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# MCDBA

## SQL Server 2000 考试指南

MCDBA SQL Server 2000 All-in-One Exam Guide

英文  
原版

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# MCDBA SQL Server 2000 考试指南

(英文原版)

MCDBA SQL Server 2000 All-in-One Exam Guide

[美] Dave Perkovich 著

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## 内 容 简 介

本书是美国著名的出版商 McGraw-Hill 出版的畅销认证系列丛书 All-in-One 之一。包含微软认证数据库管理员 (MCDBA) 认证两门核心考试的内容, 全面介绍了 SQL Server 的各种不同版本, 包括每个版本支持的操作系统, 以及 SQL Server 2000 的高级特性。读者可以学到如何进行本地和远程安装、管理 Windows 2000 Server 和 SQL Server 2000 以及管理和维护数据等内容。本书每章都包括详细的考试目标、实际练习和考试技巧, 是一个实用的学习工具。

本书所附光盘中包含大量原汁原味的考试试题以及自适应测试引擎。本书不仅适用于准备 MCDBA 考试, 也是设计、实现和管理 Microsoft SQL Server 数据库的重要资源。

Dave Perkovich **MCDBA SQL Server 2000 All-in-One Exam Guide.**

ISBN 0-07-213158-6

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版权合同登记号: 图字: 01-2001-5390

图书在版编目(CIP)数据

MCDBA SQL Server 2000 考试指南(英文原版)/(美)珀克韦奇(Perkovich, D.)著

-北京: 电子工业出版社, 2002.4

(专业认证考试丛书)

书名原文: MCDBA SQL Server 2000 All-in-One Exam Guide

ISBN 7-5053-7529-6

I M. II 珀. III 关系数据库-数据库管理系统, SQL Server 2000-工程技术人员-资格考核-自学参考资料 IV TP311.138

中国版本图书馆CIP数据核字(2002)第015076号

责任编辑: 赵宏英

印 刷: 北京天竺颖华印刷厂

出版发行: 电子工业出版社 www.phei.com.cn

北京市海淀区万寿路173信箱 邮编: 100036

经 销: 各地新华书店

开 本: 787 × 1092 1/16 印张: 27 字数: 674千字

版 次: 2002年4月第1版 2002年4月第1次印刷

定 价: 56.00元(含光盘)

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## DEDICATION

I would like to dedicate this book to my wife, Joan, and my daughter Ellie.  
Without their support for all the weekends at the office,  
I would never have been able to complete this project.

## ACKNOWLEDGMENTS

I would like to thank the team at Osborne/McGraw-Hill including Michael Sprague, Paulina Pobocha, and Monika Faltiss. Together, they helped keep me moving forward and ensuring that this book made it into your hands.

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# INTRODUCTION

This exam guide has been developed to cover the two Microsoft SQL Server 2000 exams that lead to your Microsoft Certified Database Administrator certification. These include exams 70-228 and 70-229. To obtain your MCBDA status, you will also need to pass two additional exams that include one elective. For complete exam information, and the latest objectives, visit Microsoft's Web site at [\*\*www.microsoft.com/training\*\*](http://www.microsoft.com/training).

Because this exam guide covers the objectives associated with two exams, you will notice Chapters 2 through 8 cover the objectives for exam 70-228, and Chapters 9 through 14, in turn, cover the objectives for exam 70-229. Chapter 1 has been included to provide a general overview and introduction to Microsoft SQL Server 2000 and can really apply to both exams.

When preparing for the two SQL Server 2000 exams, you will want to use this exam guide in association with the additional reference materials included with SQL Server called Books Online. Books Online can be optionally installed when you setup SQL Server. More details about installing Books Online are discussed in Chapter 2.

When you have completed the exercises included in this exam guide, two 75-question sample exams have also been provided. These exams are not designed to provide you direct answers to what you will find on the actual Microsoft exams. Instead, you should use these questions to help you determine how prepared you are before attempting the actual exams. You may find that after completing the sample exams, you will need to return to the material presented in this book for further study.

Before starting this exam guide, you will want to have a test server running Windows 2000 or Windows 2000 Advanced Server. The steps necessary to install SQL Server will be provided. So, when preparing your server in order to complete the exercises included in these chapters, you only need to install and configure the operating system.



# Introducing Microsoft SQL Server 2000

By the end of this chapter, you will be able to

- Describe the components and architecture of SQL Server 2000
- List the editions of SQL Server 2000 and their requirements
- Plan the implementation of SQL Server 2000

Welcome to the Osborne McGraw-Hill *All-in-One MCDBA Exam Guide*. In this chapter, you will be introduced to Microsoft SQL Server 2000. This chapter will also introduce you to the Northwind Distributors case study. This case study will be used throughout the exam guide to help illustrate the concepts presented. A general overview of SQL Server will be provided. Topics will include options for implementing a SQL Server solution and which services are installed with SQL Server. You will also learn about some of the new advanced features included with this version of SQL Server. The various editions of SQL Server 2000 will also be described including which operating systems each edition supports. This chapter will conclude with a discussion of planning a SQL Server installation including hardware and licensing considerations.

## Northwind Distributors Case Study

The following fictional case study is presented to help you understand the concepts discussed in this exam guide. Throughout this chapter and future chapters, references will be made to Northwind Distributors, LTD. In later chapters, the technical requirements and business model of Northwind will change to further illustrate the concepts presented in the specific chapter. You should therefore have a good understanding of Northwind and their network and database needs before proceeding to future chapters.

With the release of SQL Server 2000, Northwind has decided to implement SQL Server 2000 as its enterprise database. Northwind is a small distributor of foods for use by commercial restaurants in North America. Their product line consists of over 75 items used by restaurants in the preparation of a variety of authentic cuisine. They have several contracts with major restaurant chains and a number of independent restaurants in four regions across the United States. Their goal is to use SQL Server 2000 to meet the various needs of the organization. Currently, Northwind has four locations: Phoenix, San Antonio, Vancouver, and a new office in Los Angeles. All locations have warehouses and a sales staff. The Phoenix office is the company's headquarters.

Currently, the corporate network consists of Windows NT 4.0 servers. Phoenix has three servers, San Antonio has one, and Vancouver has one. Each location, other than Los Angeles, has its own domain with

a Windows NT domain controller. Because it just opened, Los Angeles does not yet have its own server or domain. Clients in Los Angeles are currently being authenticated remotely on the Phoenix domain. Further, clients in all locations are running a mix of Windows 98 and Windows 2000 Professional operating systems.

The offices, including Los Angeles, are connected through Phoenix using virtual private networks on dedicated T1 lines using the Internet as a WAN backbone. Phoenix, San Antonio, and Vancouver each have their own SQL Server 7.0 database. Management wants Los Angeles to be configured similarly using SQL Server 2000. They also want the replication of sales data between all offices to improve. Currently, data is replicated through a manual process that the database administrator performs in Phoenix once a week.

## Microsoft SQL Server 2000 Overview

Microsoft SQL Server 2000 represents the latest enterprise database technology from the Microsoft Corporation. Originally developed in 1989, this latest version of SQL Server has a number of enhancements over previous versions. These enhancements are designed to enable organizations to deploy a highly scalable and reliable database solution. SQL Server has been developed to leverage the new Microsoft .NET platform strategy and can be used to build e-commerce, line-of-business, and data warehousing solutions.

## Implementation Architectures

SQL Server now supports three implementation architectures. These include the following:

### Desktop Server

Under this implementation, SQL Server is installed as a database server on a single desktop computer. The applications that will be interacting with the database are installed on the same computer. This implementation is similar to using Microsoft Access with a single user. A desktop server implementation of SQL Server is typically only useful when a small number of users are present (because they must share the same physical computer) and the size of the database itself is relatively small. In contrast to the client/server implementations described in the following section, a desktop server does not provide support for connections to the database from other computers on the network. Desktop servers can also be installed for use on a laptop computer.

### Two-Tier Client/Server

In a two-tier client/server implementation, clients across the network make direct requests to the SQL Server database (see Figure 1-1). In this case, SQL Server is installed on a server separate from the client computers. Unlike the desktop server implementation, a two-tier solution spreads the computing resource responsibilities across the various systems (the server tier and the desktop tier) that are involved. For example, you may have a dedicated Windows 2000 Advanced Server that hosts the SQL Server 2000 database. Clients may be connecting from a Visual Basic application that is running on their local Windows 2000 Professional desktop computer. As a result, the client computers are providing the user interface and data processing power, whereas the Windows 2000 server is providing the computing power to run SQL Server, such as processing requests, managing data updates, and so on.