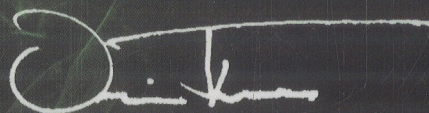


Windows Server® 2008 R2 SECRETS

DO WHAT YOU NEVER THOUGHT POSSIBLE WITH WINDOWS SERVER 2008 R2



ORIN THOMAS

- + **Insider Tips**
Expert advice to help you optimize performance
- + **Valuable Insights**
Eye-opening descriptions of poorly documented or undocumented features and procedures
- + **Unbeatable Advice**
Real-world workarounds and little-known tips and techniques

Contents

	Read This First	xv
PART I	DEPLOYMENT AND ADMINISTRATION SECRETS	1
Chapter 1	Windows Server 2008 R2 Deployment Secrets	3
	Choosing an Edition of Windows Server 2008 R2	4
	Deciding Between Types of Installation	6
	Optimizing Your Deployment Image	12
	Minimizing Deployment Time	19
	Activating Windows	27
	Summary	30
Chapter 2	The Windows Server 2008 R2 Administrator's Toolkit	33
	Choosing the Right Remote Administration Tool	34
	Remote Desktop	35
	Management Consoles	41
	Remote PowerShell	45
	Emergency Management Services (When All Else Fails)	46
	Summary	49
Chapter 3	Server Core Secrets	51
	Using Server Core Administration Tools	52
	Performing Server Core Post-Deployment Tasks	54
	Understanding the Sconfig.cmd	62
	Administering with Server Core Configurator	63
	Understanding Server Core Infrastructure Roles	67
	Summary	72

Chapter 4	Active Directory Domains and Forests	73
	Understanding Forests and Domains	74
	Setting Domain and Forest Functional Levels	79
	Selecting the DNS Server	82
	Defining Active Directory Sites	89
	Defining FSMO Roles	91
	Using Read-Only Domain Controllers	93
	Securing with Global Catalog Servers and Universal Group Membership Caching	98
	Maintaining the Active Directory Database	100
	Summary	110
Chapter 5	Effectively Managing Group Policy	113
	Applying Group Policy	114
	Using Group Policy Management Console	117
	Using Important Group Policy Features	122
	Completing Common Group Policy Tasks	126
	Summary	132
Chapter 6	Managing Users and Computers	135
	Using Organizational Unit Structures	136
	Managing User Accounts	140
	Configuring Account Policies	147
	Managing Groups	155
	Creating Computer Accounts	161
	Summary	163
Chapter 7	Managing Active Directory Certificate Services	165
	Understanding Certification Authority Types	166
	Managing Certification Authorities	171
	Using Certificate Templates	175
	Utilizing Certificate Autoenrollment	181
	Recovering Certificates	183

	Backing Up Certificate Services	184
	Revoking Certificates	186
	Summary	188
PART II	NETWORK INFRASTRUCTURE AND SECURITY SECRETS	191
Chapter 8	Network Addressing	193
	Understanding IPv4 and DHCP	194
	Understanding IPv6	205
	Transitioning to IPv6	212
	Summary	217
Chapter 9	Securing the Network: Windows Firewall and Network Access Protection	219
	Understanding Windows Firewall with Advanced Security	220
	Understanding Connection Security Rules	230
	Understanding and Configuring Network Access Protection	236
	Summary	244
PART III	SHARED FOLDER AND DATA PROTECTION SECRETS	247
Chapter 10	Secrets Behind Shared Folders	249
	Using the Share and Storage Management Console	250
	Using File Server Resource Manager	255
	Working with the Distributed File System	271
	Utilizing BranchCache	275
	Working with Offline Files	278
	Summary	280
Chapter 11	Keeping Data Private	281
	Encrypting File System	282
	Encrypting with BitLocker	287
	Using Active Directory Rights Management Services	296
	Summary	300

Chapter 12	Backup and Recovery	303
	Using and Configuring Windows Server Backup	304
	Enabling Shadow Copies of Shared Folders	313
	Performing Recovery	316
	Using System Center Data Protection Manager	325
	Summary	328
PART IV	INFRASTRUCTURE SERVICES	329
Chapter 13	Internet Information Services	331
	Managing Sites	332
	Managing Application Pools	348
	IIS Users and Delegation	351
	Managing FTP	352
	Summary	355
Chapter 14	Configuring Hyper-V Virtual Machines	357
	Configuring Hyper-V	358
	Understanding Virtual Hard Disks	363
	Understanding Hyper-V Networks	369
	Using Virtual Machine Snapshots	374
	Migrating Virtual Machines	376
	Summary	379
Chapter 15	Patch Management with WSUS	381
	Defining an Update Process	382
	Installing and Deploying WSUS	383
	Deploying Updates	395
	Understanding WSUS Topologies	401
	Verifying Update Deployment	402
	Going Further	407
	Summary	409

Chapter 16	High Availability	411
	Understanding Network Load Balancing	412
	Allocating Storage to iSCSI SAN	417
	Understanding Failover Clustering	422
	Summary	431
PART V	REMOTE ACCESS SECRETS	433
Chapter 17	Presentation and Application Virtualization	435
	Understanding Remote Desktop Session Host	436
	Running RemoteApp	444
	Using Remote Desktop Web Access	446
	Utilizing Remote Desktop Connection Broker	447
	Connecting via Remote Desktop Gateway	448
	Remote Desktop Licensing	450
	Understanding Remote Desktop Virtualization Host	453
	Virtualizing Applications with App-V	453
	Summary	454
Chapter 18	Remote Access	457
	Setting up Remote Desktop Gateway	458
	Deploying Virtual Private Networks	468
	Connecting via DirectAccess	478
	Summary	482
PART VI	MAINTENANCE AND MONITORING SECRETS	483
Chapter 19	Getting the Most Out of Event Logs and Auditing.	485
	Auditing Windows Server 2008 R2	486
	Filtering and Viewing Event Logs	492
	Event Log Forwarding	497
	Creating Event Viewer Tasks	499
	Going Further with Operations Manager	504
	Summary	505

Chapter 20	Performance and Resource Management	507
	Monitoring Point-in-Time Performance	508
	Understanding Data Collector Sets	514
	Using Windows Server Resource Manager	521
	Summary	525
	Index	527