

# CONTENTS

<b>FOREWORD</b>	<i>xxxi</i>
<b>INTRODUCTION</b>	<i>xxxiii</i>
<b>CHAPTER 1: WHAT'S NEW IN SHAREPOINT 2010</b>	<b>1</b>
<b>Installation</b>	<b>1</b>
System Requirements	1
Installation Options	2
Upgrade and Patching Options	3
<b>Central Administration</b>	<b>5</b>
<b>Service Applications</b>	<b>7</b>
<b>Windows Identity Foundation and Claims</b>	<b>8</b>
<b>Health and Monitoring</b>	<b>8</b>
Health Analyzer	9
Timer Jobs	10
Reporting	10
<b>Managing SharePoint 2010 with Windows PowerShell</b>	<b>10</b>
<b>Managed Accounts</b>	<b>11</b>
<b>Recovering from Disaster</b>	<b>11</b>
<b>The New and Improved User Experience</b>	<b>12</b>
<b>Summary</b>	<b>13</b>
<b>CHAPTER 2: THE NEW AND IMPROVED USER EXPERIENCE</b>	<b>15</b>
<b>Browser Support</b>	<b>16</b>
<b>Changes to the SharePoint 2010 User Interface</b>	<b>17</b>
<b>Creating a Site</b>	<b>20</b>
<b>Lists and Libraries in SharePoint 2010</b>	<b>21</b>
Creating Lists and Libraries	22
Working with Lists	22
Working with Libraries	26
Columns = Metadata	29
Creating Views	32
<b>Working with SharePoint Pages</b>	<b>39</b>
Exploring Edit Mode	40
Working with Web Parts	45

---

<b>Using Site Templates in SharePoint 2010</b>	<b>48</b>
<b>Multilingual User Interface</b>	<b>51</b>
Installation and Configuration of SharePoint 2010 Language Packs	51
Using the Multilingual User Interface	52
<b>Summary</b>	<b>58</b>
<b>CHAPTER 3: ARCHITECTURE AND CAPACITY PLANNING</b>	<b>59</b>
<hr/>	
<b>What's in a Name?</b>	<b>60</b>
SharePoint Foundation	60
SharePoint Server 2010	61
Search Server 2010	62
Fast Search Server 2010	63
SharePoint Online	63
<b>Other Servers</b>	<b>64</b>
Windows Server	64
Windows Vista and 7	66
SQL Server	66
E-mail Servers	66
<b>Hardware Requirements</b>	<b>68</b>
Web Servers	69
Application Servers	70
SQL Servers	71
Mixing and Matching Servers	72
Other Hardware Notes	75
Virtualization	76
<b>Terminology</b>	<b>76</b>
<b>Controlling Deployments</b>	<b>80</b>
Blocking Rogue Deployments	80
Registering SharePoint Servers in Active Directory	80
HTTP Throttling	80
Large List Throttling	81
<b>Summary</b>	<b>83</b>
<b>CHAPTER 4: INSTALLING AND CONFIGURING SHAREPOINT 2010</b>	<b>85</b>
<hr/>	
<b>The Prerequisites Installer</b>	<b>86</b>
<b>Running Setup.exe</b>	<b>88</b>
Choosing Your Installation Type	89
<b>Using the SharePoint 2010 Wizards</b>	<b>95</b>
Configuration Wizard	96
Central Administration Wizard	99

---

<b>Central Administration Post-Setup Configuration</b>	<b>101</b>
Outgoing E-Mail	101
Secure Store Service	101
Configuring a Search Schedule	101
Monitoring Drive Space	102
Other Thinking Points	102
<b>Step-by-Step Install</b>	<b>102</b>
The Environment	103
The Install	103
<b>Creating Something Users Can Use</b>	<b>108</b>
Creating a New Managed Account	109
Creating a Web Application	109
Creating a Site Collection	111
Add Users	112
<b>Summary</b>	<b>112</b>
<b>CHAPTER 5: UPGRADING FROM SHAREPOINT 2007 TO SHAREPOINT 2010</b>	<b>113</b>
<hr/>	
<b>Upgrade Considerations</b>	<b>113</b>
What Can You Upgrade?	114
Unsupported Scenarios	116
Upgrade Best Practices	117
<b>In-Place Upgrade</b>	<b>117</b>
Planning Your In-Place Upgrade	117
Performing the In-Place Upgrade	119
In-Place Upgrade Improvements	126
<b>Database Attach</b>	<b>128</b>
<b>Hybrid Upgrades</b>	<b>132</b>
<b>Database Attach with AAM Redirect</b>	<b>133</b>
<b>Other Upgrade Options</b>	<b>134</b>
Visual Upgrade	134
Mitigating Downtime with Read-Only Databases	137
<b>Patching SharePoint 2010</b>	<b>138</b>
<b>Summary</b>	<b>140</b>
<b>CHAPTER 6: USING THE NEW CENTRAL ADMINISTRATION</b>	<b>141</b>
<hr/>	
<b>A Quick Overview of the New Central Administration Interface</b>	<b>141</b>
<b>First Things First</b>	<b>143</b>
The Farm Configuration Wizard	144
Managed Accounts	144

---

<b>Central Administration Categories</b>	<b>146</b>
Application Management	146
System Settings	150
Monitoring	152
Backup and Restore	155
Security	156
Upgrade and Migration	159
General Application Settings	160
Configuration Wizards	166
<b>Summary</b>	<b>166</b>
<b>CHAPTER 7: UNDERSTANDING THE SERVICE APPLICATION ARCHITECTURE</b>	<b>167</b>
<hr/>	
<b>Farewell to the Shared Services Provider</b>	<b>168</b>
<b>Service Application Fundamentals</b>	<b>170</b>
The Connection Structure	170
Connecting across Farms	175
Service Applications As a Framework	176
<b>Service Application Administration</b>	<b>177</b>
Creating a New Instance of a Service Application	177
Using the Ribbon to Manage Service Applications	179
Managing Service Application Groups	182
<b>Multi-Tenancy in SharePoint 2010</b>	<b>188</b>
Segmentation of Data and Processing	188
Creating a Site Subscription	190
Multi-Tenant Use Cases	191
Partitioning in the Enterprise	191
<b>Summary</b>	<b>193</b>
<b>CHAPTER 8: SECURING AND MANAGING SITE CONTENT</b>	<b>195</b>
<hr/>	
<b>Reviewing the Terminology</b>	<b>196</b>
<b>Administration Hierarchy in SharePoint 2010</b>	<b>197</b>
Server or Server Farm Administrators	197
Service Application Administrators	199
Site Collection Administrators	199
Site Administration	201
Administration Beneath the Site Level	201
<b>Understanding Permissions</b>	<b>201</b>

<b>Permission Levels</b>	<b>205</b>
Creating a New Permission Level Based on an Existing Permission Level	208
Creating a Permission Level from Scratch	209
Editing an Existing Permission Level	210
Deleting a Permission Level	211
<b>Security Groups</b>	<b>211</b>
SharePoint Security Groups	212
Active Directory Groups	218
SharePoint Security Groups versus Active Directory Groups	218
Special Groups and Authentication Options	218
<b>Granting Permissions</b>	<b>220</b>
Granting Access to a Top-Level Site	220
Breaking Inheritance and Granting User Access	222
Editing User Access	223
Managing Access Requests	223
<b>Web Application Policy</b>	<b>224</b>
<b>Summary</b>	<b>225</b>
<b>CHAPTER 9: CLAIMS-BASED AUTHENTICATION</b>	<b>227</b>
<b>Claims-Based Identity</b>	<b>227</b>
User Access Challenge	228
User Information Storage Challenge	228
Solution	228
Using Claims Identity for Authentication	229
<b>SharePoint Authentication Options</b>	<b>231</b>
Classic Mode	231
Claims-Based	232
<b>Creating Claims-Based Web Applications</b>	<b>232</b>
Configuring CBA with Windows Authentication	232
Configuring Anonymous Access	235
Converting to CBA from CMA	237
Configuring Forms-Based Authentication	238
<b>Summary</b>	<b>246</b>
<b>CHAPTER 10: ADMINISTERING SHAREPOINT 2010 WITH WINDOWS POWERSHELL</b>	<b>247</b>
<b>Introduction to Windows PowerShell</b>	<b>248</b>
<b>Microsoft SharePoint 2010 Management Shell and Other Hosts</b>	<b>248</b>
Microsoft SharePoint 2010 Management Shell	248
Using Other Windows PowerShell Hosts	249

<b>Commands</b>	<b>252</b>
Cmdlets	252
Functions	252
Scripts	253
Native Commands	253
<b>Basic PowerShell</b>	<b>253</b>
Listing the SharePoint Commands	254
PowerShell Help	255
PowerShell Variables	255
PowerShell Pipeline	258
Controlling Output	259
<b>Using SharePoint Commands</b>	<b>261</b>
Working with the Farm	261
Retrieving Farm Configuration Information	264
Working with Web Applications	264
Working with Site Collections	268
Working with Webs	273
Working with Objects below the Web Level	275
Disposing of SharePoint Variables	279
<b>Summary</b>	<b>281</b>
<b>CHAPTER 11: MANAGING NAVIGATION AND UNDERSTANDING GOVERNANCE</b>	<b>283</b>
<hr/>	
<b>Navigation</b>	<b>284</b>
Understanding the Different Types of Navigation	284
Bread Crumbs	285
Portal Site Connection	286
Tree View	286
Team Site Navigation	287
Publishing Site Navigation	291
Workspace Navigation	293
Next Steps	293
<b>SharePoint Governance</b>	<b>294</b>
What Is Governance?	294
Getting Started with Governance	294
Governance Team	295
Defining Policies and Procedures	296
Infrastructure	298
Information Architecture	298
Development and Customization	299
Support and Availability	300
Selling the Need for Governance	300
<b>Summary</b>	<b>301</b>

---

<b>CHAPTER 12: CONFIGURING SHAREPOINT 2010 FOR HIGH AVAILABILITY BACKUPS</b>	<b>303</b>
<b>Determining Your Business Requirements</b>	<b>303</b>
<b>Content Recovery</b>	<b>305</b>
About SQL Server Snapshots	306
Content Storage Overview	306
The Recycle Bin	306
Versioning	310
Exporting and Importing Sites, Lists, and Libraries	312
Backing Up and Restoring Site Collections	318
Restoring Content with Unattached Content Database Data Recovery	321
<b>Disaster Recovery</b>	<b>324</b>
Backup and Restore for Disaster Recovery	325
Backing Up and Restoring Content Databases	326
Backing Up and Restoring Service Applications	334
Backing Up and Restoring a Farm	335
Backing Up and Restoring Configuration Settings	337
Warm Standby Solutions	340
<b>High Availability</b>	<b>341</b>
Load Balancing	341
SQL Server Database Mirroring	341
Failover Clustering	344
Read-Only Mode	344
HTTP Request Monitoring and Throttling	345
Gradual Site Delete	347
<b>Summary</b>	<b>348</b>
<b>CHAPTER 13: USING FEATURES AND SOLUTION PACKAGES</b>	<b>349</b>
<b>Using SharePoint 2010 Features</b>	<b>350</b>
Defining Scope	350
Activating and Deactivating Features	351
Managing Features	351
Creating a Feature	356
<b>Solutions</b>	<b>359</b>
Managing Farm Solutions	359
Managing Sandbox Solutions	365
Creating Solutions	365
<b>Summary</b>	<b>369</b>

---

<b>CHAPTER 14: CONFIGURING AND MANAGING ENTERPRISE SEARCH</b>	<b>371</b>
<b>The Different Versions of Search</b>	<b>372</b>
<b>SharePoint Foundation Search</b>	<b>372</b>
Setting Up Foundation Search	373
Search Results	375
User Interface Features	377
Site Search Administration	377
<b>SharePoint Server and Search Server</b>	<b>378</b>
Search Server versus SharePoint Server	378
Configuration and Scale	379
Adding a Server to the Search Topology	381
Scaling Up with Crawl Databases	384
The Search UI	390
Search Administration	395
Other Search Features	406
<b>FAST Search</b>	<b>408</b>
Thumbnails	409
Scrolling Preview	409
Similar Results	409
User Context	409
Visual Best Bets	409
Promote/Demote Documents	410
<b>Summary</b>	<b>410</b>
<b>CHAPTER 15: MONITORING SHAREPOINT 2010</b>	<b>411</b>
<b>Unified Logging Service</b>	<b>411</b>
Trace Logs	412
Correlation IDs	417
Developer Dashboard	419
Logging Database	420
Health Analyzer	431
Timer Jobs	436
<b>Summary</b>	<b>443</b>
<b>CHAPTER 16: MANAGED METADATA SERVICE APPLICATIONS</b>	<b>445</b>
<b>Advantages of the Managed Metadata Service</b>	<b>446</b>
<b>New Managed Metadata Service Features</b>	<b>446</b>
Column Types	447
Content Types	447
Filtering	448

---

<b>Getting Started with the Managed Metadata Service</b>	<b>448</b>
The Service Applications Architecture	448
Configuring Managed Metadata Services	448
Connecting to a Web Application	452
<b>Managed Metadata Services</b>	<b>452</b>
Getting Started with Managed Metadata	452
Using Managed Metadata in Sites	456
Column-Specific Term Sets	459
Key Usability Features	459
Metadata Navigation	461
<b>Content Types</b>	<b>463</b>
Creating and Publishing Content Types	465
<b>Summary</b>	<b>469</b>
<b>CHAPTER 17: SOCIAL COMPUTING AND SHAREPOINT 2010</b>	<b>471</b>
<hr/>	
<b>The User Profile Service Application</b>	<b>472</b>
User Profiles and Properties	472
Synchronization	477
Organizations	479
Audiences	479
<b>Tags and Notes</b>	<b>484</b>
Tagging	484
The Note Board	486
Tag Profiles	487
<b>My Sites</b>	<b>488</b>
Setting Up My Sites	488
My Sites User Experience	493
<b>Wikis and Blogs</b>	<b>501</b>
Wikis	501
Blogs	502
<b>Ratings</b>	<b>505</b>
Turning on Ratings	505
The Ratings Timer Job	505
<b>Outlook 2010 Social Connector</b>	<b>506</b>
<b>People Search</b>	<b>507</b>
People Search Configuration	507
Performing a People Search	507
The People Search Results Page	508
<b>Summary</b>	<b>509</b>

---

<b>CHAPTER 18: INTEGRATING THE OFFICE 2010 CLIENTS WITH SHAREPOINT 2010</b>	<b>511</b>
<b>Office 2010 Application Commonalities</b>	<b>512</b>
Connecting to SharePoint from within Microsoft Office 2010 Applications	512
Connecting to Office 2010 from SharePoint 2010	517
<b>Integrating SharePoint 2010 with Word 2010</b>	<b>519</b>
Comparing Document Versions	519
Document Barcodes	520
Quick Parts	520
Blogging in Microsoft Word	521
<b>Integrating SharePoint 2010 with Excel</b>	<b>522</b>
Importing Spreadsheets into SharePoint	522
Exporting to Excel	524
Chart Web Part	525
Publishing to Excel Services	525
Excel Web Access Web Part	525
<b>Integrating SharePoint 2010 with PowerPoint</b>	<b>525</b>
Slide Libraries	526
Broadcasting Slide Shows	526
PowerPoint Service Application	527
<b>Integrating SharePoint 2010 with Outlook</b>	<b>527</b>
Managing SharePoint Alerts	528
SharePoint Lists and Libraries	528
Calendars and Meetings	529
<b>Integrating SharePoint 2010 with InfoPath</b>	<b>530</b>
InfoPath Forms Services in Central Administration	531
InfoPath Form Web Part	532
Customizing the Document Information Panel	533
Customizing SharePoint List Forms	534
<b>Integrating SharePoint 2010 with Microsoft Visio</b>	<b>536</b>
Visio Graphics Service Configuration	536
Visio Web Access Web Part	536
<b>Integrating SharePoint 2010 with OneNote</b>	<b>537</b>
<b>Integration with Access 2010 and Access Services</b>	<b>538</b>
SharePoint Data As a Table	538
Access Services	540
<b>SharePoint 2010 Workspace</b>	<b>543</b>
<b>Publishing Links to Office Client Applications</b>	<b>545</b>
<b>Managing Office 2010 and SharePoint through Group Policy</b>	<b>546</b>
<b>Summary</b>	<b>549</b>

---

<b>CHAPTER 19: THE OFFICE WEB APPLICATIONS</b>	<b>551</b>
<b>OWA Overview</b>	<b>551</b>
Web Technology Utilized by OWA	552
Accessibility Features	553
Architecture	554
<b>Deployment</b>	<b>554</b>
Installing SharePoint 2010 Server and Preparing for OWA	555
Service Activation	557
Feature Activation	558
<b>OWA Installation</b>	<b>558</b>
Single-Server Farm Install	558
Multiple-Server Farm Install	579
<b>OWA PowerShell Activation</b>	<b>579</b>
<b>Summary</b>	<b>584</b>
<b>CHAPTER 20: PERFORMANCEPOINT SERVICES AND BUSINESS INTELLIGENCE</b>	<b>585</b>
<b>PPS Features and Terminology</b>	<b>586</b>
<b>PPS Installation and Configuration</b>	<b>587</b>
PerformancePoint Service Application and Proxy	588
Secure Store Service Application and Proxy	594
Installing the Business Intelligence Center Website	597
Installing PerformancePoint Dashboard Designer	600
<b>Introduction to Dashboard Designer</b>	<b>601</b>
Creating an Analytic Chart Report and Dashboard	603
Reusing Designer Objects	608
Promoting PerformancePoint Objects across Environments	609
<b>Importing PerformancePoint Server 2007 Content to PerformancePoint Services 2010</b>	<b>612</b>
Planning	612
Dashboard Designer Tasks and Necessary Permissions	613
Preparation before Running the Wizard	613
Using the Import Wizard	614
<b>Summary</b>	<b>616</b>
<b>CHAPTER 21: NEW CONTENT MANAGEMENT CAPABILITIES IN SHAREPOINT 2010</b>	<b>617</b>
<b>Managed Metadata</b>	<b>618</b>
SharePoint 2010 Metadata Service and Enterprise Content Types	618
Establishing the “Right” Metadata	619

<b>Document Sets</b>	<b>621</b>
Configuring and Creating Document Sets	622
Customizing the Document Set	628
<b>Document ID Service and IDs</b>	<b>629</b>
Configuring the Document ID Service	630
<b>Content Organizer</b>	<b>635</b>
Configuring the Content Organizer	635
<b>Summary</b>	<b>646</b>
<b>CHAPTER 22: WORKING WITH SHAREPOINT DESIGNER 2010</b>	<b>647</b>
<hr/>	
<b>Who Should Use SharePoint Designer?</b>	<b>648</b>
<b>Introduction to SharePoint Designer 2010</b>	<b>649</b>
Requirements for Using SPD 2010	649
<b>Overview of the New UX</b>	<b>650</b>
Bread Crumbs, Tabs, and Navigation	653
The File Tab	654
Checking and Changing the Current User	654
<b>Restricting Access to SharePoint Designer</b>	<b>655</b>
<b>What Can You Do with SharePoint Designer 2010?</b>	<b>658</b>
Data Sources	658
Views and Forms	664
Workflows	670
Branding	677
<b>Summary</b>	<b>681</b>
<b>CHAPTER 23: BRANDING SHAREPOINT 2010</b>	<b>683</b>
<hr/>	
<b>What Is Branding?</b>	<b>683</b>
<b>Understanding Your Requirements</b>	<b>684</b>
<b>SharePoint Versions and Publishing</b>	<b>684</b>
Creating a Publishing Site Collection	685
Activating Publishing on a Team Site Collection	687
Changing the Welcome Page on a Site Collection	689
<b>Types of SharePoint Sites: Internet versus Intranet</b>	<b>690</b>
<b>Branding Basics for SharePoint 2010</b>	<b>694</b>
Themes	695
Master Pages	703
Page Layouts	710
Cascading Style Sheets	713
Where to Find Branding Features	714

---

Customization and Solution Packages	716
Controlling Access to Branding in SharePoint	717
<b>Summary</b>	<b>721</b>
<b>CHAPTER 24: BUSINESS CONNECTIVITY SERVICES IN SHAREPOINT 2010</b>	<b>723</b>
<hr/>	
<b>Capability Overview</b>	<b>724</b>
<b>Architecture</b>	<b>726</b>
Service Applications	726
Connectors and the Connector Framework	728
BDC Client and Server Runtime	728
External Content Types	729
Security	730
<b>Creating a BCS Solution</b>	<b>731</b>
Creating an External Content Type	732
Creating an External List	738
<b>Service Applications That Use BCS</b>	<b>741</b>
Search Service	741
User Profile Service	742
<b>Design Considerations for BCS Solutions</b>	<b>742</b>
<b>Upgrading the Business Data Catalog to BCS</b>	<b>743</b>
<b>Summary</b>	<b>744</b>
<b>CHAPTER 25: BUILDING WORKFLOWS IN SHAREPOINT 2010</b>	<b>745</b>
<hr/>	
<b>Why Use Workflow?</b>	<b>746</b>
<b>Windows Workflow Foundation</b>	<b>746</b>
<b>Workflow Basics</b>	<b>747</b>
Terminology	747
Workflow Association Types	748
Using the Ribbon	748
Workflow Initialization	750
<b>Configuring Workflows Using the Browser</b>	<b>751</b>
Out-of-the-Box Templates	751
Microsoft Office 2010 Integration	753
Creating a SharePoint 2010 Workflow for a Real World Scenario	753
Editing/Deleting Workflows	757

<b>Workflow Tools in SharePoint Designer 2010</b>	<b>758</b>
Declarative Workflows	759
Direct Workflow Associations	759
Reusable Workflows	761
Prototype Workflows	762
Edited Versions of Standard Workflow Templates	762
WSP Files	763
High-Privilege Workflows	764
Office InfoPath 2010 Compatibility	764
Associated Columns	764
Site Workflows	765
<b>Workflow Visualization Using Visio Premium 2010</b>	<b>765</b>
<b>Using Visual Studio 2010 to Create Workflows</b>	<b>766</b>
<b>Selecting a Workflow Method</b>	<b>766</b>
<b>Summary</b>	<b>767</b>
<b><i>INDEX</i></b>	<b>769</b>