

微软全球唯一指定的教材 高蘋果位通行证 深入专业的编程技术 高级程序员必备

CD-ROM

Microsoft Visual C++6.0 桌面应用程序开发

(影印第2版)



Microsoft Visual C++6.0

MCSD Training Kit

For Exam **70-016**

Microsoft Certified

Professional

Solution Developer

Exam Training

北京大学出版社

http://cbs.pku.edu.cn

[美] Microsoft 公司

Microsoft Visual C++ 6.0 桌面应用程序开发

Microsoft 公司 著

北京大学出版社

内容简介

本书是《徽软指定 MCSD 教材(影印第 2 版)》丛书中的一本,讲述 Visual C++ 6.0 桌面应用程序开发技巧,内容包括建立开发环境、MFC、创建用户界面、建立 COM 组件 、解决方案的测试与调试等。本书还可指导您准备 MCP 70-016 考试(徽软认证解决方案开发人员证书的一门核心考试)。

本书由微软公司专家编写,技术深入,权威性强,可作为 Visual C++ 6.0 桌面应用程序开发人员和 MCP 考试应试者的参考书。

Copyright (2000) by Microsoft Corporation

Original English language edition Copyright © 2000 (year of first publication by author) By Microsoft Corporation (author)

All rights published by arrangement with the original publisher, Microsoft Press, a division of Microsoft Corporation, Redmond, Washington, U.S.A.

著作权合同登记号:图字 01-2000-1383 号

书 名: Microsoft Visual C++ 6.0 桌面应用程序开发(影印第2版)

责任著作者: Microsoft 公司 著

盘 号: ISBN 7-900629-05-X/TP • 06

出 版 者:北京大学出版社

地 址: 北京市海淀区中关村北京大学校内 100871

知: http://cbs.pku.edu.cn

电 话: 出版部 62752015 发行部 62765128 62754140 编辑室 62765126

电子信箱: wdzh@mail.263.net.cn

印刷者:北京大学印刷厂印刷

发 行 者: 北京大学出版社

经 销 者:新华书店

787 毫米×1092 毫米 16 开本 45.75 印张 1180 千字 2000 年 6 月第 1 版 2000 年 11 月第 2 次印刷

定 价: 128.00 元

微软认证是一项综合性认证计划,是对个人的与软件有关的技能的重要评测标准,其证书授予那些能够使用微软公司的产品完成特定任务和实施解决方案的人。微软认证被全世界的技术管理者视为质量的标志,是雇主聘用和考核职员的重要参考依据,又是个人求职和升迁的金钥匙。MCSD 即微软认证解决方案开发人员,获得此证书表明能够使用微软的开发工具、技术和平台(包括 Microsoft Office 和 Microsoft BackOffice)开发自定义商务解决方案。所以,这套面向 MCSD 认证考试的培训教材一经推出,就受到了广大读者的欢迎。针对这种情况,我们及时地推出了它的影印第 2 版,并为每本书附上了 Microsoft SQL Server 2000 的 120 天试用版或者 Microsoft Windows 2000 Advanced Server 的 120 天试用版。

本套影印丛书共分 6 册,分别是《Microsoft Visual Basic 6.0 桌面应用程序开发》、《Microsoft Visual Basic 6.0 分布式应用程序开发》、《Microsoft Visual C++ 6.0 桌面应用程序开发》、《Microsoft Visual C++ 6.0 身面应用程序开发》、《Microsoft Visual C++ 6.0 分布式应用程序开发》、《需求分析和解决方案结构定义》和《Microsoft Visual InterDev 6.0 Web 应用程序开发》。6 册书分别针对不同的用户群体以及 MCSD 认证计划的不同考试,讲述不同的内容,各有侧重,互为补充。

本套丛书具有以下共同特点:

每一章一开始,首先对本章内容作以概括性介绍,让读者有一个总体性认识。然后说明在学习本章内容之前需要具有哪些预备知识,安装哪些软件。

书中提供了大量操作训练实例,让读者能够即时地对所学技能进行有效的练习。

配套光盘中提供了丰富的辅助资料,包括多媒体演示、示例数据和操作训练文件等。 多媒体演示所涉及的是本书中的一些关键概念。操作训练文件则给了读者一个亲自动手的 机会。可以直接在光盘上练习,也可以安装到硬盘上之后再使用。

为了进一步提高本丛书及其配套光盘的质量,希望广大读者把有关的意见或建议反馈 给微软出版社。联系方法是:

电子邮件地址:

tkinput@microsoft.com

微软出版社将通过以下网址提供对本丛书及其配套光盘的修正意见:

http://mspress.microsoft.com/support/

出版者 2000 年 11 月

About This Book

Welcome to *Desktop Applications with Microsoft Visual C++ 6.0 MCSD Training Kit*. By completing the chapters and associated Lab exercises in this course, you will acquire the knowledge and skills necessary to develop solutions using Visual C++ 6.0.

This book addresses the objectives of the Microsoft Certified Solution Developer (MCSD) Exam 70-016, "Designing and Implementing Desktop Applications with Microsoft Visual C++ 6.0." This book provides content that supports the skills measured by the 70-016 exam. Review questions at the end of each chapter test your knowledge of the chapter material, and help you prepare for the exam.

Note For more information on becoming a Microsoft Certified Solution Developer, see "Microsoft Certified Professional Program" later in this section.

Intended Audience

This course is designed for individuals interested in developing their skills in Microsoft Visual C++ 6.0 while developing desktop applications. Topics include using the Microsoft Solutions Framework (MSF); building applications with the Microsoft Foundation Classes (MFC); creating user interfaces; implementing application behaviors; and working with persistent data. Also included are adding database support to applications; creating Component Object Model (COM) components and ActiveX controls; using MFC and the Active Template Library (ATL); Internet programming; error handling, debugging, and testing; and application deployment.

Prerequisites

This book assumes that you have a good working knowledge of C++ application development and are acquainted with but not knowledgeable about Microsoft Visual C++ 6.0 and the Microsoft Windows Application Programming Interface (API). Before beginning this self-paced course, you should have:

- A thorough working knowledge of the C++ language as described by the ANSI standard, including language features such as templates and exception handling.
- A good understanding of the principles of object-oriented software development.
- A good basic understanding of the operation of a Windows application, and the features of the Windows user interface.

Course Overview

This course combines text, graphics, and review questions to teach you about designing and implementing desktop applications with Visual C++ 6.0. The course assumes that you will work through the book from beginning to end. However, you can choose a customized track and complete only the sections that interest you. If you choose to customize your course, see the "Before You Begin" section in each chapter for important information regarding prerequisites.

The book is divided into the following chapters:

- Chapter 1, Preparing for Application Development In this chapter, you will learn about the elements of designing a Visual C++ application using MSF design concepts. You will study the issues that you should consider in planning your design. You will also be given an overview of the Visual C++ development tools through a description of the installation options.
- Chapter 2, Visual C++ Development Environment This chapter discusses the development environment and the tools that enable you to create applications using Visual C++. You will use the MFC AppWizard to generate a development project, which contains source code and resource files that you can compile into a working executable program. You will explore features of the Visual C++ development environment and learn how to configure options for your project. You will also learn how to use Microsoft Visual SourceSafe to manage source code control for a software development team.
- Chapter 3, Building Applications with the Microsoft Foundation Classes In this chapter, you will learn about specific MFC classes and their role in Windows application development. You will learn how the MFC framework implements the basic components of a Windows application, and how it provides an architecture that enables the processing, display, and storage of the application's data.
- Chapter 4, Creating the User Interface This chapter explores some of the elements of a typical Windows application user interface. You will edit application menus and toolbars, and add code to handle user selections. You will update the interface to communicate information to the user. You will also learn how dialog boxes are used in an application, and you will use the dialog editor to create a dialog box template.

- Chapter 5, Implementing Application Behaviors This chapter discusses some of the MFC programming techniques that you can use to implement the operational behavior of an application. You will learn how to make use of dialog box classes, and also how to take advantage of the multithreading capabilities of the Win32 platform. You will learn more about the techniques used to display application data to an on-screen window or a printer. You will also implement Help for an MFC application.
- Chapter 6, Persistent Data In this chapter, you will learn ways to make your application data and settings persistent. You will use the MFC CFile class for general file input/output (I/O) operations. You will also use the serialization facilities of the MFC framework to save and restore structured application data. Finally, you will save individual data items, such as application settings, in the system registry.
- Chapter 7, Adding Database Support In this chapter, you will learn about a variety of data access interfaces available to Visual C++ application developers. These interfaces include features of MFC that provide support for data access and ActiveX Data Objects (ADO), Microsoft's standard interface to essentially all forms of external data.
- Chapter 8, Introducing the Component Object Model This chapter provides a conceptual introduction to COM. COM is a binary standard that defines a way for software objects, developed in different languages or operating on different platforms, to communicate with each other and with other applications. Also included in this introduction are ActiveX controls are COM components designed for placement in an ActiveX control container, such as an application dialog box or a Web page, to perform a self-contained function.
- Chapter 9, Creating COM Components In this chapter, you will create a simple COM component using the ActiveX Template Library (ATL). You will review aspects of the source code generated for your COM object by the ATL wizards, and learn about other approaches to generating COM components.
- Chapter 10, COM Clients This chapter explains how applications and components can act as clients of COM server components by making use of the services that the component provides. You will learn how the Visual C++ compiler simplifies the creation of COM client code. You will also learn techniques for creating COM objects that contain instances of other COM objects.
- Chapter 11, Creating ActiveX Controls In this chapter, you will create a simple ActiveX control using MFC, and analyze the MFC-generated code. You will then develop the same control using the ActiveX Template Library (ATL). You will thus be able to compare the two development methods and assess which method might be most appropriate in a particular development scenario.

- Chapter 12, Internet Programming This chapter introduces some of the features of Visual C++ 6.0 that allow you to create Internet-based applications. You will learn how you can use Dynamic HTML to create application user interfaces, and how you can add Web-browsing capabilities to your applications and components. You will study how to develop an application that creates ActiveX documents—documents that can be hosted by Microsoft Internet Explorer for viewing and editing over the Web. You will also learn how to create Internet Server API (ISAPI) DLLs that enhance the services provided by Microsoft Web servers.
- Chapter 13, Error Handling, Debugging, and Testing In this chapter, you will learn about the three steps that make up the second half of the software development process: error handling, debugging, and testing. These final steps are an essential part of the development process, and merit at least as much attention as that given to the designing and coding phases.
- Chapter 14, Deploying Desktop Applications In this chapter, you will learn some of the ways a Windows application created with Visual C++ can be efficiently deployed. After presenting an overview of deployment methods, the chapter shows how to use InstallShield, a tool that helps automate the creation of installation programs for Visual C++ projects. You will also learn how installation programs install ActiveX controls and other COM components, and how the Microsoft Zero Administration for Windows (ZAW) initiative will affect program installation in the future.

Features of This Book

The following features are designed to enhance the usefulness of this course:

- Each chapter opens with a "Before You Begin" section, which provides information about chapter prerequisites.
- Each chapter is divided into lessons. Most lessons contain procedures that give you an opportunity to use the concepts presented, or explore the part of the application described in the lesson. All procedures are preceded by an arrow symbol.
- Each lesson ends with a short Lesson Summary of the material presented.
- The Review section at the end of the chapter lets you test what you have learned in the lesson.
- The Appendix, "Review Questions and Answers," contains all of the book's review questions and corresponding answers.
- The Glossary contains key terms and definitions used in the course.

Conventions Used in This Book

Before you start reading any of the chapters, it is important that you understand the terms and notational conventions used in this book.

Notational Conventions

- Italic is used for emphasis when defining new terms or indicating place-holders. Italic is also used for references to book, chapter, and section titles.
- **Bold** is used to emphasize selections you make during labs and procedures and to highlight elements such as functions, methods, and classes.
- Names of files and folders might appear in Title Caps. Unless otherwise indicated, you can use all lowercase letters when you type a file or folder name in a dialog box or at a command prompt.
- File name extensions appear in all lowercase.
- Acronyms appear in all uppercase.
- Monospace type represents code samples, examples of screen text, or entries that you might type at a command prompt or in initialization files.
- Square brackets [] are used in syntax statements to enclose optional items. For example, [filename] in command syntax indicates that you can choose to type a file name with the command. Type only the information within the brackets, not the brackets themselves.

Keyboard Conventions

- A plus sign (+) between two key names means that you must press those keys at the same time. For example, "Press ALT+TAB" means that you hold down ALT while you press TAB.
- A comma (,) between two or more key names means that you must press each of the keys consecutively, not together. For example, "Press ALT, F, X" means that you press and release each key in sequence. As another example, "Press ALT+W, L" means that you first press ALT and W together, and then release them and press L.
- You can choose menu commands with the keyboard. Press the ALT key to activate the menu bar, and then sequentially press the keys that correspond to the highlighted or underlined letter of the menu name and the command name. For some commands, you can also press a key combination listed in the menu.
- You can select or clear check boxes or option buttons in dialog boxes with the keyboard. Press the ALT key, and then press the key that corresponds to the underlined letter of the option name. Alternately, you can press TAB until the option is highlighted, and then press the spacebar to select or clear the check box or option button.
- You can cancel the display of a dialog box by pressing the ESC key.

About the Companion CD

The companion CD contains sample exam questions and the files used in the hands-on labs and procedures in the text.

Using the Lab Files

The companion CD contains files required to perform the hands-on lab exercises. To copy the lab files to your hard drive, run the Setup.exe program in the root directory of the CD and follow the instructions that appear on your screen.

By default, the lab files are copied to the \DAVC folder. Each chapter in the book has its own subfolder. (For example, material relating to Chapter 1 can be found in \DAVC\Chapter1.) Each of these folders might contain the following subfolders:

- The \Code folder contains source files and code snippets that you can use as you complete the labs or exercises in the lessons. These files are referenced at the top of the code listing. The icon shown in the left margin identifies the sections of code contained on the CD. You can cut and paste these files to save yourself some typing. (Be sure to exclude the labels.)
- The \Data folder contains other data files that you will use in the course of developing and testing the lab exercises.
- The \Exercises folder contains files related to the exercises in the lessons.
- The \Lab folder contains project files for the labs that appear at the end of each chapter. Most \Lab folders will have the following subfolders:
 - The \Partial folder contains the application as it looks at the beginning of each lab.
 - The \Solution folder contains a completed version of the lab solution. This project has had each step applied and can be used to review the completed lab.

The recommended procedure is to follow the labs in numerical order. Save your work and use it in the next lab to continue developing the example application. If you do not complete a lab, you can start the next lab using the project in the \DAVC\Chapter n\Lab\Partial folder, which will allow you to proceed from the appropriate starting point.

You should check your work against the project in the $\DAVC\C$ hapter $n\L$ ab\ Solution folder after you complete each lab.

Beneath the \DAVC folder is the \Database folder, which contains files that you use to set up the database used by the labs.

Self Test Software Visual C++ 6.0 Sample Exam

To practice taking a certification exam, you can install the sample exam from Self Test Software (STS) contained on the companion CD. Designed in accordance with the actual Microsoft certification exam, this sample includes questions to help you assess your understanding of the materials presented in this book. Each question includes feedback with an associated course reference so that you can review the material presented. Visit the STS Web site at www.selftestsoftware.com for a complete list of available practice exams.

The Self Test Software demonstration for Exam 70-016 is located in the \Exam folder. To install the sample exam on your hard drive, run the Mp016.exe program in this folder and follow the instructions that appear on your screen.

Microsoft Visual C++ 6.0 Starts Here

This companion CD also contains the *Microsoft Visual C++ 6.0 Starts Here* product to help you become more familiar with Visual C++ 6.0. It is located in the \MVC6SH folder (on the companion CD). For installation instructions, refer to the Readme.txt file.

SQL Server 7.0 Trial Edition

On a separate CD, you will find a 120-day limited trial edition of Microsoft SQL Server 7.0 that you can install to enable you to complete the labs. Please refer to the "Getting Started" section for information on how to install SQL Server and how to set up the databases that are used by the labs in this courseware.

Getting Started

To complete the exercises in this book, your computer must meet the following hardware and software requirements.

Hardware Requirements

All hardware should be on the Microsoft Windows Hardware Compatibility List located at www.microsoft.com/hcl.

Computer/Processor	Personal computer with a Pentium-class processor; 166-megahertz (MHz) or higher processor recommended
Memory	24 megabytes (MB) of RAM for Microsoft Windows 95 or later (32 MB recommended); 32 MB for Microsoft Windows NT 4.0 (64 MB recommended)
Hard Disk Space	Visual C++: 300 MB typical; 360 MB maximum
Microsoft Developer Network (MSDN)	57 MB typical; 493 MB maximum
Internet Explorer (IE)	43 MB typical; 59 MB maximum

Windows NT 4.0 40 MB for Windows 95 or later; Option Pack 200 MB for Windows NT 4.0

SQL Server 7.0 170 MB typical; 266 MB maximum

Drive CD-ROM drive

Display VGA or higher-resolution monitor; Super VGA

recommended

Operating System Windows 95; Microsoft Windows 98; Windows NT

Workstation 4.0 with Service Pack 4 or later; Windows

NT Server 4.0 with Service Pack 4 or later

Peripheral/Miscellaneous Microsoft Mouse or compatible pointing device

Software Requirements

The following software is required to complete the exercises in this course:

■ Visual C++ 6.0, Professional or Enterprise Edition

Visual SourceSafe

 Windows NT 4.0 Option Pack including Microsoft Internet Information Server or Microsoft Personal Web Server

SQL Server 7.0 (trial version included with this courseware)

Internet Explorer 4.01 with Service Pack 2 or higher

Installation Instructions

These instructions describe how to install the software you need to complete the exercises and labs in this book, including the following:

- Windows NT 4.0 Option Pack
- Internet Information Server 4.0 (if you are running Windows NT Server 4.0)
 or -

Personal Web Server (if you are running Windows NT Workstation 4.0, Windows 95, or Windows 98)

Both products can be downloaded free of charge from Microsoft's Web site at www.microsoft.com.

SQL Server 7.0 Standard Edition (if you are running Windows NT Server 4.0)
 - or -

SQL Server 7.0 Desktop Edition (if you are running Windows NT Workstation 4.0, Windows 95, or Windows 98)

A limited 120-day trial edition is included with this courseware.

SQL databases that have been created for use with the labs in this book.
These are installed from the companion CD to the \Database folder on your hard drive.

Installing the Windows NT 4.0 Option Pack

The Windows NT 4.0 Option Pack contains Internet Information Server (IIS), which can be installed on Windows NT Server 4.0; and Personal Web Server (PWS), which can be installed on Windows NT Workstation 4.0, Windows 95, or Windows 98. You can obtain the Windows NT 4.0 Option Pack from the Web at www.microsoft.com/ntserver/nts/downloads/recommended/nt4optpk/default.asp

Note To install all the components of the Windows NT 4.0 Option Pack, networking and the TCP/IP protocol must be installed.

► To install and configure the Windows NT 4.0 Option Pack including IIS on Windows NT Server 4.0

- Download and run the Setup.exe file. Because you have Service Pack 4
 or greater installed, the following message appears: "Setup detected that
 Windows NT 4.0 SP4 or greater is installed on your machine. We haven't
 tested this product on SP4. Do you wish to proceed?" Click Yes. If the message appears again, click Yes again.
- 2. When the Windows NT 4.0 Option Pack Setup window appears, click Next.
- 3. Click Accept to agree with the terms of the license agreement.
- 4. Choose a **Typical** installation. Choose the directories in which to install the files or accept the defaults, and then click **Next**.
- 5. For SMTP and NNTP Service Setup, choose the directories you want or accept the defaults, and click **Next**.
- 6. Click Finish when installation is complete.
- 7. Click **Yes** to restart the computer, and accept the systems settings change.

Installing Personal Web Server

Personal Web Server (PWS) comes as a version of the Windows NT 4.0 Option Pack that is configured for installation on Windows NT Workstation 4.0, Windows 95, or Windows 98. You can download PWS from the Web at www.microsoft.com/windows/ie/pws/default.htm.

Note To install all the components of the Personal Web Server, networking and the TCP/IP protocol must be installed.

▶ To install and configure Personal Web Server on Windows NT Workstation 4.0

- 1. Download and run the Setup.exe file. Because you have Service Pack 4 or greater installed, the following message appears: "Setup detected that Windows NT 4.0 SP4 or greater is installed on your machine. We haven't tested this product on SP4. Do you wish to proceed?" Click Yes. If the message appears again, click Yes again.
- 2. When the Windows NT 4.0 Option Pack Setup window appears, click Next.
- 3. Click Accept to agree to the terms of the license agreement.
- 4. Choose a **Typical** installation. Choose a directory in which to install the Default Web home directory or accept the default, and then click **Next**.
- 5. Click Finish when installation is complete.
- 6. Click Yes to restart the computer, and accept the systems settings change.

► To install and configure Personal Web Server on Windows 95 or Windows 98

- 1. Download and run the Setup.exe file. If you are installing on Windows 95, the following message might be displayed: "Setup has installed Winsock2 on your machine and needs to reboot to complete the installation." When prompted to restart your system, click **Yes**. After your computer restarts, the Personal Web Server Setup window appears.
- 2. In the Personal Web Server Setup window, click Next.
- 3. Click Accept to agree with the terms of the license agreement.
- 4. Choose a **Typical** installation. Choose a directory in which to install the Default Web home directory or accept the default, and then click **Next**.
- 5. Click **Finish** when installation is complete.
- 6. Click Yes to restart the computer, and accept the systems settings change.

Installing SQL Server 7.0 Standard Edition

► To install and configure SQL Server 7.0 Standard Edition on Windows NT Server 4.0

- 1. Insert the SQL Server 7.0 CD-ROM. Autorun starts.
- 2. Choose Install SQL Server Components.
- 3. Choose Database Server Standard Edition.
- 4. In the Select Install Method window, choose the **Local** installation and click **Next**.
- 5. In the Welcome window, click Next.

- 6. Click Yes to agree with the terms of the license agreement.
- 7. Complete the User Information with your name (required) and company information (optional).
- 8. Choose **Typical** as the Setup Type, set the Destination Folder for Program Files and Data Files to **c:\mssql7**, accept the defaults, and click **Next**.
- In the Services Accounts window, choose Use the same account for each service. Choose Use the Local System account for Service Settings. Click Next.
- 10. Click Next to start copying files.
- 11. Choose Per Seat as the licensing mode and click Continue.
- 12. When the per-seat licensing agreement is displayed, select the I agree that check box and click OK.
- 13. After the necessary files are copied to your hard drive, click **Finish** in the **Setup Complete** dialog box.
- 14. Exit the SQL Server setup program.
- 15. Restart your computer to configure the Data Access Component. (If you skip this step, you will not be able to import data from a text file later in these instructions.)

Installing SQL Server 7.0 Desktop Edition

- ► To install and configure SQL Server 7.0 Desktop Edition on Windows NT Workstation 4.0
 - 1. Insert the SQL Server 7.0 CD-ROM. Autorun starts.
 - 2. Choose Install SQL Server Components.
 - 3. Choose Database Server Desktop Edition.
 - In the Select Install Method window, choose the Local installation and click Next.
 - 5. In the Welcome window, click Next.
 - 6. Click Yes to agree with the terms of the license agreement.
 - 7. Complete the User Information with your name (required) and company information (optional).
 - 8. Choose **Typical** as the Setup Type, set the Destination Folder for Program Files and Data Files to **c:\mssql7**, accept the defaults, and click **Next**.
 - In the Services Accounts window, choose Use the same account for each service. Choose Use the Local System account for Service Settings and click Next.

- 10. To start copying files, click Next.
- 11. After the necessary files are copied to your hard drive, click **Finish** in the **Setup Complete** dialog box.
- 12. Exit the SQL Server setup program.
- 13. Restart your computer to configure the Data Access Component. (If you skip this step, you will not be able to import data from a text file later in these instructions.)

► To install and configure SQL Server 7.0 Desktop Edition on Windows 95 or Windows 98

- 1. Insert the SQL Server 7.0 CD-ROM. Autorun starts.
- 2. Choose Install SQL Server Components.
- 3. Choose Database Server Desktop Edition.
- 4. In the Welcome window, click Next.
- 5. Click Yes to agree with the terms of the license agreement.
- 6. Complete the User Information with your name (required) and company information (optional).
- 7. Choose **Typical** as the Setup Type.
- 8. Set the Destination Folder for Program Files and Data Files to c:\mssql7, accept the defaults, and click Next.
- 9. To start copying files, click Next.
- When setup is complete, click Yes to restart your computer, and then click Finish.

SQL Server 7.0 Database Configuration for All Operating Systems

- ► To create the Stocks SQL Server database
 - 1. On the Start menu, choose Programs/SQL Server 7/Enterprise Manager.
 - 2. Expand SQL Server(s) up to and including the local computer name.
 - 3. Right-click the **Databases** object. Select **New Database** and type **Stocks** in the **Name** text box. Accept all defaults and click **OK**.
 - 4. Verify that the Stocks database was created, by opening the **Databases** object and viewing the Stocks database.

► To create the Pricehistory table in the Stocks database

1. On the **Tools** menu of the SQL Enterprise Manager, choose **SQL Server Query Analyzer**.

- 2. Open the CreatePHTable.sql script from the \Database folder that was installed from the companion CD. Using the **DB**: drop-down list box, change the database window to the Stocks database. Press F5 to execute the script, or click the **Execute Query** button (with a green right arrow icon) on the toolbar of the SQL Server Query Analyzer. The following message appears: "The command(s) completed successfully."
- 3. Minimize the SQL Server Query Analyzer.

► To import data into the Pricehistory table in the Stocks database

- 1. Using the Enterprise Manager, expand SQL Server(s) up to and including the local computer name.
- 2. Expand the **Databases** object and click the **Stocks** database. On the right side of the screen, choose **Import Data**.
- 3. When the DTS Import Wizard opens, click Next.
- 4. From the Sources drop-down list, choose Text file. In the File name box, type the path for the PHImportData.txt file that was installed from the companion CD to the \Database folder, and click Next.
- 5. In the Select file format window, check that **Delimited** is chosen, accept all defaults, and click **Next**.
- 6. Verify that Comma is chosen as the Column Delimiter and click Next.
- 7. In the Destination drop-down box, verify that Microsoft OLE DB Provider for SQL Server is selected. In the Server box, check that your local server name is displayed. Choose Use SQL Server authentication, type sa as the username, and leave the password blank. Choose Stocks as the Database and click Next.
- 8. In the Select Source Tables dialog box, change Destination table to [stocks].[dbo].[pricehistory], and click Next.
- 9. Ensure that the Run immediately check box is selected and click Next.
- 10. In the Completing the DTS Wizard dialog box, click Finish.
- 11. The following message appears: "Successfully transferred 1 table(s) from flat file to Microsoft SQL Server." Click **OK**.
- 12. When the Transferring Data dialog box appears, click Done.
- 13. Open the SQL Server Query Analyzer and click the **New Query** button on the toolbar. Type the following command: **select * from pricehistory**.
- 14. Press F5 to execute the script, or click the **Execute Query** button on the toolbar of the SQL Server Query Analyzer. The data from the table appears in the results window.