EXHIBIT 8

Part 2

Automate Mail Management

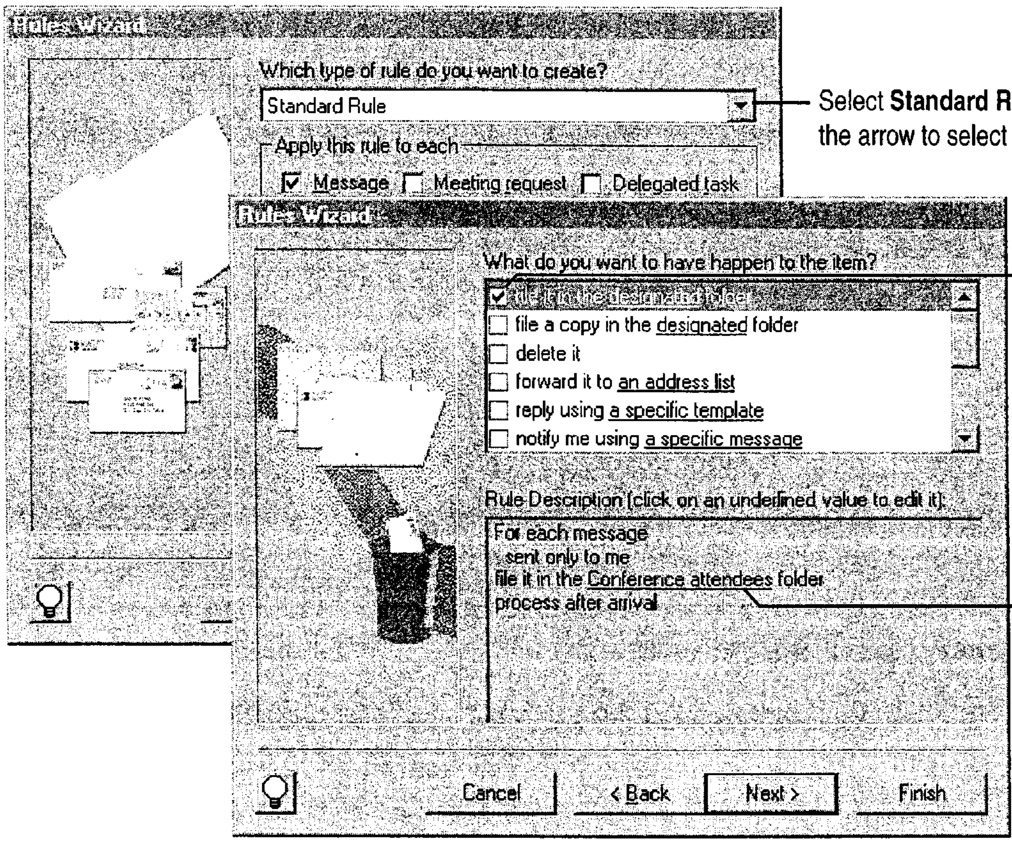
You have requested that conference attendees who register by e-mail include "Inspired Technologies conference" in the subject line. Now you can add a *rule*, an automated instruction, to move registration e-mail to a separate folder so that the messages won't be added to and possibly misplaced in your Inbox.

Important The Rules Wizard is located on the Outlook Web site. It does not ship with Outlook. To download it, go to:

http://www.microsoft.com/outlook/

Click **Rules Wizard** (**Tools** menu), and then click **New**. Select **Standard Rule** from the list, and then follow the instructions in the wizard.

You can use the Rules Wizard to help you manage messages, meeting requests, and tasks.



Select **Standard Rule** to create a rule, or click the arrow to select a "fill-in-the-blank" rule.

Select the check boxes for the rule options you want ...

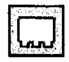
... then click the underlined text to finish defining the rule.

Let Outlook help you set up a rule Use a "fill-in-the-blank" rule instead of starting from scratch. Click **Rules Wizard** (**Tools** menu), click **New**, and then select rules from the list.

MS 114116

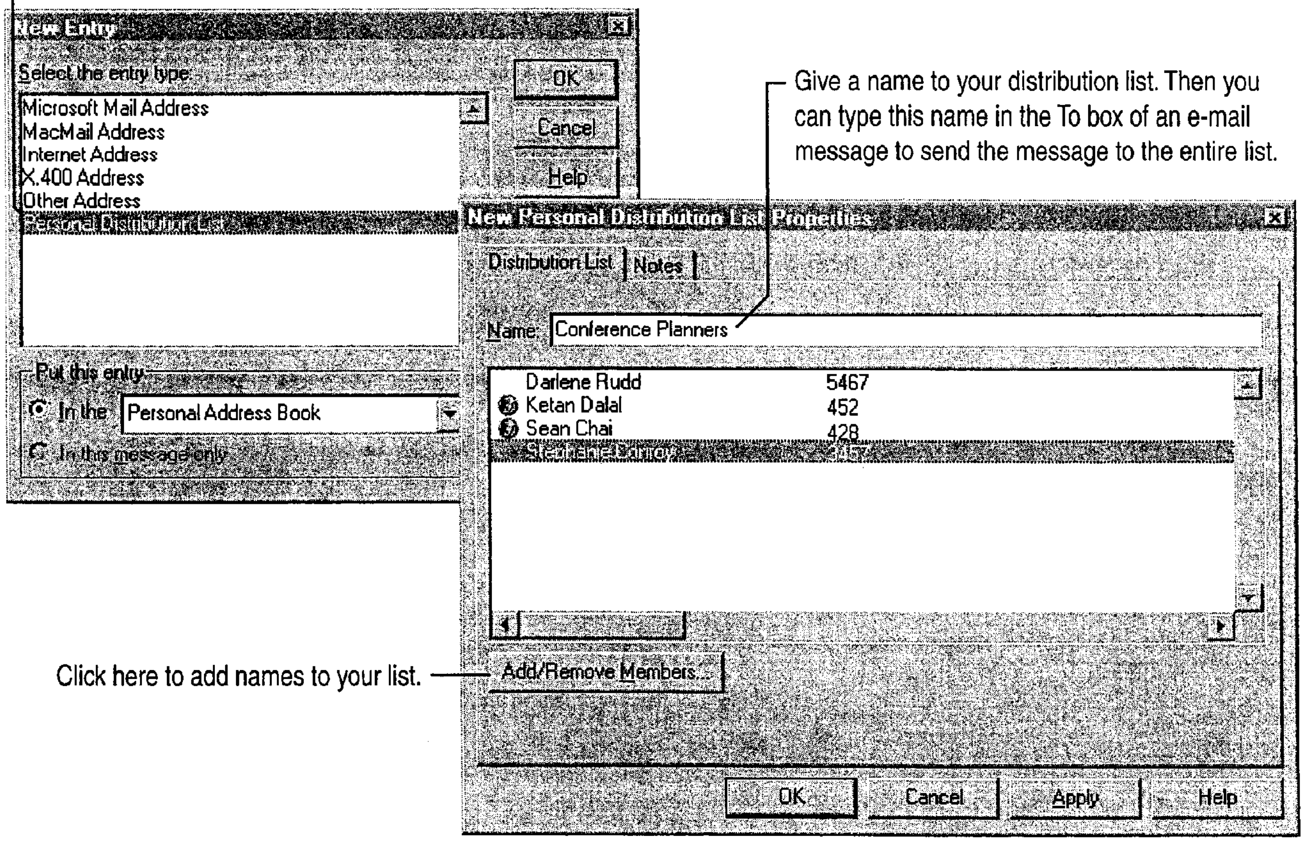
Create a Personal Distribution List

You send e-mail messages regularly to your department to update them about the conference. Instead of typing the same names every time you send e-mail, you can create a *personal distribution list* that contains the names of everyone in the group. To send mail easily to a group, click **Address Book** (**Tools** menu), and then click **New Entry**.



New Entry button

Click here to create a new distribution list.



Give a name to your distribution list. Then you can type this name in the To box of an e-mail message to send the message to the entire list.

Click here to add names to your list.

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

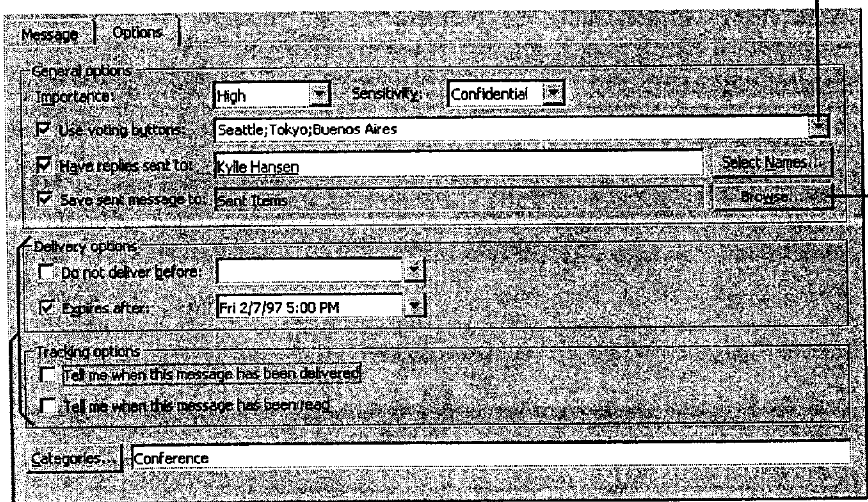
Office Assistant button

MS 114117

Use E-mail to Get Opinions

You've narrowed down the conference location to three possible sites. To get your team's input on which site is best, you can use e-mail to get their votes on the choices. Click the **Options** tab in a new e-mail message to set voting options.

Click here to select voting options, or type your own, separated by semicolons.



Click here to save the message to a folder other than Sent Items.

Set tracking and delivery options here.

Track the result of the vote Open the original message, which is stored in the Sent Items folder by default, and then click the **Tracking** tab to see the responses.

Next Steps

To	See
Manage e-mail when you're out of the office	"Use Outlook to Share Folders," page 433
Use a Microsoft Word template as your e-mail editor	"Distribute Documents Online," page 396

MS 114118

Add Activities to the Calendar

Working on the conference for Inspired Technologies is keeping you busy. However, you also need to plan time to take care of other projects and personal errands, as well as to keep track of holidays, seminars, and periods when you won't be in the office. You can use the Calendar to organize your time and to remind you of upcoming activities.

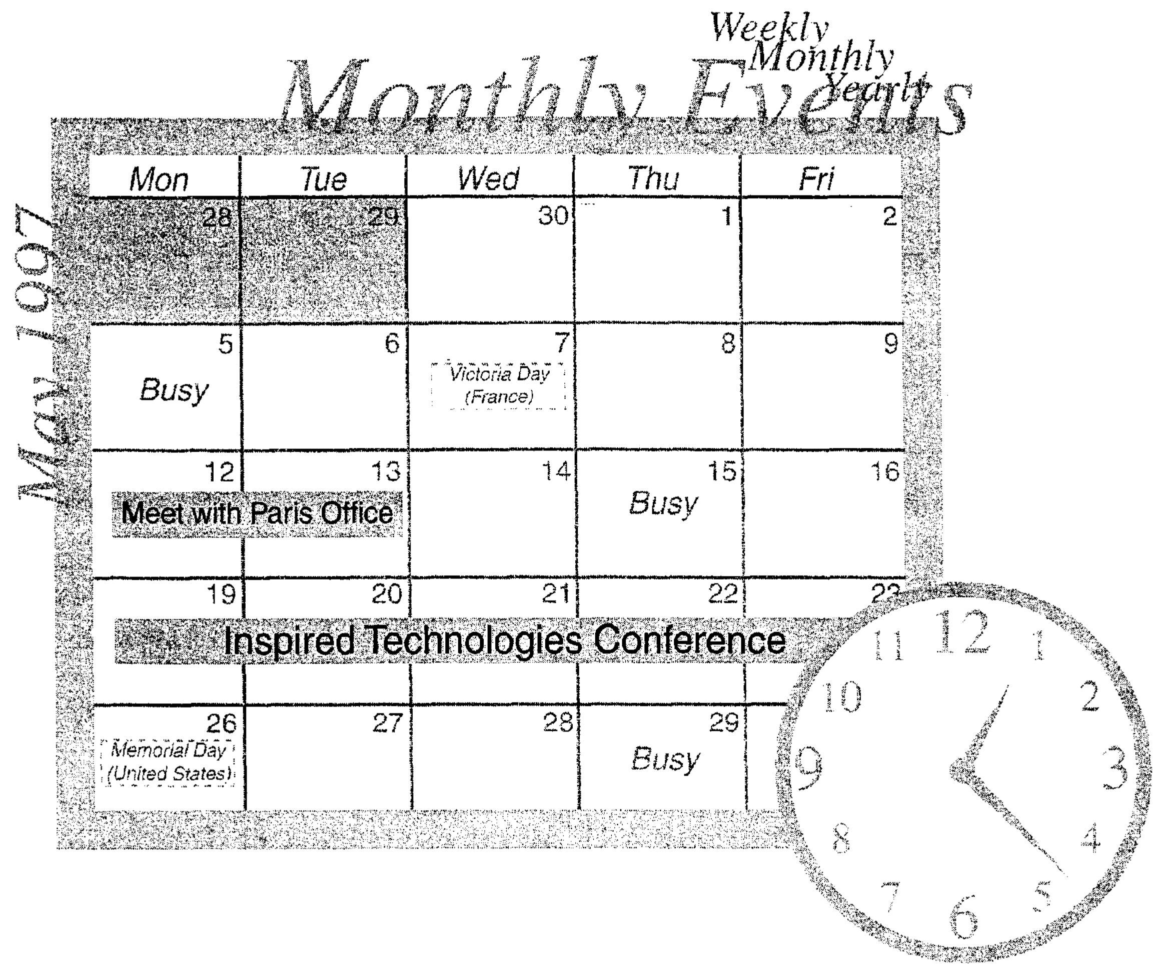
Key Features

Appointments

Events

TaskPad

- Create an *appointment* when you want to set aside time in the Calendar for an activity that doesn't involve anyone else. To organize a meeting with other people, see "Set Up a Meeting," page 117.
- Add an *event* to represent a holiday, birthday, or activity that lasts for a day or more.



MS 114119

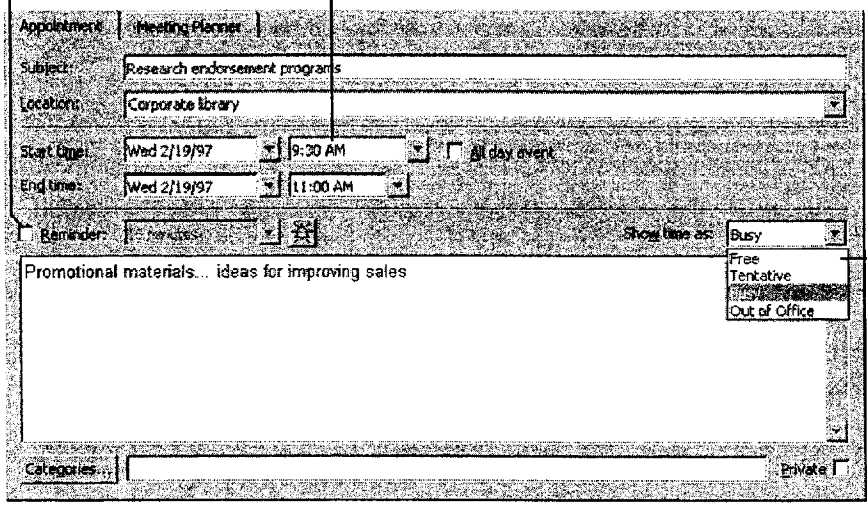
AHL0123446

Schedule an Appointment

You need to schedule time to run an errand. To create an appointment for this activity, click the **New** arrow and then click **Appointment**.

Click here to be prompted for the appointment.

Type a date and time for the appointment, or click the arrows to select a date and time.



Use this list to specify how you want the appointment labeled in the Calendar.

Set up a recurring appointment Click **New Recurring Appointment** (**Calendar** menu). If you want to turn a one-time appointment into a recurring appointment, double-click the appointment to open it and then click **Edit Pattern** (**Appointment** menu).

Don't remember when you made that appointment for? Click **Find** (**Tools** menu).

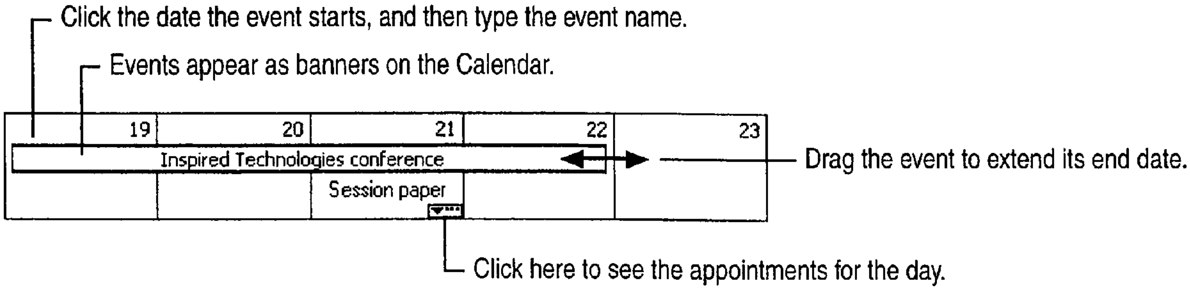
Turn an appointment into a meeting Open the appointment, and then click **New Meeting Request** (**Appointment** menu).

MS 114120

AHL0123447

Mark an Event

Add the conference to the Calendar. Click **Month** (**View** menu) to view the Calendar by month, and then start typing.



Add holidays to the Calendar Click **Options** (**Tools** menu). On the **Calendar** tab, click **Add Holidays** to add holidays from one or more countries to the Calendar.

Change the way you display information Select a view in the **Current view** list to change to another view in the Calendar. For more information on views, see "Customize the Way You Display Information," page 366.

Take Care of the Calendar While You're Away

If you're going out of town, you can let someone else create appointments and update the calendar in your absence. Open the conference calendar, and then click **Options** (**Tools** menu). On the **Delegates** tab, click **Add** to assign permissions for the folder to someone else.

Print the Calendar

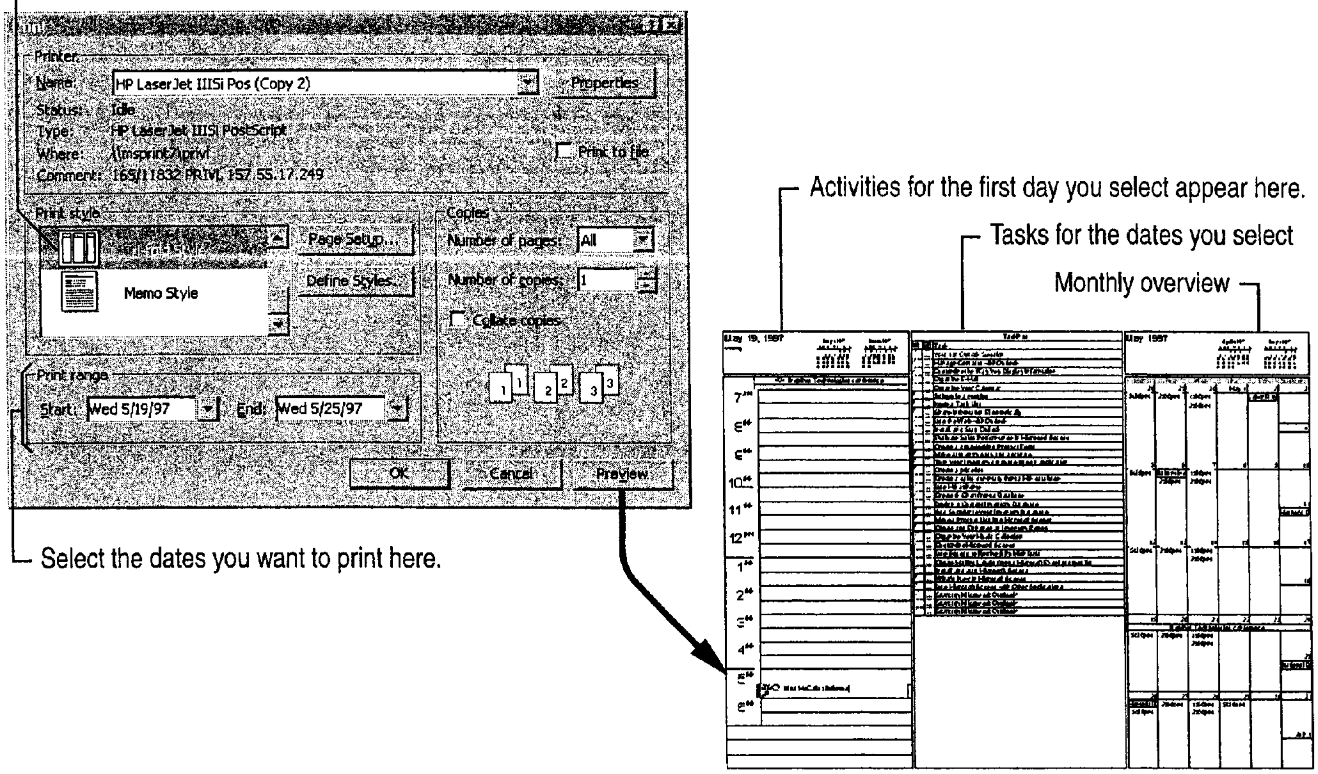
You want to print the Calendar for the week of the conference so that you can take with you a record of your activities for that week. In the **Current view** list, select **Day/Week/Month**. Then click **Print** (**File** menu).

Select **Tri-fold Style** to get an overview of activities for a range of dates.

Activities for the first day you select appear here.

Tasks for the dates you select

Monthly overview



Select the dates you want to print here.

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

Office Assistant button

MS 114122

Add Activities to the Calendar

The task list that you create in Tasks appears in a TaskPad in the Calendar. To see the TaskPad, click **Day/Week/Month** in the **Current view** list, and then click **Day** or **Week** (**View** menu).

Views that you create in Tasks do not appear in the Calendar. Click **TaskPad View** (**View** menu) to filter the tasks that appear in the TaskPad. Click **TaskPad Settings** (**View** menu) to customize the way tasks appear in the TaskPad.

Next Steps

To	See
Plan a meeting	"Your First Outlook Session," page 113
Send or accept a meeting request	"Confirm a Meeting," page 387
Use the Calendar for group scheduling	"Use Outlook to Share Folders," page 433
Learn more about tasks	"Keep a Task List," page 391

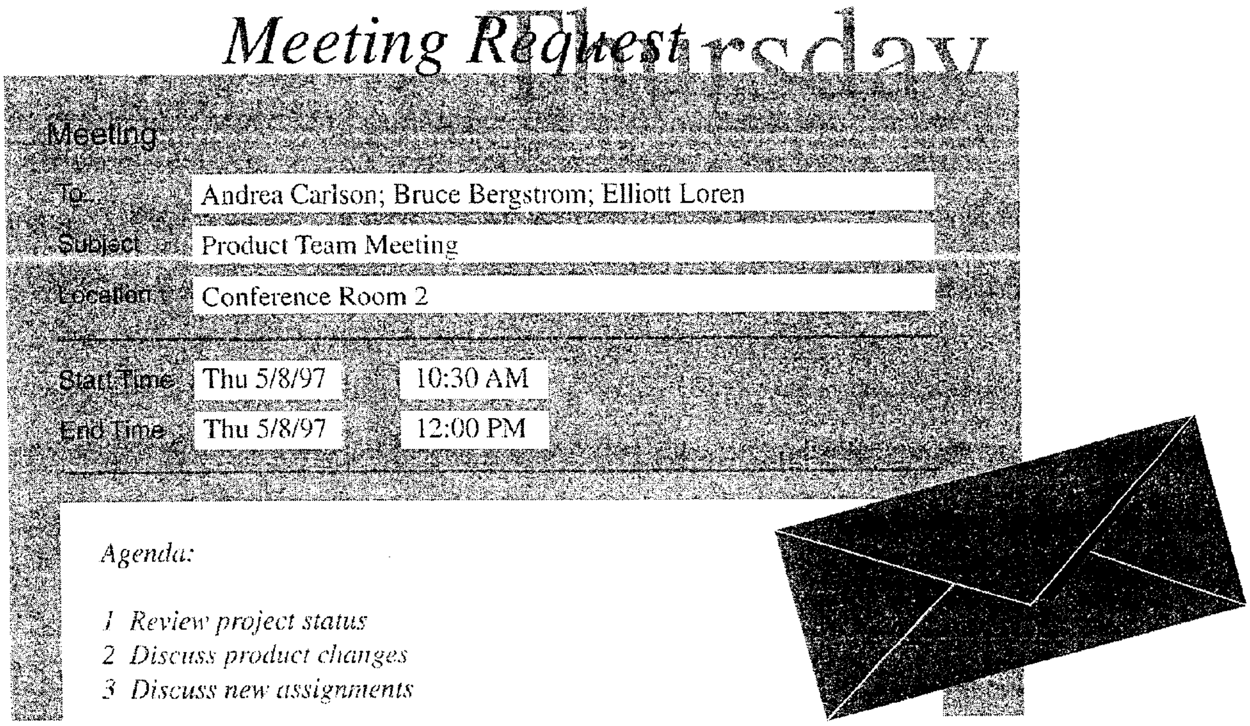
MS 114123

Confirm a Meeting

You've set up a meeting with the speakers for the conference you're planning for Inspired Technologies. You want to confirm the attendees so you can finalize the agenda. In Outlook, after you invite others to a meeting, you can track their responses.

Key Features

Meeting Planner



To schedule meetings, you need Microsoft Exchange or a compatible electronic mail system.

MS 114124

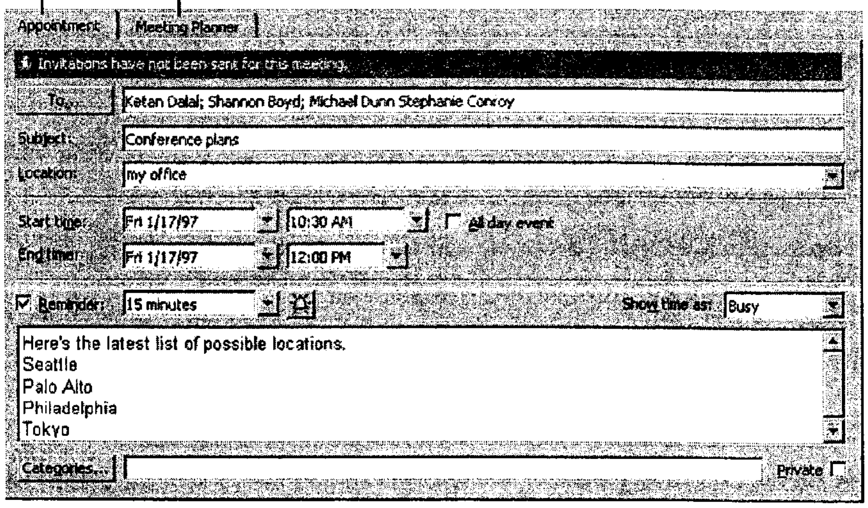
AHL0123451

Track Meeting Responses

After you send a meeting request, the meeting appears in the Calendar. You can open the Calendar item to track responses.

Outlook tallies the responses to the meeting request on the **Appointment** tab.

Click **Meeting Planner** to see the response from each invitee.



Accept the invitation When you send someone a meeting request, a message appears in that person's Inbox with a meeting request symbol. They can accept, tentatively accept, or decline the request. If they accept, the meeting appears as an item on their calendar.

Meeting request symbol

Create a recurring meeting Click **New Recurring Meeting** (**Calendar** menu) to schedule a meeting regularly.

Cancel a meeting Open the meeting, and then click **Delete** (**File** menu).

Reschedule a meeting If you have to change a meeting, open the meeting and then change the date and/or time. You can type an explanation for the change in the text box. Then click the **Send** button to notify the attendees.

Send button

MS 114125

AHL0123452

Send a Meeting Request Over the Internet

You can send meeting requests and receive responses over the Internet. Just type the Internet address in the **Meeting Planner** when you set up the meeting. If both you and the invitee are using Microsoft Exchange, you can see available times in the **Meeting Planner**.

If the Internet invitees use Outlook or Schedule+, the meeting appears in their calendars when they accept it.

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

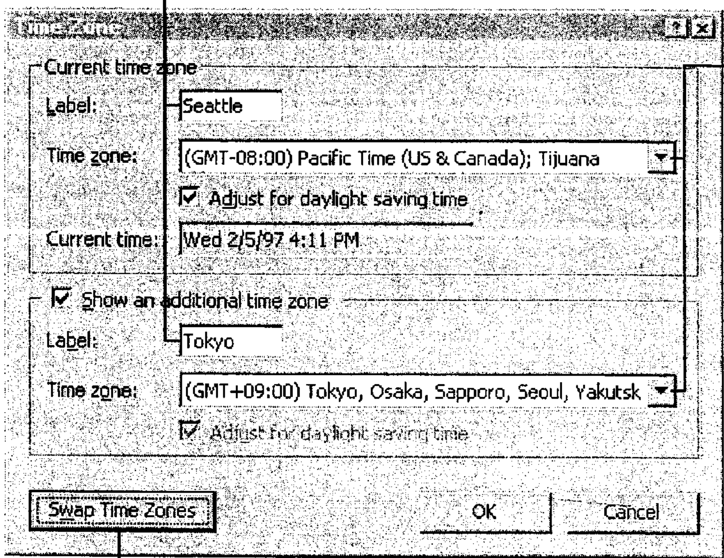
Office Assistant button

MS 114126

Schedule a Conference Call

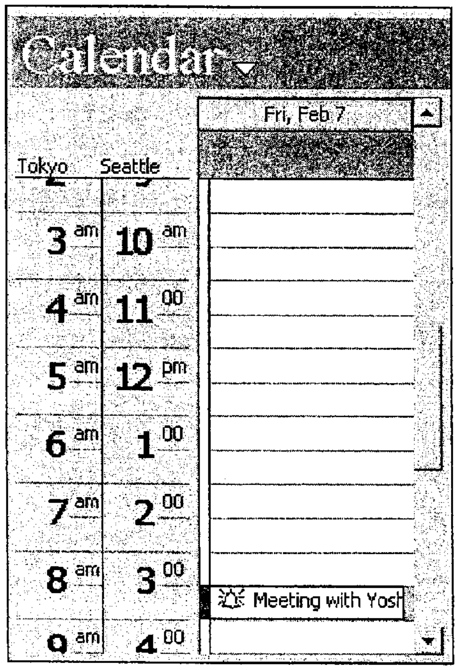
One of the speakers is in Tokyo. You decide to schedule a conference call to include him in the meeting. You can set up the Calendar to display more than one time zone so that you can plan the best time to call. Click **Options** (**Tools** menu). On the **Calendar** tab, click **Time Zone**. In the **Time Zone** dialog box, select the **Show an additional time zone** check box.

Type the label names you want to appear in the Calendar here.



Click here to display a list of time zones.

To display both time zones in the Calendar, click **Day/Week/Month** from the **Current view** list, and then click **Day**.



Click here to change the order in which the time zones appear in the Calendar. When you swap the time zones here, you also change the time zone for all of your Windows-based programs.

Next Steps

To	See
Print information in the Calendar	"Add Activities to the Calendar," page 382
Use the Journal to keep a record of meetings, e-mail messages, and appointments	"Your First Outlook Session," page 113

MS 114127

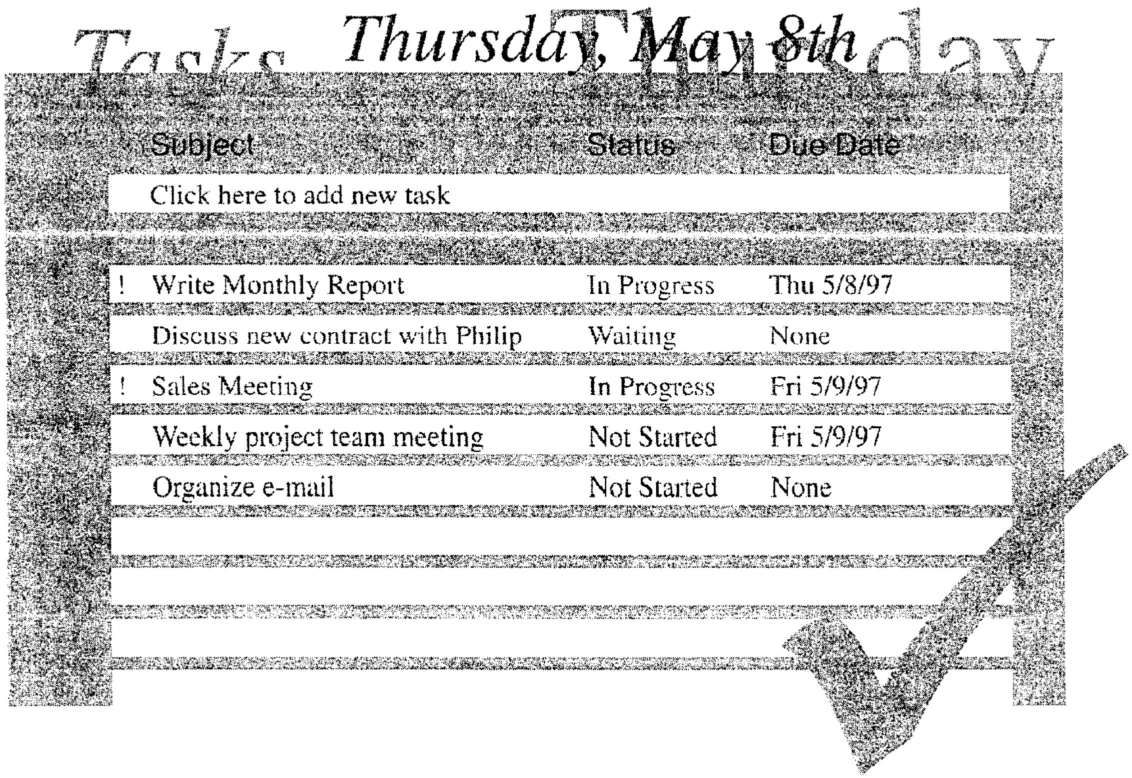
AHL0123454

Keep a Task List

The conference you're planning has a number of tasks associated with it. You're responsible for defining the tasks and assigning them to members of your team. Outlook gives you the flexibility to organize and share tasks with others.

Key Features

Delegating Tasks



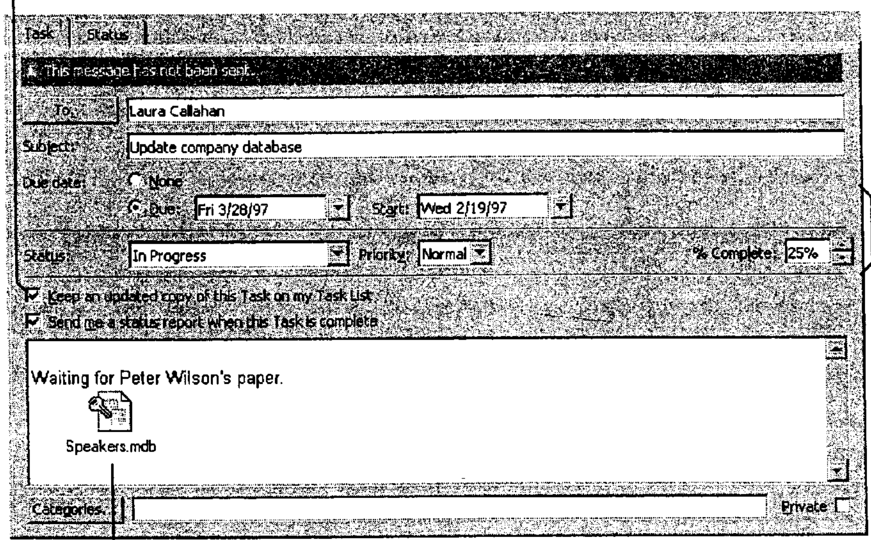
Assign a Task

You want to delegate one of your tasks to your assistant. In Tasks, double-click the task icon to open the task, and then click **Assign Task** (**Task** menu). In the **To** box, type your assistant's name.

Assigned task symbol

When you assign a task to someone else, the information is sent to that person in an e-mail message. The symbol next to the task in your task list changes to indicate that it has been assigned to someone else. You can no longer change information in that task, but you can keep a copy of the task.

Click here if you want to keep a copy of the task in your task list. The task status changes as the recipient updates the task.



You can specify the status, priority, and due date of the task that you're assigning.

You can type notes in the text box, or click **Insert** (**File** menu) to include Outlook items, files, or objects with the task.

How do you know if the task is accepted? After you assign the task, you receive an e-mail message from the recipient, indicating whether (s)he accepts or declines the task.

What if the recipient declines the task? You own the task again, and you can update the information in it. You can keep the task or assign it to someone else.

Delegate a task as you create it Click **New Task Request** (**Tasks** menu) to create and assign a task not already on your task list.

Want to rearrange the way tasks are displayed in your task list? Select a different view from the **Current view** list. For more information, see "Customize the Way You Display Information," page 366.

MS 114129

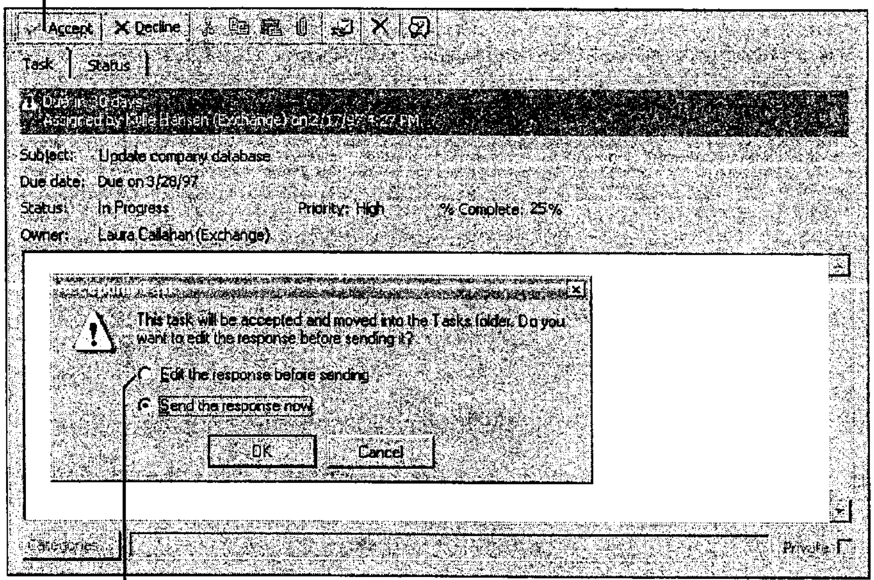
AHL0123456

Accept a Task

The task request appears in your assistant's Inbox. After the task is accepted, it's added to your assistant's task list. The symbol to the left of the task indicates that the task was assigned to him/her.

Accepted task symbol

Click here to accept a task.



Click here to add a comment to the response message.

Keep track of the task's status Your assistant can update the status options in the task, and then click **Save and Close** (**Task** menu). If you chose to keep a copy of the task, the updated information automatically appears in your task list.

Decline a task Your assistant can decline the task by opening the task in the task list, and then clicking **Decline** (**Task** menu). The task is removed from your assistant's task list. As originator of the task, you are notified that the task was declined.

Need to print the task? You may want to print a task so that when you're in a meeting you can refer to notes, status, and other details. In the task, click **Print** (**File** menu).

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

Office Assistant button

MS 114130

Next Steps

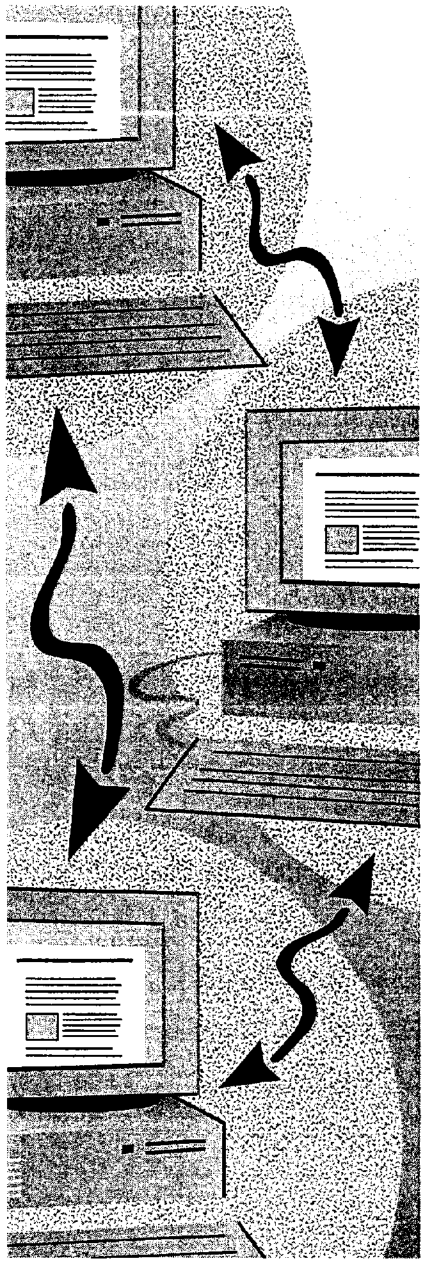
To	See
Post tasks to a public folder	"Use Outlook to Share Folders," page 433
Track your work	"Your First Outlook Session," page 113

MS 114131

PART 8

Exchange Information with Others

Contents



MS 114132

AHL0123459

Distribute Documents Online

When you need to distribute your documents to co-workers, you want to do it in the most efficient way possible. Distribute your documents online to get quick feedback from reviewers. You can use Word as your e-mail editor to compose and reply to messages. You can also send e-mail messages to distribute data created in Microsoft Access. When you distribute Microsoft Access data, use the **Send** command (**File** menu), not the **Send To** command.

Key Features

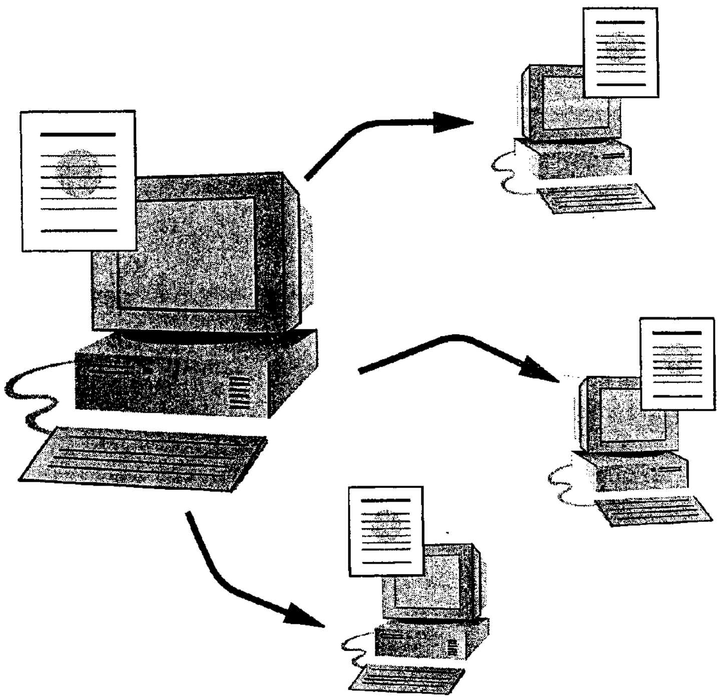
Sending Documents

Routing Documents

Posting Documents

Microsoft Word as an E-mail Editor

You can distribute documents to other users over your network.



To send and route e-mail messages in applications for Windows, you must have Microsoft Exchange, Microsoft Mail, cc:Mail, or another compatible e-mail system installed on your computer. The examples in this topic use Microsoft Exchange.

MS 114133

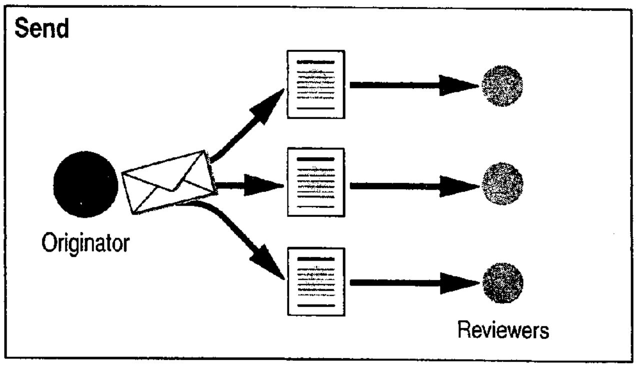
Choose How You Want to Distribute Documents

You have three options for distributing a document online.

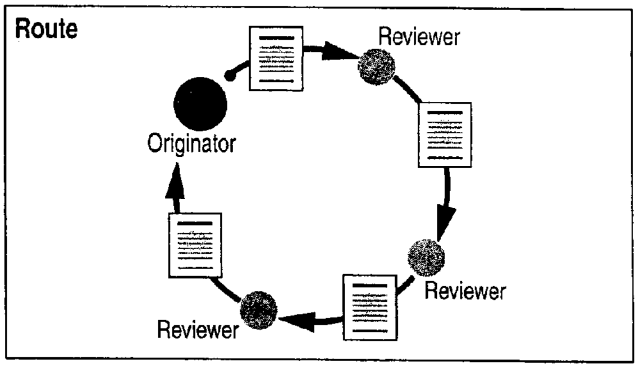
Send a document Choose this method when you need to distribute a document quickly, you have a specific list of reviewers, and you want review comments quickly.

Route a document Choose this method when you have a longer review period, a short list of reviewers, and you want each reviewer to see the comments of previous reviewers.

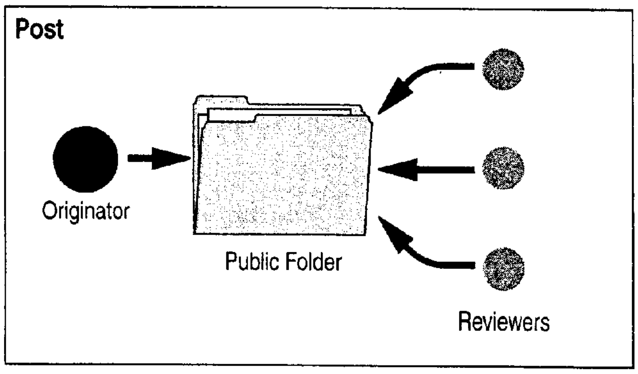
Post a document Choose this method when you want to provide wide distribution of a document, such as a company policy manual, or when you're not sure who might need or want to review it.



The originator sends simultaneous copies of a document to several reviewers, who may each return comments.



The originator routes a single copy of a document to multiple reviewers. Each reviewer sees comments from previous reviewers. The routed copy is automatically returned to the originator.



The originator posts a document to a public folder. Multiple reviewers can access the document and then return copies with their comments.

MS 114134

Want to Distribute Information to a Wider Audience?

If you want to distribute information online to your entire company, or to anyone outside your company, use the **Web** toolbar to create files that you can publish on the World Wide Web. For more information, see "Office and the Web," page 442.

What if your audience doesn't use Office? Office has free document viewers that let your online readers view and print files in their native format, without installing the full application. These viewers are free and can be downloaded from a software page that you access by clicking **Microsoft on the Web** (**Help** menu).

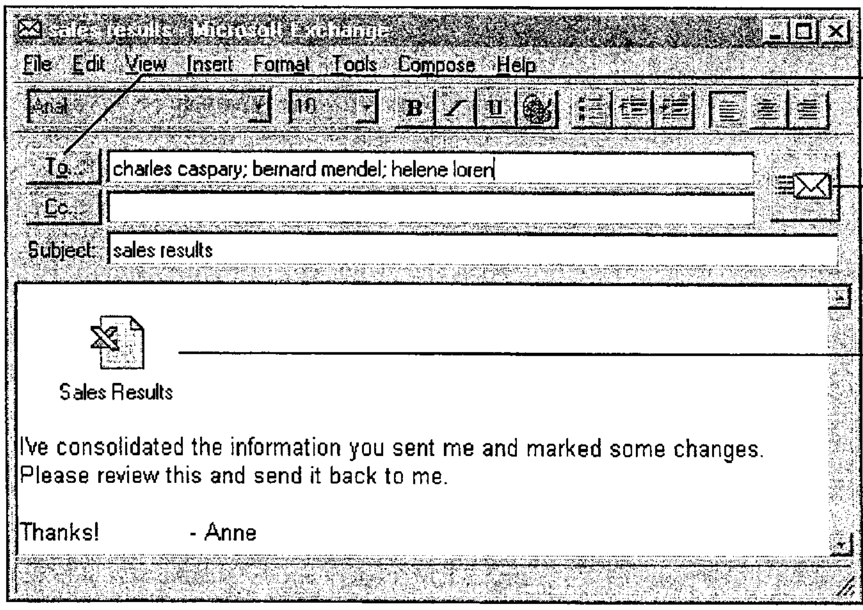
? **Want to know more?** Look up **Getting Results - Distribute Documents** in Help.

Office Assistant button

Send a Document

If you need to distribute your document to a specific list of reviewers from different departments and you have a tight deadline to meet, use e-mail messages to send your document quickly and efficiently. Each person can review it and return comments individually. When you send a document, you have two options:

- Start from your e-mail application, and then attach the document you want to send. For more information, see the documentation for your e-mail application.
- Start from the application that you're working in (Word, for example), click **Send To** (**File** menu), and then click **Mail Recipient** to send a copy of the document you're working on. If you're sending from Microsoft Access, select a format for the document, and then click **Send** (**File** menu). This starts your e-mail application, as shown in the following illustration.



To select the recipients, click here, and then use the options in the **Address Book** dialog box.

When you are ready to send your message, click here.

A copy of your document is included in the message.

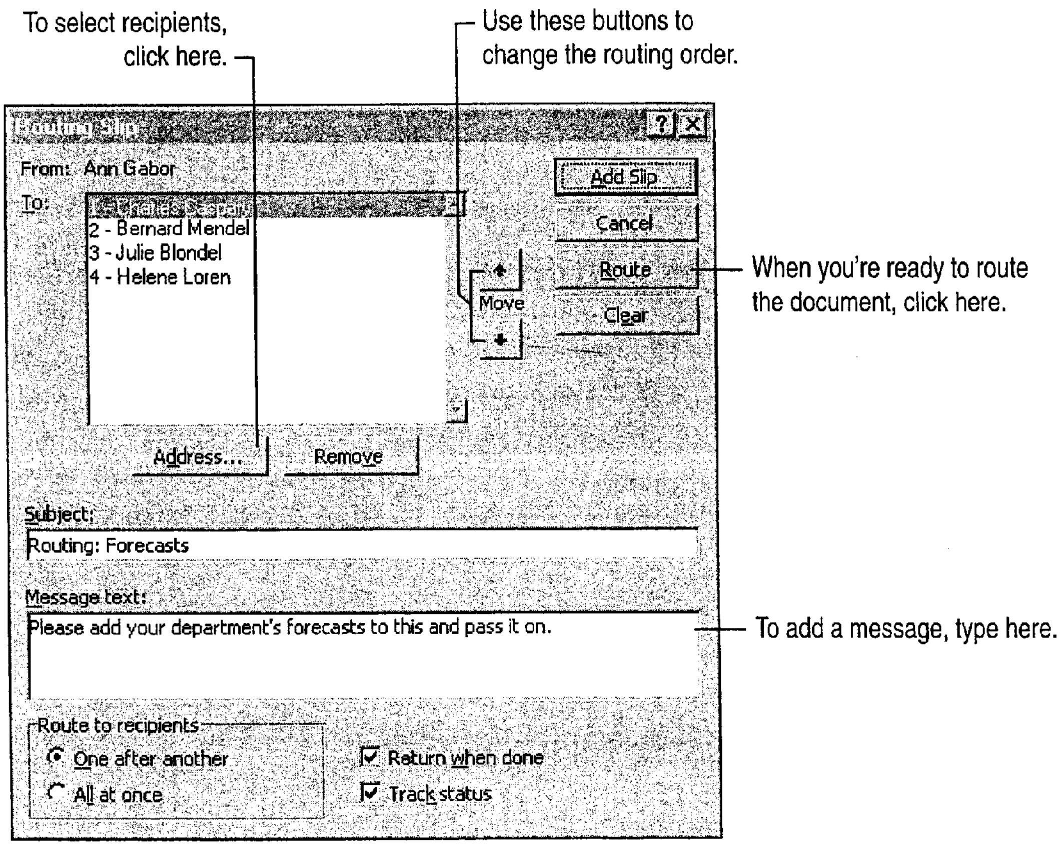
Want to send a fax instead of an e-mail message? Click **Send To** (**File** menu), and then click **Fax Recipient** to send a fax. To send a fax, you must have a modem and fax software. For more information, see "Create a Fax Cover Sheet and Send a Fax," page 192.

MS 114136

Route a Document

Perhaps you want only a few members of your team to see your document. As each member reviews your document, you want him or her to build on the comments of the previous reviewer. In this case, it's best to route your document. When you route a document by sending e-mail messages, you distribute a single copy of the document to the recipients in the order you specify.

To route a document, open the document, and then create a routing slip by clicking **Send To** (**File** menu) and then clicking **Routing Recipient**. In the **Routing Slip** dialog box, select the recipients and the order in which each will receive the document.



MS 114137

Want to know who has the routed document? When a recipient finishes reviewing the document, clicks **Send To** (**File** menu), and then clicks **Next Routing Recipient**, the document is automatically sent to the next recipient. Each time the document is sent to another person, you receive a status message letting you know who has the document. When the last recipient sends the document, it is routed back to you.

Find out who made the comments in the review document You can lock (protect) the document so that reviewers' changes and comments can be tracked. Word then identifies each set of changes or comments by reviewer. For more information, see "Have Your Team Review a Word Document," page 406.

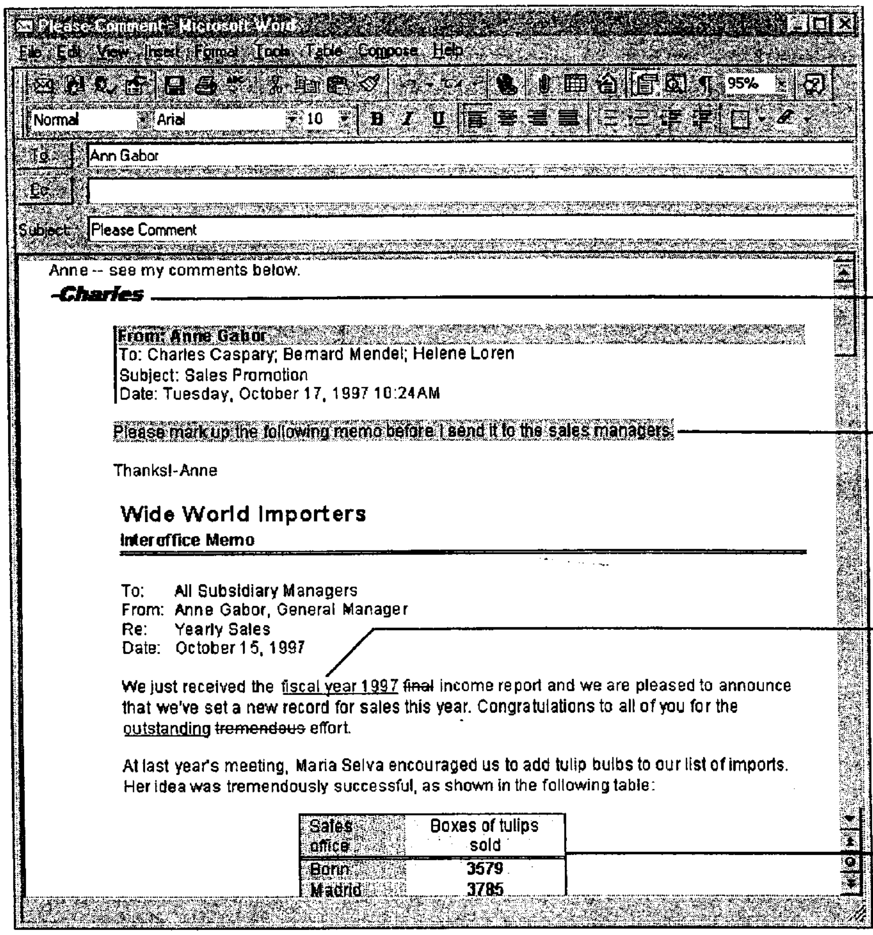
Want to know more? Look up **Getting Results - Distribute Documents** in Help.

Office Assistant button

MS 114138

Use Word for Windows as Your E-mail Editor

Instead of using the built-in message editor that comes with your e-mail application, you can use Word for Windows to make editing and reading e-mail messages easier. For example, you can use highlighting, revision marking, bullets and complex numbering, AutoCorrect, and automatic formatting.



You can automatically include your signature in e-mail messages.

Use the **Highlight** button to highlight important parts of your document.

Revision features in Word make it easy to find comments in long messages.

Use the **Table AutoFormat** command (**Table** menu) to automatically format tables.

Important To use Word as your e-mail editor, you should have at least 12 megabytes (MB) of memory, and you must have Word and either Microsoft Exchange or Microsoft Outlook installed on your computer. If you have Microsoft Exchange, you must have installed WordMail capability when you first installed Office. To install this capability after initial installation, run the Setup program again.

MS 114139

How do you turn on Word as your e-mail editor? In Microsoft Exchange, click **WordMail Options** (**Compose** menu), and then select the **Enable Word as e-mail editor** check box. If you want to use Word as your e-mail editor in Outlook, click **Options** (**Tools** menu), and on the **Mail** tab, select the **Use Microsoft Word as e-mail editor** check box.

Switch between e-mail editors in Microsoft Exchange When you're in the main window of Microsoft Exchange (when folders and messages are displayed), click **WordMail Options** (**Compose** menu).

Make your e-mail messages easier to read Use the **Online Layout** command (**View** menu) to display your messages in larger fonts and with increased spacing, and to jump to comments from a particular person.

Want to automatically include your signature in e-mail messages? Run Word, create an AutoText entry, and name it "signature." Your signature can include formatted text and graphics. Whenever you send a message, Word automatically adds this signature.

Make it easy for others to read long messages If you are sending a long message that includes many replies, you can make it easier for others to read by using the Word **Highlight** button to mark sections that are particularly important.

Highlight button

Use Word E-mail Templates to Create Special Text Effects

To see the templates you can use, in Microsoft Exchange, click **WordMail Options** (**Compose** menu), select a template, and then click **Compose**. To set a template as your default mail template, select a template, click **Set as Default Template**, and then click **Close**. In Outlook, click **Options** (**Tools** menu). On the **Mail** tab, select the **Use Microsoft Word as e-mail editor** check box, click the **Templates** button, and then select a template.

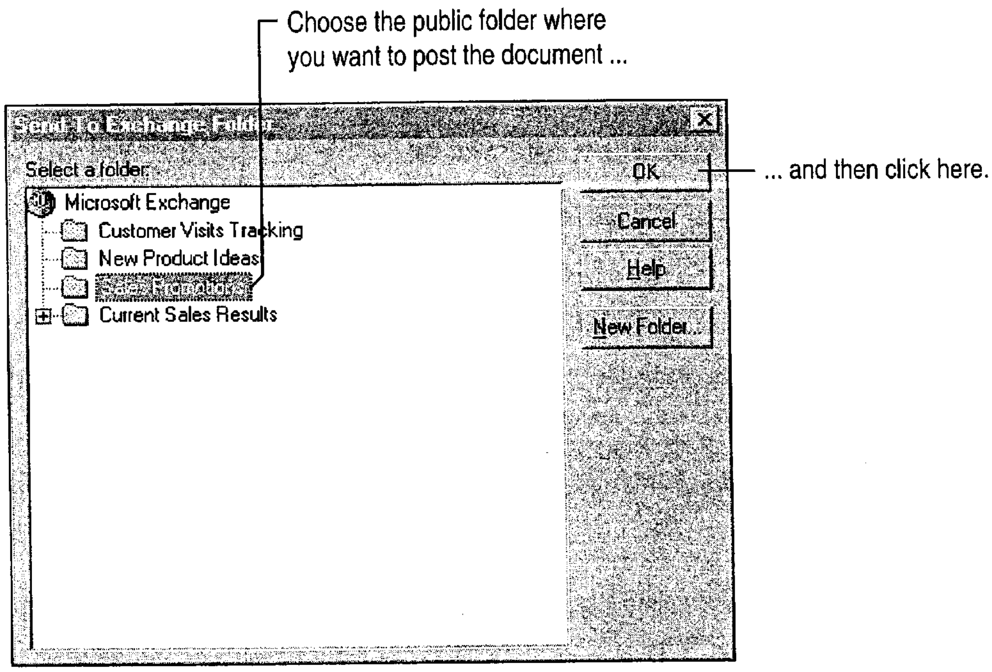
Want to know more? Look up **Getting Results - Distribute Documents** in Help.

Office Assistant button

Post a Document

If you have a document (such as an employee manual) that you want to make available widely, post your document on a network. When you post a document, you deliver a copy of the document to a Microsoft Exchange public folder so that others can view the document over the network.

To post a document, click **Send To** (**File** menu), and then click **Exchange Folder**.



Make it easier for others to find the document you've posted Create a Public Folder shortcut for the folder you're posting your document to, and then include that shortcut in an e-mail message to people who might be interested in reading your document. For more information, see your Microsoft Exchange documentation.

MS 114141

AHL0123468

Next Steps

To	See
Get feedback from co-workers on a Word document	"Have Your Team Review a Word Document," page 406
Share a workbook with co-workers	"Share a Workbook with a Co-Worker," page 412
Share information on the Web	"Create a Web Presentation with PowerPoint," page 452
	"Publish Microsoft Excel Tables and Charts on the Web," page 448
	"Create a Web Page with Word," page 458
	"Office and the Web," page 442
	"Use Microsoft Access to Retrieve and Publish Data," page 464
Create a fax cover sheet and fax a document	"Create a Fax Cover Sheet and Send a Fax," page 192

MS 114142

Have Your Team Review a Word Document

Track Changes Online with Revision Marks and Add Comments

Suppose you just completed a new product proposal, and you want your team to review it online.

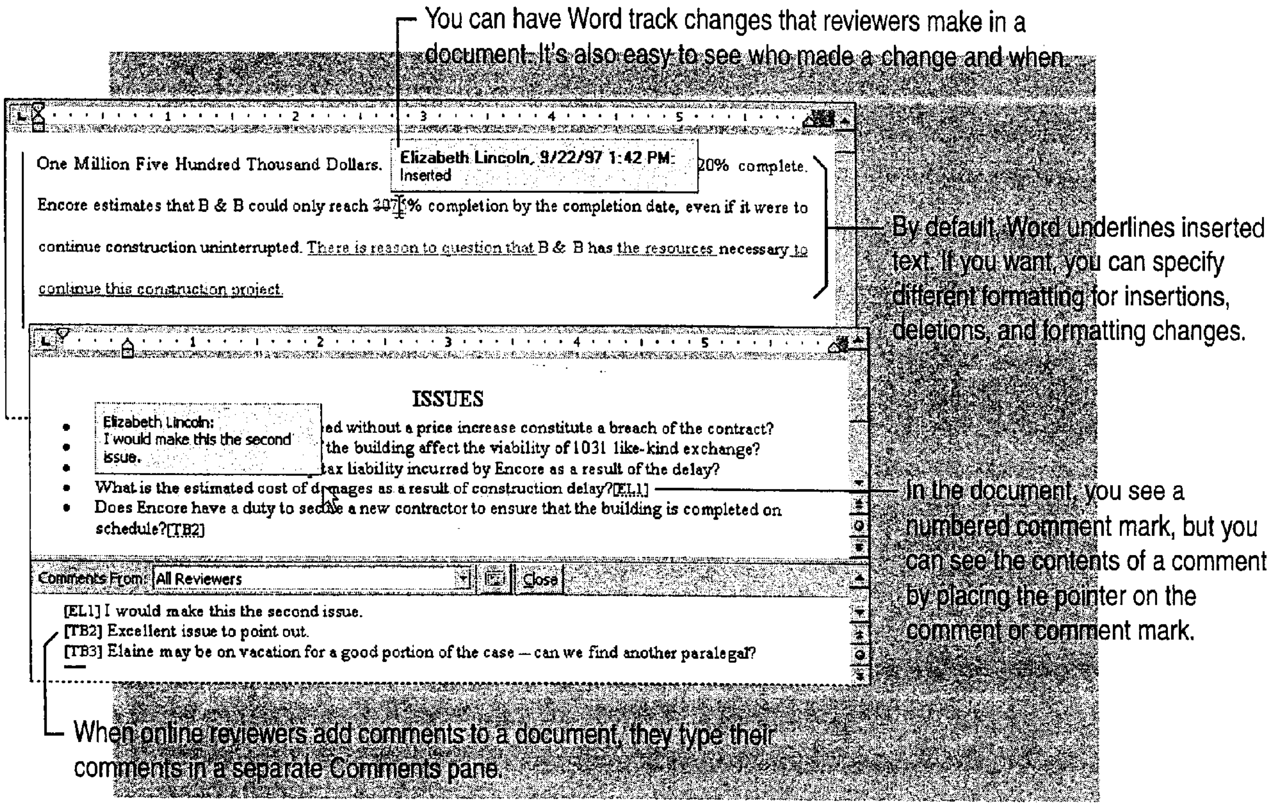
Whether you want reviewers to make changes directly to the document or in a separate Comments pane, Word makes it easy for you to get feedback from reviewers.

Key Features

Change Tracking

Comments

Document Protection



MS 114143

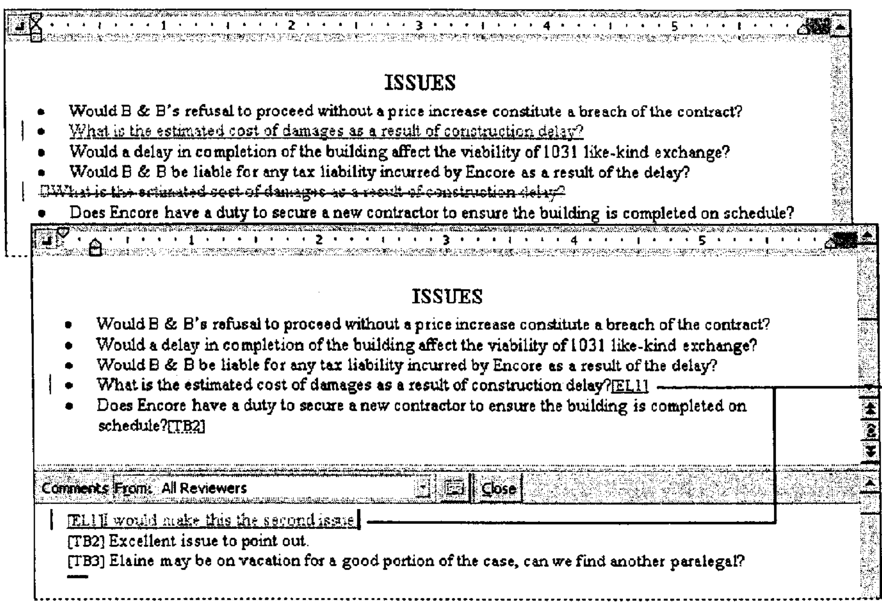
Decide How Reviewers Will Provide Feedback

Before routing the document, decide how you want reviewers to provide feedback.

Have reviewers make changes directly to the document Use the Track Changes feature. Reviewers edit a document as they would ordinarily, and revision marks show where they added, deleted, or moved text and graphics, or even reformatted text. Reviewers can also add comments if they want (see next paragraph). When you get the review copy back, you can point to a revision and have a ScreenTip tell you who made the change, the nature of the change, and the date and time of the change. You can review each change and decide whether to accept or reject it.

Have reviewers insert comments without making changes in the document itself Reviewers select the text or graphic they want to comment on, and then click the **Insert Comment** button on the **Reviewing** toolbar. Their comments are inserted in a separate Comments pane, not in the document itself. In the document, the text or graphic they selected is shaded yellow and you'll see a numbered comment mark that includes the reviewer's initials. To see the comments in the document window, point to the shaded text or the comment mark, and a ScreenTip displays the comment. If comment marks aren't displayed, click **Comments** (**View** menu).

Insert Comment button (**Reviewing** toolbar)



When you track reviewers' changes, all their edits are marked with special formatting. You can accept or reject the changes.

When you have reviewers add only comments, you have to manually incorporate their changes in the document.

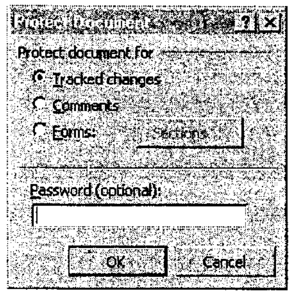
Want to change the formatting Word uses for tracked changes? Click **Options** (**Tools** menu). On the **Track Changes** tab, select the formatting you want.

MS 114144

Get a Document Ready for Review

After you decide which method to use for feedback from reviewers, you need to "protect" the document for the kind of feedback you want; that is, lock the document so that only certain types of changes can be made, and then provide instructions for users on how to review your document.

"Lock" the document Open the document for review, and then click **Protect Document** (**Tools** menu). Click **Tracked changes** or click **Comments**. Locking the document automatically enables revision marks or comments.

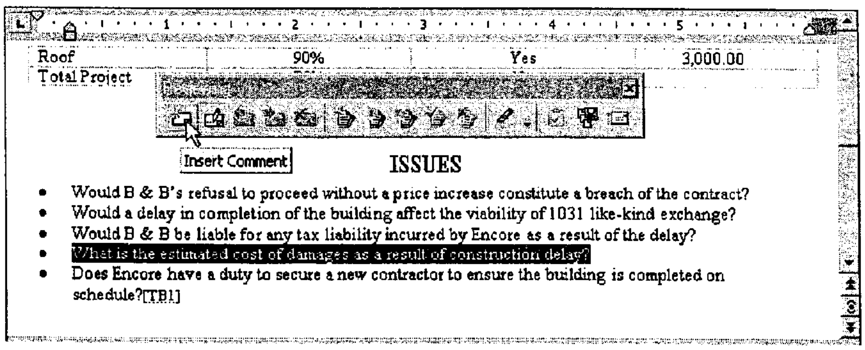


Protect Document dialog box

Decide how to distribute the document You can send the document individually to each reviewer, route it so that each reviewer sees previous reviewers' changes, or put the document on a network server or post it to a public folder. For more information, see "Distribute Documents Online," page 396.

Include instructions for reviewers In e-mail or the document itself, tell users what to expect. If you protect a document for tracking changes, tell reviewers that revision marks will automatically appear when they edit the document or add comments.

If you protect a document for comments only, tell reviewers that if they want to, they can select the text or graphic they want to comment on—which adds yellow shading—and then click the **Insert Comment** button on the **Reviewing** toolbar. If the toolbar isn't displayed, they can click **Reviewing** (**View** menu, **Toolbars** submenu).



Reviewers can insert comments quickly by clicking the **Insert Comment** button on the **Reviewing** toolbar.

MS 114145

Are reviewers distracted by revision marks? Tell them they can hide revision marks while editing by clicking **Track Changes** (**Tools** menu), clicking **Highlight Changes**, and then clearing the **Highlight changes on screen** check list.

Want reviewers to focus on key sections only? If you used the **Highlight** button to mark text, tell reviewers they can find these sections by clicking **Find** (**Edit** menu), clicking **More**, and then clicking **Highlight** in the **Format** list.

Highlight button

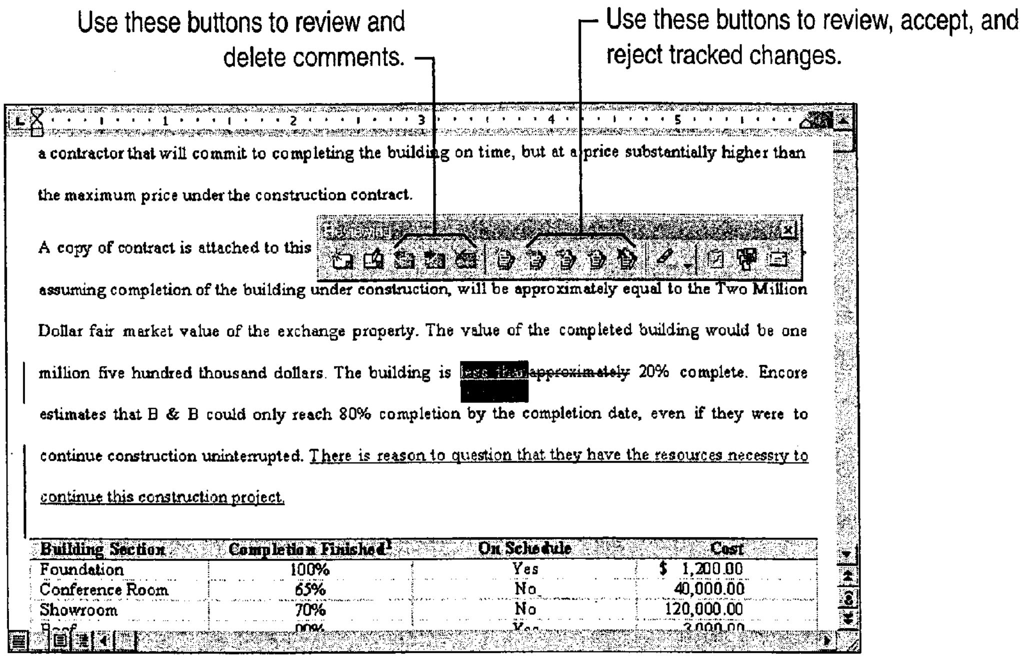
Want reviewers to add voice comments? Reviewers with sound cards and microphones installed on their computers can insert voice comments. Tell reviewers to click the **Insert Comment** button on the **Reviewing** toolbar, and then to click the **Insert Sound Object** button in the Comments pane.

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

Office Assistant button

Incorporate Changes

After the reviewers have made their changes, you need to review them. First, remove protection by clicking **Unprotect Document** (**Tools** menu). Display the **Reviewing** toolbar by clicking **Reviewing** (**View** menu, **Toolbars** submenu).



Merge changes from all reviewers into a single document Open the document into which all reviewers' changes will be combined, and then click **Merge Document** (**Tools** menu). In the **Select File to Merge into Current Document** dialog box, click a copy of the document that has changes to be merged, and then click **Open**.

Are ScreenTips not displayed for comments or changes? Click **Options** (**Tools** menu). On the **View** tab, select the **ScreenTips** check box.

Do tracked changes not appear in your document? Click **Highlight Changes** (**Tools** menu, **Track Changes** submenu), and then select the **Highlight changes on screen** check box.

Delete a comment Position the insertion point in the text highlighted for the comment, or select the comment mark, and then click the **Delete Comment** button on the **Reviewing** toolbar. The mark and the associated comment are deleted.

Want to print comments? Click **Print** (**File** menu), and then click **Comments** in the **Print what** box.

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

Delete Comment button (**Reviewing** toolbar)

MS 114147

AHL0123474

Compare Documents When Changes Aren't Tracked

Make sure the original and edited documents have different file names, or are in different folders if they have the same file name. Open the edited version of the document, and then click **Compare Documents** (**Tools** menu, **Track Changes** submenu). In the **Select File to Compare with Current Document** dialog box, open the file you want to compare.

As Word compares the two documents, it marks differences. You can review and incorporate the changes as described previously.

Next Steps

To	See
Make formatting changes to your document	"Make Your Word Document Look Great," page 127
Make the final version of the document available to a wider audience	"Distribute Documents Online," page 396

MS 114148

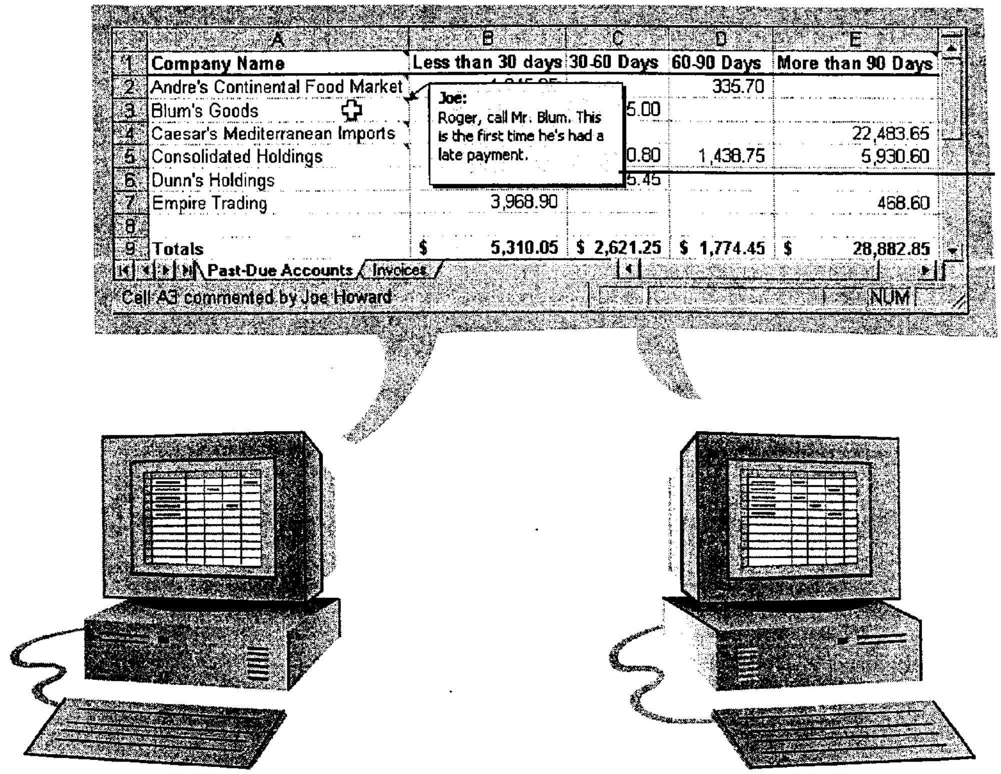
Share a Workbook with a Co-Worker

Suppose you need help from your co-workers in completing, verifying, and updating the information in a worksheet. Everyone needs to see the most recent data and know what they're responsible for. Microsoft Excel can merge everyone's changes; you view the group's progress every time you save.

Key Features

Comments

Shared Workbooks



Note assignments and instructions right in the cells.

Microsoft Excel lets everyone work on the same worksheet at once and keeps the information up-to-date.

Before you start everyone who shares a workbook must have Microsoft Excel 97.

Did you know that you can also route workbooks to other users?
Routing sends a workbook to each user in succession and returns it to you with their cumulative edits. For more information, see "Distribute Documents Online," page 396.

MS 114149

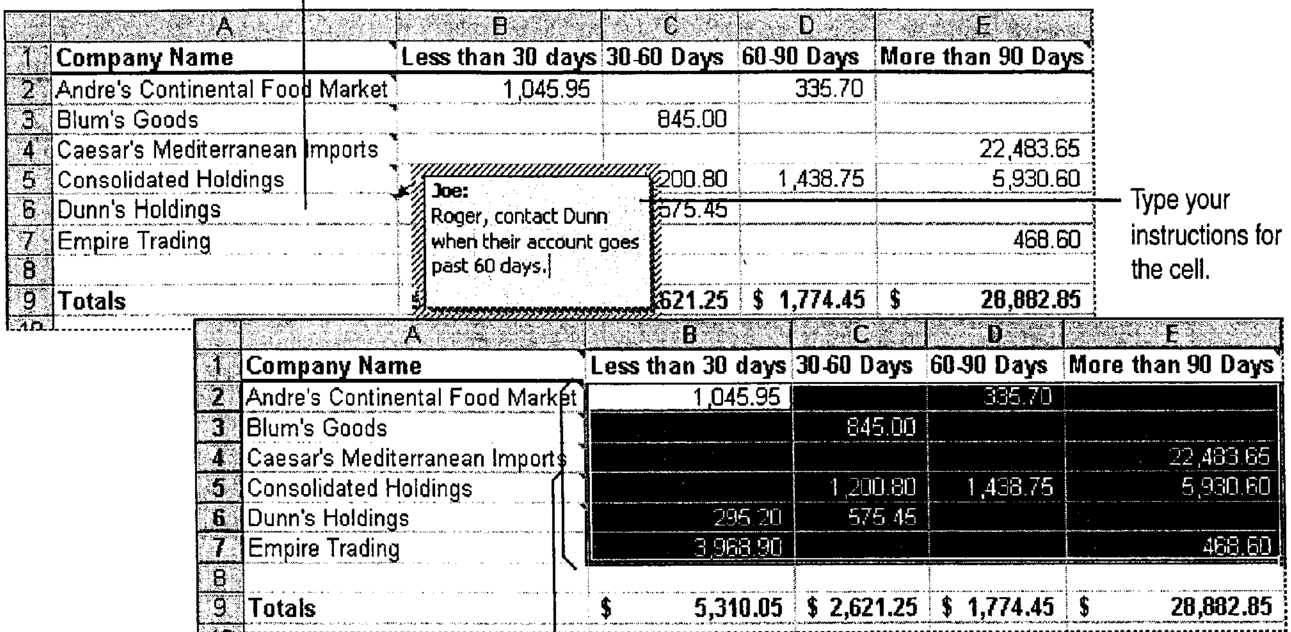
AHL0123476

Prepare Your Workbook to Be Shared

Anyone in your workgroup can share a workbook over your network with little preparation, but you can do some things in advance to make the collaboration go more smoothly. For example, your group can use your aged-receivables worksheet to collect past-due customer accounts. To let your co-workers know which customers to call, you can add *comments* to certain cells. You can also set up the worksheet so that your team members can update the amounts owed and add their own comments, without risking inadvertent changes to the formulas.

To view a comment, move the pointer over a cell containing a comment. To view all comments, click **Comments** (**View** menu).

On your worksheet, select the cell you want to add a comment to. Click **Comment** (**Insert** menu).



Type your instructions for the cell.

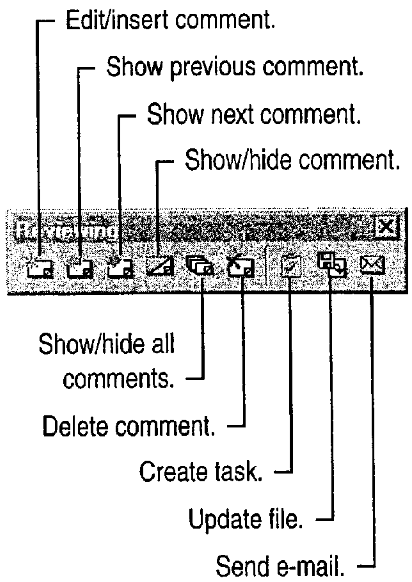
Unlock the cells that everyone will edit. Click **Cells** (**Format** menu). On the **Protection** tab, clear the **Locked** check box. Then protect the worksheet by clicking **Protect Sheet** (**Tools** menu, **Protection** submenu).

MS 114150

Want to keep your formulas out of sight? Hide them before you protect the worksheet. Select a formula, and then click **Cells** (**Format** menu). On the **Protection** tab, select the **Hidden** check box.

Protect the revision history Information about changes made to a shared workbook is recorded on a new sheet named **History**. You can protect this revision history and ensure that the workbook remains shared, until you decide otherwise. Click **Protect for Sharing** (**Tools** menu, **Protection** submenu), and then select the **Sharing with Track Changes** check box. For more information on revision history, see "What Kinds of Shared Editing Can You Do?" later in this topic.

Tend your comments To add, delete, edit, or review multiple comments, click **Comments** (**View** menu) to display all comments in the workbook and to display the **Reviewing** toolbar.



Leap into action Use the **Create Task** button on the **Review Comments** toolbar to start and create a new task in Microsoft Outlook. Click the **Send Mail** button to compose a quick e-mail message. For more information, see "Create a Task," page 120.

Combine separate workbooks Click **Merge Workbooks** (**Tools** menu). To allow merging, all the workbooks must be created from the same original, and revision history must be maintained throughout the editing process. For more information, see "Collaborate, and Watch Everyone's Progress," page 415.

Should you consider using a Microsoft Access database? For information that will help you choose the right Office application for your needs, see "Where Should You Store Your Contact Information?" page 346.

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

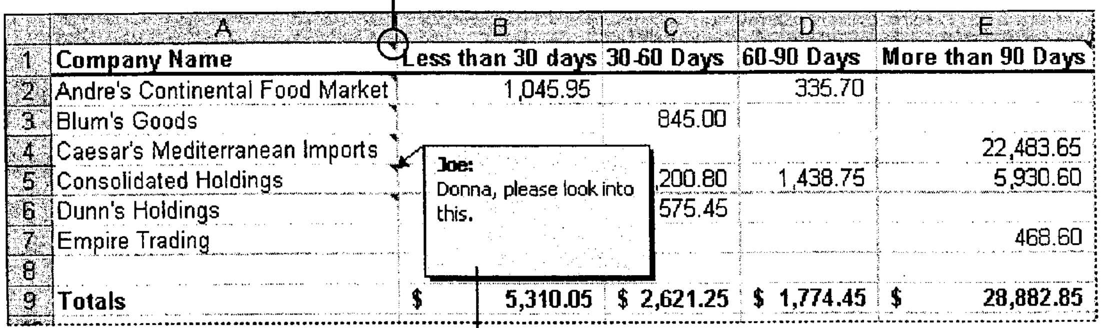
Office Assistant button

Collaborate, and Watch Everyone's Progress

Now that you have prepared the workbook, it can be shared. Put it on your network, and then click **Share Workbook** (**Tools** menu). On the **Editing** tab, select **Allow editing by more than one user at the same time**. Now your team members can get started on their work.

Every time the workbook is saved, it is updated with everyone's saved changes.

Cells that have comments have indicator marks in their upper-right corners.



When a reviewer moves the pointer over the cell, your comment appears as a tip.

Tired of seeing the comments? After you've read them, turn them off: Click **Options** (**Tools** menu). On the **View** tab, click **None** in the **Comments** box. Or print the comments by clicking **Page Setup** (**File** menu). On the **Sheet** tab, select an option in the **Comments** box.

Highlight and review revisions You can easily see the changes made by your group by clicking **Highlight Changes** (**Tools** menu, **Track Changes** submenu). To review the changes one by one, click **Accept or Reject Changes** (**Tools** menu, **Track Changes** submenu).

MS 114152

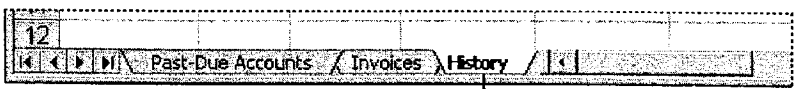
What Kinds of Shared Editing Can You Do?

You can do many of the same things in a shared workbook that you can do in a regular workbook. You can create and edit formulas and values; add, delete, and move rows and columns; apply formatting; edit charts; sort and filter the worksheet; and insert and delete sheets. As each user saves the workbook, changes are merged and reconciled.

What if two people change the same cell? When the second user to make a change tries to save the workbook, a dialog box presents information about both changes. The last person to save can decide which change to keep.

Save and update automatically You can save your changes and get updates from other users automatically, at an interval that you set. Click **Share Workbook** (**Tools** menu). On the **Advanced** tab, click **Automatically every:**, and then type the frequency with which you want to save the workbook.

Keep track of who changed what You can see information about which changes users have decided to keep. Click **Share Workbook**. On the **Advanced** tab, make sure the **Keep change history for:** option is selected. You can then specify how long you want to retain the revision history. To keep the revision history on a sheet in the workbook, click **Highlight Changes** (**Tools** menu, **Track Changes** submenu) and then click **List changes on a new sheet**.



Click here to see full details about what changes were saved and discarded.

Create an Online Manual

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

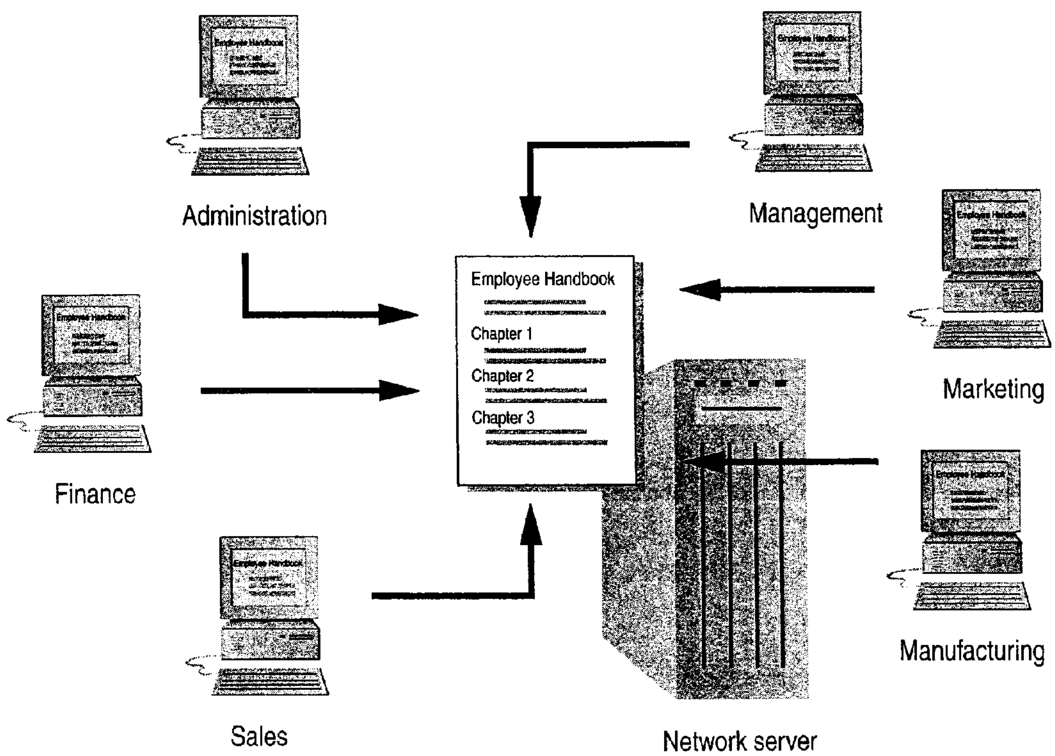
You're in charge of creating a procedures manual for your company, an employee handbook, let's say. You need to make sure the manual is universally accessible and always up-to-date. Also, you want to let users browse through and retrieve information quickly. Finally, you'd like to include color and graphics, 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

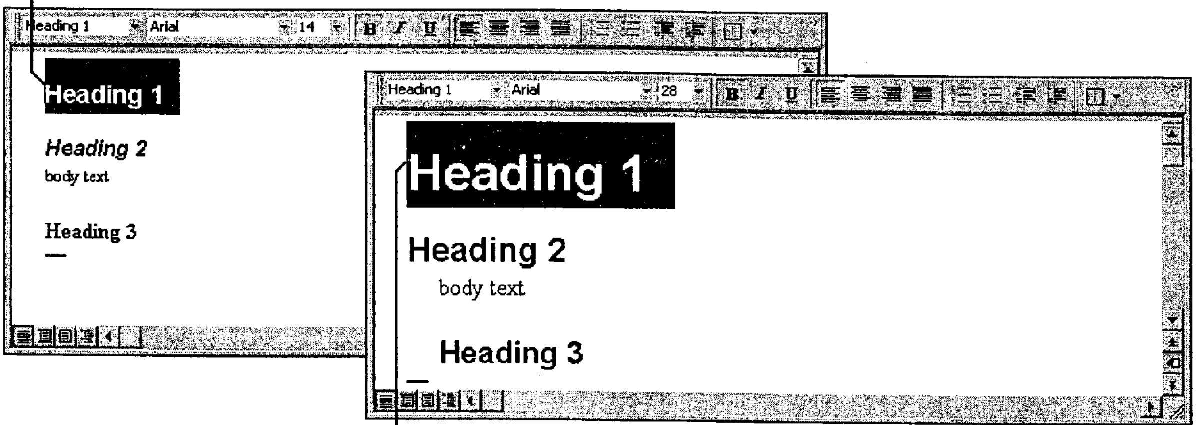
Create an Easy-to-Read Design

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.

MS 114155

AHL0123482

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

MS 114156

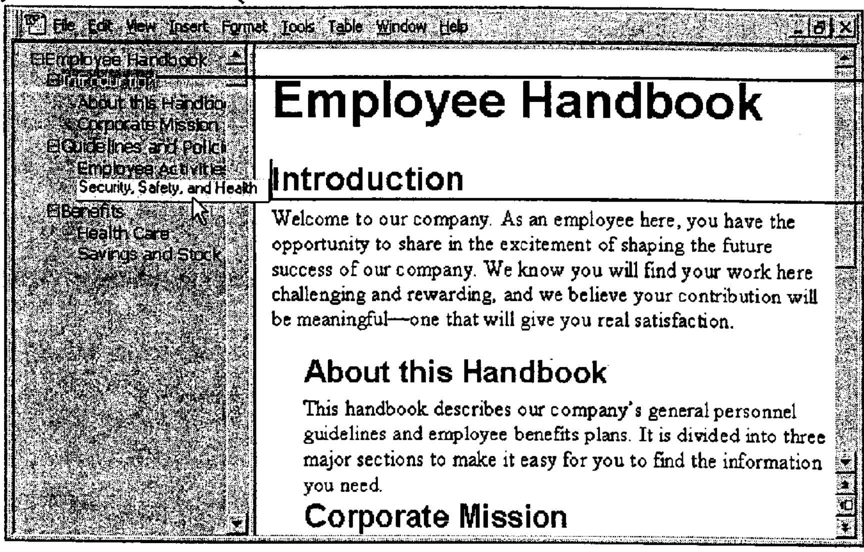
AHL0123483

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.

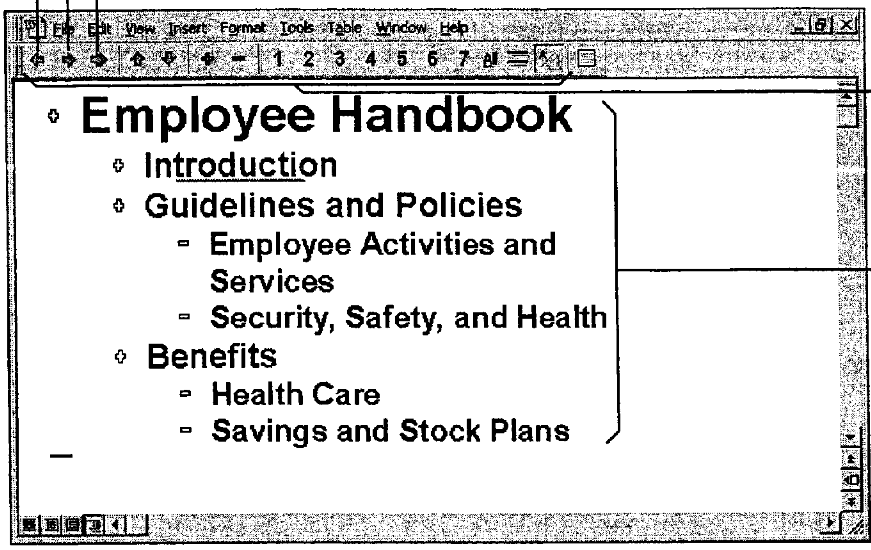
To Outline or Not to Outline?

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

AHL0123485

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

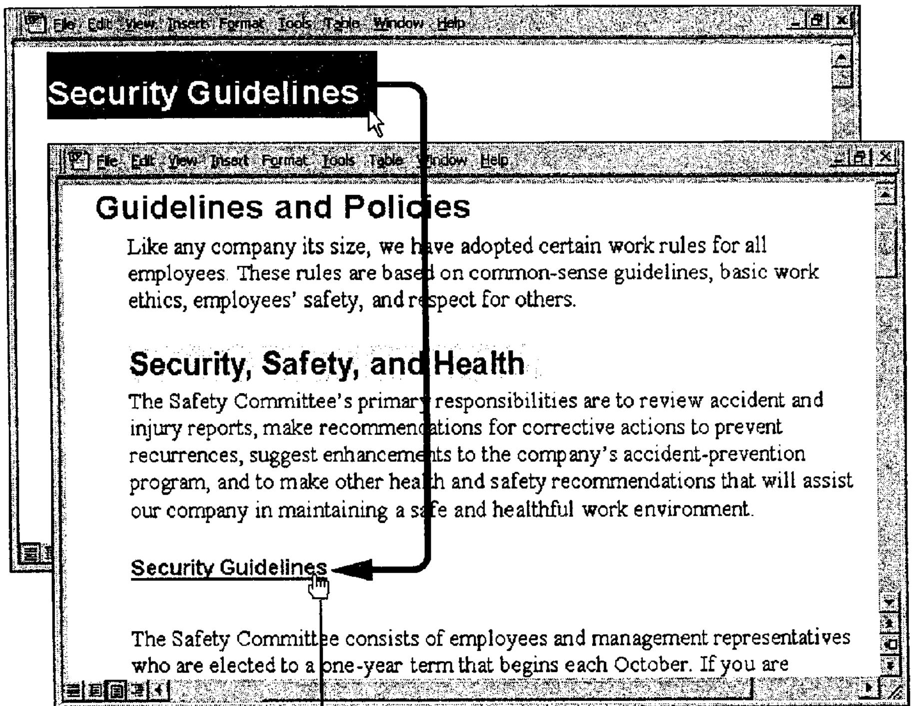
MS 114159

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.

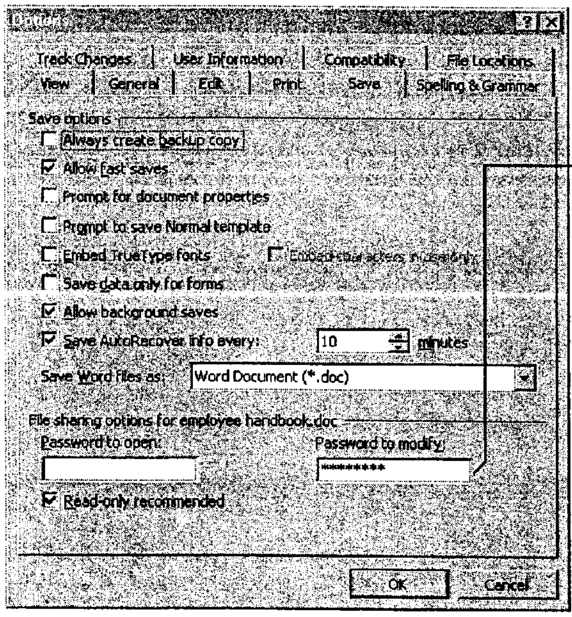
Want to know more? Look up **Getting Results - Online Manual** in Help.

Office Assistant button

Save Your Document and Protect It from Changes

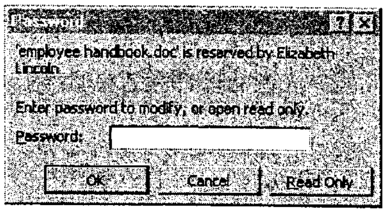
To make sure that your document is not changed by online readers, protect it by requiring a password to modify the document.

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

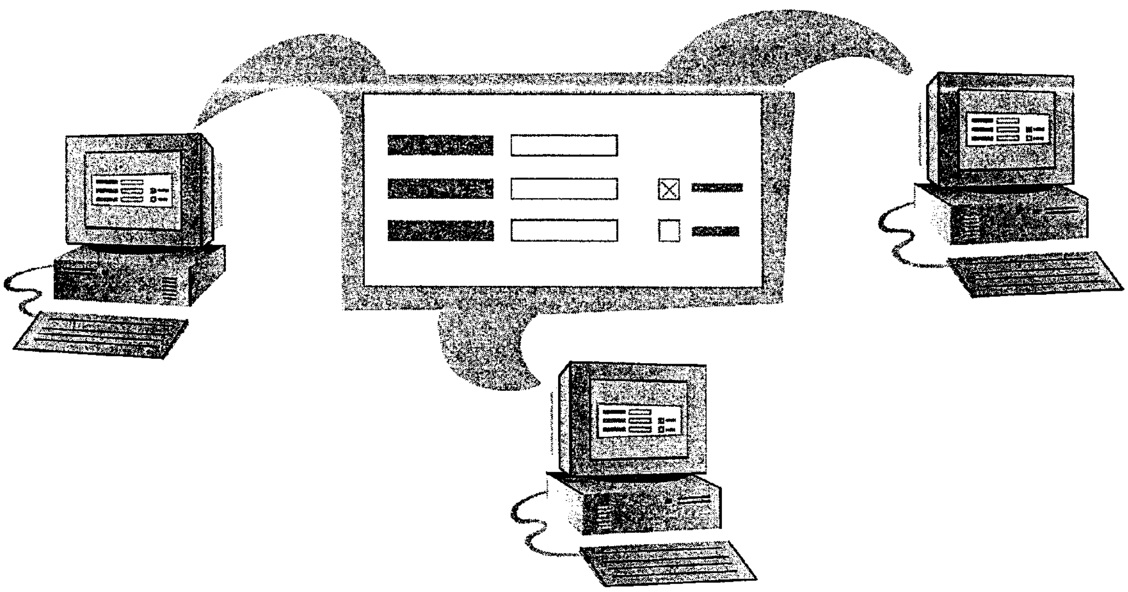
Work with a Microsoft Access Database in a Multiuser Environment

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.

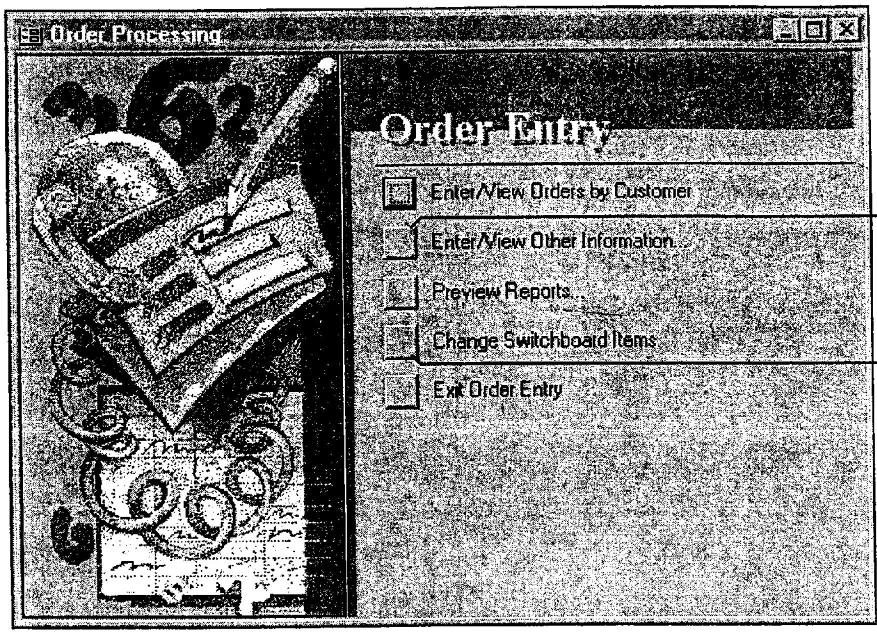
MS 114164

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

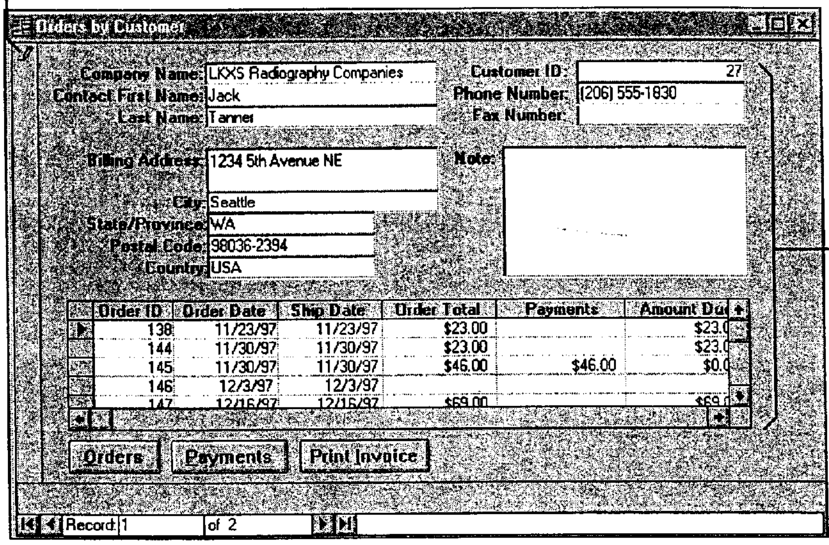
Share Your Order Entry Database

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.

MS 114167

AHL0123494

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.

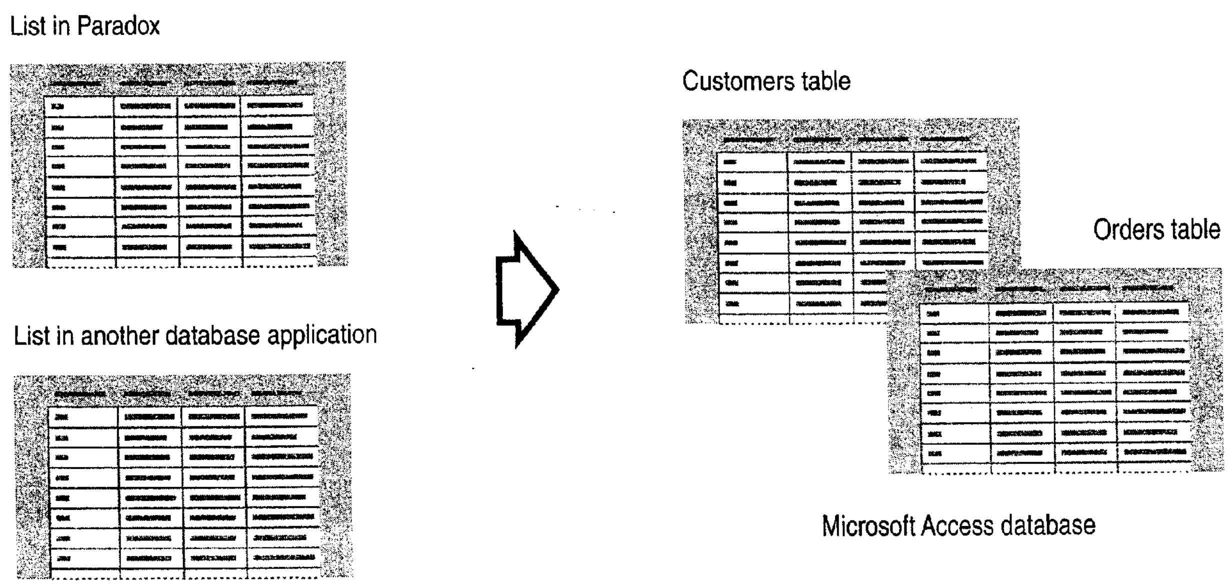
You can prevent others from using a database while you make changes. First, make sure no one else is using the database. Click **Open Database** (**File** menu), and then select the **Exclusive** check box in the **Open** dialog box that appears. Then select and open the database you want to work in.

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

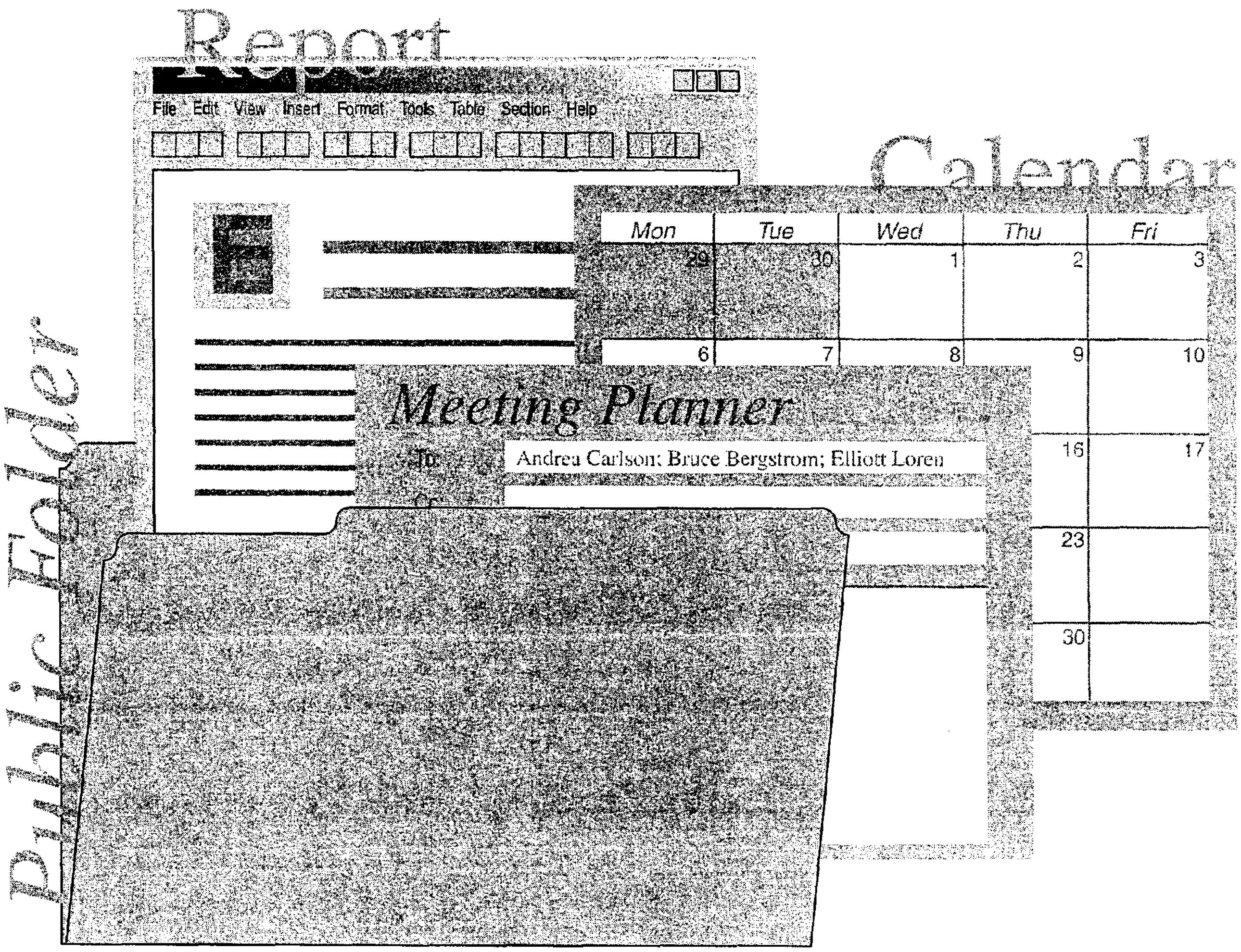
To	See
Learn more about using forms for data entry	"Use Your First Microsoft Access Database," page 104
Move Microsoft Excel data into Microsoft Access	"Move a Product List into Microsoft Access," page 493

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

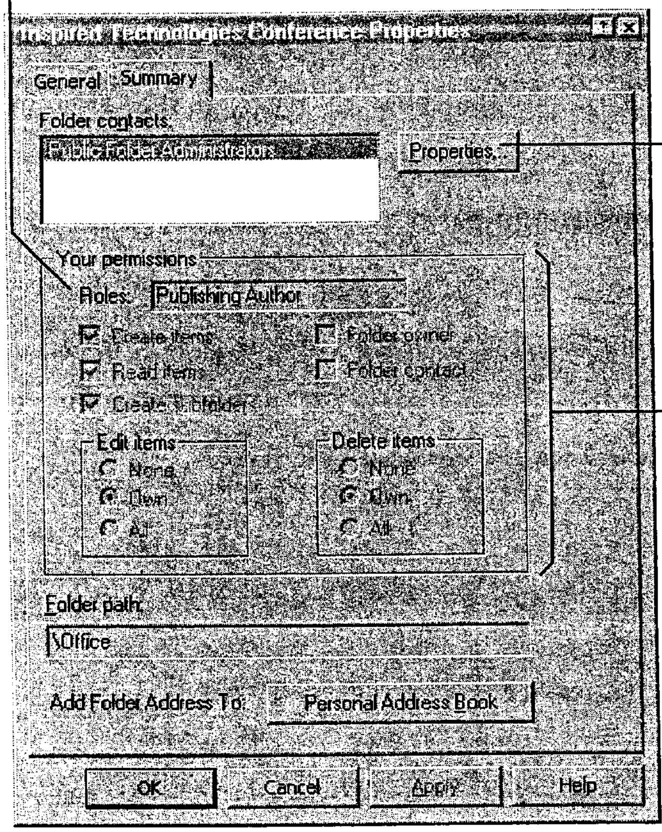
Check Permissions Granted for a Public Folder

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

AHL0123498

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**.

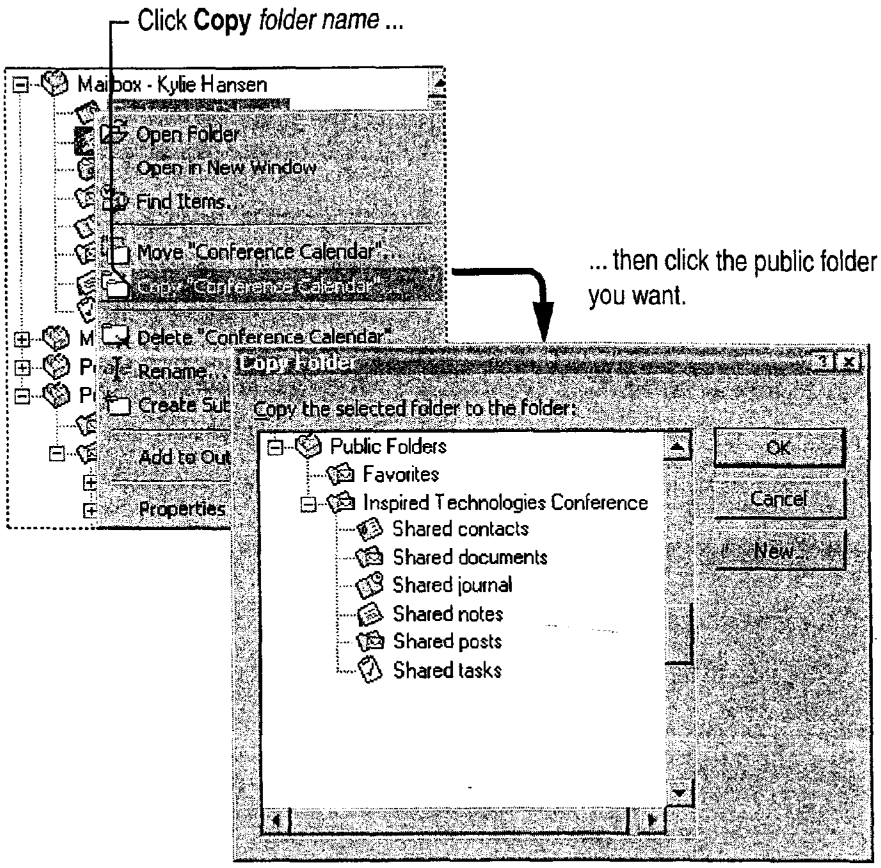
Want to know more? Look up **Getting Results - Share Folders** in Help.

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).

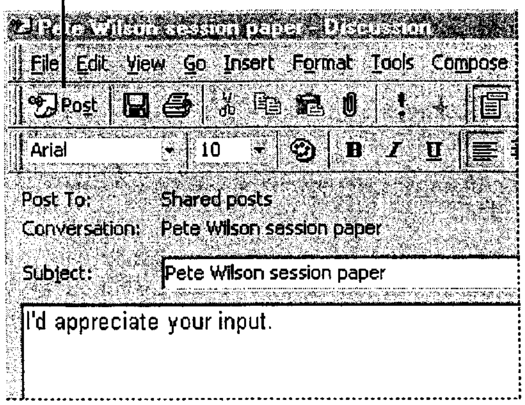
Create a new folder within a public folder Instead of copying a private folder, right-click the public folder and then click **Create Subfolder** to create a new folder. You must have permission to create subfolders within a public folder.

Start an Online Discussion

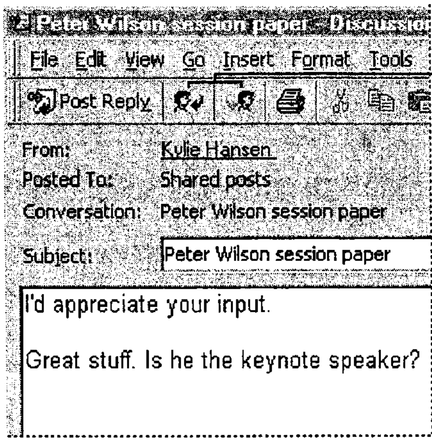
One of the speakers has submitted a paper for the conference and you'd like input from the rest of the team. You can use a public folder as a bulletin board so that members of the group can discuss the paper online. You must have permission to create items in order to post information to a public folder.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

MS 114175

AHL0123502

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

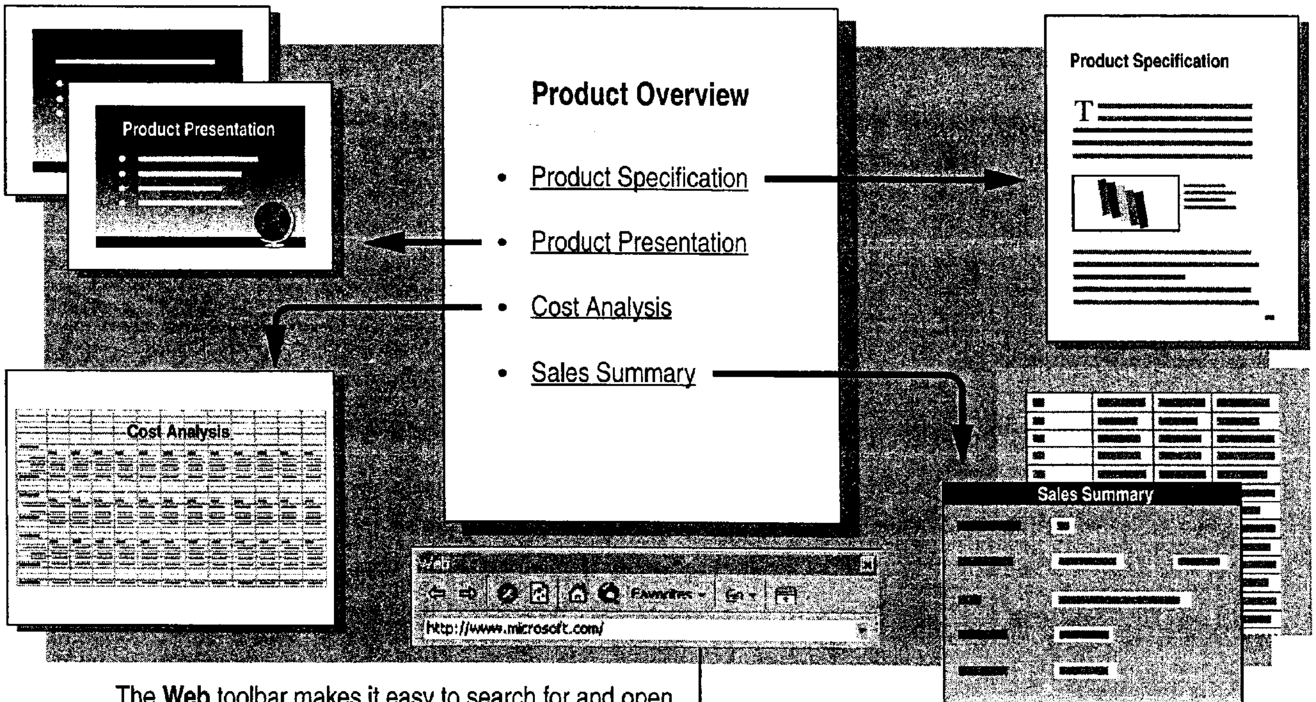
Make the Most of Office Applications on Your Internal Web or the World Wide Web

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

AHL0123505

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

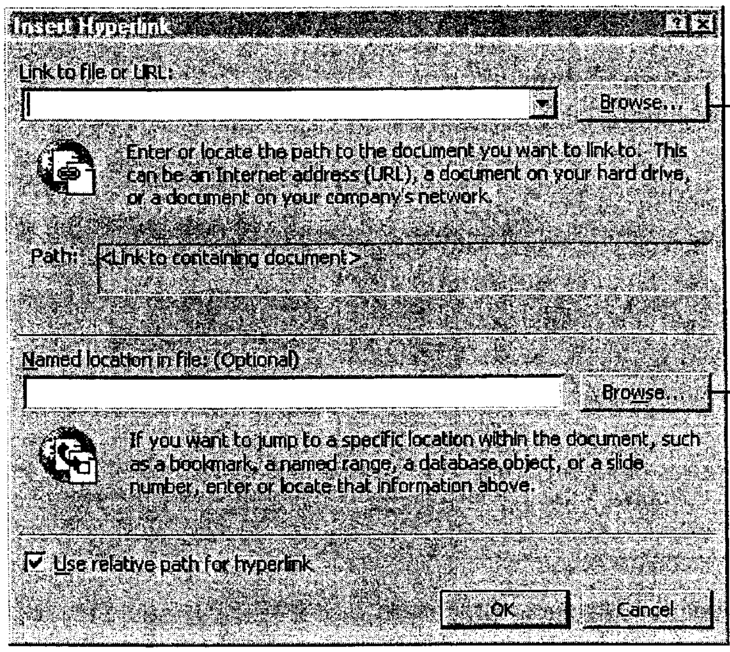
MS 114179

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.

MS 114180

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

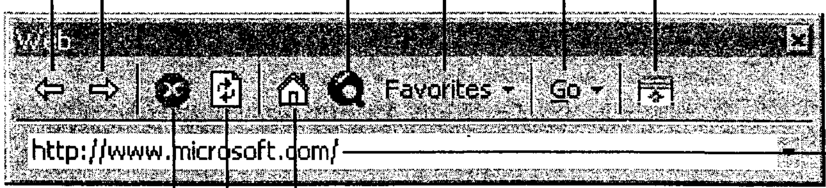
Use the Web Toolbar to Navigate Your Intranet

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.



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

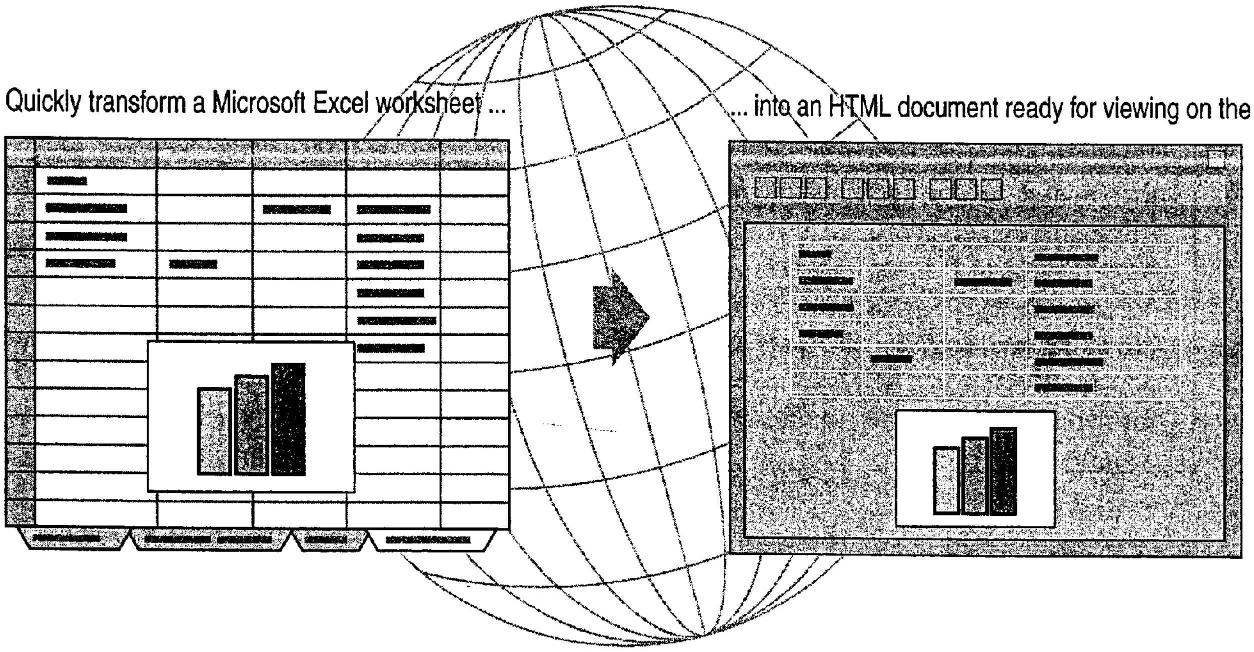
To	See
Create a Web page by using Word	"Create a Web Page with Word," page 458
Create Web content by using Microsoft Excel	"Publish Microsoft Excel Tables and Charts on the Web," page 448
Create a Web page by using PowerPoint	"Create a Web Presentation with PowerPoint," page 452
Add a hyperlink to a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

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

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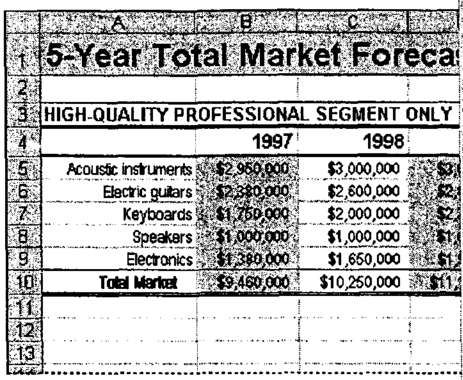
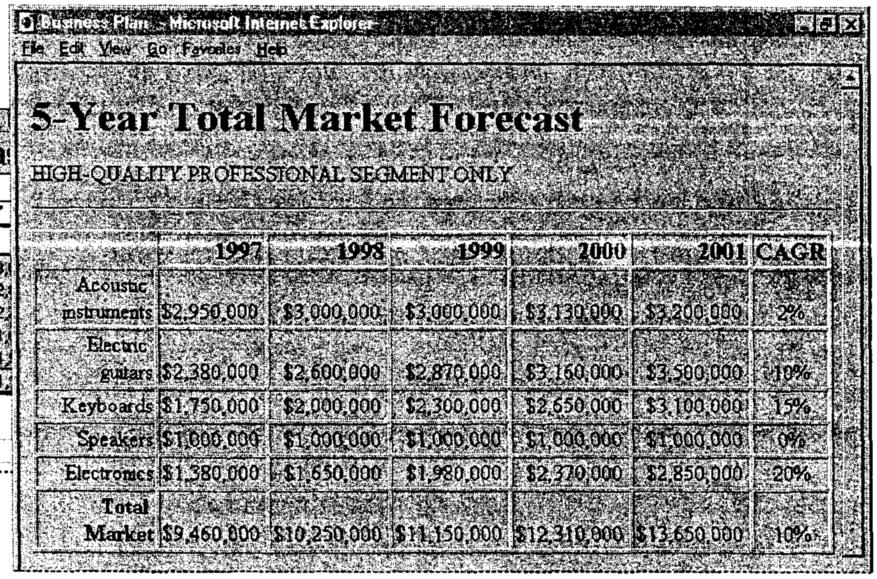
Save the Worksheet as an HTML Document

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

AHL0123512

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

MS 114186

AHL0123513

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

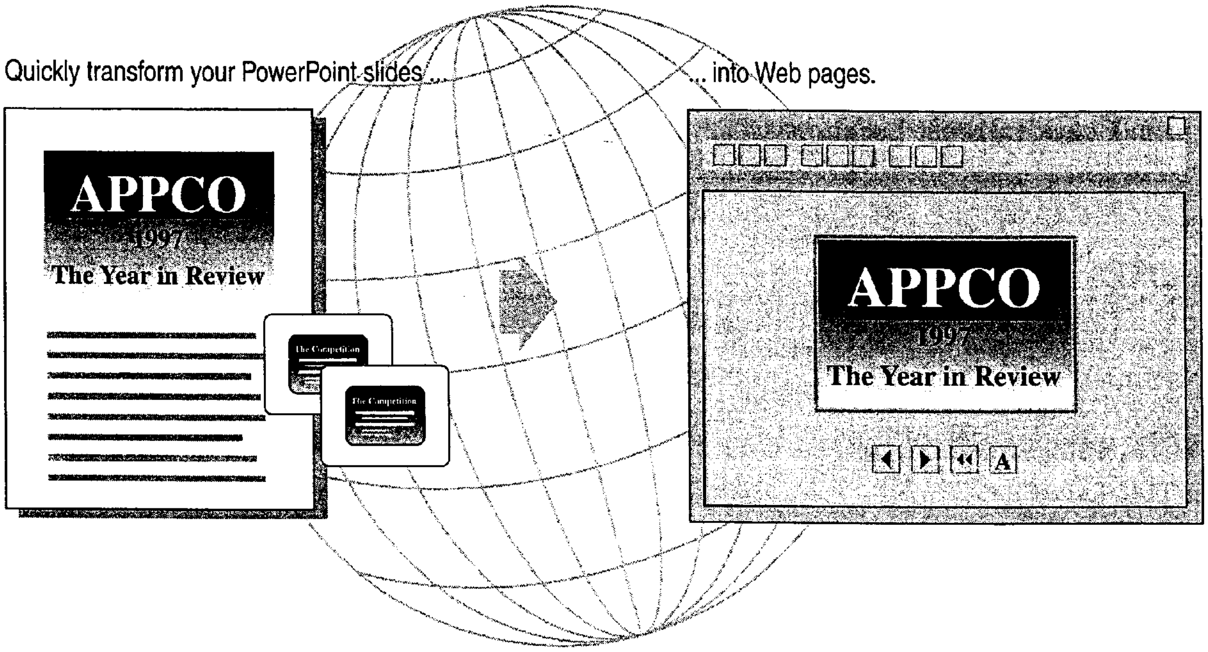
Create a Web Presentation with PowerPoint

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



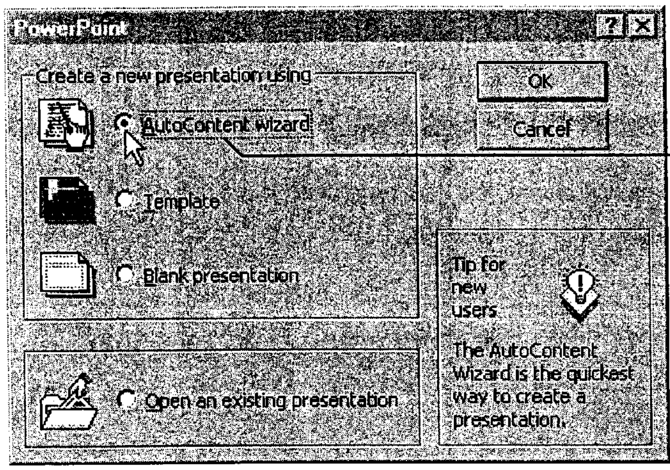
MS 114188

AHL0123515

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.

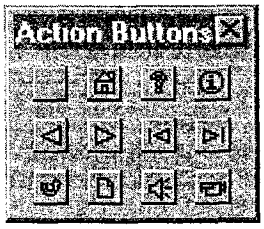
Want to create hyperlinks? You can format any selected PowerPoint text or object as a hyperlink. For example, to create a hyperlink to the Microsoft Web site, select the text or object, click the **Insert Hyperlink** button, and then type **http://www.microsoft.com/** in the **Link to file or URL** box.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

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.

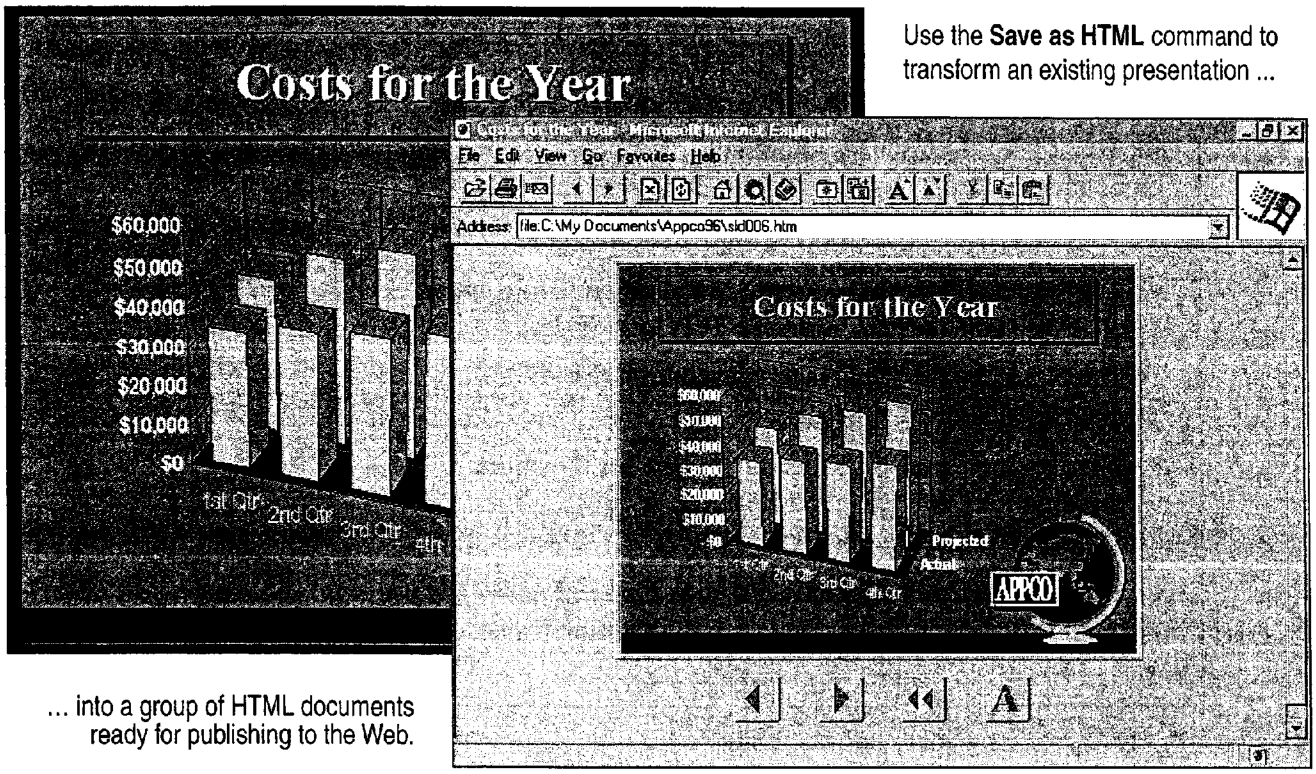
Office Assistant button

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.

MS 114191

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

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

AHL0123520

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

AHL0123521

Start the Web Page Wizard

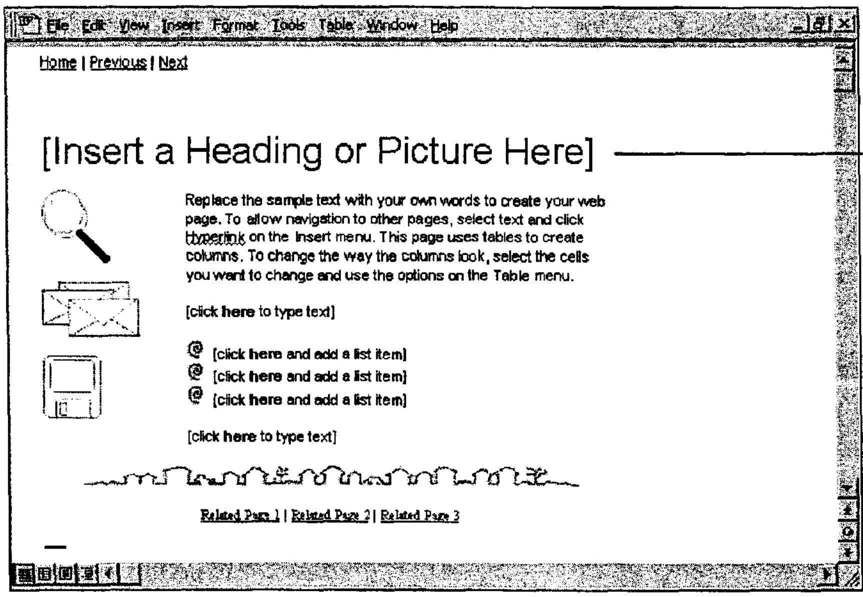
Start by clicking **New (File** menu). On the **Web Pages** tab, double-click **Web Page Wizard.**

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.

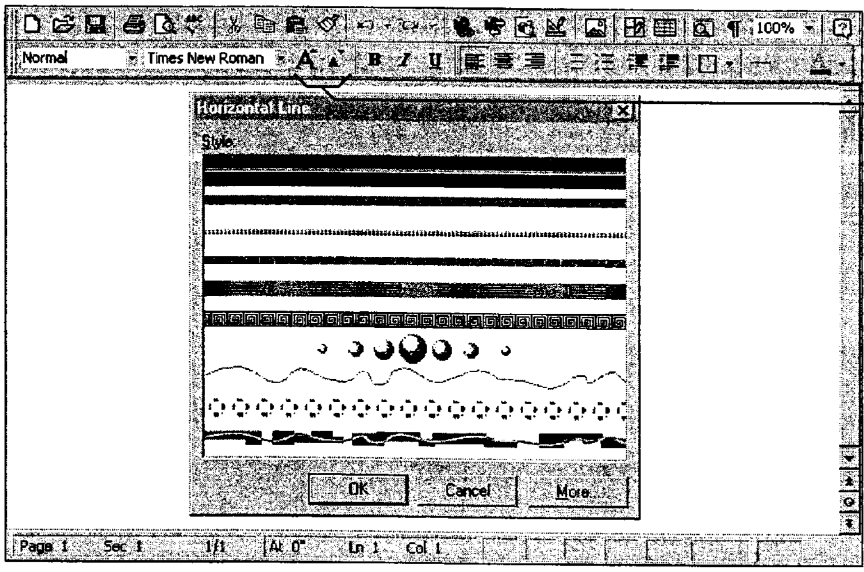
For more information, look up **Getting Results - Word Web Page** in Help.

MS 114196

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

AHL0123524

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

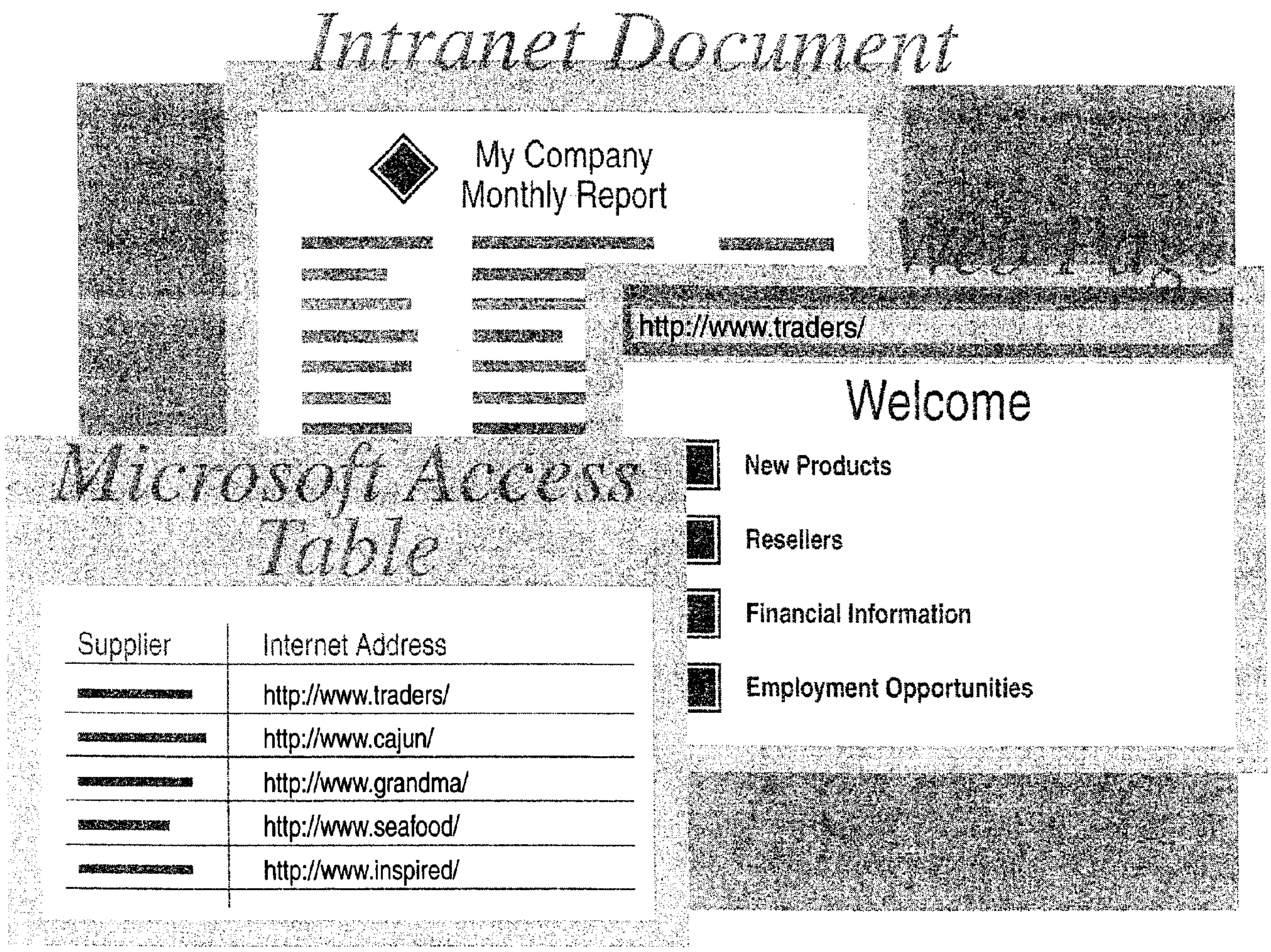
Suppose that you're responsible for updating product information for your company's sales force. Many of your suppliers have created sites on the World Wide Web for storing and updating information about their products. If you often jump to these Web sites, you can use Microsoft Access to store their 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.



MS 114200

AHL0123527

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

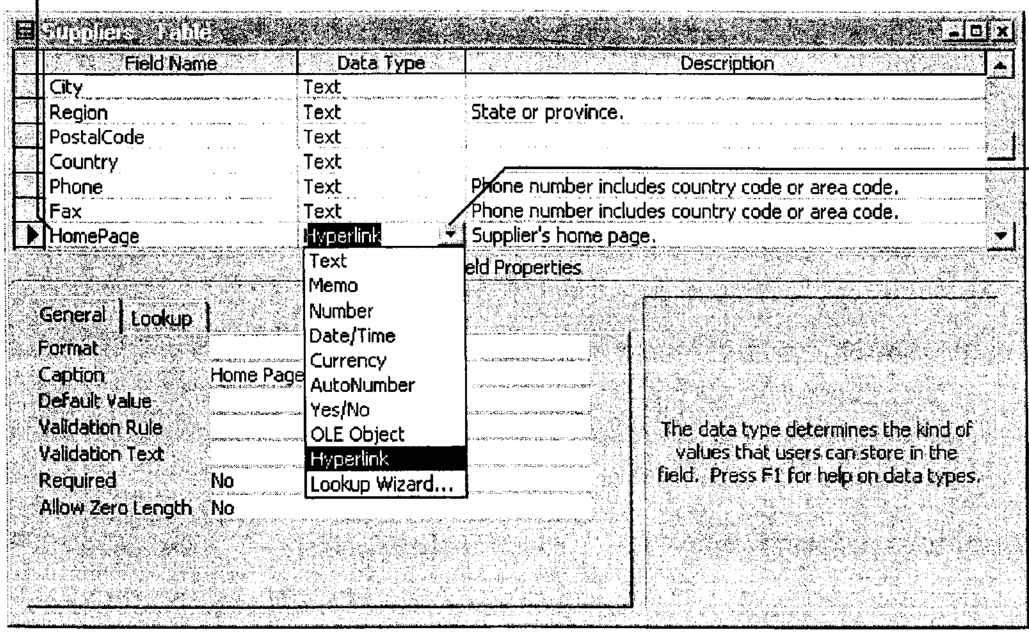
Create a hyperlink field To make it easy to jump to your suppliers' Web sites, add a field to the Suppliers table in which you can store their hyperlink addresses. To create a hyperlink field, open the Suppliers table in table design view. In the database window, on the **Tables** tab, double-click **Suppliers**,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



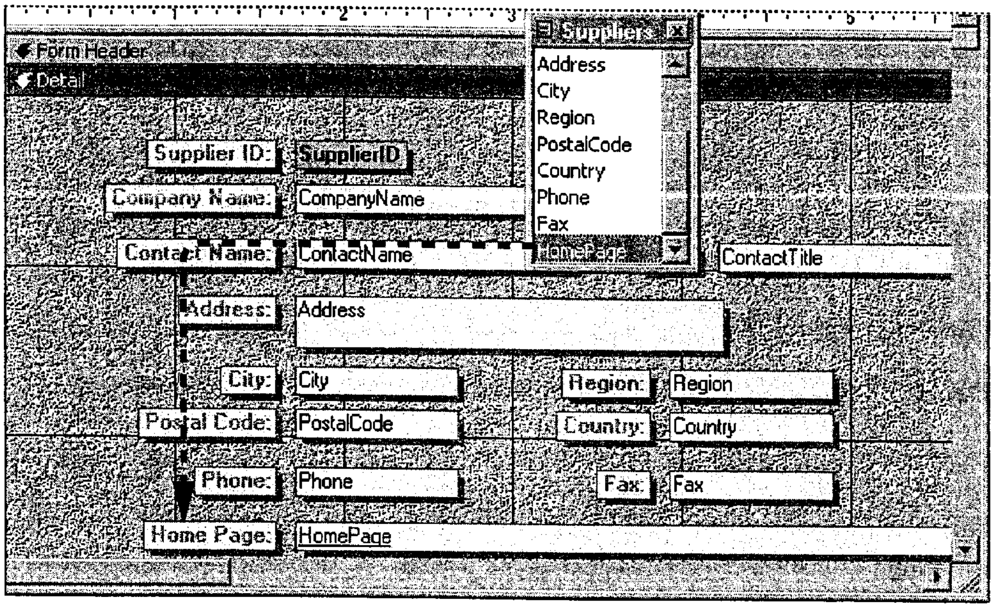
... then click in the **Data Type** column. Click the arrow, and then select **Hyperlink** from the list.

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.

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.

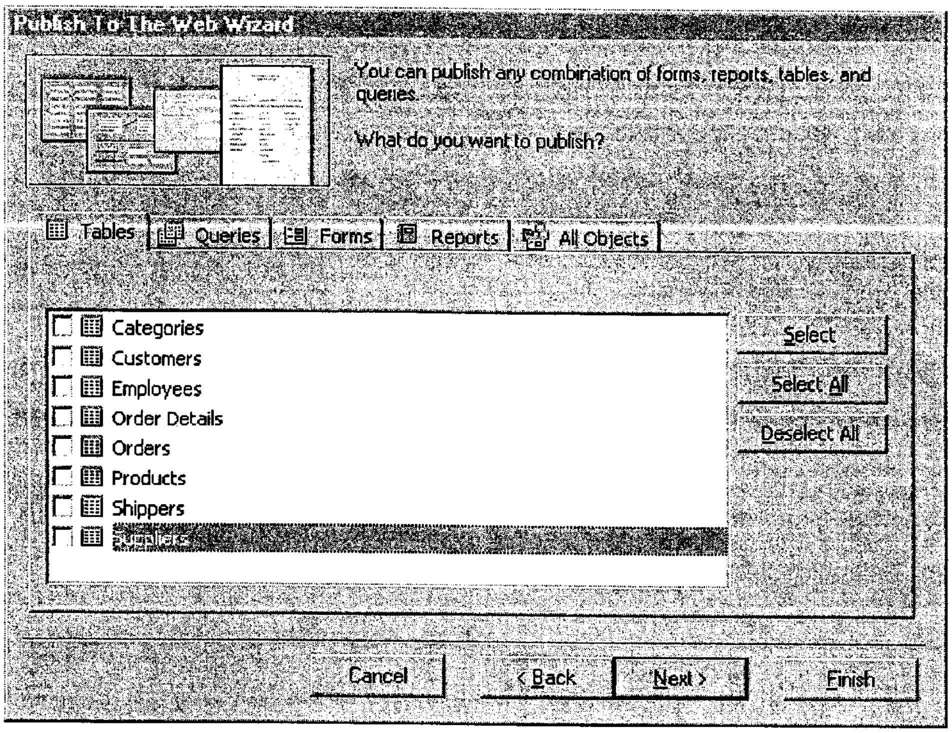
Office Assistant button

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

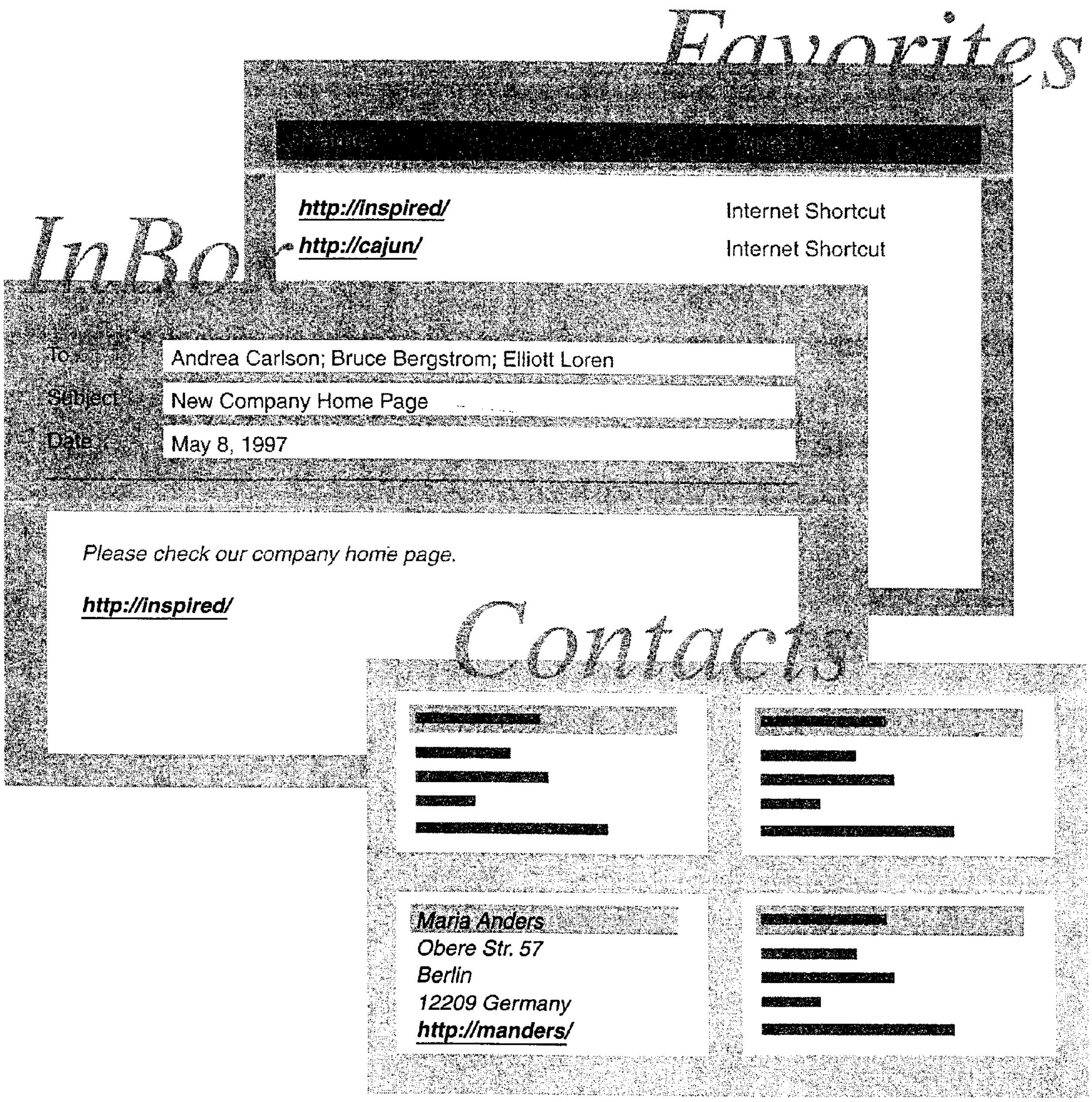
AHL0123532

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

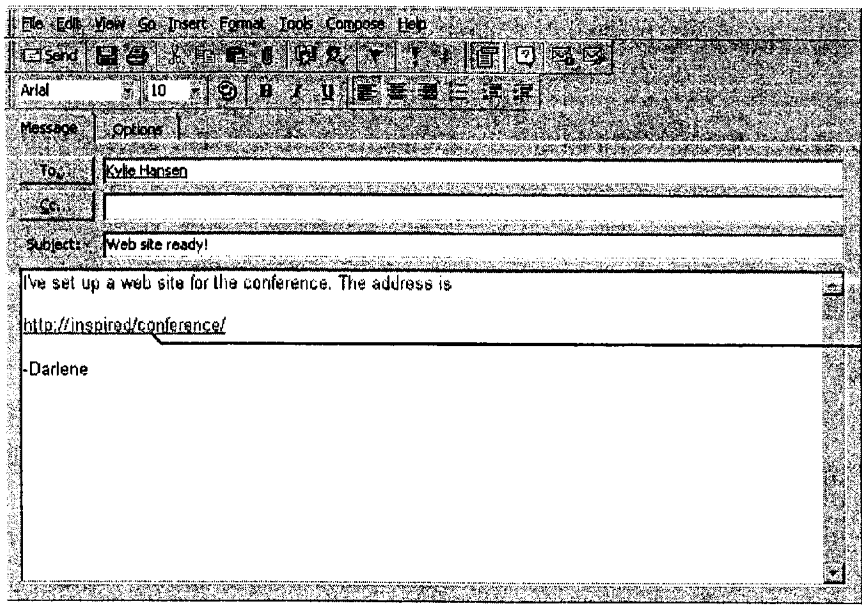
Hyperlinks



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

MS 114207

AHL0123534

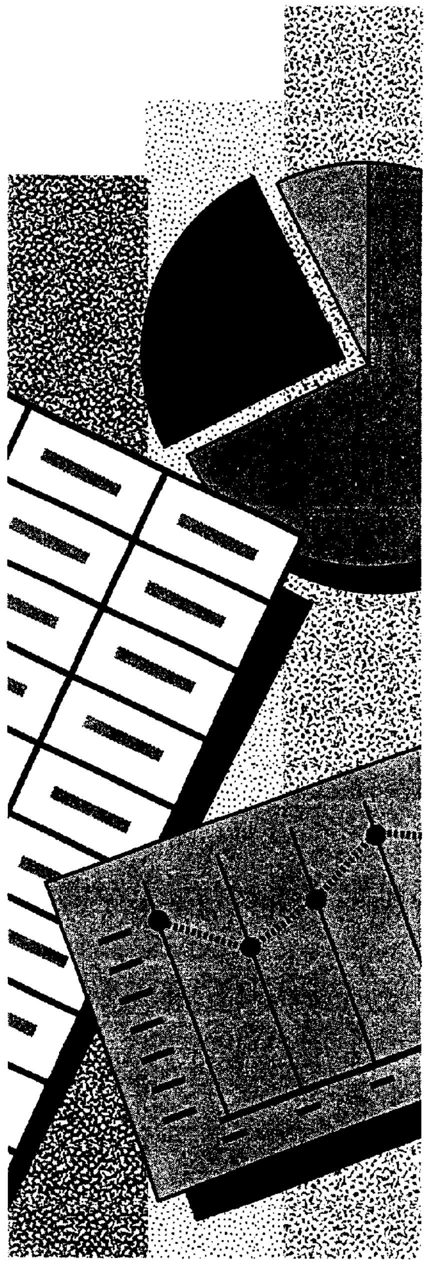
Next Steps

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

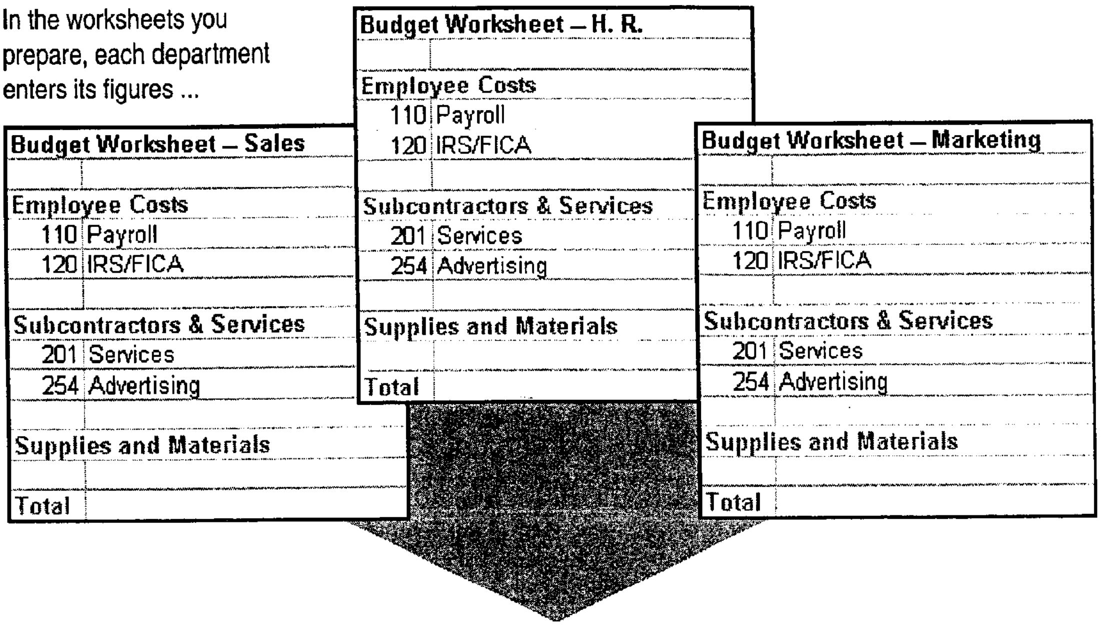
Working up an overall budget requires combining the budgets for several groups or departments within your company. Determining how to allocate the available funds usually involves several rounds of proposals and reconsolidation. To project expenses and make adjustments, your department managers need 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 ...

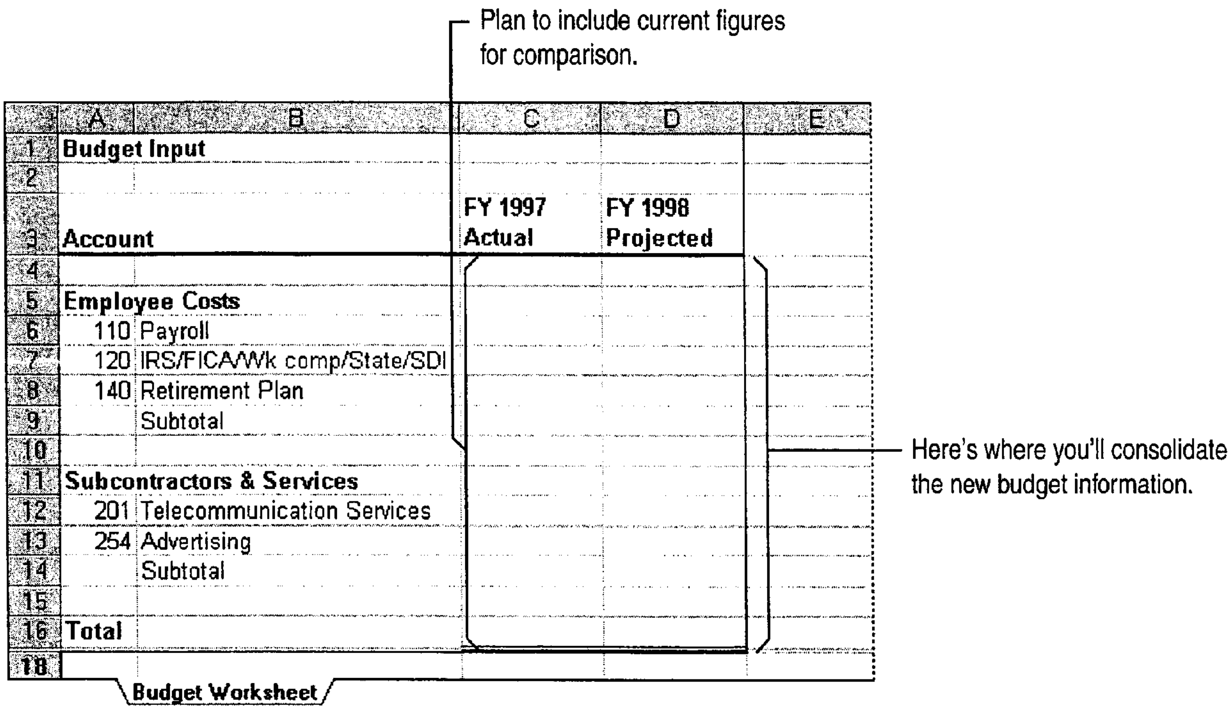


Consolidated Budget Input	FY1997	FY1998
Employee Costs	164,146	?
Subcontractors & Services	58,035	?
Supplies and Materials	902	?
Total	**223,083**	**?**

... 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

MS 114211

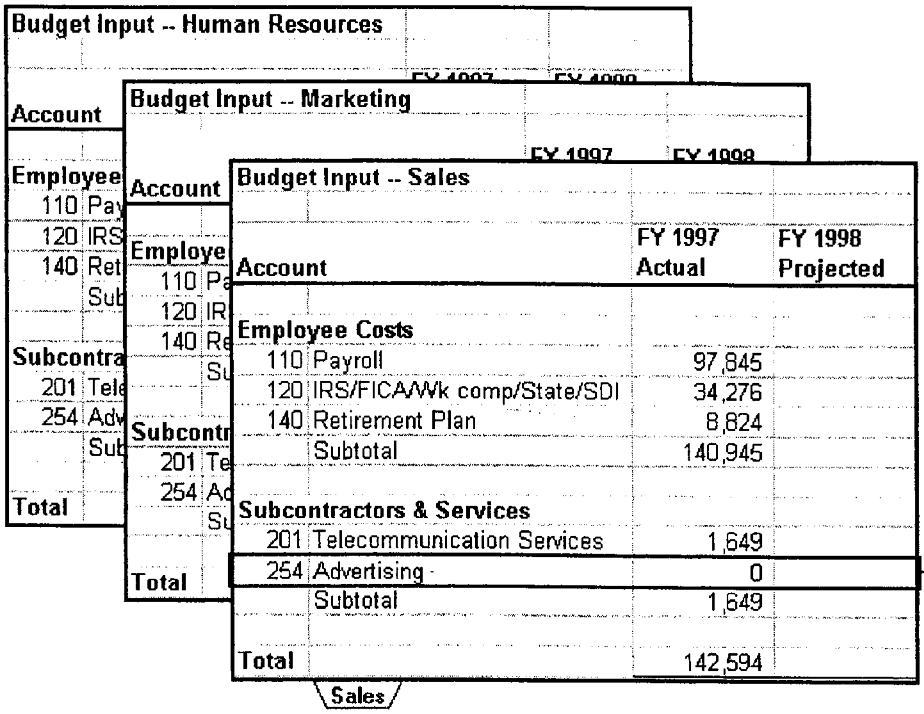
AHL0123538

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

AHL0123539

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.

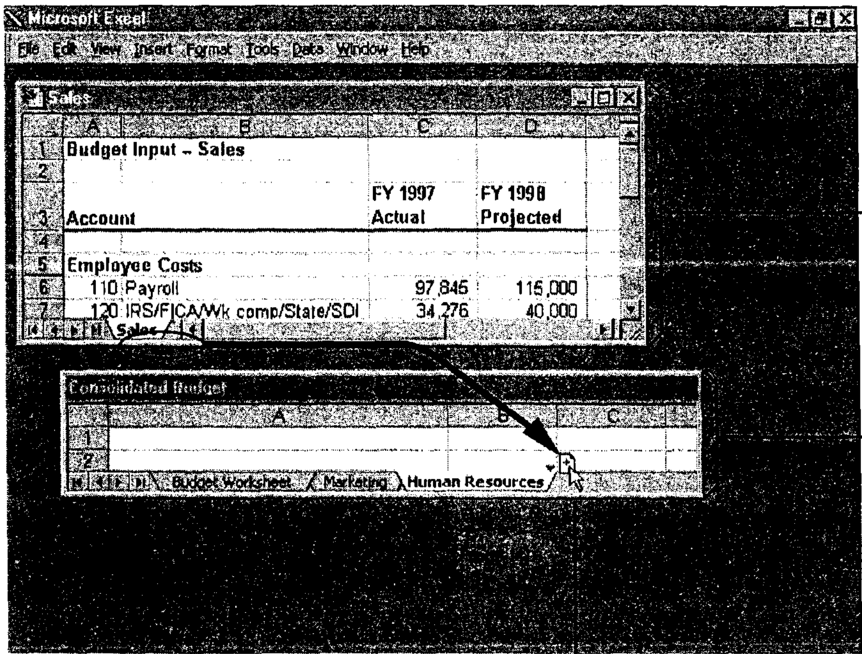
Office Assistant button

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.

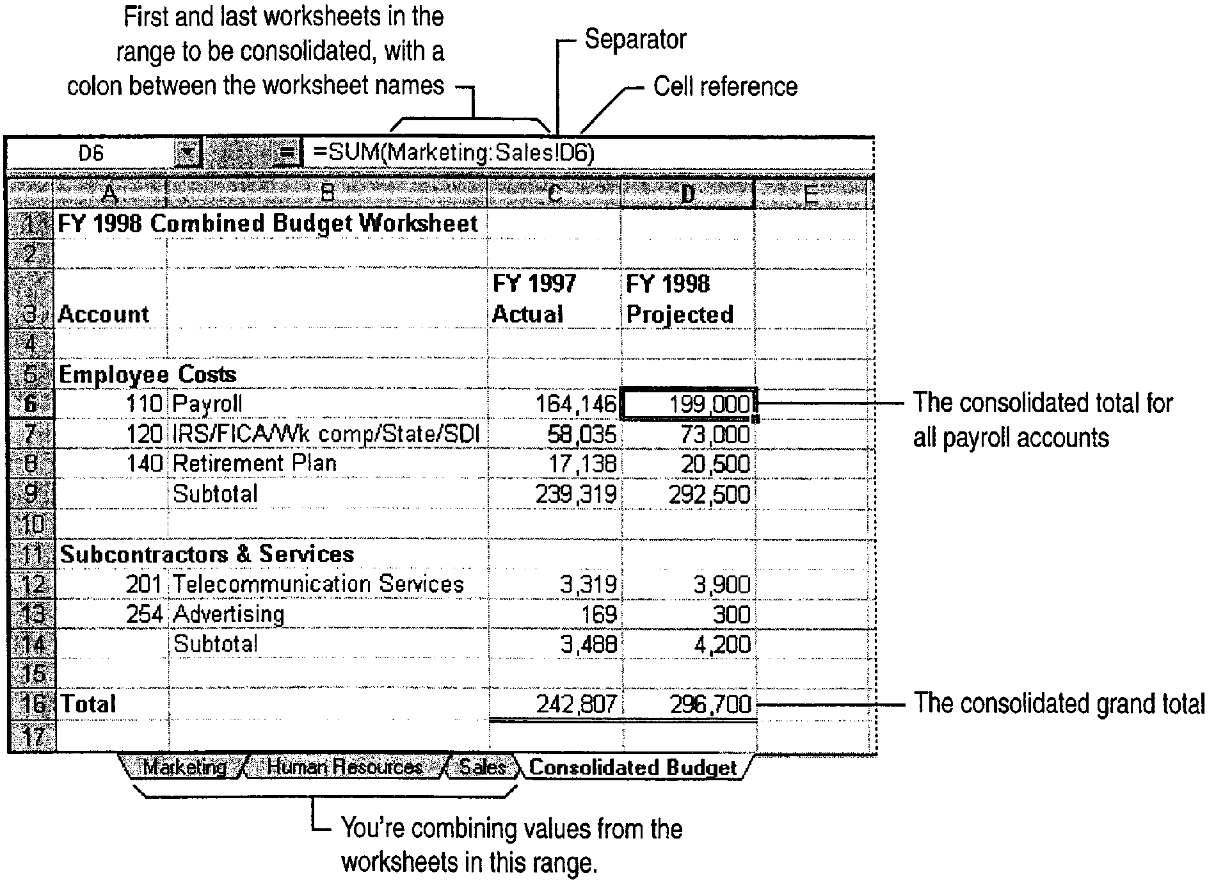
Make sure you get the right kinds of data For more control over the workbooks you distribute to your co-workers, you can set each cell to limit the allowable range of values, or to accept only a specific data type. This way you can avoid, for example, someone mistakenly entering a value that is too large 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.



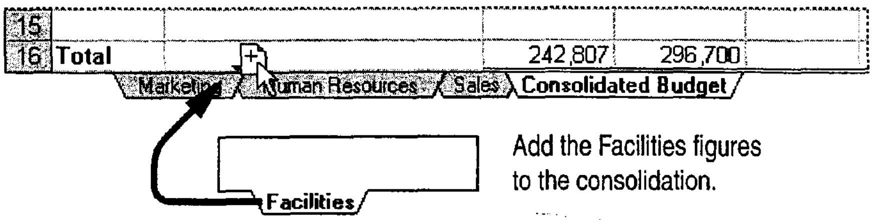
	A	B	C	D	E
1	FY 1998 Combined Budget Worksheet				
2					
3	Account		FY 1997 Actual	FY 1998 Projected	
4					
5	Employee Costs				
6	110	Payroll	164,146	199,000	
7	120	IRS/FICA/Wk comp/State/SDI	58,035	73,000	
8	140	Retirement Plan	17,138	20,500	
9		Subtotal	239,319	292,500	
10					
11	Subcontractors & 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.

MS 114216

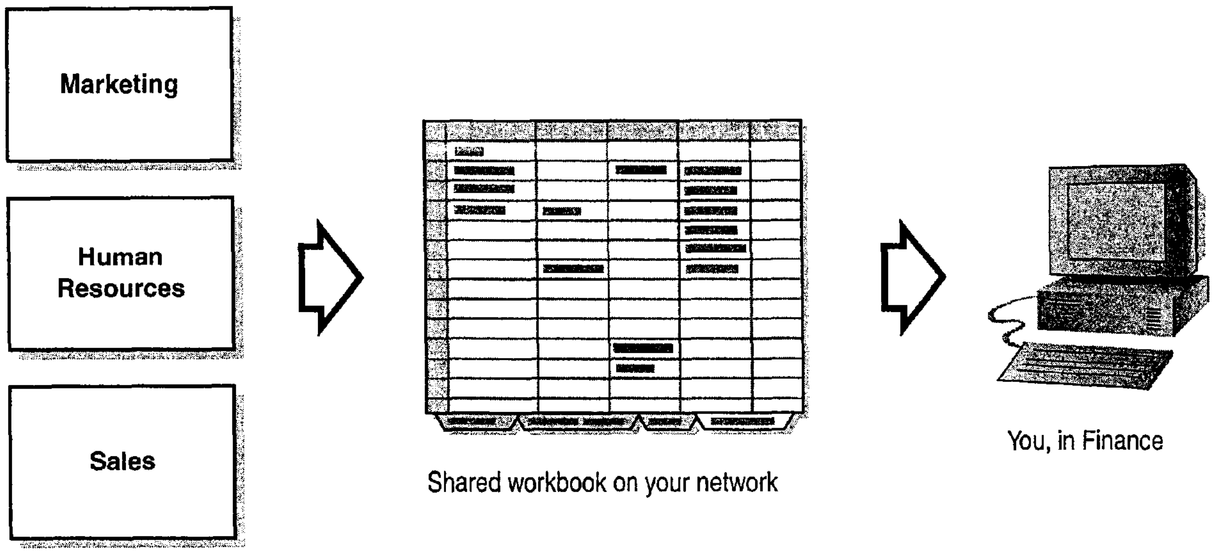
AHL0123543

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

AHL0123544

Develop Budgeting Alternatives

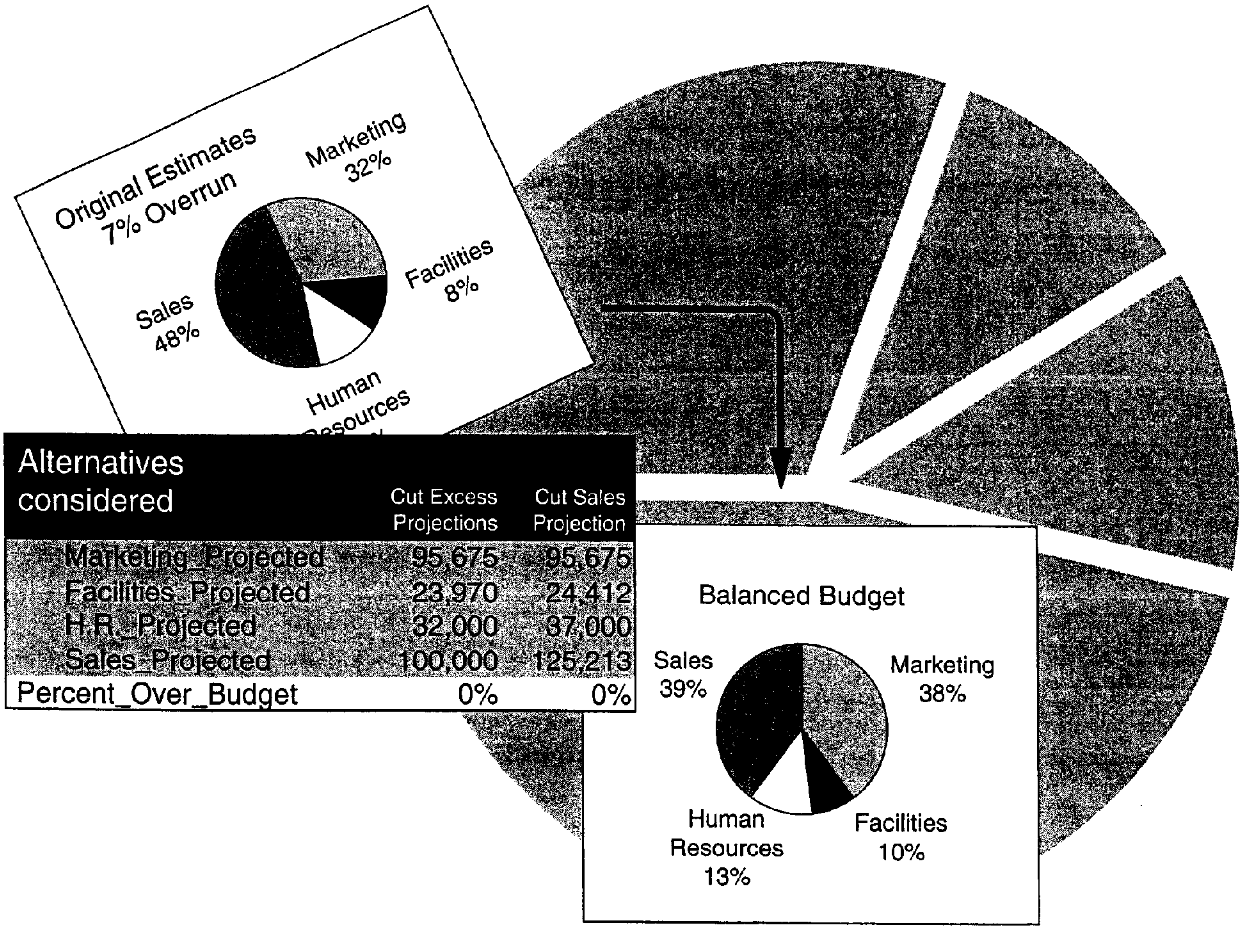
Work with What-If Assumptions in Microsoft Excel

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%

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
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

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
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

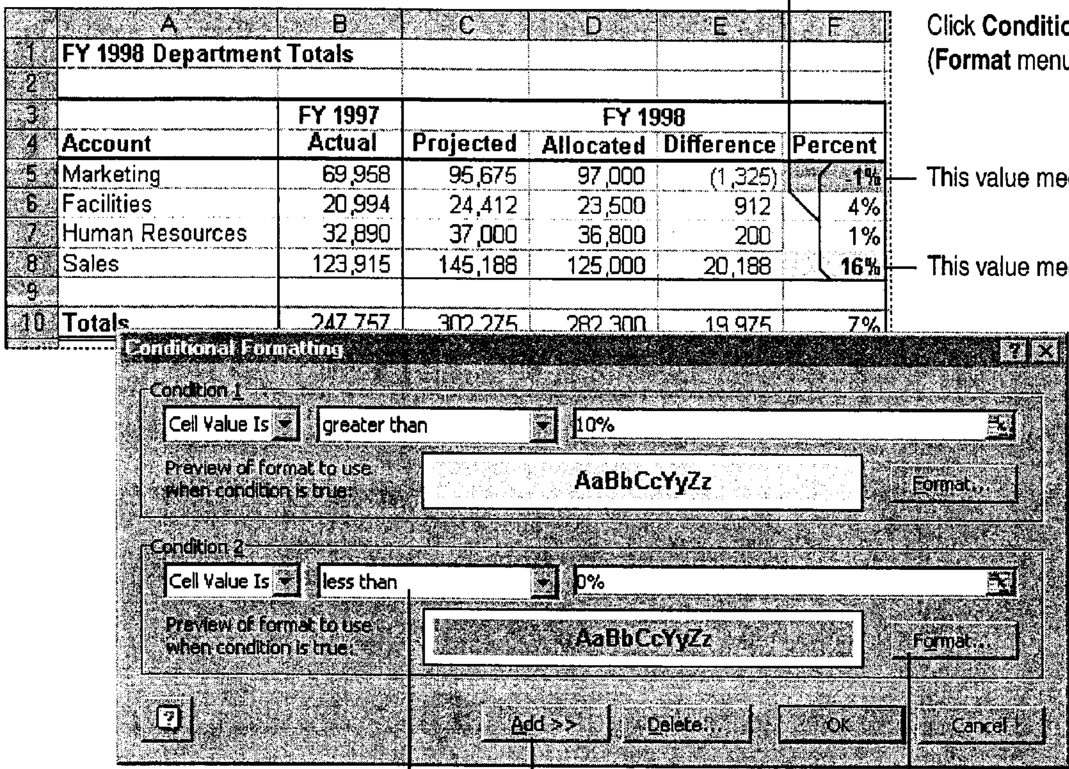
More Power: Shared Workbooks

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.

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.

You want to know when percentages are outside the range of 0%–10%.



Click **Conditional Formatting** (**Format** menu).

This value meets Condition 2.

This value meets Condition 1.

Click here to specify the operator you want for this condition.

Click here to add more conditions.

Click here to specify the formatting you want for this condition.

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.

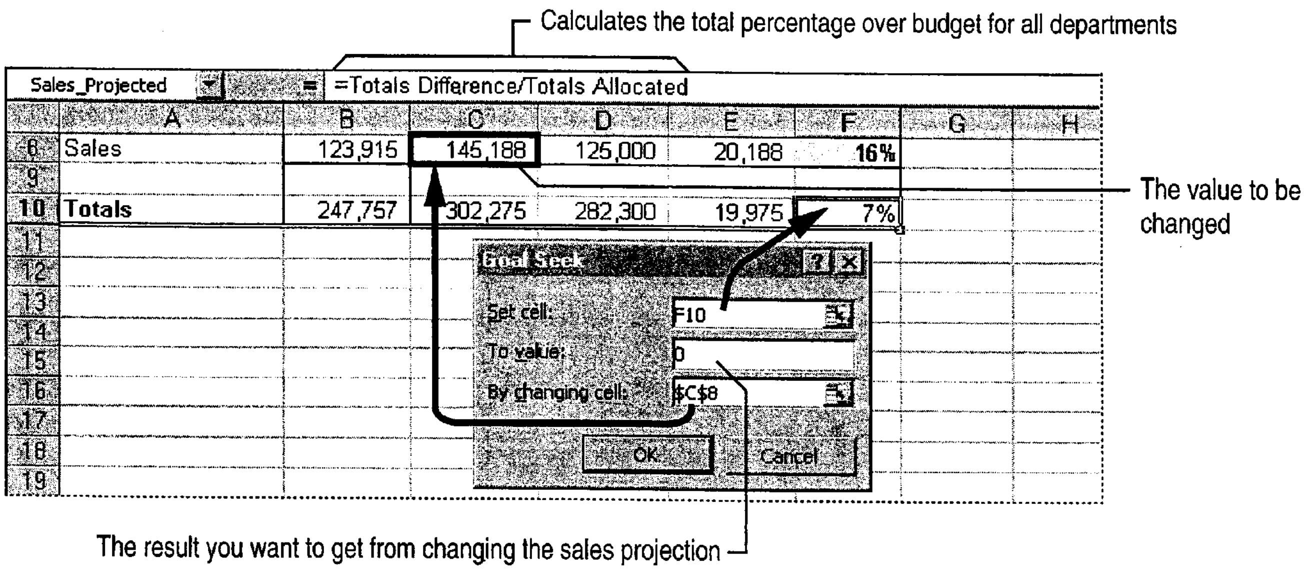
Create hyperlinks to source data Important data often deserves further explanation—especially when an alarm is triggered. Click the **Insert Hyperlink** button to create a hyperlink that jumps directly to a cell range, worksheet, or workbook containing additional information. You can even create a hyperlink 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

Compare Alternatives

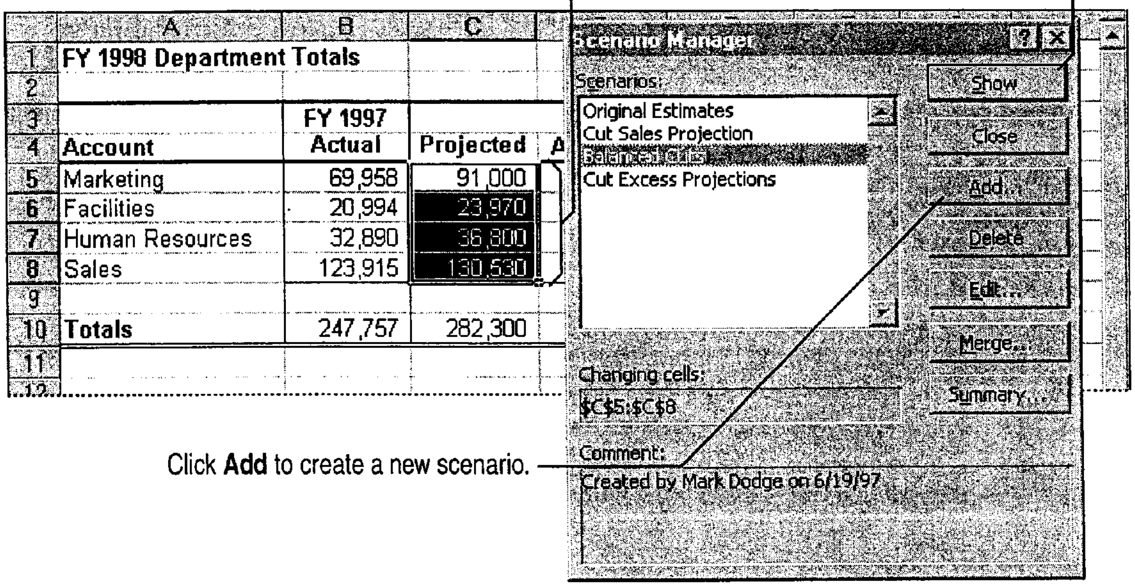
As you try different strategies to reduce over-budget projections, you need to compare and refine approaches. Perhaps you have done this by saving various copies of your worksheet and viewing them simultaneously.

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.

Select the changing cells (the ones in which you try out different values).

To display a scenario that you've saved, select the name and then click **Show**.



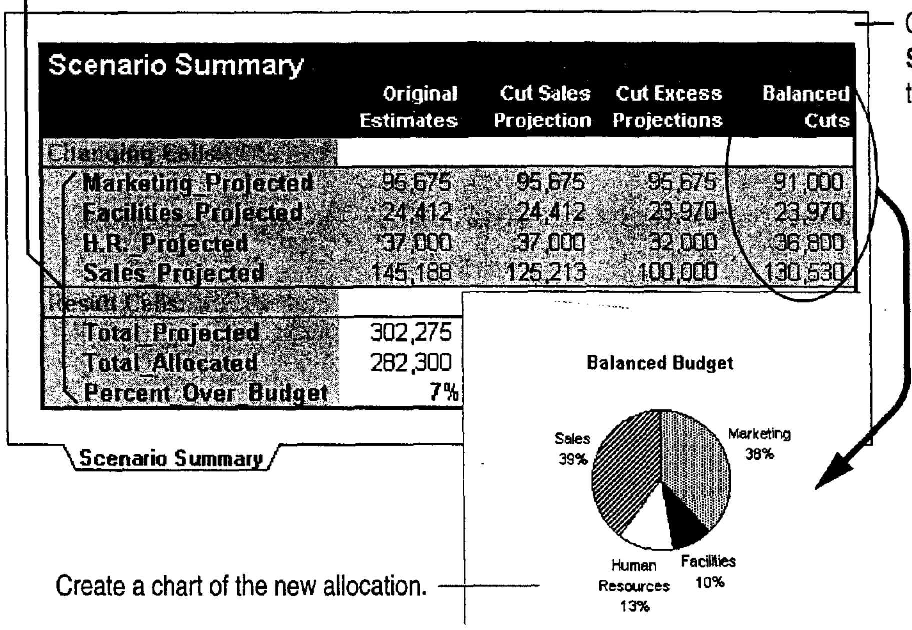
Click **Add** to create a new scenario.

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.



Scenario Summary	Original Estimates	Cut Sales Projection	Cut Excess Projections	Balanced Cuts
Changing Cells:				
Marketing_Projected	95,675	95,675	95,675	91,000
Facilities_Projected	24,412	24,412	23,970	23,970
H.R._Projected	37,000	37,000	32,000	36,800
Sales_Projected	145,188	125,213	100,000	130,530
Result Cells:				
Total_Projected	302,275			
Total_Allocated	282,300			
Percent_Over_Budget	7%			

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

AHL0123551

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%

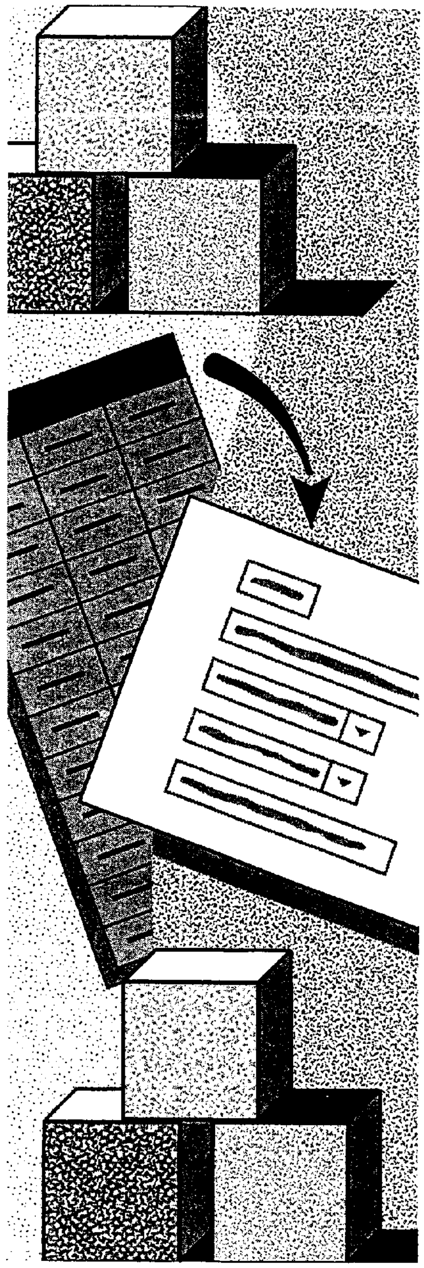
You can use row and column labels in formulas instead of cell references.

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

MS 114225

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

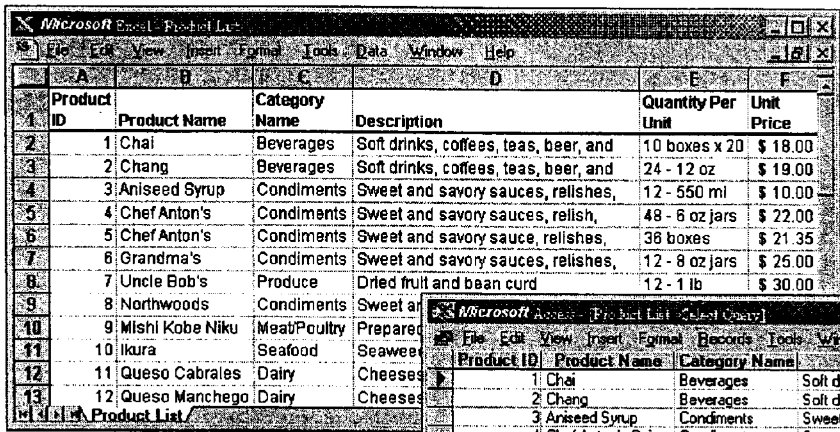
Move a Product List into Microsoft Access

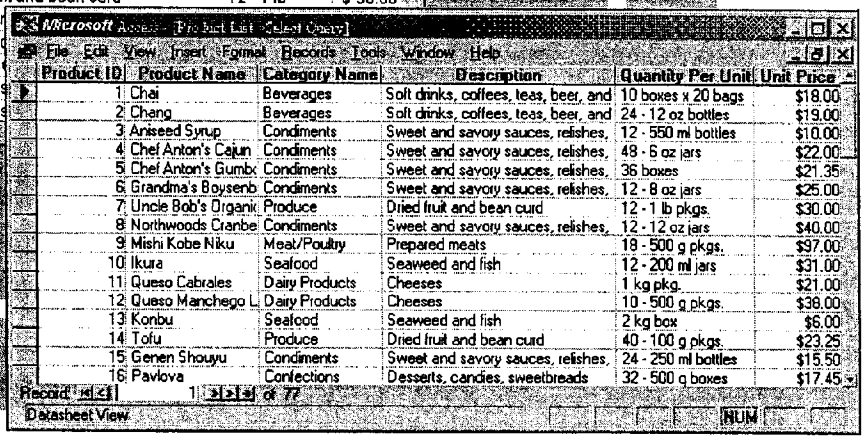
Convert Data from Microsoft Excel to Microsoft Access

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.

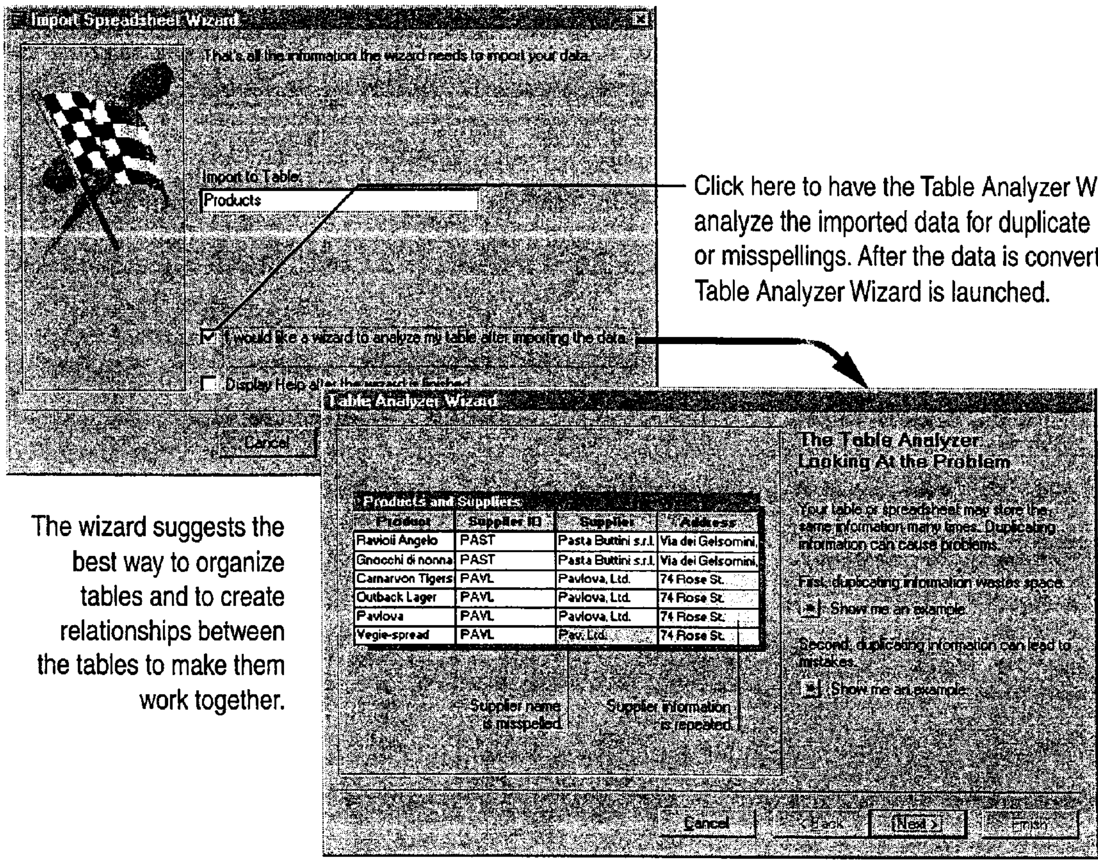
MS 114228

AHL0123555

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

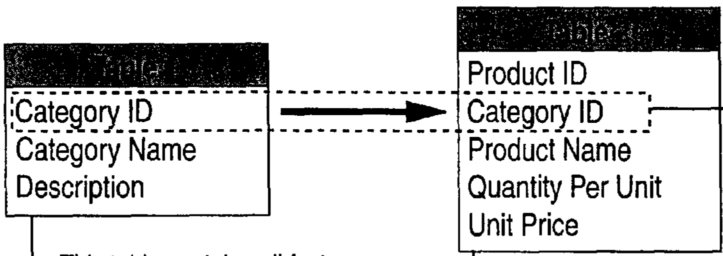
AHL0123556

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.



This relationship indicates that information about a category (its name and description) can appear alongside many products.

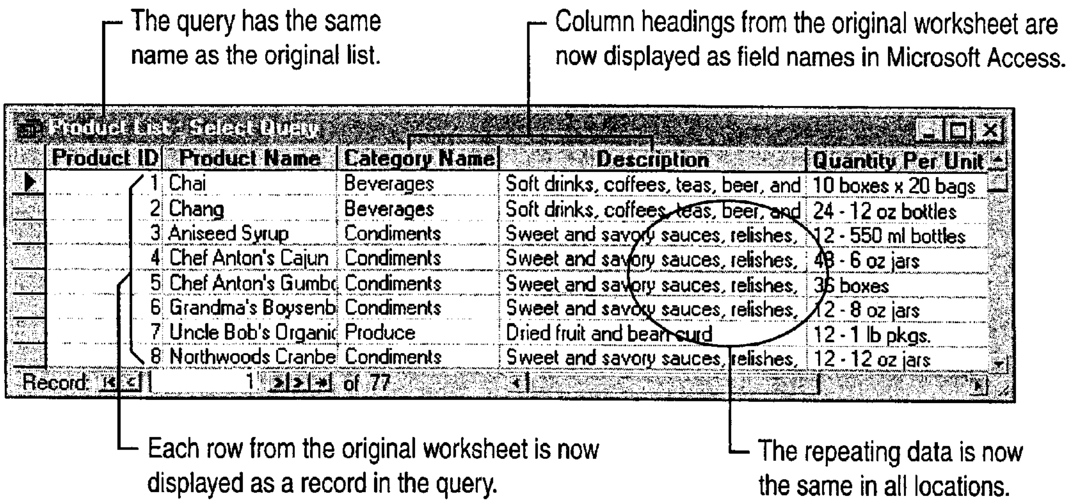
This table contains all facts about product categories.

This table contains all facts about products.

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.



Product ID	Product Name	Category Name	Description	Quantity Per Unit
1	Chai	Beverages	Soft drinks, coffees, teas, beer, and	10 boxes x 20 bags
2	Chang	Beverages	Soft drinks, coffees, teas, beer, and	24 - 12 oz bottles
3	Aniseed Syrup	Condiments	Sweet and savory sauces, relishes,	12 - 550 ml bottles
4	Chef Anton's Cajun	Condiments	Sweet and savory sauces, relishes,	48 - 6 oz jars
5	Chef Anton's Gumbo	Condiments	Sweet and savory sauces, relishes,	36 boxes
6	Grandma's Boysenb	Condiments	Sweet and savory sauces, relishes,	12 - 8 oz jars
7	Uncle Bob's Organic	Produce	Dried fruit and bean curd	12 - 1 lb pkgs.
8	Northwoods Cranbe	Condiments	Sweet and savory sauces, relishes,	12 - 12 oz jars

Record: 1 of 77

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

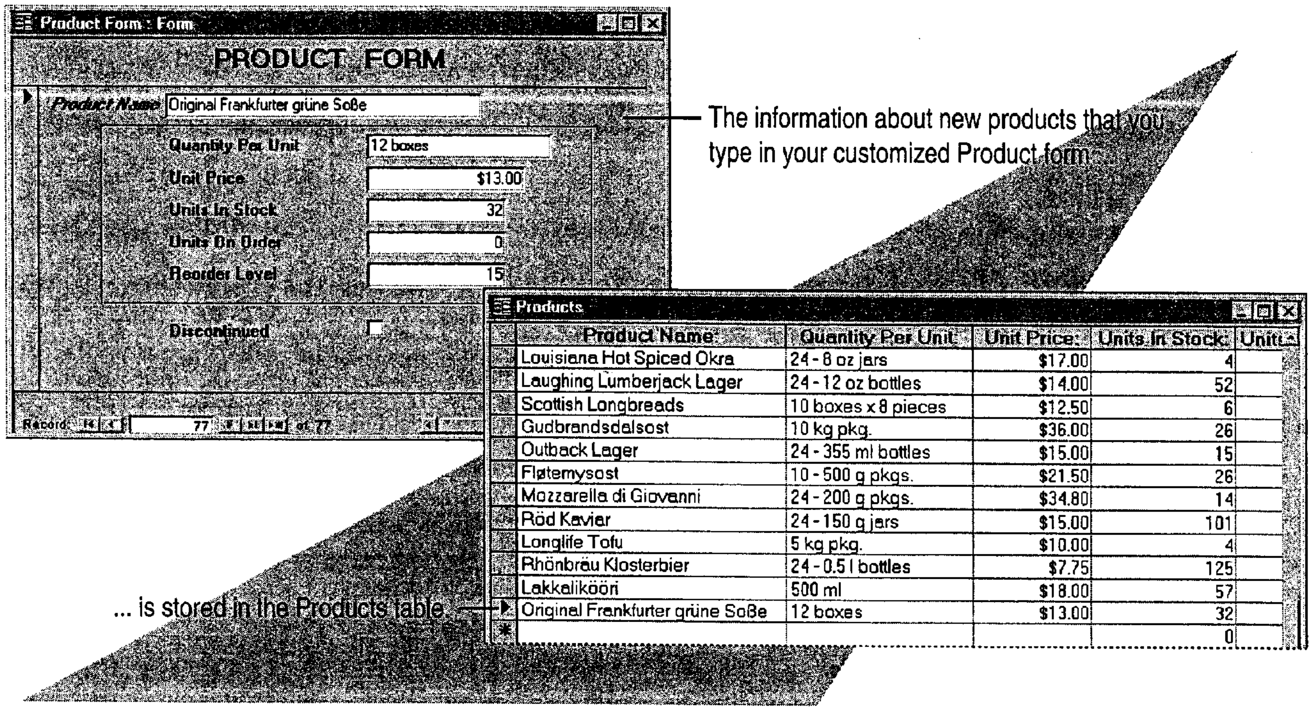
Create a Great-Looking Product Form

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



Product Name	Quantity Per Unit	Unit Price	Units In Stock	Units
Louisiana Hot Spiced Okra	24 - 8 oz jars	$17.00	4	
Laughing Lumberjack Lager	24 - 12 oz bottles	$14.00	52	
Scottish Longbreads	10 boxes x 8 pieces	$12.50	6	
Gudbrandsdalsost	10 kg pkg.	$36.00	26	
Outback Lager	24 - 355 ml bottles	$15.00	15	
Fløtemysost	10 - 500 g pkgs.	$21.50	26	
Mozzarella di Giovanni	24 - 200 g pkgs.	$34.80	14	
Röd Kaviar	24 - 150 g jars	$15.00	101	
Longlife Tofu	5 kg pkg.	$10.00	4	
Rhönbräu Klosterbier	24 - 0.5 l bottles	$7.75	125	
Lakkalikööri	500 ml	$18.00	57	
Original Frankfurter grüne Soße	12 boxes	$13.00	32	
			0	

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

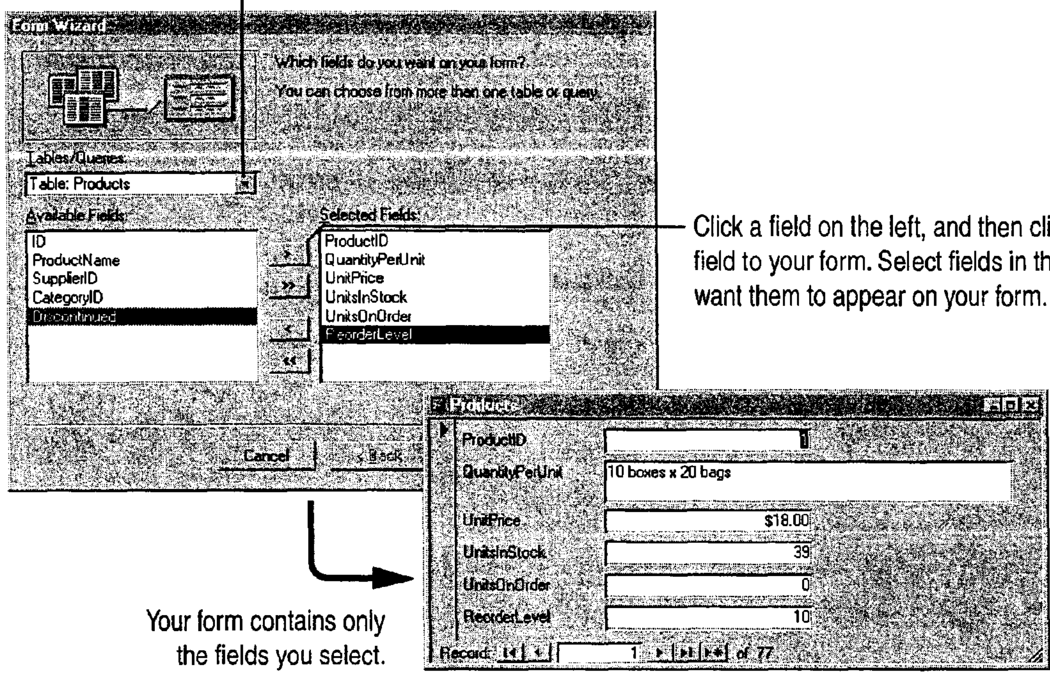
AHL0123560

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

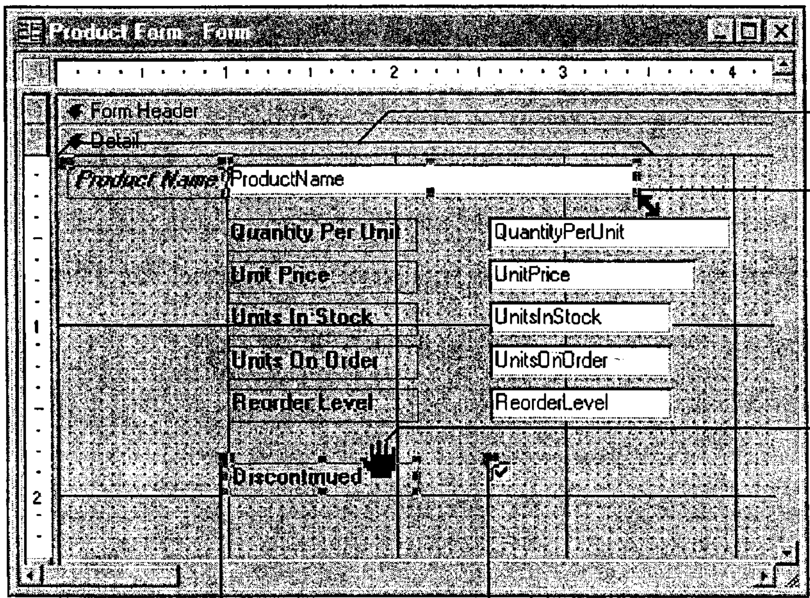
MS 114234

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

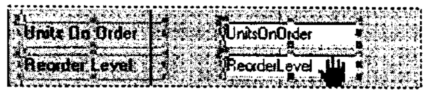


MS 114235

AHL0123562

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.

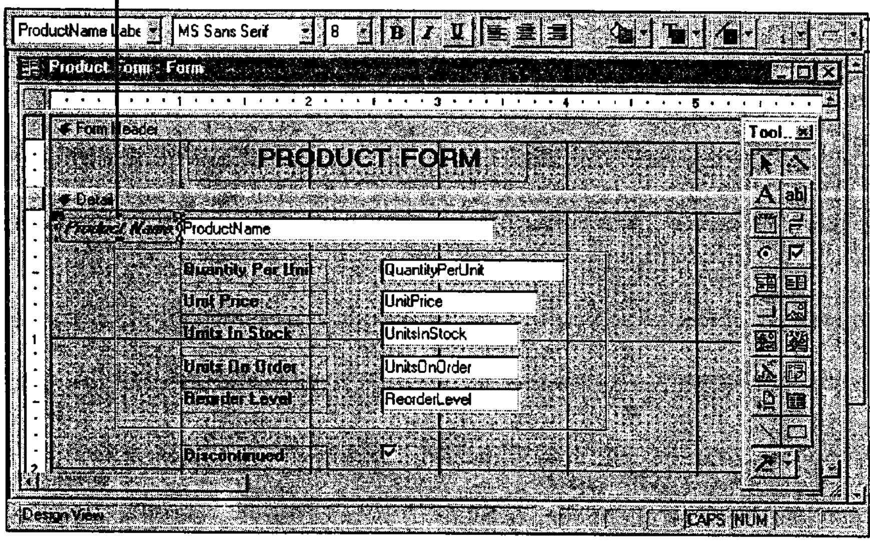

Office Assistant button

MS 114236

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

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

?

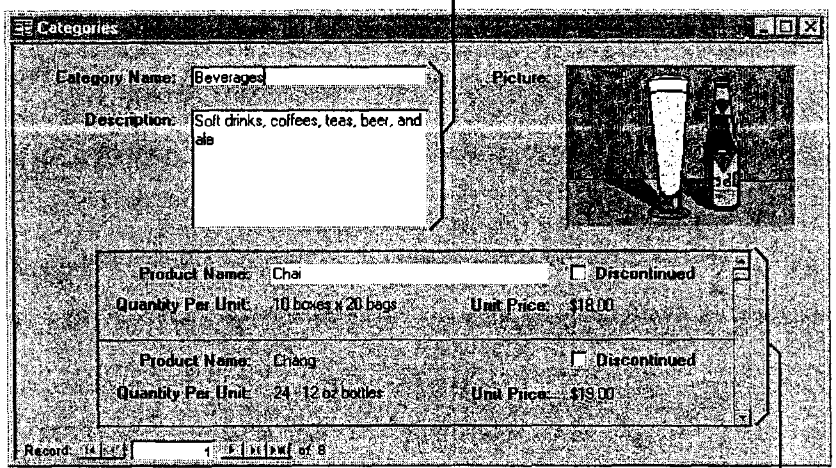
Want to know more? Look up **Getting Results - Forms** in Help.

Office Assistant button

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

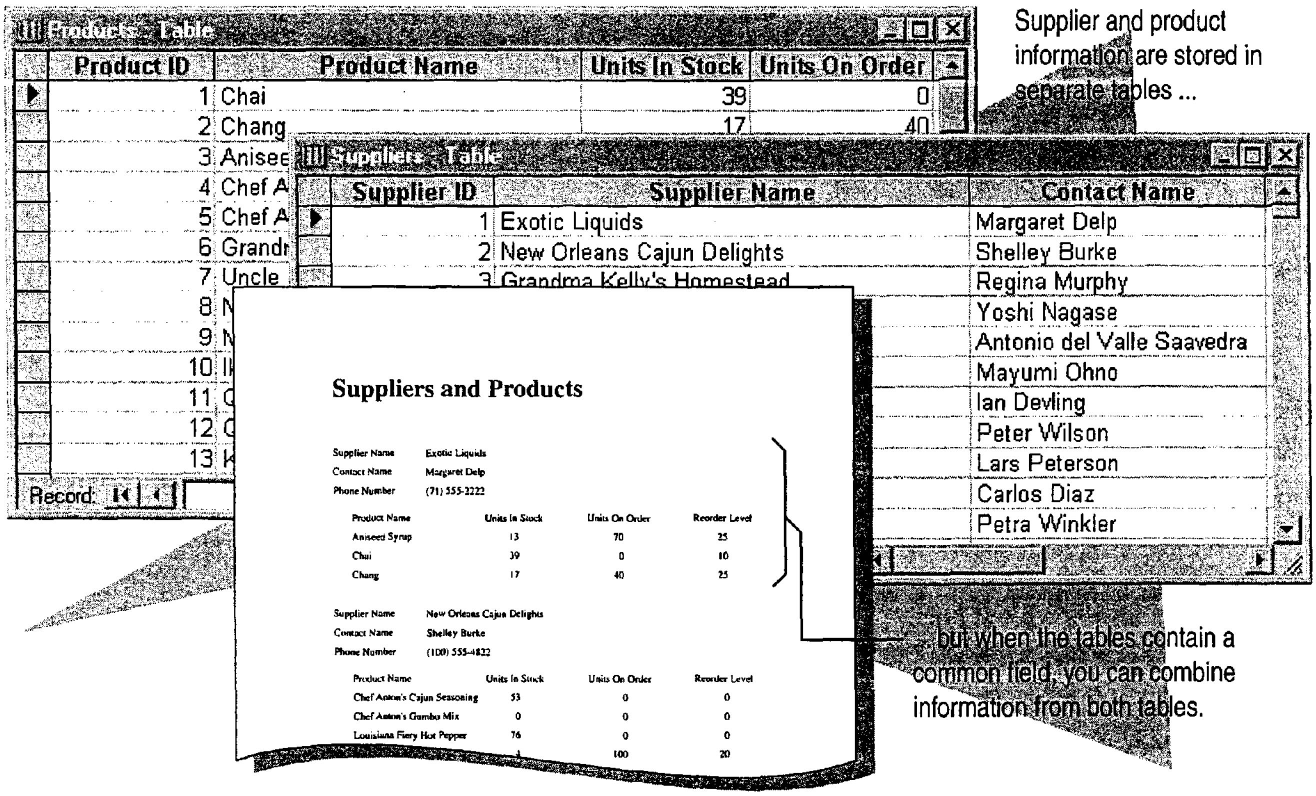
To	See
Learn more about creating relationships between tables	"Add a Suppliers Table to Your Inventory Database," page 505
Find information contained in two or more tables	"Evaluate Sales Performance in a Microsoft Access Database," page 582

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



Supplier and product information are stored in separate tables ...

... but when the tables contain a common field, you can combine information from both tables.

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.

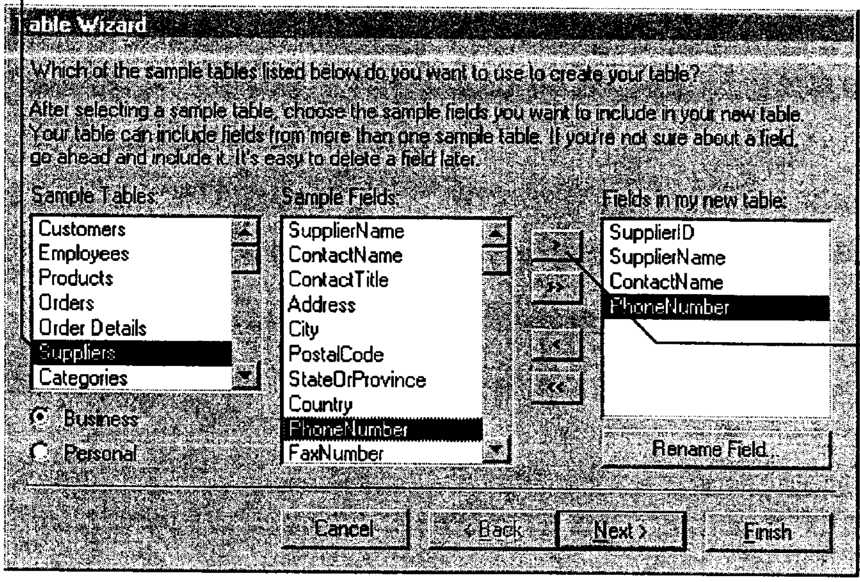
Create the Suppliers Table

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

AHL0123568

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.

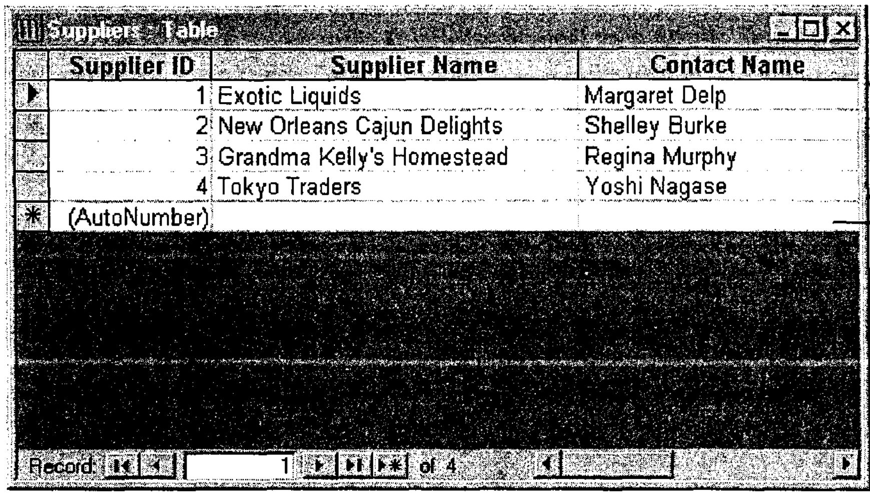
Want to know more? Look up **Getting Results - Add Suppliers** in Help.

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).

MS 114243

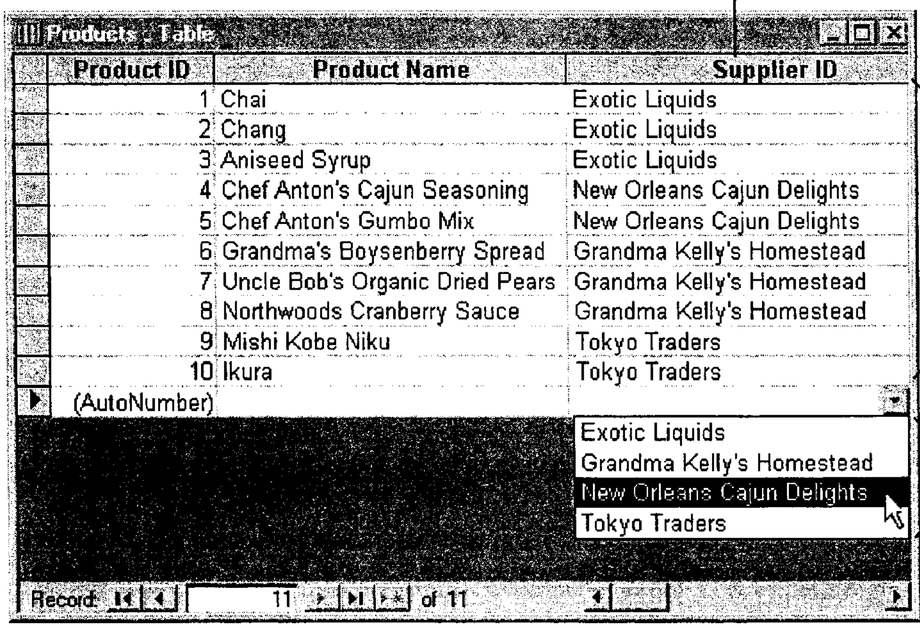
Connect Supplier and Product Information

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.

MS 114244

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

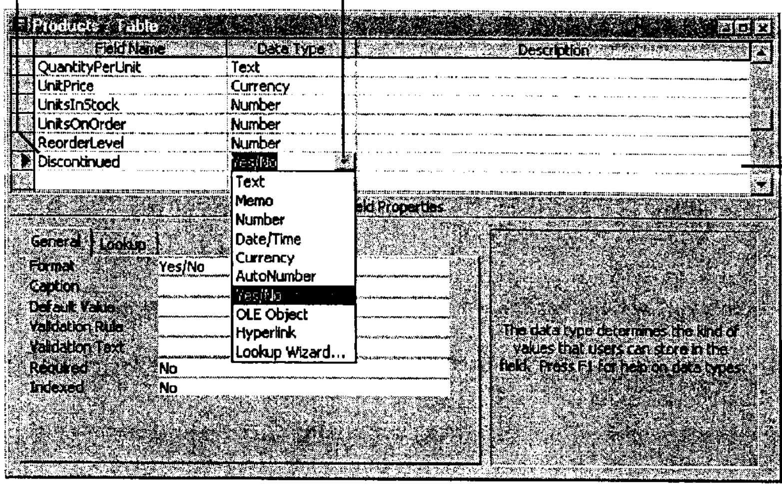
MS 114245

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

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.

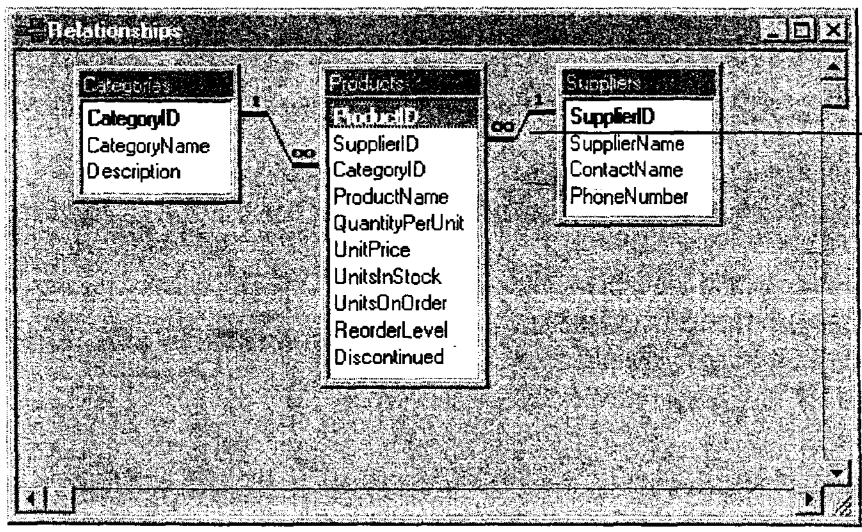
You can see the tables in your database and the relationships between them in the relationships window. To open this window, in the database window, click the **Relationships** button.

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

MS 114247

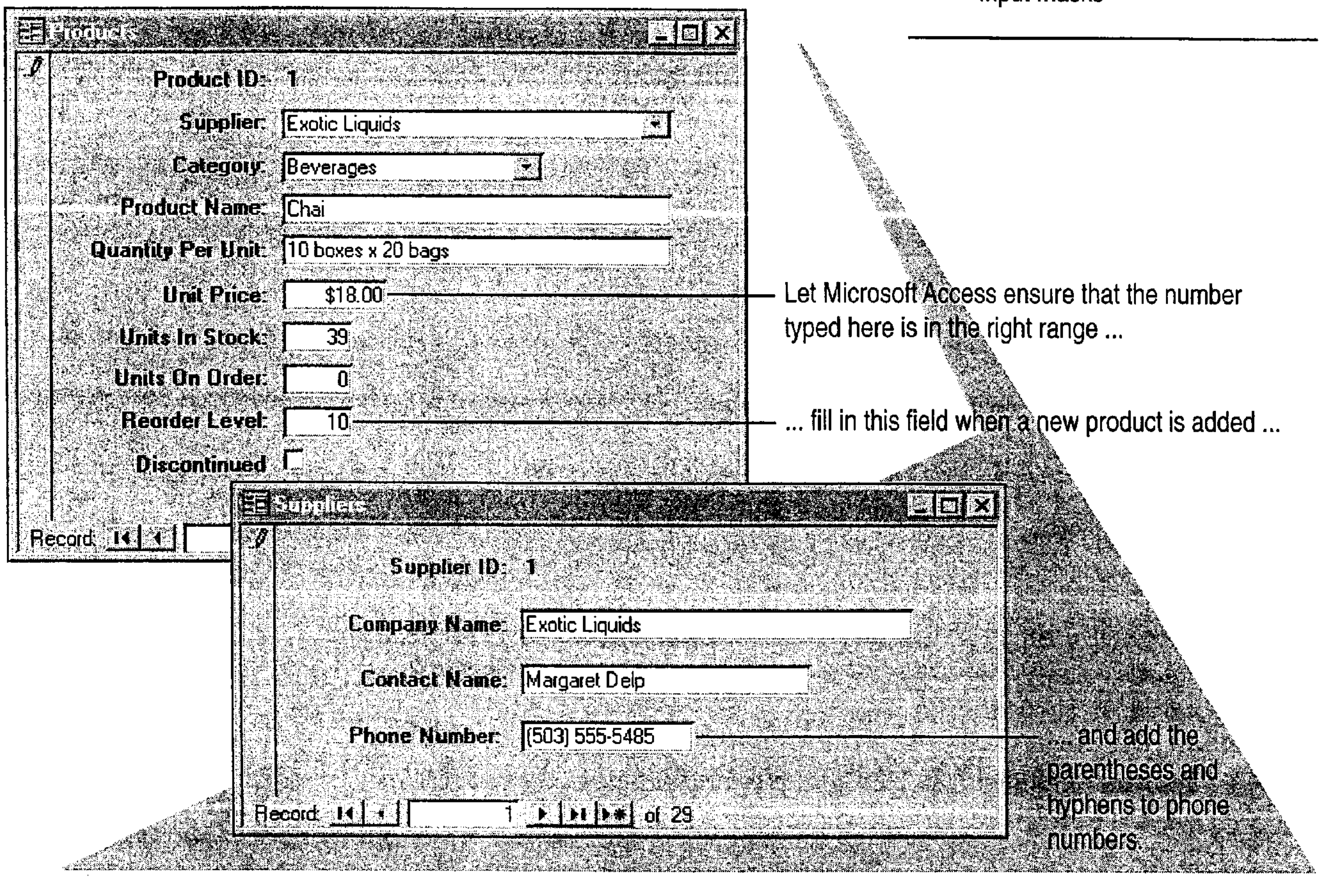
AHL0123574

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

AHL0123575

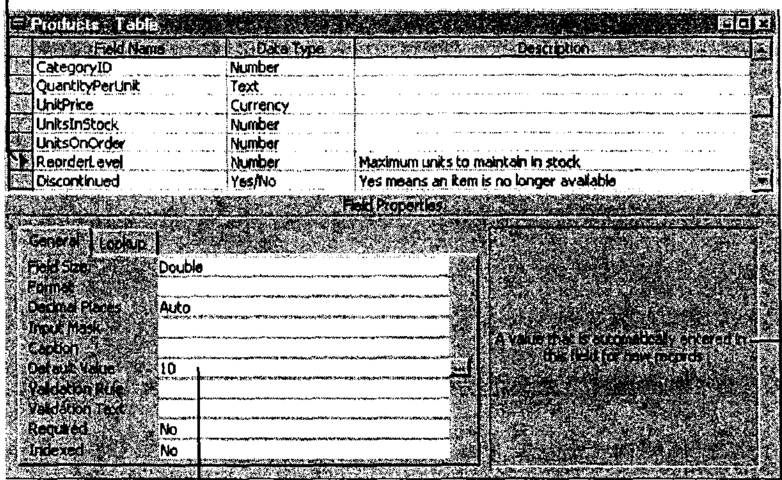
Set Field Properties to Control Data Entry

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

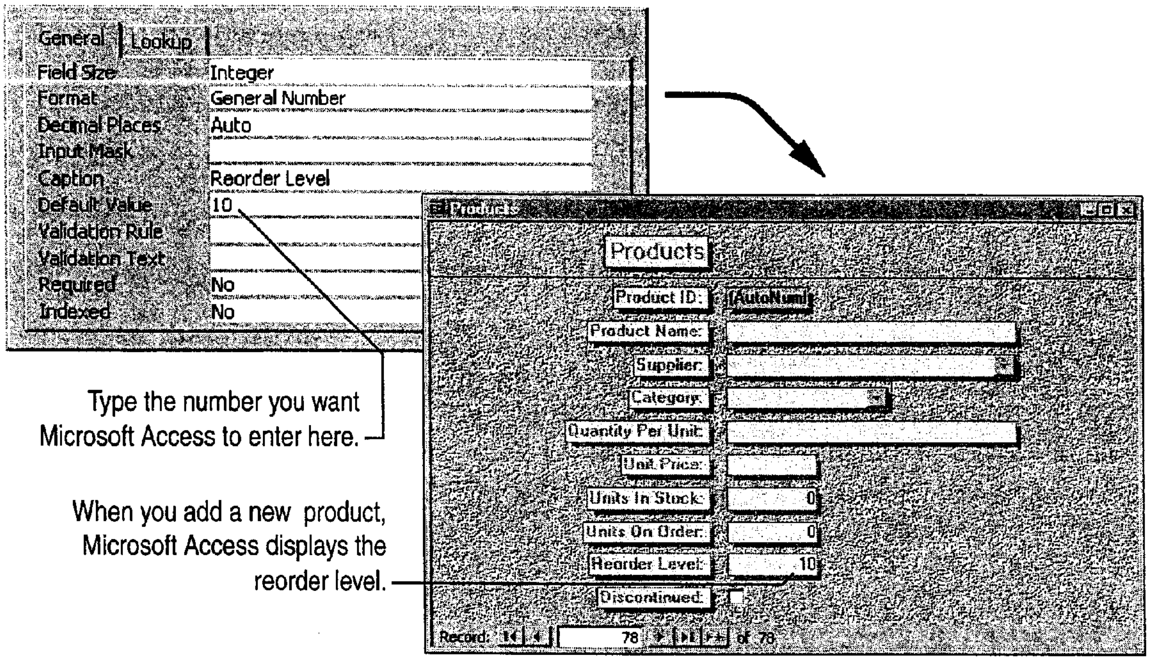
MS 114249

AHL0123576

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.



Type the number you want Microsoft Access to enter here.

When you add a new product, Microsoft Access displays the reorder level.

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( )**.

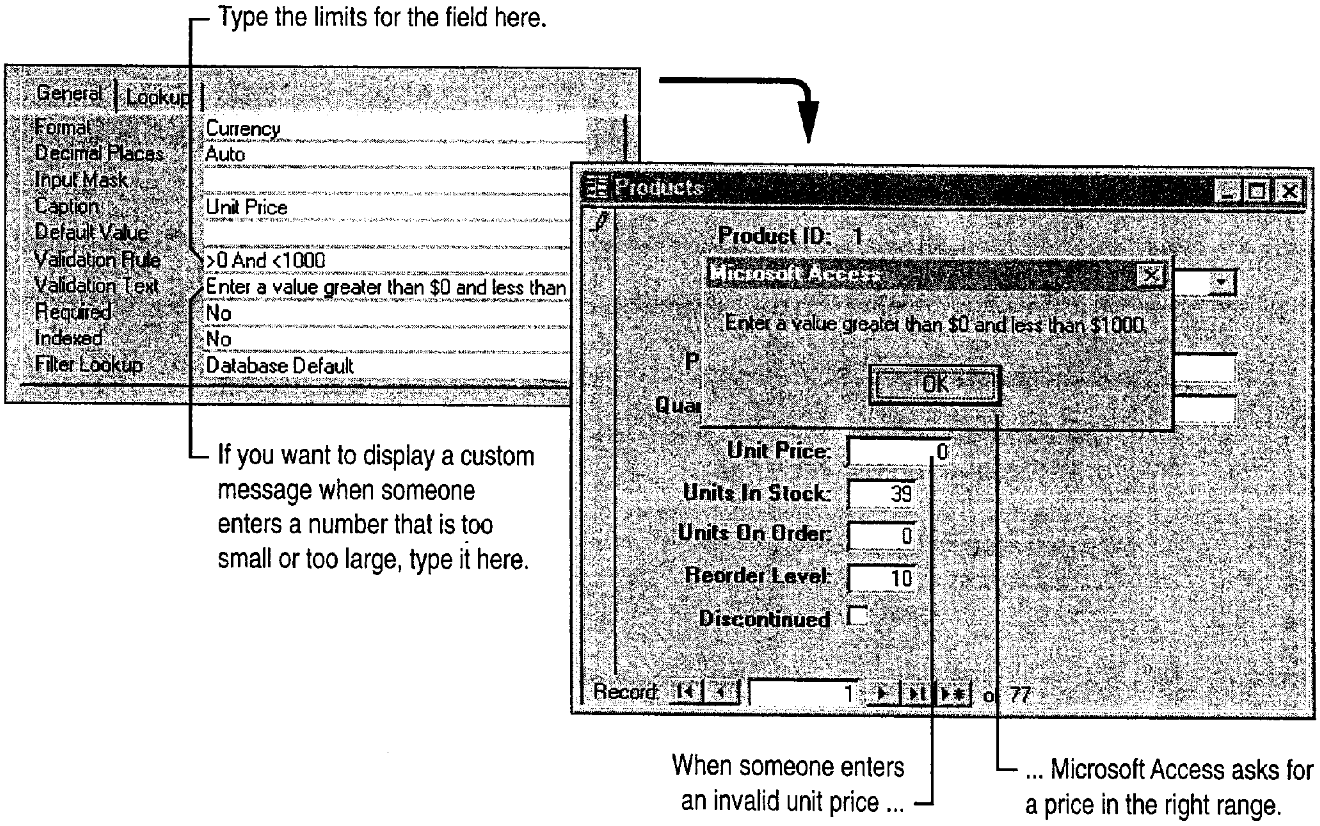
MS 114250

AHL0123577

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.

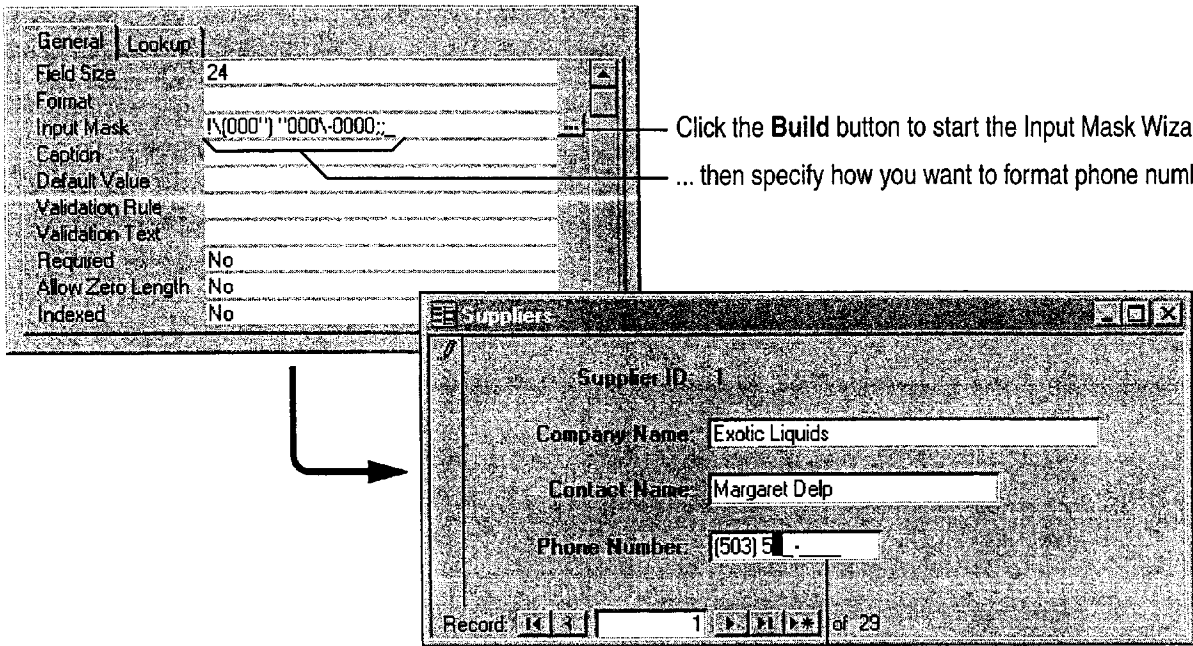
Office Assistant button

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.



Click the **Build** button to start the Input Mask Wizard ...

... then specify how you want to format phone numbers.

Microsoft Access adds the parentheses and hyphen and ensures that you or your co-workers type the correct number of digits.

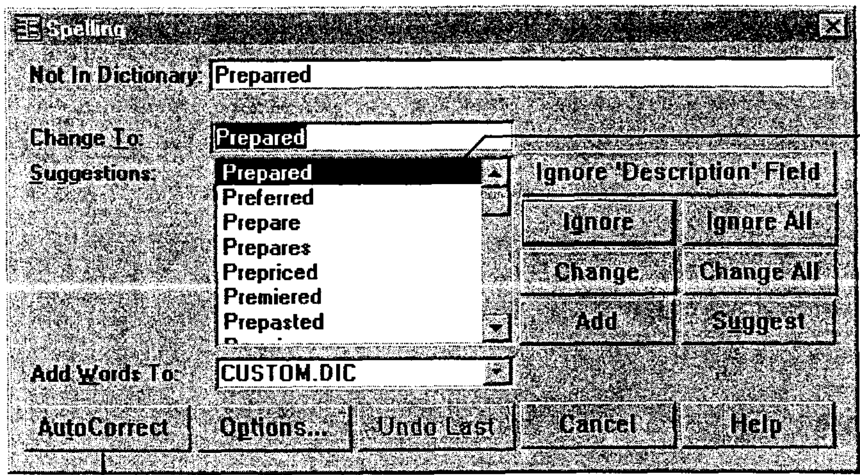
Do you have other data with formatted characters? You can have Microsoft Access automatically add formatted characters for other types of data, such as social security numbers or postal codes.

MS 114252

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

MS 114253

Turn Your Inventory Database into an Application

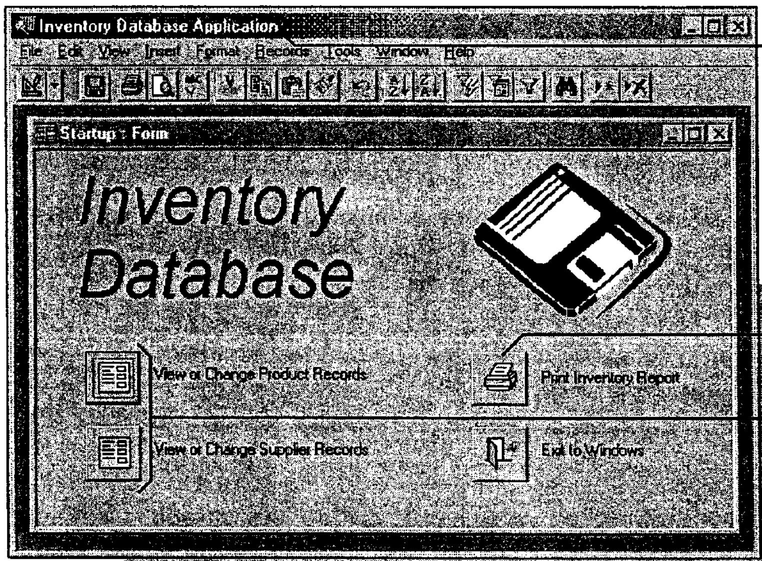
Make a Database Easy for Others to Use

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.

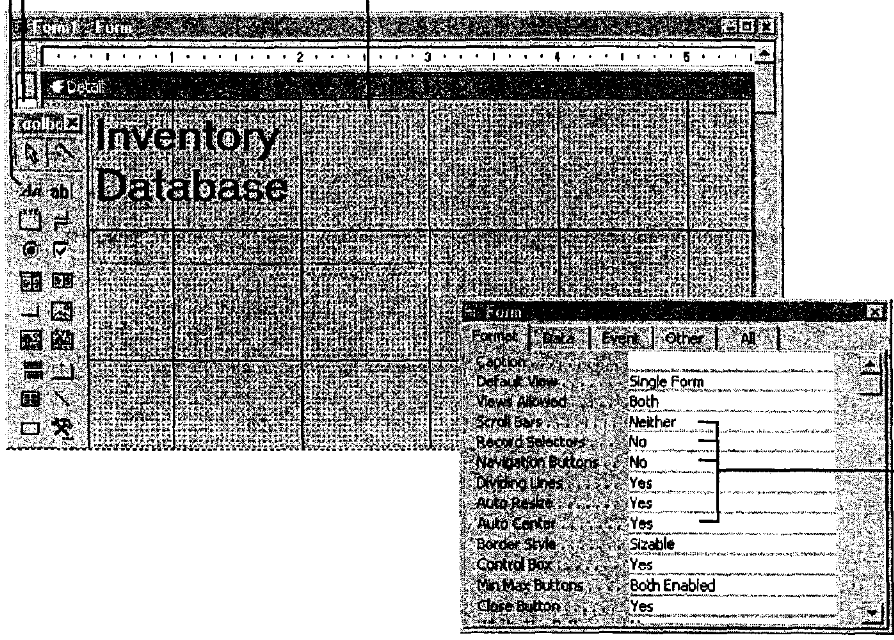
To begin creating a startup form, click the **New Object** arrow, and then click **New Form**. Double-click **Design View**, and then create a label on the form.

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

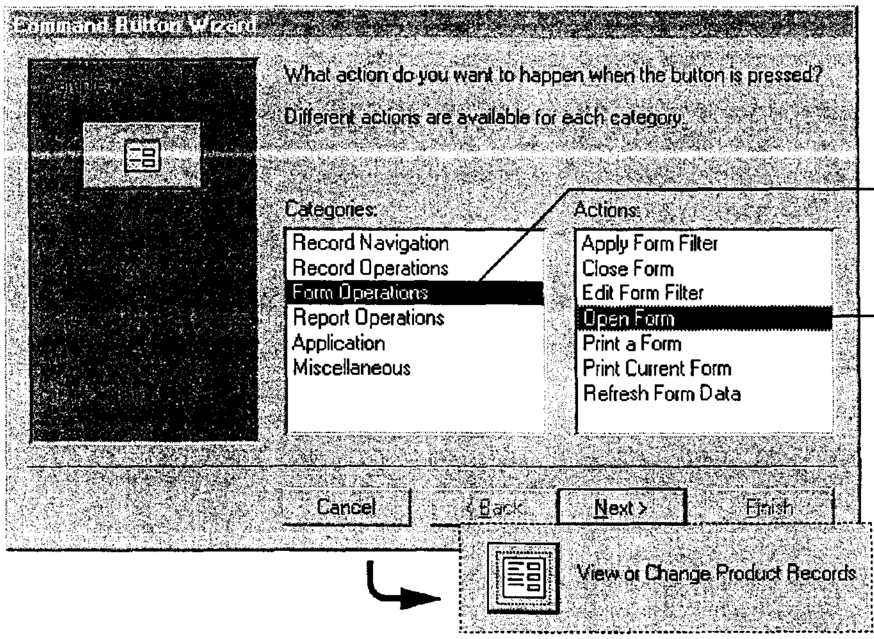
Add Buttons That Open Forms and Reports

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.

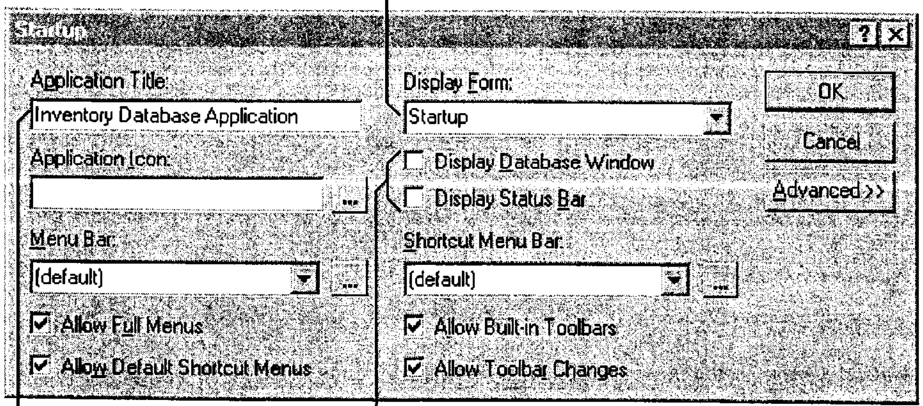
Office Assistant button

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.

Select your startup form from the list.



Type a title for your application here.

If you don't want the screen to display the database window or the status bar, clear these check boxes.

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.

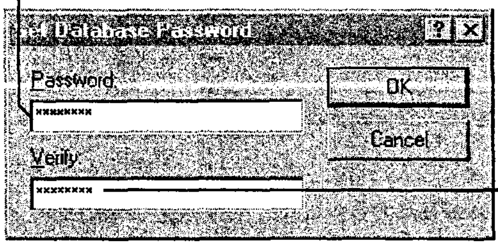
Office Assistant button

Protect Your Database with a Password

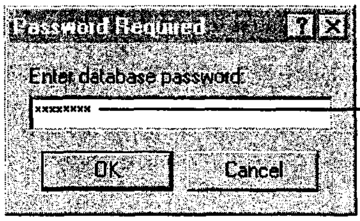
If your inventory database contains confidential information, create a password to prevent unauthorized users from opening it.

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

AHL0123586

Create and Enhance an Inventory Report

Summarize Inventory Data in a Microsoft Access Report

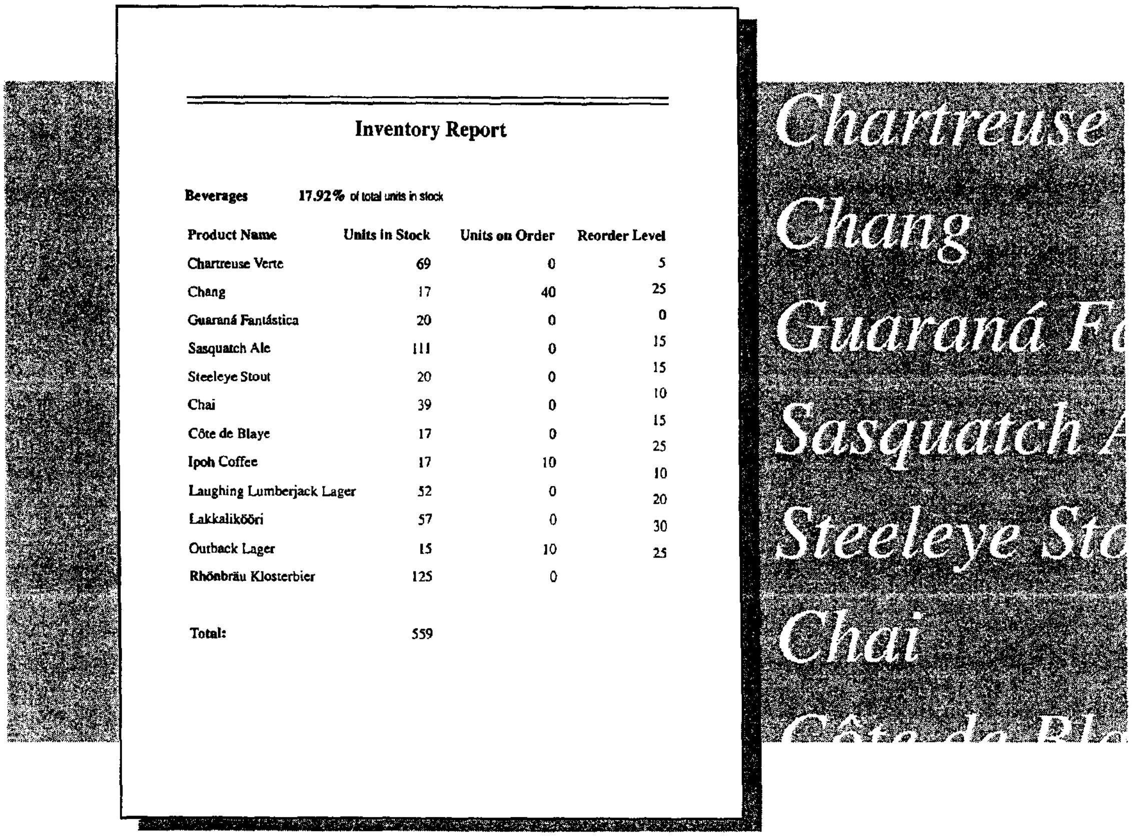
Business is booming, and as a result you've greatly increased your inventory. To keep track of inventory flow, you want to create a monthly inventory report.

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.

Begin the Report

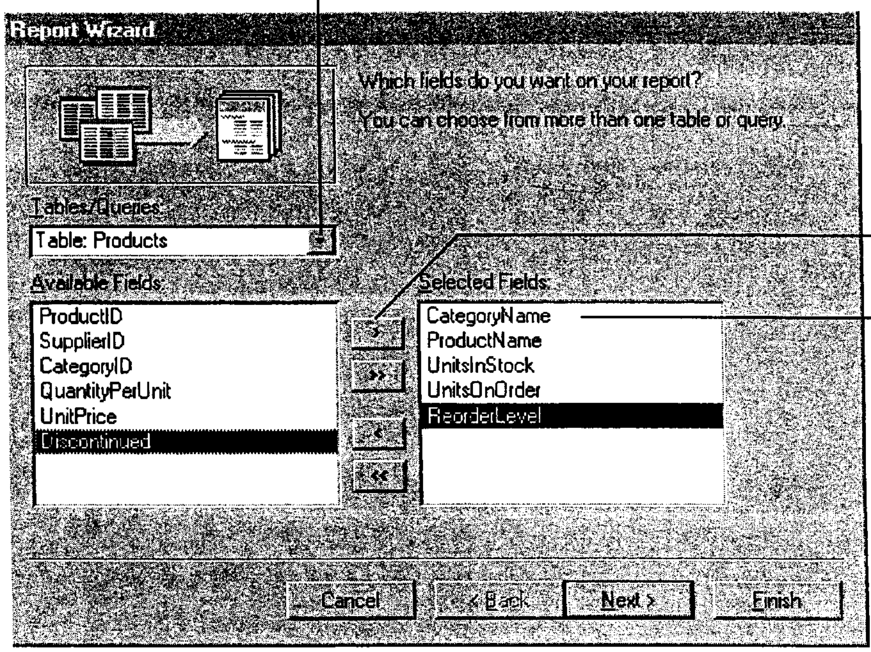
Suppose you want to create a report that reflects your current inventory. You can organize the report by product category (such as Beverages), and include each product name, the number of units in stock, the number of units on order, and the product's reorder level. Also, include the total number of 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

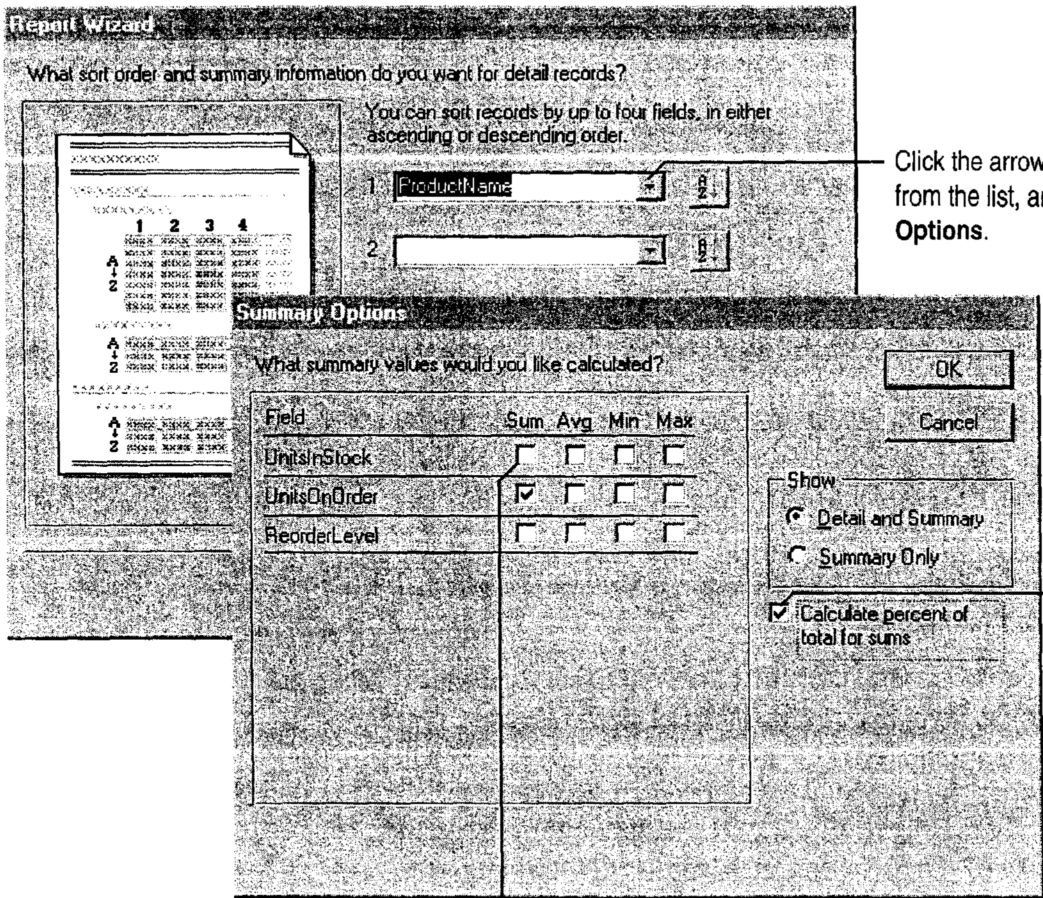
MS 114261

AHL0123588

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**.

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

Office Assistant button

MS 114262

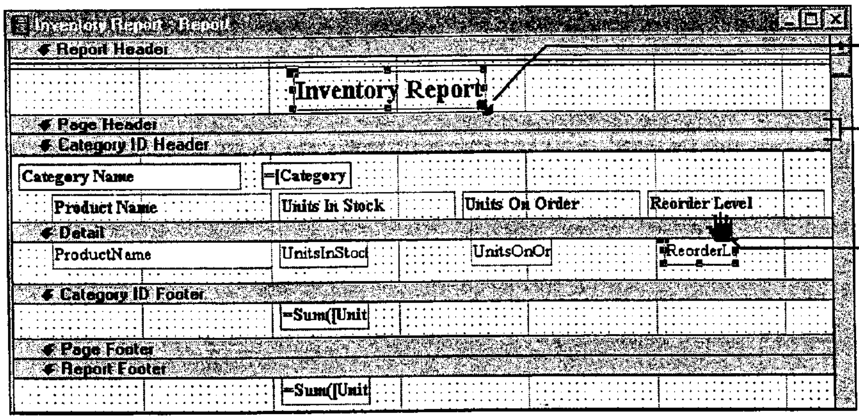
AHL0123589

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

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

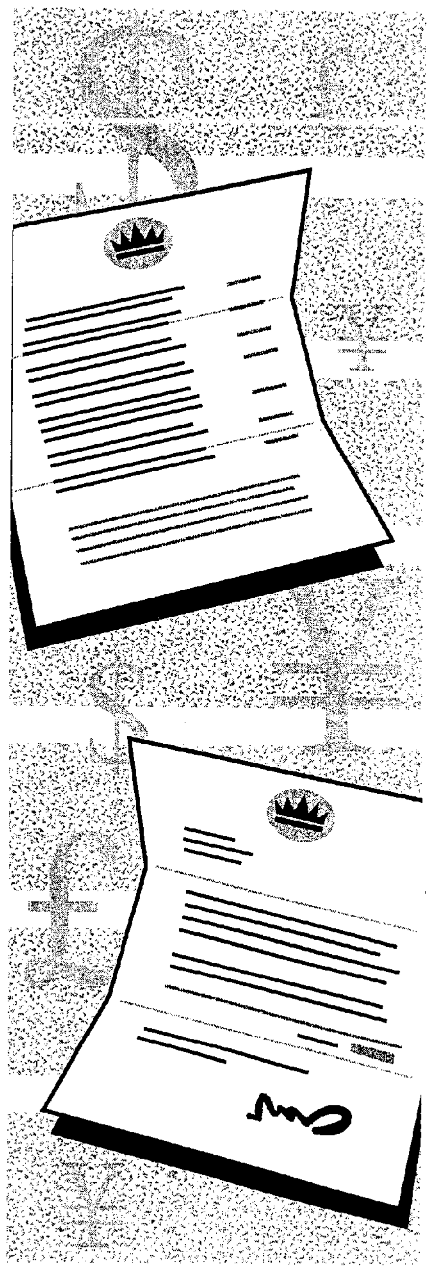
MS 114264

AHL0123591

PART 12

Prepare Customer Bids

Contents



MS 114265

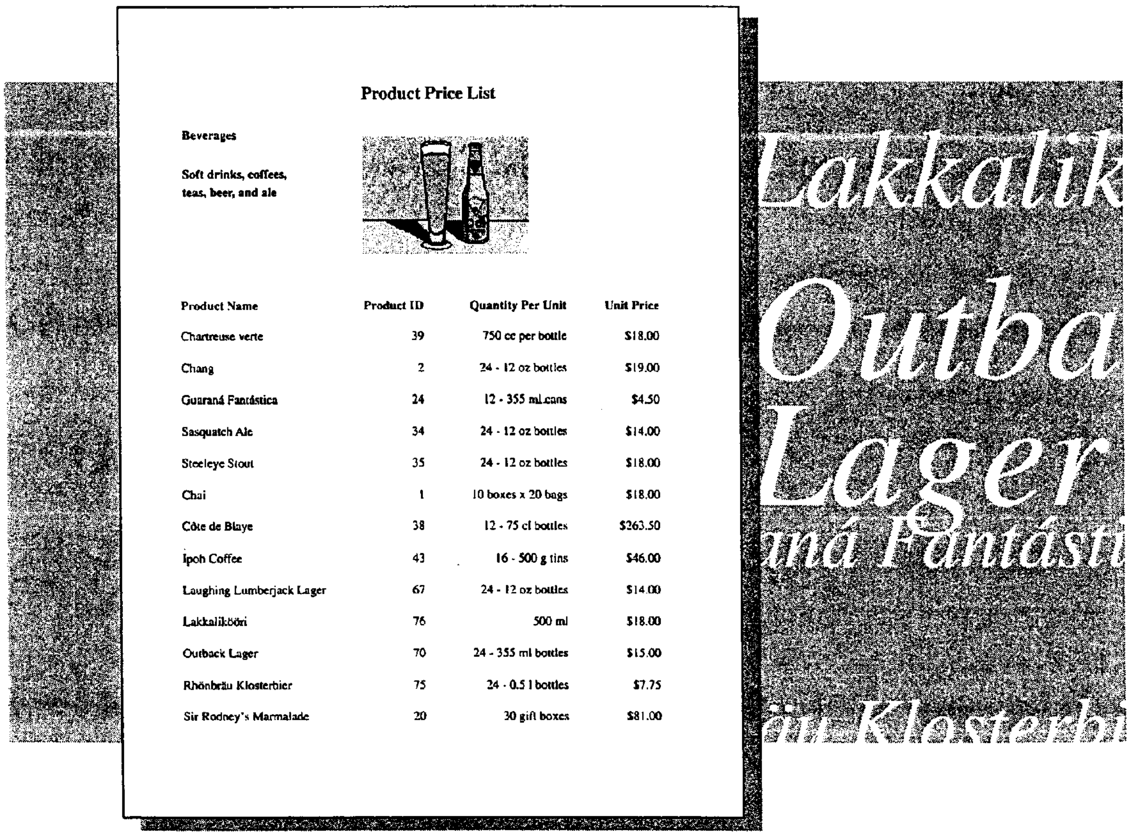
Create a Price List

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.

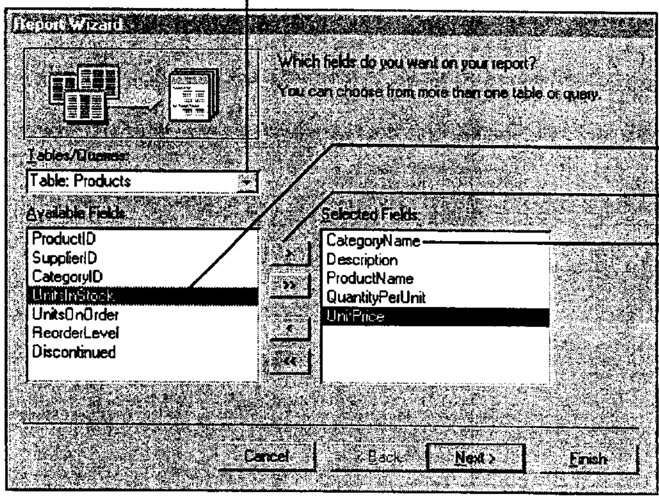
MS 114266

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.

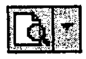
Office Assistant button

MS 114267

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.

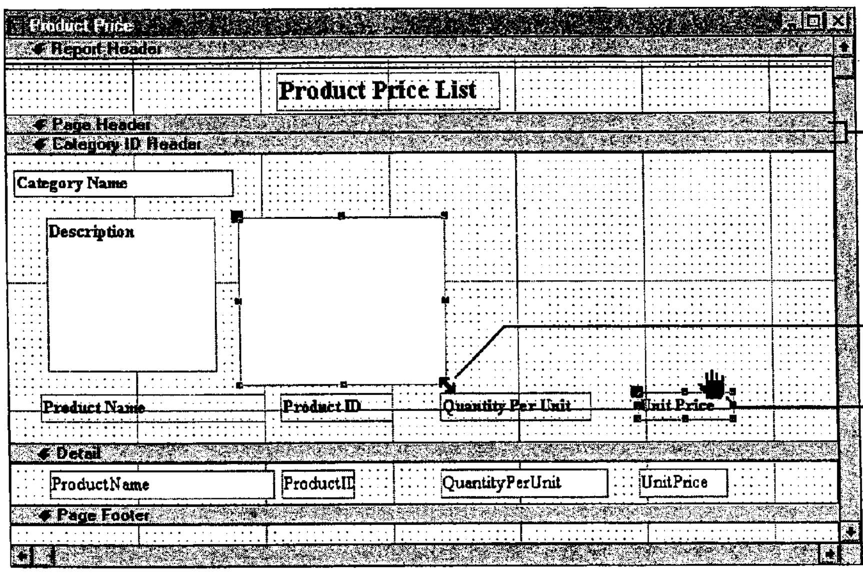
- If you don't need a control included by the Report Wizard, click the control, and then press DELETE.
- To see how your layout changes will appear in the report, in report design view, click the **View** arrow and then select **Layout Preview**. If you need to make more adjustments, click the **Close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



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 handle to adjust the size of a control.

Click and drag a control to reposition it.

MS 114268

AHL0123595

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

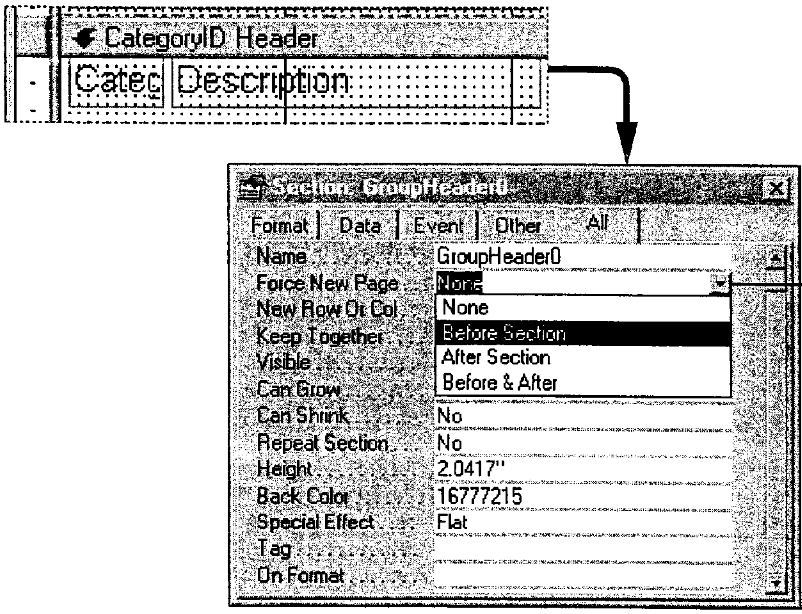
MS 114269

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.**

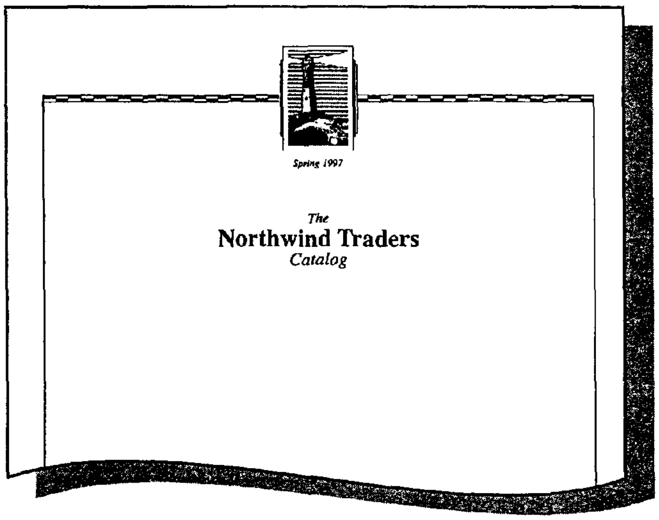
Want to see how the report will look when it's printed? In report design view, click the **Report View** arrow, and then click **Print Preview.**

MS 114270

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

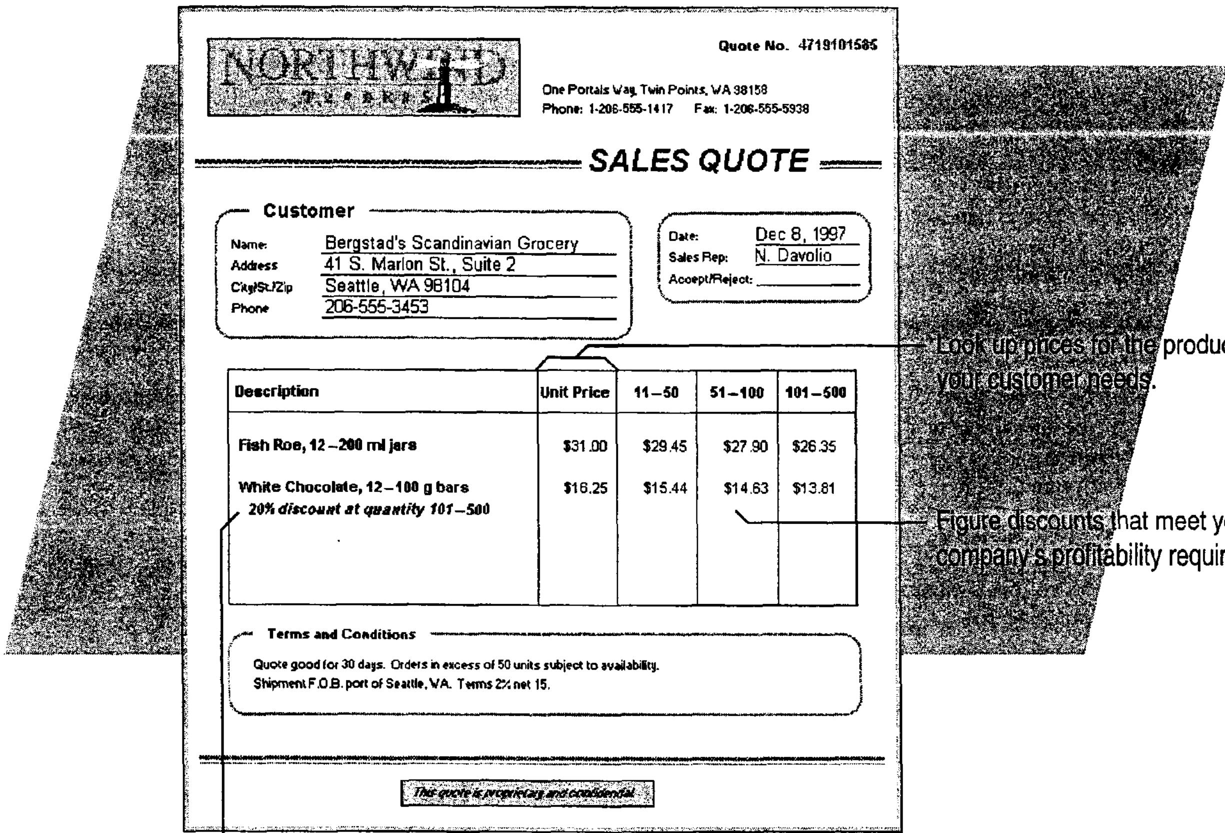
Get Information from a Price List and Calculate Discounts

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



Quote No. 4719101585

NORTHWIND TRADERS

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.

B3 = =VLOOKUP(B1,price_list,2,FALSE)

The function returns the information for this product from column 2, Quantity Per Unit.

	A	B	C	D
1	*Select Product Name:*	Malaysian Coffee		
2				
3	*Quantity:*	16 - 500 g tins		
4	*Unit Price:*	$ 46.00		
5	*Margin:*	17%		
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%
11	Cabrales Cheese	1 kg pkg.	$ 21.00	15%
12	Chef Anton's Gumbo Mix	36 boxes	$ 31.35	28%
13	Cloudberry Liqueur	500 ml	$ 18.00	32%
14	Côte de Blaye (Red Bordeaux)	12 - 75 cl bottles	$ 263.50	20%
15	Courdavault Raclette Cheese	5 kg pkg.	$ 55.00	35%
16	Fish Roe	12 - 200 ml jars	$ 31.00	32%
17	Malaysian Coffee	16 - 500 g tins	$ 46.00	17%
18				

Price List

Similar formulas find the price and profit margin information for you.

Cell range named price_list

Use the **Name** box to define and use range names.

Column 2 of the range named price_list

MS 114274

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.

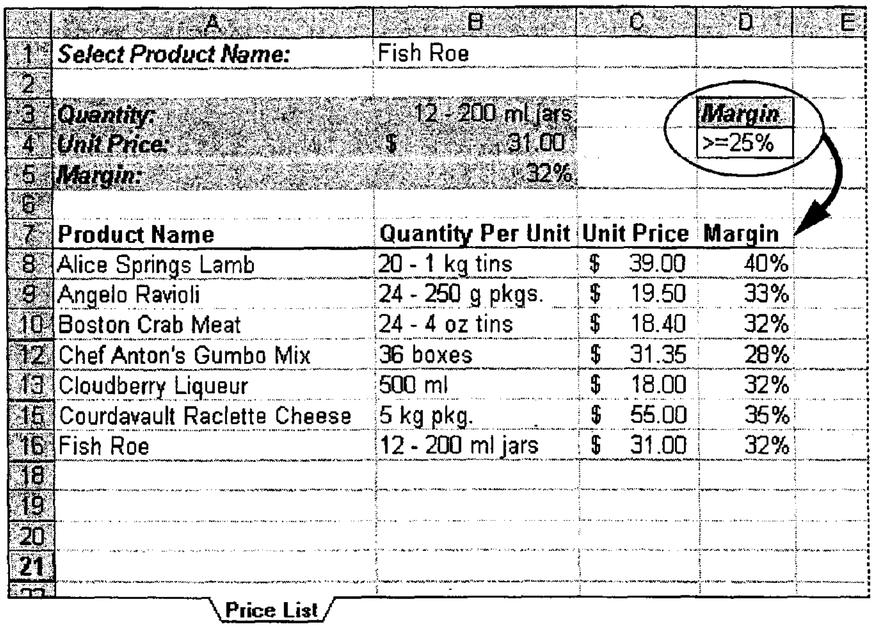
Office Assistant button

MS 114275

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

MS 114276

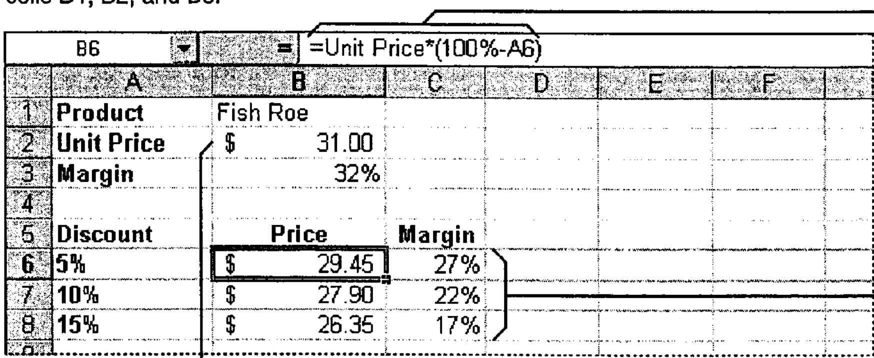
AHL0123603

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.

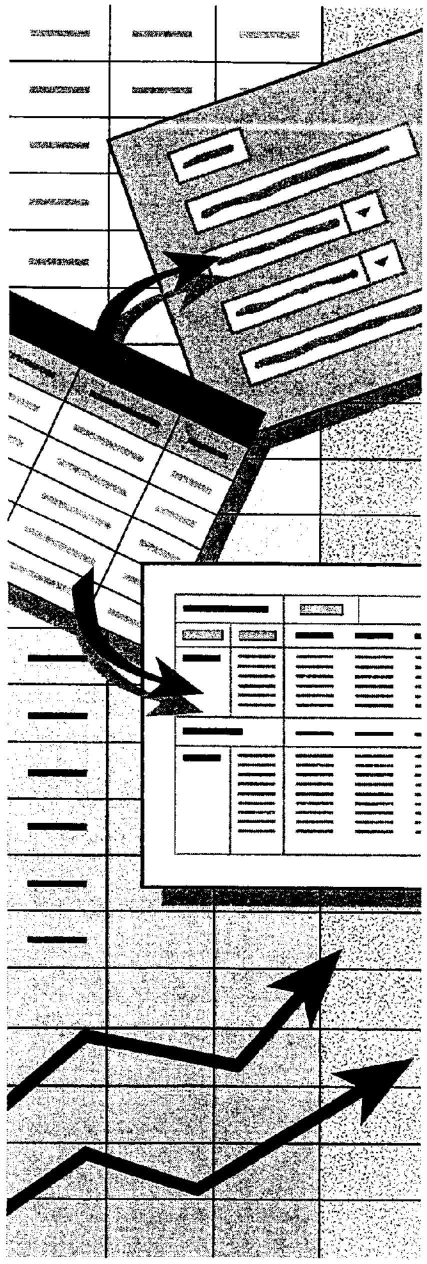
Next Steps

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

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

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.

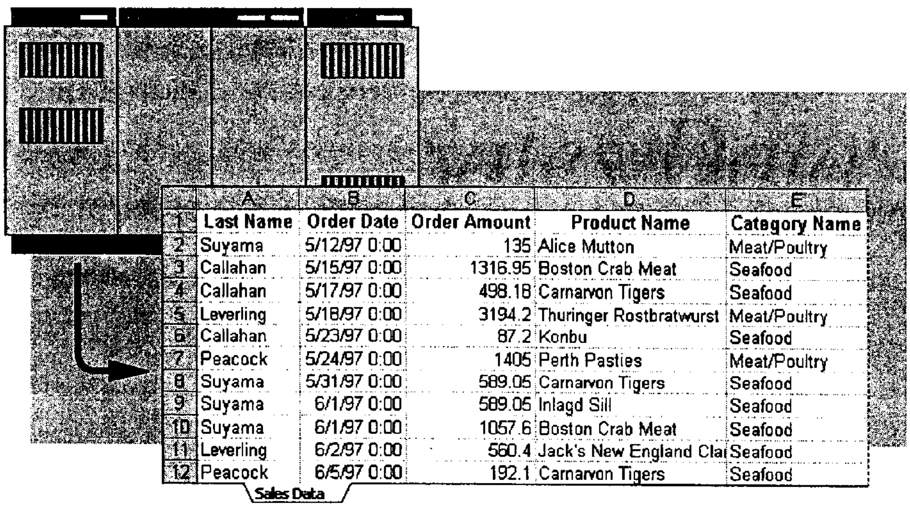
Out of mountains of detailed data in the corporate database, extract just what is relevant to your work by using a *query*—a method of extracting specific data from a database. Then you can use familiar spreadsheet analysis tools on that data, without retyping it.

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

Sales Data

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.

MS 114281

AHL0123608

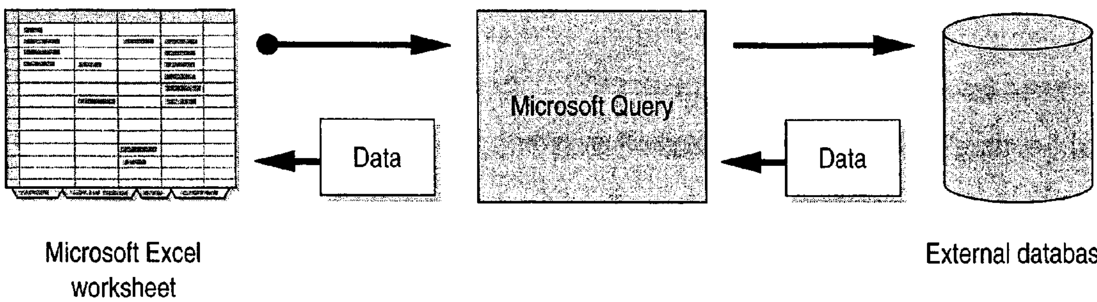
Set Up a Link to Your Database

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.



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).

MS 114282

AHL0123609

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

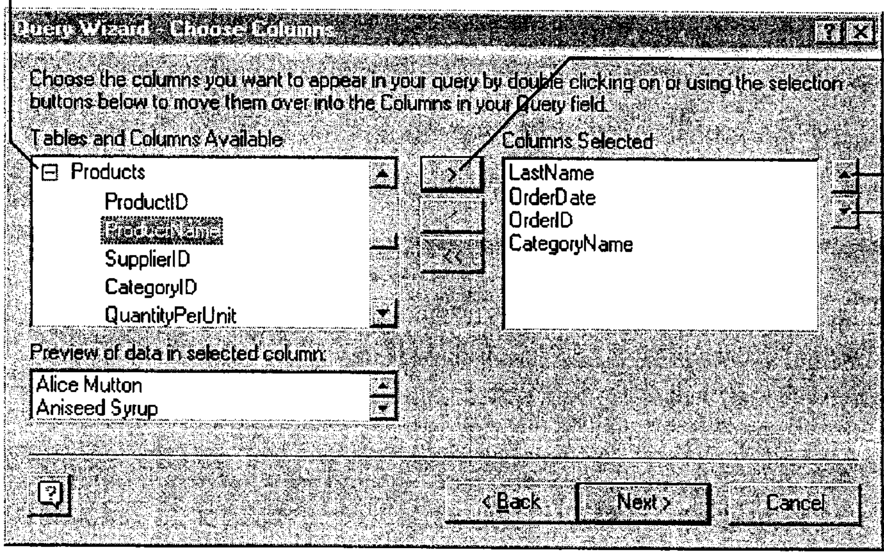
MS 114283

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.

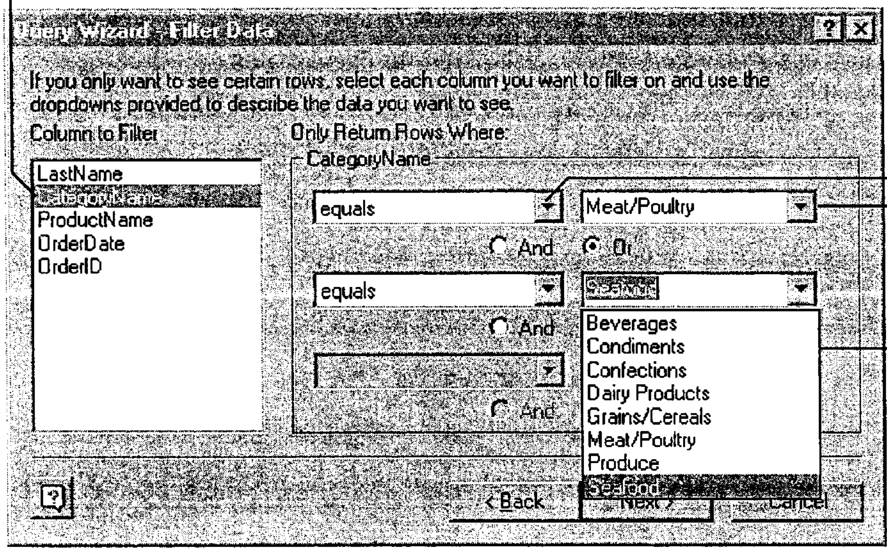
MS 114284

AHL0123611

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.

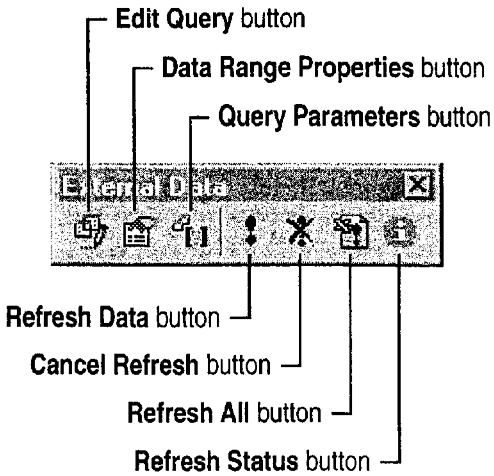
Database records containing the value you select here are returned to the worksheet.

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.

MS 114285

AHL0123612

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

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.

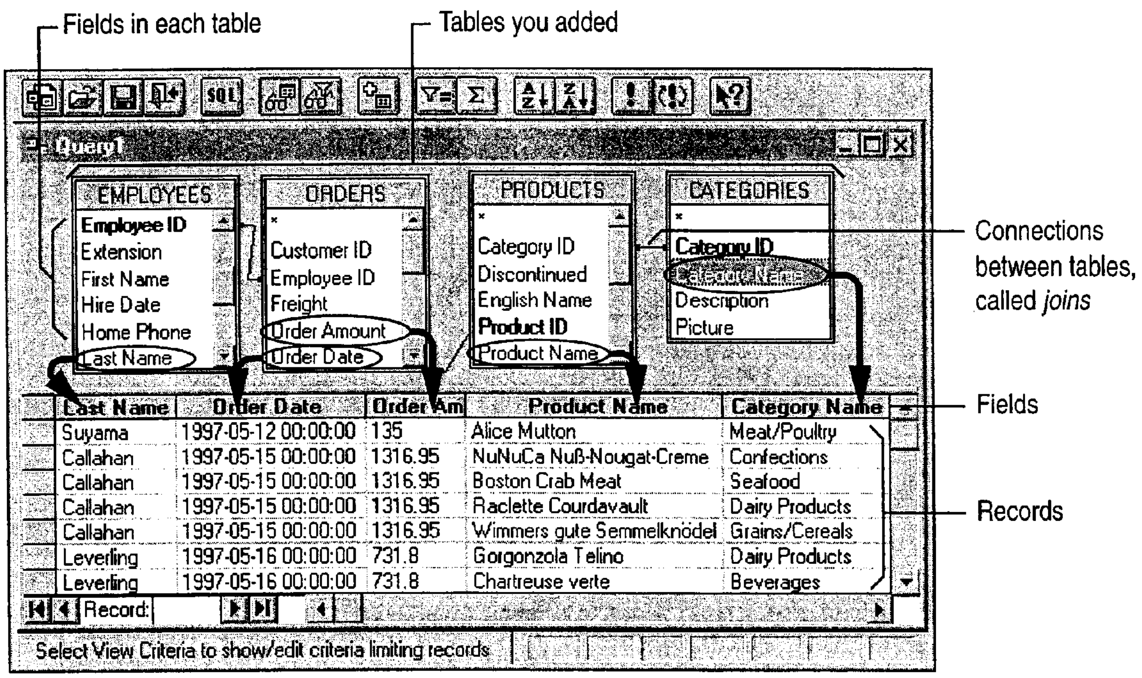
Drag to the lower part of the Query window each field that has data you want.

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.



MS 114287

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

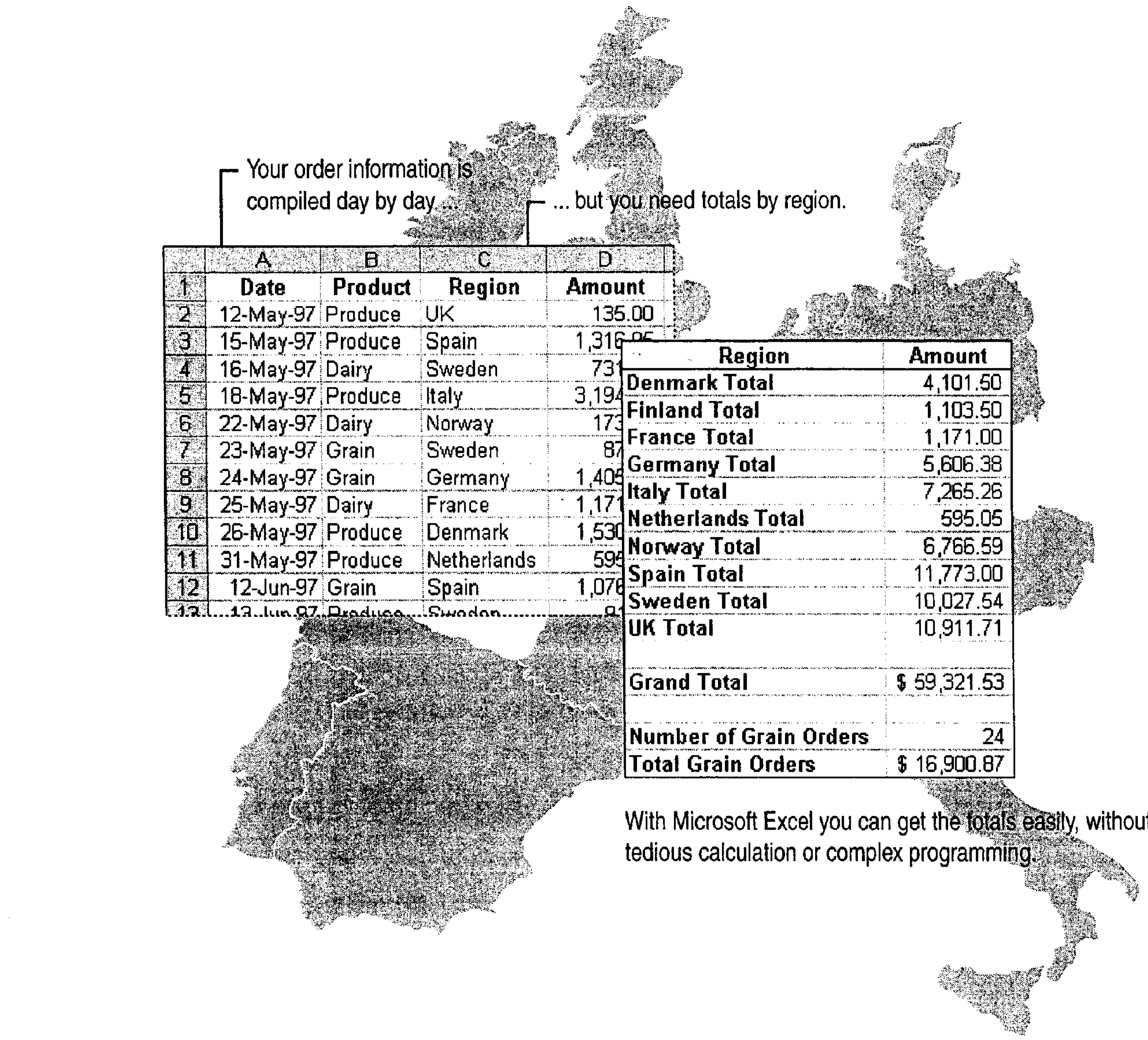
Create a Detailed Sales Report

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	73
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	1,409
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	[illegible]

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

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.

MS 114291

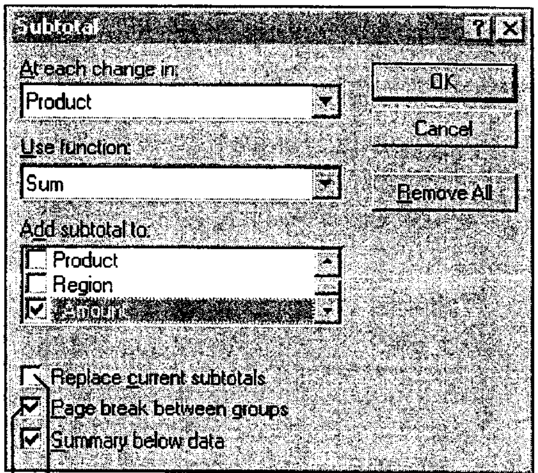
More Power

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.

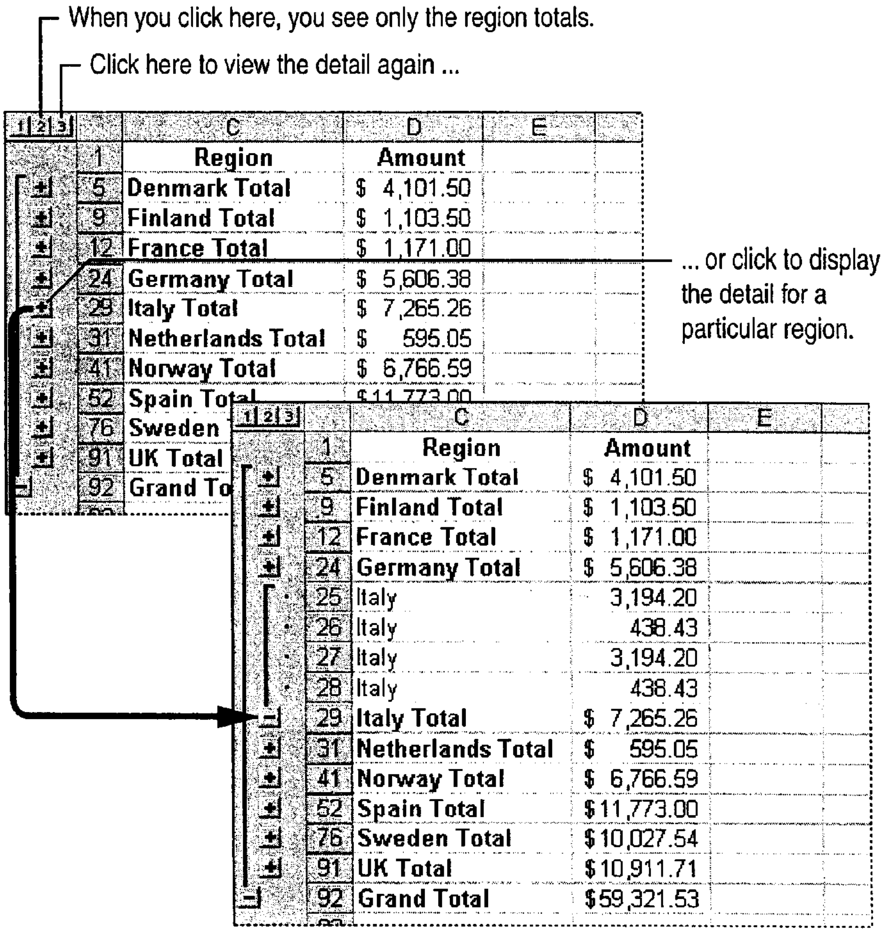


To nest the subtotals, clear this check box the second time you subtotal.

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.

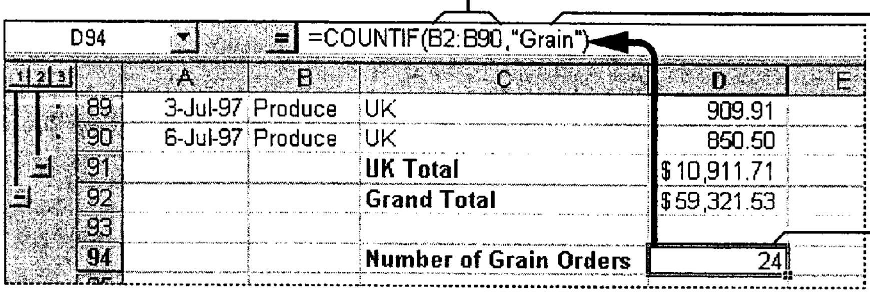
With the **Paste Function** button, it's easy to set this up.

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.

Next Steps

To	See
Create a chart	"Create a Chart from Worksheet Data," page 260
Chart regional sales on a map	"Display Data on a Map," page 287

Create a Sales Summary

Use PivotTables to Summarize Sales Data

Chances are, you have all the detailed data you need to make decisions, but it isn't always presented in a way that makes it easy to draw conclusions from it. For example, suppose what you want is the big picture: How is each product selling? Who is selling the most of each product?

From the same data, you can create several instant summaries, called *PivotTables*, to answer your questions. If you work with sales figures or other similar business data, Microsoft Excel can rapidly produce the summaries you want from the details you have.

Key Features

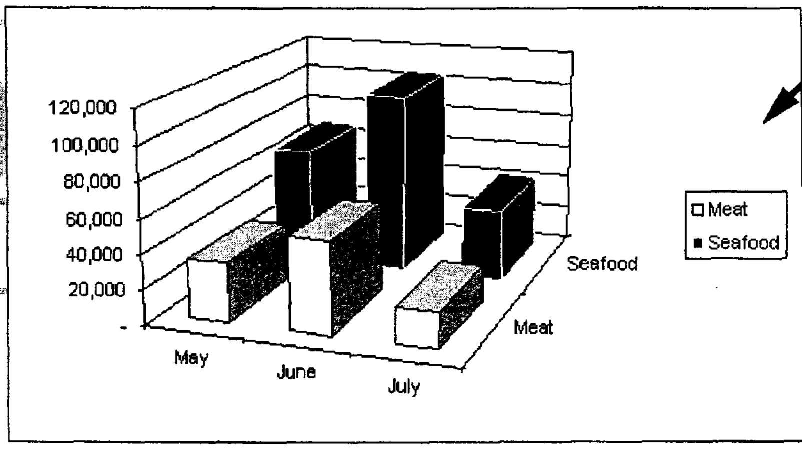
- PivotTable Wizard
- Chart Wizard

Given the date, amount, and product for each order ...

	A	B	C	D	E
1	**Name**	**Order Amount**	**Order Date**	**Product**	
2	Annabella Dodsworth	$ 135.00	12-May-97	Meat	
3	Michael Suyama	$ 1,316.95	15-May-97	Meat	
4	Andrew Fuller	$ 731.80	16-May-97	Seafood	
5	Michael Suyama	$ 498.18	17-May-97	Meat	
6	Andrew Fuller				
7	Linda Callahan				
8	Michael Suyama				

... summarize how each product is selling by creating a PivotTable — no formulas to enter.

	A	B	C	D	E
1	Sum of Order Amount	Order Date			
2	Product	May	Jun	Jul	Grand Total
3	Meat	33,905.34	52,824.09	21,246.03	**$107,975.46**
4	Seafood	67,810.68	105,648.18	42,492.06	**$215,950.92**
5	Grand Total	$101,716.02	$158,472.27	$63,738.09	**$323,926.38**



You can also compare the results visually, with a chart.

MS 114296

AHL0123623

What Information Is Buried in Your Data?

Your company probably keeps a separate record describing each order processed. Scanning the list shows hundreds of orders just for the products you are responsible for tracking. You want a fast way to see how much each representative has sold of each product.

	A	B		C	D	E
1	**Name**	**Order Amount**		**Order Date**	**Product**	
2	Annabella Dodsworth	$	135.00	12-May-97	Meat	
3	Michael Suyama	$	1,316.95	15-May-97	Meat	
4	Andrew Fuller	$	731.80	16-May-97	Seafood	
5	Michael Suyama	$	498.18	17-May-97	Meat	
6	Andrew Fuller	$	3,194.20	18-May-97	Seafood	
7	Linda Callahan	$	173.40	22-May-97	Seafood	
8	Michael Suyama	$	87.20	23-May-97	Seafood	
9	Janice Leverling	$	1,405.00	24-May-97	Meat	
10	Andrew Fuller	$	1,171.00	25-May-97	Meat	
11	Michael Suyama	$	1,530.00	26-May-97	Seafood	
12	Michael Suyama	$	470.00	30-May-97	Meat	

You have a row of facts for every order.

There's too much detail to see what's going on; you want total orders per sales rep, not a list of every order.

You're interested in monthly totals rather than day-by-day sales.

Guidelines: Setting Up Data for a PivotTable

Label your columns PivotTables use your column labels to cross-tabulate your data. For example, you can summarize orders by product or by sales representative.

Use one worksheet row for each record A PivotTable summarizes data stored in rows.

Make sure any dates are in date format Select any column with dates, and click **Cells** (**Format** menu). On the **Number** tab, click the **Date** category, and then select the date type you want.

If a column contains repeating information, spell each entry the same way each time Entries that are the same, such as entries for seafood or meat in a product column, can be grouped together automatically in the PivotTable.

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

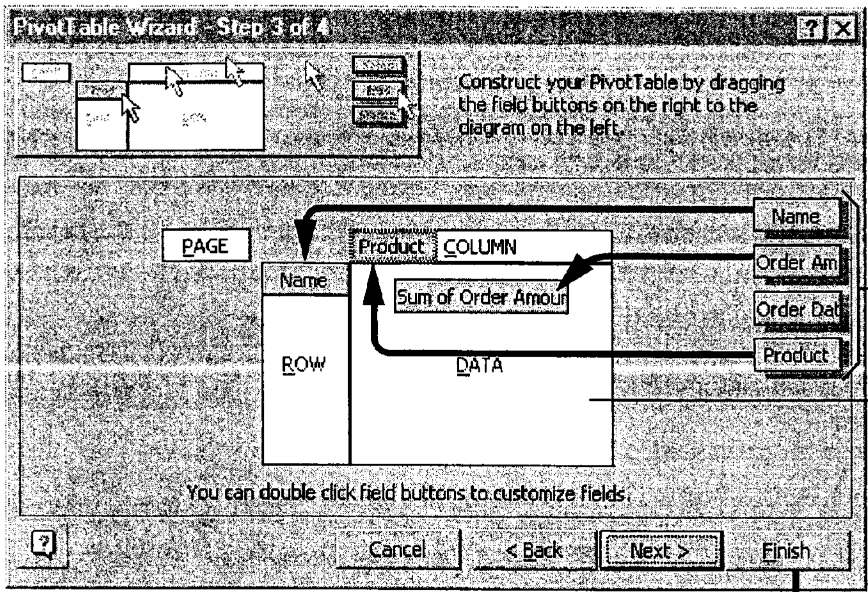
Office Assistant button

MS 114297

Who Is Selling the Most Product?

A PivotTable can answer this question in a flash. Select a cell in your source data. Click **PivotTable Report** (**Data** menu), and then follow the instructions in the wizard.

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



The wizard lists your column labels as *field buttons.*

To summarize the sales of each product by sales rep, drag the field buttons into position. Only fields containing numbers can be dragged to the DATA area.

	A	B	C	D	E
1	Sum of Order Amount	Product			
2	Name	Meat	Seafood	Grand Total	
3	Andrew Fuller	27,086.64	54,173.28	81,259.92	
4	Annabella Dodsworth	22,280.34	44,560.68	66,841.02	
5	Janice Leverling	20,932.35	41,864.70	62,797.05	
6	Linda Callahan	20,658.00	41,316.00	61,974.00	
7	Michael Suyama	17,018.13	34,036.26	51,054.39	
8	Grand Total	$107,975.46	$215,950.92	$323,926.38	

Sales Summary

The finished result cross-tabulates and totals the sales for you.

Add commas or currency signs, or adjust the decimal places Select a number in the DATA area of the PivotTable. On the **PivotTable** toolbar (which appears automatically when a PivotTable is active) click **Field**, and then click the **Number** button to apply number formatting.

PivotTable Field button

To pivot the table, just drag the gray field buttons You don't need to start the PivotTable Wizard again to change the layout of your summary. For example, you could switch the positions of the **Name** and **Product** buttons in the PivotTable to view the products in the rows and the sales representatives in the columns.

MS 114298

How Well Are Products Selling over Time?

To review product sales, use the PivotTable Wizard to create a PivotTable showing the sales performance of each product (ROW area) by order date (COLUMN area). If this view still has too much detail and too many columns to see at once, you'll want to see monthly totals instead of daily details. A PivotTable can quickly group the dates by month.

When you run the PivotTable Wizard to create a different summary, first select the **Another PivotTable** option in step 1. Then, select the **New worksheet** option in step 4. Because Microsoft Excel reuses the data from your first PivotTable, your workbook stays smaller and the changes you make to your source data are reflected faster in your PivotTables.

The **Group** command lets you group dates automatically by weeks, months, quarters, or years.

Sum of Order Amount	Order Date				
Product	12-May-97	15-May-97	16-May-97	17-May-97	18-May-97
Meat	405	3950.85	2195.4	1494.54	9582.6
Seafood	810	7901.7	4390.8	2989.08	19165.2
Grand Total	1215	11852.55	6586.2	4483.62	28747.8

Product Summary

Select this button, and then click **Group (Data** menu, **Group and Outline** submenu).

Dates are now grouped by months.

Sum of Order Amount	Order Date			
Product	May	Jun	Jul	Grand Total
Meat	33905.34	52824.09	21246.03	107975.46
Seafood	67810.68	105648.18	42492.06	215950.92
Grand Total	101716.02	158472.27	63738.09	323926.38

Product Summary

Select a field button when you click a field button, the entire field is selected automatically. To select the button without selecting the entire field, click again.

MS 114299

Update automatically When you make changes to the original data, your PivotTables can be updated automatically and can grow and expand. On the **PivotTable** toolbar, click **Options** (**PivotTable** menu), and then click **Refresh on open**. Or you can click the **Refresh Data** button on the **PivotTable** toolbar at any time.

Refresh Data button

Make a PivotTable directly from external data When you use data outside your worksheet, your PivotTable can be updated automatically when the data changes. If you have Microsoft Query installed with the appropriate ODBC drivers to access external data sources, select the **External data source** option in step 1 of the wizard. For more information on installing Microsoft Query, see "Get Sales Information from a Database," page 548.

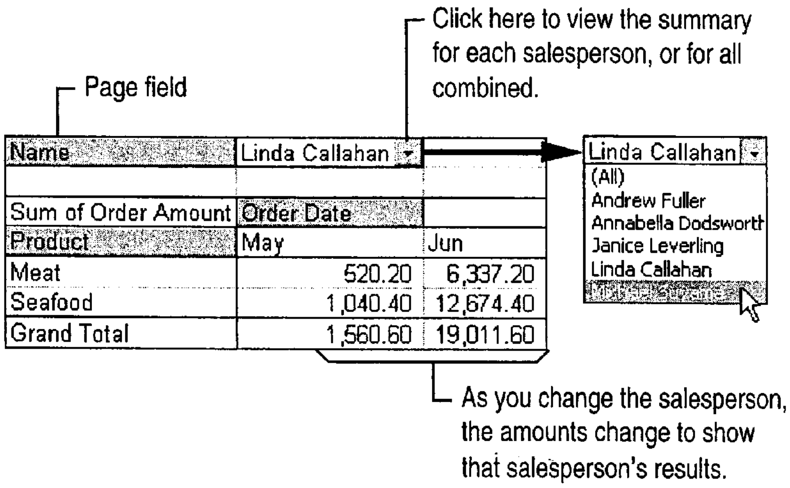
Add calculated fields and items You can add calculated fields and items to your PivotTables. Select a field or item in your PivotTable. On the **PivotTable** toolbar, click **Formulas** (**PivotTable** menu), and then click **Calculated Field** or **Calculated Item**.

MS 114300

Page Fields: Another Way to Group Information

A single PivotTable can generate several related reports by using *page fields*. A page field lets you display your data in three dimensions.

For example, you could edit the Sales by Product PivotTable to use the Name column as a page field. This field lets you view the sales by product for each sales representative, or for all representatives combined.



For PivotTables with many fields, page fields are a great way to keep your tables compact and readable.

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

Office Assistant button

MS 114301

AHL0123628

Compare Sales Results Graphically

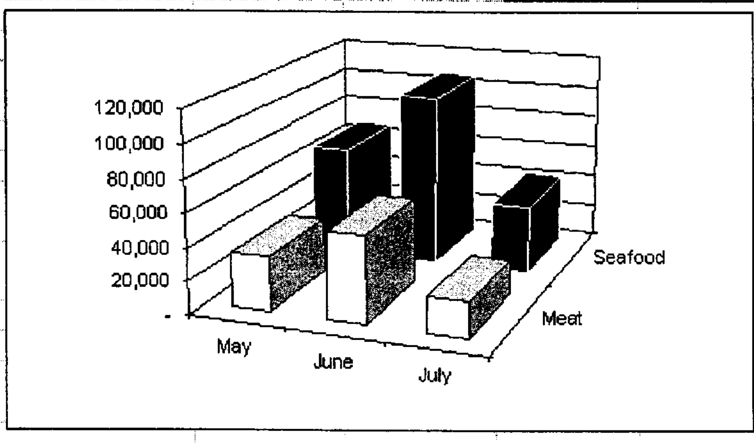
Your product summary lets you consider the totals, but there's a better way to compare the two product lines. You can create a chart from a PivotTable as you would from any data. As you make changes to the PivotTable or refresh the underlying data, the chart is updated too.

To create a chart, first select the entire PivotTable, and then use the Chart Wizard to select the options you want. For more information, see "Create a Chart from Worksheet Data," page 260.

Chart Wizard button

A column chart compares data over time, showing variations.

	A	B	C	D	E
1	Sum of Order Amount	Order Date			
2	Product	May	June	July	Grand Total
3	Meat	33,905.34	52,824.09	21,246.03	$ 107,975.46
4	Seafood	67,810.68	105,648.18	42,492.06	$ 215,950.92
5	Grand Total	$ 101,716.02	$ 158,472.27	$ 63,738.09	$ 323,926.38



Click anywhere in the PivotTable, and then run the Chart Wizard.

In step 2 of the Chart Wizard, select the data and labels, omitting the totals.

Select data that includes a field button You can select data such as cell A2 in the illustration above: On the **PivotTable** toolbar, click **Select** (**PivotTable** menu), and make sure the **Enable Selection** button is not pressed in. Then drag from the lower-right to the upper-left corner to select the data you want.

Is your sales data broken down geographically? You can view where your sales are concentrated on a map of your region or country. For more information, see "Display Data on a Map," page 287.

Next Steps

To	See
Forecast future sales based on your recent results	"Create a Sales Forecast," page 571

MS 114303

Create a Sales Forecast

You collect and analyze sales figures not just to see how you're doing, but in the hope of predicting future results. What are the trends in your recent sales, and how can you expect them to affect future sales?

With Microsoft Excel forecasting functions, you can apply sophisticated statistical analysis techniques to your data. And you don't have to be a statistician or study involved mathematics to create realistic sales projections. You can also use these techniques to project expenses, inventory requirements, stock prices, and other business trends.

Key Features

FORECAST Function

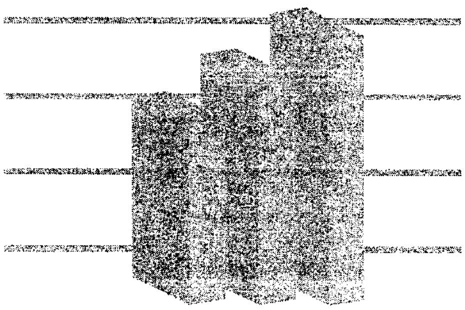
TREND Function

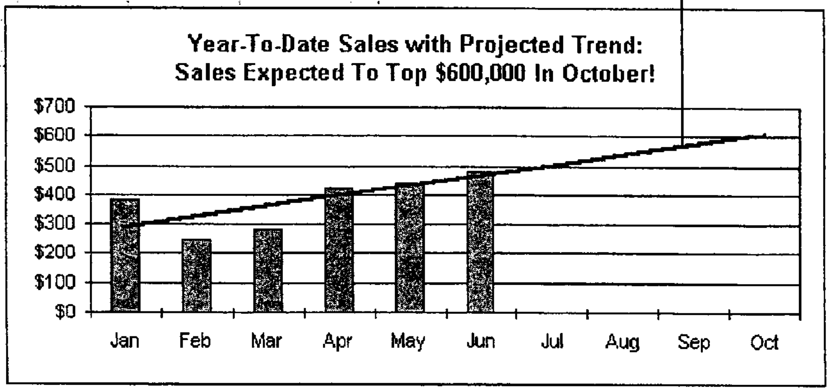
Trendlines in Charts

Forecast sales one month ahead, or several months.

	A	B	C	D	E	F	G
1	**Projected Sales, Second Half of 1997**					in thousands of dollars	
2							
3	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	
4	498.07	532.75	567.44	602.12	636.81	671.50	
5							
6							

Figure the sales trend and show it graphically. See when you're likely to reach your goals.



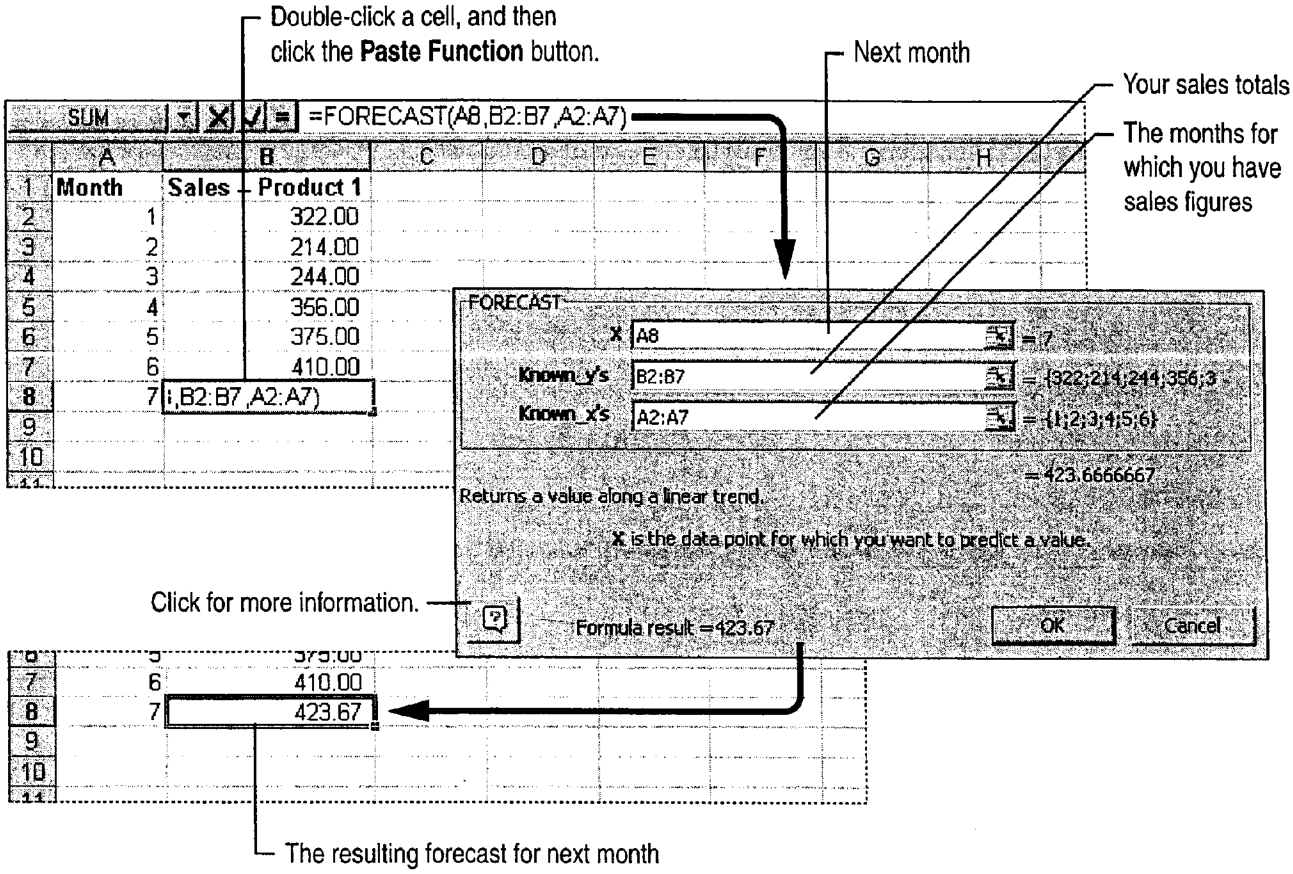


MS 114304

Forecast Next Month's Sales

To predict next month's sales based on the results in recent months, use the FORECAST function. The **Paste Function** button makes it easy to enter the formula.

Paste Function button



Learn more about functions If you want more detail than the **Paste Function** dialog box provides, click the question mark button in the lower-left corner for full reference information about the function.

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

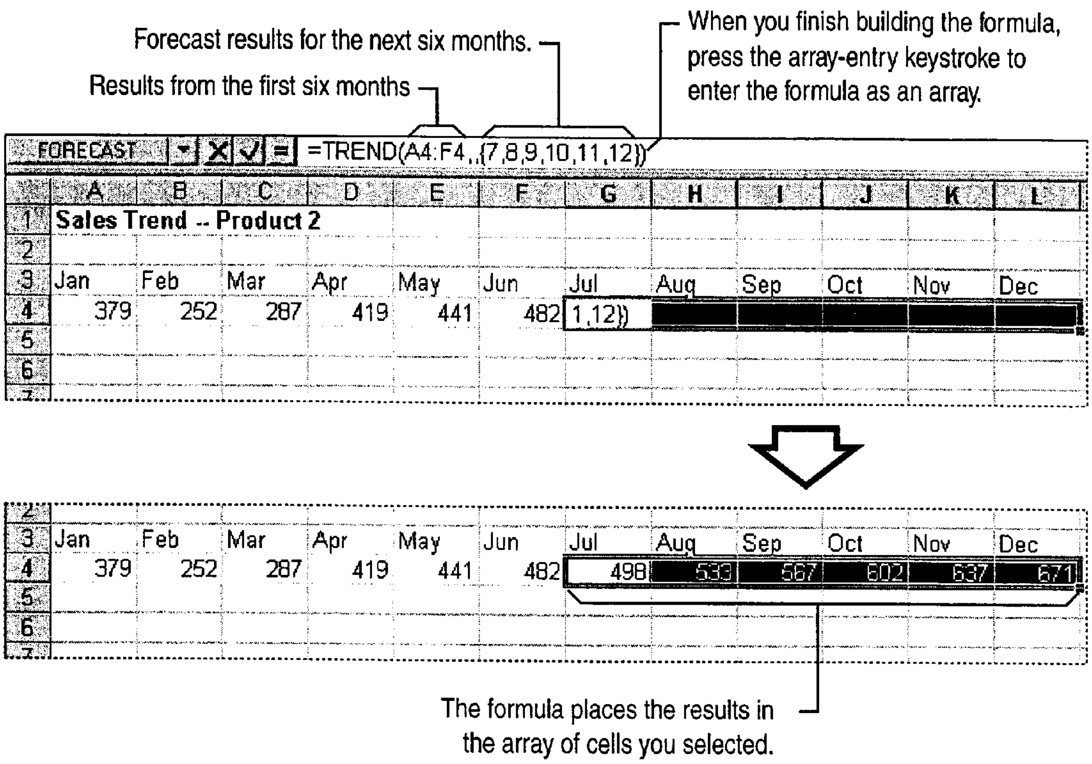
Office Assistant button

MS 114305

Determine Sales Trends

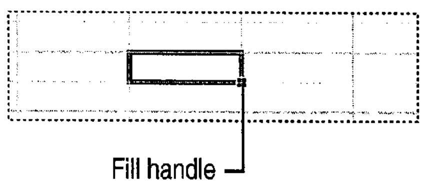
Will sales continue to go up or down, and how fast? You can calculate the likely direction using the TREND function.

You can use a TREND formula to predict the results for the next several months, even if you don't have actual results for recent months. A formula that calculates several values at once uses a range of cells, called an *array*, to display the set of results. Before entering the function, select enough cells for all of the results.



What is the array-entry keystroke? Press CONTROL+SHIFT+ENTER to enter an array formula.

Calculate a trend quickly using AutoFill Select your data for previous months, drag the *fill handle* with the right mouse button, and then click **Linear Trend** (to project growth along a straight line), or **Growth Trend** (to project growth along an exponential curve) from the shortcut menu.



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


Office Assistant button

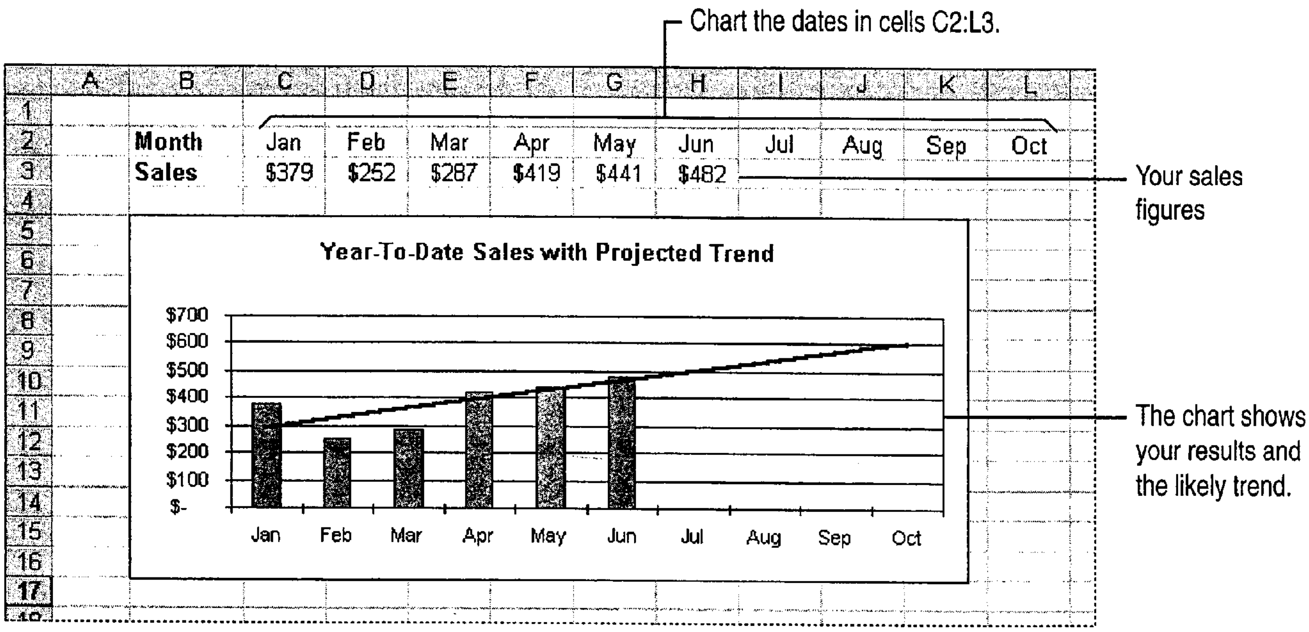
MS 114306

Chart a Trendline

Another way to project a trend is to chart a *trendline*. A trendline shows the direction of your sales visually.

First, use the Chart Wizard to create a column chart. Then, click the chart, and then click the first column. Click **Add Trendline** (**Chart** menu), and then select the type of trendline you want. For more information about creating charts, see "Create a Chart from Worksheet Data," page 260.

Chart Wizard button



Change the look of your chart For more information, see "Customize the Look of a Chart," page 276.

MS 114307

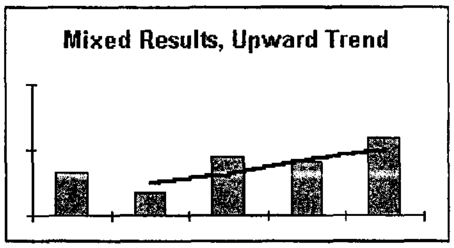
AHL0123634

What If Sales Don't Follow a Simple Trend?

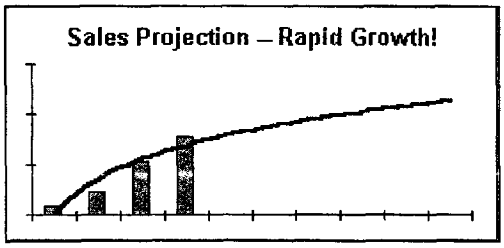
Trendlines describe future sales well when you have a simple, linear increase or decrease. If your data doesn't conform to this type of pattern, one of the following charting methods might work better.

First sales are up, then they're down To see the trend in all the spikes and dips, add a *moving average trendline* to your chart. This trendline smoothes out the fluctuations to show the overall growth pattern more clearly.

Sales are really taking off If your sales are doubling or tripling, you're seeing exponential growth. Use the GROWTH function instead of TREND to forecast this kind of expansion.



Moving average trendline



Logarithmic trendline

Next Steps

To	See
Include your forecasts in a report	"Create a Business Report," page 228
Perform a complete statistical analysis of your sales figures	The Analysis ToolPak add-in. Also, see "Analyze Data from an Experiment," page 592

MS 114308

Create a Sales Summary from a Microsoft Access Database

Use Microsoft Excel PivotTables to Summarize Microsoft Access Data

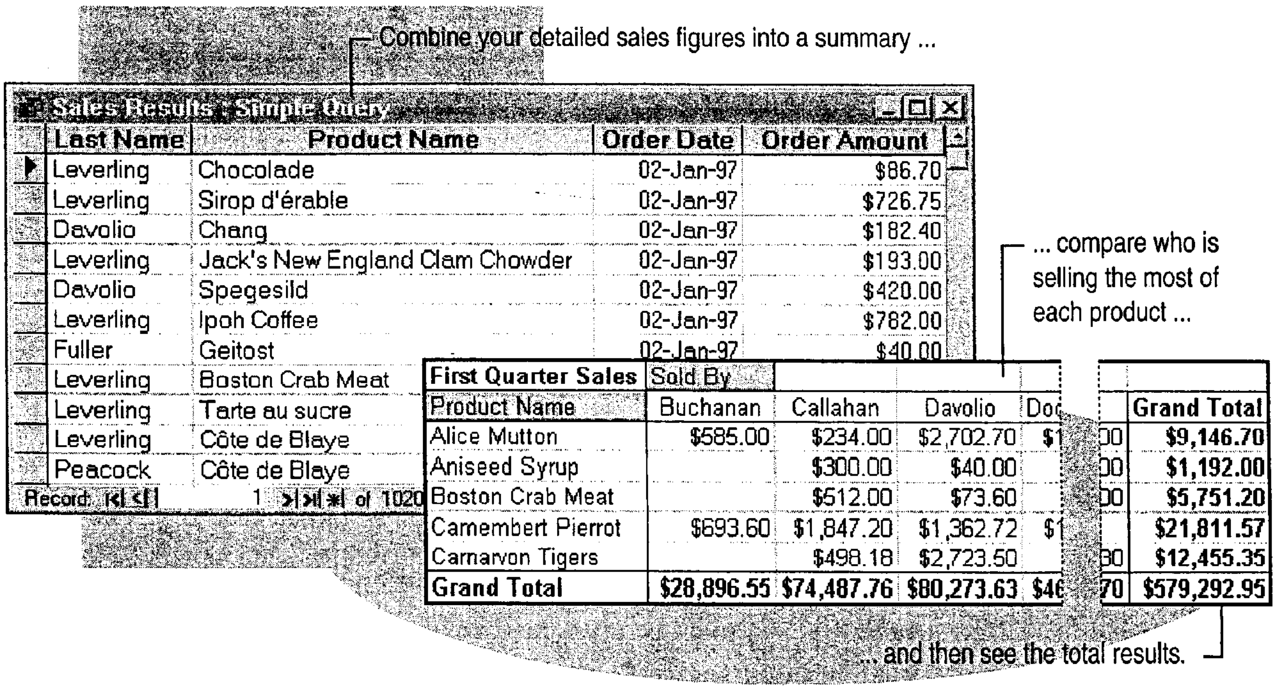
If you're working on a sales report, you can create an overview of sales results to see how well sales representatives are doing and which products are selling the most. To do so, store details about each order in a Microsoft Access sales database, and then switch to Microsoft Excel to summarize the data. Microsoft Excel can automatically create an interactive table, called a *PivotTable*, that summarizes large amounts of data. The PivotTable stays current because whenever you change information in the sales database, it's automatically updated in the PivotTable as well.

Key Features

Simple Query Wizard

PivotTable Wizard

PivotTables



Last Name	Product Name	Order Date	Order Amount
Leverling	Chocolade	02-Jan-97	$86.70
Leverling	Sirop d'érable	02-Jan-97	$726.75
Davolio	Chang	02-Jan-97	$182.40
Leverling	Jack's New England Clam Chowder	02-Jan-97	$193.00
Davolio	Spegesild	02-Jan-97	$420.00
Leverling	Ipoh Coffee	02-Jan-97	$782.00
Fuller	Geitost	02-Jan-97	$40.00
Leverling	Boston Crab Meat		
Leverling	Tarte au sucre		
Leverling	Côte de Blaye		
Peacock	Côte de Blaye		

First Quarter Sales	Sold By					
Product Name	Buchanan	Callahan	Davolio	Doc		Grand Total
Alice Mutton	$585.00	$234.00	$2,702.70	$1	00	$9,146.70
Aniseed Syrup		$300.00	$40.00		00	$1,192.00
Boston Crab Meat		$512.00	$73.60		00	$5,751.20
Camembert Pierrot	$693.60	$1,847.20	$1,362.72	$1		$21,811.57
Carnarvon Tigers		$498.18	$2,723.50		30	$12,455.35
Grand Total	$28,896.55	$74,487.76	$80,273.63	$46	70	$579,292.95

To complete the steps in this topic you need to have Microsoft Office, Professional Edition or an individual copy of Microsoft Access installed. You also need to have sales data stored in a Microsoft Access database.

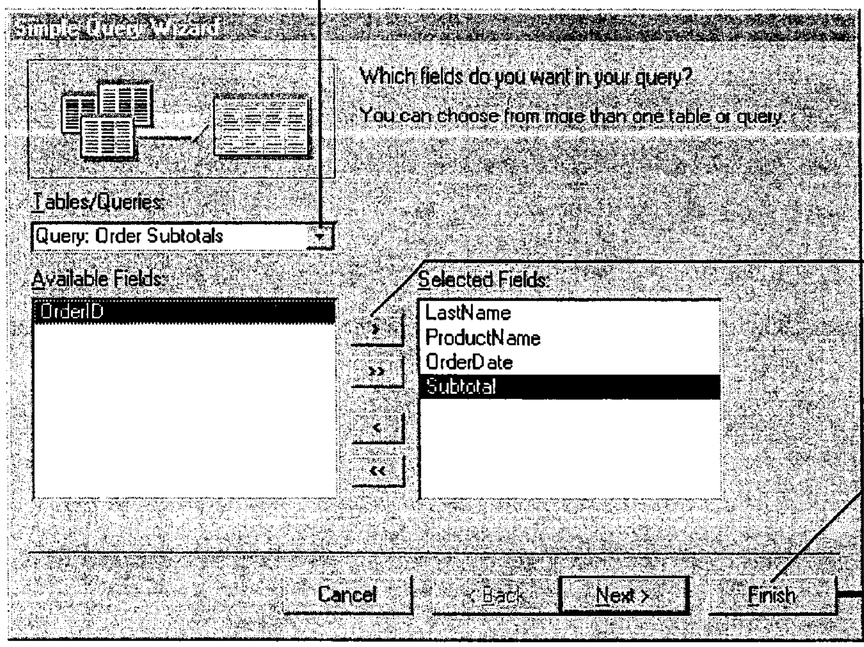
MS 114309

Choose the Data You Want to Analyze

Start by finding out how much each sales representative has sold. For each product, you need the name of the sales representative, the name of the product, the amount sold, and the dates of the orders. To retrieve this information from the database, create a query. In the database window, on the **Query** tab, click **New**, and then double-click **Simple Query Wizard**.

Select fields from the Employees, Products, and Orders tables, and the Order Subtotals query to create a new query.

Click the arrow, and then select a table or query.



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

When you're finished, click here to complete the query and to view the results.

Last Name	Product Name	Order Date	Subtotal
Buchanan	Singaporean Hokkien Fried Mee	01-Jul-97	$440.00
Buchanan	Mozzarella di Giovanni	01-Jul-97	$440.00
Buchanan	Queso Cabrales	01-Jul-97	$440.00
Suyama	Tofu	02-Jul-97	$1,863.40
Suyama	Manjimup Dried Apples	02-Jul-97	$1,863.40
Peacock	Louisiana Fiery Hot Pepper Sauce	05-Jul-97	$1,552.60
Peacock	Jack's New England Clam Chowder	05-Jul-97	$1,552.60
Peacock	Manjimup Dried Apples	05-Jul-97	$1,552.60
Leverling	Louisiana Fiery Hot Pepper Sauce	05-Jul-97	$654.06
Leverling	Gustaf's Knäckebröd	05-Jul-97	$654.06
Leverling	Ravioli Angelo	05-Jul-97	$654.06
Peacock	Sir Rodney's Marmalade	06-Jul-97	$3,597.90
Peacock	Geitost	06-Jul-97	$3,597.90
Peacock	Camembert Pierrot	06-Jul-97	$3,597.90
Leverling	Maxilaku	07-Jul-97	$1,444.80
Leverling	Chartreuse verte	07-Jul-97	$1,444.80
Leverling	Gorgonzola Telino	07-Jul-97	$1,444.80

MS 114310

AHL0123637

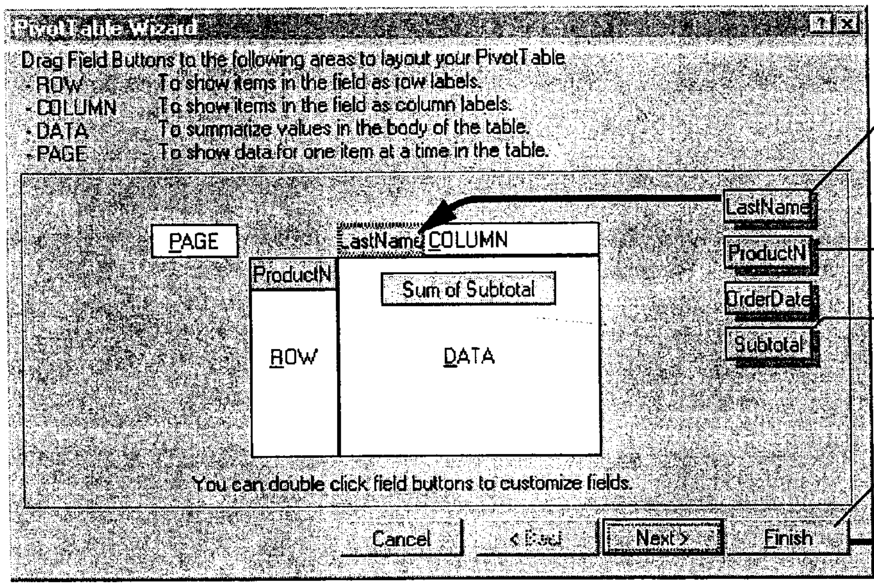
Summarize Data by Product and Salesperson

Now that you have the raw data you need, you want to total and compare the amount of each product sold by each sales representative. While working in Microsoft Access, you can use Microsoft Excel to summarize this information.

In the database window, click the **New Object** button, click **Form**, and then click **PivotTable Wizard**. Select your query and the fields you want to summarize. When the wizard finishes, the PivotTable appears as a Microsoft Excel object inserted in a Microsoft Access form.

New Object button

To create the PivotTable, drag the field buttons on the right to the diagram on the left.



Use the last names of your sales representatives for the column headings.

List the products down the rows.

Show the total orders for each sales representative and product. Only fields containing numbers can be dragged to the data area.

Click here to create the PivotTable.

The resulting PivotTable summarizes the sales figures for you.

Sum of Subtotal	LastName				
ProductName	Buchanan	Callahan	Davolio	Dodsworth	Fuller
Alice Mutton	9423.65	6489	6360.8	1979.23	14358.
Aniseed Syrup	0	2048.22	2468.22	7717.82	
Boston Crab Meat	7724.5	2647.7	5959.36	2367.69	3053
Camembert Pierrot	14342.11	6525.82	25677.58	2679.8	1925[illegible]
Carnarvon Tigers	0	6575.55	8927.01	6915.8	10579.
Chai	2188	2418.8	2215.86	1788	14387.

Can't read some field names? Double-click a long field name so that you can view all of its characters.

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

Office Assistant button

MS 114311

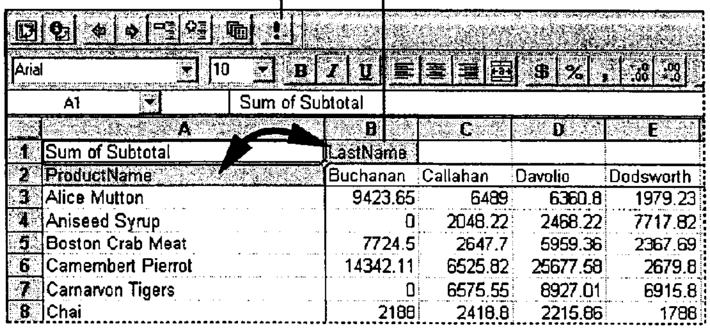
Analyze the Data in Different Ways

After the wizard creates the PivotTable, you can change the layout so that products are displayed across the columns, and sales representatives are listed down each row. Unlike a Microsoft Access table, the PivotTable is dynamic; you can transpose its rows and columns to see different summaries of the data.

You edit the table in Microsoft Excel by clicking the **Edit PivotTable** button on the form. The PivotTable opens in a separate window with Microsoft Excel commands and toolbars displayed.

Click the **Refresh Data** button to update the data in the table.

To display the sales representatives by row and the total amount sold of each product by column, drag the row and column headings to switch their positions.



The PivotTable displays the data based on the new arrangement.

Sum of Subtotal	ProductName	
LastName	Alice Mutton	Aniseed Syrup
Buchanan	9423.65	0
Callahan	6489	2048.22
Davolio	6360.8	2468.22
Dodsworth	1979.23	7717.82
Fuller	14358.45	0
King	7260.91	479.4

Finished editing in Microsoft Excel? Click **Exit** (**File** menu) to save your changes and return to Microsoft Access.

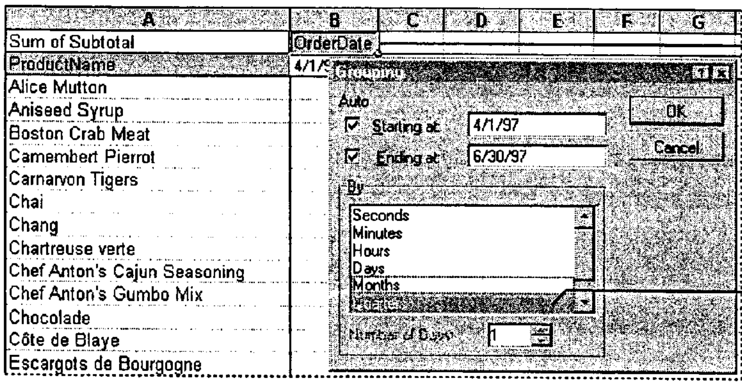
Want to reactivate Microsoft Excel for further editing? Open the Microsoft Access form, and then double-click the PivotTable.

MS 114312

AHL0123639

View Sales Data by Quarter

Suppose you want to compare the total sales figures of each product by quarter. You can have the PivotTable Wizard create another PivotTable from the same query that displays the sales performance of each product (ROW area) by order date (COLUMN area). When the wizard finishes, edit the PivotTable to group the data by quarter.



To summarize the data by quarter, right-click the column heading, and then click **Group** (**Group and Outline** menu).

Select **Quarters** from the list in the **Grouping** dialog box.

Now sales figures for each product are totaled by quarter.

Sum of Subtotal	OrderDate			
ProductName	Qtr1	Qtr2	Qtr3	Qtr4
Alice Mutton	24085.78	16792.06	15194.45	21385.33
Aniseed Syrup	5000.04	18197.42	1291.9	5734
Boston Crab Meat	29900.76	10785.12	27109.46	5968.77
Camembert Pierrot	32392.29	28552.82	33034.06	29439.67
Carnarvon Tigers	14558.09	12922.05	12982.3	18174.11
Chai	16720.43	12415.62	18785.26	5790.4

Display specific products; hide those you don't need Click the **Edit Pivot Table** button on the form, select the rows of products that you want to hide, click **Row**, and then click **Hide** (**Format** menu).

Rank products from most to least sold Click **Edit Pivot Table**, select the products you want to sort, and then click the **Sort Descending** button.

Sort Descending button

MS 114313

Next Steps

To	See
Learn more about queries	"Evaluate Sales Performance in a Microsoft Access Database," page 582
Display data visually	"Create a Chart from a Database," page 272

MS 114314

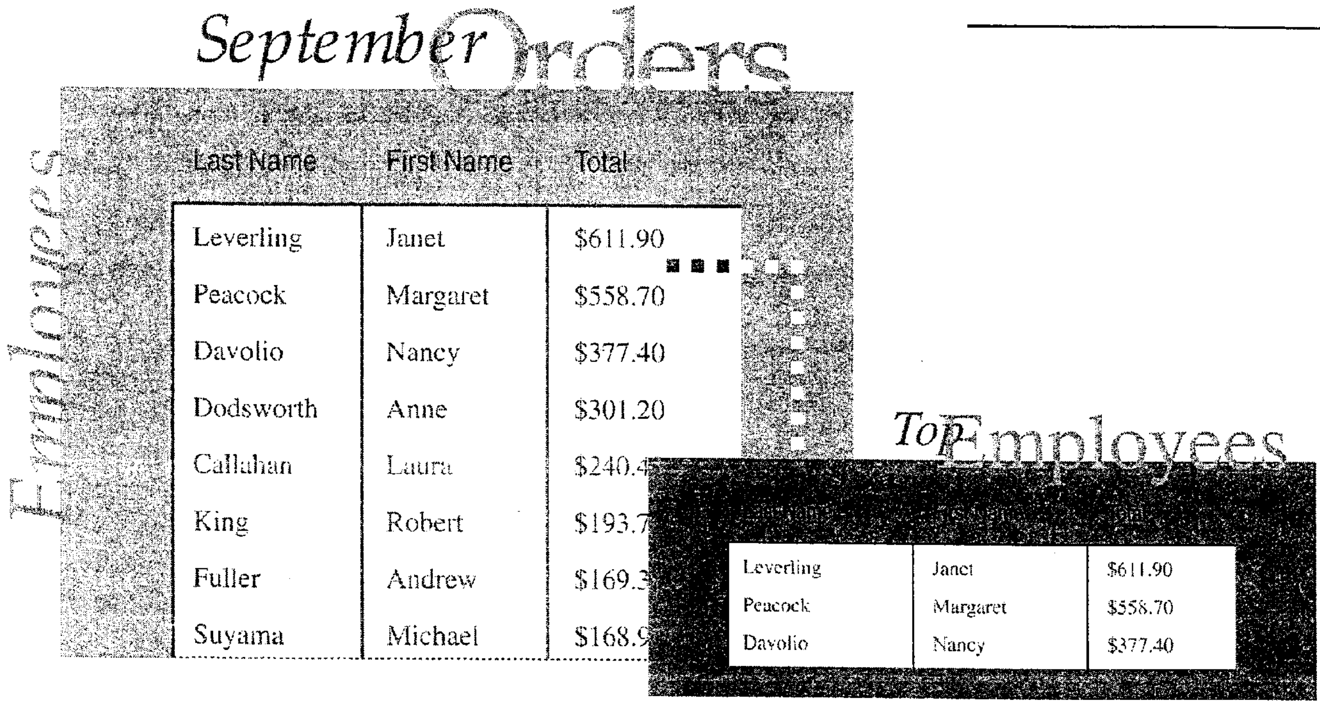
Evaluate Sales Performance in a Microsoft Access Database

Use a Query to Find Out How Well Your Sales Force Is Doing

Suppose you want to review sales figures for your company, Northwind Traders, for September. In particular, you want to see how your sales force is doing and who the top performers are. To retrieve this information, you can create a *query*, a question about data that is stored in more than one table.

Key Features

- Simple Query
- Expressions
- Sorting Records



To complete the steps in this topic you need to have Microsoft Office, Professional Edition or an individual copy of Microsoft Access installed. You also need to use the Table Wizard to create the Employees, Orders, and Order Details tables shown in this topic.

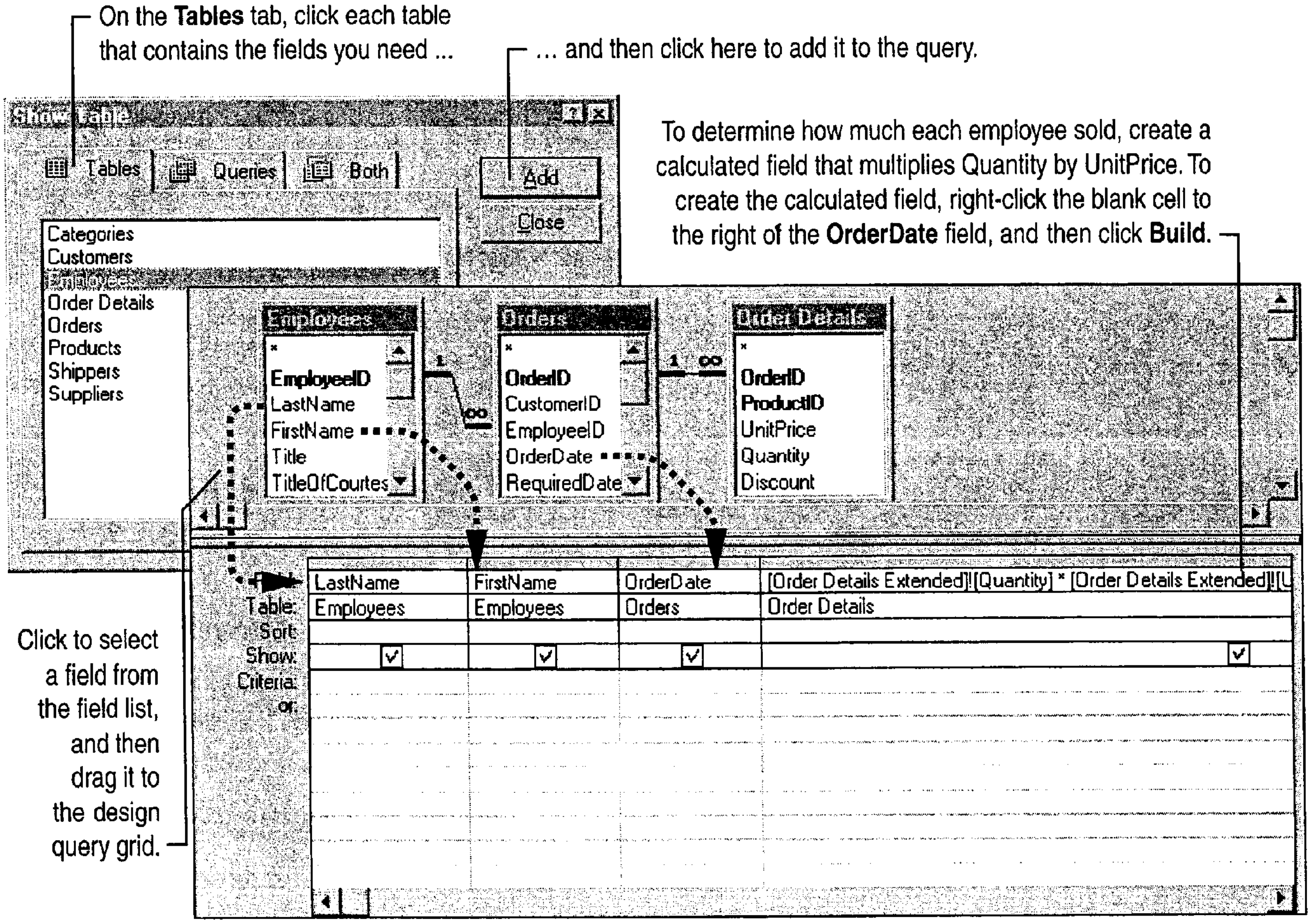
MS 114315

AHL0123642

Begin the Query

To see how well your sales force is doing, you want to review sales figures. More specifically, you want to see who received each order, the date the order was received, and the amount charged for each order. This information is stored in three tables: Employees, Orders, and Order Details.

To find information that meets specific criteria (such as details on all orders received in September), create a query in design view so that you can define criteria in the query design grid. In the database window, on the **Queries** tab, click **New**, and then click **Design View**.



MS 114316

Want to add all the fields from a table? Double-click the title bar on the field list and then drag all the fields to the grid, or double-click the asterisk (*) on the field list. When you use the asterisk, the query automatically includes fields that you add or delete from an underlying table.

Don't Need to Limit the Information the Query Returns?

Use the Simple Query Wizard to retrieve information that you don't need to refine or limit. For example, you can use the Simple Query Wizard to retrieve the names and phone numbers of all employees in an organization. In the database window, click **Queries**, click **New**, and then double-click **Simple Query Wizard**. However, if you want to retrieve the names and phone numbers of employees hired after a specific date, you need to create the query in query design view.

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

Office Assistant button

MS 114317

Show Only Last Month's Orders

To find details on all orders received in September, you need to limit your query so that it searches for the data that applies to this specified time period. To do so, type the beginning and ending dates (an *expression*) in the **Criteria** row for the OrderDate field, as shown in the following illustration.

Type the beginning and ending dates here.
Date expressions are enclosed in number (#) signs.

Field:	LastName	FirstName	OrderDate	Expr1: [Order Details]![Quantity]*[Order D
Table:	Employees	Employees	Orders	
Sort:				
Show:	☑	☑	☑	☑
Criteria:			Between #9/1/97# And #9/30/97#	
or:				

Last Name	First Name	Order Date	Expr1
Suyama	Michael	01-Sep-97	$69.75
Suyama	Michael	01-Sep-97	$544.60
Suyama	Michael	01-Sep-97	$57.00
Fuller	Andrew	01-Sep-97	$775.00
Fuller	Andrew	01-Sep-97	$231.60
Fuller	Andrew	01-Sep-97	$540.00
Fuller	Andrew	01-Sep-97	$95.00
Fuller	Andrew	01-Sep-97	$1,710.00
Fuller	Andrew	01-Sep-97	$1,020.00
Peacock	Margaret	02-Sep-97	$600.00
Peacock	Margaret	02-Sep-97	$1,288.00
Peacock	Margaret	02-Sep-97	$1,870.00
Peacock	Margaret	02-Sep-97	$910.00
King	Robert	02-Sep-97	$250.00
King	Robert	02-Sep-97	$441.60
King	Robert	02-Sep-97	$600.00
Callahan	Laura	05-Sep-97	$1,701.00
King	Robert	06-Sep-97	$54.00

You can change the name of a field by double-clicking it and then typing a new name, such as "Amount".

Click the **View** arrow and then select **Datasheet View** from the list to see orders filled in September.

View button

MS 114318

Did you make a mistake when you set up the query? In datasheet view, click the **View** arrow to return to the query design grid. You can change the query by adding or deleting fields, or by changing the criteria.

Want to see orders for another range of dates? Change the dates in the Between expression.

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

Office Assistant button

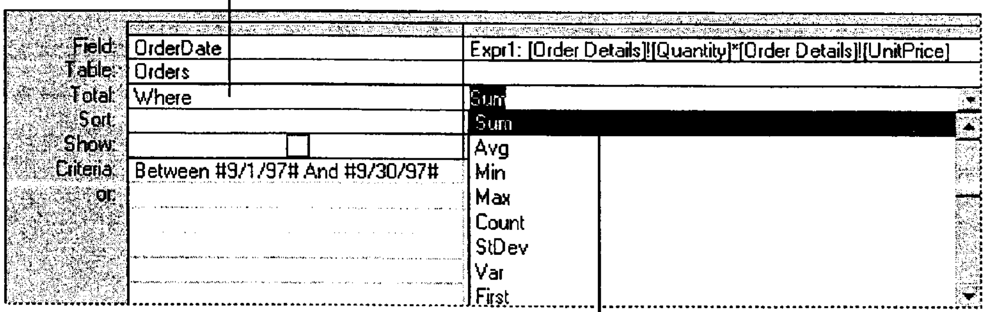
MS 114319

Calculate Total Orders Per Employee

After your query finds every order received by each employee during the month of September, you can modify the query to calculate the total orders received by each employee. Click the **Totals** button to add a Total row to the query design grid, and then select the calculation you want in the Total cell for that field.

Σ **Totals** button

Click the **Total** cell under the OrderDate column. Click the arrow, and then select **Where** to have Microsoft Access find orders for which the date is between 9/1/97 and 9/30/97.



Under the calculated field you created, click the **Total** cell. Click the arrow, and then select **Sum** to have Microsoft Access total the orders filled by each employee.

Want to find an average value for a field? In the Total cell for the field you want to calculate, click the arrow, and then select the calculation you want from the list.

Want to find the minimum and maximum values for the same field? Add the field to the query design grid twice, and then click the calculation you want in the Total cell. For example, you can add the Amount field and then click **Min** in the Total cell. In another column, add the Amount field again and then click **Max**.

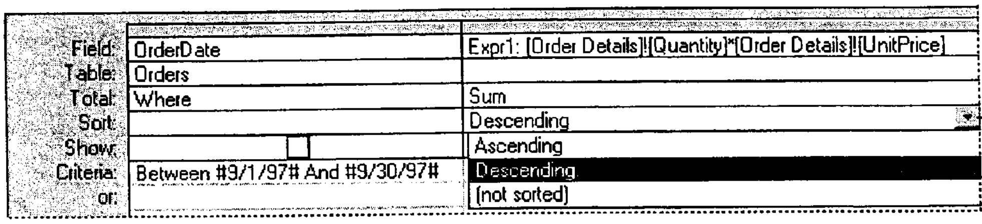
Want to know more? Look up **Getting Results - Evaluate Sales** in Help.

Office Assistant button

MS 114320

Rank Your Sales Staff

Now that you know how much each employee has sold, you can rank your sales force. To sort employees by the amount of orders for September, click in the Sort cell of the Amount field. Then select the order in which you want the information sorted. You can rank employees by sorting the grand totals in descending order.



Click here, and then click **Descending** ...

Last Name	First Name	Expr1
Fuller	Andrew	$19,787.05
King	Robert	$13,839.29
Peacock	Margaret	$12,183.85
Dodsworth	Anne	$10,412.40
Davolio	Nancy	$8,845.00
Leverling	Janet	$3,595.50
Callahan	Laura	$2,361.00
Buchanan	Steven	$1,423.00
Suyama	Michael	$671.35

... to rank employees by sales totals.

Want to sort by more than one field? Microsoft Access sorts fields from left to right. In the query design grid, arrange the fields in the order in which you want the sorts performed, and then click the sort order for each field.

Want to use the same query again? Save the query so you can reuse it. Click **Save** (**File** menu).

Create a report from a query In datasheet view, click the **New Object** arrow, and then click **New Report** to create a report based on the query.

New Object button

MS 114321

Next Steps

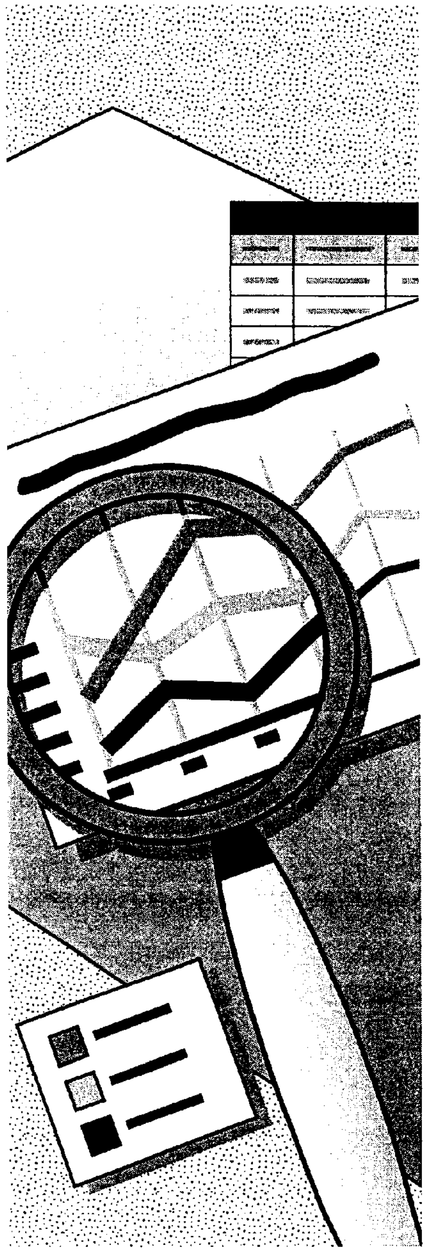
To	See
Learn more about sorting records	"Use Your First Microsoft Access Database," page 104
Create a query by using the Simple Query Wizard	"Create a Sales Summary," page 563

MS 114322

PART 14

Analyze Scientific and Engineering Data

Contents



MS 114323

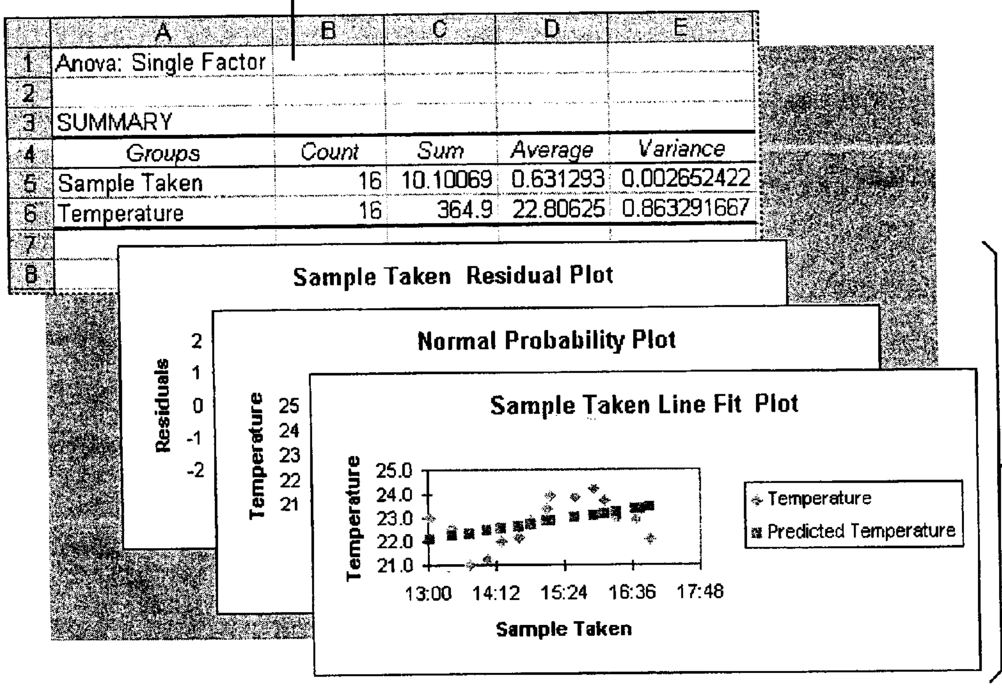
Analyze Data from an Experiment

Have you been performing calculations like exponential smoothing and Fourier analysis using a dedicated math package? Did you know that you can do the same number-crunching in Microsoft Excel and use all of the convenient and powerful analysis and formatting capabilities of Microsoft Excel on your results?

Key Features

Analysis ToolPak

Analysis of variance calculates the comparison factors you need.



The regression analysis tool automatically charts its results.

Important Make sure you've installed the Analysis ToolPak add-in. If you chose the Typical installation for Microsoft Excel rather than Custom, you'll need to run the Setup program to get this add-in. After installation, enable the Analysis ToolPak by clicking **Add-Ins** (**Tools** menu). You can work with data sets of up to 64,000 rows by 256 columns and of up to 32,000 characters per cell.

Set Up Your Data

Before you can run the analysis, you need to set up your data. Place each data series in a row or column. Each tool in the Analysis ToolPak has specific input requirements.

The tools store their output wherever you specify: on the same worksheet as the input range, on another worksheet, or in another workbook.

	A	B
1	Sample Taken	Temperature
2	13:01	23.0
3	13:25	22.5
4	13:45	21.0
5	14:02	21.2
6	14:18	22.0
7	14:36	22.2
8	14:48	22.8
9	15:05	23.3
10	15:10	23.9
11	15:35	23.8
12	15:55	24.2
13	16:07	23.7
14	16:19	23.0
15	16:39	22.9
16	16:45	23.3
17	16:55	22.1

Identify your variables for the resulting analysis, or let the tools create labels for you.

Your input range

Bring external data directly into your worksheet Microsoft Excel can read most database formats, or you can import text files. For examples, see "Get Sales Information from a Database," page 548.

Want just a simple forecast? See "Create a Sales Forecast," page 571. For some straightforward techniques to analyze uncomplicated data, see "Create a Sales Summary," page 563, and "Create a Detailed Sales Report," page 556.

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

Office Assistant button

Run the Analysis

Now your data is ready to be analyzed. Click **Data Analysis** (**Tools** menu) to select the type of analysis you want.

	A	B	C	D
1	*Sample Taken*		*Temperature*	
2				
3	Mean	0.631293403	Mean	22.80625
4	Standard Error	0.012875418	Standard Error	0.232283726
5	Median	0.630208333	Median	22.95
6	Mode	#N/A	Mode	23
7	Standard Deviation	0.051501671	Standard Deviation	0.929134902
8	Sample Variance	0.002652422	Sample Variance	0.863291667
9	Kurtosis	-1.137247717	Kurtosis	-0.359166577
10	Skewness	-0.158973114	Skewness	-0.493724094
11	Range	0.1625	Range	3.2
12	Minimum	0.542361111	Minimum	21
13	Maximum	0.704861111	Maximum	24.2
14	Sum	10.10069444	Sum	364.9
15	Count	16	Count	16
16	Confidence Level(95.0%)	0.02744332	Confidence Level(95.0%)	0.495101346

The Descriptive Statistics tool calculates the parameters you want for further analysis.

Important If you don't see the **Data Analysis** command, you might not have enabled the Analysis ToolPak after installing it. Use the **Add-Ins** command (**Tools** menu) to enable the Analysis ToolPak.

Want details about tools? For details about specific tools, look up the name of the tool in Microsoft Excel Help. For a list of the available analysis tools, click **Data Analysis**.

Next Steps

To	See
Create scatter plots and other charts from your data or analysis results	"Display Scientific Data in a Chart," page 595

MS 114326

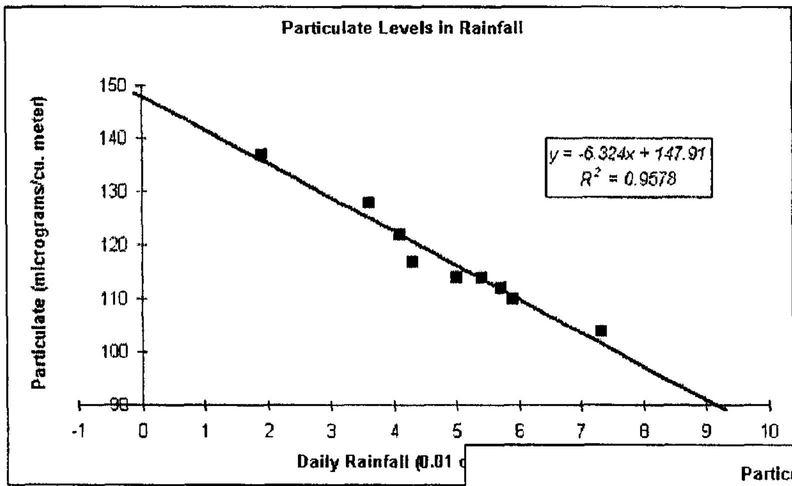
Display Scientific Data in a Chart

When your data has pairs or grouped sets of values, you can display it effectively in an xy (scatter) chart. This chart type is commonly used for displaying scientific and engineering data. A scatter chart has two value axes, instead of one value axis and one category axis like most chart types. Another difference is that data can be shown in uneven intervals, or clusters.

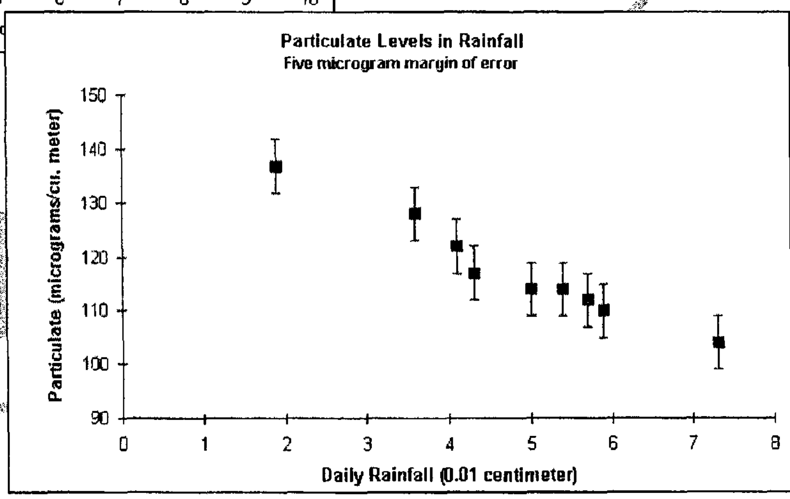
Optional chart items that can be helpful in analyzing data are trendlines for prediction and error bars to show the margin of error.

Key Features

- Scatter Charts
- Trendlines
- Error Bars



Scatter charts display clustered data along two value axes.



MS 114327

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Create a Scatter Chart

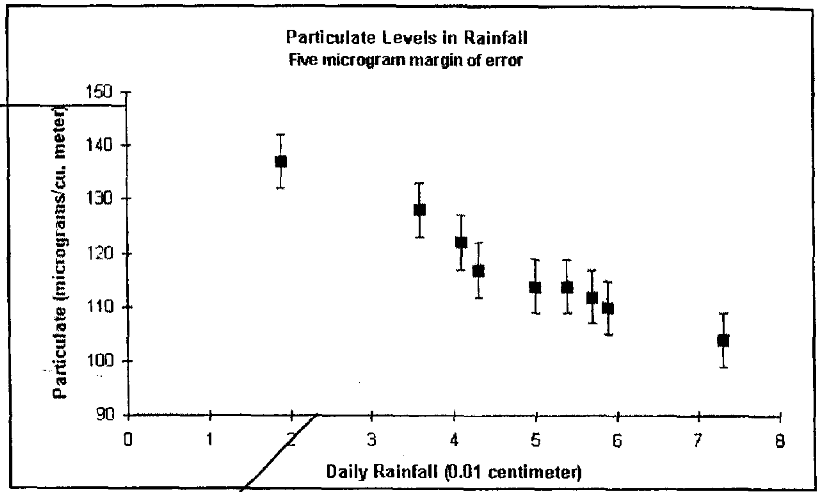
Select the data you want to display in the chart. If the selection includes text labels, you can add a legend to help identify data in charts with multiple y values. If there is more than one y value for each x value, see "Display Multiple Y Values," later in this topic.

You can let the Chart Wizard help you create the chart. After selecting the data, click the **Chart Wizard** button, and then select the XY (Scatter) type in step 1 of the wizard. For more information on creating charts, see "Create a Chart from Worksheet Data," page 260.

Chart Wizard button

Y values displayed on the vertical axis

	A	B
1	Daily rainfall	Particulate
2	4.1	122
3	4.3	117
4	5.7	112
5	5.4	114
6	5.9	110
7	5.0	114
8	3.6	128
9	1.9	137
10	7.3	104



X values displayed on the horizontal axis

What's the difference between a line chart and a scatter chart? Line charts and scatter charts look very similar. However, the line chart displays categories of data evenly along the x axis, with values along the y axis. When data should be displayed in uneven clusters, the scatter chart works better. If you want your scatter chart to display connecting lines between points, you can select one of the built-in chart subtypes with lines from the **Chart Type** dialog box (**Chart** menu).

What if my data has three y values? Use the Chart Wizard to create a bubble chart, which is similar to a scatter chart, except that each data point is a "bubble," the size of which is determined by one of the three data series.

MS 114328

AHL0123655

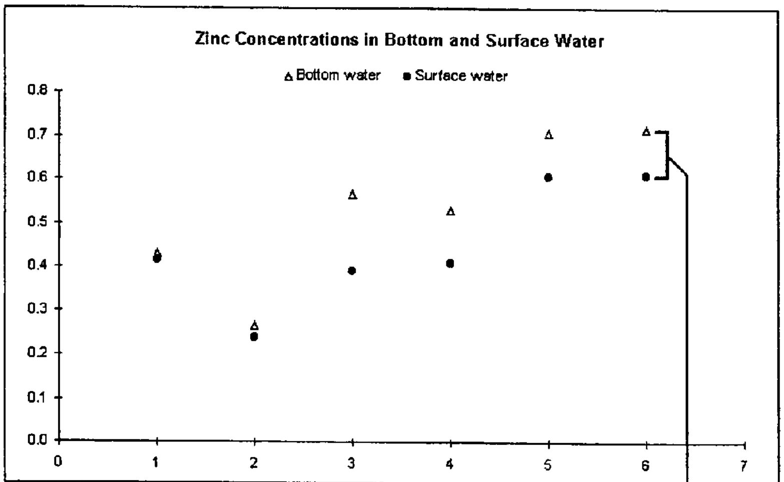
Display Multiple Y Values

When your data has two or more y values corresponding to each x value, arrange the data as shown to get the chart you want. If your data series are in rows instead of columns, the x values should be in the top row and the y values in the following rows.

	A	B	C	D	E
1	Zinc Concentrations in Bottom and Surface Water				
2		Day	Bottom water	Surface water	
3		1	0.430	0.415	
4		2	0.266	0.238	
5		3	0.567	0.390	
6		4	0.531	0.410	
7		5	0.707	0.605	
8		6	0.716	0.609	

X values in leftmost column

Pairs of y values in adjacent columns to the right



Pair of y values displayed on the chart

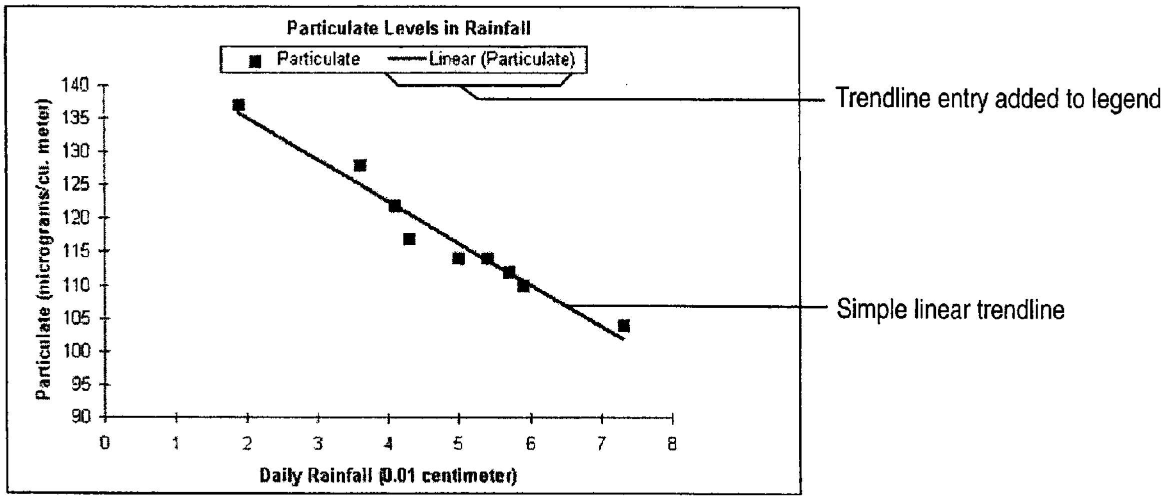
? **Want to know more?** Look up **Getting Results - Scientific Data** in Help.

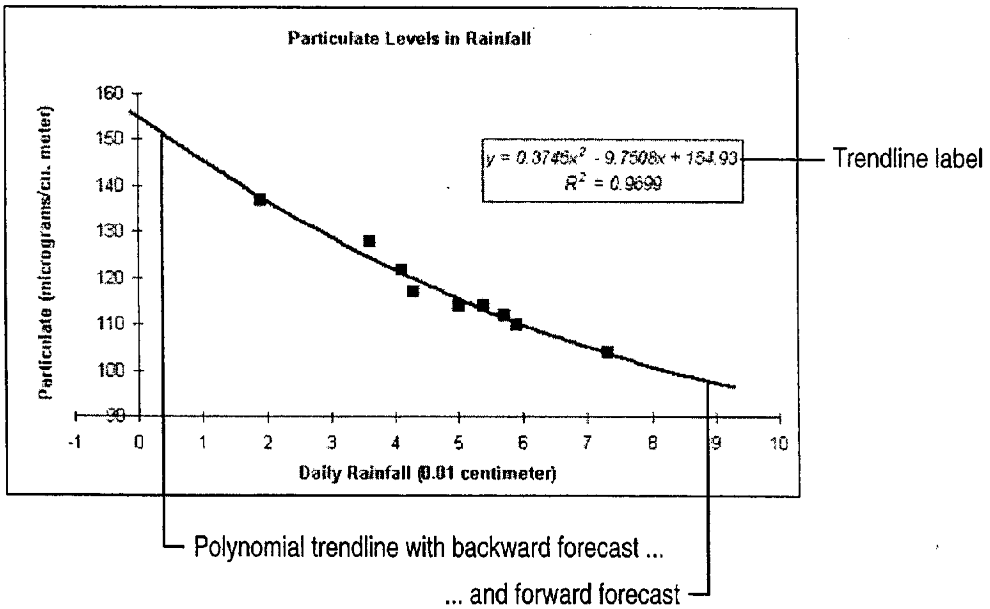
Office Assistant button

MS 114329

Predict Forward or Backward with a Trendline

To predict a trend based on available data (also known as regression analysis), add a trendline to the data series. Select the data series, and then click **Add Trendline** (**Chart** menu). Specify the trendline type you want; on the **Options** tab, you can display a trendline label with the line equation, the R-squared value, or both.





MS 114330

The trendline belongs to the data series A trendline is calculated from the values in the associated data series. If you delete or move the data series, the trendline is also deleted or moved. If you want to change the type of trendline you use, double-click the line and then make your change in the **Format Trendline** dialog box.

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

Modify the trendline You can change the trendline's type (for example, from linear to polynomial), change its color or line style, give it a name, or add a label. Double-click the line, and then make the changes you want in the **Format Trendline** dialog box.

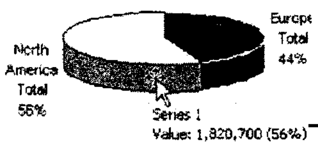
Format the trendline label You work with a trendline label like any other data label: by double-clicking it. Then you can change the font, change the way numbers are displayed, or add a border or background color. To move the label, select it and then drag it to the new location.

Use trendlines with other chart types You can add trendlines to 2-D bar, column, and line charts, but not to 3-D charts.

Use a moving average trendline All types of trendlines are useful for business data. For more information, see "Create a Sales Forecast," page 571.

Chart Tips Make it Easier to Identify Chart Elements

When you rest the pointer over a chart item, you can see the name and value of the item in a tip. Turn chart tips on or off by selecting or clearing the **Show names** and **Show values** options on the **Chart** tab of the **Options** dialog box (**Tools** menu).



— Chart tips help you identify chart elements.

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

Office Assistant button

MS 114331

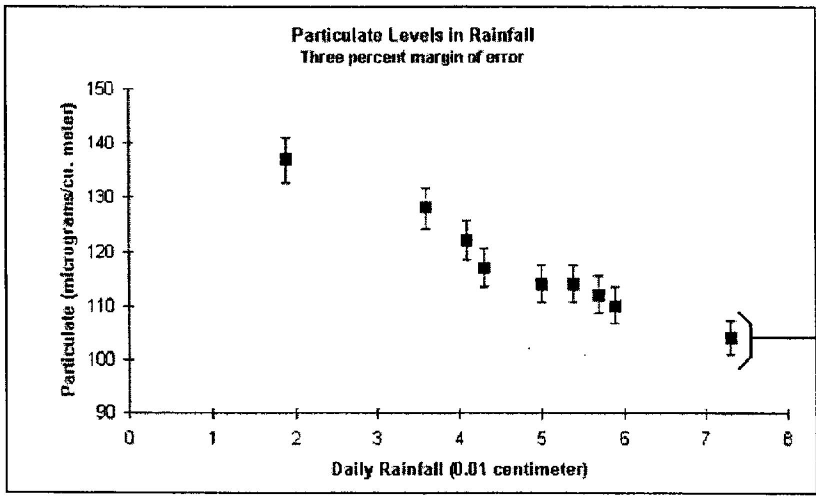
AHL0123658

Show "Plus or Minus" with Error Bars

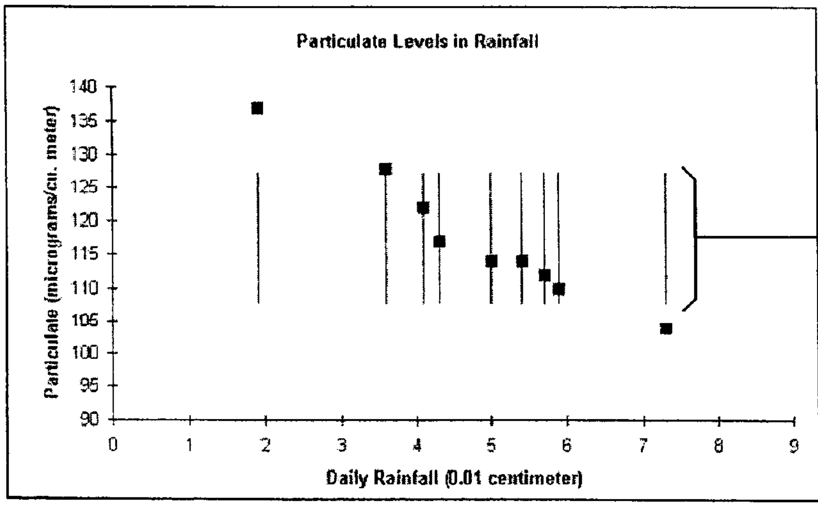
When it's useful to indicate the degree of uncertainty for a data series—the "plus or minus" range—add *error bars*. Double-click the data series to display the **Format Data Series** dialog box. Click the **X Error Bars** tab or the **Y Error Bars** tab, and then specify the display you want and how the error amount should be obtained.

How is the error amount obtained? On the two error bars tabs in the **Format Data Series** dialog box, specify the error amount; it can be a fixed value, a percentage of each value in the data series, a number of standard deviations, the standard error, or another error value in a worksheet range.

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



Error bar calculated as a percentage of y value, with end marker displayed



Error bar showing one standard deviation, with no end marker

MS 114332

The error bars belong to the data series Error bars are obtained from the values in the associated data series. If you delete or move the data series, the error bars are also deleted or moved.

Modify the error bars To change the color, style, and line weight for all error bars associated with a data series, double-click one error bar. In the **Format Error Bars** dialog box, change the look on the **Patterns** tab. You can change other characteristics on the **X Error Bars** tab and the **Y Error Bars** tab.

Use error bars with other chart types You can add error bars to 2-D area, bar, column, bubble, and line charts, but not to 3-D charts.

Next Steps

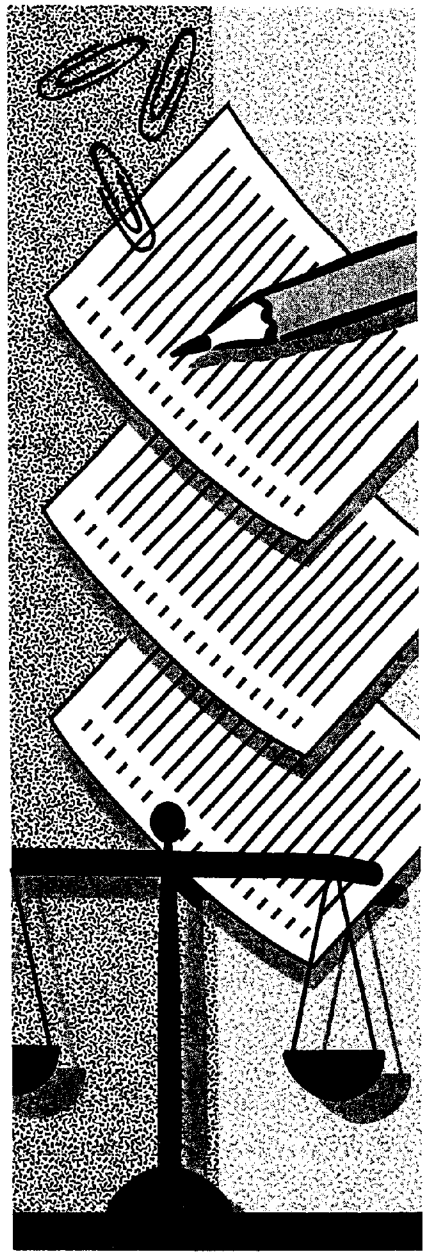
To	See
Custom-format a chart and save the formatting to use for other charts	"Customize the Look of a Chart," page 276
Create a link to, or insert, a chart in a Microsoft Word document or Microsoft PowerPoint presentation	"Add a Chart to a Document or Presentation," page 266

MS 114333

PART 15

Create Legal Documents

Contents



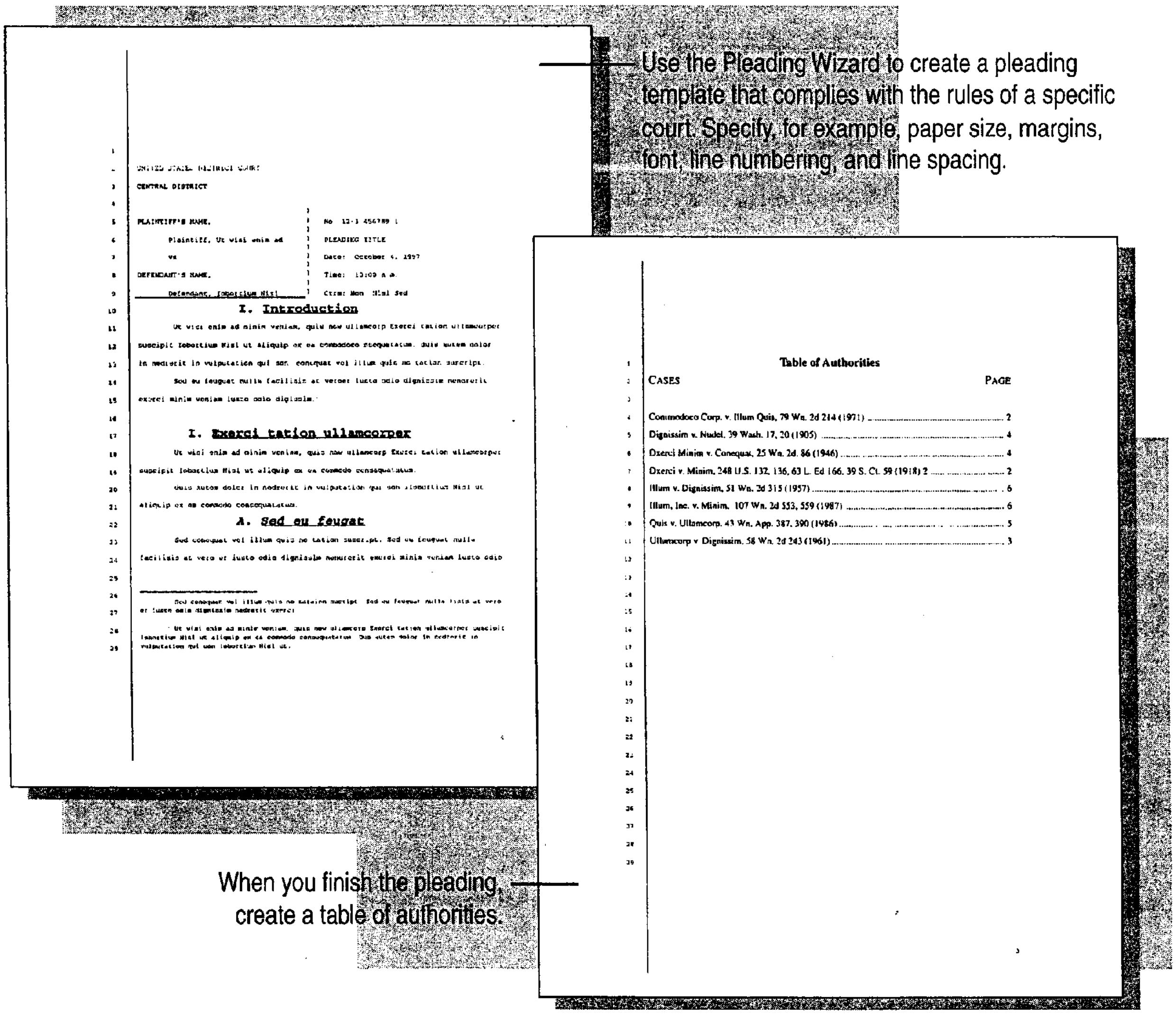
MS 114334

Create a Pleading

If you need to create a pleading to initiate or continue a legal proceeding, it's fast and easy to use the Pleading Wizard. The wizard helps you set up the basic formatting of the pleading so that it meets the requirements of the court you specify. After you've determined the formatting, the wizard saves these settings in a template for easy reuse. Then all you do is fill in the content of the pleading.

Key Features

- Pleading Wizard
- Footnotes
- Table of Authorities



Use the Pleading Wizard to create a pleading template that complies with the rules of a specific court. Specify, for example, paper size, margins, font, line numbering, and line spacing.

When you finish the pleading, create a table of authorities.

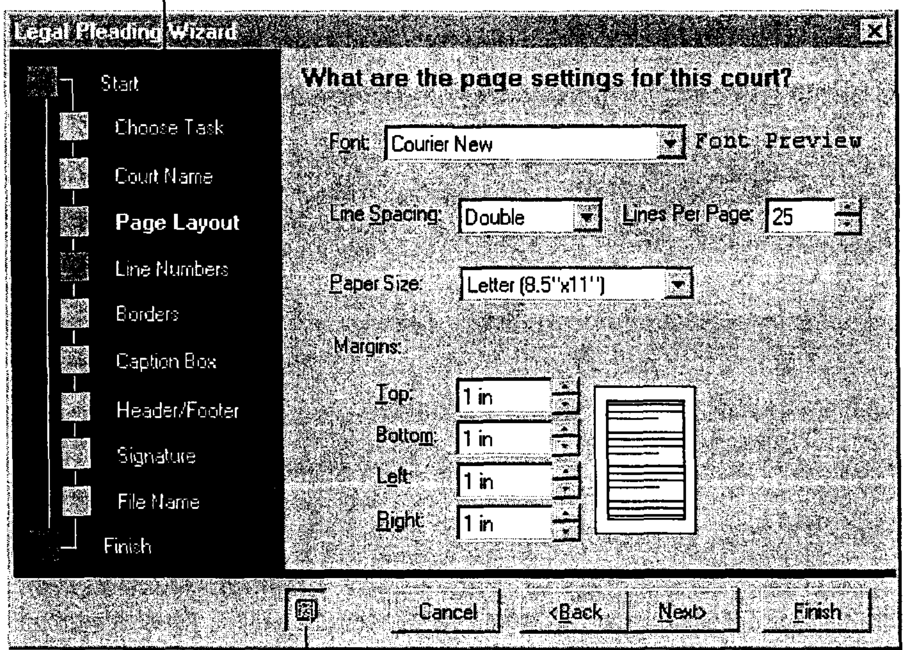
MS 114335

Select Settings to Create a Custom Pleading

To start the Pleading Wizard, click **New** (**File** menu), click the **Legal Pleadings** tab, and then double-click **Pleading Wizard**. There are two parts to the wizard: the first to create a template, and the second to create a pleading based on the template. The wizard asks you a series of easy questions. Your answers determine how Word sets up the basic page elements of the pleading template.

After you specify the basic structure and formatting of the pleading, the wizard saves the settings in a template with a name you specify. You might want to use the name of the court as the template name. The next time you need to create a pleading for that court, you can start with that template.

Through a series of simple steps, the wizard helps you create a pleading customized for a particular court. In this step, for example, you select settings for the page layout.



Click here to get Help from the Office Assistant.

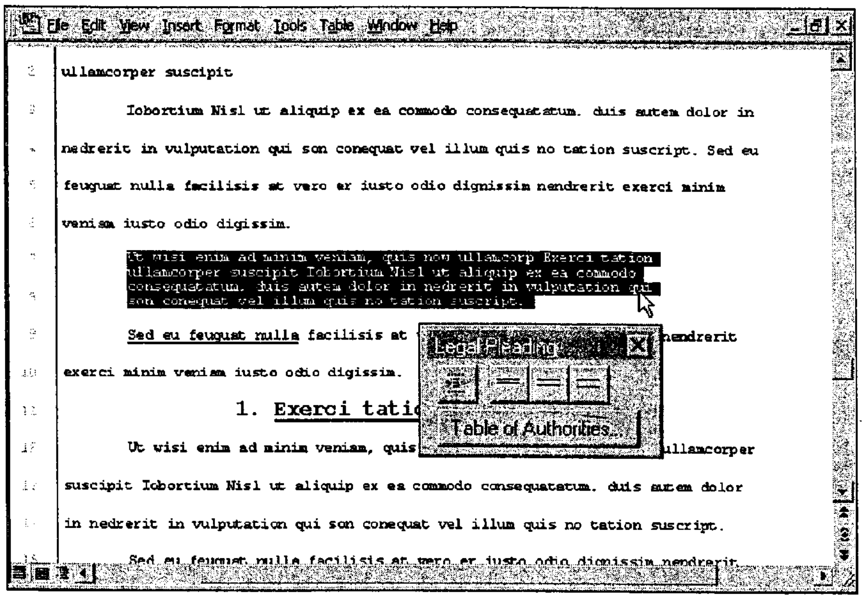
Important If the Pleading Wizard isn't available, rerun Setup to install it. For more information, see "Add or Remove Components," page 32.

MS 114336

Write the Pleading

After you create the template, you go to the second part of the wizard, in which you work in a document based on the template you created. You complete additional steps to add the parties to the pleading, the names, case number, attorney names, and so on.

When you have finished filling in these details, click **Finish**. When the pleading is displayed, the Assistant gives you several options for adjusting the formatting. When you have the format you want, add the content of the pleading.



Format the content you add to your pleading by using the **Legal Pleading** toolbar (**View** menu, **Toolbars** submenu).To indent text for a block quotation, or to change line spacing, select the text and then click the appropriate button.

Need a specific type of pleading? When the wizard asks you to select the parties, click **Petitioner and Respondent** to create a summons for legal separation, or click **Debtor** to create a decree of dissolution.

Need numbered and bulleted lists in your pleading? See "Add Numbering to Headings and Paragraphs," page 614.

Including cross-references? See "Add Automatic Cross-References," page 616.

Want more tips on legal forms? See "Create a Legal Contract," page 611.

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

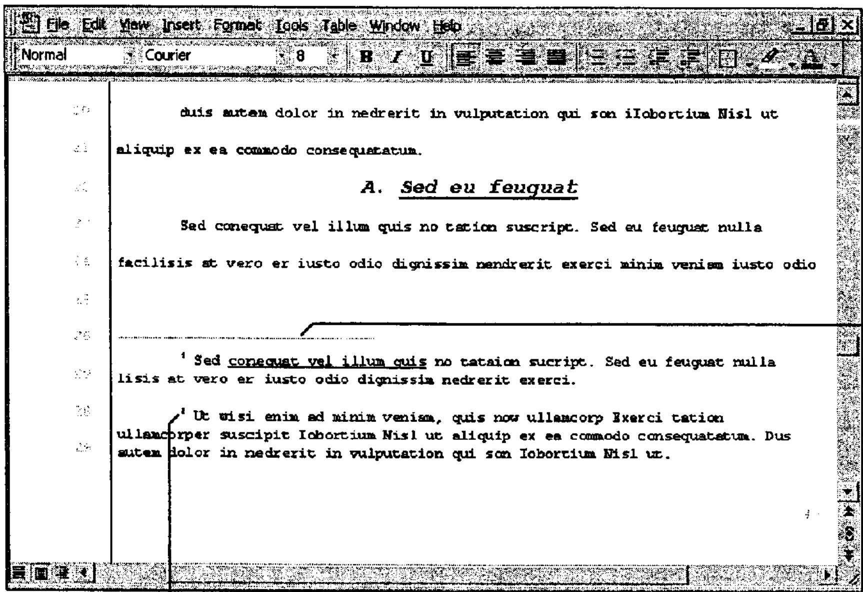
Office Assistant button

Add Footnotes

When you need to expand upon or include other citations or text, you can insert a footnote. Click where you want to insert the footnote reference mark, and then click **Footnote** (**Insert** menu).

To separate footnotes from the pleading text, Word automatically inserts a short horizontal line. Or, if the footnote continues onto the next page, Word inserts a longer separator line.

You can underline citations and format footnote text just as you would any other text.



Word adds a line to separate footnotes from regular text.

Word automatically numbers footnotes as you add them.

See the contents of a footnote quickly Position the insertion point over the footnote reference mark, and the contents of the footnote are displayed.

Move or delete a footnote To complete either action, you work with the footnote reference mark, not the text in the note pane. To move a footnote, select and drag the mark to a new location. To delete a footnote, select the mark and press DELETE. Whenever you move or delete a footnote, Word automatically renumbers the footnotes accordingly.

Want to add a footnote continuation notice? For footnotes that continue onto the next page, add a continuation notice. In normal view, click **Footnotes** (**View** menu). In the list box at the top of the footnote pane, click **All Footnotes**, click **Footnote continuation notice**, and then type the text of the notice.

MS 114338

Mark Entries for a Table of Authorities

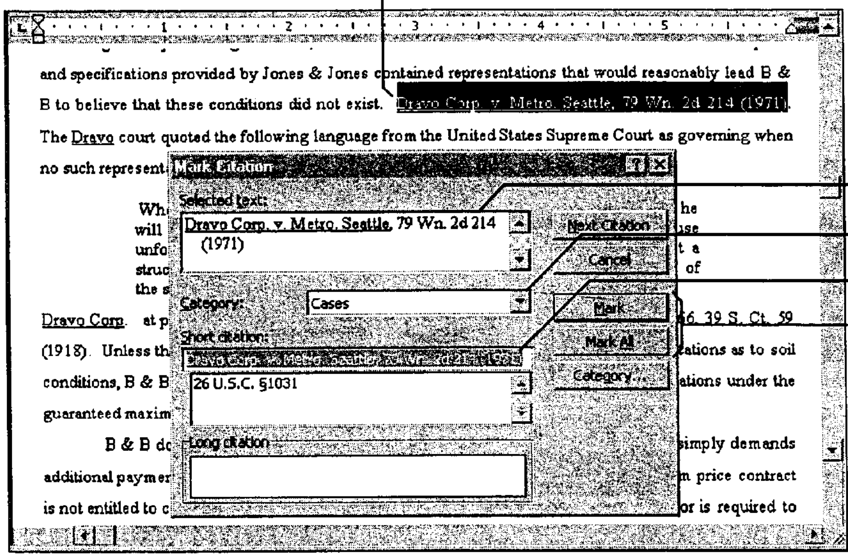
Before you can create a table of authorities, you need to mark the text to be included. After an entry is marked, Word can include the page number on which the citation occurs.

The first occurrence of a citation is the long version, such as "Forrester v. Craddock, 51 Wn. 2d 315 (1957)." Subsequent references are the short version, such as "Forrester v. Craddock."

To find the first long citation, scroll through the text. Select the text for the first citation, and then press ALT+SHIFT+I to display the **Mark Citation** dialog box.

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

Text for the long citation



If necessary, edit the long citation.

Select a category.

Edit or type the short citation.

Click **Mark** to mark only this instance, or click **Mark All** to have Word mark all instances of the citation in the pleading.

Have Word search for citations Word can search for common abbreviations that are found in long citations, such as *v.*, *ID.*, *Ibid*, *Cong.*, *Sess.*, or *in re*. In the **Mark Citation** dialog box, just click **Next Citation**.

Format text for the long citation To apply formatting to the case name, for example, select the text in the **Selected text** box of the **Mark Citation** dialog box, and then apply the formatting you want.

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

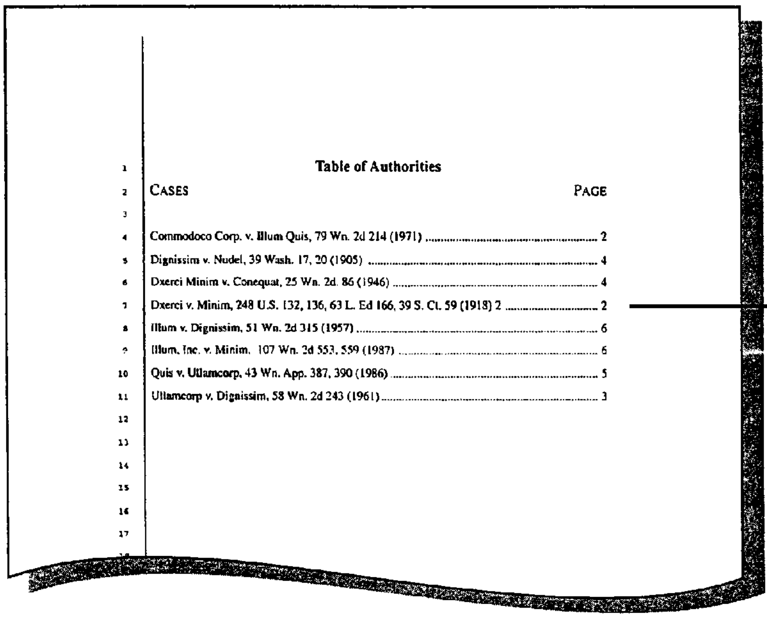
Office Assistant button

MS 114339

AHL0123666

Create a Table of Authorities

Place the insertion point where you want the table to appear in your pleading. Click the **Table of Authorities** button on the **Legal Pleading** toolbar. Select the format and any other options you want.



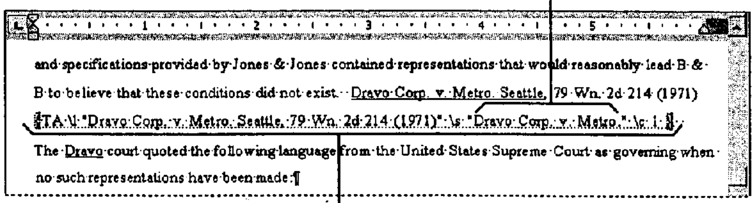
Word can automatically update the page numbers in the table of authorities.

MS 114340

Make Changes to a Table of Authorities

Edit the entries Before you make any changes, display paragraph marks (if they aren't displayed already) by clicking the **Show/Hide ¶** button.

To edit an entry in a table of authorities, edit the text within the quotation marks.



To delete an entry, select the entire entry, including the braces, and then press DELETE or BACKSPACE.

Update the table To have the table of authorities reflect editing changes, click the table of authorities, and then press F9.

Next Steps

To	See
See additional information on legal writing	"Create a Legal Contract," page 611
Fax your pleading to a client	"Create a Fax Cover Sheet and Send a Fax," page 192
Get comments on the pleading	"Have Your Team Review a Word Document," page 406
Change the formatting	"Make Your Word Document Look Great," page 127

MS 114341

Create a Legal Contract

Use Word to Create Legal Documents

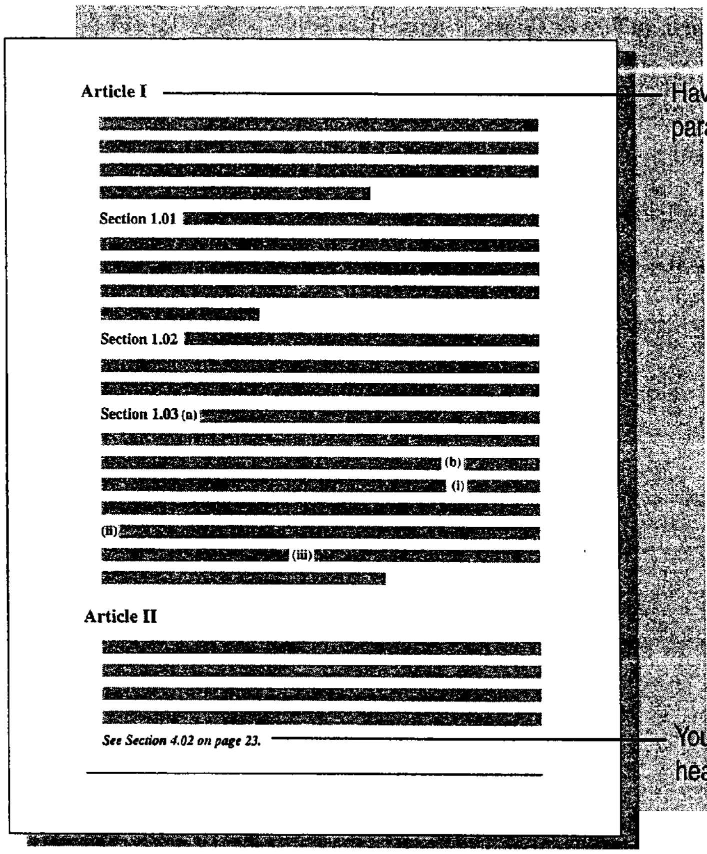
Whether you are writing a contract or corporate bylaws, Word provides tools to help you create the document efficiently.

For example, you can add numbering to headings, paragraphs, or items within a paragraph. You can also add cross-references to numbered paragraphs and to items located elsewhere in the document. Word keeps track of the page numbers for you so that you don't have to manually update the cross-references.

Key Features

Numbering Paragraphs

Cross-References



Have Word automatically number headings, paragraphs, and items within paragraphs.

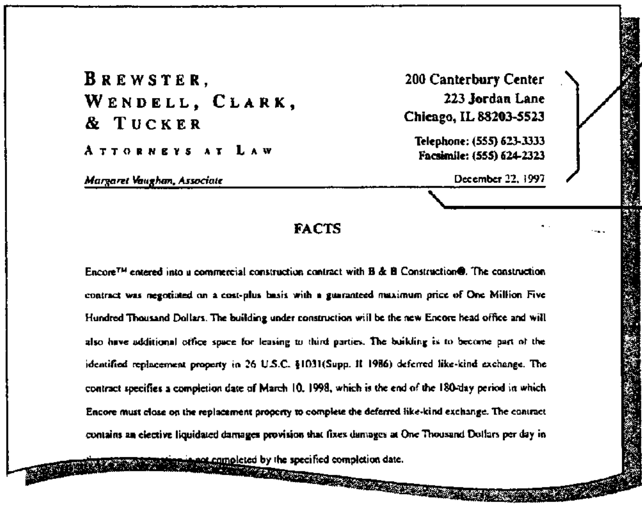
You can include cross-references to numbered items, headings, footnotes, figures, and tables.

Create and Format the Contract

Chances are you'll want to begin the contract by revising an existing one or by using your firm's template. Open the contract by clicking **Open** (**File** menu). If you want to start from scratch, want to use an existing template, or want to create a new template, click **New** (**File** menu). For more information on templates, see "About Creating and Opening Documents and Databases," page 48.

If you start from scratch, type or insert basic elements, such as your firm's name and logo. Then create standard headers and footers for the document. Click **Header and Footer** (**View** menu), and type the text. Use the buttons on the **Header and Footer** toolbar to insert the elements you want. For more information on formatting your document, see "Make Your Word Document Look Great," page 127, and "Create a Pleading," page 604.

Switch Between Header And Footer button



BREWSTER,
WENDELL, CLARK,
& TUCKER
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Telephone: (555) 623-3333
Facsimile: (555) 624-2323

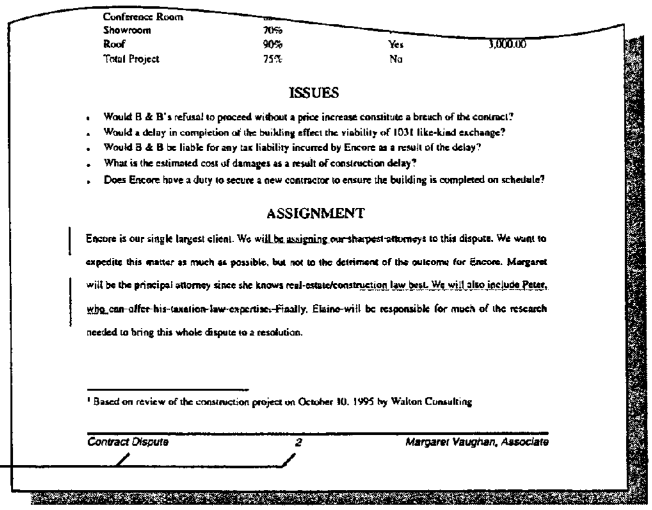
Margaret Vaughan, Associate December 22, 1997

FACTS

Encore™ entered into a commercial construction contract with B & B Construction®. The construction contract was negotiated on a cost-plus basis with a guaranteed maximum price of One Million Five Hundred Thousand Dollars. The building under construction will be the new Encore head office and will also have additional office space for leasing to third parties. The building is to become part of the identified replacement property in 26 U.S.C. §1031(Supp. II 1986) deferred like-kind exchange. The contract specifies a completion date of March 10, 1998, which is the end of the 180-day period in which Encore must close on the replacement property to complete the deferred like-kind exchange. The contract contains an elective liquidated damages provision that fixes damages at One Thousand Dollars per day in ... completed by the specified completion date.

Use a table to align text elements. To insert a table, click the **Insert Table** button and then drag to select the number of rows and columns. Then type the text in the table.

Add a line by clicking the **Borders** button and then select the kind of line style and border you want.



Conference Room			
Showroom	70%		
Roof	90%	Yes	3,000.00
Total Project	75%	No	

ISSUES

- Would B & B's refusal to proceed without a price increase constitute a breach of the contract?
- Would a delay in completion of the building effect the viability of 1031 like-kind exchange?
- Would B & B be liable for any tax liability incurred by Encore as a result of the delay?
- What is the estimated cost of damages as a result of construction delay?
- Does Encore have a duty to secure a new contractor to ensure the building is completed on schedule?

ASSIGNMENT

Encore is our single largest client. We will be assigning ~~our sharpest attorneys~~ to this dispute. We want to expedite this matter as much as possible, but not to the detriment of the outcome for Encore. Margaret will be the principal attorney since she knows real-estate/construction law best. We will also include Peter, who ~~can offer his taxation law expertise. Finally,~~ Elaine will be responsible for much of the research needed to bring this whole dispute to a resolution.

[1] Based on review of the construction project on October 10, 1995 by Walton Consulting

Contract Dispute 2 *Margaret Vaughan, Associate*

The footer can include the contract title and page number.

MS 114343

AHL0123670

Create a template you can use next time See "Save Your Own Documents as Templates," page 52.

Insert boilerplate text To make it easy to add boilerplate text from other legal documents, display the **AutoText** toolbar by clicking **AutoText** (**View** menu, **Toolbars** submenu). For more information on using AutoText entries, see "Make Writing Easier," page 231.

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

Office Assistant button

MS 114344

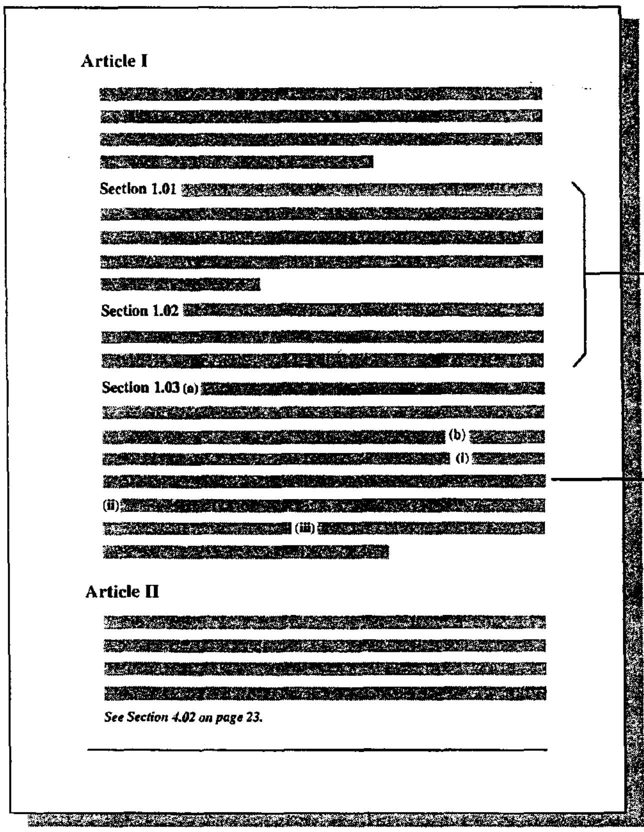
Add Numbering to Headings and Paragraphs

You can apply numbering to headings, paragraphs, and items within a paragraph. You can also mix levels of numbers, such as Section 1.01 (i).

Headings If you apply built-in heading styles, such as Heading 1, to headings in your document, you can have Word automatically number them. Click **Bullets and Numbering** (**Format** menu). On the **Outline Numbered** tab, click the format you want.

Paragraphs Use the same procedure as for numbering headings. If the font and formatting of the heading style is not what you want, you can redefine the heading style by clicking **Style** (**Format** menu). In the **Styles** box, select the style you want to change, and then click the **Modify** button.

Items within a numbered paragraph To include multiple outline numbers in a single line, such as Section 1.01 (i), use the ListNum field. Click in front of the first item you want to number, and then press ALT+CONTROL+L. Repeat for each item you want to number.



To include numbered headings like these, select a format on the **Outline Numbered** tab of the **Bullets and Numbering** dialog box (**Format** menu).

To include different numbering levels on the same line or in the same paragraph, use the ListNum field by pressing ALT+CONTROL+L.

MS 114345

AHL0123672

Continue a numbered list across unnumbered paragraphs If you have unnumbered paragraphs in a list, you can still have a continuously numbered list. Select the item with which you want to continue numbering. Click **Bullets and Numbering** (**Format** menu). On the **Numbered** tab, click **Continue previous list.**

Change the numbering format used in the ListNum field To change the format from (i) to (a), for example, select the ListNum field, and then click the **Increase Indent** button or **Decrease Indent** button to see a list of options.

Increase Indent button

Decrease Indent button

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

Office Assistant button

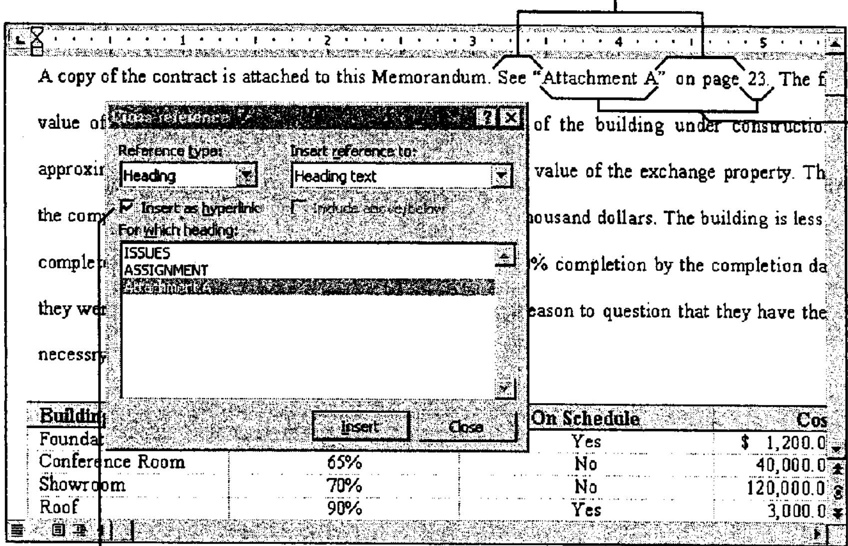
MS 114346

Add Automatic Cross-References

When you want readers to be aware of information in other parts of your contract, include the title, the paragraph number, the page number, or all three, so that readers can find the information quickly. Word can automatically add cross-references to many elements in your document: headings with built-in heading styles, numbered headings and paragraphs, footnotes, and figures and tables with captions.

Just type the text for the cross-reference in your document. For example, type **See "** and then click **Cross-Reference** (**Insert** menu). Type the closing quotation mark, and then type **on page** if you want to add the page reference.

You type the "skeleton" of the cross-reference.



Based on the selections you make in the **Cross-reference** dialog box, Word inserts the title and the correct page number.

To allow online readers to jump to an item in the same document, make sure this check box is selected.

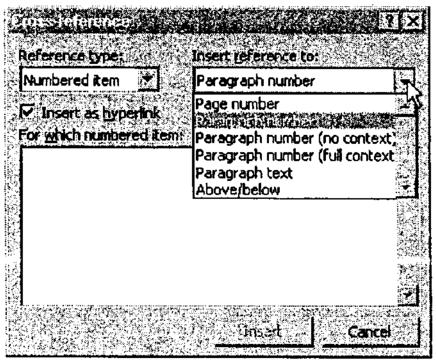
Need to update page numbers in cross-references? Select your document by clicking **Select All** (**Edit** menu), and then press F9.

MS 114347

AHL0123674

Add Cross-References to Numbered Paragraphs

You can add cross-references to numbered paragraphs, numbered headings, and even numbered items in a paragraph. In the **Cross-Reference** dialog box, select **Numbered Item** from the **Reference type** list. From the **Insert reference to** list, select the numbering option that you want.

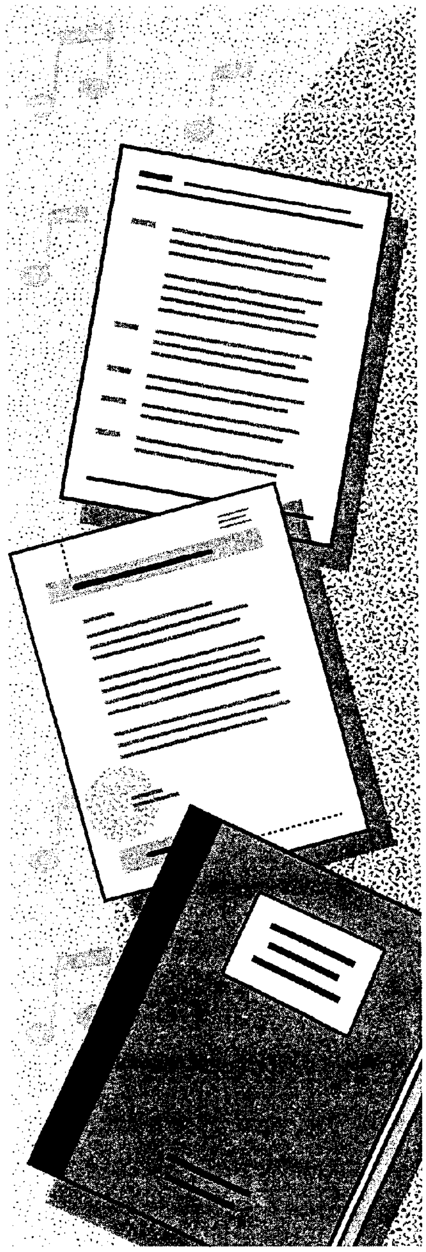


Next Steps

To	See
Fax the document to a client	"Create a Fax Cover Sheet and Send a Fax," page 192
Get comments on the document	"Have Your Team Review a Word Document," page 406
Change the formatting	"Make Your Word Document Look Great," page 127

PART 16

The Home Office



Contents

MS 114349

Create a Resume and Cover Letter

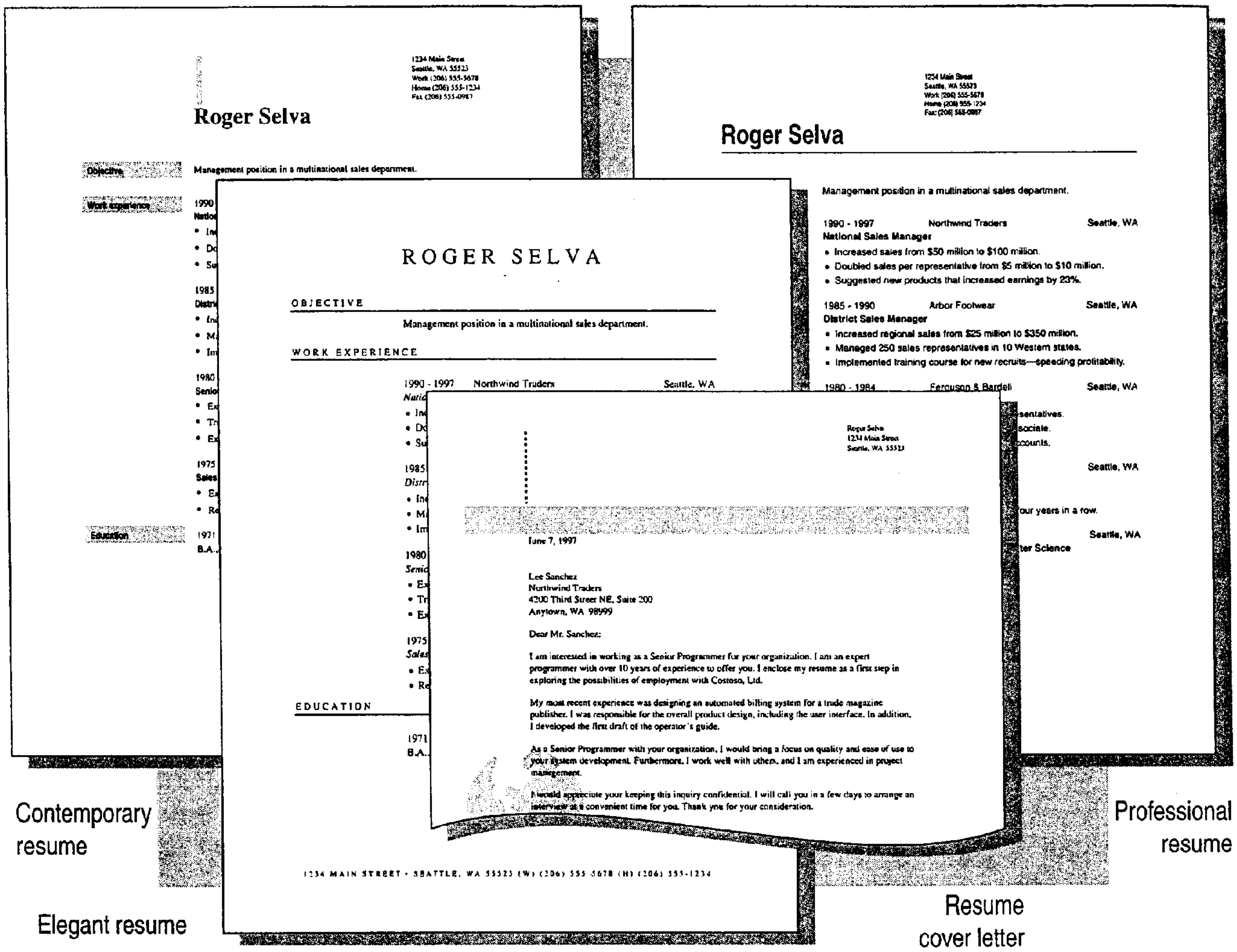
a.k.a. Curriculum Vitae or CV

Creating a resume from scratch may be the first step in your job search. Or you might want to create an online version of your resume so you can update it easily or send it via fax or e-mail. Whatever the reason, you need a resume that stands out from the rest.

The Resume Wizard and resume templates help you create a resume that highlights your skills and experiences. You can also produce a cover letter and matching envelope.

Key Features

Resume Wizard



MS 114350

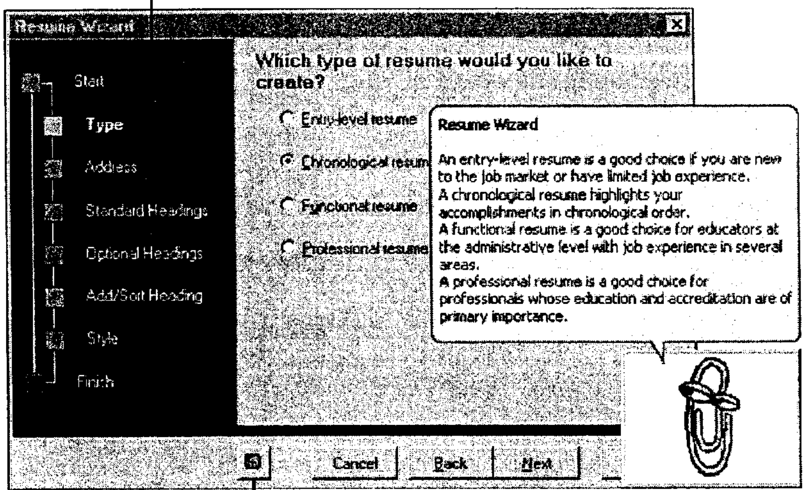
AHL0123677

Use the Resume Wizard to Get Started

To start the Resume Wizard, click **New** (**File** menu). On the **Other Documents** tab, double-click **Resume Wizard**. In English versions of Word distributed outside the U.S. and Canada, the Resume Wizard is called the Curriculum Vitae Wizard.

The Resume Wizard walks you through a series of steps in which you add or select information to set up the basic content and layout of the resume. When you click **Finish**, the new resume appears. All you need to do is fill in the details.

The Resume Wizard provides a road map of what you will complete to create a resume.



Click this button to get Help from the Office Assistant.

Need a cover letter or want to send your resume by fax or e-mail? Immediately after you create a resume with the wizard, the Office Assistant gives you these options. Just click the option you want. For more information, see "Write a Cover Letter," page 624.

Don't like the style of your resume? If you want to change your resume right after you've created it, it's very easy. Immediately after you create a resume with the wizard, the Office Assistant gives you several formatting options, such as changing the style or shrinking the resume to fit on a page. Just click the option you want.

Use a resume template If you want an attractive, ready-to-fill-in resume, use one of the resume templates. Click **New**. On the **Other Documents** tab, double-click the resume template you want.

MS 114351

Add Your Information to the Resume

Since you'll probably be following the same formatting for entries, under Work Experience for example, here are some suggestions to make it quicker and easier to add information:

Show table gridlines The resume that the wizard helped you create is set up as a table. Tables make it easy to align information. If the table gridlines aren't already showing, click **Show Gridlines** (**Table** menu). The gridlines make it easier for you to select, copy, add, or delete the contents of a row or cell, but they won't show up when you print the resume.

Copy the contents of a row Select a row or rows, click the **Copy** button, click where you want to insert the information you've copied, and then click the **Paste** button.

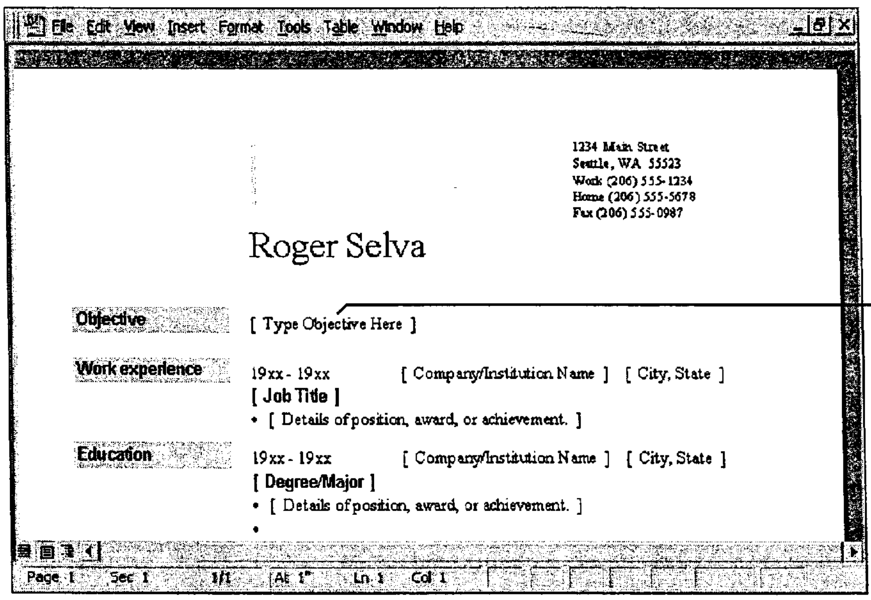
Copy button

Paste button

Add a row to a table Position the insertion point in the row that you want to be below the new row, and then click the **Insert Rows** button.

Insert Rows button

Add a row to the end of a table Position the insertion point in the last cell of the last row, and then press TAB.



Click or select the sample text, and then type your own information.

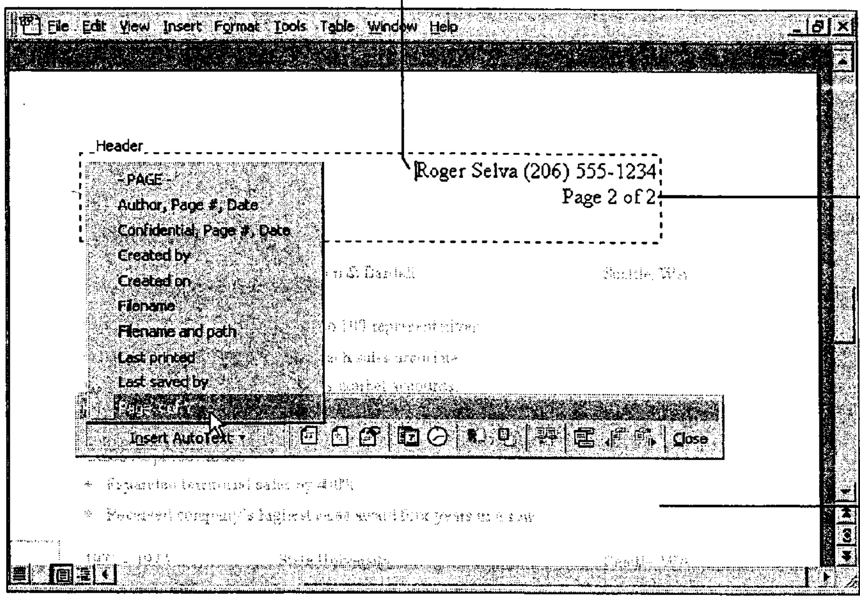
MS 114352

Add a Second Page—or More

If you decide to include multiple pages, you can add your name, phone number or e-mail address, and the page number to the top of each page. That way, a prospective employer can easily tell if pages are missing or out of order.

Click **Header and Footer** (**View** menu) to display the **Header and Footer** toolbar. If necessary, click the **Show Next** button on the **Header and Footer** toolbar to switch to the header for the second and subsequent pages.

Type your name, phone number, and/or e-mail address.



To insert the page number and the total number of pages, click the **Insert AutoText** button on the **Header and Footer** toolbar and then click **Page X of Y**.

When you finish, double-click in the main document.

Like the result—and want to use it to start your next resume? Save your resume as a template. Click **Save As** (**File** menu), and then select **Document Template** in the **Save as type** box.

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

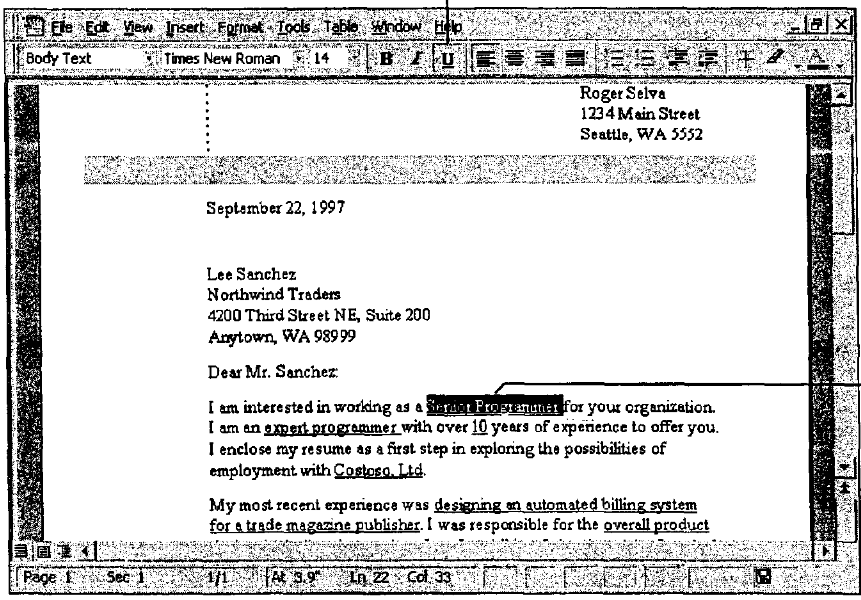
Office Assistant button

MS 114353

Write a Cover Letter

Grab a prospective employer's attention by including a polished, professional cover letter that tailors your skills and achievements to the job description. To get a head start on your cover letter, use the sample that the Office Assistant provides. Select **Add a cover letter** from the options that the Assistant gives you after you create your resume.

To remove the underlining, select the text and then click the **Underline** button.



Select the underlined text, and then type over it.

MS 114354

Did you create a cover letter before filling in your resume? Use the **Window** menu to switch to it and edit the contents. Otherwise, use the Letter Wizard. Start your letter by typing **Dear** followed by a name, and then press ENTER. The Assistant will ask if you want help writing a letter. For more information, see "Write a Business Letter," page 184.

Record the employer's address for follow-up correspondence Use your Microsoft Exchange personal address book or Outlook contact list. For more information, look up **Getting Results - Resume** in Help.

Send your resume via fax or e-mail Immediately after you create a resume, the Office Assistant gives you the **Send resume to someone** option. Click it, and then specify how you want the resume sent. If you decide to fax your resume, the Fax Wizard appears. If you decide to e-mail your resume, a message is opened and your resume is attached.

Print an envelope With the cover letter on the screen, click **Envelopes and Labels (Tools** menu). Change any options you want, insert the envelope into the printer as shown in the **Feed** box, and then click **Print**.

Next Steps

To	See
Add even more visual impact	"Make Your Word Document Look Great," page 127
Fax a copy of your resume	"Create a Fax Cover Sheet and Send a Fax," page 192
Send a copy of your resume in an e-mail message	"Distribute Documents Online," page 396
Schedule an interview	"Schedule an Appointment," page 383
Write follow-up correspondence	"Write a Business Letter," page 184
Keep track of contacts	"Manage Contacts with Outlook," page 348
	"Create a Business Contact List in Microsoft Excel," page 353
	"Track Your Business Contacts in Microsoft Access," page 360

MS 114355

Catalog Your Music Collection

If you have a large collection of CDs, tapes, and albums, you can create a database to catalog your collection and make individual selections or artists easier to find. Use the Microsoft Access Database Wizard to create the database. Then, when you need to find recordings by a particular artist or to print a list of your entire CD collection, just specify in your search the information you need.

Key Features

- Database Wizard
- Filter by Form
- Filter by Selection

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

MS 114356

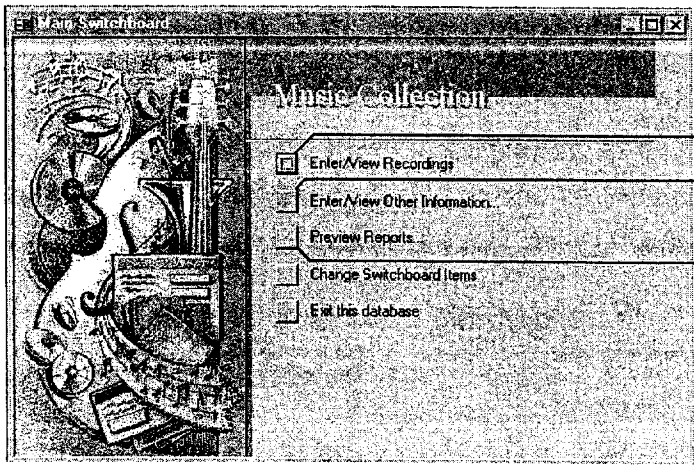
AHL0123683

Create a Music Database

With the Database Wizard, you can create everything you need to catalog your music collection, so that you can find the information you want. To use the wizard, start Microsoft Access, click **Database Wizard**, and on the **Databases** tab, double-click **Music Collection**. Or, if you've already started Microsoft Access, click the **New Database** button, and on the **Databases** tab, double-click **Music Collection**. Then, follow the instructions in the wizard. If you want ideas on how to catalog your music collection, select the sample data option.

New Database button

The Database Wizard creates everything you need to catalog and search your music database, including a switchboard for opening forms, tables, and reports.



Click here to store information about recordings.

Click here to store information about specific artists or music categories.

Click here to preview reports by artist, category, format, or track.

Want to create a new database without using the Database Wizard? Click the **New Database** button, and on the **General** tab, click **Blank Database**.

Set up other types of databases with the Database Wizard You can use the Database Wizard to create many types of databases for business and personal use, including databases for tracking business contacts and cataloging valuable household items. For more information on creating a database to catalog household items, see "Record Your Home Assets," page 631.

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

Office Assistant button

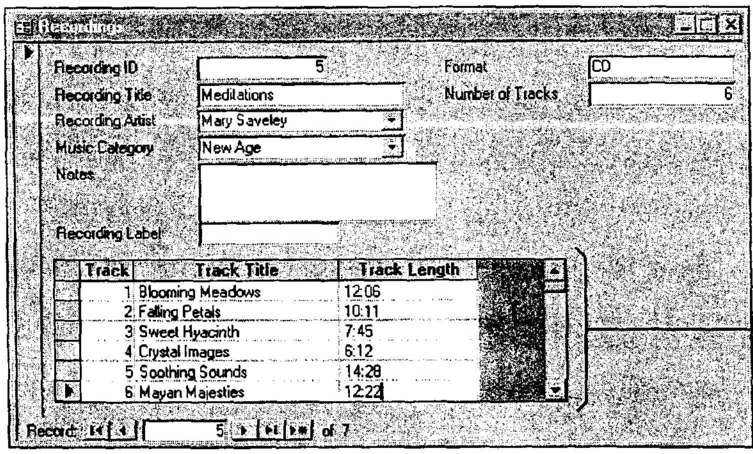
MS 114357

Add Information About Your Music Collection

Now you're ready to add information about your music collection to the new database. You'll enter most of the information you need on the Recordings form.

On the Music Collection switchboard, click **Enter/View Recordings**. If you selected the sample data option when the Database Wizard created the database, you can use this data as an example of what to enter in each field.

Use the Recordings form to store details about each CD, tape, or album in your collection.



Use the Track subform to store details about individual selections from a CD, tape, or album.

Want to track additional details about artists and music categories?
On the switchboard, click **Enter/View Other Information**, and then use the Recording Artists and Music Categories forms.

MS 114358

AHL0123685

Find Selections by Your Favorite Artist

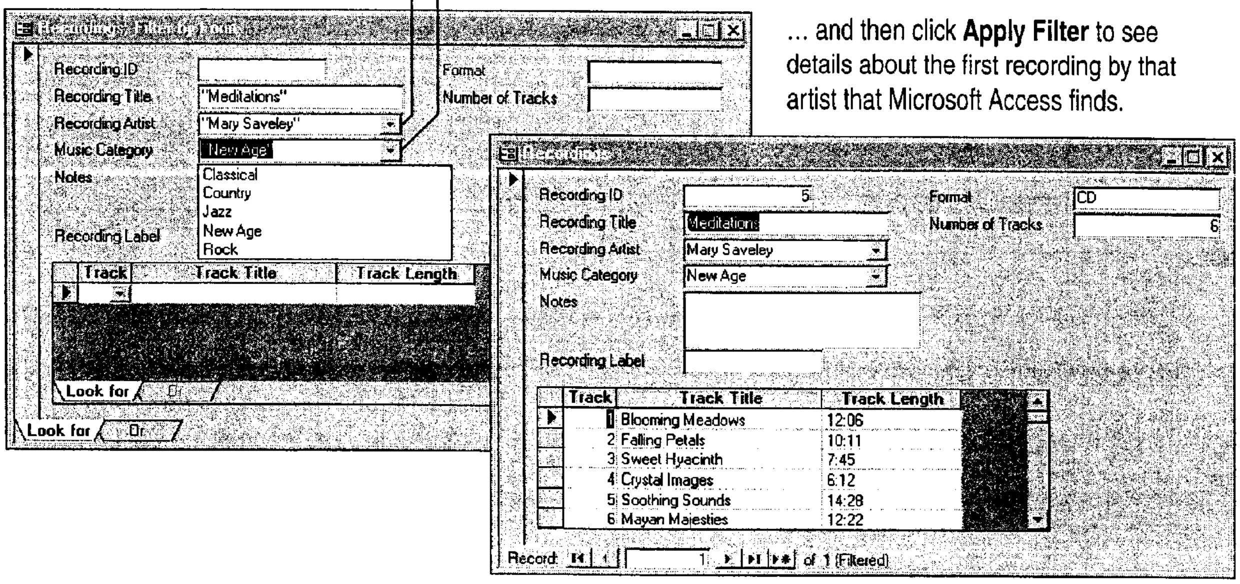
Now, if you want to hear something by your favorite artist, you can search your database quickly for a list of that artist's selections. Use the **Filter by Form** button to narrow your search.

On the Music Collection switchboard, click **Enter/View Recordings**. Click the **Filter by Form** button, and then select the details you want to search for.

Filter by Form button

Choose your favorite artist ...

... and the music category ...



... and then click **Apply Filter** to see details about the first recording by that artist that Microsoft Access finds.

Review all records after filtering Each time you begin a search, click the **Remove Filter** button first, so that Microsoft Access looks through all the records in the database.

Remove Filter button

Find all works by a particular artist or all albums in a particular category In the Recordings form, select the data in the field that contains the information you want (for example, "Chopin," in the Artist field), and then click the **Filter by Selection** button.

Filter by Selection button

Want to find data that meets either of two criteria? For example, to find recordings by either Beethoven or Chopin, click the **Filter by Form** button, click the field that contains Beethoven's name, click the arrow that appears to the right of that field, and then select Beethoven's name from the list of artists. Click the **Or** tab and then click the arrow that appears to the right of the field that contains Chopin's name. Select Chopin's name from the list of artists and then click the **Apply Filter** button.

Filter by Form button

MS 114359

AHL0123686

Next Steps

To	See
Create your own database without using wizards	"Design a Custom Inventory Database," page 492

MS 114360

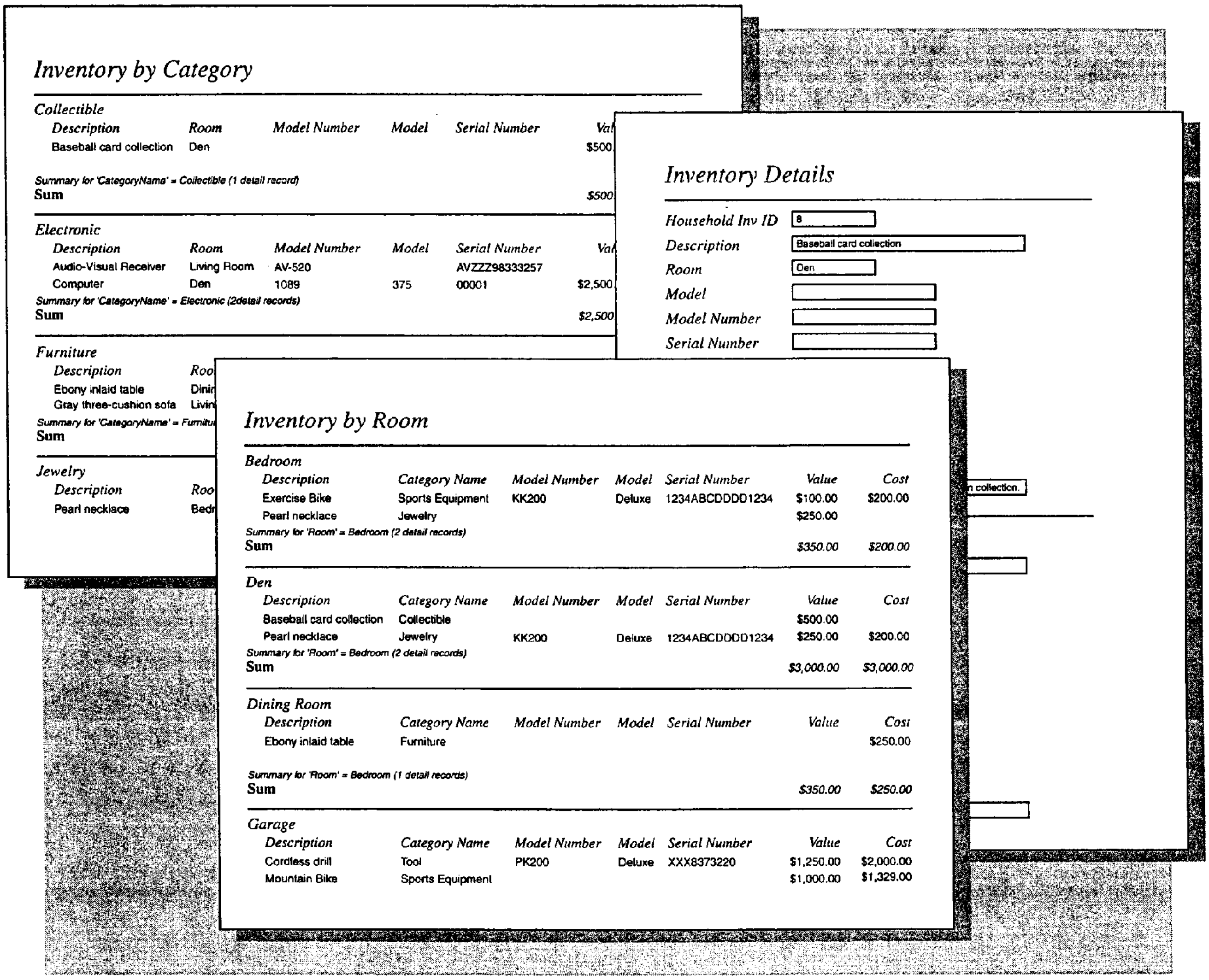
Record Your Home Assets

Do you need to keep track of valuable household items for insurance or inheritance purposes? You can use Microsoft Access to catalog furniture, art, and other assets. When you add this information to a database, you have an inventory of all your assets in one location that's easy to update.

Key Features

Database Wizard

Use Microsoft Access to organize your household inventory and print several types of reports.



MS 114361

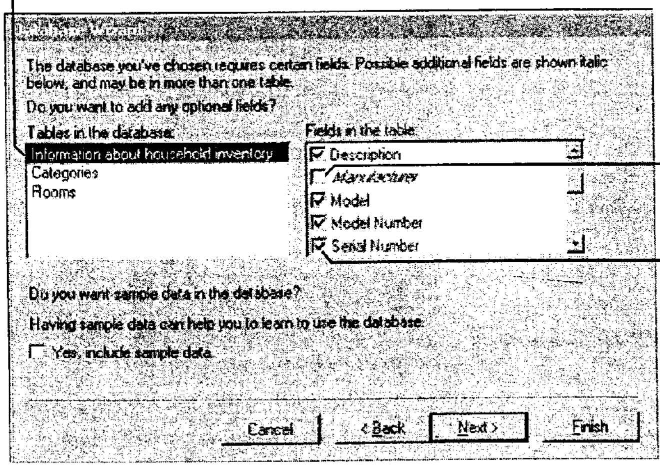
Create a Household Inventory Database

Use the Database Wizard to quickly create a database with the information you need to record your home assets.

To use the wizard, start Microsoft Access, click **Database Wizard**, and on the **Databases** tab, double-click **Household Inventory**. Follow the instructions in the wizard to create the tables, forms, and reports you need to catalog your household assets. If you want to see the types of information that you can include in your database, select the sample data option.

The Database Wizard creates all the fields you need to catalog your household assets.

Click to select a table. All the fields associated with that table are displayed in the adjacent list.



Optional fields are in italics. Select an optional field to add it to the database.

Clear a selected field to remove it from the database.

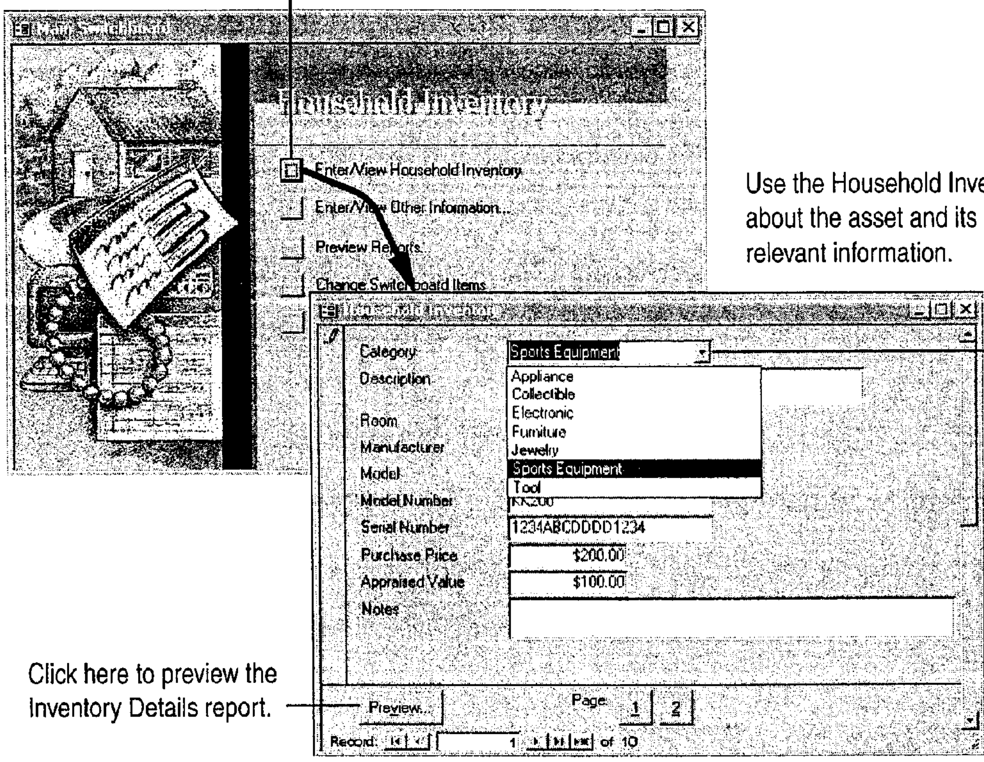
? **Want to know more?** Look up **Getting Results - Home Assets** in Help.

Office Assistant button

Record Assets in the Database

After you create the database, you're ready to add information about your household items. On the Household Inventory switchboard, click **Enter/View House Inventory** to type your data.

Click here to add information to the database.



Use the Household Inventory form to add details about the asset and its location, and any other relevant information.

Click here to select a category for the asset.

Click here to preview the Inventory Details report.

Add additional categories to the database On the Household Inventory switchboard, click **Enter/View Other Information**, and then click **Enter/View Categories** to modify or add new categories to the database.

Print an inventory report organized the way you want On the switchboard, click **Preview Reports**, and then select an option to preview the items in your database. Items can be organized by asset, by value, by category, or by contents per room. When you're ready to print a report, click **Print**.

Print button

Next Steps

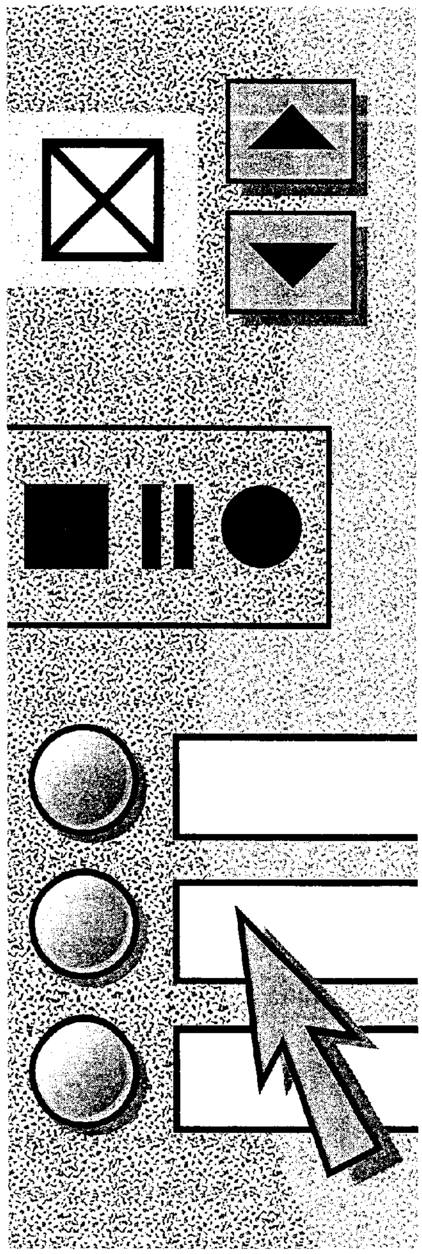
To	See
Use a filter to search for specific items in your database	"Catalog Your Music Collection," page 626

MS 114363

PART 17

Automate and Program Office

Contents



MS 114364

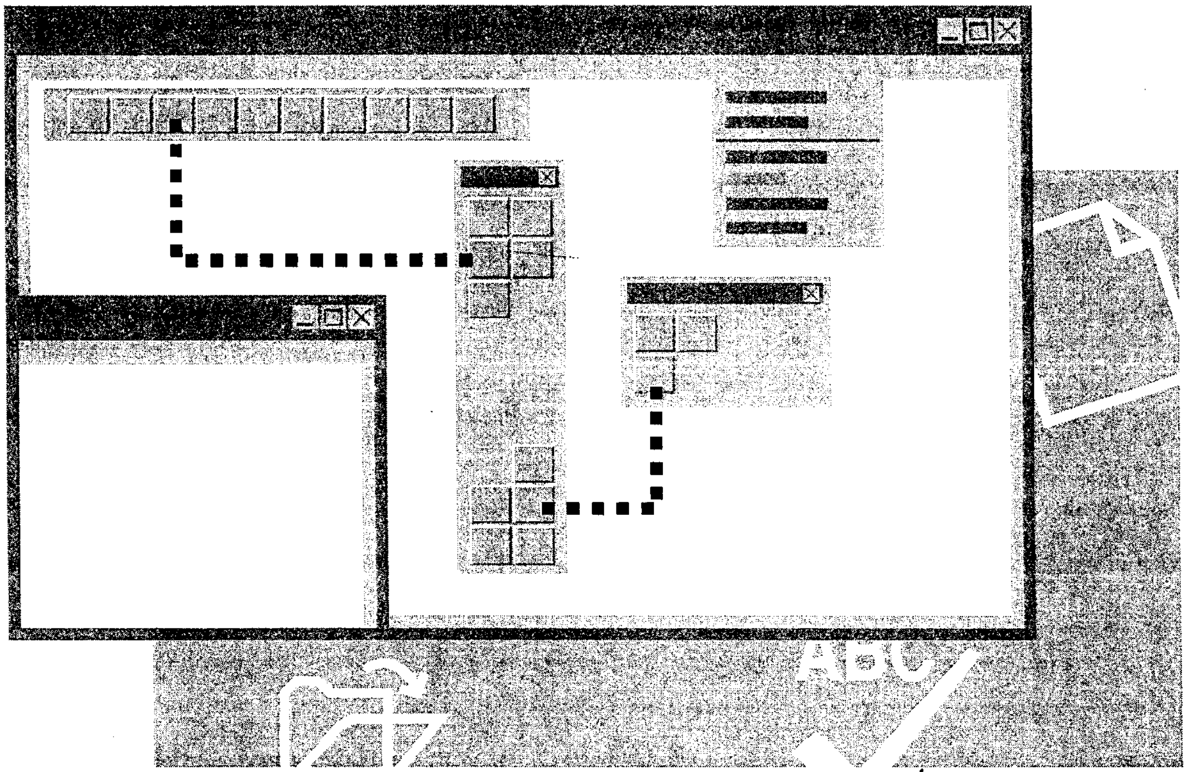
Customize Office

Rearrange Your Work Environment to Suit Your Working Style

When you move into a new office, the first thing you do is adjust things the way you want them: You hang pictures, adjust your chair height, and rearrange the furniture.

You can customize Office applications to match your working style as well. Change the way your screen looks and which elements are displayed, add buttons to toolbars, add commands to menus, or create your own toolbars and menus.

For quick access to commands you use frequently, add a toolbar button ... ... or add a command to a menu.



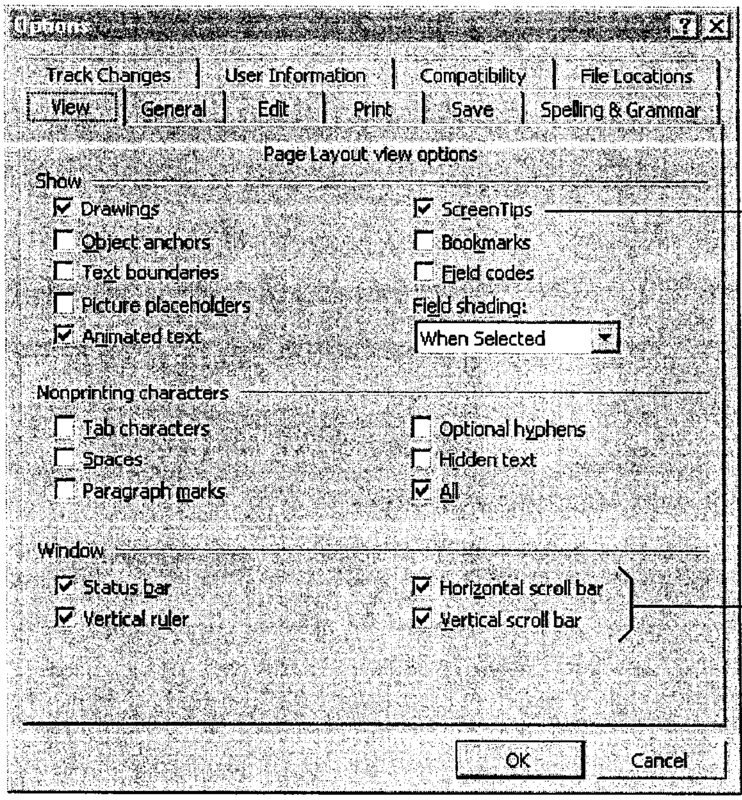
MS 114365

Adjust Your Screen Workspace

Perhaps the easiest way to customize Office applications is to adjust the amount of screen area available for your work. One way to make more screen area available is to hide toolbars that you don't need. Click **Toolbars** (**View** menu). Toolbars with a check mark next to them appear on screen; from these, click the ones you want to hide.

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

In each Office application, you can also select specific screen elements to hide or display by clicking **Options** (**Tools** menu). On the **View** tab, set the options you want.



These are the view options for page layout view in Microsoft Word.

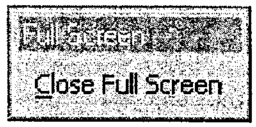
Selected check boxes indicate items that appear on the screen.

Clear these check boxes to gain more space on the screen.

MS 114366

AHL0123693

Maximize the screen area in Microsoft Excel and Microsoft Word Click **Full Screen** (**View** menu) to remove everything except your workbook or document. To access commands on the menu bar, point to the top of the screen and then click the command you want. To return to the previous view, click the **Close Full Screen** button.

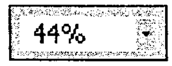


Close Full Screen button

Save and print different views in Microsoft Excel Click **Custom Views** (**View** menu) to create different views of a worksheet or workbook so that you can see your data with different display options. You can display, print, and store different views without saving them as separate sheets.

Want to view your file without the dots, lines, and paragraph marks? In Word, PowerPoint, and Microsoft Excel, you can determine which nonprinting elements (such as spaces, gridlines, page breaks, field codes, and formulas) you want displayed. Click **Options** (**Tools** menu), and on the **View** tab, set the options you want.

Is the text on your screen too small? Use the **Zoom** box to magnify the display up to 400 percent for easy reading. In Microsoft Access, make sure you are in the print preview or layout preview view.



Zoom box

Customize the Office Assistant If you choose to display the Assistant while you're working, you can change the way in which the Assistant appears on the screen. You can also customize the kind of help that the Assistant provides. For more information, see "For Help, Ask the Office Assistant," page 38.

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

Office Assistant button

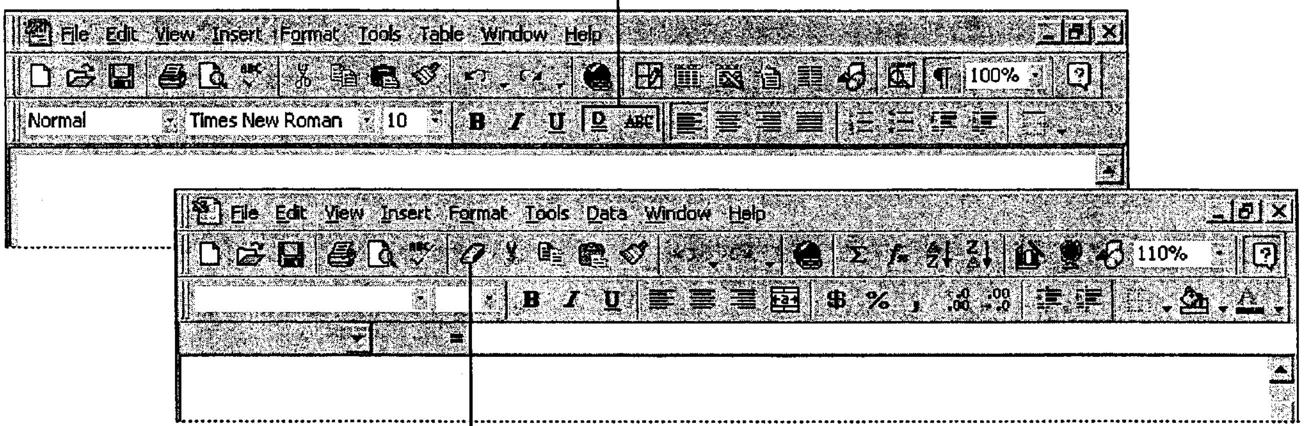
Customize a Toolbar with Your Favorite Buttons

Just as you place items you use often close at hand, you can put your favorite toolbar buttons where you want them. You also can rearrange buttons and remove those you don't use.

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

To add a button to a toolbar, click **Customize** (**View** menu, **Toolbar** submenu). If the toolbar you want to add the button to isn't displayed, click the **Toolbars** tab, and then click the toolbar you want to change. On the **Commands** tab, select the appropriate category, and then drag the command to the toolbar.

In Word, the **Double Underline** and **Strikethrough** buttons were added to the **Formatting** toolbar.



In Microsoft Excel, the **Clear Contents** button was added to the **Standard** toolbar.

Guidelines for Working with Toolbar Buttons and Toolbars

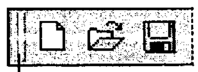
When the **Customize** dialog box is open, you can make a variety of changes to customize toolbars (you can even make some changes without setting options).

Move or delete a toolbar button With the **Customize** dialog box open, drag the button to the new location on the toolbar to move it, or drag it off the toolbar to delete it.

Want larger toolbar buttons? With the **Customize** dialog box open, on the **Options** tab, select the **Large icons** check box.

Display shortcut keys with ScreenTips for toolbar buttons With the **Customize** dialog box open, on the **Options** tab, select the **Show shortcut keys in ScreenTips** check box.

Move a toolbar to another location Click the move handle on a docked toolbar, or click the title bar on a floating toolbar. Then drag the toolbar to a new location.



Move handle

Want to undo changes to a built-in toolbar? With the **Customize** dialog box open, on the **Toolbars** tab, select the toolbar you want to change, and then click **Reset**.

Move or delete buttons when the Customize dialog box isn't open Hold down ALT, and then drag the button to a new location or off the toolbar.

Create a custom toolbar With the **Customize** dialog box open, on the **Toolbars** tab, click the **New** button, and then type a name for the toolbar. On the **Commands** tab, select a category and drag a command to the toolbar.

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

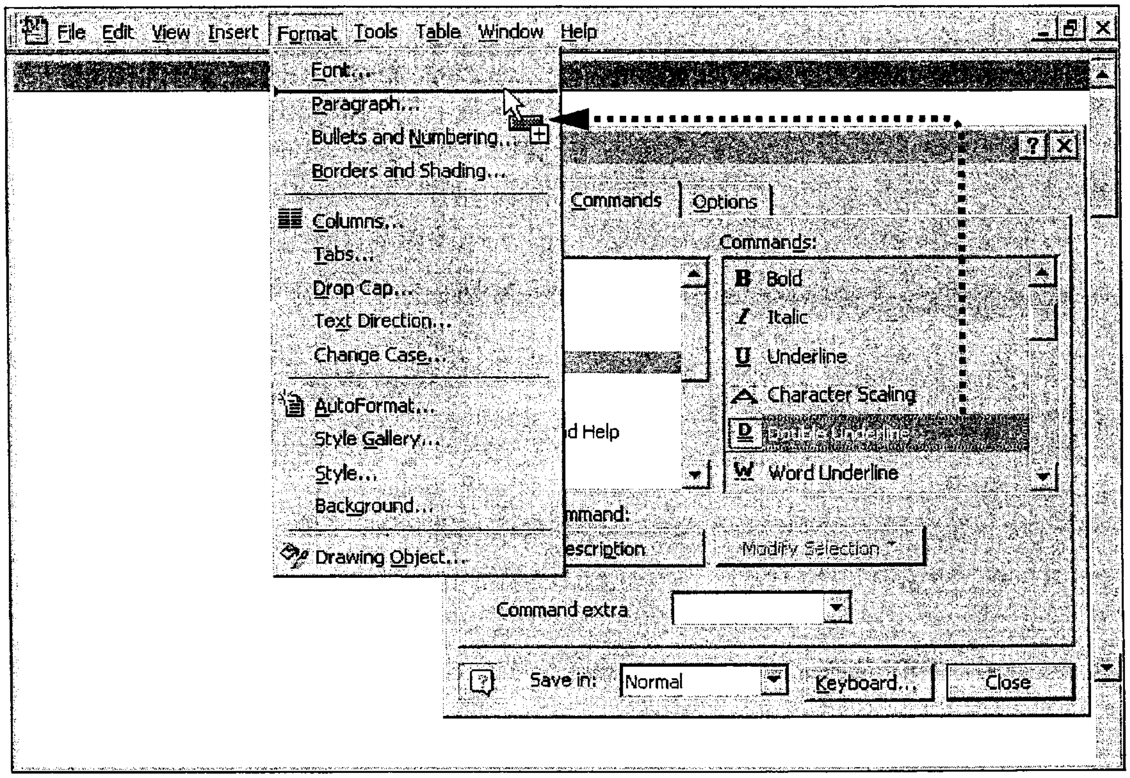
Office Assistant button

Modify Menus and Commands

In your toolbox at home, the tools you use most often tend to end up at the top of the box. In your Office toolbox, you can make it easy to find the menus and commands you use often. Customize existing menus by adding or removing commands, or you can create your own menus.

To add a command to a menu, click **Customize** (**Tools** menu). On the **Commands** tab, select a category.

Drag a command from the **Commands** box to the menu to which you want to add the command. When the menu displays, point to the location where you want the command to appear, and then release the mouse button.



MS 114370

Guidelines for Working with Menu Commands and Menus

Move or delete a menu command With the **Customize** dialog box open, click the menu that contains the command. Drag the command to the new location to move it, or drag it off the menu to delete it.

Create a custom menu With the **Customize** dialog box open, on the **Commands** tab, click **New Menu** in the **Categories** box. Drag **New Menu** from the **Commands** box to where you want the new menu to appear. Right-click the new menu, click in the **Name** box, and then type a name for the new menu. To add a command to the menu, select a category. Drag the command to the new menu, continue holding down the mouse button until the blank list for that menu appears, and then drag the command into the blank list.

Want to undo changes to a menu? With the **Customize** dialog box open, right-click the menu you want to restore, and then click **Reset** on the shortcut menu.

Next Steps

To	See
Create a macro and add it to a menu or toolbar	"Automate Repetitive Tasks," page 643
Customize the Microsoft Office Shortcut Bar	"Take a Shortcut to Work," page 44

MS 114371

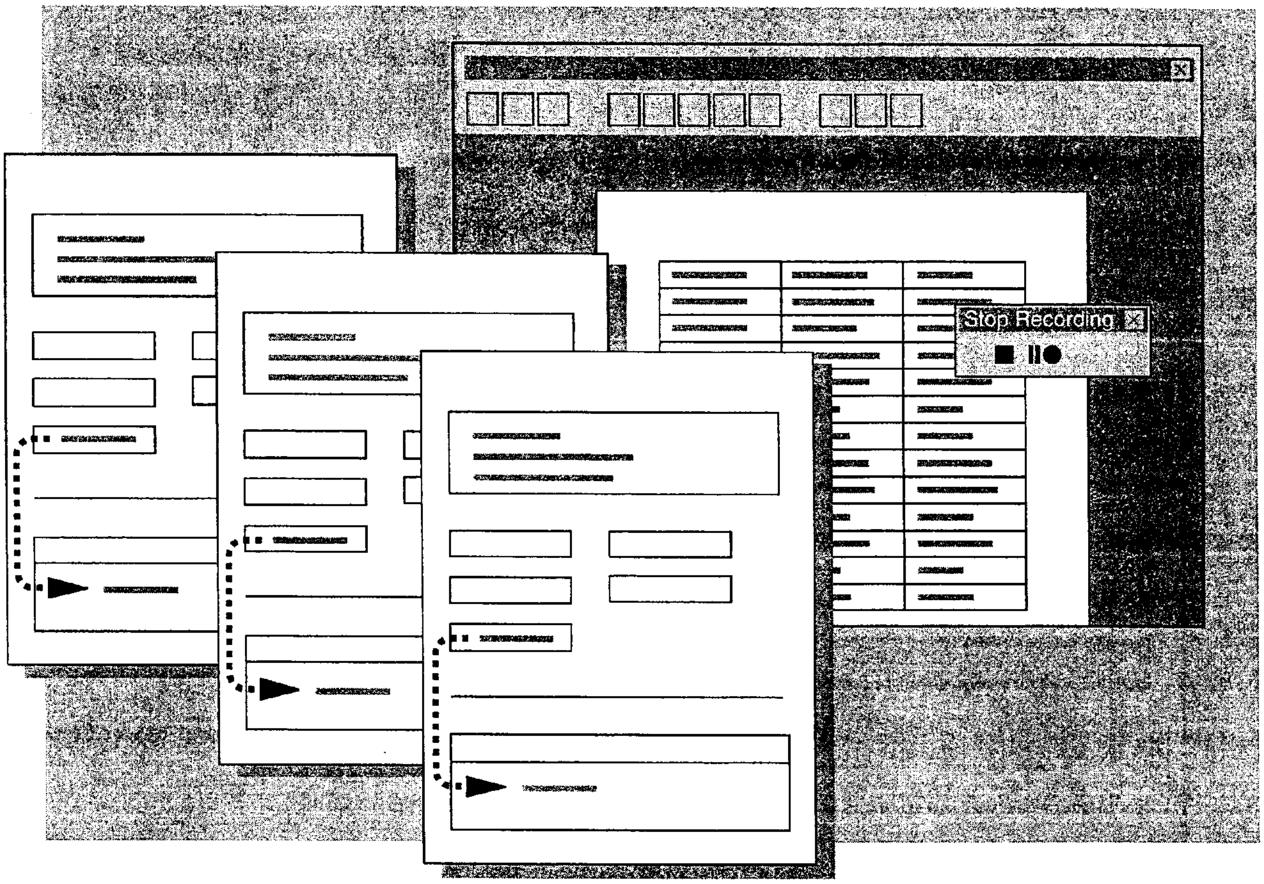
Automate Repetitive Tasks

Do you ever find yourself going through the same steps over and over to perform routine tasks? Perhaps you make the same complex text modifications again and again, repeatedly format certain worksheet cells so that they stand out, or add the same graphic to many of your slides. Or perhaps you perform more complex repetitive tasks, such as filling out employee review forms or collecting and processing payroll information.

Office provides a simple way to perform these tasks automatically. Microsoft Visual Basic for Applications is a powerful built-in programming language that enables a novice user to automate simple tasks and that enables a developer to create customized, multiple application solutions to automate complex tasks.

Key Features

Macro Recorder



MS 114372

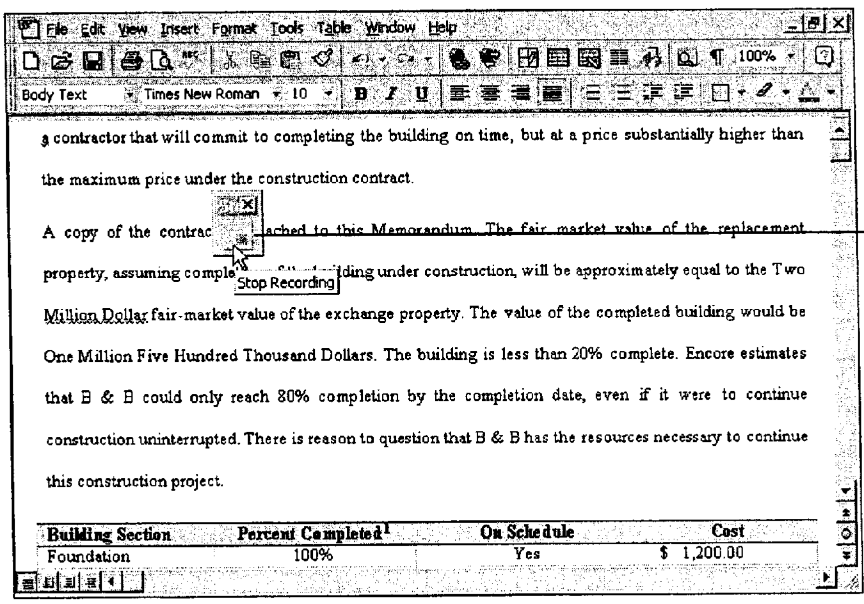
Record a Simple Task

To automate a simple task, you can "record" the task as you perform it. The set of actions you record is called a *macro*. After you have recorded a task, you can "play it back" whenever you want.

For example, suppose you often review Word documents containing revision marks. You can record a macro in Word to display the revision marks automatically. Before you begin recording the macro, make sure the **Highlight changes on screen** check box in the **Highlight Changes** dialog box (**Tools** menu) is cleared and the **Track changes while editing** check box is selected. Then start the macro recorder: Click **Record New Macro** (**Tools** menu, **Macros** submenu), and then type a name for your macro. To make it easy to remember what the macro does, use the descriptive macro name Turn_on_change_tracking.

The **Stop Recording** toolbar appears. Word is now ready to record your actions. Click **Highlight Changes** (**Tools** menu), select the **Highlight changes on screen** check box, and then click **OK**. Click the **Stop Recording** button. The entire sequence of actions you just performed is now stored as a macro.

You can record another macro that automatically hides revision marks. Turn on the macro recorder again and this time name your macro Turn_off_change_tracking. Clear the **Highlight changes on screen** check box, and then turn off the macro recorder.



The **Stop Recording** button

MS 114373

AHL0123700

Does the computer beep when you click the mouse button? The macro recorder cannot record all mouse movements. If you try an action using the mouse and the computer beeps, try it again using the keyboard.

Do you really need a macro? Before recording a macro, make sure there isn't a built-in feature that accomplishes the task. Search in Help for words related to the task.

Run through the task once before you record The macro recorder records everything you do. If you know exactly what actions you want to take before you turn on the recorder, you can record a cleaner macro.

Is the Stop Recording Toolbar in the way? Just drag it to another part of the screen or dock it on one side of the window. This will not affect the macro you are recording.

Save your work When you first start recording macros, they might not always work exactly as you expect. For example, if you record a series of keystrokes with text selected and then run it with nothing selected, you might not get the results you wanted. As a precaution, always save your work immediately before you run a macro for the first time. Then, if the results are less than perfect, you can just close the document without saving changes, reopen the document, and try again.

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

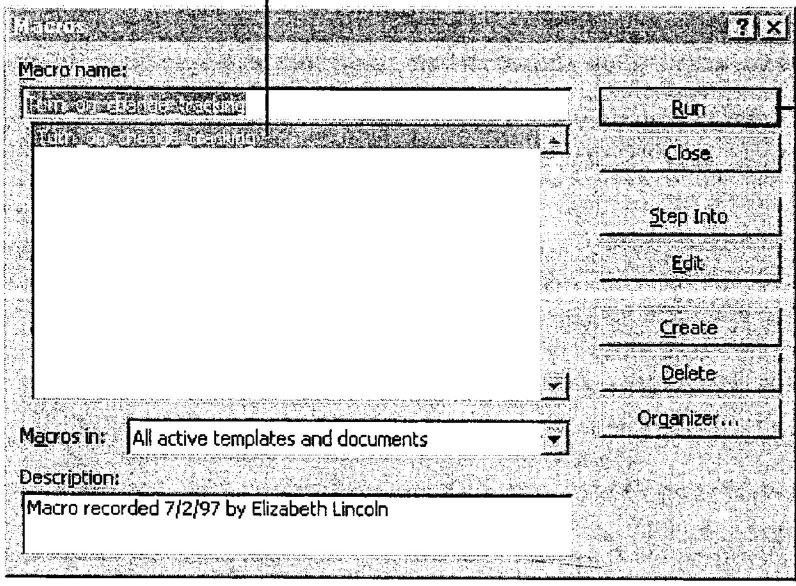
Office Assistant button

MS 114374

Perform the Task Automatically

Now that you have recorded the macro, you can use it whenever you need it. Click **Macros** (**Tools** menu, **Macro** submenu), select **Turn_on_change_tracking**, and then click **Run**.

Click the name of the macro you want to run ...



... then click here to run the macro.

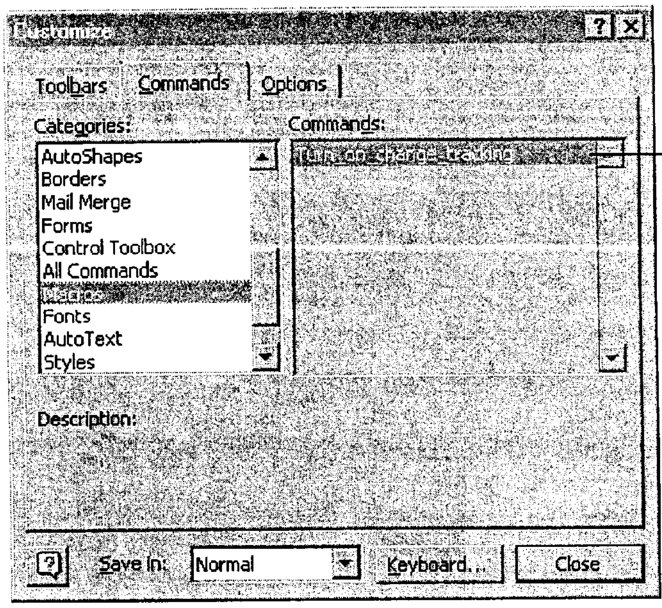
Try it out Type some text in your document. Revision marks should be visible. Then run the Turn_off_change_tracking macro. Revision marks should be hidden.

What If Your Macro Doesn't Work?

If your macro isn't working the way you expected, you can try recording it again to make sure you recorded the actions you thought you did. If the macro still doesn't work, make sure that you are running the macro under the same conditions in which you recorded it. For example, if you record the macro with a drawing object selected, select a drawing object before playing the macro back. If you still aren't getting the results you want, look up **Getting Results - Automate** in Help.

Run Your Macro from a Toolbar Button

You can make your macro even easier to use by assigning it to a toolbar button. Click **Customize** (**Tools** menu). On the **Commands** tab, click **Macros** in the **Categories** box. In the **Commands** box, click the name of your macro, and then drag it to a toolbar. If you want to change the image on the button face, right-click the button to display the shortcut menu.



Drag the macro from here to the toolbar you want.

Now you can run your macro whenever you want just by clicking this custom button. For more information on customizing toolbars, see "Customize Office," page 636.

Run a macro with a shortcut key If you would rather run your macro by using a shortcut key, select the name of the macro in the **Macro** dialog box (**Tools** menu, **Macro** submenu), click **Options**, and then type a letter in the **Shortcut key** box.

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

Office Assistant button

MS 114376

AHL0123703

Automate Complex Tasks

Recorded macros are great when you want to perform exactly the same task every time you run the macro. But what if you want to automate a task in which the actions vary with the situation, or depend on user input, or move data from one Office application to another? For example, you might want to assign a background color to a worksheet cell based on the day of the week that data is entered into the cell, display the performance review form for the employee whose name you enter, or automatically link the most recently created Microsoft Excel chart in your My Documents folder to a PowerPoint slide.

To create automations that are more powerful than recorded macros, you should learn to program in Visual Basic for Applications. If you've never programmed before, don't be scared off! Learning Visual Basic for Applications can be much easier than learning other programming languages, because many of the commands in Visual Basic for Applications are named after familiar interface features, such as dialog box options. A good way to see this is to look at the instructions in a macro you've recorded. Chances are, you'll recognize many of the words and will be able to figure out what some of the instructions mean without knowing anything about programming. For information on displaying a recorded macro, look up **Getting Results - Automate** in Help.

Learning Visual Basic for Applications is well worth the time investment. Many companies are finding that they can use it to extend the features of Office rather than buying dedicated software packages for each task they want to automate. Custom solutions can take less time to develop, since the developer can take advantage of all the features that are built in to Office applications. Creating a custom tool in Visual Basic for Applications can also decrease the amount of training and support employees need in order to use a new tool, since the tool is based on an application they're already familiar with.

You can learn more about Visual Basic for Applications at your own pace. If you like to learn by experimenting, try looking at the code for some of your recorded macros, and then refer to the online reference topics to find out more about specific programming words. (To display a reference topic, place the insertion point in a keyword in the code editing window and then press F1.) If you prefer a more structured approach, try one of the books in the Microsoft Press *Step-by-Step* series. For more information, see "Microsoft Press Publications for Office 97," page 19.

MS 114377

Automate Repetitive Tasks in Microsoft Access

Put Macros and Visual Basic for Applications to Work in Your Forms

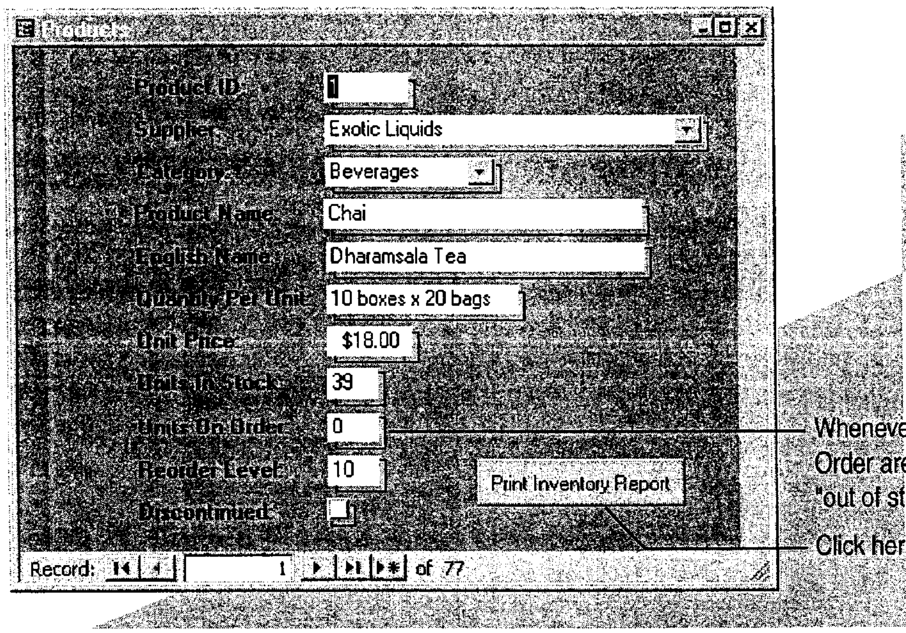
When you set up a database, you want it to be as easy to use as possible, especially for repetitive tasks such as data entry. With Microsoft Access, it's easy to automate tasks such as printing a report or displaying a message that lets you know when a product needs to be reordered. You can automate tasks by creating macros or writing Visual Basic for Applications code procedures. When you create a command button for a form by using the Command Button Wizard, the wizard writes a Visual Basic event procedure for you.

Key Features

Macros

Command Button Wizard

Visual Basic Procedures



To complete the steps in this topic you need to have Microsoft Office, Professional Edition or an individual copy of Microsoft Access installed. You also need a Products form and an Inventory report. For more information, see "Create a Great-Looking Product Form," page 498, and "Create and Enhance an Inventory Report," page 525. However, you can use the basic steps in this topic to add command buttons to any form and to create any macro.

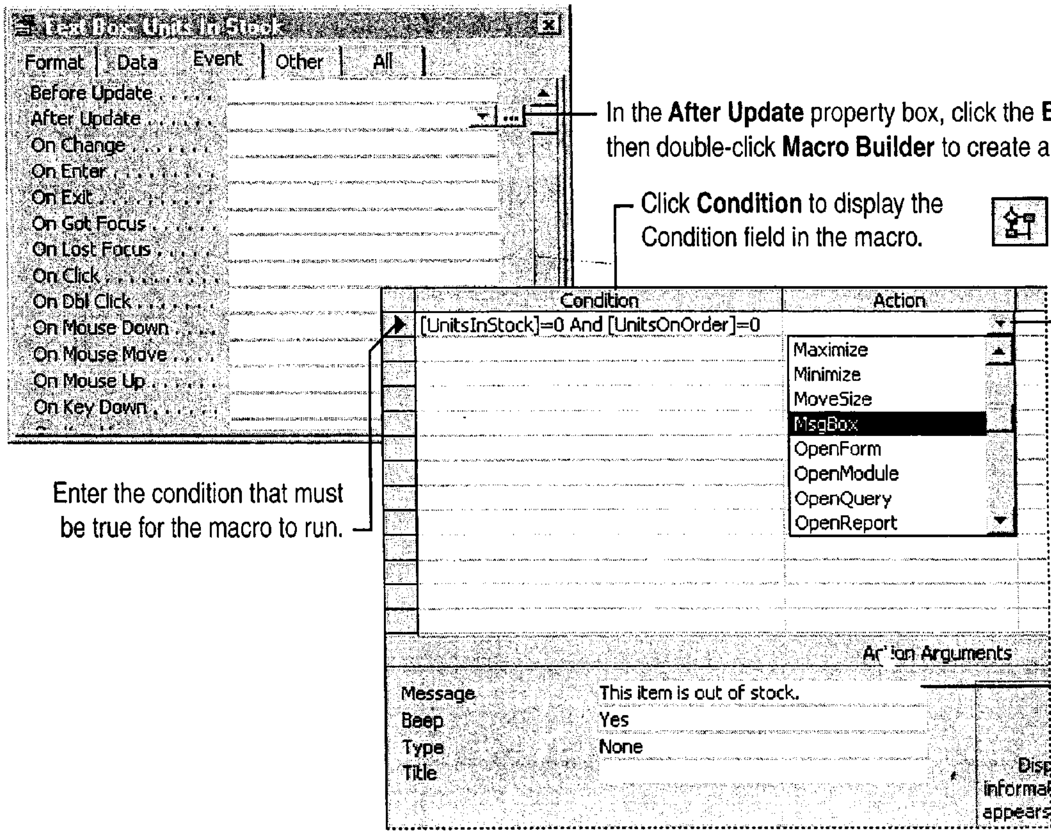
Create a Macro to Display a Message

When you find yourself repeating the same tasks, such as searching for products that you need to reorder, create a macro to display a message that an item is “out of stock” if there are no units in stock and no units on order.

In the database window, on the **Forms** tab, select **Products**. Click **Design** to open the Products form in form design view. Click the **Units In Stock** text box, and then click the **Properties** button. On the **Event** tab, click **After Update**. To open the macro window and create the macro, use the procedures shown in the following illustration. When you’re done, click the **Save** button. Microsoft Access runs the macro whenever you change the number of units in stock to zero when the number of units on order is also zero.

Properties button

Save button



MS 114379

Want to modify a macro? In the database window, on the **Macros** tab, click the macro you want to modify, and then click **Design**.

What other actions can a macro carry out? A macro can set the value in a field, control, or property (the SetValue action), carry out a Microsoft Access menu command (the RunCommand action), or simulate typing on the keyboard (the SendKeys action), among other actions. To learn more about a macro action, in the macro window, select the action in the Action column and then press F1.

Want a macro to carry out a series of actions in response to a single event? Select each action you want to carry out in a separate row of the macro window. Microsoft Access carries out the actions row by row.

More About Macros and Events

How are events named? Events are named after the user actions that cause them. For example, when you change the units in stock to zero in the Products form, the macro that displays the "out of stock" message runs in response to an "AfterUpdate" event.

Create macros that respond to other events You can create other macros that tell Microsoft Access what to do when a user opens a form (an Open event), moves from one record to another (a Current event), or clicks a specific button (a Click event).

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

Office Assistant button

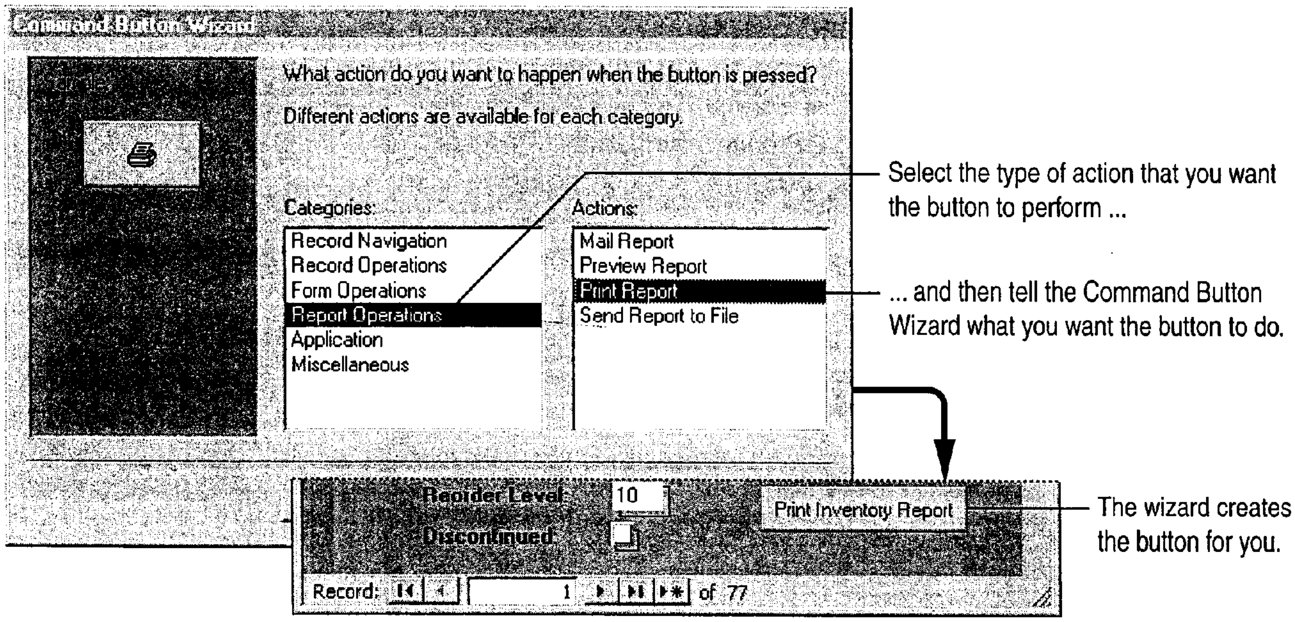
MS 114380

Add a Command Button That Prints a Report

Command Button tool

Control Wizards tool

If you often print a report after updating your database, you can save time by using the Command Button Wizard to create a button that automates this task. In the database window, on the **Forms** tab, select **Products** and then click **Design** to open the Products form in form design view. 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 Products form, click where you want to put the command button, and then follow the instructions in the wizard. When the wizard finishes, Microsoft Access displays the command button in form design view.



What other types of buttons can the wizard create? Use the wizard to create buttons that automatically open other forms, move between records, and add or delete records, among other tasks. For more information, see "Add Buttons That Open Forms and Reports," page 521.

MS 114381

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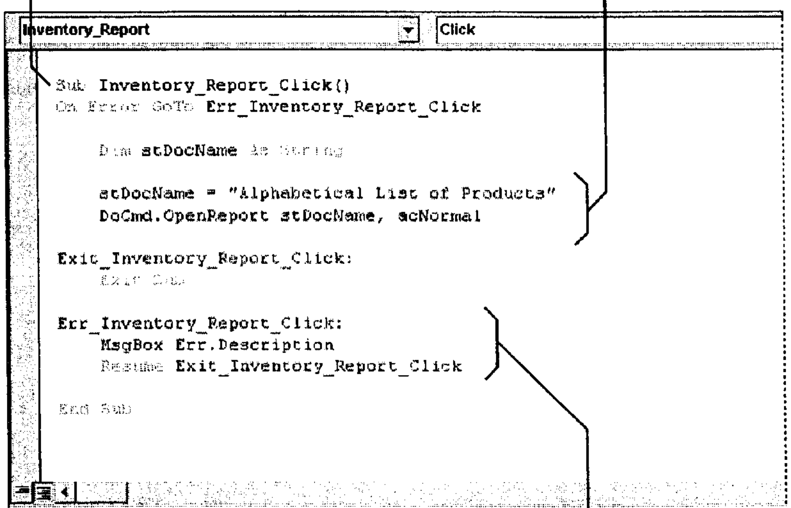
Program in Visual Basic

When the Command Button Wizard creates a button, it writes a Visual Basic event procedure to carry out the action you want. Suppose you want to see the event procedure for the **Print Inventory Report** button. Select the button and then click the **Properties** button to open its property sheet. In the property sheet, select the **OnClick** property, and then click the **Build** button. Using the Visual Basic programming language, you can edit or add to the event procedure that the Command Button Wizard creates. Or, write your own event procedures to customize Microsoft Access even further.

The module window displays the Visual Basic code for the active form.

This event procedure runs whenever you click the **Print Inventory Report** button ...

... and this code prints the report.



You can customize the error message that appears when an error occurs by replacing the **MsgBox** function argument with your own error message.

MS 114382

Next Steps

To	See
See examples of how to use macros to automate work in forms and reports	The Northwind sample database, which Setup installs with Microsoft Access (if Northwind isn't already installed, rerun Setup to install it)
Learn more about programming in Visual Basic and creating custom database applications using Microsoft Access	*Building Applications with Microsoft Access 97*, available directly from Microsoft by using the order form provided with Microsoft Office (also available as part of the ValuPack on the Office 97, Professional Edition CD)

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APPENDIX

Accessibility for People with Disabilities

Microsoft is committed to making its products and services easier for everyone to use. This appendix provides information on the following features, products, and services that make Windows, Windows NT, and Office applications more accessible for people with disabilities:

- Accessibility of Office applications
- Microsoft services for people who are deaf or hard-of-hearing
- The Access Pack for Microsoft Windows NT, a software utility that makes using Windows NT easier for people with motion or hearing disabilities
- Keyboard layouts designed for people who type with one hand or a wand
- Microsoft software documentation on audiocassette, floppy disk, or compact disc (CD)
- Third-party utilities to enhance accessibility
- Hints for customizing Windows or Windows NT
- Other products and services for people with disabilities

Note The information in this section applies only to users who license Microsoft products in the United States. If you obtained Windows or Windows NT outside the United States, your package contains a subsidiary information card that lists Microsoft support telephone numbers and addresses. You can contact your subsidiary to find out whether the types of products and services described in this appendix are available in your area.

MS 114384

Accessibility of Office Applications

In addition to Windows and Windows NT accessibility products and services, several features of Office applications make them more accessible for people with disabilities. For more information, see Help.

Zoom to Magnify the View

You can view your documents or worksheets at any magnification up to 400 percent.

Enlarge Toolbar Buttons

To view enlarged toolbar buttons, click **Large Buttons** (**View** menu, **Toolbars** submenu).

Enlarge Interface Text

You can enlarge the text in row and column headings and in the formula bar and status bar. Click **Options** (**Tools** menu). On the **General** tab, set the font and size you want.

Customize Toolbars

You can add, delete, and move buttons on toolbars to best suit the way you work. You can also create entirely new toolbars that contain buttons for the commands, formats, and macros that you use most frequently. For more information, see the applications' Help.

Customize Menus

You can add new menus, delete existing menus, and customize menus so that they contain the commands, formats, and macros that you use frequently.

MS 114385

Microsoft Services for People Who Are Deaf or Hard-of-Hearing

If you are deaf or hard-of-hearing, complete access to Microsoft product and customer services is available through a text telephone (TT/TDD) service.

Sales information You can contact the Microsoft Sales Information Center on a text telephone by dialing (800) 892-5234 between 6:30 A.M. and 5:30 P.M. Pacific time.

Technical assistance In the United States, you can contact the Microsoft Support Network on a text telephone at (206) 635-4948 between 6:00 A.M. and 6:00 P.M. Pacific time, Monday through Friday, excluding holidays. In Canada, dial (905) 568-9641 between 8:00 A.M. and 8:00 P.M. eastern time, Monday through Friday, excluding holidays. Microsoft support services are subject to the prices, terms, and conditions in place at the time the service is used.

MS 114386

The Access Pack for Microsoft Windows NT

Microsoft distributes the Access Pack for Microsoft Windows NT, which provides people who have motion or hearing disabilities with better access to computers running Windows NT. (If you are running Windows 95, these Access Pack features are already built in. For more information, see Windows 95 Help.) The Access Pack for Microsoft Windows NT contains several features that:

- Allow single-finger typing of SHIFT, CONTROL, and ALT key combinations.
- Ignore accidental keystrokes.
- Adjust the rate at which a character is repeated when you hold down a key, or turn off character repetition entirely.
- Prevent typing extra characters if you unintentionally press a key more than once.
- Enable you to control the mouse pointer by using the keyboard.
- Enable you to control the computer keyboard and mouse by using an alternative input device.
- Provide a visual cue when the computer beeps or makes other sounds.

The Access Pack for Microsoft Windows NT is included in the Microsoft Application Note WN0789. Access Packs are also available for Windows 3.0 and 3.1. If you have a modem, you can download the information you need. See "Which Files to Download or Order," later in this appendix.

MS 114387

Keyboard Layouts for Single-Handed Users

Microsoft distributes Dvorak keyboard layouts that make the most frequently typed characters on a keyboard more accessible to people who have difficulty using the standard "QWERTY" layout. There are three Dvorak layouts: one for two-handed users, one for people who type with their left hand only, and one for people who type with their right hand only. The left-handed or right-handed keyboard layouts can also be used by people who type with a single finger or a wand. Users do not need to purchase any special equipment to use these features.

Windows and Windows NT already support the two-handed Dvorak layout, which can be useful for coping with or avoiding types of repetitive-motion injuries associated with typing. To get this layout, click **Regional Settings** or **International** in the Windows Control Panel. The two layouts for people who type with one hand are distributed as Microsoft Application Note GA0650. For instructions on obtaining this application note, see "Which Files to Download or Order," later in this appendix.

Microsoft Documentation in Alternative Formats

In addition to the standard forms of documentation, many Microsoft products are also available in other formats to make them more accessible.

Most of the Office 97 documentation is also available as Help, on the Office CD in the ValuPack, or on the Web. If you have difficulty reading or handling printed documentation, you can obtain many Microsoft publications from Recording for the Blind & Dyslexic, Inc. Recording for the Blind & Dyslexic distributes these documents to registered, eligible members of their distribution service, either on audiocassettes or on floppy disks. The Recording for the Blind & Dyslexic collection contains more than 80,000 titles, including Microsoft product documentation and books from Microsoft Press. For more information, contact Recording for the Blind & Dyslexic.

Recording for the Blind & Dyslexic, Inc.	Phone:	(609) 452-0606
20 Roszel Road	Fax:	(609) 987-8116
Princeton, NJ 08540	World Wide Web:	http://www.rfbd.org/

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Third-Party Utilities to Enhance Accessibility

A wide variety of third-party hardware and software products are available to make personal computers easier to use for people with disabilities. Among the different types of products available for the MS-DOS, Windows, and Windows NT operating systems are the following:

- Programs that enlarge or alter the color of information on the screen for people with visual impairments
- Programs that describe information on the screen in braille or synthesized speech for people who are blind or have difficulty reading
- Hardware and software utilities that modify the behavior of the mouse and keyboard
- Programs that enable users to "type" by using a mouse or their voice
- Word or phrase prediction software that allows the user to type more quickly and with fewer keystrokes
- Alternative input devices, such as single switch or puff-and-sip devices, for those who cannot use a mouse or a keyboard

For more information on obtaining third-party utilities, see "More Accessibility Information," later in this appendix.

MS 114389

Customize Windows or Windows NT

There are many ways you can customize Windows or Windows NT to make your computer more accessible.

- Beginning with Windows 95, accessibility features are built in to Windows. These features are useful for individuals who have difficulty typing or using a mouse, who have moderately impaired vision, or who are deaf or hard-of-hearing. The features can be installed during setup, or you can add them later from your Windows 95 installation disks. For information about installing and using these features, see Windows Help.
- You can also use the Control Panel and other features to adjust the appearance and behavior of Windows or Windows NT to suit varying vision and motor abilities. You can adjust colors and sizes, sound volume, and the behavior of the mouse and keyboard.

The specific features available, and whether they are built in or must be obtained separately, depend on which operating system you are using.

For full documentation on the accessibility features available in your operating system, see the appropriate application notes listed in the next section. Accessibility features are also documented in the *Microsoft Windows 95 Resource Kit* and the *Microsoft Windows NT Resource Kit.*

MS 114390

Which Files to Download or Order

The resources listed here provide more complete documentation on ways to customize Windows and Windows NT for people with disabilities.

You can obtain these files by downloading them with your modem, or you can order them on disks by phone.

For	You need
Application notes for Windows 95	Ww1062.exe
Application notes for Windows NT 3.1 and 3.5 (includes Access Pack for Microsoft Windows NT)	Wn0789.exe
Application notes for Windows for Workgroups 3.1	Wg0788.txt
Application notes for Windows 3.1	Ww0787.txt
Application notes for Windows 3.0	Ww0786.txt
Access Pack for Microsoft Windows 3.0 and 3.1	Accp.exe
Dvorak keyboard layouts for people who type with one hand (already included in Windows NT 3.5 and later)	Ga0650.exe (most network services) Ga0650.zip (Microsoft Download Service)

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Download the Access Packs, Application Notes, and Alternative Keyboard Layouts by Modem

If you have a modem, you can download these files from the following network services:

- The Microsoft Web site: Click **Microsoft on the Web (Help** menu)
- The Microsoft Internet servers: ftp.microsoft.com and gopher.microsoft.com, in /softlib/mslfiles
- MSN, The Microsoft Network online service
- CompuServe
- GEnie
- Microsoft Download Service (MSDL), which you can reach by calling (206) 936-6735 any time except between 1:00 A.M. and 2:30 A.M. Pacific time (MSDL supports 1200, 2400, 9600, 14400, and 28800 baud rates (V.32 and V.42), with 8 data bits, no parity, and 1 stop bit)
- Various user-group bulletin boards (such as the bulletin board services on the Association of PC User Groups network)

Order the Access Packs, Application Notes, and Alternative Keyboard Layouts on Disks by Phone

If you do not have a modem, within the United States call the Microsoft Sales Information Center at (800) 426-9400 (voice) or (800) 892-5234 (text telephone).

In Canada, you can call (905) 568-3503 or (905) 568-9641 (text telephone).

MS 114392

More Accessibility Information

In addition to the features and resources already described in this appendix, other products, services, and resources are available from Microsoft and other organizations.

Additional Microsoft Products and Services for People with Disabilities

For more information, contact:

Microsoft Sales Information Center	World Wide Web:	http://www.microsoft.com/
One Microsoft Way	Voice telephone:	(800) 426-9400
Redmond, WA 98052-6393	Text telephone:	(800) 892-5234

Directories of Computer Products for People with Disabilities

The Trace R&D Center at the University of Wisconsin–Madison produces the *Trace ResourceBook*, which describes products that help people with disabilities to use computers. It provides descriptions and photographs of about 2,000 products. A compact disc, CO-NET CD, provides a database of more than 18,000 products and other information for people with disabilities. It is issued twice a year.

To obtain these directories, contact:

Trace R&D Center	World Wide Web:	http://trace.wisc.edu/
University of Wisconsin	Fax:	(608) 262-8848
S-151 Waisman Center		
1500 Highland Avenue		
Madison, WI 53705-2280		

Assistive Technology Programs and Trained Evaluators

For general information and recommendations on how computers can address specific needs, you should consult a trained evaluator. An assistive technology program in your area will provide referrals to programs and services that are available to you.

To locate the assistive technology program nearest you, contact:

National Information System	Voice/text telephone:	(803) 935-5231
University of South Carolina	Fax:	(803) 935-5059
Center for Developmental Disabilities		
Columbia, SC 29208		

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Not finding what you want? Your subject may be in Help.

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Getting Results with Microsoft Office 97 helps you get the most out of your software

Get Organized. See how easy it is to organize the information and tasks you work with every day.

Get Connected. Learn how to maximize the potential of the Internet or your company's intranet with innovative tools for finding information, publishing documents, and collaborating with others.

Get Results. Find out how the Office 97 applications work together seamlessly so you can get powerful results faster and easier than ever before.

Read "Start Here" first to:

Chart your course. Learn how to get started with Office 97 quickly, based on your experience and interests.

Find out what's new. Learn about the exciting new features in the Office 97 applications.

Expand your knowledge. Discover the wide range of Microsoft Office 97 publications available from Microsoft Press, tailored to your specific experience level and information needs.

For ***insight,***

information,

interaction,

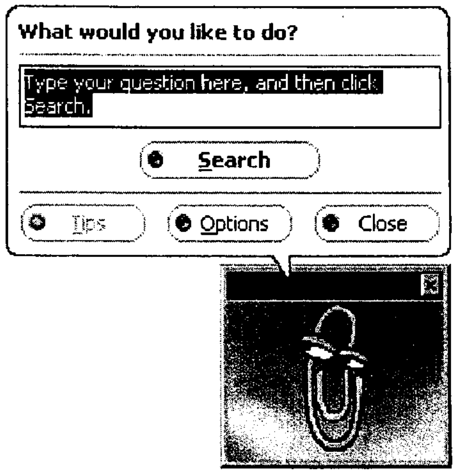
and ***support,***

visit the Microsoft Office Web site at:

http://www.microsoft.com/office/

The Office Assistant is Ready to Help

- **Ask for help when you need it.** The Office Assistant observes your actions, fields your questions, and quickly presents you with a list of the most relevant Help topics.
- **Get expert advice without asking.** The Office Assistant delivers helpful messages and timely tips that can make your work easier.



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