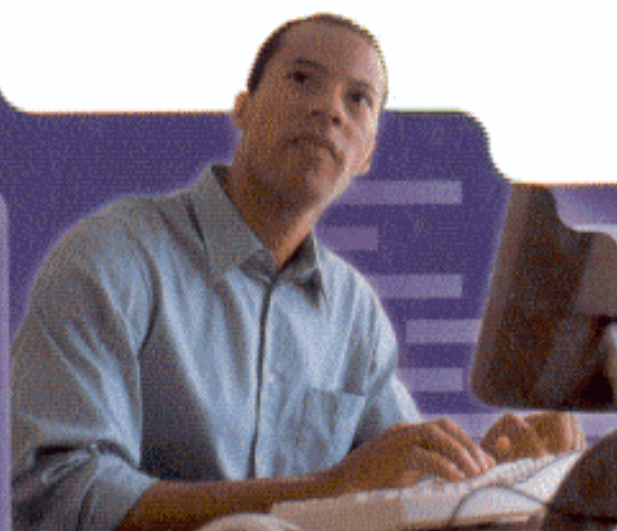


MCSE



**Exam
70-224**

Microsoft® Exchange 2000 Server Implementation and Administration Training Kit



- ▶ Official Microsoft study guide for MCP Exam 70-224: *Installing, Configuring, and Administering Microsoft Exchange 2000 Server*
- ▶ Work at your own pace through the book's skill-building practice exercises
- ▶ Develop real-world expertise by mastering the concepts, procedures, and tasks measured by certification exam objectives

Contents

Acknowledgments	xxi
About This Book	xxv
Intended Audience	xxv
Prerequisites	xxv
Reference Materials	xxvi
About the CD-ROM	xxvi
Features of This Book	xxvi
Notes	xxvii
Conventions	xxvii
Chapter and Appendix Overview	xxviii
Finding the Best Starting Point for You	xxxii
Where to Find Specific Skills in This Book	xxxii
Getting Started	xxxviii
Hardware Requirements	xxxviii
Software Requirements	xxxviii
Setup Instructions	xxxix
The Microsoft Certified Professional Program	lx
Microsoft Certification Benefits	lxi
Requirements for Becoming a Microsoft Certified Professional	lxiii
Technical Training for Computer Professionals	lxiv
Technical Support	lxv
Evaluation Edition Software Support	lxvi
Chapter 1 Introduction to Microsoft Exchange 2000 Server	1
About This Chapter	1
Before You Begin	2
Lesson 1: General Overview of Messaging Systems	3
Shared-File Messaging Systems	3
Exercise 1: A Simulated Shared-File Messaging System	5
Client/Server Messaging Systems	9
Exercise 2: Testing the Performance of a Client/Server Messaging System	10

Collaboration/Groupware Systems	13
Exercise 3: Setting Up a Corporate Phone Book for Business Contacts ..	14
Lesson 2: Exchange 2000 Server Design Goals	19
Powerful Infrastructure for Messaging and Collaboration	19
Support for Collaborative Business Solutions	21
Exercise 4: Cross-Platform Collaboration	21
Collaboration and Communication Without Limits	23
Lesson 3: Backward Compatibility and Interoperability	25
Coexisting with Earlier Versions of Exchange Server	25
Mixed Mode Operation	26
Coexistence with Other Messaging Systems	27
Windows 2000 Network Components	28
Supported Client Platforms	29
Exercise 5: Verifying Options for Internet-Based Client Connectivity ..	30
Chapter Summary	32
Review	33
Chapter 2 Integration with Microsoft Windows 2000	35
About This Chapter	35
Before You Begin	36
Lesson 1: Integration with Microsoft Management Console	37
Microsoft Management Console Overview	37
MMC Snap-Ins and Exchange 2000 Server	39
Exercise 1: The MMC and Exchange 2000 Administration	40
Lesson 2: Active Directory Directory Service Integration	42
Physical and Logical Structure	42
Domains and Namespaces	43
Exercise 2: Creating a Domain Tree in the Test Environment	45
Active Directory Replication	47
Exchange 2000 Attributes in the Active Directory Directory Service	49
Exercise 3: Verifying Exchange 2000 Extensions to the Active Directory Directory Service	50
Active Directory Integration and Outlook Clients	53
Lesson 3: Windows 2000 Protocols and Services Integration	57
Windows 2000 Network Architecture	57
Internet Information Services 5.0	59
Exercise 4: Checking the SMTP Service	61
Exchange 2000 Server Extensions	62
Chapter Summary	64
Review	65

Chapter 3 Microsoft Exchange 2000 Server Architecture	67
About This Chapter	67
Before You Begin	68
Lesson 1: Exchange 2000 Server Components	69
Essential Components for Exchange 2000 Server	69
Exercise 1: Reducing Exchange 2000 Server to the Minimum	73
Internet Information Services for Exchange 2000 Server	75
Examining Metabase Settings for Internet-Based Exchange 2000 Services	78
Additional Components for Exchange 2000 Server	79
Lesson 2: Communication Between Essential Server Components	84
Interprocess Communication Mechanisms	84
Clients and Administrative Interfaces	87
Exercise 2: Communication Partners of the Exchange System Manager	89
Component-to-Component Communication	91
Exchange 2000 Server Message Handling	99
Chapter Summary	102
Review	104
Chapter 4 Planning the Microsoft Exchange 2000 Server Installation	107
About This Chapter	107
Before You Begin	108
Lesson 1: Deployment Considerations	109
Distributed Versus Centralized Management	109
Exercise 1: Centralized Exchange 2000 Administration	111
Exchange 2000 Hierarchy	113
Exercise 2: Default Administrative and Routing Group Configuration	116
Mixed Mode and Native Mode	117
Exercise 3: Checking the Mixed/Native Mode Attribute	119
Lesson 2: Preparing the Server Installation	122
Exchange 2000 Requirements	122
Installation Preparation	125
Exercise 4: Preparing and Performing a Subsequent Installation in a Subdomain	128
Front End/Back End Configurations	134
Exercise 5: FE/BE Configuration Options	135
Installing Exchange 2000 Server in a Clustered Environment	138
Chapter Summary	139
Review	141

Chapter 5 Installing Microsoft Exchange 2000 Server	143
About This Chapter	143
Before You Begin	144
Lesson 1: Installation Types	145
First Server Installation	145
Subsequent Server Installations	147
In-Place Upgrade	148
Installations in International Environments	149
Unattended Setup Mode	152
Exercise 1: Installing Exchange 2000 in Unattended Mode	153
Lesson 2: Postinstallation Considerations	157
Installing the Exchange 2000 Management Programs	157
Assignment of Administrative Roles and Permissions	159
Exercise 2: Verifying Incorrect Security Information	162
Default File Locations and Share Point Permissions	168
Exercise 3: Checking Active TCP Ports	170
Exchange 2000 Server Service Dependencies	172
Adding or Repairing Components in Maintenance Mode	172
Exercise 4: Adding Components to an Exchange 2000 Installation	174
Chapter Summary	176
Review	177
Chapter 6 Coexistence with Previous Microsoft Exchange Server Versions	179
About This Chapter	179
Before You Begin	180
Lesson 1: Preparation of Exchange Server Environments	181
Preparing the Windows Environment	181
Exercise 1: Changing the LDAP Port for Exchange Server	183
Upgrading the Operating System	184
Exercise 2: Upgrading to Windows 2000 Server	185
Configuring the Active Directory Connector	188
Exercise 3: Installing and Configuring the ADC	190
Lesson 2: Upgrade and Migration Strategies	194
Upgrade Strategies	194
Exercise 4: Performing an In-Place Upgrade to Exchange 2000 Server	198
Administering Heterogeneous Exchange Organizations	200
Directory Replication with Previous Exchange Server Versions	201
Server-to-Server Communication and Message Transfer	204
Upgrading Outlook Web Access	206

Switching from Mixed Mode to Native Mode	206
Exercise 5: Performing a Move-Mailbox Upgrade and Finalizing the Migration	207
Active Directory Cleanups	211
Chapter Summary	213
Review	214
Chapter 7 Microsoft Exchange 2000 Server in Clustered Environments	215
About This Chapter	215
Before You Begin	216
Lesson 1: Cluster Service Architecture	217
Server Clusters in Exchange 2000 Environments	217
Windows 2000 Clustering Architecture	222
Lesson 2: Load Planning and Failover Strategies	225
Load-Balancing Clusters	225
Failover and Failback Procedures	230
Lesson 3: Clustering Support in Exchange 2000 Server	232
Exchange 2000 Server Clustering Installation	232
Exercise 1: Installing Exchange 2000 Server in a Cluster	234
Resource Groups and Virtual Servers	235
Exercise 2: Configuring Virtual Exchange 2000 Servers	236
Configuring Additional Virtual Servers	241
Exercise 3: Testing Exchange 2000 Failover Procedures	242
Upgrading Exchange Server 5.5 Clusters	244
Chapter Summary	245
Review	246
Chapter 8 Microsoft Outlook 2000 Deployment	247
About This Chapter	247
Before You Begin	248
Lesson 1: Microsoft Outlook 2000 Installation Types	249
Installation Overview	249
Local Installation	252
Default Network Installation	253
Exercise 1: Preparing an Administrative Installation Point	255
Preconfiguring the Network Installation	256
Unattended Installation	257
Exercise 2: Deploying Outlook 2000	257
Default Messaging Profile Generation	263

Exercise 3: Verifying the Profile Generation	265
Adding or Removing Program Features	266
Lesson 2: Configuring the Exchange Transport	269
Exchange Transport Components	269
Client Connection Order	270
Exercise 4: Testing the Client/Server Communication	272
Lesson 3: Messaging-Related Outlook Options	274
E-Mail Options	274
E-Mail Processing	274
Configuring the Startup Mode	275
Default Settings for New Messages	275
Outlook 2000 Security	275
Deleting Items	276
Defining Delegates	276
Exercise 5: Assigning Delegate Permissions	279
Outlook Client Extensions	285
COM Add-Ins and Visual Basic for Applications	286
Chapter Summary	286
Review	288
Chapter 9 MAPI-Based Clients	289
About This Chapter	289
Before You Begin	290
Lesson 1: Clients for Exchange 2000 Server	291
MS-DOS-Based Clients	291
Windows 3.x-Based Clients	292
Windows-Based (32-Bit) Clients	292
Macintosh-Based Clients	294
Lesson 2: Messaging Application Programming Interface	295
MAPI Subsystem	295
Information Services	296
Lesson 3: Creating Messaging Profiles	299
Messaging Profiles	299
Exercise 1: Creating a New Profile	302
Personal Folder Configuration	304
Exercise 2: Creating a Personal Folder Store	305
Offline Folder Configuration	307
Offline Address Book Configurations	310

Lesson 4: Advanced User Configurations	312
Roving User Support	312
Remote User Support	313
Exercise 3: Configuring Remote Mail Support	315
Chapter Summary	318
Review	320
Chapter 10 MAPI-Based Clients in a Novell NetWare Environment	321
About This Chapter	321
Before You Begin	322
Lesson 1: Integrating Windows 2000 with Novell NetWare	323
NWLink-Based Connections	323
IP-Based Connections	326
Installing Gateway (and Client) Services for NetWare	326
File and Print Services for NetWare	328
Service Advertising Protocol Agent	328
NDS and the Active Directory Directory Service	329
Lesson 2: Outlook and NetWare Client Requirements	332
Network Communication Requirements	332
Client Connectivity Issues and the RPCPing Utility	334
Chapter Summary	336
Review	337
Chapter 11 Internet-Based Client Access	339
About This Chapter	339
Before You Begin	340
Lesson 1: Support for Internet Protocols	341
Simple Mail Transfer Protocol	341
Exercise 1: Examining DNS MX Records	344
Post Office Protocol, Version 3	345
Exercise 2: Examining the POP3 Communication	346
Internet Mail Access Protocol Version 4	348
Exercise 3: Examining the IMAP4 Communication	349
Network News Transfer Protocol	351
Exercise 4: Examining the NNTP Communication	353
Hypertext Transfer Protocol	354
Exercise 5: Working with Published WebDAV Resources and the Web Storage System	356
Lightweight Directory Access Protocol	359

Lesson 2: Configuring Virtual Protocol Servers	361
Protocol Virtual Server Configurations	361
Authentication Methods	365
Setting Security Options	367
Configuring NNTP Virtual Servers	370
Exercise 6: Supporting Internet Messaging Clients	373
Chapter Summary	379
Review	380
Chapter 12 Management Tools for Microsoft Exchange 2000 Server	381
About This Chapter	381
Before You Begin	382
Lesson 1: Windows 2000 Tools and Snap-Ins	383
Active Directory Users and Computers	383
Services Snap-In	383
Computer Management	384
Performance Utility	385
Internet Services Manager	386
Event Viewer	386
Backup and Restore Utility	386
Task Manager	387
Windows 2000 Registry Editors	387
Active Directory Service Interface Edit	388
Exercise 1: Managing Exchange 2000 Server with Windows 2000 Administrative Utilities	388
Lesson 2: Exchange 2000 Tools and Snap-Ins	395
Exchange System Management Tools	395
The Exchange System Manager Window	398
System Policies	399
Exercise 2: Defining a Server Policy for Message Tracking	402
Chapter Summary	406
Review	407
Chapter 13 Creating and Managing Recipients	409
About This Chapter	409
Before You Begin	410
Lesson 1: Configuring Recipient Objects	411
Overview of Recipient Objects	411
Creating Mailbox- and Mail-Enabled Recipient Objects	413
Managing and Maintaining Mailbox-Enabled Recipients	414

Exercise 1: Managing and Maintaining Mailboxes	415
Managing and Maintaining Mail-Enabled Recipients	418
Working with Mail-Enabled Groups	420
Exercise 2: Managing and Maintaining Contacts and Groups	422
Lesson 2: Mailbox and Resource Management	426
Assigning Mailbox Rights	426
Management of Server-Based Mailbox Resources	427
Exercise 3: Configuring Mailbox Storage Limits and Deletion Settings ..	429
Management of Recipient Policies	432
Export and Import Features	435
Chapter Summary	438
Review	439
Chapter 14 Managing the Server Configuration	441
About This Chapter	441
Before You Begin	442
Lesson 1: Management of Server Resources	443
Storage Management in Exchange System Manager	443
Storage Groups and Information Stores	443
Exercise 1: Creating Dedicated Mailbox and Public Folder Servers	446
Full-Text Indexing	452
Diagnostic Logging	456
Lesson 2: Management of Administrative Groups	458
Configuration at the Administrative Group Level	459
Adding Servers to an Administrative Group	459
Creating Administrative Groups	459
Removing a Server from Active Directory Directory Services	460
Lesson 3: Management of Server Address Lists	461
Domain Information and Global Catalogs	461
Server-Based Address Lists	462
Offline Address Lists	464
Address and Details Templates	465
Extension Attributes	467
Exercise 2: Customizing Outlook's Search Capabilities	467
Chapter Summary	470
Review	471
Chapter 15 SMTP Transport Configuration	473
About This Chapter	473
Before You Begin	474

Lesson 1: SMTP Configurations and Virtual Servers	475
Configuring Additional SMTP Virtual Servers	475
Managing Incoming Message Traffic	477
Managing Outgoing Message Traffic	482
Communicating with Other Exchange Organizations over the Internet ..	485
Configuring Protocol Logging	487
Exercise 1: Relay Restrictions and Junk Mail	488
Lesson 2: Customizing the SMTP Service	492
SMTP Transport Event Handling	492
Protocol Event Handling	493
Event Binding	494
Virus Protection Using Transport Event Sinks	494
Exercise 2: Checking Incoming Messages for .vbs Attachments	495
Chapter Summary	498
Review	499
 Chapter 16 Message Routing Administration	501
About This Chapter	501
Before You Begin	502
Lesson 1: Routing Group Planning	503
Multiple Routing Group Scenarios	503
Managing Routing Groups	509
Exercise 1: Creating Multiple Routing Groups	510
Lesson 2: Connecting Routing Groups	512
Routing Group Connector	512
Exercise 2: Configuring a Routing Group Connector	514
SMTP Connector	516
Exercise 3: Configuring an SMTP Connector	520
X.400 Connector	522
Exercise 4: Configuring a TCP/IP-Based X.400 Connector	526
Previous Exchange Connectors	529
Connectors over Dial-Up Connections	530
Lesson 3: Link Status Information	532
Message Routing	532
Link State Information and Routing Group Masters	536
Message Rerouting Based on Link State Information	538
Chapter Summary	541
Review	542

Chapter 17 Public Folder Management	543
About This Chapter	543
Before You Begin	544
Lesson 1: Introduction to Public Folders	545
Public Folder Considerations	545
Elements of a Public Folder	547
Public Folders Within the Active Directory Directory Service	549
Exercise 1: Creating Public Folder Hierarchies	553
Lesson 2: Creating and Managing Public Folders	557
Security Settings for Public Folder Hierarchies	557
Creating a Public Folder	559
Managing Public Folder Properties	559
Managing Public Folder Access Permissions	561
Exercise 2: Creating and Managing Public Folder Resources	564
Lesson 3: Public Store Configurations	567
Managing Public Stores	567
Public Folder Referrals	569
Exercise 3: Public Folder Access Across Routing Group Boundaries	571
Chapter Summary	574
Review	575
Chapter 18 Public Folder Replication	577
About This Chapter	577
Before You Begin	578
Lesson 1: Public Folder Strategies	579
Stand-Alone Public Folders	579
Replicated Public Folders	580
Public Folder Instances Between Organizations	582
Configuring Dedicated Public Folder Servers	582
Lesson 2: Public Folder Replication Configuration	585
Public Folder Replication Overview	585
Public Folder Contents Replication	586
Replication Configuration per Public Store	587
Replication Configuration per Public Folder	589
Replication of System Folders	591
Moving a Public Folder Between Servers	592
Exercise 1: Replicating Public Folder Resources	593
Lesson 3: Public Folder Replication Process	598
The Replication Process	598

Monitoring Message State Information	599
Replicating Created and Deleted Messages	601
Replicating Item Modifications	603
Out-of-Sync Public Folders and Backfill	604
Adding and Deleting Replicas	605
Public Folder Conflict Resolution	606
Exercise 2: Public Folder Conflict Resolution	607
Chapter Summary	609
Review	611
Chapter 19 Implementing Advanced Security	613
About This Chapter	613
Before You Begin	614
Lesson 1: Exchange 2000 Server Security	615
Controlling Access to Exchange 2000 Resources	615
Auditing and Protocol Logging	620
Exercise 1: Enabling Security Auditing	622
Secured Internet Connections	624
Private/Public Key Security	627
Exercise 2: Installing Windows 2000 Certificate Services	631
Lesson 2: Advanced Security Features	634
KM Server Architecture	634
Exercise 3: Installing KMS	637
Server Keys and Passwords	640
Stage 1: Enabling Advanced Security—The Administrator's Side	641
Stage 2: Enabling Advanced Security—The Client's Side	643
Exchanging Signed Messages	645
Exchanging Sealed Messages	646
Exercise 4: Configuring and Using Advanced Security	648
KMS for Multiple Administrative Groups	654
Country-to-Country Encryption Algorithms	654
Key and Certificate Management	655
Advanced Security Maintenance	656
Moving Key Histories Between KM Servers	658
Advanced Security with Other Organizations	659
Chapter Summary	661
Review	662

Chapter 20 Microsoft Exchange 2000 Server Maintenance and Troubleshooting	663
About This Chapter	663
Before You Begin	664
Lesson 1: System Maintenance and Monitoring	665
Deleted Items Retention	665
Exercise 1: Recovering a Deleted Mailbox	666
System Monitors as Maintenance Tools	668
Link and System States	669
Exercise 2: Configuring System Monitor Notifications	671
Using the Message Tracking Center	673
Exercise 3: Tracking Messages Across the Organization	675
Using Message Queues for Troubleshooting	678
The MTA Check Utility	679
Forcing Active Directory Replication	680
Lesson 2: Database Operation and Maintenance	681
Considerations About Information Stores	681
Defining the Databases	682
Main Database Components	684
Log File Maintenance and Circular Logging	687
Database Partitioning	688
Maintaining Databases	690
Exercise 4: Compacting Exchange 2000 Server Databases	692
Lesson 3: Backup, Restore, and Disaster Recovery	695
Backing Up the Databases	695
Backing Up the Configuration	699
Verifying Database Backups	700
Exercise 5: Backing Up Exchange 2000 Server	700
Designing a Disaster Recovery Plan	702
Restoring to the Same Server	703
Exercise 6: Restoring a Database to the Same Server	705
Complete Disaster Recovery	707
Forklifting Users by Means of a Complete Disaster Recovery	708
Replacing Server Hardware with Mailbox Move and Public Folder Replication	709
Exercise 7: Performing a Complete Disaster Recovery	710
Restoring to a Different Server	714
Exercise 8: Restoring a Database to a Different Server	717
High-Speed Recovery with Delayed Restore	720
Exercise 9: Performing a High-Speed Recovery with Delayed Restore	724

Chapter Summary	734
Review	735
Chapter 21 Microsoft Outlook Forms Environment	737
About This Chapter	737
Before You Begin	738
Lesson 1: Electronic Forms Applications	739
Application Design Environment	739
Exercise 1: Building a Document Management Solution	742
Types of Electronic Forms	745
Outlook Forms Designer	746
Developing Outlook Forms	747
Outlook Forms and Custom Controls	748
Disabling the Outlook Forms Designer	749
Lesson 2: Managing Outlook Forms	750
Forms Libraries	750
Managing Forms	752
Installing Outlook Forms	753
Exercise 2: Designing a Custom Outlook Form	755
Chapter Summary	758
Review	759
Chapter 22 Microsoft Outlook Web Access	761
About This Chapter	761
Before You Begin	762
Lesson 1: Outlook Web Access Overview	763
Outlook Web Access Architecture	764
Outlook Web Access File Locations	765
Default Virtual Directories	765
Exercise 1: Publishing a Document Management System Through a Dedicated Outlook Web Access Virtual Directory	766
Outlook Web Access Limitations	768
Data Security Issues	768
Supported Browsers	768
Multimedia Messaging	769
Lesson 2: Outlook Web Access Environments	770
Single-Server Configurations	770
Front End/Back End Configurations	771
Front End Load Balancing	771
Resource Access	772

Exercise 2: Accessing Mailbox and Public Folder Resources with Outlook Web Access	775
Backward Compatibility Issues	779
Chapter Summary	781
Review	782
Chapter 23 Microsoft Exchange 2000 Microsoft Web Storage System	783
About This Chapter	783
Before You Begin	784
Lesson 1: The Microsoft Web Storage System	785
HTTP-Based Interfaces	785
Database Interfaces	786
Exchange Installable File System	789
Internet and MAPI-Based Messaging Clients	791
Lesson 2: Designing a Web Storage System Solution	793
Designing Web Storage System Forms	793
Exercise 1: Implementing a Custom Web Form for Outlook Web Access	797
Synchronous, Asynchronous, and System Events	802
Chapter Summary	804
Review	805
Chapter 24 Workgroup and Workflow Technologies	807
About This Chapter	807
Before You Begin	808
Lesson 1: CDO for Exchange 2000 Server	809
ActiveX Data Objects Versus Collaboration Data Objects	809
CDO for Exchange 2000 Server Object Model	811
Sending CDO Messages	814
CDO Calendaring	814
Contact Management	816
Lesson 2: CDO for Exchange Management	818
Collaboration Data Objects versus Active Directory Services Interfaces	818
CDO for Exchange Management Object Model	819
Working with Information Stores and Public Folder Hierarchies	820
Mailbox and Public Folder Management	821
Lesson 3: Workflow for Exchange 2000 Server	823
Workflow Basics	823
Preparing the CDO Workflow System Account	827
Exchange 2000 Server Workflow Preparation	829
CDO for Workflow Interfaces	832

Chapter Summary	833
Review	834
Chapter 25 Real-Time Collaboration	835
About This Chapter	835
Before You Begin	836
Lesson 1: Instant Messaging	837
The Principle of Instant Messaging	837
Instant Messaging Implementation	840
Instant Messaging Domains	842
User Addresses for Instant Messaging	843
Domain Name Service Dependencies	844
System Monitoring of Instant Messaging	845
Exercise 1: Deploying Instant Messaging	846
Lesson 2: Chat Services	853
Chat Overview	853
Installing the Exchange 2000 Chat Service	854
Managing the Exchange 2000 Chat Service	855
Exercise 2: Implementing a Chat Community	856
Lesson 3: Online Conferencing	859
Data and Video Conferencing Overview	859
Architecture of Exchange 2000 Conferencing Server	861
Installing Exchange 2000 Conferencing Server	864
Scheduling Online Conferences	866
Joining Online Conferences	866
Chapter Summary	867
Review	868
Chapter 26 Connecting to Microsoft Mail and Schedule+	869
About This Chapter	869
Before You Begin	870
Lesson 1: The Microsoft Mail Connector	871
MS Mail Connector Overview	871
MS Mail Message Routing in Exchange 2000 Server	873
MS Mail Connector Architecture	874
Configuring the MS Mail Connector	877
Configuring the MS Mail Environment	880
Lesson 2: Configuring Directory Synchronization	882
MS Mail Directory Synchronization Events	882

Directory Synchronization with Exchange 2000 Server	884
Configuring a DXA Server	888
Configuring a DXA Requestor	890
Directory Synchronization Templates	891
Lesson 3: The Schedule+ Free/Busy Connector	893
Schedule+ Free/Busy Connector Architecture	893
Configuring the Schedule+ Free/Busy Connector	896
Chapter Summary	897
Review	898
Chapter 27 Connecting to Lotus cc:Mail	899
About This Chapter	899
Before You Begin	900
Lesson 1: The Connector for Lotus cc:Mail	901
Connector for Lotus cc:Mail Overview	901
Components of the Connector for Lotus cc:Mail	904
Lotus cc:Mail Considerations	907
Lotus cc:Mail and Connector Interfaces	909
Configuring the Connector for Lotus cc:Mail	910
Advanced Connector Maintenance	912
Lesson 2: Lotus cc:Mail Directory Synchronization	914
Configuring the Lotus cc:Mail Post Office	914
Configuring the Connector for Lotus cc:Mail	915
Customizing Address Generation Rules	916
Chapter Summary	917
Review	918
Chapter 28 Connecting to Lotus Notes	919
About This Chapter	919
Before You Begin	920
Lesson 1: The Connector for Lotus Notes	921
Connector for Lotus Notes Overview	921
Components of the Connector for Lotus Notes	926
Configuring the Lotus Domino Server	929
Configuring the Connector for Lotus Notes	939
Lesson 2: Directory Synchronization with Lotus Domino/Notes	944
Directory Synchronization Overview	944
Configuring Directory Synchronization	946
Chapter Summary	948
Review	949

Chapter 29 Connecting to Novell GroupWise	951
About This Chapter	951
Before You Begin	952
Lesson 1: The Connector for Novell GroupWise	953
Connector for Novell GroupWise Overview	953
Components of the Connector for Novell GroupWise	959
Configuring the GroupWise Domain and API Gateway	962
Configuring the Connector for Novell GroupWise	972
Lesson 2: Directory Synchronization with Novell GroupWise	977
Directory Synchronization Overview	977
Configuring Directory Synchronization	979
Chapter Summary	981
Review	983
 Appendix A Questions and Answers	 985
 Glossary	 1019
 Index	 1069