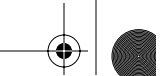


# Contents

<i>Introduction</i> .....	<i>xxi</i>
<b>Part 1 • Implementation and Administration</b> .....	<b>1</b>
<b>Chapter 1 • Overview of Operations Management</b> .....	<b>3</b>
Understanding IT Service Management .....	4
Exploring the IT Infrastructure Library (ITIL) .....	4
Exploring the Microsoft Operations Framework (MOF) .....	8
Tying It All Together .....	14
Defining Operations Management .....	16
Systems Management .....	16
Operations Management .....	16
The Bottom Line .....	16
<b>Chapter 2 • Installing System Center Operations Manager 2007</b> .....	<b>19</b>
Identifying Server Components .....	19
Operations Manager 2007 Server .....	20
DataStore (SQL Server 2005) .....	21
Verifying Prerequisites .....	22
Identifying Prerequisites .....	22
Running the Prerequisite Check Utility .....	26
Installation Criteria .....	28
Creating Accounts .....	28
Configuring Active Directory .....	30
Installing the Database .....	32
Installing Operations Manager 2007 .....	39
Installing the Root Management Server on Clustered Hardware .....	42
Verifying the Installation .....	54
The Bottom Line .....	55
<b>Chapter 3 • Management Group Settings</b> .....	<b>63</b>
Configuring Management Group Global Settings .....	63
Alerts .....	64
Database Grooming .....	66
Notification Channels .....	67
Privacy Settings .....	71
Reporting Settings .....	74
Web Addresses .....	75
Configuring Global Server Settings .....	76
Heartbeat .....	76
Security .....	76
Exploring Global Agent Settings .....	77
Understanding Individual Server Options .....	78
Agent Management .....	78



- Heartbeat ..... 84
- Security ..... 84
- Proxy Settings ..... 84
- The Bottom Line ..... 86

**Chapter 4 • Installing and Configuring Agents ..... 89**

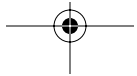
- Exploring Agent Installation Prerequisites ..... 89
- Installing by Using the Computer and Device Management Wizard ..... 90
- Installing Manually ..... 97
  - Installing from CD ..... 97
  - Other Manual Installation Methods ..... 99
- Multihomed Agents ..... 101
- Adjusting Individual Agent Settings ..... 102
  - Properties ..... 103
  - Open ..... 105
  - Change Primary Management Server ..... 105
  - Repair ..... 105
  - Uninstall ..... 106
  - Delete ..... 106
- The Bottom Line ..... 106

**Chapter 5 • Managing Management Packs ..... 109**

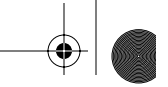
- Understanding Monitoring Capabilities ..... 110
- Identifying Management Pack Requirements ..... 110
  - Current Management Packs Available ..... 111
  - Requirements for Management Pack Monitoring ..... 111
- Exploring Management Packs ..... 113
  - Discovery ..... 114
  - Groups ..... 116
  - Monitors ..... 120
  - Using Rules ..... 141
  - Reporting ..... 148
  - Overrides ..... 148
  - Converting Legacy Management Packs ..... 149
  - Removing Management Packs ..... 152
- The Bottom Line ..... 152

**Chapter 6 • Authoring and the Management Pack Life Cycle ..... 155**

- Authoring Management Packs ..... 155
  - Creating New Management Packs ..... 156
- Exploring a Typical Life Cycle ..... 156
- Creating Management Pack Life-Cycle Controls ..... 158
  - Release Management ..... 158
  - Versioning ..... 158
  - Management Packs That You Created ..... 159
  - Management Packs Provided by Microsoft ..... 161
- Documenting Changes ..... 162
- Using MP Studio 2007 ..... 162



Analysis and Documentation .....	163
Manage Overrides .....	163
Management Pack Store .....	164
Testing .....	164
Comparison .....	164
Management Pack Life Cycle .....	164
Management Pack Development .....	165
Management Pack Implementation .....	166
Management Pack Maintenance .....	167
Management Pack Considerations .....	169
The Bottom Line .....	169
<b>Chapter 7 • Monitoring with the Console .....</b>	<b>173</b>
Console Overview .....	173
Workspaces .....	174
Views .....	175
Tasks .....	182
Operators .....	186
Customizing the Console .....	190
Limiting the Data in the Details Pane .....	191
Creating Views As an Operator .....	196
Configuring Notification Channels .....	197
Maintenance Mode .....	198
The Bottom Line .....	201
<b>Chapter 8 • Audit Collection Services and Agentless Exception Monitoring ..</b>	<b>205</b>
Exploring Audit Collection Services .....	205
Audit Collection Services Components .....	206
Deployment Options .....	209
Optimizing the ACS Collector .....	219
Security .....	220
Performance Monitoring .....	224
Admin Tools .....	225
Uninstalling ACS .....	227
Using Agentless Exception Monitoring .....	228
Configuring Client Monitoring .....	229
Editing Group Policy .....	232
Agentless Exception Monitoring Views .....	235
The Bottom Line .....	235
<b>Chapter 9 • Reporting .....</b>	<b>239</b>
Installing Reporting Services .....	239
Installing SQL Reporting Services .....	240
Configuring SQL Report Server .....	245
Installing Operations Manager Reporting .....	253
Using the Reporting Workspace .....	258
Predefined Reports .....	260
Creating New Reports .....	262
The Bottom Line .....	273



**Chapter 10 • Working with Complex Environments . . . . . 275**

- Working with Multihoming Agents . . . . . 275
  - Multihoming Overview . . . . . 275
  - Configuring Management Groups . . . . . 278
  - Agent Setup . . . . . 279
  - Agent Settings . . . . . 286
- Configuring Connected Management Groups . . . . . 286
  - Overview of Connected Management Groups . . . . . 287
  - Configuring Connectors . . . . . 287
  - Providing Notification Channels . . . . . 289
  - Forwarding and Responding to Alerts . . . . . 290
- Interoperating with Third-Party Monitoring Solutions . . . . . 293
  - Installing Connectors . . . . . 293
  - Configuring Connectors . . . . . 294
  - Editing and Deleting Subscriptions . . . . . 299
- The Bottom Line . . . . . 299

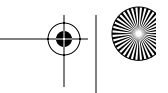
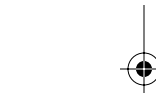
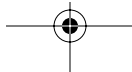
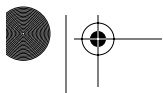
**Part 2 • Maintenance and Troubleshooting . . . . . 301**

**Chapter 11 • Optimizing Your Environment . . . . . 303**

- Optimizing Management Packs . . . . . 303
  - Identifying Useful Settings . . . . . 304
  - Customizing Management Packs . . . . . 306
- Optimizing Rules . . . . . 309
  - Modifying Existing Rules . . . . . 310
  - Creating New Rules . . . . . 316
  - Self-Tuning Thresholds . . . . . 319
  - Optimized Performance Counters . . . . . 328
- The Bottom Line . . . . . 328

**Chapter 12 • Backup, Restore, and Disaster Recovery . . . . . 331**

- Backup Strategy . . . . . 331
  - Backing Up Secure Storage . . . . . 332
  - Backing Up the Registry . . . . . 333
  - Backing Up the Operations Manager 2007 Database . . . . . 335
  - Backing Up Management Packs . . . . . 337
- Restoring Your Environment . . . . . 338
  - Performing the Initial Installation . . . . . 339
  - Restoring the Management Packs . . . . . 339
  - Restoring Secure Storage . . . . . 339
  - Restoring the Registry . . . . . 340
  - Restoring the Database . . . . . 340
- Disaster Recovery . . . . . 342
  - Using OpsManager 2007 to Monitor Your Disaster Recovery Site . . . . . 343
  - Replicating Operations Manager Data to Your Disaster Recovery Site . . . . . 343
- The Bottom Line . . . . . 344



<b>Chapter 13 • Troubleshooting</b> .....	<b>345</b>
Operations Manager 2007 Troubleshooting Tools .....	345
Resource Kit Tools .....	346
Management Pack Catalogs .....	346
Third-Party Tools .....	348
Other Interesting Tools .....	349
Troubleshooting Agents .....	350
Making the Agent Available to the Server .....	350
Operations Manager Won't Remove an Agent Entry in the Pending Management Folder .....	352
Operations Manager Can't Push Content or Manage the Client Remotely .....	352
Operations Manager Can't Install the Agent Remotely .....	354
Agent Warnings and Errors in Event Viewer .....	354
Troubleshooting Management Packs .....	355
The Entity Health for One or More Management Servers Displays Critical .....	355
A Management Pack Won't Work After Conversion .....	355
Operations Manager Won't Let You Save a Recorded Web Monitor .....	356
Management Pack Warnings and Errors in Event Viewer .....	356
Troubleshooting Security Issues .....	356
Overcoming Issues with the W32Time Service .....	357
Understanding Why the Discovery Wizard Never Completes .....	358
Security Failure Audits, Warnings, and Errors in Event Viewer .....	359
The Bottom Line .....	360
<b>Chapter 14 • Scripting Operations Manager 2007</b> .....	<b>361</b>
Introducing PowerShell .....	361
Useful PowerShell Cmdlets .....	363
PowerShell and Operations Manager .....	373
Operations Manager Cmdlets .....	375
Computer and Device Cmdlets .....	376
Discovery Cmdlets .....	381
Management Pack Cmdlets .....	384
Rule Cmdlets .....	386
Task Cmdlets .....	389
Action Cmdlets .....	391
Notification Cmdlets .....	392
Alert Cmdlets .....	394
Miscellaneous Cmdlets .....	397
Management Server Cmdlets .....	400
Maintenance Window Cmdlets .....	403
Monitoring Cmdlets .....	405
Performance Counter Cmdlets .....	407
The Bottom Line .....	409
<i>Index</i> .....	411

