

Contents at a Glance

<i>Introduction</i>		<i>xxvii</i>
<i>Assessment Test</i>		<i>xlviii</i>
Chapter 1	Getting Started with Windows 2000 Professional	1
Chapter 2	Automating the Windows 2000 Installation	43
Chapter 3	Upgrading to Windows 2000 Professional	103
Chapter 4	Configuring the Windows 2000 Environment	129
Chapter 5	Managing the Desktop	207
Chapter 6	Managing Users	239
Chapter 7	Managing Groups	305
Chapter 8	Using User Profiles and Hardware Profiles	337
Chapter 9	Managing Disks	365
Chapter 10	Accessing Files and Folders	429
Chapter 11	Managing Network Connections	493
Chapter 12	Managing Printing	545
Chapter 13	Dial-Up Networking and Internet Connectivity	597
Chapter 14	Optimizing Windows 2000	643
Chapter 15	Performing System Recovery Functions	705
Glossary		779
<i>Index</i>		811

Contents

<i>Introduction</i>	<i>xxvii</i>	
<i>Assessment Test</i>	<i>xlviii</i>	
Chapter 1	Getting Started with Windows 2000 Professional	1
	The Design Goals of Windows 2000 Professional	3
	Features from Windows 98	3
	Features from Windows NT Workstation 4	4
	Hardware Support	5
	Ease of Use	5
	Lower Cost of Ownership	5
	New Features of Windows 2000	6
	Preparing to Install Windows 2000 Professional	7
	Hardware Requirements	7
	The Hardware Compatibility List (HCL)	10
	Clean Install or Upgrade?	11
	Installation Options	11
	Choosing Your Installation Method	16
	Installing Windows 2000 from the CD	16
	Installing Windows 2000 over a Network	17
	Running the Windows 2000 Professional Installation Process	18
	Running the Setup Program	19
	Running the Windows 2000 Setup Wizard	20
	Installing Windows 2000 Networking	22
	Setting Up Your Computer for Hands-on Exercises	23
	Troubleshooting Installation Problems	27
	Supporting Multiple-Boot Options	30
	Summary	31
	Exam Essentials	32
	Key Terms	33
	Review Questions	34
	Answers to Review Questions	40

Chapter 2	Automating the Windows 2000 Installation	43
	Choosing Automated Deployment Options	44
	An Overview of Remote Installation	45
	An Overview of Disk Imaging	46
	An Overview of Unattended Installation	47
	Using Setup Manager to Create Answer Files	47
	Extracting the Windows 2000 Deployment Tools	48
	Unattended Answer Files	49
	Answer File Format	56
	Using Remote Installation Services (RIS)	62
	RIS Client Options	64
	Preparing the RIS Server	65
	Preparing the RIS Client	77
	Installing Windows 2000 Professional through RIS	78
	Using Disk Images	79
	Preparing for Disk Duplication	80
	Using the System Preparation Tool	80
	Installing Applications with Windows Installer Packages	84
	Copying the MSI Application to a Share	86
	Creating a Group Policy Object	86
	Filtering the Group Policy Object	87
	Adding the Package to the Group Policy Object	88
	Installing a Published Application	91
	Summary	93
	Exam Essentials	93
	Key Terms	94
	Review Questions	95
	Answers to Review Questions	101
Chapter 3	Upgrading to Windows 2000 Professional	103
	Deciding Whether to Upgrade	105
	Preparing to Upgrade to Windows 2000 Professional	106
	Client Upgrade Paths and Requirements	106

	Upgrade Considerations for Windows 9x	107
	An Upgrade Checklist	109
	Performing the Windows 2000 Upgrade	112
	Applying Update Packs	116
	Summary	118
	Exam Essentials	118
	Key Terms	119
	Review Questions	120
	Answers to Review Questions	126
Chapter 4	Configuring the Windows 2000 Environment	129
	Windows 2000 Management Utilities	130
	Control Panel	131
	Computer Management	134
	Microsoft Management Console	139
	Registry Editor	142
	Installing Hardware	144
	Installing Plug and Play Devices	144
	Installing Non-Plug and Play Hardware	145
	Managing Device Drivers	146
	Updating Drivers	146
	Managing Driver Signing	150
	Managing Disk Devices	152
	Managing DVD and CD-ROM Devices	152
	Managing Removable Media	155
	Managing Display Devices	156
	Configuring Video Adapters	156
	Using Multiple-Display Support	160
	Managing Mobile Computer Hardware	162
	Managing Power Options	165
	Managing Card Services	171
	Managing I/O Devices	171
	Configuring the Keyboard	172
	Configuring the Mouse	173

	Configuring Wireless Devices	175
	Configuring USB Devices	175
	Managing Imaging Devices	177
	Managing Processors	180
	Configuring Fax Support	182
	Setting Fax Properties	183
	Starting the Fax Service	186
	Troubleshooting Devices	187
	Managing Windows 2000 Services	190
	Summary	195
	Exam Essentials	196
	Key Terms	197
	Review Questions	198
	Answers to Review Questions	205
Chapter 5	Managing the Desktop	207
	Managing Desktop Settings	208
	Customizing the Taskbar and Start Menu	210
	Using Shortcuts	215
	Setting Display Properties	216
	Managing Multiple Languages and Regional Settings	219
	Multilingual Technology	219
	Choosing Windows 2000 Multiple-Language Support	220
	Enabling and Configuring Multilingual Support	222
	Configuring Locale Settings	223
	Configuring Accessibility Features	224
	Setting Accessibility Options	225
	Using Accessibility Utilities	226
	Summary	230
	Exam Essentials	230
	Key Terms	231
	Review Questions	232
	Answers to Review Questions	237

Chapter 6	Managing Users	239
	Windows 2000 User Accounts	240
	Built-in Accounts	241
	Local and Domain User Accounts	241
	Logging On and Logging Off	242
	Local User Logon Authentication	243
	Logging Off Windows 2000 Professional	244
	Working with User Accounts	247
	Using the Local Users and Groups Utility	247
	Creating New Users	250
	Disabling User Accounts	254
	Deleting User Accounts	257
	Renaming Users	258
	Changing a User's Password	259
	Managing User Properties	260
	Managing User Group Membership	261
	Setting Up User Profiles, Logon Scripts, and Home Folders	262
	Using Account Policies	266
	Loading the Local Computer Policy Snap-In	267
	Setting Password Policies	268
	Setting Account Lockout Policies	271
	Using Local Policies	274
	Setting Audit Policies	275
	Assigning User Rights	278
	Defining Security Options	283
	Troubleshooting User Accounts Authentication	290
	Troubleshooting Local User Account Authentication	290
	Domain User Accounts Authentication	291
	Summary	293
	Exam Essentials	294
	Key Terms	295
	Review Questions	296
	Answers to Review Questions	302

Chapter 7	Managing Groups	305
	Using Built-in Groups	307
	Default Local Groups	307
	Special Groups	310
	Working with Groups	313
	Creating Groups	314
	Managing Group Membership	316
	Renaming Groups	318
	Deleting Groups	319
	Using Local Group Policies	320
	Group Policies within Active Directory	321
	Quick Overview of Active Directory	321
	Group Policy Objects and Active Directory	322
	Summary	324
	Exam Essentials	325
	Key Terms	325
	Review Questions	327
	Answers to Review Questions	333
Chapter 8	Using User Profiles and Hardware Profiles	337
	User Profile Configuration Options	338
	Creating and Managing User Profiles	340
	Local User Profiles	340
	Roaming Profiles	342
	Using Mandatory Profiles	346
	Creating and Managing Hardware Profiles	349
	Summary	354
	Exam Essentials	354
	Key Terms	354
	Review Questions	355
	Answers to Review Questions	362

Chapter 9	Managing Disks	365
	Configuring File Systems	367
	File System Selection	367
	File System Conversion	370
	Configuring Disk Storage	371
	Basic Storage	371
	Dynamic Storage	372
	Using the Disk Management Utility	375
	Managing Basic Tasks	377
	Managing Basic Storage	393
	Managing Dynamic Storage	393
	Managing Data Compression	396
	Setting Disk Quotas	399
	Configuring Disk Quotas	400
	Monitoring Disk Quotas	405
	Managing Data Encryption with EFS	406
	Encrypting and Decrypting Folders and Files	407
	Using the <i>CIPHER</i> Utility	408
	Retrieving Encrypted Files	410
	Using the Disk Defragmenter Utility	410
	Analyzing Disks	412
	Defragmenting Disks	413
	Using the Disk Cleanup Utility	414
	Troubleshooting Disk Devices and Volumes	416
	Summary	417
	Exam Essentials	418
	Key Terms	419
	Review Questions	420
	Answers to Review Questions	426
Chapter 10	Accessing Files and Folders	429
	File and Folder Management Basics	431
	Organizing Files and Folders	431

Managing Folder Options	435	
Searching for Files and Folders	448	
Managing Local Access	450	
Applying NTFS Permissions	451	
Determining NTFS Permissions for Copied or Moved Files	460	
Optimizing Local Access	461	
Managing Network Access	462	
Creating Shared Folders	463	
Configuring Share Permissions	465	
Managing Shares with the Shared Folders Utility	467	
Providing Access to Shared Resources	473	
The Flow of Resource Access	478	
Access Token Creation	478	
ACLs and ACEs	479	
Local and Network Resource Access	480	
Summary	481	
Exam Essentials	481	
Key Terms	482	
Review Questions	483	
Answers to Review Questions	490	
Chapter 11	Managing Network Connections	493
Reviewing Networking Protocols	494	
Network Data Flow	495	
The OSI Model Layers	496	
Installing and Configuring Network Adapters	499	
Installing a Network Adapter	500	
Configuring a Network Adapter	504	
Troubleshooting Network Adapters	510	
Installing and Configuring Network Protocols	512	
Using TCP/IP	512	
Using NWLink IPX/SPX/NetBIOS	526	
Using NetBEUI	529	
Managing Network Bindings	530	

	Summary	531
	Exam Essentials	532
	Key Terms	532
	Review Questions	534
	Answers to Review Questions	543
Chapter 12	Managing Printing	545
	Printing Basics	546
	The Windows 2000 Printing Process	548
	The Roles of Print Devices and Printers	550
	Setting Up Printers	550
	Managing Printer Properties	557
	Configuring General Properties	557
	Configuring Sharing Properties	561
	Configuring Port Properties	564
	Configuring Advanced Properties	566
	Separator Pages	572
	Security Properties	574
	Print Permission Assignment	575
	Advanced Settings	577
	Device Settings Properties	578
	Managing Printers and Print Documents	579
	Managing Printers	580
	Managing Print Documents	580
	Connecting to Printers	584
	Summary	585
	Exam Essentials	585
	Key Terms	586
	Review Questions	587
	Answers to Review Questions	593
Chapter 13	Dial-Up Networking and Internet Connectivity	597
	Setting Up a Modem	598
	Configuring General Modem Properties	599

Configuring Modem Properties	600	
Running Modem Diagnostics	601	
Configuring Advanced Modem Properties	601	
Viewing Driver Details and Updating Drivers	605	
Viewing Modem Resources	605	
Using Dial-Up Connections	606	
Dialing In to a Remote Access Server	607	
Dialing In to the Internet	617	
Using Virtual Private Network (VPN) Connections	620	
Using Internet Connection Sharing	623	
Managing Internet Printers	631	
Summary	634	
Exam Essentials	634	
Key Terms	635	
Review Questions	636	
Answers to Review Questions	641	
Chapter 14	Optimizing Windows 2000	643
Keeping Windows 2000 Up-to-Date	644	
Using the Windows Update Utility	645	
Using Windows Service Packs	645	
Using System Monitoring Tools	647	
Determining System Performance	649	
Using System Monitor	651	
Using Performance Logs and Alerts	661	
Monitoring and Optimizing Memory	670	
Monitoring and Optimizing the Processor	673	
Monitoring and Optimizing the Disk Subsystem	674	
Monitoring and Optimizing the Network Subsystem	677	
Creating Baseline Reports	679	
Using Task Manager	681	
Managing Application Tasks	681	
Managing Process Tasks	682	

Managing Performance Tasks	684	
Configuring Application Performance	686	
Scheduling Tasks	687	
Managing Scheduled Task Properties	690	
Summary	694	
Exam Essentials	695	
Key Terms	696	
Review Questions	697	
Answers to Review Questions	702	
Chapter 15	Performing System Recovery Functions	705
Safeguarding Your Computer and Recovering from Disaster	707	
Using Event Viewer	709	
Reviewing Event Types	711	
Getting Event Details	712	
Managing Log Files	713	
Setting Log File Properties	714	
The Windows 2000 Boot Process	719	
The Normal Boot Process	719	
Editing the BOOT.INI File	726	
Creating the Windows 2000 Boot Disk	732	
Using Advanced Startup Options	734	
Starting in Safe Mode	734	
Enabling Boot Logging	736	
Using Other Advanced Options Menu Modes	738	
Using Startup and Recovery Options	739	
Using the Dr. Watson Utility	742	
Creating Windows 2000 Professional Setup Boot Disks	745	
Using the Backup Utility	747	
Creating and Using an ERD	748	
Using the Backup Wizard	751	
Configuring Backup Options	754	
Using the Restore Wizard	760	

Using the Recovery Console	762
Starting the Recovery Console	763
Using the Recovery Console	766
Summary	768
Exam Essentials	769
Key Terms	769
Review Questions	771
Answers to Review Questions	776
Glossary	779
<i>Index</i>	811