

The following Help topics are title specific and must be edited for each new release of a Mastering Series title.

# Take the Tour

The best way to familiarize yourself with *Learn Microsoft Visual Basic 6.0 Now* is to take a short multimedia tour of the title. The Tour is accessible from the **Help** menu and the Welcome screen.

# System Requirements

- ® MPC2-compatible PC with a 486DX/66 Mhz or higher processor (Pentium or higher processor recommended)
- ® Microsoft Windows 95 or later or Microsoft Windows NT 4.0 or later
- ® 16 MB RAM for Windows 95 or later; 24 MB RAM for Windows NT 4.0 or later
- ® 12 MB available hard disk space; 16 MB if you install labs
- ® CD-ROM drive
- ® VGA or higher resolution monitor; Super VGA, 256 colors recommended
- ® Microsoft Mouse or compatible pointing device
- ® Audio board with headphones or speakers recommended
- ® To connect to the World Wide Web through URL links provided in the product you will need a modem, an account with an Internet Service Provider or online service, and Internet Explorer 3.0 or greater.

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**Note** To run the lab exercises, you must install Visual Basic 6.0 Learning Edition.

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# Introducing the Course

*Learn Microsoft Visual Basic 6.0 Now* teaches you how to program in Visual Basic 6.0. This product is specifically designed for the Learning Edition of VB6.

**The Course** includes an assortment of labs that give you hands-on experience using the skills learned in the chapters. Each lab consists of one or more exercises that focus on the information contained in the associated chapter. At any time, you can review solutions to the lab. The Course also includes narrated demonstrations and animations, sample code, and tips. You can test your understanding of the material by answering the self-check questions.

**Taking the Tour** is the best way to learn about the contents of the Course and how to navigate. The Tour is accessible from the Welcome screen and from the **Help** menu.



Related Topics

# An Overview of Course Content

Click a button below for a description of each chapter in the Course:

- Ch 1 Writing Your First Program
- Ch 2 Working with Controls
- Ch 3 Working with Menus and Dialog Boxes
- Ch 4 Visual Basic Variables and Operators
- Ch 5 Controlling Flow and Debugging
- Ch 6 Using Loops and Timers
- Ch 7 Working with Forms, Printers, and Error Handlers
- Ch 8 Adding Artwork and Animation
- Ch 9 Working with Modules and Procedures
- Ch 10 Processing Text Files and Databases
- Ch 11 Connecting to Microsoft Office
- Ch 12 Creating Your Own Objects

You can take the Course in any order that you choose—start at the beginning, jump into the middle, or read only those topics that interest you.

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**Chapter 1** introduces you to programming and using the features and capabilities of the Visual Basic 6.0 Learning Edition programming system. You will learn how to explore and configure the Visual Basic development environment, build your first program, and Create an executable file.

**Chapter 2** introduces the standard Visual Basic toolbox controls and teaches you how to use them to build useful interface features. You will learn how to name Visual Basic objects, use basic controls to display text and process input, use file system controls to browse the files and folders on your computer, and use data input controls to display lists and check boxes. You will also learn how to use Data and OLE controls to work with Microsoft Office applications, and install Active X controls.

**Chapter 3** focuses on processing input from another source in the user interface: menu commands and dialog boxes. You will learn how to add menus to your programs by using the Menu Editor, process menu choices by using program code, and use a common dialog object to display standard dialog boxes.



**Chapter 4** is the first of three chapters that focus specifically on writing program code to manage the events in a Visual Basic application. This chapter describes Visual Basic variables and operators and tells you how to use specific data types to improve program efficiency. You will learn how to use variables to store information in your program and work with specific data types to streamline your calculations.

**Chapter 5** describes writing conditional expressions that control the flow of program code, and tracking down software defects with Visual Basic's debugging tools. You will learn how to understand and use the principles of event-driven programming, use conditional expressions, decision structures, and mathematical operators to control the order that your program executes commands, and find and correct errors in your programs.

**Chapter 6** describes how to write repeating statements (loops) in program code and how to use the Timer control to create clocks and other time-related utilities. You will learn how to write the For...Next loop to run a block of code a set number of times, write the Do... loop to run a block of code until a specific condition is met, and use the Timer control to create a digital clock and other special effects.

**Chapter 7** describes how adding forms, printer support, and error-processing to your user interface enhance your programs. These techniques will help you build programs that are more sophisticated and robust. You will learn how to add extra forms to the user interface, use the Printer object to send output to a printer, and create error handlers to manage runtime errors.

**Chapter 8** describes how to enhance your program user interface with artwork and special effects. The skills you learn will teach you more about graphics programming and using a coordinate system-and the results will make your applications more interesting to use. You will learn how to create basic artwork with the Line and Shape controls, add Drag and Drop support to your user interface, and create animation effects with the Timer control.

**Chapter 9** describes how to create a special file in your project called a standard module. Standard modules contain code and variables that you want to be accessible from all the event procedures in your program; you'll find that they are especially useful in larger programming projects. You will learn how to create a standard module for code you use often, use public variables to share important information, and create your own Function and Sub procedures.

**Chapter 10** describes how you can open and modify text files and databases on your system. You will learn how to display a text file with the TextBox control; create a new text file; open a database with the Data control; and search, add, and delete database records.

**Chapter 11** describes how you can explore the application objects in your system and control Microsoft Office applications with Automation. You learn how to view application objects with the Object Browser and control Microsoft Office applications such as Microsoft Excel and Microsoft Word from your programs.



**Chapter 12** is an introduction to creating your own objects in a Visual Basic program by using a special file in your project called a class module. At design time, class modules contain the definition of a class in the form of its property, method, and event procedures. At run time, a class module is transformed into an object whose members (that is, properties, methods, and events) determine how that object can behave in a program.

# Using Setup to Uninstall

u To uninstall *Learn Microsoft Visual Basic 6.0 Now* from the Setup program

1. Run Setup from the CD-ROM.
2. Click **Remove**.
3. To confirm that you wish to remove the title, click **OK**.
4. When the title has been removed, click **Finish**.

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**Note** Do not remove any shared DLLs unless you are sure they are not being used by other applications.

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# Using the Control Panel to Uninstall

u To remove *Learn Microsoft Visual Basic 6.0 Now* from your system by using the Control Panel, follow these steps

1. In the Control Panel, click **Add/Remove Programs**.
2. Select *Learn Microsoft Visual Basic 6.0 Now*, and then click **Add/Remove**.
3. Click **Remove All**.

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**Note** Do not remove any shared DLLs unless you are sure they are not being used by other applications.

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# Reinstalling the Title or Sample Files

## u To reinstall the *Learn Microsoft Visual Basic 6.0 Now* title or sample files

1. Delete, move or rename any sample files you wish to reinstall. *Existing sample files will not be overwritten.*
  2. Run Setup from the CD-ROM.
  3. Click **Reinstall**. The Setup program will confirm your previous installation. Click **OK**.
  4. Choose the components you would like to reinstall:
    - a. **Typical** - Setup will reinstall the *Learn Microsoft Visual Basic 6.0 Now* program, restoring the correct settings.
    - b. **Complete** - Setup will reinstall the *Learn Microsoft Visual Basic 6.0 Now* program, restoring the correct settings, and also reinstall the sample files, replacing only those files which are missing.
- Click **Next**.
5. When the update is completed, click **Finish**.

The following Help topics are NOT title specific and should need editing only for changes in the Mastering Series application user interface or functionality.

# Using the Navigation Pane

The Navigation pane occupies the left pane of the Viewer window, and is used to navigate through the content of the title. On the **Contents** menu at the top of the navigation area, you can choose a component of the [Course](#) to be displayed in the Topic pane at the left of the Viewer window.

Use the **Contents** button to view the **Contents** menu or to find information, as follows.



**Contents.** Displays the Course components.



**Index.** Displays index entries related to particular topics in the Course.



**Find.** Displays the Find pane, where you can search for a word or topic.

The Navigation pane is separated from the Topic pane by a split bar that you can drag to change the size of both panes.



Related Topics

The Course components are:

- ® **Course.** Displays the chapters for the Course, and includes the following components.
- ® **Labs.** Include exercises that provide experience using the skills presented in the chapters.
- ® **Multimedia.** Includes audio and video animations and demonstrations of the concepts and techniques covered in the Course.
- ® **Sample Code.** Provides code samples to illustrate the material covered in the chapters and labs.
- ® **Self-Check Questions.** Test your understanding of the material covered in each chapter by answering the Self-Check questions.

# Viewing Content in the Topic Pane

When you select a topic in the navigation area, the text and associated [media](#) displays in the Topic pane. You can view the following elements in the Topic pane.

- ® Course selections
- ® A topic selected from the Notebook
- ® A topic selected from the History window
- ® Index entries
- ® Search results from using the Find feature

You can use the navigation buttons at the bottom of the Topic pane to move forward and back through the Course contents, or to jump to information that is related to the currently displayed topic.

You can select text displayed in the Topic pane to copy to the Clipboard. You can also print the topic.

To change the size of both panes, drag the split bar between the panes.



Related Topics



# Displaying Multimedia and Additional Information

Throughout this title you will find multimedia icons that you can click to:

- ® View additional information, such as narrated demonstrations and animations, graphics, sample code, and tips.
- ® Launch Internet Explorer and jump to a specific address.

Here are icons that you will see throughout the Course. To view a description of each icon, click the icon.



**Animations.** An animated introduction describes what you can expect to learn in the chapter. Additional animations in the Course illustrate technical concepts.



**Demonstrations.** Help you learn by watching and listening, as a developer takes you through the steps of a procedure.



**Sound.** Launch audio files stored on the CD-ROM.



**Expert Points of View.** Provide the technical expertise of an experienced developer.



**Illustrations.** Display technical illustrations and diagrams.



**Internet.** Launches Internet Explorer and jumps to a specific Internet address.



**Sample Code.** Displays a pop-up window of sample code.



**Self-Check Questions.** Provide several questions and one answer at the end of each chapter.



**Tips.** Provide helpful information.



**Lab Hints.** Provide helpful information within Labs.

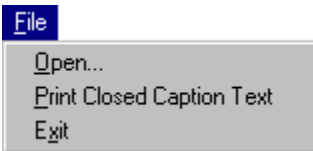


Related Topics

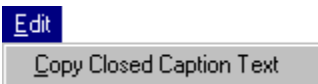
# Viewing Animations, Demonstrations and Expert Points of View

The following controls are available on the menu bar when viewing an animation, demonstration or expert point of view:

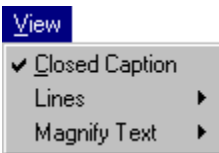
## File Menu



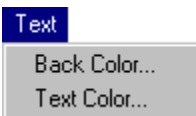
## Edit Menu



## View Menu



## Text Menu



If you do not have a sound card installed, the closed caption feature will be on by default.

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[Related Topics](#)

Opens any listed Active Movie file.

Prints the Closed Caption text for the file being viewed.

Closes the application.

Copies the Closed Caption text of the file being viewed to the Clipboard.

Toggles the Closed Caption text on or off.

Specifies the number of lines of Closed Caption text displayed; from one to four.



Specifies the size of the Closed Caption text displayed.

Sets the background color on which the Closed Caption text is displayed.

Sets the color of the Closed Caption text.

# Choosing a Display Mode

You can view the Contents, Index, or Find features by clicking one of the buttons at the top of the Navigation pane on the left, while displaying the associated information in the Topic pane on the right. Or, you can hide the Navigation pane and view only the Topic pane.

**u To display both panes of the window, do one of the following**

- ® On the **View** menu, click **Navigation & Topic**.
- ® Press CTRL+A.
- ® Point to the left pane, right-click, and then click **Navigation & Topic** on the [shortcut menu](#).
- ® Click the **Navigation & Topic** button on the toolbar.



**u To display the Topic pane only, do one of the following**

- ® On the **View** menu, click **Topic Only**.
- ® Press CTRL+O.
- ® Point to the left pane, right-click, and click **Topic Only** on the [shortcut menu](#).
- ® Click the **Topic Only** button on the toolbar.



Related Topics

# Course Components

*Learn Microsoft Visual Basic 6.0 Now* consists of components that can be accessed from within the Course content, or directly from the menu at the top of the Navigation pane. The Course components include:

- ® [Course](#)
- ® [Labs](#)
- ® [Multimedia](#)
- ® [Sample Code](#)
- ® [Self-Check Questions](#)

Within the Course chapters, you'll also find:

- ® [Sound Files](#)
- ® [Graphics](#)
- ® [Internet Jumps](#)
- ® [Tips](#)

Within the Labs, you'll also find:

- ® [Lab Hints](#)

[Help](#) can be launched from within the title. To launch Help, click the **Help** icon on the toolbar or select **Help Topics** from the **Help** menu.



Related Topics

**Multimedia** demonstrations, animations, and expert points of view illustrate and help you master programming concepts and techniques. You can jump to a list of demonstrations, animations, and expert points of view by clicking **Multimedia** on the **Contents** menu. To launch a demonstration, animation, or expert point of view, click the one you want in the Navigation pane.

- To launch a **demonstration** from within the Course, click a Demonstration icon.
- To launch an **animation** from within the Course, click an Animation icon.
- To launch an **expert point of view** from within the Course, click a POV icon.

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**Note** You can toggle the Closed Caption (CC) option on and off in the media viewer window to view the associated text of a animation, demonstration or expert point of view.

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Each pop-up window has a slider control that enables you to play, pause, or jump to another location in the media file.

**Sound** files can be launched from within the title.



To launch a sound file, click a Sound icon.

**Help** files can be launched from within the title.



To launch Help, click the Help icon.

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**Note** Help can be launched from the toolbar or from the **Help** menu.

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**Illustrations** are provided to show important information described in the Course. You'll see three types of illustrations:

- ® Standard in-line graphics.
- ® In-line graphics with hot spots you can click to view additional information.
- ® Pop-up graphics. Click the Illustration icon within the Course to view an illustration.



You can print or copy an illustration to the Clipboard by using the toolbar or menu commands.

Launch **Internet Explorer** to jump to a specific site on the Internet.

- To launch Internet Explorer and jump to a specified Web page, click the Internet Jump icon, and then click **OK** in the dialog box.

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**Note** The first time you launch Internet Explorer from within the title, a dialog box is displayed to inform you that you are about to launch Internet Explorer. If you do not want this prompt to appear each time you launch Internet Explorer, you can turn off the message by deselecting **Display this dialog when accessing the Internet**.

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You can browse the Web site you jumped to, or surf the Internet by entering other Internet addresses.



Address:

To return to the title, minimize or close Internet Explorer.

**Labs** in each chapter illustrate programming concepts and techniques. You can jump to the lab exercises by clicking **Labs** on the **Contents** menu, or by clicking the lab you want within the Course. In the Course, labs and their solutions appear at the end of the chapter section with which they are associated.

Each lab has associated project, solution, and demonstration files. You can review the complete solution for each lab within the Course, or by clicking **Multimedia** on the **Contents** menu.


A list of **Sample Code** is available by clicking **Sample Code** on the **Contents** menu. To display sample code in the Topic pane, click the chapter or lab, and then click the code you want from the list in the Topic pane.

- Or, you can view sample code by clicking a Sample Code icon within the chapters or labs in the Course.

The Sample Code window opens to the same size and location as when it was last closed. You can resize the window by dragging its borders.

You can copy sample code to the Clipboard. Or, you can print the sample code displayed in the window. To copy or print sample code, right-click in the Sample Code window, and then click **Print** or **Copy**.

Test your understanding of the Course material by answering the **Self-Check** questions. You can view a list of the Self-Check questions by clicking **Self-Check Questions** on the **Contents** menu, or by clicking **Self-Check Questions** at the end of each chapter. The Self-Check questions provide several questions with one correct answer for each.

-  To view an answer to a self-check question, click the Answer icon.

The answer window opens to the same size and location as when it was last closed. You can resize the window by dragging its borders.

You can copy or print an answer to the Clipboard. To print or copy an answer, right-click the Topic pane when a self-check question is displayed, and then click **Print** or **Copy**.

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**Note** You can also print the questions displayed in the Topic pane by clicking the **Print** button on the toolbar.

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**Tips** are provided throughout the chapters.




To view a tip, click a Tip icon within the Course.

The Tip window opens to the same size and location as when it was last closed. You can resize the window by dragging its borders.

You can select a portion of a tip to copy it to the Clipboard, or you can print or copy the entire tip. To print or copy a tip, right-click the Tip window, and then click **Print** or **Copy**.

**Lab Hints** are provided throughout the labs.

-  To view a lab hint, click a Lab Hint icon within the Course.

The Lab Hint window opens to the same size and location as when it was last closed. You can resize the window by dragging its borders.

You can select a portion of a hint to copy it to the Clipboard, or you can print or copy the entire hint. To print or copy a hint, right-click the Lab Hint window, and then click **Print** or **Copy**.

# Putting the Index to Work

You can use the Navigation pane to search the Index containing information from the Course.

u **To search the Index, do one of the following**

- ® On the **View** menu, click **Index**.
- ® Press CTRL+I.
- ® Point to the Navigation pane, right-click, and then click **Index** on the [shortcut menu](#).
- ® Click the **Index** button at the top of the Navigation pane.



u **To use the Index**

1. Click the text box, and type the first few letters of the word that you want to find.  
The Index will scroll to the closest entry and list related topics in a list box at the bottom of the Navigation pane.
2. Click an Index entry to display the associated topic in the Topic pane.



Related Topics



# Using Find to Refine Your Search

u **To use Find to search for a word or phrase, do one of the following**

® On the **View** menu, click **Find**.

® Press CTRL+F.

® Point to the Navigation pane, right-click, and then click **Find** on the [shortcut menu](#).

® Click the **Find** button on the toolbar.



You can type a word or phrase, or select a previous search string from the drop-down list. To search for a phrase, enclose the phrase in quotation marks. You can also use [Boolean](#) operators to refine your search.



Related Topics

# Using Boolean Operators

The title supports the following Boolean operators in the Find tool.

Operator	Description	Example
*	Matches any number of characters in a word.	<b>valid*</b> finds valid, validate, validation.
<b>AND</b> <b>+ (plus)</b> <b>&amp; (ampersand)</b>	The logical AND ( + ) and the ampersand operators find topics that only contain all of the strings.	<b>language AND logic</b> finds topics that only contain both words.
<b>OR</b> <b>  (pipe)</b> <b>, (comma)</b>	The logical OR (   ) and comma operators find topics that contain any of the listed strings.	<b>language OR logic</b> finds topics that contain either word.
<b>NOT</b> <b>- (minus)</b> <b>~ (tilde)</b>	The logical NOT ( - ) and tilde operator find only topics that do not contain the string.	<b>language NOT logic</b> finds topics that contain the word <b>language</b> , and do not contain the word <b>logic</b> .
<b>NEAR</b>	The NEAR operator finds only those topics within eight words.	<b>save NEAR print</b> finds those topics that only contain the two words within eight words from each other.

You can combine multiple operators in a single search. The search string is evaluated from left to right. You can also enclose a phrase in quotation marks to search for that exact phrase, rather than the individual words within it. You can force the search string to be evaluated in a different order by enclosing portions of it in parentheses.

To run the search, press ENTER. When the results list appears, click a topic to view it in the Topic pane. The word or phrase for which you searched is highlighted in the displayed topic.

# Viewing the Glossary

u **To see glossary terms and definitions, do one of the following**

- ® To display an associated glossary definition, click any word or phrase in the Course that is underlined, in magenta text.
- ® Click the **Glossary** button on the toolbar to open the Help file and search for a word or phrase.



Related Topics

# Revisiting Topics Using the History Window

To browse through a list of previously visited topics, open the History window by clicking **History** on the **Navigate** menu, or by pressing CTRL+H.

Click a topic in the History window to display it in the Topic pane. If the Contents are displayed in the Navigation pane, the title of the topic in the History window will be selected.

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**Note** You must use the mouse to select a topic in the History window. You can then use the arrow keys to navigate to the next topic; however the rest of the keyboard is disabled in this window.

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The History window stays on top of the Viewer window until you close it. The window opens in the same size and location as when it was last closed. You can move the window or drag its borders to suit your needs.

# Creating Notebook Entries

You can use the **Notebook** to mark topics of interest anywhere in the Course and make notes about these topics. You can return to these notes at any time during the current session or during future sessions.

u **To open the Notebook, do one of the following**

- ® On the **Edit** menu, click **Notebook**.
- ® Press CTRL+K.
- ® Point to the Navigation or Topic pane, right-click, and then click **Notebook** on the [shortcut menu](#).
- ® Click **Notebook** on the toolbar.



For more information about using the Notebook, click on an item below:

[Add or delete a Notebook entry](#)

[Add, edit, or delete your notes](#)

[Display a Notebook entry in the Topic pane](#)

[View notes for current topic](#)

[View Help in the Notebook](#)

[Printing Notes and Notebook Entries](#)

u **To add a topic to the Notebook, click the topic in the Navigation pane, and then**

® Click the **Notebook** button on the toolbar to open the Notebook window.



® Click the **Add to Notebook** button on the Notebook toolbar.



u **To delete a Notebook entry, select it from the Notebook list, and then:**

® Click the **Delete** button on the Notebook toolbar.



u **To add new notes to the Notebook or edit existing notes**

- ® Add the topic to the Notebook, or select an existing Notebook entry, and then type your notes in the Topic pane.
- ® Click the **Add to Notebook** button to attach your notes to the existing Notebook entry.



u **To paste text or graphics from the Topic pane into the Notebook window, copy the information to the Clipboard, and then do one of the following**

- ® Press CTRL+V.
- ® Right-click the Notes pane in the Notebook window, and then click **Paste** on the [shortcut menu](#).
- ® Click the **Paste** button on the toolbar.



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**Note** When you edit your notes, you can right-click to select the standard Windows editing commands, **Undo**, **Cut**, **Copy**, **Paste**, **Delete** and **Select All**.

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To display a topic from the Notebook window in the Topic pane, select the topic in the Notebook window, and then click the **Go To Topic** button, or double-click the topic.



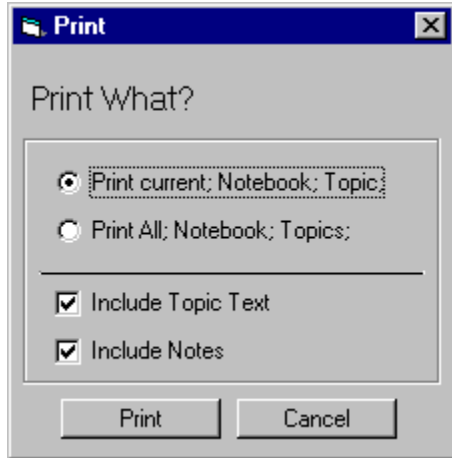


To view the notes for the currently displayed topic, click the **Notebook** button on the toolbar.

You can view **What's This?** online Help for the toolbar buttons and windows in the Notebook. Point to the button or window for which you want help, right-click, and then click **What's This?**.

# Printing Notes and Notebook Entries

You can print all of the topics listed in your Notebook, print only the current Notebook entry, print all your notes for the current entry, or print all your notes for all topics.



u To print in the Notebook window, click the **Print** button and then click one of the following options

Ⓐ **Print current Notebook topic.** Prints the selected Notebook entry.

Ⓑ **Print all Notebook topics.** Prints all topics stored in your Notebook.

You can choose one or both of the following to print the Notebook topic(s) with or without your notes.

Ⓐ **Include Topic Text.** Prints the selected entry or all Notebook entries.

Ⓑ **Include Notes.** Prints notes that are associated with the selected entry, or all notes that you have added to the Notebook.

To print the option you want, click the **Print** button, or click **Cancel** to close the dialog box without printing.

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Related Topics

# Printing Topics and Other Information

You can print the topic text displayed in the Topic pane.

u **To print, do one of the following**

- ® On the **File** menu, click **Print**.
- ® Press CTRL+P.
- ® Right-click in the Navigation pane, and then click **Print** on the [shortcut menu](#).
- ® Click the **Print** button on the toolbar.



When you click **Print**, a Windows **Print** dialog box appears. Select the options you want, and then click OK.



Related Topics

# "What's This?"--Help About Toolbars, Menus, and Windows

To find out what a screen element does, you can point to the element for which you want Help, right-click, and then click **What's This?**.

# The Toolbar Buttons

## Main Viewer Toolbar



**Print.** Click to print the entire topic displayed in the Topic pane.



**Copy.** Click to copy highlighted text or the entire topic displayed in the Topic pane. You can paste your selection into another application or into your Notebook. (Open the Notebook window, click the Topic pane, and then press CTRL+V.)



**Navigation & Topic.** Click to display the Navigation pane in the left pane while viewing the Topic pane in the right pane. To close the Navigation pane and display only the Topic pane, click Topic Only.



**Topic Only.** Click to close the Navigation pane and display the Topic pane only. To display both panes, click the **Navigation & Topic** button.



**Notebook.** Click to open the Notebook, where you can store a list of topics of particular interest, along with your notes.



**Glossary.** Click to view an extensive glossary of related terms and definitions.



**Help.** Click to get Help for the title.

## Notebook Toolbar



**Add to Notebook.** Click to add the selected topic to your Notebook.



**Delete.** Click to delete the selected topic from your Notebook.



**Print.** Click to print topics or notes from your Notebook.



**Paste.** Click to paste the selected topic text or contents of the Clipboard into the Notebook window.

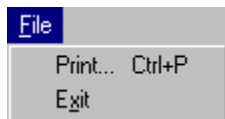


**GoTo.** Select a topic in the Notebook, and then click to display the topic text. You can also go to a specific topic by double-clicking the topic in the Notebook window.

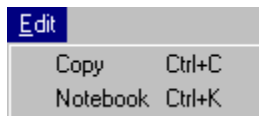
# The Menu Commands

Click a menu command to see a description of what it does.

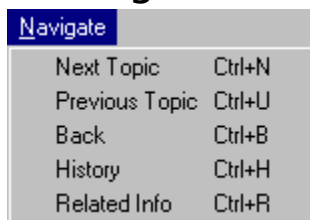
## File menu



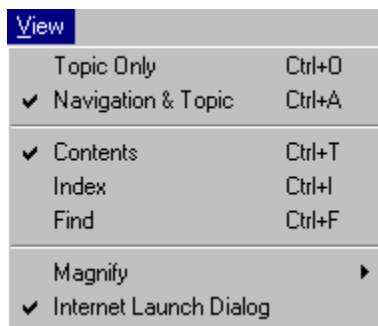
## Edit menu



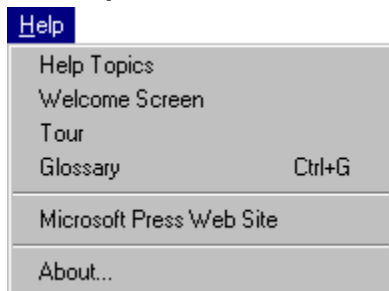
## Navigation menu



## View menu



## Help menu



When the standard Windows **Print** dialog box appears, enter or click the options you want, and then click OK to print.

If you are printing from the Notebook window, select the options you want in the **Print** dialog box, and then click **OK** to print.



Related Topics



Closes the application.

Copies the text or graphics you selected in the Topic pane or Notebook. To paste the selection into another application, open the application, and then click **Paste** on the **Edit** menu, or use the key combination for the application's **Paste** command (CTRL+<KEY>).

u **To paste text or graphics from the Topic pane into the Notebook window, copy the information to the Clipboard, and then do one of the following**

- ® Press CTRL+V.
- ® Right-click in the Notes pane of the Notebook window, and then click **Paste** on the [shortcut menu](#).
- ® Click the **Paste** button.



Opens the Notebook, where you can mark topics of interest and make notes about these topics.

Moves to the next topic in the Navigation pane.

Moves to the previous topic in the Navigation pane.

Moves back through the topics you have viewed.

Displays a list of the topics you have viewed. To display a previously viewed topic click a topic in the History window.

Displays a list of topics related to the current topic. To display a related topic, click a topic from the list.

This is the same as clicking the **Related Information** menu at the bottom of the Topic pane.

---

**Note** If there is no related information for the topic, these options will appear dimmed.

---



Displays both the Navigation pane and Topic pane.

Displays the Topic pane only.

Displays the Contents in the Navigation pane.

Displays the Index in the Navigation pane.

Displays the Find window.

Displays the **Magnify** menu from which you can magnify or reduce text in the Topic pane or in any window (Sample Code, Tips, Closed Captions).

**u To magnify or reduce text, select one of the following options**

- Ⓜ **0.75** reduces all text to 75% of its normal size.
- Ⓜ **1** returns all text to its normal size.
- Ⓜ **1.5** magnifies all text to 150% of its normal size.
- Ⓜ **2** magnifies all text to 200% of its normal size.

Displays the text of video segments in a pop-up window. You can move and resize the window to view the video and closed caption simultaneously.

---

**Note** The pop-up window will appear in the same location as it was when you last opened it.

---

Displays a dialog box when you launch Internet Explorer from within the title.



Opens this Help file.

Displays the Welcome screen, where you can take the Tour or view a video introduction of the title.

Launches the Tour for the title.

Displays a glossary of terms and definitions.

Connects to the Microsoft Press Web page.

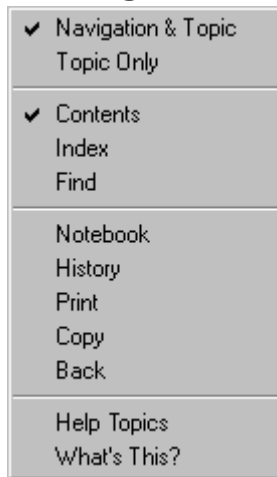
Displays the name, version, and copyright information for this product.

# The Shortcut Menu

A shortcut menu is available from the Viewer window and most supplementary windows, including the right pane of the Notebook window. The commands on a shortcut menu change depending on where you right-click the mouse. To display a shortcut menu, right-click in a window, and then click the menu command you want.

Click the following shortcut menus to display a brief description of each menu command.

## Navigation and Topic Pane

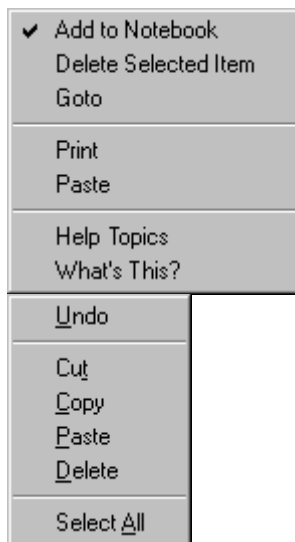


These commands appear when you right-click in the Navigation or Topic pane in the main Viewer window.

A check mark on this menu indicates the currently active pane, or window and mode.

When you select **Topic Only**, you can restore the Navigation pane by clicking **Navigation & Topic** on the menu.

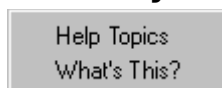
## Notebook Window



The left pane of the Notebook window displays these commands.

The right pane of the Notebook window displays these standard Windows editing commands.

## History Window



These commands appear when you right-click the History window.

## Supplementary Viewer



The active text or supplementary graphics viewers display these commands.

---

**Note** A shortcut menu is not available in the Animation, Demonstration, and Expert Point of View windows.

---



Displays both the Navigation and Topic panes in the main Viewer window.

Displays only the Topic pane in the main Viewer window. You can restore the Navigation pane by clicking **Navigation & Topic** on the shortcut menu.

Displays the Contents in the Navigation pane.

Displays the Index in the Navigation pane.

Displays the Find window in the Navigation pane.

Opens the Notebook window.

Opens the History window.

Opens the Windows **Print** dialog box.



Copies the selected text, or the entire text or illustration displayed in the window, to the Clipboard.

Opens the Help file.

Moves back to the previously viewed topic.

Provides context-sensitive Help for the active screen element.

Adds the displayed topic to the Notebook, where you can also add notes.

Deletes the selected Notebook entry.

Deletes the selected text in the Notes pane of the Notebook window.

Goes to the selected Notebook topic and displays the text and associated [media icons](#) in the Topic pane.



Opens the **Print** dialog box. You can print a selected Notebook entry or all entries with or without your notes. You can also print the notes associated with the selected Notebook entry, or print all of your notes. After selecting the options you want and clicking **Print**, the Windows **Print** dialog box appears.

Pastes text from the Clipboard into the Notes window.

Clears the previous edit made in the Notes window.

Cuts the highlighted text from the Notes window and copies it to the Clipboard.

Selects all text in the Notes window.

The following Help topics are NOT title specific and should need editing only for changes in the Mastering Series application user interface or functionality.

**This file contains only context-sensitive Help information** that appears when the user presses F1 (or right-clicks the mouse) from within the Mastering Series viewer.

The context IDs in this file are MAPPED to the user interface in the .HPJ file. Any changes to these IDs *must* be made to the viewer as well.



**Print.** Click to print the entire topic displayed in the Topic pane.



**Copy.** Click to copy highlighted text or the entire topic in the Topic pane. You can paste the selection into another application or into your Notebook. Open the Notebook window, click the right pane, and press CTRL+V.



**Navigation & Topic.** Click to display the Navigation pane on the left of the window or while viewing the Topic pane on the right. To close the Navigation pane and display only the Topic pane, click **Topic Only**.



**Topic Only.** Click to close the Navigation pane and display the Topic pane only. To display both panes of the window, click **Navigation & Topic**.



**Notebook.** Click to open the Notebook, where you can store a list of topics of particular interest, along with your own notes about them.



**Glossary.** Click to view an extensive glossary of terms and definitions related to Visual Basic.



**Help.** Click to get Help for the title.



**Add to Notebook.** Click to add the selected topic to your Notebook.



**Delete.** Click to delete the selected topic from your Notebook.



**Print.** Click to print topics or notes from your Notebook.



**Paste.** Click to paste selected topic text or contents of the Clipboard to your notes in the Notebook window.



**Go to Topic.** Select a topic in the Notebook, and then click to display the topic in the Topic pane.

You can also go to a topic by double-clicking the topic in the Notebook window.

**URL launch.** Automatically displays the Internet Address of the current site, or the site most recently accessed through Internet Explorer. You can enter a different URL in this text box and press ENTER to launch Internet Explorer to visit another site.

**Contents.** Click to view the Contents in the Navigation pane, and then click an entry to display a topic in the Topic pane.



**Index.** Click to view and search through the Index of the Course and Library.

**Find.** Click to search for a word or topic. You can type a word or phrase, or select a previous search string from the drop-down list. The Find feature supports Boolean search operators.

Click to display **Related Information**, and then click a topic from the list to display it in the Topic pane.

**Back.** Click to go back through the topics you have viewed previously.

To see a list of all topics you have viewed during the current session, click **History** on the **Navigate** menu.

**Previous.** Click to move to the previous topic in the Navigation pane.

**Next.** Click to move to the next topic in the Navigation pane.

When you click the **Contents** button at the top of the Navigation pane, you can select a topic in the Course or Library, scroll through the topics, and click to view a topic in the Topic pane.

You can change from displaying the Contents in the Navigation pane to display the Index or Find window. To display the Index or Find window, click one of the Navigation buttons at the top of the Navigation pane.

**Index.** Displays index entries related to particular topics in the Course and the Library.

**Find.** Displays the Find window, where you can search for a word or topic.

When you click the **Find** button at the top of the Navigation pane, you can search for a word or phrase, or select a previous search string from the drop-down list. To search for a phrase, enclose the phrase in quotation marks.

Click a search result to display the text in the Topic pane.

You can switch the Navigation pane to display the Contents or Index by clicking one of these buttons at the top of the Navigation pane.

**Contents.** Displays topics for the Course or selections from the Library.

**Index.** Displays index entries related to particular topics in the Course and Library.

When you click the **Index** button at the top of the Navigation pane, you can click the text box and type the first few letters of a word. The Index will scroll to the closest entry, and list related topics in the list box at the bottom. Click an index entry to display the topic text in the Topic pane.

You can switch the Navigation pane to display Contents or the Find window by clicking one of these buttons at the top of the Navigation pane.

**Contents.** Displays topics for the Course or selections from the Library.

**Find.** Displays the Find window, where you can search for a word or topic.

The **Topic pane** always displays content, whether it is a selection from the Contents in the Navigation pane, a topic related to an index entry, or a topic you select from the results in the Find window. Click a topic in the Navigation pane to display it in the Topic pane.

**Print Notebook dialog box.** Click a selection to print the current Notebook topic or all topics stored in your Notebook. You can print your notes, topic text, or both.



Lists the **Notebook entries**, including those topics to which you have added notes. To display a Notebook entry in the Topic pane, double-click it, or select the topic and click the **Go To** button on the toolbar.

To add, edit, or delete notes for a particular topic, click the entry, and then add, revise, or delete the notes displayed in the Notes window.

Displays the **Notes** that you have created for particular topics. To add or revise your notes, click the Notes pane in the Notebook window.

**Pop-up illustrations** can be printed or copied to the Clipboard by using the appropriate command on the shortcut menu. Right-click the mouse, and then click **Print** or **Copy**.

The **Sample Code window** opens to the same size and location as when it was last closed. You can resize the window by dragging its borders.

You can select sample code to copy it to the Clipboard. Or, you can print or copy all of the sample code displayed in the window. Right-click the mouse to display the shortcut menu, and then click **Print** or **Copy**.

The **Self-Check answer window** opens to the same size and location as when it was last closed. You can resize the window by dragging its borders.



To view an answer, click the answer icon.

You can print or copy an answer to the Clipboard. Right-click the mouse to display the shortcut menu, and then click **Print** or **Copy**.

---

**Note** You can print or copy the questions displayed in the Topic pane by clicking the **Print** button on the toolbar, or by using the shortcut menu in the Topic pane.

---

The **Tip window** opens to the same size and location as when it was last closed. You can resize the window by dragging its borders.

You can select a portion of a tip to copy it to the Clipboard. Or, you can print or copy the entire tip. Right-click to display the shortcut menu, and then click **Print** or **Copy**.

The **Lab Hint window** opens to the same size and location as when it was last closed. You can resize the window by dragging its borders.

You can select a portion of a lab hint to copy it to the Clipboard. Or, you can print or copy the entire lab hint. Right-click to display the shortcut menu, and then click **Print** or **Copy**.

The **History window** opens to the same size and location as when it was last closed. You can move it, or resize the window by dragging its borders.

Click a topic in the History window to display the topic text in the Topic pane.

---

**Note** You must use the mouse to select a topic in the History window. The keyboard is disabled in this window.

---

The History window stays on top of the main Viewer window until you close it.



A context-sensitive Help topic is not available for this item. Right-click with the mouse to view **What's This?** Help.

The following Help topics are not title specific and should need editing only if there are changes to the Product Support information contained herein.

# When You Have a Question

If you have a question about this title, first refer to this Help file, or read the CD-ROM jewelcase booklet. If you cannot find the answer, contact Microsoft Technical Support.

If you still have a question, Microsoft offers technical support and services ranging from no-cost and low-cost online information services (available 24 hours a day, 7 days a week) to annual support plans. A brief description of these services is provided in the following sections.

---

**Note** The services listed here are available in the United States and Canada only. Services outside of these countries may vary.

---

For information about Microsoft subsidiary offices, see [Product Support Worldwide](#).

---



Related Topics

# Electronic Services

## Information and Electronic Services

Microsoft provides easy access to the latest technical and support information for Microsoft products. You can access a variety of no-cost and low-cost and information services 24 hours a day, 365 days a year.

### Internet services and the Microsoft Network (MSN)

Access the Microsoft Frequently Asked Questions, Software Library, Knowledge Base, customer-to-customer newsgroups, and other technical information and services on our Internet sites.

® On the World Wide Web and MSN, go to <http://www.microsoft.com/support/>

® For FTP access, go to <ftp://ftp.microsoft.com>

## Microsoft FastTips

Call (800) 936-4100 on a touch-tone telephone. Receive automated answers to common technical problems, and access popular articles from the Microsoft Knowledge Base, all of which are delivered by a recording or by fax.

After you reach FastTips, you can use the following keys on your touch-tone telephone.

® To advance to the next message, press \*.

® To repeat the current message, press 7.

® To return to the beginning of FastTips, press #.

## Microsoft Download Service

Access via modem, sample programs, device drivers, patches, software updates, and programming aides (1200, 2400, or 9600 baud, no parity, 8 data bits, 1 stop bit). In the United States, call (425) 936-6735. In Canada, call (905) 507-3022.

# Standard Support

In the United States, unlimited no-charge support is available via a toll call between 6:00 A.M. and 6:00 P.M. Pacific time, Monday through Friday, excluding holidays. For technical support for this title, call (425) 635-7033.

In Canada, support engineers are available via a toll call between 8:00 A.M. and 8:00 P.M. Eastern time, Monday through Friday, excluding holidays. Call (905) 568-3503.

When you call, you should be at your computer and have the appropriate product documentation. Be prepared to give the following information.

- ® The version number of the Microsoft product you are using.
- ® The type of hardware you are using, including network hardware, if applicable.
- ® The operating system you are using.
- ® The exact wording of any messages displayed on your screen.
- ® A description of what happened, and what you were doing when the problem occurred.
- ® A description of how you tried to solve the problem.

# Text Telephone

Microsoft text telephone (TT/TDD) services are available for the deaf or hard-of-hearing. In the United States, use a TT/TDD modem, and dial (425) 635-4948 between 6:00 A.M. and 6:00 P.M. Pacific time, Monday through Friday, excluding holidays. In Canada, use a TT/TDD modem, and dial (905) 568-9641 between 8:00 A.M. and 8:00 P.M. Eastern time, Monday through Friday, excluding holidays.

# Other Support Options

## Microsoft TechNet

Microsoft TechNet is the front-line resource for fast, complete answers to technical questions on Microsoft systems and desktop products. Information available on TechNet ranges from crucial data on client-server and workgroup computing, systems platforms, and database products, to the latest on support for Microsoft Windows and Macintosh applications. As a TechNet user you receive:

- ® Twelve monthly compact discs containing the Microsoft Knowledge Base, Microsoft operating systems product resource kits, customer solutions, key Microsoft conference session notes, and other valuable information.
- ® Twelve monthly supplemental compact discs (drivers and patches) containing the Microsoft Software Library.
- ® A dedicated Microsoft TechNet forum on CompuServe (type **GO TECHNET**).
- ® WinCIM, a Windows application for accessing CompuServe.
- ® A 20% discount on Microsoft Press books.

For more information about Microsoft TechNet, in the U.S. and Canada, call (800) 344-2121, between 7:00 A.M. and 7:00 P.M. Central time, Monday through Friday. Outside the U.S. and Canada, contact your Microsoft subsidiary, or call (303) 684-0914.

## Microsoft Authorized Support Centers

Microsoft Authorized Support Centers (ASCs) are a select group of strategic support providers who offer high-quality customized support services that span the complete systems life cycle of planning, implementation, and maintenance of your multi-vendor environment. Services include:

- ® On-site support
- ® Integration and implementation services
- ® Help desk services
- ® Hardware support
- ® Development resources

Choosing an ASC enables you to work with one vendor for all of your technical support and service needs. You can also combine ASC services with your in-house help desk, or the Microsoft support service option that best fits your information technology support needs.

For more information about the ASC program, in the U.S. call (800) 936-3500 between 6:00 A.M. and 6:00 P.M. Pacific time, Monday through Friday, excluding holidays. In Canada, call (800) 563-9048 between 8:00 A.M. and 8:00 P.M. Eastern time, Monday through Friday, excluding holidays.

# Product Training and Consultation

Microsoft Solution Providers are independent developers, consultants, and systems analysts who offer fee-based technical training and support, industry knowledge, objective advice, and a range of value-added services to companies of all sizes. Solution Providers work with organizations to help implement computing systems that take advantage of the current new technologies.

For the name of a Microsoft Solution Provider near you, in the U.S. call (800) 426-9400 between 6:30 A.M. and 5:30 P.M. Pacific time, Monday through Friday, excluding holidays. In Canada, call (800) 563-9048 between 8:00 A.M. and 8:00 P.M. Eastern time, Monday through Friday, excluding holidays.



# Product Support Worldwide

If you are outside the United States and have a question about a Microsoft product, first:

- ® Consult the documentation and other printed information included with your product.
- ® Check online Help.
- ® Consult electronic options, such as CompuServe forums or bulletin boards, if available.

If you cannot find a solution, you can receive information about how to obtain product support by contacting the Microsoft subsidiary office that serves your country.

## Calling a Microsoft Subsidiary Office

When you call, you should be at your computer and have the appropriate product documentation. Be prepared to give the following information.

- ® The version number of the Microsoft product you are using.
- ® The type of hardware you are using, including network hardware, if applicable.
- ® The operating system you are using.
- ® The exact wording of any messages displayed on your screen.
- ® A description of what happened, and what you were doing when the problem occurred.
- ® A description of how you tried to solve the problem.

Microsoft subsidiary offices, and the countries they serve, are listed as follows. If there is no Microsoft office in your country, contact the establishment from which you purchased your Microsoft product.

[Argentina](#)

[Australia](#)

[Austria](#)

[Europe](#)

[Belgium](#)

[Bolivia](#)

[Brazil](#)

[Canada](#)

[Caribbean](#)

[Czech Republic](#)

[Chile](#)

[Colombia](#)

[Denmark](#)

[Dubai](#)

[Ecuador](#)

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[French Polynesia](#)

[Germany](#)

[Greece](#)

[Hong Kong](#)

[Hungary](#)

[Indonesia](#)

[India](#)

[Ireland](#)  
[Israel](#)  
[Italy](#)  
[Japan](#)  
[Korea](#)  
[Liechtenstein](#)  
[Luxembourg](#)  
[Malaysia](#)  
[México](#)  
[Netherlands](#)  
[New Zealand](#)  
[Northern Ireland](#)  
[Norway](#)  
[Papua New Guinea](#)  
[Paraguay](#)  
[Philippines](#)  
[Poland](#)  
[Portugal](#)  
[Republic of China](#)  
[Republic of Ireland](#)  
[Russia](#)  
[Scotland](#)  
[Singapore](#)  
[Slovenia](#)  
[Slovak Republic](#)  
[South Africa](#)  
[Spain](#)  
[Sweden](#)  
[Switzerland](#)  
[Turkey](#)  
[United Kingdom](#)  
[Uruguay](#)  
[Venezuela](#)  
[Wales](#)

Microsoft de Argentina S.A.  
Customer Service: (54) (1) 819-1900  
Fax: (54) (1) 819-1921  
Technical Support for Development Tools: (54) (1) 819-1900  
Technical Support for Windows 95: (54) (1) 314-0560

Microsoft Pty. Ltd.

Installation Support: (61) (02) 870-2870

Fax: (61) (02) 805-0519

Bulletin Board Service: (61) (02) 878-5200

Technical Support: (61) (02) 870-2131

Sales Information Centre: (61) (02) 870-2100

Microsoft Ges.m.b.H.  
Phone: 0222-68 7607  
Fax: 0222-68 16 2710  
Information: 0660-6520  
Prices, updates, etc.: 0660-6520  
Windows installation: 0660-6520  
CompuServe: GO MSEURO (Microsoft Central Europe)  
General Information about Microsoft Technical Support in Central Europe:  
Fax: 0049/2622/167006

Technical support: 0660-6511

Microsoft Belgium

Phone: (32) (2) 730-3911

Fax: (32) (2) 726-9609

Technical Support:

(32) (2) 513-3274 (Dutch speaking)

(32) (2) 502-3432 (English speaking)

(32) (2) 513-2268 (French speaking)

Bulletin Board:

(32) (2) 726-8545

(14400/1200/2400/9600 bd, 8N1, ANSI)

(Argentina)

Microsoft de Argentina S.A.

Customer Service: (54) (1) 819-1900

Fax: (54) (1) 819-1921

Technical Support for Development Tools: (54) (1) 819-1900

Technical Support for Windows 95: (54) (1) 314-0560



Microsoft Informatica Ltda.  
Phone: (55) (11) 514 -7100  
Fax: (55) (11) 514 - 7106/514-7107  
Technical Support Phone: (55) (11) 871-0090  
Technical Support Fax: (55) (11) 262-8638  
Technical Support Bulletin Board Service: (55) (11) 872-4106  
Technical Support Help by Fax (55) (11) 871-4701

Microsoft Canada, Inc.

Head Office Phone: (905) 568-0434

Customer Support Centre: (800) 563-9048

MS Office Technical Support Phone: 1 (905) 568-2294

Priority Support Information: 1 (800) 668-7975

Text Telephone (TT/TDD) 1 (905) 568-9641

Technical Support Bulletin Board Service: 1 (905) 507-3022

Microsoft Caribbean, Inc  
Tel: (809) 273-3600  
Fax: (809) 273-3636  
Technical Support: (214) 714-9100

Microsoft Chile S.A.  
Phone: (56) (2) 330-6000  
Fax: (56) (2) 330-6190  
Customer Service: 56) (2) 800-213121  
Personal Operating System and Applications:  
Phone: (56) (2)-330-6222  
Fax: (56) (2) 341-1439

Microsoft Colombia  
Tel: (571) 618 2245  
Soporte Técnico: (571) 618 2255  
Fax:(571) 618 2269

Microsoft  
Panská 6  
11000 Praha 1  
Phone (+42) (2) 2423-7089 or 2423-4325  
Fax: (+42) (2) 2423-4343  
Technical Support:  
Phone: (+42) (2) 2150 3222

Microsoft Denmark AS  
Phone: (45) (44) 89 01 00  
Technical Support: (45) (44) 89 01 11  
Microsoft Sales Support: (45) (44) 89 01 90  
Microsoft BBS:  
(45) (44) 66 90 46  
(Document 303030 in FaxSvar contains detailed instructions)  
Microsoft FaxSvar: (45) (44) 89 01 44

Microsoft Middle East  
Phone: (971) 4 513 888  
Fax: (971) 4 527 444



Microsoft Corporation Ecuador S.A.  
Phone: (593) 2 460-447, (593) 2 460-451  
Customer Service: (593) 2 460-453, (593) 2 460-458  
Technical Support: (593) (2) 463-094

(United Kingdom)  
Microsoft Limited  
Phone: (44) (01734) 27-0000, (01734) 27-0001  
Fax: (01734) 27-0002  
Pre-Sales Information: (0345) 00-2000  
Upgrades & Registration: (44) (816) 14-8000  
Bulletin Board Service:  
    (01734) 27-0065 (up to 14.4Kbaud, n, 8, 1)  
Fax Information Service (01734) 27-0080  
Customer Support: (01734) 27-1000  
Developer Support: (01734) 27-1414  
Advanced Systems Support: (01734) 27-1007

Microsoft OY

For Technical Support, please contact your local dealer.

Phone: (0358) (90) 525 502 500

Microsoft FaxSvar: (46) (0)8 752 29 00

(Information in Swedish and English)

Microsoft BBS:

(46) (0) 8 750 47 42

(Information in Swedish and English)

Microsoft MSDL: 90-455 03 66

Microsoft FastTips: 90-525 502 550

Microsoft France

Phone: (33) (1) 69-86-46-46

Telex: MSPARIS 604322

Fax: (33) (1) 64-46-06-60

Technical Support Phone: (33) (1) 69-86-10-20

Technical Support Fax: (33) (1) 69-28-00-28

Fax Information Service: (33) 36-70-13-13

(France)  
Microsoft France  
Phone: (33) (1) 69-86-46-46  
Telex: MSPARIS 604322  
Fax: (33) (1) 64-46-06-60  
Technical Support Phone: (33) (1) 69-86-10-20  
Technical Support Fax: (33) (1) 69-28-00-28  
Fax Information Service: (33) 36-70-13-13

Microsoft GmbH  
Phone: 089-3176-0  
Telex: (17) 89 83 28 MS GMBH D  
Fax: 089-3176-1000  
Information: 089-3176 1199  
Prices, updates, etc.: 089-3176 1199  
CompuServe: GO MSEURO (Microsoft Central Europe)  
Bulletin board, device drivers, tech notes:  
    Btx: \*microsoft# or \*610808000#  
Standard Support: Installation and Handling  
Windows 95: 089 / 31 76 - 11 15  
General information about Microsoft Technical Support in Central Europe:  
FAX: 02622/167006

Microsoft Hellas, S.A.  
Phone: (30) 1 6806-775 through (30) 1 6806-779  
Fax: (30) 1 6806 780

Microsoft Hong Kong Limited  
Microsoft Hong Kong Limited Phone (852)-2804-4200  
Microsoft Hong Kong Limited Fax (852)-2560-2217  
Product Support Services (852)-2804-4222  
PSS Faxback Service: (852)-2535-9293  
Microsoft Club Upgrade Centre: (852)-2880-5085  
Microsoft Club Member Hotline: (852)-2516-5113  
Technical Support: (852)-2804-4222



Microsoft Kft.

Phone: (+36) (1) 268-1668

Fax: (+36) (1) 268-1558

Microsoft Hotline/Customer Service: (+36) (1) 2MS-INFO (267-4636)

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Prices, Updates: 01-839 61 11

Documentation: Phone: 155 59 00

Fax: 064-224294,

Microsoft Info-Service

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Windows, Windows for Workgroups, Printing System: 01/342-4085

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+32 2 502 34 32 (English speaking)

+32 2 513 22 68 (French speaking)

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Fax: (52) (5) 280-7940

Customer Service: (52) (5) 325-0911

Technical Support: (52) (5) 325-0912 Standard Support

Technical Support: (52)(5) 237-4800 Developers Tools and Advanced Systems

Fast Tips: (52)(5) 237-4894 (24 hours x 365 days service)

Bulletin Board Service:

(52) (5) 628-6200

(2400s/14400k baud, 8 bits, No parity, 1 stop bit, ANSI terminal emulation)

(52) (5) 628-6202

(14400k baud, 8 bits, No parity, 1 stop bit, ANSI terminal emulation)

User: MSMEXICO, NO Password

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    (Document 404040 in FaxSvar contains detailed instructions)  
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Microsoft FaxSvar: (46) (0)8 752 29 00

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(Document 202020 in FaxSvar contains detailed instructions)

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Microsoft MSDL: 08-750 47 42

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CompuServe: GO MSEURO(Microsoft Central Europe)

Documentation:

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The following Help topics are NOT title specific and should not need editing. This information pertains to hardware problems.

# Increasing System Performance

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**Note** The following information is for Windows 95 systems - other systems may vary.

---

If your computer meets minimum system requirements only, try the following procedures to increase system performance.

Ⓜ Close all open applications when running the title.

## **u Have Windows 95 manage virtual memory settings**

1. To display your System Properties, click here.



2. Click the **Performance** tab.

3. Click the **Virtual Memory** button, and then click **Let Windows manage my virtual memory settings (recommended)**.

## **u Defragment your hard drive**

1. Click the Windows 95 **Start** button, and then point to **Programs**.

2. Point to **Accessories**, point to **System Tools**, and then click **Disk Defragmenter**.

---

**Note** To install the Disk Defragmenter, double-click the Add New Programs icon in the Control Panel.

---

## **u Optimize CD-ROM drive settings**

1. To display your System Properties, click here.



2. Click the **Performance** tab.

3. Click the **File System** button, and then click the **CD-ROM** tab.

4. Increase the **Supplemental cache size**, and check that the settings and speed are correct in the

**Optimize access pattern for** drop-down list box.



Related Topics

# Audio Performance Problems

Learn Series titles use the following type of sound file:

® **WAVE** (\*.wav): Digitized audio

To hear these sounds, you must have a sound card that is capable of playing WAVE sounds.

Your sound card uses a special piece of software called a "sound driver" to communicate with your computer. In some instances, you may not hear any sounds when using this title. Usually, this is because your sound driver is not installed or is configured improperly. If you do not hear any sounds, or get an error message saying that there is a problem with your sound card or sound driver when you start the program, the WAVE portion of your sound driver may be either improperly configured or not installed.



Related Topics



# I got an error message about my sound

The two most common error messages about WAVE sounds are:

- ® "A sound card is required to run this title."
- ® "This title cannot get the sound device right now, it's in use elsewhere, try again."

If you receive the first error message, it usually indicates that your sound driver is either not installed, not installed correctly, or not configured correctly. If you receive the second error message, it usually indicates that your sound driver is in use by another open program. Solve this by closing all other open programs, and restarting the Learn Series title.

For more information about troubleshooting WAVE errors, see [I can't hear any sounds](#).


# I can't hear any sounds

## **u If sound does not play at all**

1. Check the volume on your sound card or speakers, and if necessary, turn up the volume.
2. Check that the speakers are connected to your computer, that the power switch is on, and that the batteries (if any) are functional.
3. Check that the software for the audio card is installed correctly, and if necessary, reinstall it.
4. Ensure that the audio card is pressed securely into its slot, or change a jumper setting on the audio card.
5. If you have both an audio card and special software that bypasses the audio card to play sounds through the PC speaker, try removing or disabling the PC speaker driver. This product requires MPC-compatible audio; it is not meant to run with the PC internal speaker only or any combination of the speaker and special software.

# Checking Your Sound Card

## **u** To ensure that your sound card is installed properly

1. To display your system properties, click here.  

2. Click the **Device Manager** tab, double-click **Sound, video and game controllers**, and then double-click the name of your sound card.
3. Click the **General** tab, and under **Device status**, check that the device is working properly.

---

**Note** If your sound driver is not working properly, contact the manufacturer of your sound card.

---

# My sounds are "scratchy"

Sound distortion is often caused by sending a higher volume or amplitude of sound than speakers are able to handle. If the volume control on your audio card is set too high, it may cause distortion from the amplifier on the audio card. Sometimes lower-quality speakers distort at a lower volume than higher-quality speakers.

For example, if your audio card or WAVE file output volume is set to near maximum, it will cause distortion. To change your audio card settings, refer to the documentation that came with your audio card.

## **u To adjust the volume control**

1. To open volume control, click here.



2. Adjust the volume controls.
3. Click the **Close** box.

# My sounds are cut off

Most audio cards can play only one sound at a time; therefore, other products with sound may interrupt sounds from this product. Some programs may take over the audio capability and prevent other Windows programs from creating sounds.

If you think you have another program that produces sounds that could interrupt sounds from this product, do not run the two programs simultaneously.

# My sounds "skip"

If sound breaks up or "skips" periodically, it usually indicates that the CD-ROM drive does not meet the full MPC II (Multimedia PC - Level 2) specifications, and that it needs to be upgraded.

You can continue to use your CD-ROM drive to run this program, but sound will continue to skip.


## **u CD-ROM Drive requirements**

- ® Double-speed CD-ROM: This CD-ROM drive can transfer data from the CD-ROM at 300 KB per second while using less than 40% of the CPU bandwidth, and has an average seek time of less than 400 milliseconds.
- ® MS-DOS CD-ROM Extensions (MSCDEX) version 2.2 or later.

# Checking and Changing Video Settings

This title requires that your [video driver](#) supports a screen resolution of *at least* 640 x 480 (the program will support higher screen resolutions, but we recommend you use 800 x 600 or greater). In addition, the program requires that your video driver is able to display [256 colors](#).

## **u** To check video settings or change them

1. To view your Display Properties, click here.  

2. Click the **Settings** tab.
3. Under **Desktop Area**, drag the slider.

---

**Note** Your monitor and display adapter determine whether you can change your screen resolution.

---

If your video driver is not working properly, contact the manufacturer of your video card.

---

 Related Topics

# The display driver supports less than 256 colors

This title requires a [video driver](#) that supports a screen resolution of at least 640 x 480, although the program will support higher screen resolutions. In addition, the program requires that the video driver be able to display [256 colors](#).

**u To check video settings or change them:**

1. To view display properties in Windows 95, click here.



2. Click the **Settings** tab.
3. Under **Desktop Area**, drag the slider.

---

**Note** Your monitor and display adapter determine whether you can change your screen resolution.

---

If your video driver is not working properly, contact the manufacturer of your video card.



# My machine "hangs"

If you use accelerated [video drivers](#), video drivers with more than 256 colors, or high-resolution video drivers, the product may not display videos correctly. For example, you may see garbled images, or the product may stop running when you play a video.

If you encounter these problems, change to a standard video mode, such as a 640 x 480 resolution with [256 colors](#).

**u To check video settings or change them:**

1. To view display properties in Windows 95, click here.



2. Click the **Settings** tab.
3. Under **Desktop Area**, drag the slider.

---

**Note** Your monitor and display adapter determine whether you can change your screen resolution.

---

Your computer uses hardware called a video card (or video display adapter) to display images on your video monitor. Your computer also uses software called a "video driver" to communicate with your video card (and vice versa).

Video color depth refers to the number of colors that your video driver is capable of displaying simultaneously on your monitor. The maximum number of colors that you can display is determined by a combination of two factors: the amount of video RAM (or VRAM) that your video card has, and the screen resolution.

Most video cards can display 256 colors at a screen resolution of 640 x 480. Greater color depth, or greater screen resolution with 256 or more colors, may require additional VRAM. You can change color depth by selecting the Setting tab in the Windows Control Panel Display option.

Color depth is referred to in terms of "bits" (for example, 8-bit). The number of colors you see is equal to the number 2 to the power of the number of bits to which your color depth is set. The following is a list of the most common color depths and the number of colors that they represent:

<b>2 bit</b>	4 colors
<b>4 bit</b>	16 colors
<b>8 bit</b>	256 colors
<b>16 bit</b>	65,536 colors (often referred to as 64K or 64,000 colors)
<b>24 bit</b>	16,777,216 colors (often referred to as 16M or 16 million colors)

DPI = Dots per inch

