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Mastering Microsoft® Visual Basic® 6 Development

Course Number: 1013A



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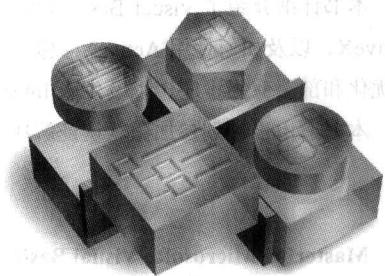




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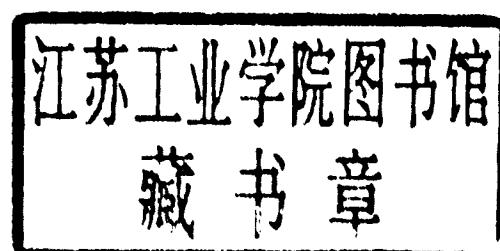
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内容简介

本书详细介绍了 Visual Basic 6 的基本原理、如何使用 Visual Data Access 工具、如何使用类模块、如何生成 ActiveX、以及如何使用 ActiveX 数据对象。还介绍了有关的高级数据访问问题、如何生成和使用 COM 组件、如何优化和部署应用程序、以及生成 Internet 应用程序等。本书通过精心设计的实验，可巩固和加深对知识的掌握。

本书适用于计划参加微软认证解决方案开发专家 (MCSD) 考试的人员。

Mastering Microsoft® Visual Basic® 6 Development

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考试号: 70-217

MCSE 制胜宝典——Microsoft Windows 2000 Active Directory 服务

作 者: Jill Speelman

定 价: 79.00 元(含 1 张光盘)

内容简介: Active Directory 是 MCSE 考试当中操作系统类的核心科目之一。本书的内容涵盖了 Active Directory 基础结构的规划、配置和管理; 域名系统(DNS)的配置; 用户和软件的管理; Windows 2000 的远程部署; 目录服务基础结构中安全措施的实施和维护; Active Directory 性能的监视与优化; 以及如何通过 Active Directory 来实现对用户、组、共享文件夹及网络资源的中心管理。

适用对象: MCSE 应试人员、网络管理员、计算机爱好者

MCSE 制胜宝典——Microsoft Windows 2000 Server

作 者: Microsoft Corporation

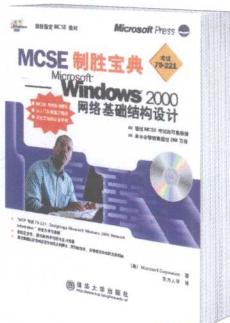
定 价: 98.00 元(含 1 张光盘)

内容简介: Windows 2000 Server 是 MCSE 考试当中操作系统类的核心科目之一。本书介绍了 Windows 2000 Server 安装和配置; 共享系统的管理; Windows 2000 磁盘和数据存储的管理; 硬件设备的设置和故障排除; 系统性能的监视和优化; 以及网络服务的实现保障。

适用对象: MCSE 应试人员、网络管理员、计算机爱好者



考试号: 70-215



考试号: 70-221



考试号: 70-216

网络的资源是 MCSE 的核心考查内容之一。本书介绍了 Windows 2000 网络基础结构的规划; TCP/IP 的配置; Windows Internet Name System (WINS) 和域名系统(DNS)对本地网和 Internet 上主机名称的解析; 动态主机配置协议(DHCP)的配置; 远程访问服务(RAS); 以及如何借助 Network Address Translation 在小型网络中共享单一的 Internet 连接; 如何利用证书、Internet 安全协议(IPSec)身份验证和加密来确保通信的安全。

适用对象: MCSE 应试人员、网络管理员、计算机爱好者

MCSE 制胜宝典——Microsoft Windows 2000 网络基础结构设计

作 者: 微软公司

定 价: 98.00 元(含 1 张光盘)

内容简介: Windows 2000 网络基础结构的设计是

MCSE 考试当中设计类的核心考试科目之一。本书介绍了如何

对组织的商业要求(包括信息流、业务流程和 IT 结构)进行分析; 如何评估现有和未来的网络需求(包括伸缩性、性能、安全性和灾难恢复能力); 如何规划并设计网络的拓扑结构; 如何评估各种多协议路由方案; 如何创建安全可靠的名称解析服务; 如何为 Internet/Intranet 访问选择恰当的组件; 如何制定远程访问解决方案; 如何对 Windows 2000 的网络服务与资源进行监视和管理。

适用对象: MCSE 应试人员、网络管理员、计算机爱好者

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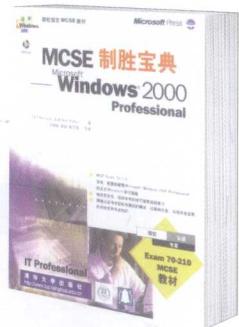
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作 者: Rick Wallace

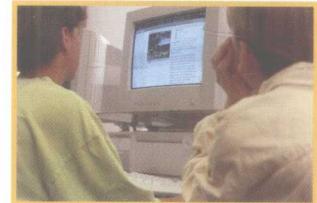
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内容简介: Windows 2000 Professional 是 MCSE 考试当中操作系统类的核心科目之一。本书讲述了如何安装、配置、管理和使用 Windows 2000 Professional, 并介绍许多网络技术方面的知识, 内容有 TCP/IP、DNS 服务器和 Active Directory 目录服务、网络打印机的安装和配置、数据的管理和存储, 以及如何配置远程访问。

适用对象: MCSE 应试人员、网络管理员、计算机爱好者



考试号: 70-210



MCSE 制胜宝典——Microsoft Windows 2000 网络基础结构管理

作 者: Microsoft Press,

Training Associates, Inc

定 价: 59.00(含 1 张光盘)

内容简介: Windows 2000 操作系统是面向网络的操作系统, 如何充分、安全地利用

考试号: 70-216

网络的资源是 MCSE 的核心考查内容之一。本书介绍了 Windows 2000 网络基础结构的规划; TCP/IP 的配置; Windows Internet Name System (WINS) 和域名系统(DNS)对本地网和 Internet 上主机名称的解析; 动态主机配置协议(DHCP)的配置; 远程访问服务(RAS); 以及如何借助 Network Address Translation 在小型网络中共享单一的 Internet 连接; 如何利用证书、Internet 安全协议(IPSec)身份验证和加密来确保通信的安全。

适用对象: MCSE 应试人员、网络管理员、计算机爱好者

MCSE 制胜宝典——直通 Microsoft Windows 2000

作 者: 微软公司

定 价: 132.00 元(含 1 张光盘)

内容简介: 对于那些已经通过 Microsoft Windows NT 的 MCSE 认证并打算参加 70-240 考试的 MCP 来说, 本书是通过 MCSE Windows 2000 认证的捷径。本书涵盖了包括考试 70-210、70-215、70-216 和 70-217 在内的 MCSE Windows 2000 核心认证科目的所有内容。本书将帮助您将在最短的时间里, 花费最小的精力迅速地全面提升自己在 Windows 2000 操作系统方面的工作实力, 确保自己在业界的领先地位。

适用对象: MCSE 应试人员、网络管理员、计算机爱好者



考试号: 70-240

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Chapter 1: Visual Basic Essentials

To complete this course successfully, you should have a basic understanding of how to work with Microsoft® Visual Basic®. This chapter provides a brief review of the skills you need to create Visual Basic applications.

Objectives

After completing this chapter, you will be able to:

- ◆ Use Visual Basic to create a simple application and an executable file for users.
- ◆ List the files that comprise a Visual Basic application.
- ◆ Use the Visual Basic debugging tools.
- ◆ Add run-time error handling to a procedure.

This section introduces the following topics:

- ◆ Understanding Event-Driven Programming
- ◆ Creating a Simple Visual Basic Project
- ◆ Understanding the File in a Visual Basic Project
- ◆ Choosing a Visual Basic Project Template
- ◆ Getting Assistance

Note

13

Understanding Visual Basic Development

This section introduces you to some of the fundamental concepts of Visual Basic development. It lists the steps necessary to create a Visual Basic application, and provides a brief summary of Help resources for Visual Basic.

This section includes the following topics:

- ◆ Understanding Event-Driven Programming
- ◆ Creating a Simple Visual Basic Application
- ◆ Understanding the Files in a Visual Basic Project
- ◆ Choosing a Visual Basic Project Template
- ◆ Getting Assistance

Notes

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Understanding Event-Driven Programming

Visual Basic is derived from the Basic language, which is a structured programming language. However, Visual Basic uses an event-driven programming model.

Procedural Applications

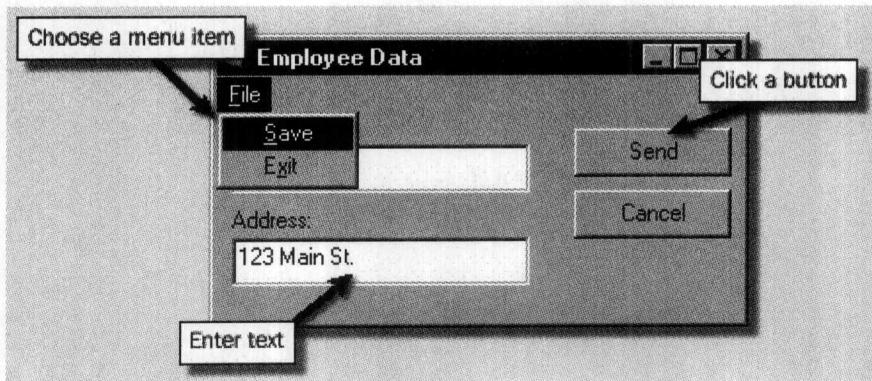
In traditional or procedural applications, the application controls which portions of code run and the sequence in which they run. Application execution starts with the first line of code and follows a predefined path through the application, calling procedures as needed.

Event-Driven Applications

In an event-driven application, execution does not follow a predetermined path. Instead, different code sections run in response to events. Events can be triggered by the user's actions, by messages from the system or other applications, or from inside the application itself. The sequence of events determines the sequence in which the code runs. Therefore, the path through the application's code can differ each time the program runs.

An essential part of event-driven programming is writing code that responds to all the possible events that may occur in an application. Visual Basic makes it easy to implement an event-driven programming model.

The following illustration shows some actions that generate events to which you can respond by writing code. These events can occur in any order.



Notes

Maze

15 Creating a Simple Visual Basic Application

You use the following steps to create an application in Visual Basic:

1. Create the user interface of the application.
2. Write code that responds to events that occur in the user interface.
3. Create components.
4. Test the application.
5. Compile and distribute the application and components.

To see a demonstration of how to create the user interface and add code for a simple application in Visual Basic, click this icon.

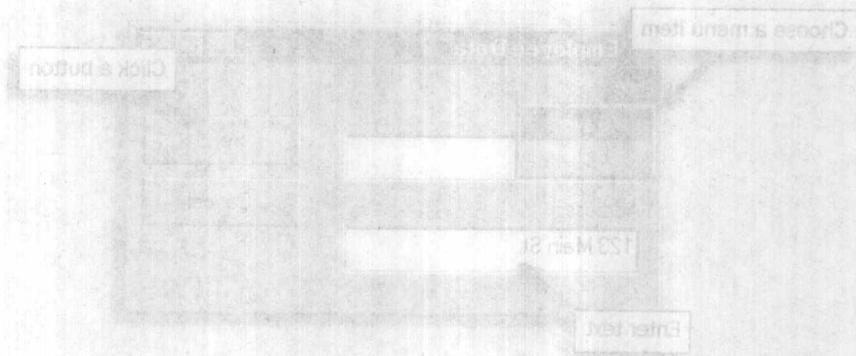


(CD-ROM plays the demonstration, "Creating a Simple Application.")

In the following sections, you learn how to create the user interface of your application by adding controls to a Windows Form. You also learn how to respond to events that occur in the application by writing code that handles those events.

An application consists of one or more windows. A window is a rectangular area on the screen that contains text, graphics, and other elements. Windows are used to display information, accept input, and perform tasks.

The following figure shows a Windows Form with several controls. A Windows Form is a type of window that is used to create a graphical user interface (GUI) application. It can contain various controls such as buttons, labels, text boxes, and checkboxes.



Notes

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16 Understanding the Files in a Visual Basic Project

As you develop an application, you work with a project to manage all the different files that make up the application. A project can include the following files:

- ◆ Group Project File (.vbg)
The group project file is a list of all the projects contained in one group.
- ◆ Project File (.vbp)
The project file is a list of all the files and components associated with the project, as well as information about the environment options you set. Visual Basic updates this file every time you save the project.
- ◆ Form Module (.frm)
A form module contains textual descriptions of the form and its controls, including property settings. A form module can also contain form-level declarations of constants, variables, and external procedures, event procedures, and general procedures.
- ◆ Form Data File (.frx)
Visual Basic creates one binary data file for each form. The file contains binary properties such as pictures or icons. Binary data files are automatically generated and cannot be edited.
- ◆ Class Module (.cls)
Class modules are similar to form modules, except class modules have no visible user interface. You can use class modules to create your own objects, including code for methods and properties.
- ◆ Standard Module (.bas)
Standard modules can contain global declarations of types, constants, variables, external procedures, and public procedures.
- ◆ User Control (.ctl) and Property Page Modules (.pag)
User Control and Property Page modules are similar to forms, but are used to create ActiveX® controls and their associated property pages for displaying design-time properties.
- ◆ ActiveX Controls (.ocx)
ActiveX controls are optional controls that you can add to the toolbox and use on forms. When you install Visual Basic, the files containing the controls included with Visual Basic are copied to a common folder (the \Windows\System folder under Microsoft Windows® 95). Additional ActiveX controls are available from a wide variety of sources. You can also create your own controls using the Professional or Enterprise editions of Visual Basic.
- ◆ ActiveX Documents (.dob)
ActiveX documents are similar to forms, but are displayable in an Internet browser such as Internet Explorer.
- ◆ Active Designer File (.dsr)
Active Designer files store information about the designers you add to your project. These files cannot be edited and are automatically generated for any designer used in an application.
- ◆ Resource File (.res)
Resource files contain bitmaps, text strings, and other data that you can change without having to reedit or recompile your code. A project can contain no more than one resource file.

For more information about binary data files and project files, read the article "Visual Basic Specifications, Limitations, and File Formats" in Visual Basic Help.

For a complete list of the files in a Visual Basic project, read the article "Project File Formats" in Visual Basic Help.

- ♦ **Group Project File (.vbd)**
The Group project file is a file of all the projects contained in the Group.
- ♦ **Project File (.vbp)**
The project file is a file of all the files and components associated with the project, as well as information about the application options you set. A new Visual Studio database library file may have the project file.
- ♦ **Form Module (.frm)**
A form module contains declarations for form and controls, including WithEvents, form-level declarations of controls, WithEvents, and external procedures. A form module can also contain form-level declarations of controls, WithEvents, and external procedures, such as event procedures, WithEvents procedures, and delegates.
- ♦ **Form Data File (.fdx)**
A form Data file is used to store form data for each form. The data consists of pairs such as picture or icon, Visual Basic files, and subroutines and events to be used.
- ♦ **Class Module (.cls)**
Class modules are similar to form modules, except class modules have no specific class identifier. You can use class modules to create your own objects, including ones for methods and properties, and WithEvents.
- ♦ **Standard Module (.bas)**
Standard modules can contain global declarations of forms, constants, variables, external procedures, and public procedures.
- ♦ **User Control (.ctl) and Project Base Module (.bsq)**
User Control and Project Base modules are similar to forms, but they need to access ActiveX controls. They also associate them with objects for displaying and time triggers.
- ♦ **ActiveX Control (.ocx)**
ActiveX controls are optional controls that can be added to any project and run on other Web pages. When you insert ActiveX controls, the developer must first copy and paste the control code into a column under Project Explorer, right-click the control, and then click Microsoft Windows OCX. ActiveX controls are usually inserted into a Web page to show data. You can also choose to add controls from the File Insert menu or Explorer ribbon to ActiveX Base.
- ♦ **ActiveX Document (.dox)**
ActiveX documents are similar to forms, but are displayed in an Internet browser, such as Internet Explorer.
- ♦ **ActiveX Designer File (.des)**
Active Designer files store information about the designer tool app to any project. These files control the settings and the configurations for any designer used in the solution.
- ♦ **Resource File (.res)**
Resource files contain pictures, text strings, and other data that can't be written without visual editing. A binary file containing no source code. A binary file consisting of binary data.

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Choosing a Visual Basic Project Template

Visual Basic offers several project templates designed to support the development of different kinds of applications and components. As you begin developing an application, you first decide what kind of project template to use. A project template contains the basic project objects and environment settings you need to create the type of application or component you want.

You will learn about the following project templates in this course:

- ◆ Standard EXE

Standard EXE projects contain a form by default. Use this project template to develop a stand-alone application. For more information, see Creating a Simple Visual Basic Application in this chapter.

- ◆ Data Project

A Data Project is a Standard EXE project that, in addition to a form, contains a **DataEnvironment** object and a **DataReport** object by default. Use this project template to develop an application that reads or manipulates data from a data source. For more information, see Chapter 2: Using Visual Data Access Tools.

Note Data Project templates contain references to the Microsoft ActiveX Data Objects (ADO) library and several other data-specific components. If you do not need all of the components that are included by default, you can use a Standard EXE project template instead, and set references manually for the components you want. For information about how to set references, see Using Components in this chapter.

- ◆ ActiveX EXE/ActiveX DLL

ActiveX EXE and ActiveX DLL projects contain a class module by default. Use these project templates to develop COM components that expose functionality to other applications.

Use an ActiveX EXE project template if your component will both expose functionality programmatically and run as a stand-alone application. Use an ActiveX DLL project template if your component will only be used programmatically by another application. For more information, see Chapter 8: Building COM Components.

- ◆ ActiveX Control

ActiveX Control projects contain a **UserControl** object by default. Use this project template to create a component designed to be a user interface element in a form or dialog box. For more information, see Chapter 4: Building ActiveX Controls.

- ◆ ActiveX Document EXE/ActiveX Document DLL

ActiveX Document EXE and ActiveX Document DLL projects contain a **UserDocument** object by default. Use these project templates to create components designed for use in a document object container, such as Internet Explorer. For more information, see Chapter 10: Building Internet Applications.

- ◆ DHTML Application

DHTML Application projects contain a **DHTMLPage** object and a class module by default. Use this project template to create a component that can be used on the client side of a Web application. For more information, see Chapter 10: Building Internet Applications.

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