate data entry	"Make Data Entry Easy and Accurate," page 513
Create attractive forms to present online data	"Create a Great-Looking Product Form," page 498
Create custom reports to summarize and print information contained in your database	"Create and Enhance an Inventory Report," page 525

Make Data Entry Easy and Accurate

After you create an inventory database that includes all the tables you need, you can make data entry consistent, accurate, and easy by setting *field properties* for your tables. Field properties control how a field behaves or looks. When you set field properties for a table, all forms and datasheets that use information from that table will use the same settings.

Key Features

- Field Properties
- Default Values
- Validation Rules
- Input Masks



To complete the steps in this topic you need to have either Microsoft Office, Professional Edition or an individual copy of Microsoft Access installed. You must also create the Products, Categories, and Suppliers tables in "Move a Product List into Microsoft Access," page 493, and "Add a Suppliers Table to Your Inventory Database," page 505. However, you can follow the basic steps in this topic to make data entry easier for any table you create.

MS 114248

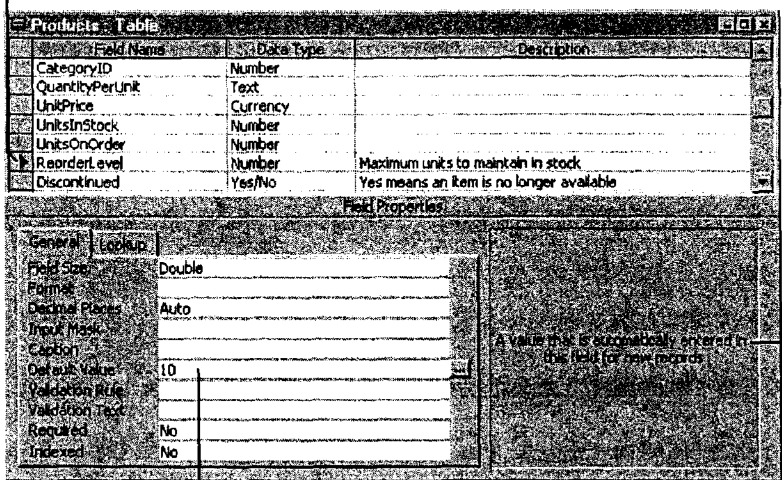
Set Field Properties to Control Data Entry

Each field in a table has a set of properties that you can customize to determine how data is handled. You can set field properties for a table while working in table design view. To open a table in table design view, click **Database Window**. On the **Tables** tab, click the table whose fields you want to customize, and then click **Design**. When you're done, click the **Save** button.

Database Window button

Save button

To set field properties, click a field ...



Microsoft Access displays a brief description of the selected property.

... click a property, and then type the new setting.

Important Set properties for a table before you create forms, reports, or queries based on that table. If you set table properties after creating forms, reports, or queries, some of the settings won't apply to the forms.

Create a form that uses your new property settings Save the table, click the **New Object** arrow, and then click **AutoForm**.

New Object button

Want to know more? Look up **Getting Results - Field Properties** in Help.

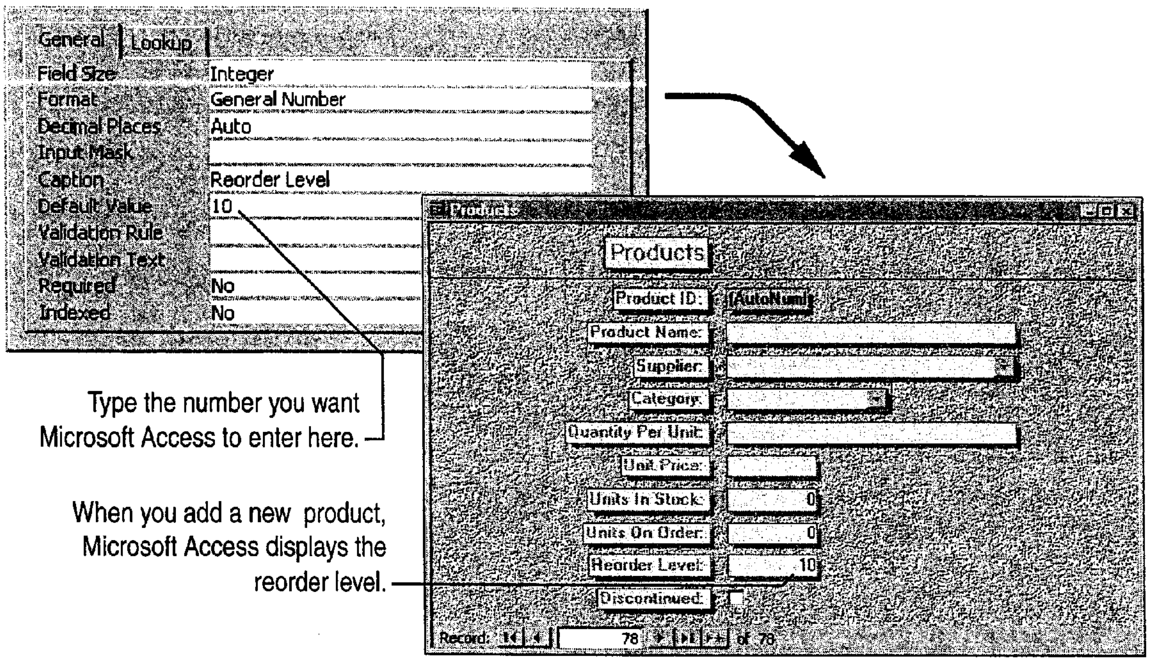
Office Assistant button

MS 114249

Let Microsoft Access Enter Information for You

After you set properties for a field, you can use Microsoft Access to automatically enter data. When you set a *default value* for a field, Microsoft Access enters that value when you add a new record to the database. For example, suppose that you usually reorder any product when there are only 10 items left in stock. You can customize your Products table so that whenever you or your co-workers enter a new product into the database, Microsoft Access automatically enters 10 in the Reorder Level box.

Open the Products table, click **Design View** (**View** menu), and then click the **Reorder Level** field to display its properties.



Want to undo a change you made to a default value in a field? Microsoft Access lets you accept a default value or type a new value over it. If you type over a default value and then decide you want to undo your change, press CONTROL+Z.

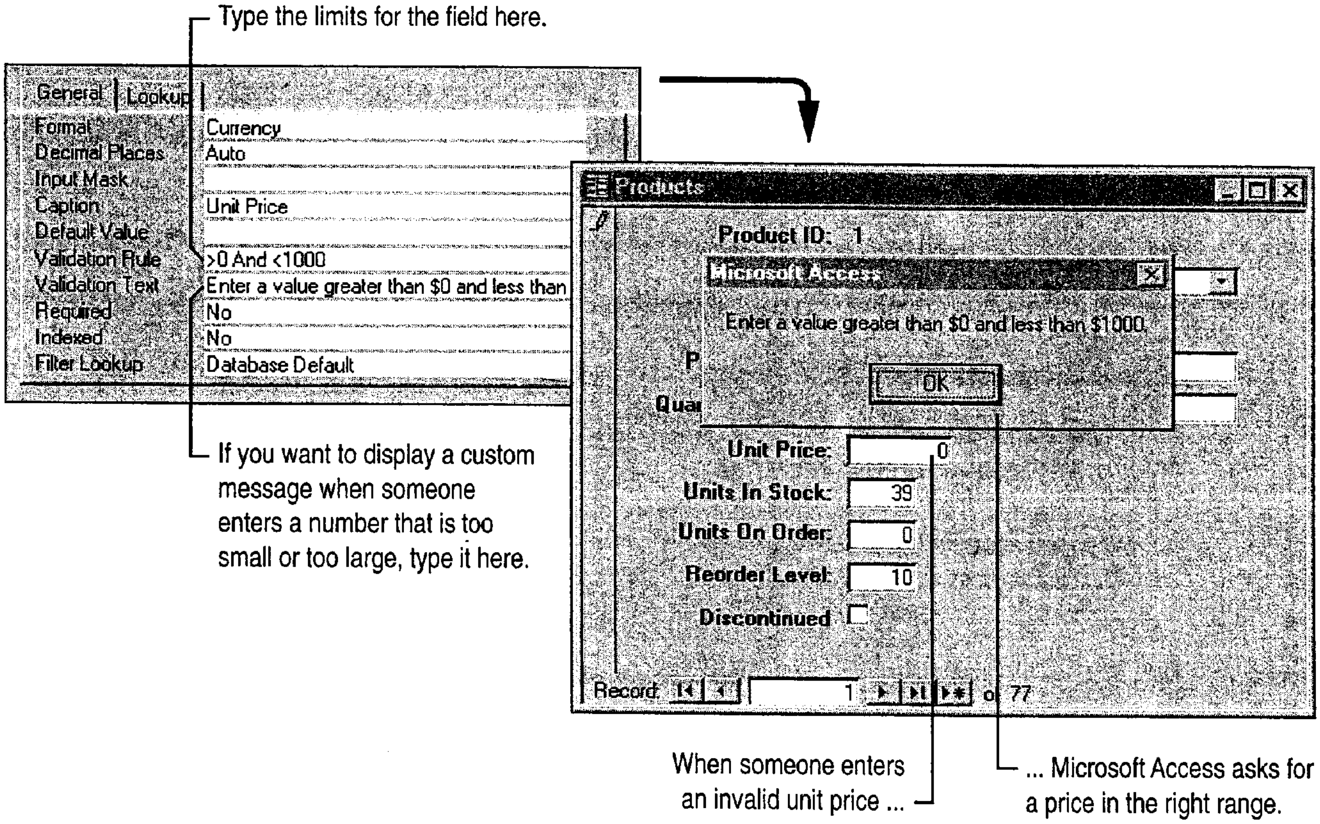
Enter the current date automatically If you want to enter the current date in the Date field, click the **Default Value** property box and then type **=Date( )**.

MS 114250

Use Validation Rules to Minimize Data Entry Errors

Suppose that you want to minimize data entry errors. For example, you want to make sure that the value entered for the unit price of a product is always between 0 and 1000. You can set the Validation Rule property to make sure that all values entered in the Unit Price field fall within this range. If the data you enter does not meet the conditions set by the *validation rule*, Microsoft Access displays a message.

Open the Products table, click **Design View** (**View** menu), and then click the Unit Price field to display its properties.



Want to make sure that a field always contains a value? In the field's **Required** property box, click **Yes**.

Want to know more? Look up **Getting Results - Field Properties** in Help.

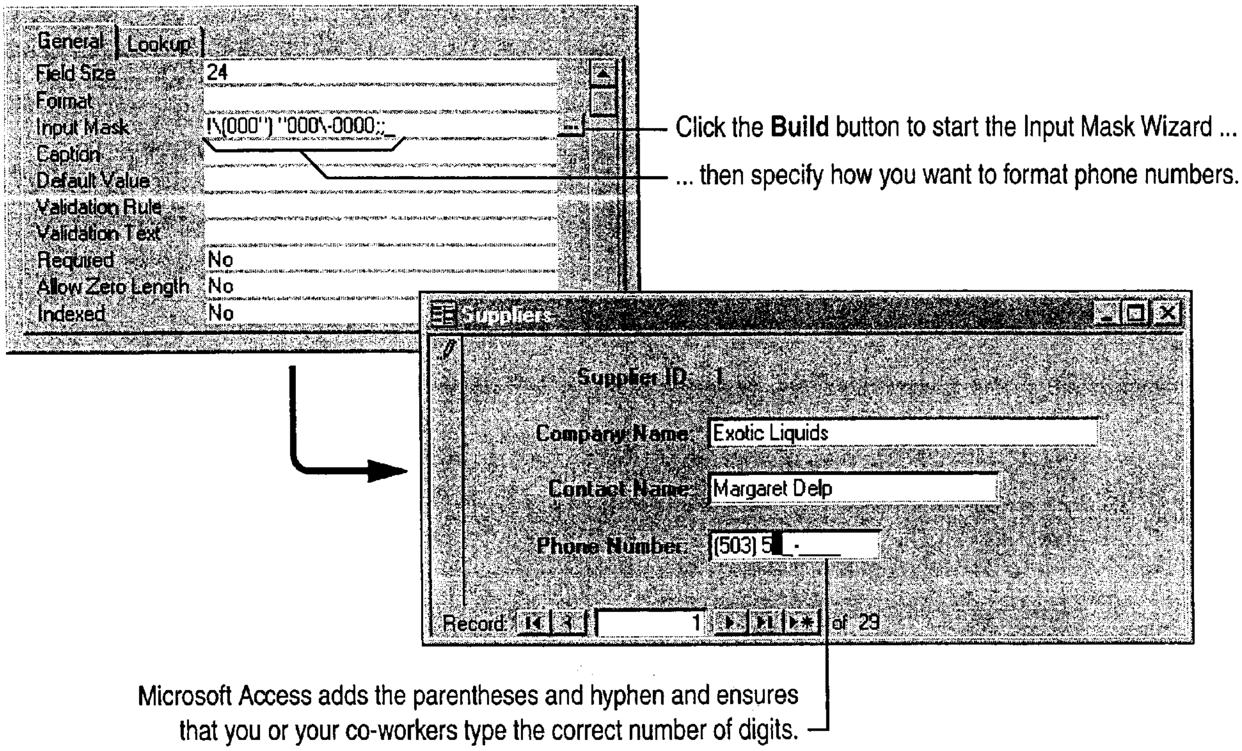
Office Assistant button

MS 114251

Simplify Typing Phone Numbers

Suppose that you always include parentheses and a hyphen when you enter a supplier's phone number, like this: (503) 555-5485. Save time by creating an *input mask* that lets Microsoft Access automatically add the parentheses and hyphen for you. An input mask controls how data is entered in a field.

Open the Suppliers table, click **Design View**, and then click the Phone field to display its properties.

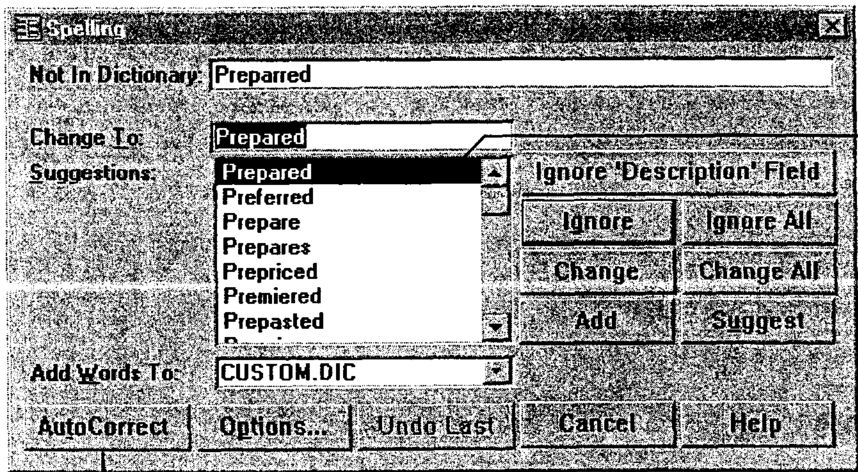


Do you have other data with formatted characters? You can have Microsoft Access automatically add formatted characters for other types of data, such as social security numbers or postal codes.

Check Spelling and Correct Mistakes

To prevent spelling mistakes that can compromise the integrity of your database, let Microsoft Access check your spelling. Microsoft Access can even automatically correct words that you frequently mistype.

To check spelling, click the form or datasheet that you want to review and then click **Spelling (Tools** menu). You can check spelling for fields that store text, but not numbers or other types of data.



Double-click the word you want, or type the correct spelling.

Click here to add the word to the list that Microsoft Access automatically corrects while you type.

Next Steps

To	See
Create attractive forms that present data on the screen in your own way	"Create a Great-Looking Product Form," page 498
Create custom reports to summarize and print information	"Create and Enhance an Inventory Report," page 525
Save typing by selecting information from a Suppliers list	"Add a Suppliers Table to Your Inventory Database," page 505

Turn Your Inventory Database into an Application

Make a Database Easy for Others to Use

Make it easy for co-workers to use your inventory database by creating a simple startup form that appears each time someone opens the database. You can add buttons to the startup form so that your co-workers can easily open the forms and print the reports they use most frequently. Then, secure your database from unauthorized use by creating a password.

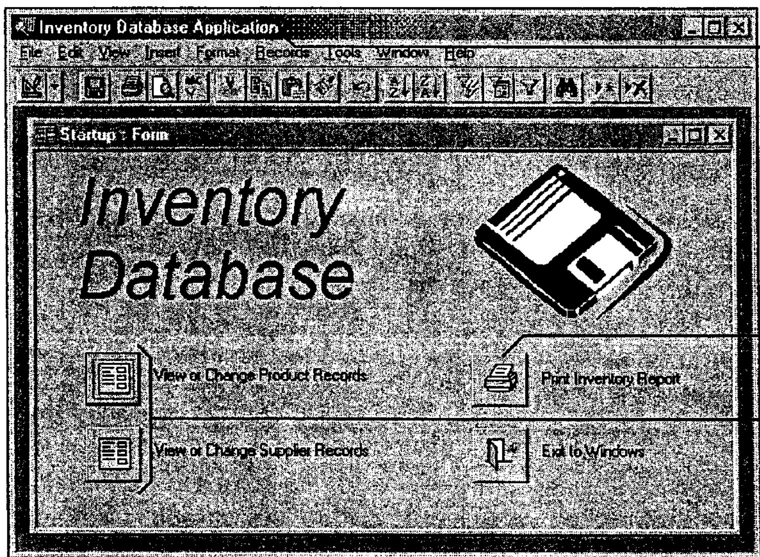
Key Features

Startup Form

Command Button Wizard

Database Passwords

By creating a startup form that appears when someone opens the database application, you can make it easier for your co-workers to get their work done.



Display your database application's title in the title bar.

Click here to print the inventory report.

Click these buttons to open the forms in your database application.

To complete the steps in this topic you need to have either Microsoft Office, Professional Edition or an individual copy of Microsoft Access installed. You also must create a Product form and an Inventory report as described in "Create a Great-Looking Product Form," page 498, and "Create and Enhance an Inventory Report," page 525.

MS 114254

Create a Startup Form

The first step in turning your database into a custom application is to create a *startup* form. This form appears whenever someone opens your database. Although a startup form looks like any database form, it can include special text to identify the database and to welcome users.

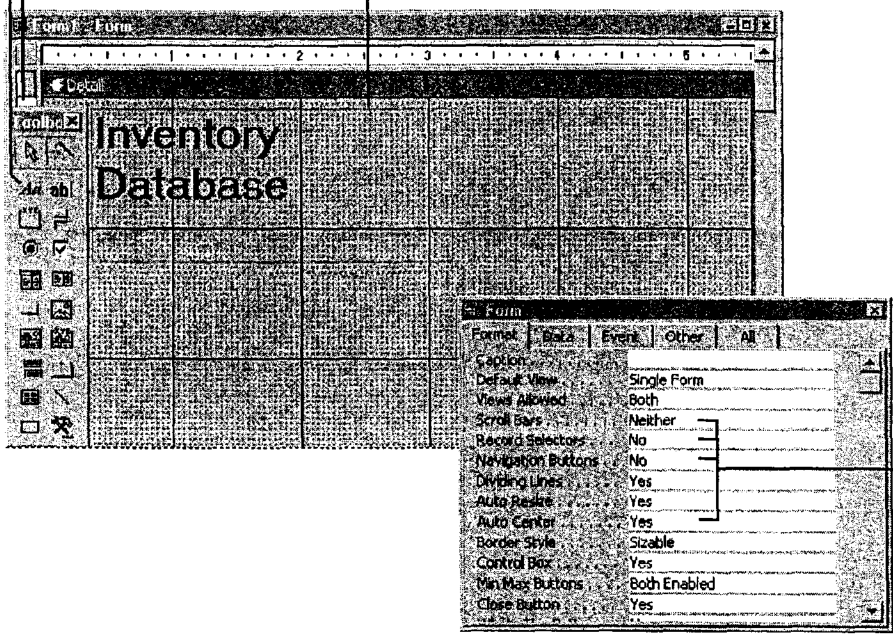
To begin creating a startup form, click the **New Object** arrow, and then click **New Form**. Double-click **Design View**, and then create a label on the form.

New Object button

Click the **Label** tool ...

Form selector

.... click where you want to put the label, and then drag to adjust the size of the label box. In the label box, type text.



Click the form selector, and on the **Format** tab, change the default properties so that they match the properties shown here. These changes make the form look like a dialog box.

Want to change the appearance of a label? Click the label to select it, and then select formatting options from the **Formatting** toolbar.

Add a logo or clip art to the startup form Click **Picture** (**Insert** menu).

Want to know more? Look up **Getting Results - Create Application** in Help.

Office Assistant button

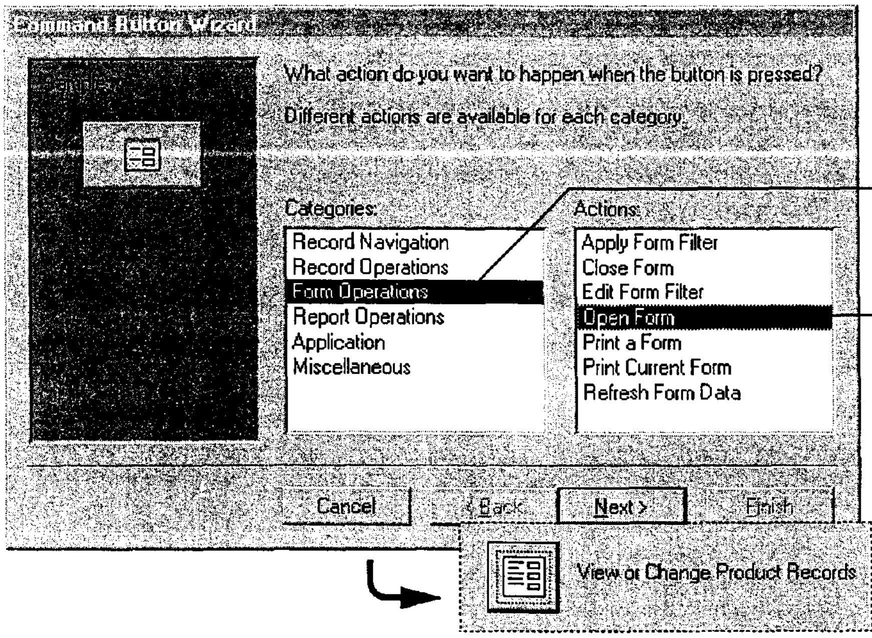
Add Buttons That Open Forms and Reports

While working in form design view, use the Command Button Wizard to add buttons to the form. Users can click them to navigate to tables and forms in the database and to print reports.

If the toolbox isn't visible, click **Control Toolbox** (**View** menu) to display it. Click the **Command Button** tool, and then click the **Control Wizards** tool if it isn't already selected. In the Product form, position the button where you want it, and then follow the instructions in the wizard.

Command Button tool

Control Wizards tool



Click the type of action that you want the button to perform ...

... then tell the Command Button Wizard what you want the button to do.

The wizard creates the button for you.

Create command buttons to automate simple tasks You can use the Command Button Wizard to automate other tasks, as well. For more information, see "Add a Command Button That Prints a Report," page 652.

Want to put text instead of a picture on a button? When the Command Button Wizard prompts you to select a text or picture, click **Text**, and then accept the default text or type your own.

Want to add a description for a button? Use the **Label** tool in the **Control Toolbox**.

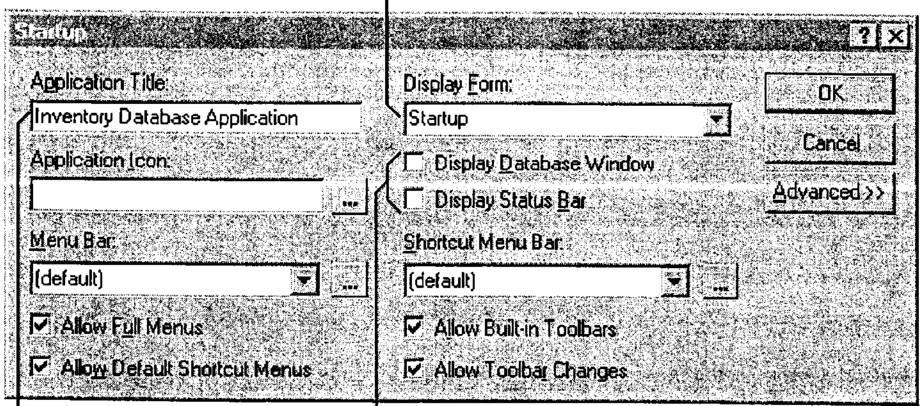
Want to know more? Look up **Getting Results - Create Application** in Help.

Office Assistant button

MS 114256

Display the Startup Form Automatically

After you create the startup form, have Microsoft Access display the form automatically whenever someone opens your inventory database. Then, customize the database by adding a title to the startup form's title bar, by adding an icon, and by selecting menu bar items. Click **Startup** (**Tools** menu), and then set options in the **Startup** dialog box.



Want to bypass the startup form and go directly to the database window? Hold down the SHIFT key when you open your database.

Create Custom Toolbars and Menus

If you want to control which commands are available in your database, or if you want to provide an easy way to run macros or Visual Basic programs, create custom toolbars or menus.

For more information, see "Customize Office," page 636.

Want to know more? Look up **Getting Results - Create Application** in Help.

Office Assistant button

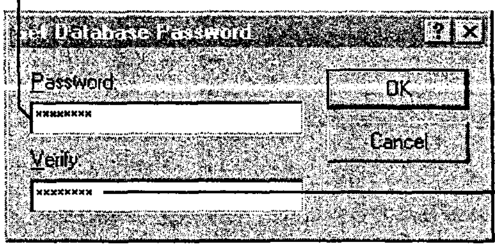
MS 114257

Protect Your Database with a Password

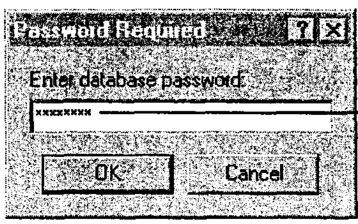
If your inventory database contains confidential information, create a password to prevent unauthorized users from opening it.

To create a password, you must open the database for exclusive access. To do so, close the database, click **Open Database (File** menu), and select your database. Click **Exclusive**, and then click **Open**. After you open the database for exclusive access, click **Security**, click **Set Database Password (Tools** menu), and then type the password.

Type a password ...



... then retype it here.



To open your database, users must type the correct password.

For added security, change the password occasionally Click **Security** (**Tools** menu), click **Unset Database Password**, and then type a new password.

Need more sophisticated security? You can give each user in your workgroup permission to view or change a different set of objects and data. To set up workgroup permissions, click **Security** and then click **User and Group Permissions** (**Tools** menu).

MS 114258

Next Steps

To	See
See examples of Startup and Main Switchboard forms	Startup and Main Switchboard forms in the Northwind sample database
Create a simple database application by using the Database Wizard	"Track Orders in a Shared Database," page 427
Learn about Visual Basic programming and read more about creating your own database applications using Microsoft Access	*Building Applications with Microsoft Access 97*, available directly from Microsoft with the order form provided in your Microsoft Office package

MS 114259

Create and Enhance an Inventory Report

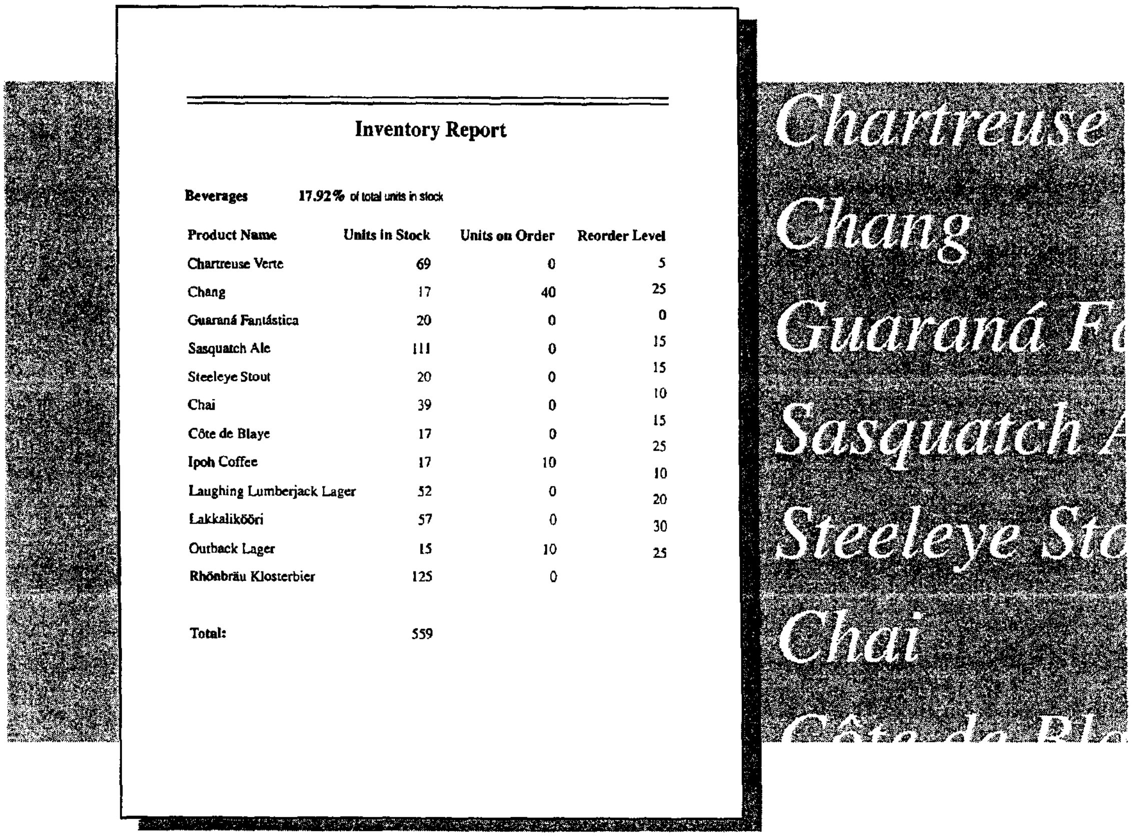
Summarize Inventory Data in a Microsoft Access Report

Business is booming, and as a result you've greatly increased your inventory. To keep track of inventory flow, you want to create a monthly inventory report.

With the Microsoft Access Report Wizard, you can quickly create a polished report that calculates the total units in stock and the percentage of the total made up by each product category. Each month, just open the report to get the latest facts and figures. When you update the database, Microsoft Access automatically updates the report data.

Key Features

- Report Wizard
- Report Design View



Inventory Report

Beverages **17.92%** of total units in stock

Product Name	Units in Stock	Units on Order	Reorder Level
Chartreuse Verte	69	0	5
Chang	17	40	25
Guaraná Fantástica	20	0	0
Sasquatch Ale	111	0	15
Steeleye Stout	20	0	15
Chai	39	0	10
Côte de Blaye	17	0	15
Ipoh Coffee	17	10	25
Laughing Lumberjack Lager	52	0	10
Lakkalikööri	57	0	20
Outback Lager	15	10	30
Rhönbräu Klosterbier	125	0	25
Total:	559		

To complete the steps in this topic you need Microsoft Office, Professional Edition or an individual copy of Microsoft Access installed. You also need to create the Categories and Products tables by using the steps in "Move a Product List into Microsoft Access," page 493, or by using the Microsoft Access Table Wizard. However, you can use the techniques in this topic to create other Microsoft Access reports.

MS 114260

Begin the Report

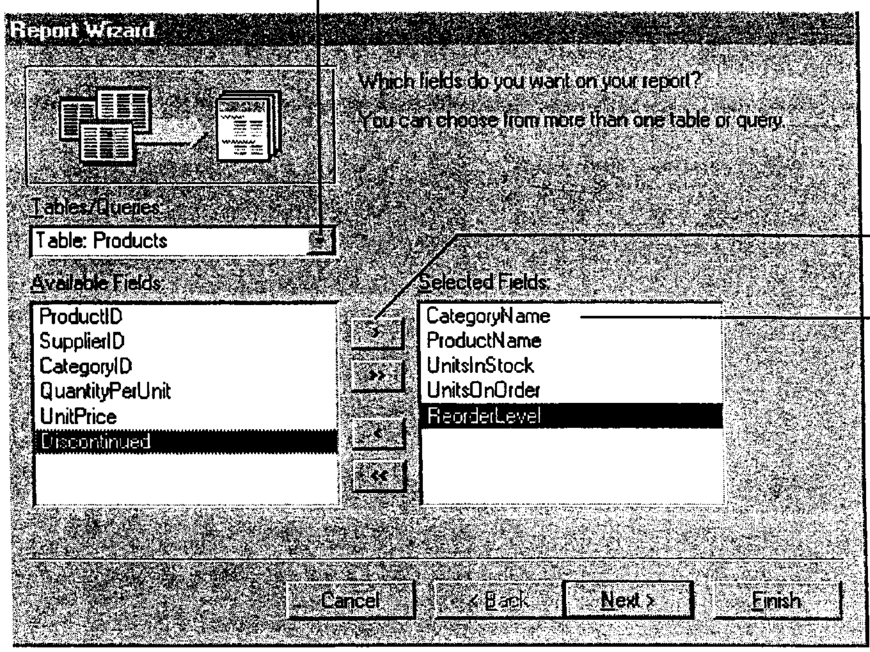
Suppose you want to create a report that reflects your current inventory. You can organize the report by product category (such as Beverages), and include each product name, the number of units in stock, the number of units on order, and the product's reorder level. Also, include the total number of units in stock for each category, and the percentage of the total units made up by each category. To retrieve this information from your inventory database and present it in an attractive format, you can use the Report Wizard.

To start the Report Wizard, click the **New Object** arrow, click **Report**, and then double-click **Report Wizard**. Then, follow the instructions in the wizard.

New Object button

Select fields from the Categories and Products tables to create a new report.

Click the arrow, and then select a table. Make sure to select the Categories table first.



Click a field on the left, and then click here to add the field to your report.

Make sure to add the CategoryName field first. That way, the Report Wizard can organize products by category.

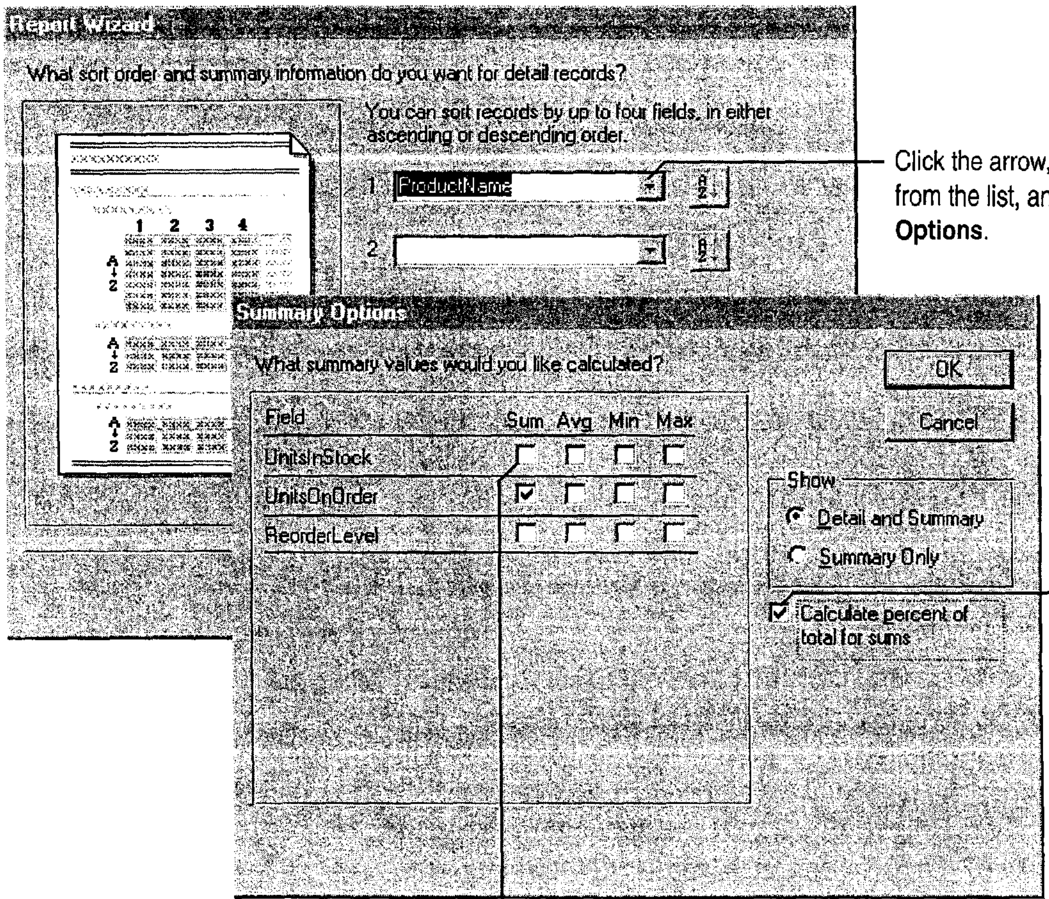
? **Want to know more?** Look up **Getting Results - Inventory Report** in Help.

Office Assistant button

Calculate Totals

Next, when the wizard prompts you for the name of the field you want to group on, accept the proposed field, CategoryName. The following screen displays sort order options. Add ProductName to the first sorting box. Then click **Summary Options**, and for the UnitsInStock field, click **Sum**. Finally, click **Calculate percent of total for sums**.

When you're finished, follow the instructions in the wizard to choose the style you want for your report, and then name it.



Click the arrow, select **ProductName** from the list, and then click **Summary Options**.

Click here to calculate the percentage of the total made up by each product category.

Click here to total the number of units in stock.

Want to see category totals without details about individual products? In the Report Wizard, on the screen that calculates totals and summaries, click **Summary Only**.

MS 114262

Want to know more? Look up **Getting Results - Inventory Report** in Help.

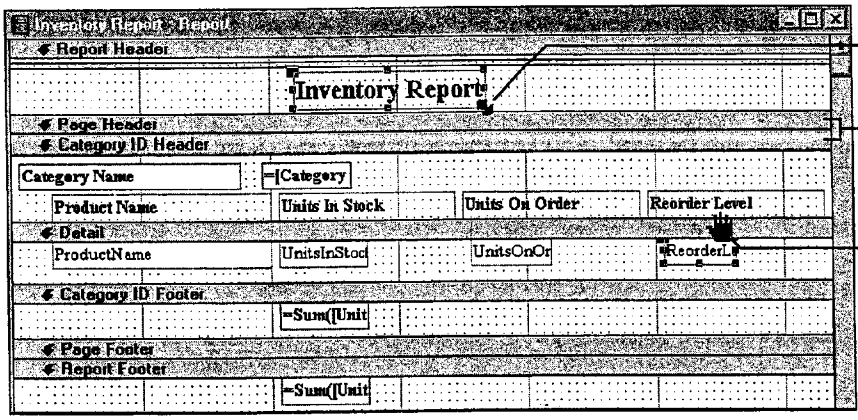
Office Assistant button

Customize the Appearance of Your Report

The Report Wizard automatically displays the report in print preview. After you see how the report will look when it's printed, you can adjust the layout before you print it (for example, you can center the title of the report).

To realign controls in a report, switch to report design view by clicking the **View** arrow and then clicking **Design View**.

In report design view, you see each element of your report on a grid that shows the relative position of that element on the page.



Click and drag a handle to adjust the size of a control.

Size a section by placing the pointer on the bottom edge of the section and then dragging it up or down.

Click and drag a control to reposition it.

Guidelines for Customizing Reports

Format headings so that they stand out Select the text box that contains the category name, and then select formatting options from the **Formatting** toolbar.

Copy a format quickly with the Format Painter Click the control whose format you want to copy, and then click the **Format Painter** button once to copy the format to a single control, or double-click the button to copy the format to multiple controls. Then click each control you want to format. If you're formatting multiple controls, click the **Format Painter** button again to turn off formatting.

Format Painter button

Add labels for the fields in your report If the **Control** toolbox is not visible, click **Control Toolbox** (**View** menu) to display it, and then click the **Label** tool. Position the pointer where you want the upper left corner of the label to appear, and then click to insert the label box. Type text for the label in the box.

Label tool

MS 114263

See how your layout changes will look when the report is printed After you finish working in report design view, switch back to print preview by clicking the **Print Preview** button. If you need to make more layout adjustments, click the **Close** button to return to report design view.

Print Preview button

Close button

Eliminate blank pages Check to see that the combined width of the report and the margins doesn't exceed the paper size selected in the **Page Setup** dialog box.

Next Steps

To	See
Get specific facts about your inventory, such as which products are on order	"Evaluate Sales Performance in a Microsoft Access Database," page 582

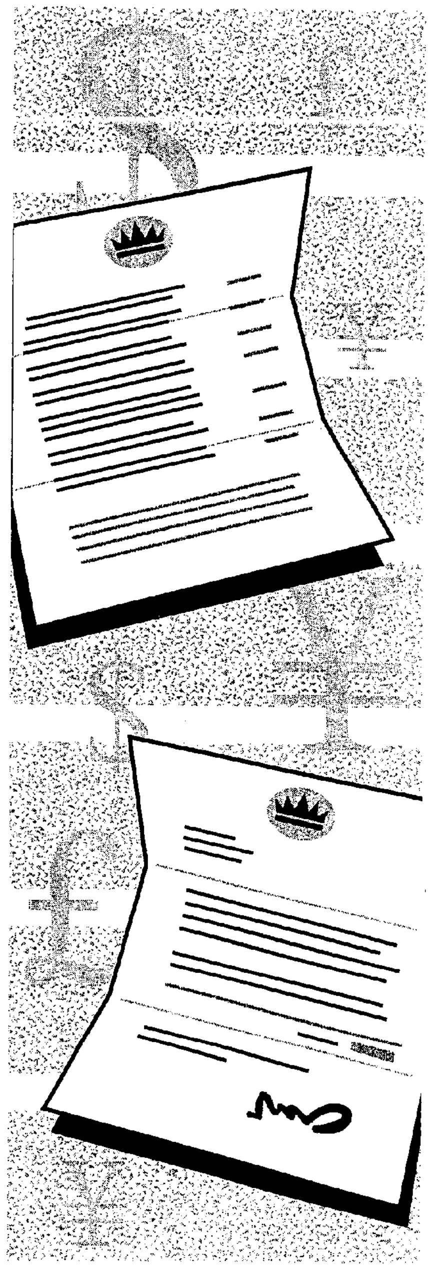
MS 114264

ARENDI-DEFS00001974

PART 12

Prepare Customer Bids

Contents



MS 114265

Create a Price List

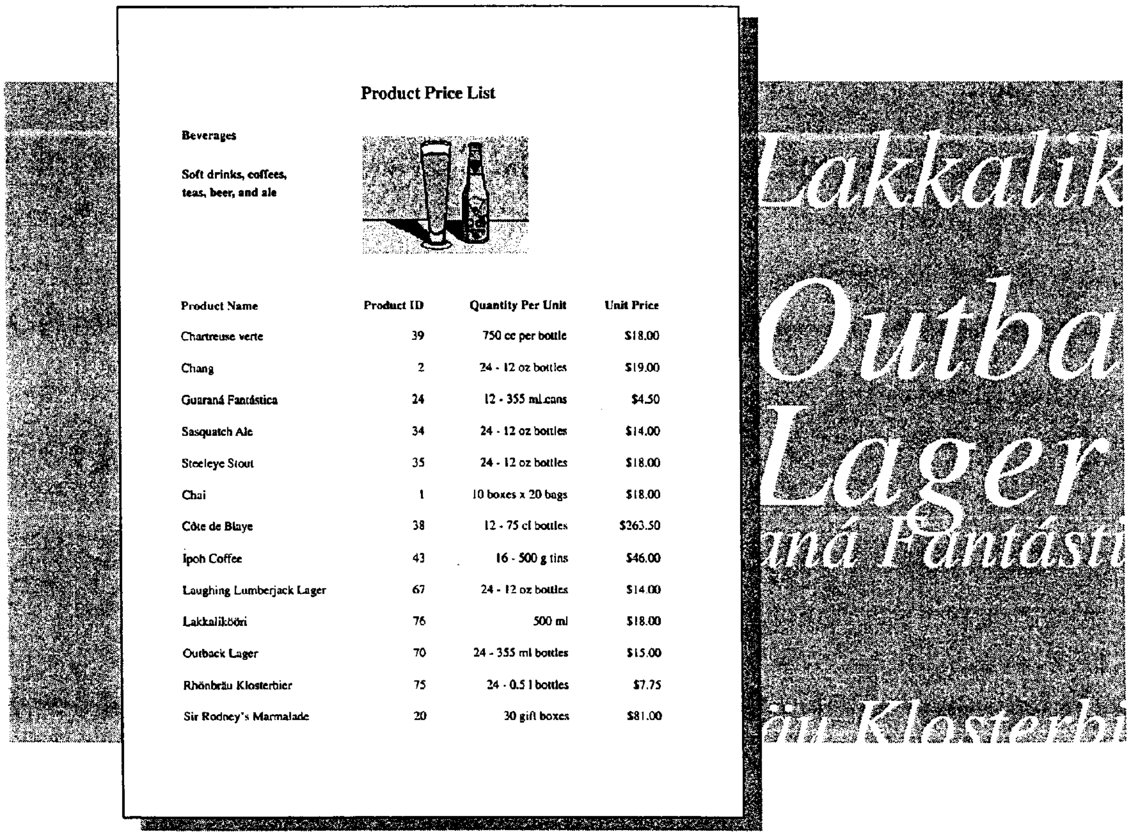
Create a Microsoft Access Report That Helps Sell Your Products

Suppose you own a company known as Northwind Traders, and you want to create a price list that promotes your company and its products. You can store product and price information in a Microsoft Access database, and then use the Report Wizard to produce a professional-looking price list. As prices change, you can update your price list by reprinting the report.

Key Features

Report Wizard

Report Design View



Product Price List

Beverages

Soft drinks, coffees, teas, beer, and ale

Product Name	Product ID	Quantity Per Unit	Unit Price
Chartreuse verte	39	750 cc per bottle	$18.00
Chang	2	24 - 12 oz bottles	$19.00
Guaraná Fantástica	24	12 - 355 ml cans	$4.50
Sasquatch Ale	34	24 - 12 oz bottles	$14.00
Steeleye Stout	35	24 - 12 oz bottles	$18.00
Chai	1	10 boxes x 20 bags	$18.00
Côte de Blaye	38	12 - 75 cl bottles	$263.50
Ipoh Coffee	43	16 - 500 g tins	$46.00
Laughing Lumberjack Lager	67	24 - 12 oz bottles	$14.00
Lakkalikööri	76	500 ml	$18.00
Outback Lager	70	24 - 355 ml bottles	$15.00
Rhönbräu Klosterbier	75	24 - 0.5 l bottles	$7.75
Sir Rodney's Marmalade	20	30 gift boxes	$81.00

To complete the steps in this topic you need Microsoft Office, Professional Edition or an individual copy of Microsoft Access installed.

Try it out The example in this topic uses the Northwind database included with Microsoft Access. You can follow the steps in the topic by opening this database, or you can create your own by using the Database Wizard.

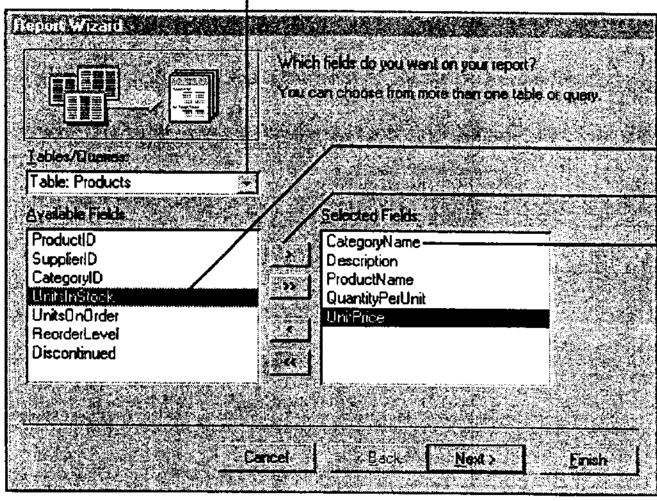
MS 114266

Begin the Report

You want your price list to include all the details your customers need to place an order—the product name and number, the quantity per unit, and the unit price—organized by category. When you use the Report Wizard, it's easy to gather and organize the information from your database and to display it in an attractive format.

In the database window, on the **Reports** tab, click **New**. Double-click **Report Wizard**, and then follow the instructions in the wizard. By using the Report Wizard, you can select fields from the tables and queries that contain the information you want to include in the price list. After selecting the information you want to include, select grouping, sorting, and summary options, and a format, style, and title for the report.

Select the Categories table first, and then select the Products table.



For each table, select the fields you want ...

... and then click here to add each field to your report.

When you select the Categories table, make sure to add the CategoryName field first so that the wizard organizes your products by category.

Create a report from data stored in a Microsoft Excel worksheet In Microsoft Excel, click the worksheet, and then click **MS Access Report** (**Data** menu).

Want to know more? Look up **Getting Results - Price List** in Help.

Office Assistant button

Adjust the Report Layout

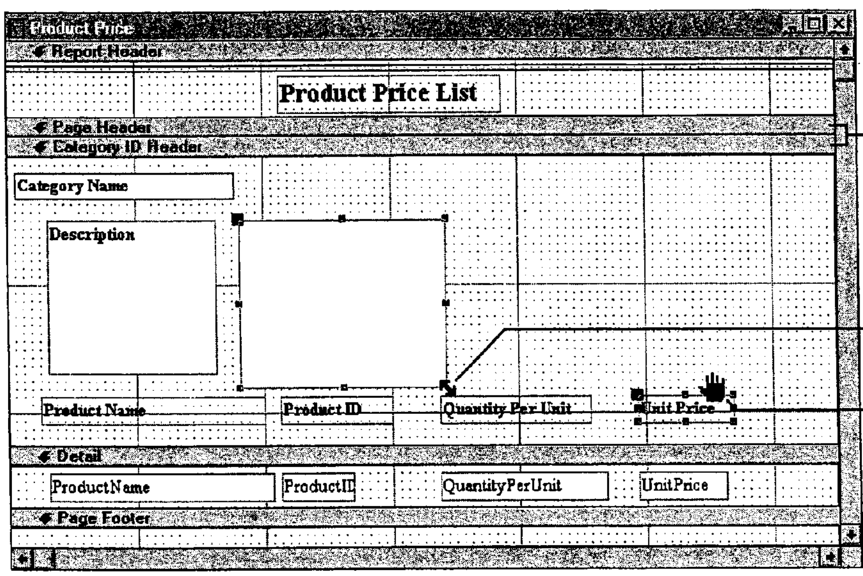
The Report Wizard produces an attractive price list, but you might want to move and realign information to reduce the space between items in your list. The wizard automatically displays the report it creates in Print Preview. To change the layout of your price list, click **Report Design View** (**View** menu) in the open report. You can adjust the layout of a report by resizing a *control* (such as a text box or a label) or by moving it to another position on the report. Each field you select in the wizard is represented by a control on the report.

- If you don't need a control included by the Report Wizard, click the control, and then press DELETE.
- To see how your layout changes will appear in the report, in report design view, click the **View** arrow and then select **Layout Preview**. If you need to make more adjustments, click the **Close Window** button to return to report design view.

View button

Close Window button

In report design view, you see each element of your report on a grid that shows the relative position of that element on the page.



MS 114268

ARENDI-DEFS00001978

Customize the report Use the **Formatting** toolbar to change text or add a border, background color, and other effects to a control.

Copy a format from one control to another Select the control with the format you want to copy. Click the **Format Painter** button once to copy the format to one control, or double-click the button to copy the format to several controls. Then click the control(s) you want to format.

Format Painter button

Format several controls at once Select the controls you want to format, and then select an option from the **Formatting** toolbar.

Want to know more? Look up **Getting Results - Price List** in Help.

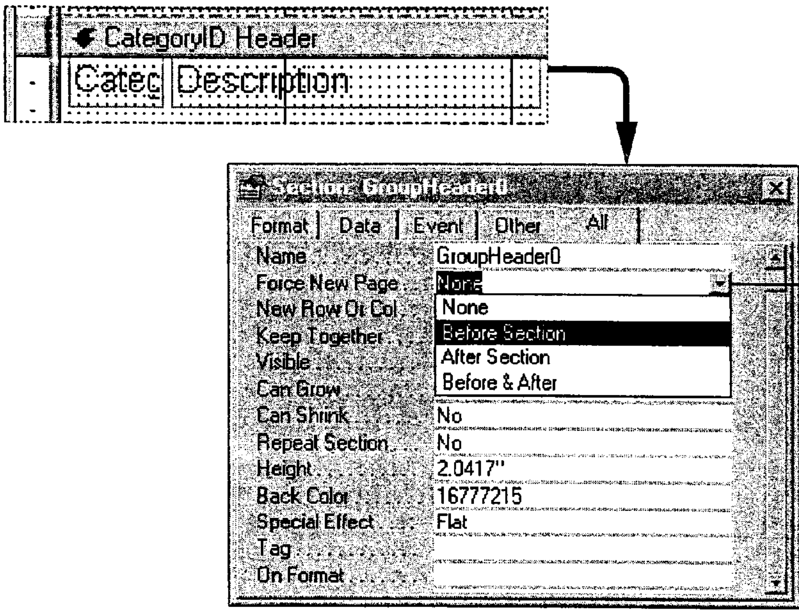
Office Assistant button

Print One Category Per Page

Now you can make it easier for your customers to find specific products by starting each product category on a new page.

If you're not already working in report design view, click **Report Design View (View** menu). Double-click the *section selector* that appears to the left of the **CategoryID** section bar to open that section's property sheet. In the **Force New Page** property box, click **Before Section**. To see how this change affects the appearance of the report, click the **Report View** arrow, and then select **Layout Preview**.

Double-click the section selector to open the property sheet for a section.



Click the arrow to display the properties list in the **Force New Page** property box, and then click **Before Section**.

Want to see how the report will look when it's printed? In report design view, click the **Report View** arrow, and then click **Print Preview**.

MS 114270

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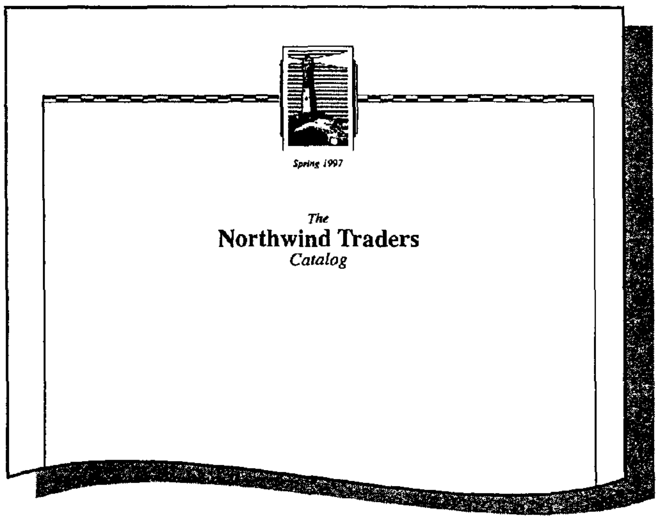
Add a Cover Sheet to Your Report

If you have a cover sheet saved as a Microsoft Word file, you can use it for your report. In the database window, on the **Reports** tab, click the name of the report, and then click **Design**. Select the **Report Header** section, and then click **Insert Object** (**Insert** menu). Click **Create from File**, click **Browse**, and then select the Word file that contains your cover sheet.

To print the cover on a separate page, double-click the section selector to the left of the **Report Header** section bar. In the property sheet, click **All**, click the **ForceNewPage** box, and then click the arrow. Select **After Section** from the list. To make the border of the cover disappear, click the **Format** tab, click in the **BorderStyle** property box, and then select **Transparent** from the list.



Guidelines for Formatting a Cover Sheet in Word

Before you import the cover sheet to Microsoft Access, you need to set page layout options in the document so that its size and orientation fall within the print area of your report. For example, suppose you want to set up your Microsoft Access report to print on 8.5-by-11-inch paper, portrait orientation, with one-inch margins on the top, bottom, left, and right sides.

MS 114271

In Microsoft Word, click **Page Setup** (**File** menu). On the **Paper Size** tab, click **Portrait**.

- Set the width to 6.5 inches, which is the width of your paper (8.5 inches) minus the sum of the left and right margins (2 inches).
- Set the height to 9 inches, which is the height of your paper (11 inches) minus the sum of the top and bottom margins (2 inches).

For more information on creating cover sheets or importing objects from Word, see "Create Letterhead and Matching Envelopes," on page 195.

Next Steps

To	See
Create a database by using the Database Wizard	"About Creating and Opening Documents and Databases," page 48
Create a report from a query	"Evaluate Sales Performance in a Microsoft Access Database," page 582
Save your report in a format that you can publish to the World Wide Web	"Use Microsoft Access to Retrieve and Publish Data," page 464

MS 114272

Prepare a Customer Quote

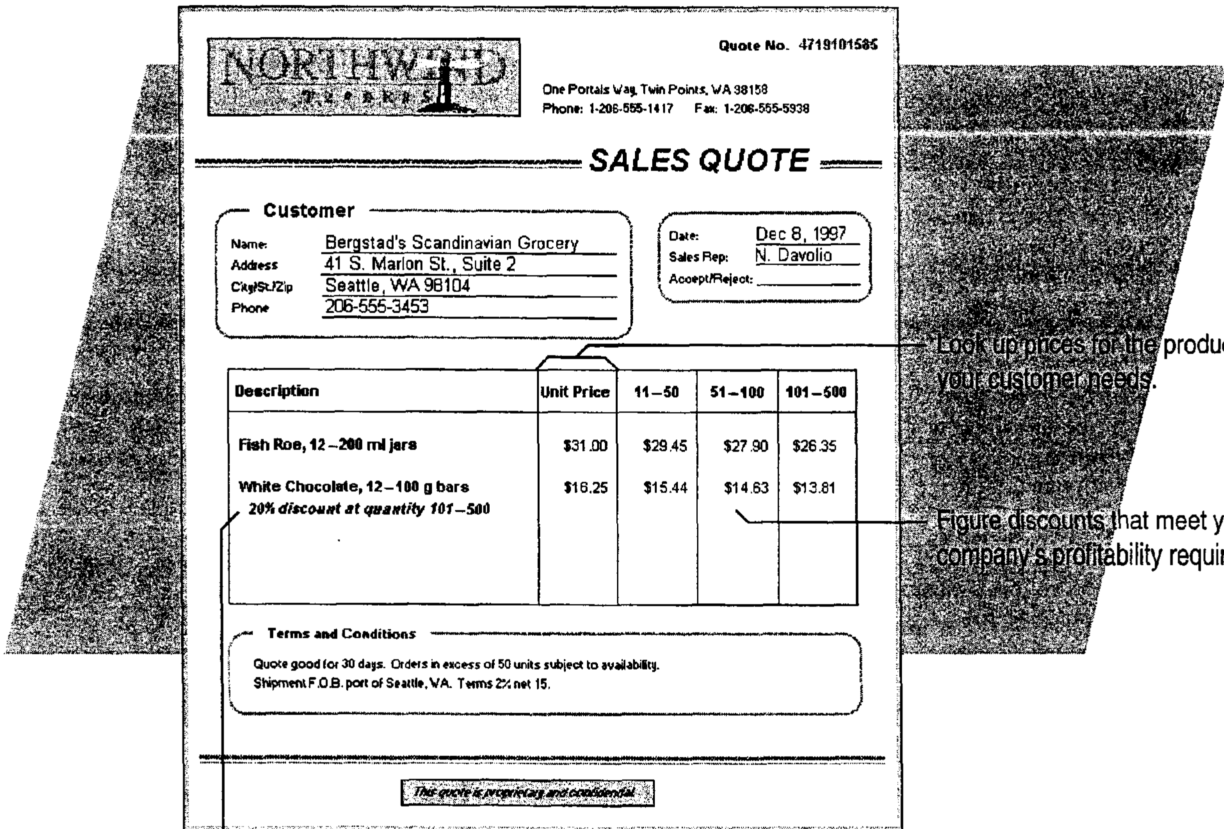
Get Information from a Price List and Calculate Discounts

To get the customer's order, you need to put together a quote that showcases your company's products. You want to tailor the product offerings and discounts to the customer's needs. But you must also consider how much profit your company makes on the order. Microsoft Excel makes it easy for you to put together the information for your quote and present it to your client.

Key Features

LOOKUP Functions

Advanced Filtering



NORTHWIND TRADERS

Quote No. 4719101585

One Portals Way, Twin Points, WA 98158
Phone: 1-206-555-1417 Fax: 1-206-555-5938

SALES QUOTE

Customer

Name: Bergstad's Scandinavian Grocery
Address: 41 S. Marion St., Suite 2
City/St/Zip: Seattle, WA 98104
Phone: 206-555-3453

Date: Dec 8, 1997
Sales Rep: N. Davolio
Accept/Reject:

Description	Unit Price	11–50	51–100	101–500
Fish Roe, 12–200 ml jars	$31.00	$29.45	$27.90	$26.35
White Chocolate, 12–100 g bars *20% discount at quantity 101–500*	$16.25	$15.44	$14.63	$13.81

Terms and Conditions

Quote good for 30 days. Orders in excess of 50 units subject to availability.
Shipment F.O.B. port of Seattle, WA. Terms 2% net 15.

This quote is proprietary and confidential.

Look up prices for the products your customer needs.

Figure discounts that meet your company's profitability requirements.

Can you offer a special discount to make your quote more attractive?

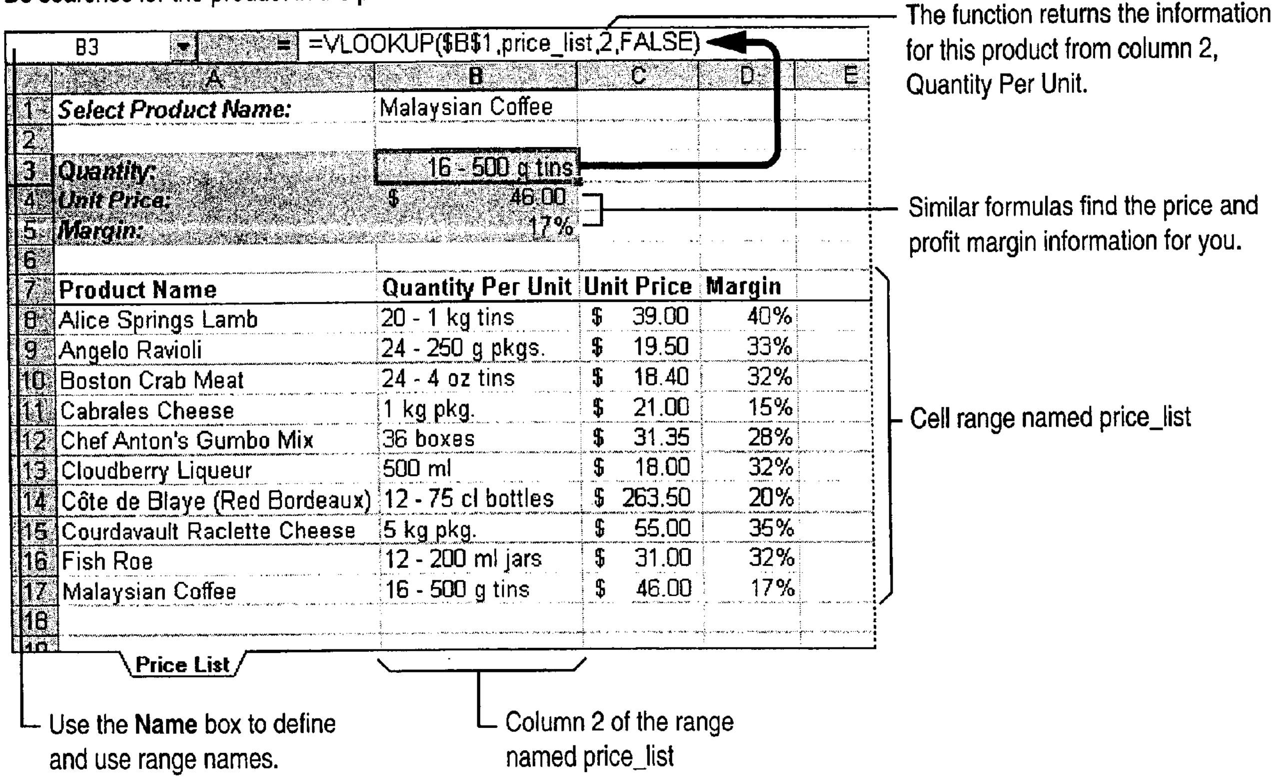
MS 114273

Look Up Prices

The first step is to get the product and pricing information for your quote. You know your product lines, and you know that prices fluctuate. Your company frequently updates its standard price list.

Here's a fast and easy way to check on prices.

When you specify a product name in cell B1, the VLOOKUP function in cell B3 searches for the product in the price list below.



MS 114274

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Use the Paste Function button to enter the VLOOKUP function Click the **Paste Function** button, and then click the **VLOOKUP** function. Follow the instructions on the screen.

Paste Function button

Use the Lookup Wizard The Lookup Wizard is an add-in that helps make using the LOOKUP functions easier. Click **Add-Ins** (**Tools** menu), and then select **Lookup Wizard**. If the Lookup Wizard does not appear in the list of add-ins, you'll need to rerun Office Setup. For more information, see "Install and Start Microsoft Office," page 28.

Use named ranges to make your formulas easier to read Select the range you want—for example, A7:D17 in the illustration on the previous page, and then type the name you want to use, such as price_list, in the **Name** box.

Create a drop-down list You could use data validation to create a drop-down list of product names in cell B1. For more information, see "Validate Your Data as You Enter It," page 359.

Is Your Price List Stored in a Database?

Use the Query Wizard to get the data from your company's database into a worksheet. Query can read most database formats and update the data for you as it changes. For more information, see "Get Sales Information from a Database," page 548.

Want to know more? Look up **Getting Results - Customer Quote** in Help.

Office Assistant button

Select Products that Meet Profit Requirements

Do you want to quote only products in a certain price or profitability range? You can filter your price list to show only products that meet your requirements. Just type the column heading and criteria in two unused cells. Then click anywhere in the price list, click **Advanced Filter** (**Data** menu, **Filter** submenu), and specify the criteria range you just typed.

Filter the Margin column to see only the rows for products that return a 25 percent or greater profit.

	A	B	C	D	E
1	*Select Product Name:*	Fish Roe			
2					
3	*Quantity:*	12 - 200 ml jars		*Margin*	
4	*Unit Price:*	$ 31.00		>=25%	
5	*Margin:*	32%			
6					
7	**Product Name**	**Quantity Per Unit**	**Unit Price**	**Margin**	
8	Alice Springs Lamb	20 - 1 kg tins	$ 39.00	40%	
9	Angelo Ravioli	24 - 250 g pkgs.	$ 19.50	33%	
10	Boston Crab Meat	24 - 4 oz tins	$ 18.40	32%	
12	Chef Anton's Gumbo Mix	36 boxes	$ 31.35	28%	
13	Cloudberry Liqueur	500 ml	$ 18.00	32%	
15	Courdavault Raclette Cheese	5 kg pkg.	$ 55.00	35%	
16	Fish Roe	12 - 200 ml jars	$ 31.00	32%	
18					
19					
20					
21					

Price List

Do you have simple filtering criteria? If you're using uncomplicated criteria, you can use **AutoFilter** (**Data** menu, **Filter** submenu) to filter your list.

Want to know more? Look up **Getting Results - Customer Quote** in Help.

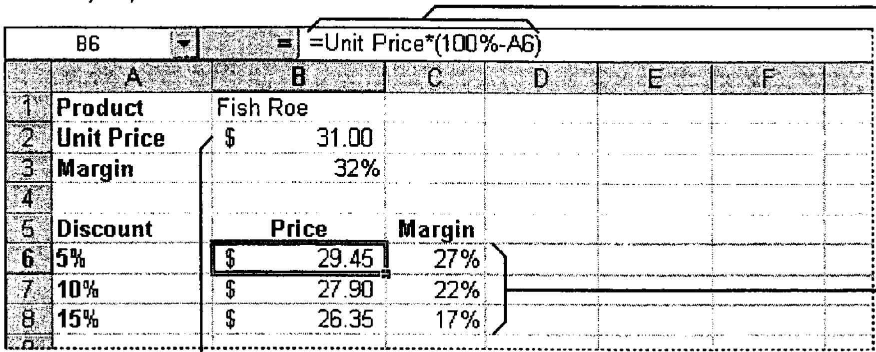
Office Assistant button

Extract and Quote the Prices

What discounts can you offer and still turn a profit? Given a base price and profit margin, you can construct a simple model that will answer this question. Using information from your price list, calculate the effects of different discounts. Then copy the product information and discount prices to your customer quote form.

Copy the product name, unit price, and margin from your price list to cells B1, B2, and B3.

In cell B6, multiply the unit price by the discounted percentage in cell A6.



The formulas in these cells subtract the discount percentage from the margin.

Microsoft Excel automatically determines that the name "Unit Price" refers to cell B2, the cell directly to the right of the label of the same name.

Next Steps

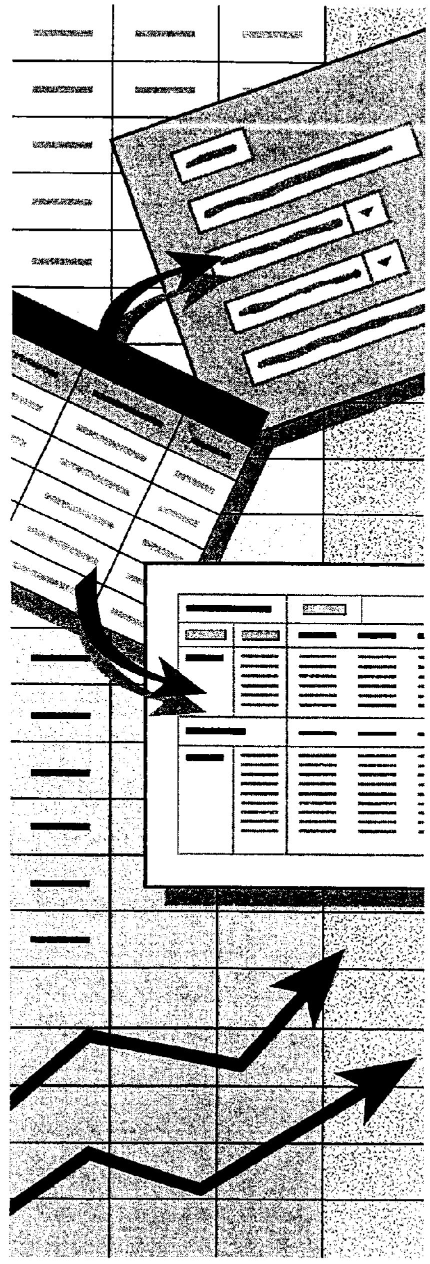
To	See
Use an online form to write up the quote	"Create a Form for Online Invoices," page 250
Fax the quote to your customer	"Create a Fax Cover Sheet and Send a Fax," page 192

MS 114277

PART 13

Analyze and Report Sales Data

Contents



MS 114278

What Method Should You Use to Analyze Your Sales Data?

Microsoft Excel and Microsoft Access provide you with complete flexibility to analyze and summarize data. Regardless of where your data originates, you can use all of the powerful features of both applications to create the summaries, reports, and charts you need.

The next few topics show you how to proceed, depending on where your data is stored initially. Topics in other parts of this book and in Help show you other analysis methods that you can apply to data, sales or otherwise.

For Data Stored in Microsoft Access

Use the following table to decide which topics to read for more information.

If you want to	Do this
Create a detailed report that organizes, subtotals, and summarizes your data	Run the Microsoft Access Report Wizard. For more information, see "Create a Price List," page 532.
Create a chart that summarizes your data graphically	Run the Microsoft Access Chart Wizard. See "Create a Chart from a Database," page 272.
Create a Microsoft Excel summary table that lets you change your view of the data dynamically	Create a Microsoft Excel PivotTable. For more information, see "Create a Sales Summary from a Microsoft Access Database," page 576.
Organize, subtotal, and summarize the data by using Microsoft Excel	In Microsoft Access, click **Office Links** (**Tools** menu), and then click **Analyze It With MS Excel** to export a snapshot of the data to a Microsoft Excel worksheet. Then see "Create a Detailed Sales Report," page 556. When your data changes, you must repeat these steps for updated results.

MS 114279

ARENDI-DEFS00001989

For Data Stored in Microsoft Excel

Use the following table to decide which topics to read for more information.

If you want to	Do this
Create a detailed report that organizes, subtotals, and summarizes your data	Add automatic subtotals to your data. For more information, see "Create a Detailed Sales Report," page 556.
Create a chart that summarizes your data graphically	Run the Microsoft Excel Chart Wizard. For more information, see "Create a Chart from Worksheet Data," page 260.
Create a summary table that lets you change your view of the data dynamically	Create a Microsoft Excel PivotTable. For more information, see "Create a Sales Summary," page 563.
Create a detailed Microsoft Access report without making changes to your original worksheet	Run the Microsoft Access Report Wizard directly from your Microsoft Excel worksheet. Click **MS Access Report** (**Data** menu). This command appears only if the AccessLinks add-in is installed and available. Click **Add-Ins** (**Tools** menu), and then click **AccessLinks Add-In**. If this option does not appear, rerun Setup and install the Data Access options. For more information, see "Install and Start Microsoft Office," page 28.

If Your Data Is Stored Somewhere Other Than in Microsoft Access or Microsoft Excel

Both Microsoft Access and Microsoft Excel let you work with data from external sources.

Import files into or link files to your Microsoft Access database
Importing a file copies a snapshot of its contents into your database. Creating a link allows you to work with a file that continues to be maintained in its originating application. For more information, see "Use Office Applications Together," page 169.

Bring data into your Microsoft Excel worksheet by using Microsoft Query You can analyze external data in Microsoft Excel and refresh the data in your worksheet when it changes. See "Get Sales Information from a Database," page 548.

MS 114280

Get Sales Information from a Database

Bring Data from Almost Anywhere to Your Microsoft Excel Worksheet

Chances are you sometimes work with data that isn't stored on your computer. For example, your company may compile sales statistics in a database located on a networked mainframe.

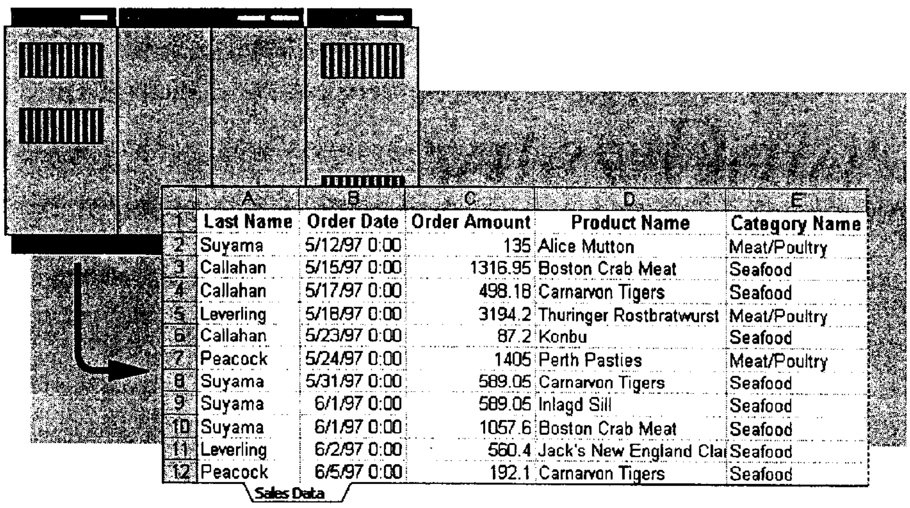
Out of mountains of detailed data in the corporate database, extract just what is relevant to your work by using a *query*—a method of extracting specific data from a database. Then you can use familiar spreadsheet analysis tools on that data, without retyping it.

Key Features

Microsoft Query

Query Wizard

Select just the data you need, and return it to Microsoft Excel for further analysis.



	A	B	C	D	E
1	Last Name	Order Date	Order Amount	Product Name	Category Name
2	Suyama	5/12/97 0:00	135	Alice Mutton	Meat/Poultry
3	Callahan	5/15/97 0:00	1316.95	Boston Crab Meat	Seafood
4	Callahan	5/17/97 0:00	498.18	Carnarvon Tigers	Seafood
5	Leverling	5/18/97 0:00	3194.2	Thuringer Rostbratwurst	Meat/Poultry
6	Callahan	5/23/97 0:00	87.2	Konbu	Seafood
7	Peacock	5/24/97 0:00	1405	Perth Pasties	Meat/Poultry
8	Suyama	5/31/97 0:00	589.05	Carnarvon Tigers	Seafood
9	Suyama	6/1/97 0:00	589.05	Inlagd Sill	Seafood
10	Suyama	6/1/97 0:00	1057.6	Boston Crab Meat	Seafood
11	Leverling	6/2/97 0:00	560.4	Jack's New England Clai	Seafood
12	Peacock	6/5/97 0:00	192.1	Carnarvon Tigers	Seafood

Before you start you need to install and enable Microsoft Query and the correct Open Database Connectivity (ODBC) driver for your data source. If you chose the Minimum or Typical installation, you need to run Setup again to install Microsoft Query. See your database manager to find out which ODBC driver you need.

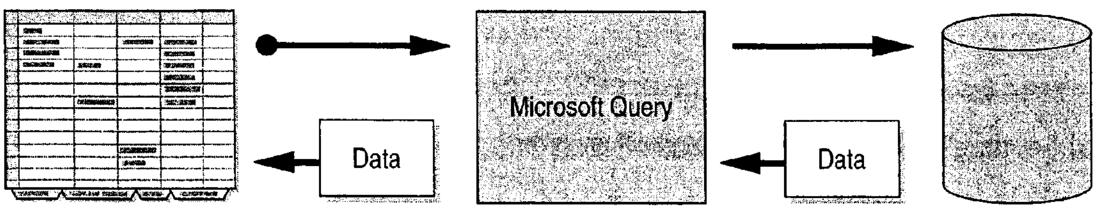
Set Up a Link to Your Database

The first time you get the external data, you need to open a new workbook and set up a connection to your database: Starting with a blank worksheet, click **Create New Query** (**Data** menu, **Get External Data** submenu) to define your database as a *data source*. A data source can be a database file, a Microsoft Excel workbook, or a text file. When you name a new data source, you associate your database with one of the ODBC drivers installed on your machine.

In the **Choose Data Source** dialog box, make sure the **Use the Query Wizard to create/edit queries** check box is selected. Select **New Data Source**, click **OK**, and then go through the four steps in the **Create a New Data Source** dialog box.

[?] For Help on dialog box options, click this button and then click the option.

You use Microsoft Query both to contact your external database and to return the data to your worksheet.



Microsoft Excel worksheet

External database

Important Each data source has different requirements. For example, your data source might require you to enter a password. For information on these requirements, contact the manager of the database.

Run Web queries Gather information from locations on the World Wide Web, or from your company's intranet. Click **Run Web Query** (**Data** menu, **Get External Data** submenu).

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Need to Get Data from Different Databases?

You can work with just about any popular mainframe or microcomputer database format. You can open dBASE .dbf files directly into Microsoft Excel worksheets. Or, by using the method described in this topic, you can use ODBC drivers to tap databases like Microsoft Access, SQL Server, FoxPro, and Paradox.

Missing the driver you need? Check with Microsoft, because new ones frequently become available. Your database vendor also might know about additional drivers. If you have Internet access, you can check the Microsoft Web site by clicking **Microsoft on the Web** (**Help** menu).

When all else fails See whether you can get a text-only version of the data. Import the text file into Microsoft Excel by clicking **Open** (**File** menu) and then selecting **Text Files** from the **Files of type** list.

Want to know more? Look up **Getting Results - Get Sales Information** in Help.

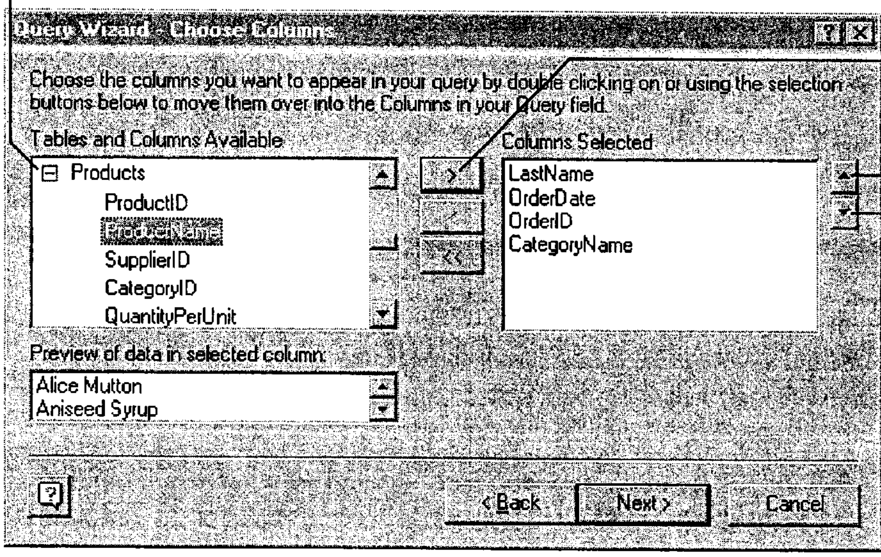
Office Assistant button

Get the Data from the Database

The Query Wizard is the best way to create simple queries in Microsoft Excel. The wizard guides you through the process of setting up a query by listing the *database tables* and the data they contain. Each table is a grid much like a worksheet. Columns are fields (categories); rows are data records.

Suppose you want to know how many orders each salesperson is getting for each product category. Find the columns you want in the **Tables and Columns Available** list, and then add them to the **Columns Selected** list.

Click here to expand the table name to show the columns it contains.



Click here to add the selected column name to the **Columns Selected** list.

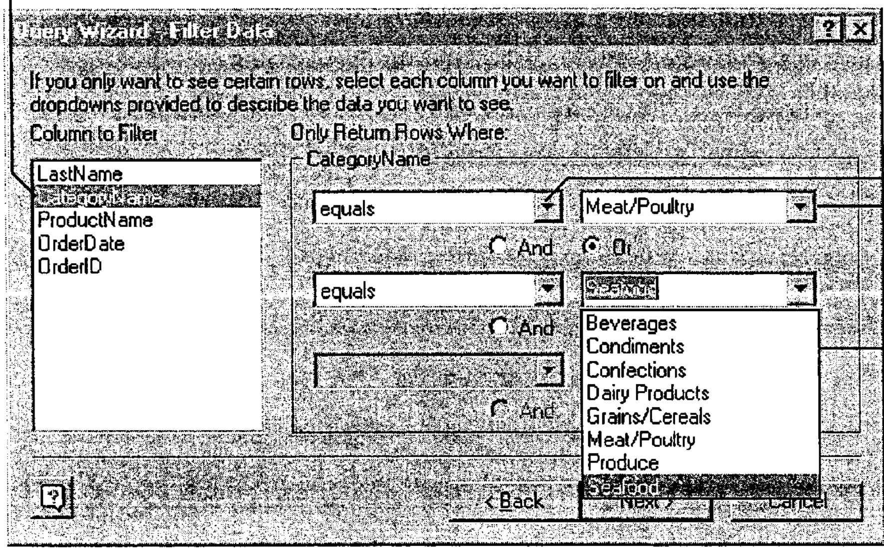
Select a column name and click these buttons to change the order of columns.

If your query is very complex you can bypass the Query Wizard and use Microsoft Query instead. In the **Create a New Data Source** dialog box, clear the **Use Query Wizard to create/edit queries** check box. For more information, see "For More Power, Use Microsoft Query," page 554.

Filter the Data and Return It to the Worksheet

Your database might have more records than the 65,535-row limit of your worksheet. You'll want to exclude data you don't need, such as products tracked by other sales managers.

Click the name of the column you want to filter.



Click here to select an operator from the list.

Database records containing the value you select here are returned to the worksheet.

Sort it out The next step of the Query Wizard, the **Sort Order** dialog box, allows you to specify the order in which you want the data sorted before it is returned to the worksheet.

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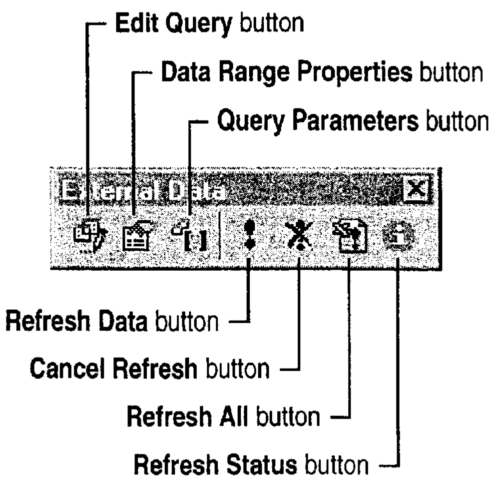
Check the status of your query Returning data to your worksheet might take awhile, depending on the size of the database and the complexity of your query. Click the **Refresh Status** button on the **External Data** toolbar, which appears automatically after you finish your query.



Try it out If you have Microsoft Access, you can query the Northwind sample database. The example illustrated here uses the Northwind database as the data source.

Save Your Queries

Click **Save Query** in the **Finish** dialog box of the Query Wizard if you want to run the same query again later. Saved database queries appear on the **Queries** tab of the **Choose Data Source** dialog box, or appear when you click **Run Database Query** (**Data** menu).

Want to know more? Look up **Getting Results - Get Sales Information** in Help.

Office Assistant button

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For More Power, Use Microsoft Query

If you want to go beyond the capabilities of the Query Wizard and employ complex queries and parameters to extract data from your database, use Microsoft Query.

Click **Create New Query** (**Data** menu). In the **Choose Data Source** dialog box, make sure that the **Use the Query Wizard to create/edit queries** check box is cleared.

Select your data source, and then click **OK** to display the **Add Tables** dialog box, in which you specify the database tables you want to use.

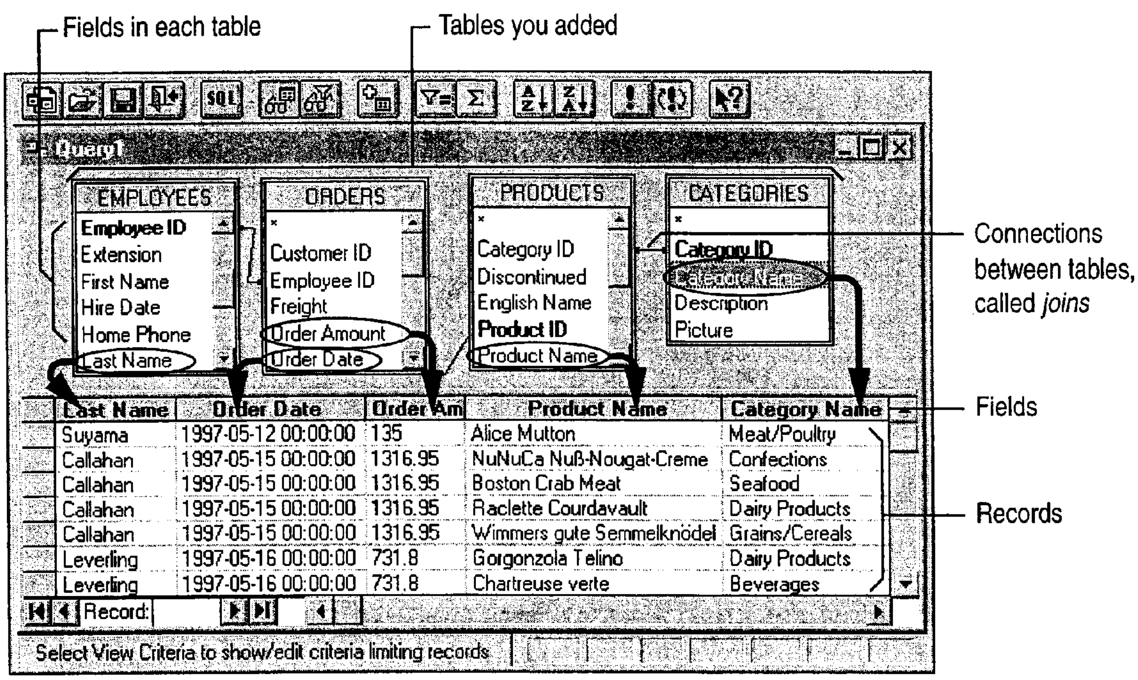
Drag to the lower part of the Query window each field that has data you want.

If you want to narrow even further the list of data returned to the worksheet, click **Add Criteria** (**Criteria** menu). Select a database field, operator, and target value, and then click **Add** for each criterion you want to add.

Click **Return Data** when you're ready to return the data to your Microsoft Excel worksheet for further analysis.

For more information, click **Microsoft Query Help** (**Help** menu) while Microsoft Query is active.

The Query window lets you view and select external data.



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Next Steps

To	See
Format the data	"Make Your Microsoft Excel Worksheet Look Great," page 148
Analyze the data	"Create a Sales Summary," page 563

MS 114288

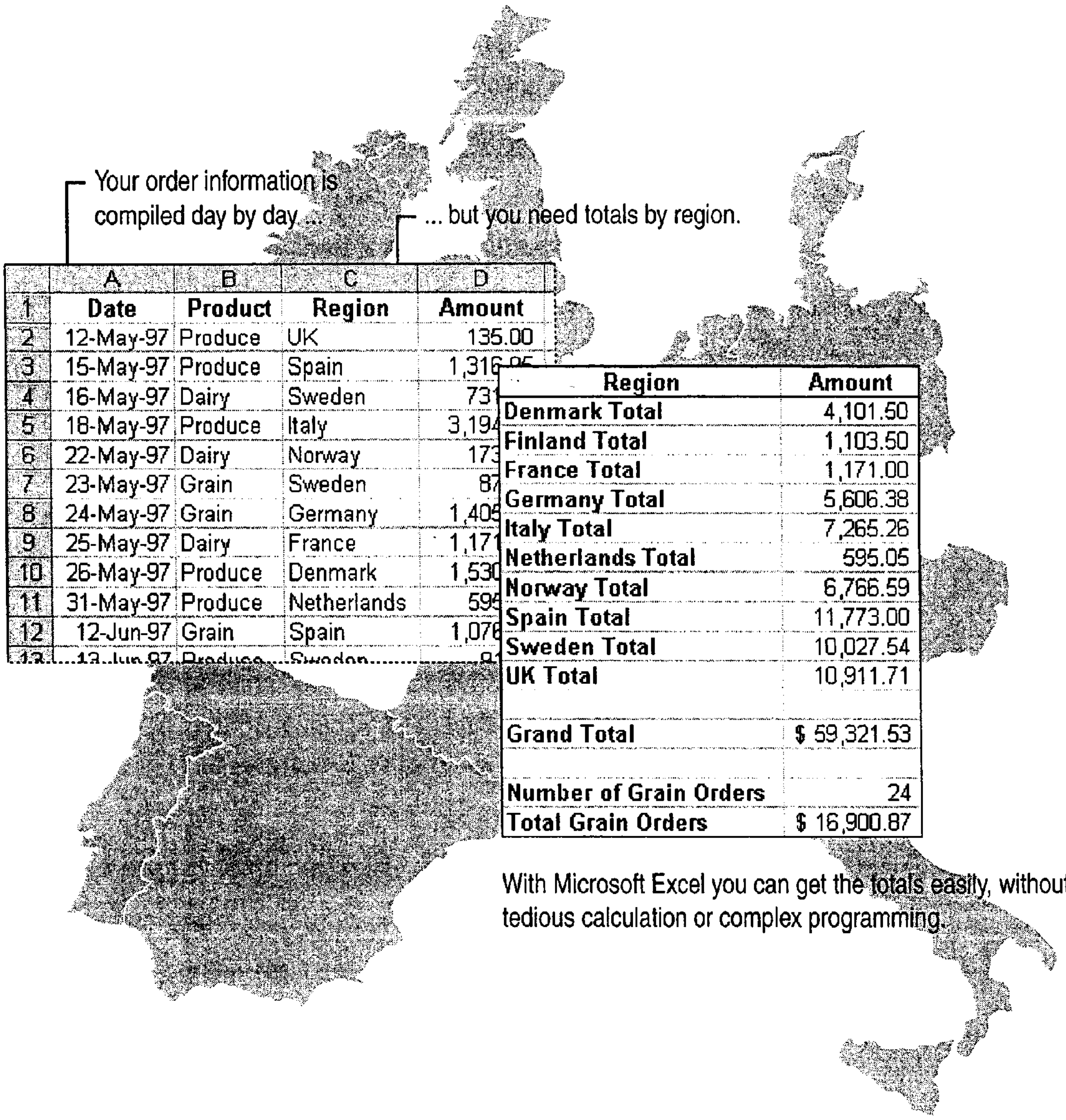
Create a Detailed Sales Report

Insert Subtotals on Your Detail Worksheet

Do you have detailed data and want to see totals? For example, suppose you receive information about orders as each is filled over the course of several months. You might need to calculate the total sales for each region and the total product sales across the regions. Microsoft Excel can rapidly organize and sum up this kind of data for you.

Key Features

- Sorting
- Subtotals
- Grouping and Outlining



	A	B	C	D
1	Date	Product	Region	Amount
2	12-May-97	Produce	UK	135.00
3	15-May-97	Produce	Spain	1,316
4	16-May-97	Dairy	Sweden	731
5	18-May-97	Produce	Italy	3,194
6	22-May-97	Dairy	Norway	173
7	23-May-97	Grain	Sweden	87
8	24-May-97	Grain	Germany	1,405
9	25-May-97	Dairy	France	1,171
10	26-May-97	Produce	Denmark	1,530
11	31-May-97	Produce	Netherlands	595
12	12-Jun-97	Grain	Spain	1,076
13	13-Jun-97	Produce	Sweden	8

Region	Amount
Denmark Total	4,101.50
Finland Total	1,103.50
France Total	1,171.00
Germany Total	5,606.38
Italy Total	7,265.26
Netherlands Total	595.05
Norway Total	6,766.59
Spain Total	11,773.00
Sweden Total	10,027.54
UK Total	10,911.71
Grand Total	$ 59,321.53
Number of Grain Orders	24
Total Grain Orders	$ 16,900.87

With Microsoft Excel you can get the totals easily, without tedious calculation or complex programming.

MS 114289

Arrange the Data by Product and Region

First group together the data you want to total. Click **Sort** (**Data** menu), and sort the data by region.

Sorting both alphabetizes the regions and groups the orders for each region together.

	A	B	C	D	E	F	G
1	**Date**	**Product**	**Region**	**Amount**			
2	9-Jun-97	Dairy	Denmark	1,148.00			
3	26-May-97	Produce	Denmark	1,530.00			
4	7-Jun-97	Produce	Denmark	1,423.50			
5	5-Jun-97	Dairy	Finland	192.10			
6	12-Jul-97	Dairy	Finland	351.00			
7	2-Jun-97	Grain	Finland	560.40			
8	17-May-97	Dairy	Germany	498.18			
9	30-May-97	Dairy	Germany	470.00			
10	7-Jul-97	Dairy	Germany	747.00			
11	24-May-97	Grain	Germany	1,405.00			
12	30-May-97	Grain	Germany	470.00			
13	30-May-97	Produce	Germany	470.00			
14	26-Jun-97	Produce	Germany	17.40			

You don't have to select the list before sorting Just click any cell in the column you want to sort, and then sort. Microsoft Excel automatically determines where your data starts and ends. For more information about setting up lists that are easy to sort, see "Create a Business Contact List in Microsoft Excel," page 353.

Want to know more? Look up **Getting Results - Subtotals** in Help.

Office Assistant button

MS 114290

Subtotal Each Region

With regional data grouped together, you can total each region's sales in a single operation. Click **Subtotals** (**Data** menu). In the **Subtotal** dialog box, at each change in region, use the SUM function, and add a subtotal to the Amount column.

Outline symbols show how your data is grouped.

With one command, you can add a total for each region.

	A	B	C	D	E
1	**Date**	**Product**	**Region**	**Amount**	
2	9-Jun-97	Dairy	Denmark	1,148.00	
3	26-May-97	Produce	Denmark	1,530.00	
4	7-Jun-97	Produce	Denmark	1,423.50	
5			**Denmark Total**	$ 4,101.50	
6	5-Jun-97	Dairy	Finland	192.10	
7	12-Jul-97	Dairy	Finland	351.00	
8	2-Jun-97	Grain	Finland	560.40	
9			**Finland Total**	$ 1,103.50	
10	25-May-97	Dairy	France	1,171.00	
89	3-Jul-97	Produce	UK	909.91	
90	6-Jul-97	Produce	UK	850.50	
91			**UK Total**	$10,911.71	
92			**Grand Total**	$59,321.53	

You can also calculate the grand total at the end of the list.

Want to subtotal selected parts of your data? Filter the data first. For example, you might want to see subtotals for only some of the regions. By clicking **AutoFilter** (**Data** menu, **Filter** submenu), you can filter the regions and then calculate subtotals. For more information, see "Zero In on the Contacts You Want," page 357.

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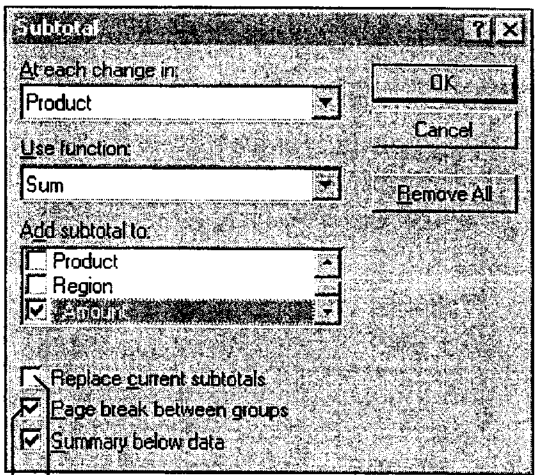
More Power

Want to total product sales within each region? You can add product totals in addition to the regional totals and grand total. First click **Sort** (**Data** menu) to sort the data by two columns: Sort by region, and then by product. Then create subtotals for the regions.

Create nested subtotals Repeat the **Subtotals** command at each change in product, but don't replace the current (regional) subtotals.

Add averages, counts, and other summaries The **Use function** list in the **Subtotal** dialog box gives you a choice of functions you can use to summarize your data.

Print each subtotaled group on a separate page If you want, Microsoft Excel will automatically insert page breaks when you create the totals.

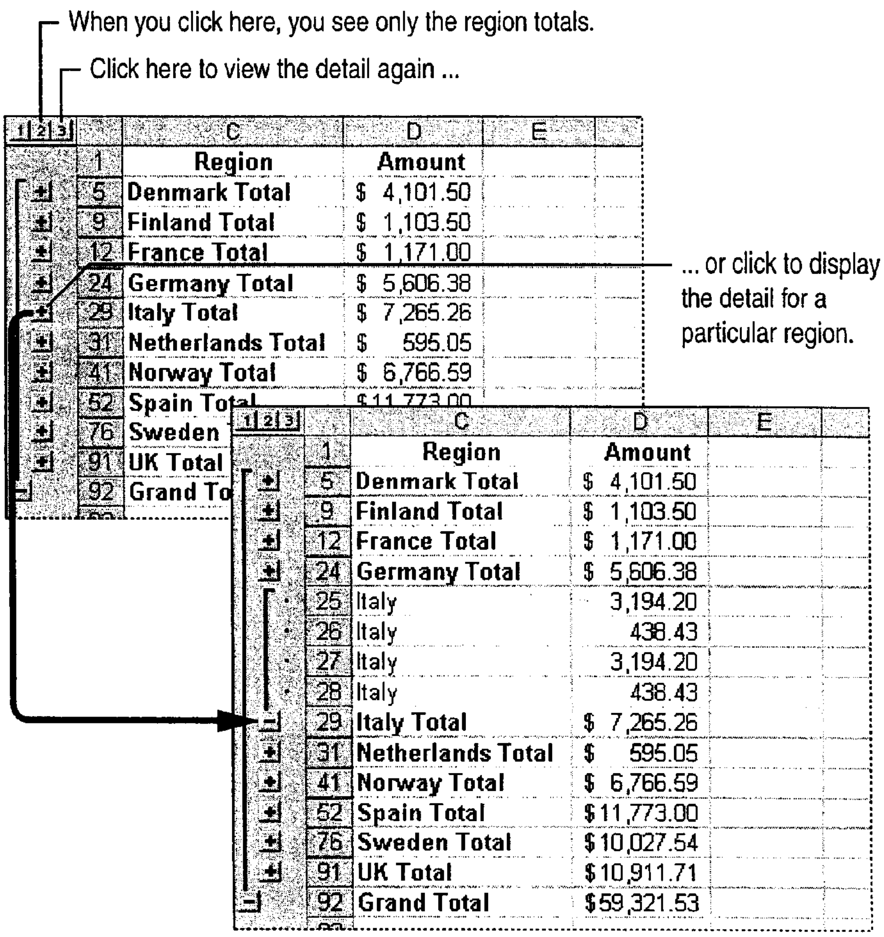


To nest the subtotals, clear this check box the second time you subtotal.

Check here to print each subtotaled group on a separate page.

View the Summary Without the Detail

In a long list of data, it's inconvenient to have to scroll to see the subtotals. When you add subtotals, your worksheet is outlined for you automatically. Outlining lets you choose the level of detail to view, so you can show exactly the information you need.



Use a PivotTable instead of outlining For more information, see "Create a Sales Summary," page 563.

Hide columns that you don't want to see Select a column to hide, and then click **Hide** (**Format** menu, **Column** submenu).

Want to know more? Look up **Getting Results - Subtotals** in Help.

Office Assistant button

MS 114293

Count Orders for a Product Across Regions

Suppose you also want to know how many orders were filled for a particular product, but the products sell across regions, so the data isn't grouped together. With the COUNTIF function, you can count the rows that contain a particular product name.

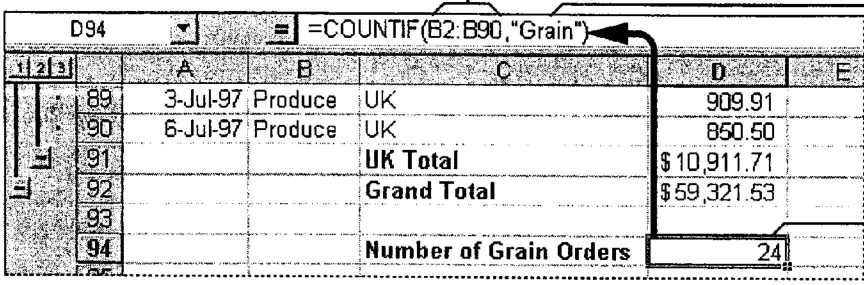
With the **Paste Function** button, it's easy to set this up.

Paste Function button

In this example, the formula in cell D94 counts the number of rows that contain the word "Grain" in column B.

Enter the range of cells that contains the product names.

For the criteria, type the name of the product that you want to count.



Your COUNTIF formula counts only the rows for grain orders.

Want to know which regions are over quota? COUNTIF can compare each row with the amount of your sales quota. For example, if the quota is $3,000 per region, you could use the following formula: `=COUNTIF(D2:D90,">3000")`.

Want to count empty cells too? Use the COUNTBLANK function to calculate the total number of empty cells in a range.

Total the orders for each product The SUMIF function adds only the amounts for the criteria you specify in the formula. For example, you could calculate the total grain orders by using the following formula: `=SUMIF(B3:B90,"Grain",D3:D90)`.

Find errors in formulas quickly If a cell in which you've entered a formula displays an error message, such as DIV/0!, Microsoft Excel can show you where the error is. Use the **Auditing** toolbar. Click **Show Auditing Toolbar** (**Tools** menu, **Auditing** submenu) to find the source of the error.