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# Professional Microsoft® IIS 8

Ken Schaefer, Jeff Cochran, Scott Forsyth, Dennis Glendenning, Benjamin Perkins



# PROFESSIONAL MICROSOFT® IIS 8

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INTRODUCTION .....	xxvii
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## ► PART I INTRODUCTION AND DEPLOYMENT

CHAPTER 1	Background on IIS and New Features in IIS 8.0 .....	3
CHAPTER 2	IIS 8.0 Architecture .....	19
CHAPTER 3	Planning Your Deployment .....	39
CHAPTER 4	Installing IIS 8.0 .....	63

## ► PART II ADMINISTRATION

CHAPTER 5	Administration Tools .....	97
CHAPTER 6	Website Administration .....	117
CHAPTER 7	Web Application Administration .....	153
CHAPTER 8	Web Application Pool Administration .....	179
CHAPTER 9	Delegating Remote Administration .....	221
CHAPTER 10	Configuring Other Services .....	259

## ► PART III ADVANCED ADMINISTRATION

CHAPTER 11	Core Server .....	315
CHAPTER 12	Core Server Extensibility .....	343
CHAPTER 13	Securing the Server .....	393
CHAPTER 14	Authentication and Authorization .....	423
CHAPTER 15	SSL and TLS .....	471
CHAPTER 16	IIS Scalability I: Building an IIS Web Farm .....	501
CHAPTER 17	IIS Scalability II: Load Balancing and ARR .....	545
CHAPTER 18	Programmatic Configuration and Management .....	597
CHAPTER 19	URL Rewrite .....	681
CHAPTER 20	Configuring Publishing Options .....	743

*Continued*

► **PART IV    MANAGING AND OPERATING IIS 8.0**

**CHAPTER 21**    IIS and Operations Management ..... 779

**CHAPTER 22**    Monitoring and Performance Tuning ..... 805

**CHAPTER 23**    Diagnostics and Troubleshooting ..... 851

**INDEX**..... 923

PROFESSIONAL

**Microsoft<sup>®</sup> IIS 8**



PROFESSIONAL

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*Thank you, Julia, Adelaide, Ivy-Jane, Sebastien, and Theo for putting up with the trials, tribulations, and late nights involved in writing a book, again. This would not have been possible without your love and support.*

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*Much of the credit for this book must go to our editor, John Sleeva, for keeping me on track and on point (on deadline is apparently a lost cause), and to our tech editor, Steve Schofield, for fixing my errors in coding and process.*

*To Zina, without whom there would be no reason to write.*

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*For my wife, Melissa, and my children, Joel and Alisha, who always patiently support me during my long hours of work and writing.*

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*To my wife, Melissa, and our amazing children: Bo, T, and Chuck-Do.*

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# CONTENTS

## INTRODUCTION

xxvii

## PART I: INTRODUCTION AND DEPLOYMENT

<b>CHAPTER 1: BACKGROUND ON IIS AND NEW FEATURES IN IIS 8.0</b>	<b>3</b>
<b>IIS Versions 1.0 to 4.0</b>	<b>4</b>
<b>IIS 5.0 and 5.1</b>	<b>4</b>
<b>IIS 6.0</b>	<b>5</b>
Secure by Default	5
Request Processing	5
Additional Features	6
<b>IIS 7.0 and 7.5</b>	<b>7</b>
ASP.NET Integration	7
Extensibility	8
Security	8
Remote Management	9
IIS Manager	10
AppCmd.exe Command-Line Utility	10
PowerShell Integration	10
Diagnostics	10
<b>Windows Server 2012 Features</b>	<b>10</b>
Server Versions	11
The New User Interface	11
Virtualization and Private Cloud	13
TLS/SSL	14
<b>IIS 8.0 Features</b>	<b>15</b>
SSL Changes	15
CPU Throttling	15
Application Warm-Up	16
WebSocket	16
Additional Features	16
<b>CHAPTER 2: IIS 8.0 ARCHITECTURE</b>	<b>19</b>
<b>IIS Architecture Basics</b>	<b>20</b>
Inetinfo.exe	20
Http.sys	21

ISAPI and CGI	22
IIS Admin Service	22
Application Pools	22
Active Server Pages	23
ASP.NET	23
<b>IIS 7.0 and Later Architecture</b>	<b>24</b>
Pipeline Modes	24
Extensibility and Modularity	26
Metabase — Going, Going, Gone!	27
WAS and the Worker Process	29
<b>IIS 8.0 Architecture</b>	<b>29</b>
SSL/SNI and Central Certificates	30
Dynamic IP Restrictions	31
Active CPU Throttling	31
Application Initialization	32
PowerShell Improvements	32
<b>Windows Server 2012 Architecture</b>	<b>33</b>
Virtualization and Hyper-V	33
Cloud Architecture	35
Resilient File System	36
BitLocker Drive Encryption	36
Network Access Protection	37
 <b>CHAPTER 3: PLANNING YOUR DEPLOYMENT</b>	 <b>39</b>
<b>Windows 2012 Server Deployment Planning</b>	<b>40</b>
Windows Server 2012 Requirements	40
Virtualization	41
Which Server Edition?	41
Upgrade or New Installation?	43
Planning Your Hardware	44
Planning Your Network	45
Planning Security	48
Planning Backup and Recovery	51
Windows Server 2012 Cloud Deployment	53
<b>IIS 8.0 Deployment Planning</b>	<b>53</b>
IIS 8.0 Requirements	53
Installation Decisions	53
Planning for IIS-Specific Security	54
Planning Development Environments	55
Planning Production Environments	55

Shared Configuration	56
Content Replication	56
<b>Application Deployment Planning</b>	<b>56</b>
<b>Automation and Deployment Tools</b>	<b>57</b>
Volume Activation	58
<b>Capacity Planning</b>	<b>58</b>
Traffic	58
WCAT	59
IIS 8.0 Request Tracing	59
Scalability	60
Application Capacity Planning	60
<b>CHAPTER 4: INSTALLING IIS 8.0</b>	<b>63</b>
<b>Windows Server 2012 Server Manager</b>	<b>64</b>
<b>The Default IIS 8.0 Installation</b>	<b>65</b>
Testing the Installation	66
Installing IIS 8.0 Using Web Platform Installer	73
<b>Installing IIS 8.0's Features</b>	<b>76</b>
<b>Installing IIS 8.0 Using PowerShell</b>	<b>79</b>
<b>Upgrading from IIS 7.0 to IIS 8.0</b>	<b>80</b>
<b>Installing IIS 8.0 on Windows 8</b>	<b>81</b>
<b>Installing IIS 8.0 on Windows 7</b>	<b>84</b>
<b>Automated Installation and Configuration</b>	<b>85</b>
Windows Deployment Services	85
<b>Hosting Service Recommendations</b>	<b>86</b>
Directory Structure	87
Web Server Accounts and Application Pools	88
Configuring Shared Hosting with Managed Code	89
<b>PART II: ADMINISTRATION</b>	
<b>CHAPTER 5: ADMINISTRATION TOOLS</b>	<b>97</b>
<b>Key Characteristics</b>	<b>98</b>
<b>IIS Manager</b>	<b>99</b>
Appearance	99
Feature Scopes	99
Features View	101
Content View	105
Feature Delegation	105
<b>IIS Manager Extensibility</b>	<b>106</b>

<b>Remote Connections</b>	<b>106</b>
<b>Configuration Settings</b>	<b>107</b>
Configuration File Hierarchy	107
Configuration Levels	108
Location Tags	109
Configuration File Structure	110
Configuration Schema	111
Locking and Unlocking Sections	113
<b>Command-Line Management</b>	<b>114</b>
 <b>CHAPTER 6: WEBSITE ADMINISTRATION</b>	 <b>117</b>
 <b>Websites, Applications, and Virtual Directories</b>	 <b>118</b>
Websites	118
Applications	119
Virtual Directories	119
Combining Sites, Applications, and Virtual Directories	120
<b>Creating a New Website</b>	<b>121</b>
Creating a Website Using IIS Manager	121
Creating a New Application Pool for Your Site	122
Creating a Website Using AppCmd	124
Creating a New Website Using PowerShell	126
Changes to the applicationHost.config File	126
<b>Configuring Logging</b>	<b>127</b>
Enabling Logging	128
<b>Configuring Host Headers</b>	<b>134</b>
<b>Administering Applications</b>	<b>138</b>
Adding Applications Using IIS Manager	138
Adding Applications Using AppCmd	139
Deleting Applications Using IIS Manager	140
Deleting Applications Using AppCmd	140
<b>Administering Virtual Directories</b>	<b>140</b>
Creating Virtual Directories Using IIS Manager	140
Creating Virtual Directories Using AppCmd	142
Adding Virtual Directories Using PowerShell	142
Removing Virtual Directories	142
<b>Authentication</b>	<b>143</b>
<b>Configuring Compression</b>	<b>143</b>
<b>Configuring Default Document Settings</b>	<b>146</b>
Reordering a Document	146
Adding a Default Document	146



<b>Configuring MIME Settings</b>	<b>146</b>
Adding MIME Types	147
Editing MIME Types	148
Removing MIME Types	148
<b>Basic Administration Tasks</b>	<b>149</b>
Configuring Default Options for IIS	149
Starting and Stopping Services and Websites	150
Isolating Applications	151
<b>CHAPTER 7: WEB APPLICATION ADMINISTRATION</b>	<b>153</b>
<b>Application Administration</b>	<b>154</b>
<b>ASP Configuration</b>	<b>154</b>
<b>ASP.NET Configuration</b>	<b>155</b>
IIS 6.0 and Previous Architecture	155
IIS 8.0 Architecture	156
IIS 8.0 and ASP.NET Modules	157
<b>ISAPI Configuration</b>	<b>172</b>
<b>CGI Configuration</b>	<b>173</b>
<b>FastCGI Configuration</b>	<b>174</b>
Installing PHP	174
Installing QDig	175
Installing the FastCGI Module	175
Enabling FastCGI for Use with PHP	175
<b>Windows Process Activation Service</b>	<b>176</b>
<b>Application Initialization</b>	<b>176</b>
<b>CHAPTER 8: WEB APPLICATION POOL ADMINISTRATION</b>	<b>179</b>
<b>A Background of Website Separation</b>	<b>180</b>
<b>Defining Applications</b>	<b>180</b>
<b>Comparing Virtual Directories to Applications</b>	<b>183</b>
<b>Understanding the w3wp.exe Process</b>	<b>185</b>
Recycling Application Pools	187
Web Gardens	188
<b>Working with Application Pools</b>	<b>190</b>
Creating Application Pools	190
Managing Settings	192
Assigning Applications and Sites to Application Pools	196
Specifying the .NET Framework Version	200
Specifying the Managed Pipeline Mode	202
Managing Active Application Pools	206

<b>Application Pool Security</b>	<b>212</b>
Application Pool Configuration Isolation	212
Application Pool SID Injection	213
Site Anonymous User	214
<b>Noteworthy Advanced Settings</b>	<b>215</b>
Bitness	215
CPU Limits	215
Processor Affinity	216
<b>Application Pool Users</b>	<b>216</b>
Network Service Account	217
Local Service Account	218
Local System Account	218
Windows Application Pool Identity	218
Custom User Account	219

---

## **CHAPTER 9: DELEGATING REMOTE ADMINISTRATION** **221**

<b>Introducing the Main Characters</b>	<b>222</b>
System Administrator	222
Site Administrator	223
The Two Shall Work as One	223
<b>IIS Manager Remote Access</b>	<b>223</b>
Installing the IIS 8.0 Management Service	223
Enabling Remote Connections	224
Authentication Types	229
Authorization at Three Levels	232
.Remote Installation and Usage	234
Extending IIS Manager	235
<b>Delegation Settings</b>	<b>236</b>
Delegation of Sections	237
Delegating the Small Details	255

---

## **CHAPTER 10: CONFIGURING OTHER SERVICES** **259**

<b>Installing and Configuring an FTP Server</b>	<b>260</b>
FTP Basics	260
Planning an FTP Server Installation	261
Creating an FTP Site	265
Creating FTP Sites with PowerShell	271
Testing FTP with Telnet	271
<b>Configuring Existing FTP Sites</b>	<b>271</b>
Home Directory	272
Advanced Settings	272

Logging	273
FTP Messages	274
<b>Configuring FTP User Security</b>	<b>274</b>
Configuring .NET Accounts for FTP	278
Configuring FTP over SSL	286
Configuring FTP User Isolation	288
Configuring FTP Host Name Support	290
Configuring FTP Request Filtering	291
Configuring FTP IP and Domain Restrictions	292
Configuring FTP Logon Attempt Restrictions	293
<b>Administering FTP with Configuration Files</b>	<b>294</b>
Adding FTP over SSL to an Existing Site	294
Configuring Host Name Support	296
<b>The FTP Command-Line Client</b>	<b>296</b>
<b>Installing and Configuring an SMTP Server</b>	<b>298</b>
How SMTP Works	298
Installing SMTP	298
Configuring the Default SMTP Server	300
SMTP Security and Authentication	302
Configuring Additional Domains	305
SMTP Folders	305
Testing and Troubleshooting SMTP	306
<b>Installing and Using LogParser</b>	<b>309</b>
Installing LogParser	309
Using LogParser from the Command Line	309
LogParser Examples	311

## PART III: ADVANCED ADMINISTRATION

<b>CHAPTER 11: CORE SERVER</b>	<b>315</b>
<b>Background</b>	<b>315</b>
<b>Core Server and Modules</b>	<b>317</b>
HTTP Modules	319
<b>Server Workload Customization</b>	<b>326</b>
Eliminating Overheads	326
A Basic Real-World Example	327
A More Complex Real-World Example	328
Customizing Individual Websites	330
Customization Using IIS Manager	334
<b>ASP.NET and the IIS Pipeline</b>	<b>336</b>
Configuring ASP.NET Execution Mode	337
Migrating IIS 7.x ASP.NET Applications to IIS 8	339

Migrating Legacy ASP.NET Applications to IIS 8.0	339
Selecting the ASP.NET Version	340
<b>Legacy ISAPI Support</b>	<b>340</b>
<b>CHAPTER 12: CORE SERVER EXTENSIBILITY</b>	<b>343</b>
<b>Extensibility Overview</b>	<b>344</b>
<b>IIS Module Concepts</b>	<b>345</b>
Events	345
Notifications	347
Return Codes	348
Notification Priority	349
<b>An Example Native Module</b>	<b>351</b>
Native Module Design	351
Native Module Creation	352
Native Module Wrap-Up	362
<b>Managed Code Modules</b>	<b>363</b>
Managed Event Notifications	364
Further Reading	365
<b>An Example Managed Module</b>	<b>366</b>
Managed Module Design	366
Managed Module Creation	366
Managed Module Wrap-Up	371
<b>Event Tracing from Modules</b>	<b>371</b>
Adding Tracing Support to a Managed Code Module	372
<b>Extending IIS Configuration</b>	<b>377</b>
Adding Configuration Support to Custom Modules	377
<b>Extending the IIS Administration Tool</b>	<b>381</b>
Creating an IIS Administration Tool Extension	382
<b>CHAPTER 13: SECURING THE SERVER</b>	<b>393</b>
<b>What Is Security?</b>	<b>394</b>
Managing Risk	394
Security Components	395
<b>Types of Attacks</b>	<b>396</b>
Denial-of-Service Attacks	396
Privilege Escalation Attacks	396
Passive Attacks	397
Advanced Persistent Threats	398
<b>Securing Your Environment</b>	<b>398</b>
<b>Securing Your IIS 8.0 Server</b>	<b>399</b>
IP and Domain Restrictions	399
Configuring MIME-Type Extensions	405

Configuring ISAPI Extensions and CGI Restrictions	407
Configuring Request Filtering	413
Application Layer Security	420
Configuring Logging	421
<b>CHAPTER 14: AUTHENTICATION AND AUTHORIZATION</b>	<b>423</b>
<b>Authentication in IIS 8.0</b>	<b>424</b>
How IIS 8.0 Authenticates a Client	426
<b>Configuring Anonymous Authentication</b>	<b>428</b>
<b>Configuring Basic Authentication</b>	<b>430</b>
<b>Configuring Digest Authentication</b>	<b>433</b>
<b>Configuring Integrated Windows Authentication</b>	<b>437</b>
<b>Configuring NTLM Authentication</b>	<b>439</b>
Configuring Kerberos Authentication	443
<b>Configuring UNC Authentication</b>	<b>448</b>
<b>Configuring Client Certificate Authentication</b>	<b>449</b>
<b>Configuring Forms-Based Authentication</b>	<b>453</b>
<b>Configuring Delegation</b>	<b>456</b>
<b>Configuring Protocol Transition</b>	<b>461</b>
<b>Configuring Authorization</b>	<b>462</b>
URL Authorization	463
Configuring Application Pool Sandboxing	466
<b>Understanding IIS 8.0 User Accounts</b>	<b>468</b>
<b>CHAPTER 15: SSL AND TLS</b>	<b>471</b>
<b>Securing a Website with TLS</b>	<b>472</b>
The SSL/TLS Handshake	473
Generating a Certificate Request	476
Submitting the Certificate Request	481
Importing the Certificate into IIS 8.0	483
Configuring Website Bindings	484
Generating a Certificate Using Domain Certificate Request	485
Generating a Self-Signed Certificate	487
Managing an SSL/TLS-Secured Website	487
Enabling Central Certificate Store	492
Managing a Public Key Infrastructure	492
<b>Securing an SMTP Virtual Server with TLS</b>	<b>496</b>
<b>Securing an FTP Site with TLS</b>	<b>498</b>
<b>CHAPTER 16: IIS SCALABILITY I: BUILDING AN IIS WEB FARM</b>	<b>501</b>
<b>IIS 8.0 and Web Farms</b>	<b>502</b>
Shared Configuration	503

<b>Content Configuration</b>	<b>520</b>
Local Content	520
Shared Network Content	521
Shared SAN or Storage Spaces Content	523
<b>Content Replication</b>	<b>524</b>
Distributed File System	525
Robocopy	528
Offline Folders/Client Side Caching	529
Additional Tools	531
Web Deploy	531
<b>Other Considerations</b>	<b>532</b>
Replication	532
.NET Configuration Files and machineKey	535
Session State	536
Security	542

---

## **CHAPTER 17: IIS SCALABILITY II: LOAD BALANCING AND ARR** **545**

---

<b>Load-Balancing Concepts</b>	<b>546</b>
Shared Concepts	546
Load-Balancing Solutions	555
<b>Application Request Routing</b>	<b>558</b>
ARR Functionality	559
Obtaining ARR	560
Understanding ARR	560
Touch Points	561
Creating a Server Farm	562
Creating Server Farm Rules	565
Health Checks	567
Web Server Bindings	571
Testing URLs Per-Site Per-Server	574
SSL/TLS Offloading	579
Man-in-the-Middle and ARR Helper	580
Server Management	581
Performance Monitoring	584
Caching	584
Miscellaneous Optimizations	588
High Availability for ARR	589
<b>Network Load Balancing</b>	<b>590</b>
<b>Frameworks</b>	<b>594</b>
Web Farm Framework	594
Windows Azure Services	595

<b>CHAPTER 18: PROGRAMMATIC CONFIGURATION AND MANAGEMENT</b>	<b>597</b>
<b>Configuration Optimization</b>	<b>598</b>
<b>Direct Configuration</b>	<b>599</b>
Configuration File Hierarchy	599
Order of Operation	601
Collection Items	602
Section Structure	605
Location Tag	607
Inheritance	610
Locking	611
childConfig/sourceConfig	612
Configuration Path	612
Schema Extensibility	613
<b>Programmatic Configuration</b>	<b>618</b>
IIS 8.0 Programming Walk-Through	618
Microsoft.Web.Administration (MWA)	626
Microsoft.Web.Management (MWM)	634
ABO, ADSI, and Legacy API Support	635
IIS WMI Provider	636
AHAdmin	639
<b>Configuration Editor</b>	<b>641</b>
Modifying the Custom Extended Schema	642
Modifying the Configuration Item	643
Modifying an Attribute and Viewing the Generated Scripts	644
<b>Command-Line Management</b>	<b>646</b>
Using AppCmd.exe	648
Getting Help	648
Using the list Command	650
AppCmd Attributes and Values	653
Managing Objects	653
Determining Which Attributes Are Associated with an Object	654
Backing Up and Restoring	657
Locking and Unlocking the Configuration	664
Piping with XML	664
<b>IIS PowerShell Management</b>	<b>665</b>
PowerShell IIS Cmdlets	666
Getting Help	668
Using PowerShell IIS Cmdlets	671
Creating a Website and Viewing the Results	673
Modifying the Attributes of a Website	676

IIS Operational Activities Using PowerShell	677
Backing Up and Restoring Using IIS PowerShell	679
<b>CHAPTER 19: URL REWRITE</b>	<b>681</b>
<b>URL Rewrite Concepts</b>	<b>682</b>
Conditions	682
Actions	683
<b>Obtaining and Installing URL Rewrite</b>	<b>686</b>
<b>Getting Started Walk-Through</b>	<b>687</b>
<b>Managing URL Rewrite</b>	<b>691</b>
Using IIS Manager	691
Using a Text Editor	691
Using APIs	692
<b>Applying URL Rewrite Rules</b>	<b>692</b>
Global Level — <globalRules>	692
Global Level — <rules>	693
Site Level — applicationHost.config	693
Site Level — web.config	694
Subfolder Level — web.config	694
<b>Rule Templates</b>	<b>695</b>
Inbound Rule Templates	696
Inbound and Outbound Rules Templates	697
Outbound Rules Template	699
Search Engine Optimization Templates	699
<b>Input Variables</b>	<b>701</b>
Common URL Parts	702
Additional Input Variables	703
<b>Wildcards Pattern Matches</b>	<b>704</b>
<b>Regular Expressions</b>	<b>705</b>
10 Things You Need to Know about Regex	707
<b>Back-References</b>	<b>712</b>
Rule Back-References versus Condition Back-References	712
Wildcards Back-References	713
Capturing Back-References across Conditions	713
Where to Use Back-References	714
<b>Setting Server Variables</b>	<b>715</b>
Request Headers	715
Allowed Server Variables	716
<b>Special Considerations</b>	<b>716</b>
Redirecting to SSL	716
Checking If a Request Is for a File or a Directory	718
Considering ScriptResource.axd and WebResources.axd	719



Caching IIS Output	719
Using String Functions with Rule Actions and Conditions	721
Importing Rules from mod_rewrite	722
Logging Rewritten URLs	722
<b>Rewrite Maps</b>	<b>722</b>
<b>Common Rules</b>	<b>725</b>
Redirecting Non-www to www (Canonical Hostnames)	726
Creating a Down for Maintenance Page	726
Preserving Old Urls	728
Preventing Image Hot-Linking	729
Blocking Requests	729
Redirecting a Subdomain to Subfolder	730
Adding HTTP_PROTOCOL	731
Hosting Multiple Domains under One Site	732
Using Query String Logic for Rules	732
<b>Outbound Rules</b>	<b>732</b>
Outbound Rules versus Inbound Rules	733
Outbound Rule Walk-Throughs	733
Further Outbound Rule Considerations	738
<b>Troubleshooting URL Rewrite</b>	<b>738</b>
Create a Testing Rule	739
Create a Stopping Rule	739
Reviewing Input Variables	739
Fiddler and Firebug	739
Test Pattern Tool	740
Display Variable Trick	741
Failed Request Tracing	741
Simplify	741
<b>CHAPTER 20: CONFIGURING PUBLISHING OPTIONS</b>	<b>743</b>
<b>Web Platform Installer</b>	<b>744</b>
Using Web Platform Installer	744
Web Application Gallery	746
Installing Gallery Applications	746
<b>Web Deployment Tool</b>	<b>751</b>
Installing Web Deploy with Web PI	751
Installing Web Deploy Directly	751
Deploying Web Applications	753
Migrating and Synchronizing Web Servers	756
<b>FTP Publishing</b>	<b>759</b>
Configuring FTP Publishing with IIS Manager	760
Configuring FTP Publishing with Configuration Files	762

<b>WebDAV Publishing</b>	<b>763</b>
Installing and Configuring WebDAV	764
<b>Visual Studio Publishing</b>	<b>768</b>
Publishing Websites	769
Publishing Web Applications	771

## **PART IV: MANAGING AND OPERATING IIS 8.0**

### **CHAPTER 21: IIS AND OPERATIONS MANAGEMENT 779**

<b>Management Approaches</b>	<b>779</b>
ITIL Standards	780
MOF: Microsoft's ITIL Superset	781
Applying MOF to IIS Operations Management	784
<b>Operational Tasks</b>	<b>797</b>
Backup and Restore Program	797

### **CHAPTER 22: MONITORING AND PERFORMANCE TUNING 805**

<b>Monitoring Websites</b>	<b>806</b>
How to Monitor IIS 8.0	806
What to Monitor	824
<b>Performance Tuning</b>	<b>831</b>
Operating System Optimizations	832
IIS Service Optimizations	835
Website Optimizations	842

### **CHAPTER 23: DIAGNOSTICS AND TROUBLESHOOTING 851**

<b>Types of Issues</b>	<b>852</b>
Specific Errors	852
Hang/Time-Out Issues	852
Resource-Intensive and Slowness Issues	853
<b>Runtime Status and Control API</b>	<b>854</b>
Viewing Worker Processes	855
Viewing Page Requests	858
Viewing Application Domains	861
<b>IIS 8.0 Error Pages</b>	<b>861</b>
Customizing Custom Error Pages	863
Multiple Language Support	866
HTTP Status Codes	866
FTP Status Codes	867

<b>Failed Request Tracing</b>	<b>867</b>
Setting Up Failed Request Tracing Rules	868
Reading the XML Trace Logs	871
<b>Logging</b>	<b>873</b>
<b>ASP.NET Tracing</b>	<b>874</b>
Enabling ASP.NET Tracing	876
The ASP.NET Trace Viewer	877
<b>Troubleshooting Tips</b>	<b>880</b>
Reproduce	880
Isolate	881
Fix	884
Test	884
<b>Additional Built-In Tools</b>	<b>885</b>
Task Manager	885
Event Viewer	885
Reliability and Performance Monitor	888
Logging NTFS Failures to Disk	895
ping, tracert, and pathping	896
telnet	898
<b>Installable Tools</b>	<b>899</b>
WFetch	899
Web Capacity Analysis Tool	899
LogParser	900
DelegConfig	901
Process Explorer	902
Process Monitor	904
The Debug Diagnostic Tool	909
ProcDump	914
WinDbg	915
Where to Go Next	921
 <b>INDEX</b>	 <b>923</b>



# INTRODUCTION

**WINDOWS SERVER 2012** is the latest incarnation of Microsoft's successful server platform. Included is a new version of IIS, now in its eighth incarnation.

IIS 8.0 isn't the revolutionary change in architecture that IIS 7.0 was. However it offers much new functionality, absorbing many of the standalone add-on updates available since IIS 7.0 was released, as well presenting administrators with new security, scalability, and administrative features.

For readers familiar with IIS 7.0, this book has substantial sections devoted to popular add-ons now baked into the product, such as the Application Request Routing (ARR) and URL Rewrite modules, as well as coverage of new features, such as Central Certificate Store and Server Name Indication support.

For readers new to IIS, this book offers complete coverage of IIS fundamentals: the configuration model, delegated administration, extensibility options, and real-time diagnostic and troubleshooting features that have been carried over from IIS 7.0.

Both new and previous users of IIS can benefit from a book covering the whole deployment lifecycle: architecture, installation, configuration, and operations management. Like its predecessor, this book continues to stress both GUI options as well as provide alternative, automated management through comprehensive AppCmd and PowerShell examples.

The authors have focused on capturing the very best of the new features in IIS 8.0 and how you can take advantage of them. The writing styles vary from chapter to chapter because some of the foremost experts on IIS 8.0 have contributed to this book. Drawing on our expertise in deployment, hosting, development, and enterprise operations, we believe that this book captures much of what today's IIS administrators need in their day-to-day work.

## WHO THIS BOOK IS FOR

This book is aimed at IIS administrators (or those who need to ramp up quickly in anticipation of having to administer IIS). What differentiates this book is that it doesn't just focus on features and how to configure them using a GUI administrative tool. Instead, we explain how features work (for example, how Kerberos authentication actually works under the covers) so that you can better troubleshoot issues when something goes wrong.

Additionally, since most administrators need to be able to automate common procedures, we have included specific chapters on programmatic administration and command-line tools as well as code snippets (with a focus on using AppCmd.exe and PowerShell) throughout the book.

This book covers features that many other IIS books don't touch (such as high availability and web farm scenarios, or extending IIS) and has a dedicated chapter on troubleshooting and diagnostics.

Real-life IIS administration is about people, processes, and technology. Although a technical book can't teach you much about hiring the right people, this book doesn't focus solely on technology. Operations management and monitoring (key components of good processes) are also addressed.

Overall, we think that this book provides comprehensive coverage of the real-life challenges facing IIS administrators: getting up to speed on the new features of a product, understanding how the product works under the covers, and being able to operate and manage the product effectively over the long term.

## HOW THIS BOOK IS STRUCTURED

The book is divided into four major parts:

- Part I covers the new features and architecture of IIS 8.0, as well as deployment and installation considerations.
- Part II discusses the basics of the administration tools (both GUI and command-line) as well as common administrative tasks for websites, delegated administration, and supporting services (such as FTP, SMTP, and publishing options).
- Part III introduces more advanced topics, such as extending IIS 8.0, programmatic administration, web farms and high availability, and security.
- Finally, Part IV covers topics that go beyond the initial understanding of the new feature set. We cover topics that administrators will need on an ongoing basis, such as operations management, performance monitoring and tuning, and diagnostics and troubleshooting.

## WHAT YOU NEED TO USE THIS BOOK

Although IIS 8.0 ships in both Windows 8 and Windows Server 2012, certain functionality (such as load balancing) is available only in the server edition. Because the full functionality of IIS 8.0 is available in Windows Server 2012, the authors have focused on that product for this book.

For IIS 8.0 extensibility, Microsoft Visual Studio 2012 has been used throughout the book; however, any IDE suitable for .NET development can be used for implementing the code samples presented.

## CONVENTIONS

To help you get the most from the text and keep track of what's happening, we've used a number of conventions throughout the book.

### PRODUCT TEAM ASIDE

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Boxes like this one hold tips, tricks, trivia from the ASP.NET Product Team, or some other information that is directly relevant to the surrounding text.