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CD-ROM

Microsoft® Exchange 2000 Server 管理员指南

（影印版）

Microsoft® Exchange 2000 Server Administrator's Companion

- 综合性日常操作手册
- 规划、部署和维护专业指南
- Exchange 2000 Server 管理员必备

[美] Walter J. Glenn
Bill English 著

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内 容 简 介

本书面向大、中、小型机构，介绍 Exchange 2000 Server 的规划、部署和维护过程中涉及的各种常用技能，包括它的存储和路由结构、用户需求和资源部署、安装和管理、各种服务，与 Windows 2000 Server 的集成，安全管理，故障排除和性能优化等。本书配有 CD-ROM，内有全书的电子版以及 Exchange 2000 Server 部署常用技能的白页。

本书由微软公司组织权威人士编写，极具技术纵深，是一本不可多得的系统管理用书。

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出 版 前 言

如果用一个成语来概括国内计算机图书市场的现状，当谓之“汗牛充栋”。然而，如果您是一位从事计算机应用系统开发或管理的中、高级专业人士，很可能发现这貌似种类齐全的计算机图书中，为您量身定做的并不多见。

依据多年从事计算机图书工作所积累的经验，以及与 IT 领域广泛而深入的接触所获取的信息，我们认识到，具有相当的专业深度和技术前沿性的图书，是计算机专业人员的迫切需要，当然，也是我们从事计算机图书工作、服务专业领域的一大着眼点。

基于这一点，2000 年元月，我们与微软出版社(Microsoft Press)达成合作协议，成立微软图书影印中心，独家代理微软出版社图书影印版在中国大陆的出版、发行，为 IT 业界提供及时的专业技术服务。选题和策划上的匠心独运，使得我们的影印书成为计算机图书中的标新立异者。这里，有四大特色值得读者朋友予以关注：

首先，这是微软出版社第一次授权在中国大陆影印、发行它的版权书。在选题上，可以说独辟蹊径。在内容上，立足技术广度和深度，系统推介微软产品。所有这些，都是目前国内一般计算机图书所无法比拟的。

其次，我们的理念是为国内计算机专业人员学习前沿性的微软技术提供服务。为此，我们不但与微软公司紧密协作与沟通，及时掌握微软最新技术动向，而且组织了精干的工作人员，倾力于微软影印书的出版和发行。

再者，微软影印书主要面向中、高级专业人员，印量有限。这类书的读者对象有较强的针对性，一般来说，包括 IT 决策人员，中、高级开发人员，以及中、高级系统管理人员。因而，我们将每套书的印数控制在 1000~2000 册之间。

最后，微软图书影印版几乎与原版书保持同步发行，最大限度地满足了国内读者跟踪微软最新技术的需求。软件升级越来越快，新软件令人目不暇接。作为技术载体之一的图书，只有迅速作出反应，把新软件介绍给读者，才能赢得他们的青睐。总之，兵贵神速，这是我们的目标。

正应验了前人的预言，21 世纪是一个信息时代。软件作为信息系统的神经，在我们生活的这个时代里发挥着举足轻重的作用，而微软公司和它推出的各种软件，更是令世人为之瞩目。我们将立足图书，继续并扩大与微软公司的合作，在中国信息产业的发展道路上留下自己的足迹。

出版者

2000 年 10 月

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Acknowledgements

This book represents the culmination of a personal and professional journey for me. Five years ago, I was in private practice in the health care field when I decided to make a career change. Over the last five years, many have helped me along the way and all of them, in one way or another, have played a part in this book.

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Most importantly, I want to thank Jesus Christ, who gave me the opportunity and talent to co-author this book and without whom I would be lost forever.

Bill English
Maple Grove, Minnesota
June 26, 2000

As usual, a lot of people did a lot of work to put this book into your hands. Foremost, I'd like to thank my co-author, Bill English, for all his work. He signed on to this project at the last moment when another author dropped out. Bill took up the challenge and did a great job. I'd also like to thank Nick Cavalencia for a grueling technical review and for contributing updated chapters to the book as well.

The folks at Microsoft Press also deserve special thanks for guiding this book through its various stages. David Clark, acquisitions editor, and Barbara Moreland, project editor, both helped to make sure that this book is of the best quality and that it was published on schedule.

Walter J. Glenn
Hunstville, Alabama
July 5, 2000

Introduction

Welcome to Microsoft Exchange 2000 Server! Whether you are an experienced Exchange administrator or just learning this product, you are going to be impressed with its new features, increased flexibility, and expanded information management capabilities. The development team at Microsoft has done an outstanding job of continuing the Exchange tradition of offering superior messaging services—Exchange 2000 Server is the best ever!

Microsoft Exchange 2000 Server is designed to meet the messaging and collaboration needs of businesses of all sizes. *Microsoft Exchange 2000 Server Administrator's Companion* is designed not only to bring you up to speed in setting up the various features of Exchange 2000 Server, but also to show you how these features work and why you might want to use them. We also offer advice from first-hand experience in the real world of Exchange networks.

It's impossible to cover every element of Exchange 2000 Server in detail in one book. However, this *Administrator's Companion* is a great place to start as you consider implementing Exchange 2000 Server in your Windows 2000 organization. This book can be used in several different ways. It can be read as a

- guide to planning and deployment,
- ready reference for day-to-day questions,
- source of information needed to make decisions about the network, or a
- thorough introduction to the particulars of Exchange 2000 Server.

We assume that the reader has a fundamental understanding of networking concepts and of Microsoft Windows 2000 Server. We have attempted to provide background at appropriate points as well as references to additional resources.

Overview of Contents

Exchange 2000 Server Administrator's Companion is divided into six parts, roughly corresponding to each stage in the implementation of an Exchange 2000 network.

Part I: Introduction

We begin by outlining the new features of Exchange 2000 Server. Then we dive in for a close look at the program's storage and routing architecture. Chapter 1 is designed to get you up to speed quickly on what Exchange Server is and some of the features it offers. This first chapter also serves as a roadmap for the rest of the book. Chapters 2 and 3 show you how to plan for and implement your routing architecture. They introduce Exchange 2000 Server's new Web store, demonstrate how the databases and transaction logs provide you with a high level of recoverability, and discuss the new link state protocol—all dramatic improvements over the routing architecture of Exchange Server 5.5. Chapter 4 explains the tight integration between Exchange 2000 Server and Windows 2000 Server, particularly the integration between Exchange and the Windows 2000 Active Directory directory service, Internet Information Server 5.0, and Windows 2000 DNS.

Part II: Planning

Every successful implementation of a messaging system requires good planning, and Exchange 2000 Server is no exception. Two chapters are devoted to planning issues. Chapter 5 looks at methods for taking stock of a current network and assessing the needs of users on that network prior to an Exchange 2000 Server deployment. Chapter 6 examines ways to create an actual deployment plan, based on the needs assessment methods outlined in Chapter 5.

Part III: Deployment

After learning about the architecture of Exchange 2000 Server and how to plan for its deployment, you're ready to get your hands dirty. In this section (the longest) we outline how to install Exchange 2000 Server and how to implement its various features in the way that best suits your organization. Chapter 7 details the various methods of installing Exchange 2000 Server, including installing a new organization, installing into an existing organization, and upgrading an Exchange 5.5 installation. This chapter also shows how to make sure a server is ready for Exchange 2000 Server installation. Chapter 8 introduces you to the Microsoft Management Console (MMC)—the new management interface included with Windows 2000—and it provides a tour of the management resources in the Exchange System snap-in for the MMC.

The next group of chapters—Chapters 9 to 13—covers a whole host of other topics: creation and management of recipients (users, contacts, groups, and public

folders), storage groups, routing and administrative groups, and routing group connectors, such as the SMTP and X.400 Connectors. Since many of you will be performing migrations, Chapter 14 covers this very important topic. Here we discuss the Active Directory Connector and Site Replication services and explain how Exchange 2000 server can co-exist with Exchange 5.5 servers on the same network.

Part IV: Clients

The best implementation of Exchange 2000 Server won't do your organization much good if there aren't any clients to connect to it and use it; in this section we've provided an overview of the clients for Exchange 2000 Server. The topics presented here could easily be expanded into their own book, so we've covered the more important topics and referenced other materials where appropriate. Chapter 15 gives a general introduction to the various types of clients that can be used to connect to an Exchange 2000 server, Chapter 16 focuses on Microsoft Outlook 2000 and examines the issues surrounding its deployment, and Chapter 17 covers some basic protocols—NNTP, SMTP, IMAP4, and OWA. We go over the basic commands of each and discuss how to use the logging features for troubleshooting purposes.

Part V: Functionality

Exchange 2000 Server ships with several new and interesting features. Among them are two real-time collaboration programs: Chat Service and Instant Messaging. Chapter 18 discusses Chat Service, both the client and the server sides. (Chat Service is most often used in conjunction with video conferencing, a topic not covered in this book.) Chapter 19 covers Instant Messaging, detailing how to setup routing and home servers and outlining how to setup the client for this service.

Exchange 2000 takes advantage of the new Active/Active clustering services of Windows 2000 Server, which is covered in Chapter 20. Chapter 22 looks at the procedures for connecting Exchange 2000 Server organizations to foreign messaging systems, such as Microsoft Mail for PC Networks and X.400 systems.

Security is a primary concern of any network administrator, and Exchange 2000 in collaboration with Windows 2000 offers enhanced options for protecting your organization. While this is another topic that could easily fill a book of its own, in Chapter 21 we offer as comprehensive a look at security as this space permits, including details on Certificate Authority and Key Management Service.

Part VI: Maintenance

Every system—even Exchange 2000 Server—needs maintenance. We've addressed the most important maintenance tasks in this section. In Chapter 24, we cover the critical topic of backup and restoration of your databases. Moreover, we outline how to monitor your Exchange 2000 servers (Chapter 23), how to perform basic troubleshooting for a server (Chapter 25), and how to tune your Exchange 2000 servers for maximum performance (Chapter 26).

Overview of Conventions

Within the chapters we've tried to make the material accessible and readable. You'll find descriptive passages, theoretical explanations, and step-by-step examples. We've also included a generous number of graphics that make it easy to follow the written instructions. The following reader's aids are common to all books in the Administrator's Companion series.

Note Notes generally represent some information that needs to be highlighted or alternate ways to perform a task.

Tip Methods of performing tasks more quickly or in a not-so-obvious manner will show up as tips.

More Info References to other books and sources of information are offered throughout the book.

Caution Don't skip over these boxes because they contain important warnings about the subject at hand—often critical information about the safety of your system.

Planning As we stress throughout the book, proper planning is fundamental to the smooth operation of any network. These boxes contain specific and useful hints to make that process go smoothly.

Real World

Everyone benefits from the experiences of others. Real World boxes contain elaboration on a particular theme or background based on the adventures of IT professionals just like you.

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Talk to Us

We've done our best to make this book as accurate and complete as a single-volume reference can be. However, because Exchange 2000 Server is a large and complex product, we're sure that alert readers will find omissions and possibly some errors—though we really hope that there aren't too many of those! If you have suggestions, corrections, or comments, you may write to one of the co-authors, Bill English, at *benglish@networknowledge.com*. We genuinely appreciate hearing from you and sincerely hope you will find the *Exchange 2000 Server Administrator's Companion* to be enjoyable and helpful.

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