



Index

Symbols and Numbers

- & (ampersand)
 - use of in SmartTag actions, 634
 - using to identify accelerators in menus, 662
- % (percent), SendKeys, 156
- () (parentheses), index operator, 431, 479–481
- , (comma), union operator, 198–199, 204–205
- / (slash), using to create submenus, 662
- : (colon), range operator, 198–199, 204–205
- ^ (caret), SendKeys, 156
- + (plus), SendKeys, 156
- 1900 format, converting Excel dates, 218–220
- 1904 format, converting Excel dates, 218–220

A

- A1-style references, in Range Object, 198–199
- Absolute address, 202
- Action classes, Smart Tags
 - creating, 657–667
 - registering, 669

Action events

- creating document level Smart Tags, 636–638
- custom, 417–419
- handling, 633–636

Actions

- creating document level Smart Tags, 641–642
- Smart Tag components in Excel, 79–81
- Smart Tag components in Word, 227–229

Actions pop-up menus, 629–631

Actions task pane, 607–628

- architecture of, 613–614
- attaching/detaching, 625–627
- contextually changing, 619–621
- custom user control added to, 616–618
- customizing with XML, 79
- detecting orientation of, 621–622
- introduction to, 607–612
- methods/properties to avoid, 627
- modeless Windows Form with, 377
- scrolling, 622–623
- showing/hiding, 623–625
- Windows Forms controls added to, 614–616

- Activate events
 - raising in Excel, 104–111
 - raising in Outlook, 397–399
 - raising in Word, 255–257
- Activate method
 - activating window in workbook, 167
 - as simplest method form, 20–21
 - worksheet management, 184–185
- ActiveX controls
 - blurry, 593
 - derived from Windows Forms control, 571–572
 - hosting in Actions task pane, 613
 - hosting managed, 586–589
 - limitations of hosting model, 590–591
 - not saving at runtime, 604–605
 - security implications of hosting model, 589–590
 - Windows Forms control hosting, 585–586
- Adapters
 - dataset programming, 688–690
 - overview, 682–683
- Add-ins
 - Automation. *See* Automation add-ins
 - COM. *See* COM add-ins
 - creating Outlook, 60–65
 - customizing Excel, 81–82
 - customizing Outlook, 364–365
 - defined, 45–46
 - hosted code, 46–47
 - Install/Uninstall events, 128
 - multiple, 117–118
 - overview, 60
 - programming Excel, 76–77
 - running/unloading code, 47–48
 - template installed as, 308–309
 - VSTO. *See* VSTO add-ins
 - Word e-postage, 263
- Add method
 - accessing Name in Names collection, 182
 - CachedDataHostItem object, 734–735
 - custom property pages, 373
 - DocumentProperty, 174–175
 - files objects, 291
 - Folders collection, 444
 - Outlook events, 405–408
 - Outlook Inspectors/Explorers collections, 431–432
 - window, 304
 - Word bookmarks, 359
 - Word documents, 311–312
 - Word Tables collection, 360
 - work/chart sheet to collection, 170
 - workbooks, 159–160
- Add Schema button, 853, 861
- AddControl method, 598–600, 603
- AddCustomization method, 730–731
- AddHandler statement
 - Activate/Deactivate events, 105
 - Calculate events, 118
 - dynamic event handling, 28–30
 - Quit events, 249
 - selection change events, 126
 - Workbook events, 100–101
- Address books/entries, accessing in Outlook, 448–449
- Addresses, in Excel Range Object, 200–204
- AddressOf keyword, dynamic event handling, 28–30
- ADO classic, 684–685
- ADO.NET, 704–705. *See also* Data programming
- AdvancedSearch method, Outlook, 426–430
- After parameter, 170–171, 183–184
- Aggregation
 - connecting aggregates, 538–539
 - obtaining aggregated objects, 539–540

- overview of, 537–538
- Windows Forms controls, 540–541
- Alerts
 - Excel, 145
 - Save Alerts in Excel, 155
 - Word, 279–280
- Aliasing, in Word, 55
- All Code group, 745
- AllowEditRanges collection, worksheet protection, 187, 190
- Alt
 - searching research services, 236
 - specifying with SendKeys method, 156
- Ampersand (&)
 - identifying accelerators in menus, 662
 - in Smart Tag actions, 634
- AND, 463
- app variable, 9, 27–28
- AppDomain policy level, 747–749
- Application Manifest Editor, 788
- Application manifests
 - editing, 788
 - objects, methods, and properties, 790–792
 - overview of, 782–783
 - reading/editing embedded, 789–790
 - relationship with deployment manifest, 783–784
- Application objects
 - AppDomain policy level, 747–749
 - in InfoPath, 505–506
 - in object models, 6–9
 - properties, 13–20
- Application objects, Excel
 - changing mouse pointer, 146
 - controlling dialog boxes and alerts, 145
 - controlling editing, 148–149
 - controlling file/printer settings, 149
 - controlling screen updates, 143–145
 - controlling workbook calculation/
 - using built-in functions, 152
 - danger of using EnableEvents property, 147–148
 - displaying message in status bar, 146–147
 - properties that return active/selected objects, 149–151
 - properties that return important collections, 151–152
 - Quitting/Undo methods, 155
 - selecting and activating range of cells, 153
 - sending keyboard commands, 156–157
 - sending workbook in e-mail, 154–155
 - spell checking, 153–154
- Application objects, Excel events
 - Activate/Deactivate, 104–111
 - Calculate, 118–120
 - Change, 120–122
 - Before Close, 128–129
 - Double-Click/Right-Click, 111–116
 - Follow Hyperlink, 123–125
 - NewWorkbook, 100–104
 - Open, 131–133
 - Before Print, 129–130
 - Before Save, 130–131
 - XML file Import/Export, 128
- Application objects, Outlook
 - copy method, 430–431
 - methods/properties that return active/selected objects, 424
 - Outlook security and trusted/untrusted objects, 486–491
 - overview, 423
 - properties that return important collections, 424–426
 - Quit method, 431
 - search methods, 426–430
 - using Session property of to retrieve NameSpace object, 443

- Application objects, Outlook events
 - Activate/Deactivate, 397–399
 - Close, 401
 - new window, 399
 - raising, 392–394
 - Start-up/Quit, 394–397
 - view and selection change, 401–403
 - window, 399–400
- Application objects, Word
 - changing mouse pointer, 280
 - checking grammar/spelling, 296–298
 - controlling dialog boxes and alerts, 279–280
 - controlling look of Word, 282–284
 - controlling screen updates, 278–279
 - customizing Mail Merge, 269–271
 - displaying messages in status bar or window caption, 281
 - exiting Word, 298–299
 - File dialog boxes, 295–296
 - file save format options, 294–295
 - multiple application/document interfaces in Word, 244–246
 - navigating document, 288–289
 - New and Getting Started document task panes, 291–294
 - overview, 277
 - properties that return active/selected objects, 284–285
 - properties that return important collections, 285–287
 - user information, 296
 - working with Word's options, 289–291
- Application objects, Word events
 - Document Activation/Deactivation events, 255–257
 - Document Close events, 252–254
 - Document Print events, 257–258
 - Document Save events, 254–255
 - Mail Merge event, 264–268
 - mouse events, 258–260
 - NewDocument event, 249–252
 - selection change events, 260–262
 - Startup/Shutdown events, 248–249
 - WindowSize events, 262
 - XML events, 262–263
- Apply method, of PropertyPage interface in Outlook, 371–376
- AppManifest object, 790–791
- Area, Range objects and, 205–206
- arg1, BeforeClick event parameter, 112
- arg2, BeforeClick event parameter, 112
- Argument, EventArgs, 636–638
- Arrange method
 - Excel windows, 177–179
 - Word windows, 306–307
- ASP.NET
 - custom handler, 721–724
 - server setup, 718–721
 - ServerDocument and, 716–718
- Assemblies
 - code groups and, 741
 - delay-sign, 759
 - determining location from deployment manifest, 785
 - signing, 760
 - strong-named, 757–760
 - trusting in Local Machine zone, 747
- Attachment events, Outlook, 416
- Attributes, InfoPath events, 507
- Authentication, 740
- AutoFit method, Word tables, 361
- Automation add-ins
 - customizing Excel, 60, 76–77
 - debugging, 90–91
 - deploying, 91–92
 - managed, 85–88
 - user-defined functions provided by, 83–85
- Automation executables
 - customizing Excel, 75
 - customizing Outlook, 363–364

- customizing Word, 51–59, 223
 - defined, 45
 - in InfoPath, 503
 - locale issue. *See* Locale issue
 - overview, 49–51
 - unloading code in, 48

- B**
- Back-end data source, 682–683. *See also* Sources
- Base class, extending to Word/Excel object models, 537–538
- Batch files, 769–770
- Before Close events
 - Excel, 128–129
 - Word, 252–254, 292
- Before parameter, worksheets, 170–171, 183–184
- Before Print events
 - Excel, 129–130
 - Word, 257–258
- Before Save events
 - Excel, 130–131
 - Word, 254–255
- BeforeCaptionShow event, 637–638
- BeforeDoubleClick events
 - cancelable events and event bubbling and, 117–118
 - Excel, 111–116
 - Word, 258–260
- BeforeRight-Click events
 - cancelable events and event bubbling and, 117–118
 - Excel, 111–116
 - Word, 258–260
- Binding data. *See* Data programming
- Binding source
 - in advanced ADO.NET data binding, 704–705
 - as proxies, 690–691
 - working with, 682–683

- Blocks
 - controlling dialog boxes and alerts in Word, 280
 - ScreenUpdating property in Excel, 144
 - ScreenUpdating property in Word, 278
- BodyFormat property, Outlook mail folder, 483–484
- Bookmarks
 - changing Actions pane contents, 620–621
 - data-bound customized Word document using, 681–682
 - host control, 561–562
 - Word, 358–360
- Booleans
 - cancel parameter. *See* cancel parameter
 - defining properties, 13–15
 - saveAsUI parameter, 130–131, 254
 - in UndoRedo parameter, 262–263
- Boxing, 11
- Breaks, Word Range object, 351–352
- BreakSideBySide method, Word windows, 306
- Browsers
 - browsing PIAs, 39–43
 - navigating Word document, 288–289
 - navigating Word Range object, 346
- Btn, 30–31
- Built in properties, Outlook, 479–482
- BuiltinDocumentProperties, workbooks, 162–163
- Businesses, programming for, 534–536
- Buttons
 - adding to Explorer window, 438
 - failure issue in dynamic event handling, 30–34
 - in InfoPath, 519–521

C

- C, 34
- C#, 5–6, 34
- C++, 34
- CA (Certificate Authority), 763–764
- Cached data. *See also* Server data scenarios
 - CachedDataHostItem collection, 733–734
 - CachedDataHostItem object, 734–735
 - CachedDataItem object, 735–736
 - caching in data island, 699–700
 - caching own data types, 700–701
 - dynamically adding/removing from data island, 701–702
 - ICachedType and, 702–703
 - methods/properties in ServerDocument object model, 731–732
 - object model, 732–733
 - Worksheet objects and, 187
- Calculate events, Excel, 118–120
- Calculation property, workbooks, 152
- “Can act like” relationship, 538
- cancel parameter
 - attachment events, 416
 - cancelable events and event bubbling and, 117–118
 - Before Close events, 128–129
 - Close events, 252–253
 - Copy/Paste/Cut/Delete events in Outlook, 408–409
 - custom action events in Outlook, 417
 - Document Print events, 257
 - Double-Click/Right-Click events, 111–113
 - e-mail events in Outlook, 413–414
 - exiting Word, 298–299
 - mouse events, 258–260
 - Outlook window events, 399–400
 - Before Print events, 129–130
 - Before Save events, 130–131
 - Save events in Word, 254
 - view/selection change events in Outlook, 402
- Cancelable events, 117–118
- CapsLock property, 13
- Caption property, Action classes, 661
- caspol.exe, 769–772
- Catch block, ScreenUpdating property in Excel, 144
- Categories dialog box, Outlook items, 483
- CDO (Collaboration Data Objects), 382–385
- Cells, Excel
 - Address properties of cell ranges, 200–204
 - insertion behavior, 582–583
 - mapping XML schema data type to Excel cell formats, 831
 - naming cell ranges, 166
 - Range objects, 197–200, 206
 - selecting and activating, 153
- Cells, Word tables, 360–361
- Certificate Authority (CA), 763–764
- Certificates, 761–765
- certmgr.exe, 764
- Change events
 - data binding and, 698
 - Excel, 120–122
 - Outlook, 405–408
 - selection change events in Excel, 125–126
 - selection change events in Word, 260–262
 - toolbar/menu events, 136
 - Word documents, 255–257
- ChangeFileOpenDirectory method, Word, 295
- Characters, inserting nonprinting characters into Range object, 351–352

- Charts
 - accessing in collection, 170
 - Activate/Deactivate events, 104–111
 - adding to workbooks, 170–171
 - Calculate events, 118–120
 - Chart object in Excel, 93–94, 194–195
 - copying/moving sheets in chart collection, 171
 - Double-Click/Right-Click events in, 111–116
 - host item class and host control, 566–567
 - iterating over open sheets in chart collection, 169
 - selection change events in, 125–126
- CheckedChange event, Outlook, 376
- CheckSpelling
 - Excel, 153–154
 - Word, 296–297
- Child code group, 755–757
- Classes
 - action, 657–667
 - always connected to database, 686
 - code behind, 48, 65
 - compiling into PIAs, 34–35
 - custom Smart Tag, 642–647
 - customization for dynamic event handling, 29
 - Excel host item, 565–566
 - Outlook item, 471–473
 - PIA browsing and, 39–43
 - properties/methods/events, 12
 - recognizer class, 649–656
 - ServerDocument. *See* Server data scenarios
 - Smart Tag class library, 648–649, 667–670
 - VSTO add-ins, 62–63
- Clauses, handles. *See* Handles clause
- Clauses, workbook events, 101
- Clear method
 - helper method Cached Data class, 733
 - in Range object, 209
- Click events
 - cancelable events and event bubbling and, 117–118
 - Excel, 111–116
 - handling in Smart Tag Action objects, 633–638
 - “my button stopped working” issue in, 30–34
 - toolbar/menu events, 136
 - Word, 258–260
- ClickOnce
 - application manifest and, 783
 - deployment manifest and, 781–782
- ClipboardContent parameter, Outlook
 - Paste events, 409
- Close events, Outlook, 401
- Close methods
 - close and save Excel workbooks, 165
 - Before Close events in Excel, 128–129
 - closing all open Excel workbooks, 160–161
 - closing all open Word documents, 314
 - ServerDocument object, 728–729
 - Word documents, 252–254, 317
- CLR. *See* Common Language Runtime (CLR)
- Coclass, PIA browsing and, 40–43
- Code
 - hosted, 46–47
 - inspecting generated, 549–552
 - running after start-up, 47–48
 - unloading hosted, 48
- Code-access security, 741–742
- Code-behind
 - controls, 584–585
 - customizing Excel, 78
 - customizing Word, 225–226

- Code-behind, *continued*
 - Excel document, 65–71
 - Excel locale issue and, 217–218
 - InfoPath forms, 494–499
 - running/unloading code, 47–48
 - solution, 46
- Code groups
 - assemblies and, 741
 - creating strong-name code group, 754
 - granting trust and, 752
 - reasons for creating child code groups, 755–757
 - zones, 743–744
- Code security, .NET Framework,
 - 739–774
 - access security, 741–742
 - AppDomain policy level, 747–749
 - deploying policies to user machines, 769–773
 - Enterprise policy level, 749–752
 - evidence types, 743–744
 - full and partial trusts, 746
 - location-based policy levels, 749–753
 - Machine policy level, 742–743
 - overview, 739–740
 - policy levels, combining, 744–745
 - publisher certificates, 761–765
 - role-based security vs. code-access security, 740–741
 - strong names. *See* Strong names
 - trusting documents and, 765–769
 - User Policy level, 745–746
- CodeName cookie, 547–549
- Collaboration Data Objects (CDO), 382–385
- Collapse method, Word Range objects, 348
- Collections
 - CachedDataHostItem, 733–734
 - defined, 10–12
 - VSTO controls, 543
- Collections, Excel
 - application object properties that return important collections, 149–151
 - Chart/Sheet/Worksheet, 169–171
 - DocumentProperties, 172–175
 - ListObject, 196
 - Names, 181–183
 - OLEObject, 192
 - Shapes, 194
 - Windows, 175–179
 - workbook properties that return collections, 162
 - Workbooks, 157–161
- Collections, Outlook
 - adding item to, 464–466
 - AddressEntries, 448
 - application object properties that return important collections, 424–426
 - Explorers/Inspectors collections, 431–433
 - Folders collection in NameSpace object, 444–445
- Collections, Smart Tags
 - ISmartTagProperties, 642–647
 - Regular expressions, 639–641
 - Terms, 638–639
- Collections, Windows Forms
 - Controls, 597–602
 - controls in collection typed as object, 605
 - enumerating/searching Controls collection in VSTO, 543–544
- Collections, Word. *See also* Document collections, Word
 - application object properties that return important collections, 285–287
 - Document and Range collections, 319–322
 - Document only, 323

- StoryRanges, 337–338
- Template, 307–309
- Colon (:), range operator, 198–199, 204–205
- Columns
 - Excel Range object, 199, 206–207
 - Word Tables collection, 361
- COM
 - communicating with PIAs, 34–35
 - hosted code solutions, 47
 - implementation and multiple interfaces in Word, 245–246
 - problems with PIA browsing and, 39–43
 - referencing PIAs using, 37–39
 - running/unloading COM code, 47–48
- COM Add-In Wizard, 904–906
- COM add-ins, 891–920
 - COM interop and regasm.exe, 914–915
 - customizing Excel, 76–77
 - customizing Outlook, 364–365
 - customizing Word, 224–225
 - in Excel, 60, 910
 - IDTExtensibility2 and, 902–903
 - introduction to, 891–892
 - locale issue and. *See* Locale issue
 - mscoree.dll and, 914–919
 - Office-specific, 906–909
 - OnAddInsUpdate method, 898–899
 - OnBeginShutdown method, 899
 - OnConnection method, 899–900
 - OnDisconnection method, 901
 - OnStartupComplete method, 902
 - Quit/Startup events in Outlook and, 394–397
 - registry entries required for, 895–897
 - registry location of, 893–895
 - scenarios for use of, 892
 - shimming as solution to mscoree.dll problems, 919–920
 - simple example, 912–913
 - Start Action, 909–910
 - startup order, 897–898
 - troubleshooting, 910–912
 - VSTO add-ins for Outlook compared with, 921–922
 - in Word, 60
 - writing with Visual Studio, 904–906
- COM interop, 914–915
- Comma (,)
 - creating new ranges, 204–205
 - as union operator, 198–199
- CommandBars
 - adding buttons/menus to Explorer window, 438
 - adding buttons/menus to Inspector window, 442–443
 - Excel, 133–138
 - when Excel is embedded in another application, 166–167
 - Word, 271–272
- Commands
 - sending keyboard commands to Excel, 156–157
 - VSTO commands for InfoPath form code development, 498
- CommitSmartTag method, 654
- Common Language Runtime (CLR)
 - assembly loader, 783
 - mscoree.dll and, 915
 - RCW objects created by, 928
- CompareSideBySideWith method
 - Excel windows, 177
 - Word windows, 306–307
- Complex data binding, 696–698
- Concurrencies, in data adapters, 690
- Configuration files, deploying, 804–805
- Confirm event, overriding in InfoPath, 526–529
- Connections, dataset, 685–686
- Console application, creating to automate Word, 51–59

- Constructors, of ServerDocument class, 727–728
- Container, control hosting model, 591
- Container property, embedding Excel in other application, 166–167
- Context
 - binding, 705
 - changes, 564
- Controls. *See also* Actions task pane; Host controls
 - AddControl method, 603
 - added at runtime not saved, 604–605
 - adding at runtime, 597–600
 - adding custom user control to
 - Actions task pane, 616–618
 - adding host controls dynamically, 544–545
 - adding to documents, 577
 - adding Windows Forms controls to
 - Actions task pane, 614–616
 - ADO.NET data binding and, 704–705
 - bindable, 691
 - binding to proxies, 690–691
 - blurry, 593
 - code behind, 584–585
 - Controls collection, 543, 600–602
 - data binding and, 696–698
 - deleting at runtime, 603–604
 - deriving from Windows Forms controls, 586–589
 - dynamic, 542–543
 - enumerating/searching Controls collection, 543–544
 - Excel host, 566–569
 - hosted in Actions task pane, 613–614
 - insertion in Excel, 582–583
 - insertion in Word, 580–582
 - layout on document/worksheet surface, 583–584
 - limitations of control hosting model, 590–591
 - modes for adding, 578–579
 - not in toolbox, 579–580
 - OLE, 594–597
 - removing, 545–546
 - saving/loading, 546
 - security implications of control hosting model, 589–590
 - state not saved, 591–593
 - typed as objects, 605
 - Windows Forms host control, 585–586
 - Word Bookmark host control, 561–562
 - Word XMLNode and host control classes, 562–565
- Cookie, identifying aggregated objects, 547–549
- Copy event, Outlook, 408–410
- Copy method
 - folders in MAPIFolder object, 458–459
 - Outlook items, 474
 - Range objects and, 209
 - sheets in collection, 170
 - worksheet management, 184–185
- Count parameter/property
 - action classes, 660
 - Chart/Sheet/Worksheet collections, 170
 - Excel cells, 206
 - Excel workbooks in collections, 159
 - recognizer classes, 651
 - Word documents in collections, 311
 - Word Range objects, 346–347
- Creatable objects, 7
- CreateItem method, Outlook, 466
- Cryptography, 754–755
- Ctrl
 - specifying in Excel with SendKeys method, 156
 - using to select multiple discontinuous cells, 197

- CType function, 9
 - CType operator
 - Activate/Deactivate events, 105–106
 - Calculate events, 118
 - Close event, 253
 - NewWorkbook event, 100
 - Outlook item type and, 470–471
 - Quit event, 249, 394
 - selection change events, 126
 - Currency manager, ADO.NET data
 - binding, 704–705
 - CurrentFolder property, Explorer
 - object, 433
 - CurrentRegion property, Range
 - Objects, 208
 - CurrentView property
 - Explorer object, 434–435
 - MAPIFolder object, 457–458
 - Cursor property
 - mouse pointer in Excel, 146
 - mouse pointer in Word, 280
 - Custom action events, Outlook, 417–419
 - Custom handler, editing data island, 721–724
 - Custom properties
 - Outlook, 370–378
 - Outlook items, 410–411, 479–482
 - Smart Tags storing, 633
 - workbooks, 162–163
 - worksheets, 186–187
 - Custom task pane, InfoPath, 519–521
 - Custom views, Explorer object, 434–435
 - Customization methods, ServerDocu-
 - ment object model, 730–731
 - Customization, VSTO
 - deploying. *See* Deploying VSTO
 - solutions
 - location and trust, 749–753
 - publisher certificates and, 764
 - signing authority and, 758–760
 - strong names and, 754
 - trusting assemblies, 746–749
 - trusting documents, 765–769
 - Cut event, Outlook, 408–410
- D**
- Data
 - separating data and view in VSTO
 - programming model, 534–536
 - XML data file Import/Export events, 128
 - Data binding
 - advanced ADO.NET, 704–705
 - complex, 696–698
 - controls, 691
 - data sources for data-bound spread-
 - sheet, 674–677
 - host items and host controls, 705
 - IBindableComponent, 704
 - overview of, 70–71
 - simple, 696–698
 - sources as proxies, 690–691
 - spreadsheets, 677–681, 691–696
 - in Word documents, 681–682, 698–699
 - XML mapping combined with, 842–849
 - Data nodes, event handlers for, 510–512
 - Data programming, 673–712
 - adapters, 682–683, 688–690
 - advanced ADO.NET data binding, 704–705
 - binding sources as proxies, 690–691
 - cached members, adding/removing
 - from data island, 701–702
 - caching in data island, 699–700
 - caching own data types, 700–701
 - complex/simple data binding, 696–698
 - data bindable controls, 691
 - data bindable host items and host
 - controls, 705

- Data programming, *continued*
 - data binding in Word documents, 698–699
 - data-bound controls for spreadsheets, 677–681
 - data-bound spreadsheets, 691–696
 - data-bound Word documents, 681–682
 - data sources, 682–683
 - data sources for data-bound spreadsheet, 674–677
 - dataset disconnected strategy, 685–686
 - datasets, 682–685
 - exceptions in, 711–712
 - ICachedType, 702–703
 - list object events, 708–711
 - list object host control properties/methods, 706–708
 - overview, 673
 - serialized XML, manipulating, 703
 - summary, 712
 - typed/untyped datasets, 686–688
- Data server. *See* Server data scenarios
- Data source events, InfoPath, 509–510
- Data sources
 - back-end data source, 682–683
 - data-bound spreadsheet, 674–677
 - overview of, 682–683
 - security, 683–684
- DataDOMEvent object, 512–517
- DataMember property, 694
- DataReader class, 686
- Datasets
 - accessing data with, 684–685
 - adapters, 688–690
 - diffgram form, 736
 - disconnected strategy, 685–686
 - overview, 682–683
 - serializing, in cached datasets, 702–703
 - toolbox for dataset components, 693
 - typed/untyped, 686–688
- Dates, Excel
 - converting to DateTime, 218–220
 - locale issue and, 214–215
- Deactivate event
 - Excel, 104–111
 - Outlook, 397–399
 - Word, 255–257
- Debugging, application-level Smart Tag methods, 671
- Debugging, user-defined functions in Automation add-ins, 90–91
- Declarative event handling
 - described, 25–28
 - in Double-Click/Right-Click events, 114
 - in workbooks, 101
- Default properties
 - DefaultFilePath property in Word, 295
 - DefaultFileSave property in Word, 294–295
 - DefaultTab property in Word, 300
 - defined, 19–20
 - file/printer properties in Excel, 149
- Delay-sign, assemblies, 759
- Delegate types
 - aggregated Document objects and, 555–561
 - aggregated Range objects and, 567–569
 - aggregated XmlNode/XMLNodes objects, 562–565
 - Bookmark objects and, 561–562
 - Excel Application objects and, 42
 - list objects and, 709–711
 - in Outlook object model, 389–392
 - in Word Document event interface, 244–245
- Delete events, in Outlook, 408–409
- Delete methods
 - controls at runtime, 603–604
 - objects from collections, 11–12

- Outlook items, 474–477
- Range object, 210
- worksheets, 184–185
- Deploying VSTO solutions, 775–806
 - application manifest, 782–783
 - Application Manifest Editor, 788
 - application manifest objects, methods, and properties, 790–792
 - configuration files and, 804–805
 - deployment manifest, 780–782
 - determining assembly location from deployment manifest, 785
 - examining generated files, 779
 - IntelliMirror and, 802
 - to Intranet or Web site, 777–785
 - local machine deployment, 785–787
 - MAGE for editing deployment manifest, 787–788
 - overview of, 775–776
 - prerequisites, 776–777
 - Publish Wizard for, 777–779
 - relationship between application manifest and deployment manifest, 783–784
 - security issues, 777–779
 - ServerDocument object for reading/editing embedded application manifests, 789–790
 - setup package creation, 793–801
 - Web caching and, 802–803
- Deployment manifests
 - determining assembly location from, 785
 - editing with MAGE, 787–788
 - overview of, 780–782
 - relationship with application manifest, 783–784
- Deployment Package Wizard, 769
- Desc property
 - action classes, 660
 - recognizer classes, 651–652
- DestFldr parameter, Outlook items, 474
- Destructive concurrency, in data adapters, 690
- Dialog object
 - accessing COM add-Ins using, 76
 - actions in Word, 299–301
 - bookmarks in Word, 358
 - Categories for Outlook items, 483
 - controlling in Excel, 145
 - controlling in Word, 279–280
 - in Excel object model, 94
 - fields in Word, 301–303
 - files in Word, 295–296
 - folder selection, 449
 - options property in Word, 289–291
 - tabs in Word, 300
- Diffgram form, dataset in, 736
- Direction parameter, Collapse method of Word Range object, 348
- Dirty state
 - custom property pages and, 376–378
 - preserving in documents, 316
 - PropertyPage interface in Outlook, 371
- Display
 - controlling save alerts in quitting Excel, 155
 - displaying message in status bar in Excel, 146–147
 - displaying Outlook item in Inspector window, 478–479
 - settings associated with Excel Window object, 179–181
- Display method
 - Dialog object, 300–301
 - Explorer object, 432
 - Inspector object, 478
 - MAPIFolder object, 459
- DLLs. *See also* Assemblies
 - AddinLoader.dll, 936
 - assemblies and, 45
 - COM add-ins, 76, 224, 911
 - mscoree.dll. *See* mscoree.dll

- DLLs, *continued*
 - Smart Tag, 80–81, 227, 648, 652, 667–670
 - strong names and DLL hell, 753–754
 - XLL, 83
- DocEvents interface, Worksheet objects, 106
- Document collections, Word
 - accessing document in collection, 310–311
 - closing all open documents, 314
 - creating new document, 311–312
 - iterating over open documents, 310
 - opening existing document, 312–314
 - saving all open documents, 315
- Document object
 - Activate/Deactivate events, 255–257
 - Close event, 252–254
 - closing/saving, 317
 - as collection, 10
 - collections associated with document and range, 319–322
 - collections associated with document only, 323
 - dirty state in documents, 316
 - grammar/spelling checks in documents and ranges, 328–329
 - hierarchy, 6
 - interfaces in Word, 244–246
 - Mail Merge event, 264–271
 - mouse events, 258–260
 - New/Open events, 249–252
 - overview, 315
 - password protection, 333–335
 - Print events, 257–258
 - printing, 329–331
 - properties, 323–328
 - Save events, 254–255
 - security, 331–333
 - selection change events, 260–262
 - Sync events, 263
 - template changes, 319
 - Undo/Redo methods, 335
 - Window Sizing events, 262
 - windows, 317–319
 - XML events, 262–263
- DocumentProperty
 - accessing in collection, 173–174
 - adding, 174–175
 - iterating over DocumentProperties collection, 172–173
 - workbooks, 162–163
- Documents
 - Actions task pane. *See* Actions task pane
 - ActiveXcontrol, 585–586
 - AddControl method, 603
 - blurry controls, 593
 - code behind control for, 584–585
 - control layout, 583–584
 - control state not saved in, 591–593
 - controls added at runtime not saved, 604–605
 - controls, adding at runtime, 597–600
 - Controls collection, 600–602
 - controls, deleting at runtime, 603–604
 - controls in Excel document, 582–583
 - controls in Word document, 580–582
 - controls not in toolbox, 579–580
 - controls typed as object, 605
 - data binding in Word, 681–682, 698–699
 - Document Class in Word, 556–561
 - limitations of control hosting model, 590–591
 - modes for adding controls to, 578
 - navigating Word, 288–289
 - populating with data on server, 713–715
 - properties merged from OLEObject/OLEControl, 594–597

- server-generated, for customizing
 - Excel, 82
 - server-generated, for customizing Word, 229
 - Smart, for customizing Excel, 78–79
 - Smart, for customizing Word, 226–227
 - trusting, 765–769
 - Windows Forms controls added to, 577
 - Windows Forms, using on the document surface, 572–575
 - Domain security level, in InfoPath forms, 500
 - Double-Click events
 - cancelable events and event bubbling, 117–118
 - raising in Excel, 111–116
 - Double-clicking, as mode for adding controls, 578
 - DownloadURL property, 651–652
 - Dragging/Dropping, adding controls, 578
 - Drawing, adding controls, 578
 - Dummy method, 43
 - Dynamic controls, in VSTO programming model, 542–543
 - Dynamic event handling
 - in Double-Click/Right-Click events, 114
 - “my button stopped working” issue, 30–34
 - overview, 28–30
 - Dynamic host items, in VSTO programming model, 547–549
- E**
- E-mail
 - events in Outlook, 413–416
 - sending workbooks via, 154–155
 - Smart Tags in HTML-formatted Outlook, 367–368
 - Smart Tags in Word, 365–367
 - Editing
 - AllowEditRanges collection, worksheet protection, 187, 190
 - allowing/disallowing. *See* Protect method
 - application manifests, 788
 - ASPX web form for editing data island, 718–721
 - custom event handler for editing data island, 721–724
 - deployment manifest, 787–788
 - e-mail, 365–367
 - embedded application manifests, 789–790
 - Excel Application Object, 148–149
 - Inspector editor types, 440–442
 - Range values, 208–209
 - security policies, 769–772
 - user information in Word options, 296
 - Electronic postage, E-Postage event in Word, 263
 - elementID, as BeforeClick event parameter, 112
 - Embedded objects, using in Worksheet object, 192–194
 - EnableEvents property, 147–148
 - End property
 - regions, 208
 - Word Range identification, 339
 - Word Range object, 340, 346
 - EndOf method, Word Range object, 342–343
 - Enterprise policy level, 749–752
 - Entry point, for hosted code, 47
 - EntryID
 - e-mail events in Outlook, 413
 - Folder/Outlook items, 447–448
 - Enumeration
 - Controls collection in VSTO, 543–544
 - defined, 12
 - GetEnumerator method, 157–158

Enumeration, *continued*

- of properties, 15
- standard folders in Namespace object, 446
- workbook parameters, 159

Error handling, OnValidate event in, 514–517

Events

- Action events in Smart Tags, 636–638
- Bookmark object, 561–562
- bubbling, 117–118
- in CDO, 382
- Change events in data binding, 698
- code response to, 47–48
- declarative, 25–28
- Document object, 555–561
- dynamic handling, 28–34
- Event model improvements, 541–542
- Excel. *See* Excel events
- implementing from PIA interface, 537–538
- InfoPath. *See* InfoPath events
- list object, 708–711
- New and Getting Started document task panes in Word, 291–293
- in object models, 12–14, 23–25
- OrientationChanged event in Actions pane, 621–622
- Outlook. *See* Outlook events
- Range object, 567–569
- Selection events for changing Actions pane, 619–621
- Smart Tags and, 633–636
- Word. *See* Word events
- Workbook object, 565
- Worksheet object, 566
- XMLNode/XMLNodes objects, 562–565

Evidence

- assemblies and, 741
- kinds of evidence in .NET Framework code security, 743–744

Excel

- add-in solutions for, 60
- automation executable solutions for, 49–51
- chart sheet host item class and chart host control, 566–567
- code behind document, 65–71
- COM add-ins. *See* COM add-ins
- controls, inserting into Word, 580–582
- data-bound controls for customized spreadsheet, 677–681
- data sources for data-bound customized spreadsheet, 674–677
- deploying. *See* Deploying VSTO solutions
- Dummy methods in, 43
- Globals class, 554–555
- host controls, adding dynamically, 544–545
- NamedRange/XMLMappedRange/List object host controls, 567–569
- programming. *See* Programming Excel
- Smart Tags in, 631–632
- VSTO extensions to Excel object models, 555
- workbook host item class, 565–566
- worksheet host item class, 566
- XML feature for. *See* XML, in Excel

Excel events

- Activate/Deactivate, 104–111
- add-in Install/Uninstall, 128
- additional events in VSTO, 138–142
- Calculate, 118–120
- Change, 120–122
- Before Close, 128–129
- concealable events and event bubbling, 117–118
- Double-Click/Right-Click, 111–116
- Follow Hyperlink, 123–125
- NewWorkbook/Worksheet, 100–104
- Open, 131–133

- overview, 99
 - Before Print, 129–130
 - Before Save, 130–131
 - Selection Change, 125–126
 - summary, 142
 - toolbar/menu, 133–138
 - WindowResize, 126
 - XML import/export, 128
 - Excel objects, 143–221
 - Application object. *See* Application objects, Excel
 - Document properties, 172–175
 - locale issue for Automation executables and COM add-ins, 214–220
 - Names collection/objects, 181–183
 - properties that return active/selected objects, 161
 - Range object. *See* Range object, Excel summary, 221
 - Window object, 179–181
 - Windows collections, 175–179
 - Workbook. *See* Workbooks
 - Workbooks Collection, 157–161
 - Worksheet. *See* Worksheets
 - Worksheets/Charts/Sheet collection, 169–171
 - Exceptions
 - in control removal, 545–546
 - data binding, 711–712
 - properties that throw, 16–17
 - ScreenUpdating property in Excel, 144
 - ScreenUpdating property in Word, 278
 - Execute method
 - Find/Replace properties in Word Range object, 355–357
 - preventing Word from executing actions, 300–301
 - Exit method
 - Word Application object, 298–299
 - Word Bookmarks, 359
 - Expand method, Word Range object, 340–342
 - Explorer object
 - Activate/Deactivate events, 397–399
 - buttons/menus, 438
 - Close events, 401
 - collections, 431–433
 - Copy/Paste/Cut/Delete events, 408–410
 - folder/view/items in, 433–437
 - MAPIFolder in Explorer view, 459
 - new window events, 397–399
 - in Outlook events, 392–394
 - view/selection change events, 401–403
 - web view of folder in, 439
 - window events, 399–400
 - window, working with, 437
 - Explorer, Outlook close events and, 932
 - Export events, of XML data files, 128
 - Exporting mapped XML to XML data file, 869–871
 - Expressions, regular expressions in creating document level Smart Tags, 639–641
 - Extended MAPI, in Outlook object model, 491–492
 - Extenders
 - aggregating onto controls in Word/Excel, 540–541
 - binding related extensions to host items/controls, 705
 - External reference, in addressing, 201
 - ExternalApplication object, in InfoPath, 505–506
- F**
- F5 shortcut, InfoPath, 496–497
 - Files. *See also* Documents
 - File converters for changing document formatting in Word Application object, 294–295

Files, continued

- File dialog boxes in Word Application object, 295–296
 - file save format options in Word, 294–295
 - FileDialog property, 17–18
 - form templates as .XSF/.XSN files, 503–504
 - JScript/VBScript files in existing form templates, 496
 - settings in Excel, 149
 - XML file formats in populating document with data on server, 714–715
 - XML file Import/Export events in Excel, 128
- Finally block
- dialog boxes and alerts in Word Application object, 280
 - ScreenUpdating property in Excel, 144
 - ScreenUpdating property in Word, 278
- Find method
- Excel Range object, 210–212
 - Outlook items, 461–464
 - Word Range Object, 355–357
- Folders
- change events in Outlook, 403–405
 - FolderPath property to identify MAPIFolder, 450
 - MAPIFolder object. *See* MAPI in NameSpace object, 446–448
 - parameters in Outlook Inspectors/Explorers collections, 431
 - root folders in Outlook NameSpace object, 444–445
 - Select Folder Dialog box in NameSpace object, 449
 - selected folders in Explorer object, 433–437
 - view/selection change events in, 401–403

- Follow Hyperlink event, Excel, 123–125
- Fonts
- cell range formats, 212–213
 - Word Range objects, 352–354
- For Each
- collection iteration, 11
 - Documents collection in Word, 310
 - Explorers and Inspectors collections, 431–433
 - Names collection in Excel, 182
 - open sheets in Excel, 169
 - open windows in Excel, 175–176
 - open windows in Word, 304
 - open workbooks in Excel, 157–158
 - Shapes collections, 194
 - syntax in collection iteration, 11
 - Word templates, 307
- Formats
- cell ranges, 212–213
 - Excel dates, 218–220
 - Inspector objects, 440–442
 - locale issue and, 217
 - Word file save format options, 294–295
 - Word Range objects, 352–355
 - XML files, 714–715
 - XML schemas in Excel, 829
 - XML serialized datasets, 736
- Forms
- ASPX web form that edits data island on server, 718–721
 - InfoPath. *See* InfoPath forms
 - Windows. *See* Windows Forms controls
- Forward method, of Outlook mail item, 485
- Friend visibility modifier, in Globals Excel class, 555
- FromXml, Cached Data class helper method, 733

- Full-trust security level, in InfoPath forms, 500
- FullName property
 - of Word Document object, 315
 - of Workbook object, 161
- Functions
 - built-in, 152
 - caching semantics, 701–702
 - CType, 9
 - user-defined. *See* User-defined functions
 - Word Basic, 301–302
- G**
- GAC (Global Assembly Cache), 36, 767–769
- Garbage collection, button failure issue, 30–32
- GenerateItemsMessage, Outlook add-in, 409
- GetContextNodes method, in XDocument object, 525
- GetEnumerator method
 - accessing Name in collection, 182–183
 - iterating over open windows in Word, 304
 - iterating over open workbooks in collection, 157–158
- GetFolderFromID method, 447–448
- GetItemFromID method, 447–448
- GetNameSpace method, 443
- GetNewPopertyBag method, 654
- GetPageInfo method, 371
- GetSelected Nodes method, 525
- GetSpellingSuggestions method, 296–297
- Getting Started task pane, 291–294
- Global Assembly Cache (GAC), 36, 767–769
- Globals class, Excel, 554–555
- Globals object, for retrieving chart/worksheets, 114
- GoTo method, Word Range object, 346–348
- Grammar checking, Word, 296–298, 328–329
- Groups, code. *See* Code groups
- GUIDAttribute, COM add-ins, 914
- H**
- Handles clause
 - Word events, 251
 - workbook events, 101
- Handling events
 - declarative event handling, 25–28
 - dynamic event handling, 28–30
 - edits data island, 721–724
 - in Excel. *See* Excel events
 - in InfoPath, 506–508
 - InfoPath events, 510–512
 - “my button stopped working” issue
 - in dynamic event handling, 30–34
 - in Word. *See* Word events
- HasPassword property, Word documents, 334
- Help, for determining Word Basic functions, 301–302
- Helper methods
 - Cached Data class, 733
 - Controls collection, 600–602
 - static helper methods in ServerDocument object, 729–731
 - Windows Forms controls, 599
- Hiding, Actions task pane, 623–625
- Hierarchy
 - Excel objects, 92–97
 - of object models, 6–7
 - Outlook objects, 378–381
 - Word objects, 238–242
- HKEY_CURRENT_USER
 - location of COM add-ins, 893–895
 - requirements for registering COM add-ins, 895–897

- HKEY_LOCAL_MACHINE
 location of COM add-ins, 893–895
 requirements for registering COM
 add-ins, 895–897
- Host controls. *See also* Controls
 aggregated objects, 539–540
 binding related extensions to, 705
 connecting aggregates in, 538–539
 Controls collection, 543–544
 derived from Windows Forms con-
 trols, 586–589
 Excel Globals class, 555
 Excel host item class, 566–567
 Excel list object, 567–569
 extending to Word/Excel object
 models, 536–538
 list object properties/methods,
 706–708
 removing, 545–546
 saving/loading, 546
 “tag” field in, 541
 Windows Forms, 540–541, 543,
 585–586
 Word, 562–565
 Word Bookmark, 561–562
- Host items
 aggregated object, 539–540
 binding related extensions to, 705
 CachedDataHostItem collection,
 733–734
 connecting aggregates in, 538–539
 dynamic, 547–549
 Excel, 565–566
 extending to Word/Excel object
 models, 536–538
 “tag” field in, 541
 Windows Forms, 540–541
- Hosted code
 discovery/context/entry point, 46–47
 unloading, 48
- HTML-formatted e-mail, Smart Tags
 embedded in, 367–369
- HTMLBody property, Outlook item,
 483–484
- Hyperlink, Follow Hyperlink event,
 123–125
- I**
- IA (Interop assemblies), 35. *See also* Pri-
 mary interop assemblies (PIAs)
- IBindableComponent, 704
- ICachedType, 702–703
- ID, getting Folder/Outlook item using
 EntryID/StoreID, 447–448
- IDL, definition of Word Application/
 Document objects, 245–246
- IDTextensibility2
 in COM add-ins, 224
 example of simple implementation
 of, 902–903
 OnAddInsUpdate method, 898–899
 OnBeginShutdown method, 899
 OnConnection method, 899–900
 OnDisconnection method, 901
 OnStartupComplete method, 902
 overview of, 897
 startup order of COM add-ins,
 394–395, 897–898
- Implementation, in VSTO program-
 ming model, 537–538
- Import events, of XML data files, 128
- Importing
 XML data file into mapped Word
 document, 871–872
 XML files and refreshing XML data
 in Excel spreadsheet, 826–827
- Index operator
 Explorer or Inspector in Outlook, 431
 ItemProperties collection in Outlook
 item, 479–481
- Index parameter
 DocumentProperty in Excel, 172–173
 sheet in collection in Excel, 170
 window in collection in Excel, 176

- Inspector object, *continued*
 - Outlook close events and, 932
 - in Outlook events, 392–394
 - Outlook item associated with, 440
 - window events in, 399–400
 - windows, 440
- Installer classes, 796–797
- Integers
 - BeforeClick event and, 112
 - parameters, 18
 - value of collection objects, 10–11
- IntelliMirror, 802
- Interfaces
 - Actions task pane. *See* Actions task pane
 - COM add-in entry point, 47–48
 - dummy interface, 43
 - ICachedType interface in cached data control, 702–703
 - implemented by recognizer/action classes, 648–649
 - multiple application/document interfaces in Word, 244–246
 - multiple event interfaces in Outlook, 389–392
 - PIA browsing and, 39–43
 - PIA properties/methods/events, 537–538
 - PropertyPage interface in Outlook, 371
 - user interface in Excel, 149–150
 - user interface in Word, 282–284
 - Windows Forms for user-interface needs. *See* Windows Forms controls
- Interop assemblies (IA). *See also* Primary interop assemblies (PIAs) defined, 35
- Intersection operator, 198–199, 204–205
- Intranets, deploying VSTO solutions to, 777–785
- inUndoRedo parameter, XML events in Word, 262–263
- Invalid Type Library, 216
- InvokeVerb method, Action classes, 663–664
- “Is a” relationship, 538
- IsCached, 701–702
- IsCacheEnabled, 731
- IsCustomized method, 731
- IsDirty variable, 376
- IsFolderSelected method, 433–436
- IsInPlace property, 166
- ISmartTagProperties collection, 642–647
- ISmartTagRecognizer2 interface, 648–649
- ISmartTagAction interface, 648–649
- Item property
 - Excel cells, 206
 - Excel Range object, 199
 - Excel window in collection, 176–177
 - Excel workbook in collection, 158–159
 - Excel worksheet in collection, 170
 - Word bookmarks, 359
 - Word document in collection, 310–311
 - Word window in collection, 305
- Items, Excel
 - using Item method for accessing Name object in collection, 182–183
 - workbook host item class, 565–566
 - worksheet host item class, 566
- Items, host. *See* Host items
- Items, Outlook
 - adding/deleting/changing, 405–408
 - adding to collections, 464–466
 - built-in/custom properties, 479–482
 - Categories dialog box, 483
 - Copy/Paste/Cut/Delete events, 408–410
 - copying/moving, 474
 - creating, 468–469

- deleting, 474–477
 - displaying in Inspector window, 478–479
 - finding, 461–464
 - getting item by ID in NameSpace object, 447–448
 - identifying specific type, 469–473
 - Item objects, 388
 - iterating, 459–461
 - mail properties and methods associated with, 483–486
 - MAPIFolder object, 452–454
 - methods, 466–468
 - in object model, 378–381
 - Open/Read/Write/Close events, 411–413
 - properties, 466–468, 473–474
 - PropertyChange events, 410–411
 - saving, 482
 - selected items in Explorer object, 433–437
- I**
- Iteration
 - collection objects, 10–12
 - DocumentProperties collection, 172–173
 - Excel open windows, 175–176
 - Excel open workbooks, 157–158
 - Folders collection, 444–445
 - Names collection, 182
 - Outlook items, 459–461
 - Word documents collection, 304, 310
- J**
- JScript files, 496
- K**
- Key objects, 7–9
 - Keyboard, sending keyboard commands to Excel, 156–157
 - Keywords
 - AddressOf keyword, 28–30
 - New, 7
 - New, in automation executables, 49
 - New, in new Word events, 251
 - WithEvents/Event keyword, 25–28
- L**
- Languages
 - .NET, 4–6
 - PIA communication, 34–35
 - Late-bound properties, Word dialog box fields, 301–303
 - Libraries
 - old format/invalid type library error, 216
 - Schema Library dialog box, 855, 875–877
 - Smart Tag class library, 648–649, 667–670
 - Lifetime
 - automation executables, 49–51
 - button failures, 30–34
 - Lightning-bolt icon, use for showing events, 104
 - List object
 - events, 708–711
 - host controls, 567–569, 706–708
 - ListObject
 - controls, 837–841
 - Excel collections, 196–197
 - Lists
 - appending XML data to, 829–830
 - in Worksheet, 196
 - Load, controls in VSTO, 546
 - LoadXml, 887–888
 - Local machine deployment, 785–787
 - Local reference, in addressing, 201
 - Locale issue
 - automation executables and COM add-ins and, 214
 - DateTime for dates, 214–215
 - old format/invalid type library error, 216
 - overview of, 217–218

- Locale issue, *continued*
 - reflection to work around, 215–216
 - switching thread locale to English and back, 215
- Location-based policy levels, 749–753
- Logical operators, use in finding Outlook item, 463
- Login, 740
- Look
 - controlling look of Excel, 149–150
 - controlling look of Word, 282–284
- M**
- Machine policy level, 742–743
- Macro recording, in VBA, 4
- Macro sheet object, in Excel object model, 94
- MAGE (Manifest Generating and Editing), 787–788
- Mail item, properties/methods, 483–486
- Mail Merge events
 - customization that handles, 269–271
 - raising, 264–268
- MailLogoff method, workbooks, 154–155
- MailLogon method, workbooks, 154–155
- MailSession property, workbooks, 154–155
- Managed Automation add-in. *See* Automation add-ins
- managed code, COM add-ins, 914–919
- Manifest Generating and Editing (MAGE), 787–788
- Manifest update, 938–939
- Manifests, application. *See* Application manifests
- Manifests, deployment. *See* Deployment manifests
- MAPI
 - Extended MAPI for changing read-only properties, 491–492
 - items in MAPIFolder object, 452–454
 - iteration class for MAPIFolder object, 454–457
 - MAPIFolder, displaying in Explorer view, 459
 - MAPIFolder identifiers, 450
 - MAPIFolder property pages, 373
 - MAPIFolder view settings, 457–458
 - MAPILogonComplete event, 397
 - moving MAPIFolder object, 458–459
 - subfolders, 450–452
- Mapping
 - Word document with mapped XML structure, 862–869
 - Word schema mapping, 880–881
 - XML schema data types to Excel cell formats, 831
- Maximize value, in WindowState enumeration, 12
- Member variables
 - in button failure issue, 32–34
 - in events handling, 27–28
- Menus
 - adding to Explorer window, 438
 - menu events in Excel, 133–138
 - menu events in Word, 271–272
- Messages
 - displaying Excel message in status bar, 146–147
 - displaying Word message in status bar, 281
- Methods
 - application manifest, 790–792
 - CDO provided, 382–385
 - collection objects, 10–12
 - implementing from PIA interface, 537–538
 - object model, 12–14, 20–23
 - OnDisconnection method, 48
- Methods, Actions task pane
 - attaching/detaching, 625–627
 - methods to avoid, 627

- Methods, Excel
- Add method, for document properties, 174–175
 - Add method, for workbooks, 159–160
 - aggregated host item, 547–549
 - aggregated Workbook object, 565
 - aggregated Worksheet object, 566
 - Application object, 296–297
 - Chart/Sheet/Worksheet collections, 170–171
 - ChartObjects, 195
 - CheckSpelling, 153–154
 - copying/clearing/deleting Range object, 209
 - creating/activating windows, 167
 - Dummy method, 43
 - getting Range objects, 199
 - Goto method, 153
 - iterating over open workbooks, 157–158
 - Names collection/object, 182–183
 - OLEObject, 192–194
 - Open/Close, 160–161
 - PrintOut workbooks, 167–168
 - protecting workbooks, 168
 - protecting worksheets, 187–192
 - Quit/Undo, 155
 - Save/Close, 163–165
 - selecting ranges, 208
 - sending workbooks as e-mail, 154–155
 - SendKeys, 156–157
 - Shapes, 194
 - text in Range object, 210–212
 - ToOle method for display color conversion, 179–180
 - windows, 177–179
 - worksheets, 183–185
- Methods, host control
- aggregated objects, 538–540
 - list objects, 706–708
 - removing controls, 545–546
- Methods, InfoPath
- button events/view switching, 519–521
 - DataDOMEvent object, 514–517
 - focus/selection in XDocument object, 525
 - Forms, 518–519
 - overriding Submit/Confirm/Save events, 525–526
 - RegisterSolution for granting full trust, 502–504
 - selections, 525
 - SelectNodes/SelectText in View object, 525–526
- Methods, Outlook
- active/selected objects returned, 424
 - Add method, for Inspectors/Explorers collections, 431
 - adding items to collections, 464–466
 - adding/removing Outlook, 445
 - Categories dialog box, 483
 - copying Application object, 430–431
 - copying/moving folder in MAPI-Folder object, 458–459
 - copying/moving items, 474
 - creating items, 468–469
 - custom properties for items, 479–482
 - deleting item, 474–477
 - Display MAPIFolder object, 459
 - displaying items in Inspector window, 478–479
 - displaying Select Folder dialog box, 449
 - Explorer window, 437
 - finding folders in Namespace object, 446
 - finding items, 461–464
 - finding items using EntryID/StoreID, 447–448
 - Folders methods of Namespace object, 444
 - Inspector window, 441

- Methods, Outlook, *continued*
 - item, 466–468
 - iterating over items, 459–461
 - mailing items, 483–486
 - PropertyPage interface, 371
 - Quit method for Application object, 431
 - retrieving Namespace object, 443
 - saving items, 482
 - searching Application object, 426–430
 - security dialog box and, 488–489
 - selected folder/view/items in Explorer object, 433–436
 - subfolders in MAPIFolders, 450–451
- Methods, Server data
 - cached data object model, 731–733
 - CachedDataHostItem collection, 733–734
 - CachedDataHostItem object, 734–735
 - CachedDataItem object, 735–736
 - shutting down ServerDocument object, 728–729
 - static helpers in ServerDocument object, 729–731
- Methods, Smart Tag
 - action class creation, 663–664
 - class creation, 643–647
 - debugging application-level Smart Tags, 671
 - object, 633–634
 - recognizer class creation, 653–654
- Methods, Windows Forms
 - AddControl method, 603
 - aggregated Range objects, 568
 - controls added at runtime, 598–600
 - Controls collection, 600–602
 - deleting controls at runtime, 603–604
 - extenders for implementing control in Word/Excel, 540–541
- Methods, Word
 - aggregated Document object, 560
 - bookmarks, 359
 - closing documents, 314
 - creating document, 311–312
 - File Dialog boxes for Application object, 295–296
 - finding/replacing Range objects, 355–357
 - getting Range object, 336
 - grammar/spell checking, 328
 - inserting nonprinting characters/breaks into Range object, 351–352
 - moving Range object, 344–346
 - navigating documents, 288–289
 - navigating Range object, 346–348
 - NeedsFill method in data caching, 700
 - New and Getting Started document task panes, 291–292
 - opening documents, 312–314
 - protecting documents, 331–334
 - Range object, 340, 348
 - research services, 229–230
 - saving all open documents, 315
 - saving documents, 317–319
 - ScreenRefresh for Application object, 279
 - showing dialog box, 299
 - showing dialog box and preventing from executing actions, 300–301
 - Tables collection, 360
 - Template collection, 308–309
 - text in Range object, 351
 - Undo/Redo, 335
 - WholeStory in Range object, 346
 - windows, 304–307
 - windows in collections, 306–307
- Minimize value, in WindowState enumeration, 12
- Modal parameter, for displaying Outlook item in Inspector window, 478
- Modal Windows Forms form, 575–577
- Model-View-Controller (MVC), 535–536

- Modeless Windows Forms form, 575–577
- Models, object. *See* Object models
- modifier keys, specifying in Excel with SendKeys method, 156
- Mouse pointer
 - changing appearance of in Excel, 146
 - changing appearance of in Word, 280
 - raising event in Word, 258–260
- Move method
 - Excel sheet in collection, 170
 - Excel worksheets, 183–185
 - MAPIFolder object, 458–459
 - Outlook item, 474
 - Word Range object, 344–345
 - Word windows, 304
- MoveAfterReturn properties, Excel
 - Application object, 148–149
- MS Excel 4.0 macro sheets, 94
- MS Excel 5.0 dialog sheets, 94
- mscoree.dll, 914–919
 - can be disabled, 916–917
 - cannot be signed, 917–918
 - loads all COM add-ins into same domains, 918–919
 - managed add-ins and, 915–916
 - shimming as solution to mscoree.dll problems, 919–920
 - summary of of problems with, 921
- MSI installer, 769
- MVC (Model-View-Controller), 535–536
- “My button stopped working” issue, 30–34
- N**
- NamedRange, host controls, 567–569
- Names
 - action classes, 661
 - cell ranges, 166
 - Excel collections/objects, 181–183
 - Excel workbooks, 161
 - Excel worksheets, 186
 - Named-parameter approach, 18
 - recognizer classes, 651–652
 - Word documents, 315
 - Word Range object, 346–347
- Namespace object, Outlook
 - address books/entries in, 448–449
 - checking if Outlook is offline, 445
 - current user, 445
 - getting folder or item by ID, 447–448
 - getting standard folders in, 446
 - root folders, 444–445
 - Select Folder Dialog box in, 449
 - Store added to/removed from, 445
 - working with, 443
- NeedsFill, data caching, 700–701
- .NET
 - ADO.NET data binding, 704–705
 - ASP.NET custom handler, 721–724
 - ASP.NET server, 718–721
 - classes, 12
 - code security. *See* Code security, .NET Framework
 - data programming. *See* Data programming
 - security policy for Smart Tag class library, 669–670
 - using ServerDocument and ASP.NET, 716–718
- .NET Framework
 - advantages of, 4
 - code security. *See* Code security, .NET Framework
 - deployment prerequisites for .NET Framework 2.0, 777
 - disadvantages of, 5
- Network connections, disconnected
 - strategy in datasets, 685–686
- New document, Word
 - creating, 311–312
 - working with New Document task pane, 291–294

- New events
 - new window event in Outlook, 399
 - NewDocument event in Word, 249–252
 - NewWorkbook/Worksheet events in Excel, 24, 100–104
 - New keyword
 - automation executables and, 49
 - defined, 7
 - new Word event, 251
 - newFolder parameter, Outlook change events, 402
 - NewValue property, DataDOMEvent object, 512–514
 - newView parameter, Outlook change events, 401–402
 - NewWindow method, 167
 - Next method
 - Word document navigation, 288–289
 - Word Range objects, 345
 - Nodes
 - event handlers for, 510–512
 - InfoPath Data source events in data nodes, 509–510
 - in InfoPath forms, 493
 - Word XMLNode and host control classes, 562–565
 - NoPromt parameter, Word documents, 315
 - Normal templates
 - Normal.dot template, 309
 - NormalTemplate property to change template attached to Word Document object, 319
 - NormalTemplate property with Word templates, 308
 - Normal value, in WindowState enumeration, 12
 - NOT, use in finding Outlook item, 463
 - Notepad, editing deployment manifest, 787
 - Nothing value
 - in cached data removal, 702
 - defined, 17
 - “my button stopped working” issue and, 30
 - NumberFormat property, in cell range formatting, 212–213
- O**
- Object models
 - cached data, 732–733
 - CDO, 382–385
 - collections, 10–12
 - declarative event handling, 25–28
 - dynamic event handling, 28–34
 - events, 23–25
 - Excel, 92–97
 - Excel events. *See* Excel events
 - methods in, 20–23
 - objects in, 7–10
 - Outlook, 378–381
 - overview, 6
 - parameterized properties, 17–20
 - parameterless properties, 13–17
 - PIAs for communication, 34–35
 - PIAs installed in, 35–36
 - PIAs referenced in, 36–39
 - security, 486–491
 - ServerDocument, 726
 - VSTO extensions to Word/Excel object models, 555
 - VSTO programming. *See* programming model, VSTO
 - Word, 237–242
 - Word events. *See* Word events
 - Objects
 - application manifest, 790–792
 - cached data objects in ServerDocument object model, 731–732
 - CachedDataHostItem object, 734–735

- CachedDataItem object, 735–736
- Excel. *See* Excel objects
- InfoPath. *See* InfoPath
- Outlook. *See* Outlook objects
- Word. *See* Word objects
- Office
 - add-ins in, 892
 - changing COM add-in project to be Office-specific, 906–909
 - object models. *See* Object models
 - primary interop assemblies (PIAs). *See* Primary interop assemblies (PIAs)
 - programming. *See* Programming, in Office
 - Service Pack One, 776
 - XML features limited to Professional Edition, 809, 851
- Office Document Membership Condition, 767–769
- Office solutions, 45–72
 - automation executable overview, 49–51
 - code-behind solution, 65–71
 - creating console application to automate Word, 51–59
 - creating Outlook add-in in VSTO, 60–65
 - Office add-ins, 60
 - overview, 45–48
 - summary, 72
- Offline property, NameSpace object, 445
- Old Format error, locale issue in Excel, 216
- OldValue property, DataDOMEvent object, 512–514
- Ole color format, 179–180
- OLEControl
 - positioning ActiveX controls in Word, 589
 - properties merged from, 594–597
- OLEObject
 - positioning ActiveX controls in Excel, 589
 - properties merged from, 594–597
 - Worksheet objects and, 192–194
- OnAddInsUpdate method, IDTExtensibility2, 898–899
- OnAfterChange event, InfoPath, 509–510, 517–518
- OnBeforeChange event, InfoPath, 509–510, 512–514
- OnBeginShutdown method, IDTExtensibility2, 899
- OnConnection method, IDTExtensibility2, 899–900
- OnContextChange event, InfoPath, 521–525
- OnDisconnection method, IDTExtensibility2, 901
 - Outlook shut down problems related to COM add-ins, 922–925
- OnLoad event handler, InfoPath, 507–508
- OnStartupComplete method, IDTExtensibility2, 902
- OnSubmitRequest event, overriding Submit/Confirm/Save events, 525–526
- OnValidate event, InfoPath, 509–510, 514–517
- Open dialog box, Word Application objects, 295–296
- Open events
 - Excel, 131–133
 - in object models, 23
 - Word, 249–252
- Open method
 - Word documents, 312–314
 - Word templates, 308
 - workbooks, 160
- Operation property, of DataDOM-Event object, 512–514

Operators

- CType operator. *See* CType operator
 - index operator for getting Explorer or Inspector, 431
 - index operator for ItemProperties collection, 479–481
 - Intersection operator, 198–199, 204–205
 - logical operators for finding items, 463
 - TypeOf operator, 170, 469–470
 - union operator, 198–199, 204–205
- Optimistic concurrency, in data adapters, 690
- Optional parameters. *See also* Parameters
- defined, 18–19
 - in methods, 22–23
- Options dialog box, Word
- bookmarks, 358
 - user information in, 296
- Options property, in Word Application object, 289–291
- OptionsPagesAdd event, 373–374
- OR, use in finding Outlook items, 463
- Ordered parameter approach, 18
- OrientationChanged event, Actions pane, 621–622
- OriginalFormat parameter
- closing all open Word documents, 314
 - exiting Word, 298
- Outlook
- add-ins. *See* VSTO add-ins
 - close events, 932
 - programming. *See* Programming Outlook
 - shut down problems related to COM add-ins, 922–925
- Outlook events, 387–422
- Activate/Deactivate, 397–399
 - additional events, 419–421
 - application level, 392–394
 - attachment, 416
 - Close, 401
 - custom action, 417–419
 - e-mail, 413–416
 - folder change, 403–405
 - item addition/deletion/change, 405–408
 - Item Copy/Paste/Cut/Delete events, 408–410
 - Item Open/Read/Write/Close events, 411–413
 - Item PropertyChange events, 410–411
 - multiple event interfaces, 389–392
 - new window, 399
 - OptionsPagesAdd, 373–374
 - overview, 387–388
 - start-up/quit, 394–397
 - summary, 422
 - view and selection change, 401–403
 - window, 399–400
- Outlook objects, 423–492
- Application object copy method, 430–431
 - Application object methods/properties, 424
 - Application object, properties returning collections, 424–426
 - Application object quit method, 431
 - Application object search method, 426–430
 - Explorer collection, 431–433
 - Explorer objects, selected folder/view/items in, 433–437
 - Explorer window, 437
 - Explorer window, buttons/menus added to, 438
 - Extended MAPI, 491
 - Inspector collection, 431–433
 - Inspector object, 440–443
 - Item. *See* Items, Outlook

- iterating over items in folders, 454–457
 - MAPIFolder, displaying in Explorer view, 459
 - MAPIFolder identifiers, 450
 - MAPIFolder items, 452–454
 - MAPIFolder, moving objects, 458–459
 - MAPIFolder, subfolders, 450–452
 - MAPIFolder view settings, 457–458
 - NameSpace object, adding/removing Stores from, 445
 - NameSpace object, address books/entries in, 448–449
 - NameSpace object, checking if Outlook is offline, 445
 - NameSpace object, current user, 445
 - NameSpace object, getting folder or item by ID, 447–448
 - NameSpace object, root folders, 444–445
 - NameSpace object, standard folders in, 446
 - NameSpace object, working with, 443
 - overview, 423
 - security, 486–491
 - Select Folder Dialog box, 449
 - web view associated with folder, 439
- P**
- Pages parameter, custom property pages, 373
 - Paragraphs object
 - as collection, 10
 - in object models, 6
 - Parameters. *See also* Properties
 - cancelable events and event bubbling and, 117–118
 - for constructing Smart Tag objects, 633
 - in events, 23–24
 - file-access parameter in ServerDocument, 728
 - InfoPath, 515–516
 - in methods, 20–23
 - in parameterized properties, 17–20
 - Parameters, Excel
 - addressing, 202–203
 - BeforeDoubleClick/BeforeRightClick events, 111–113
 - Before Save events, 130–131
 - cancel parameter in Before Close events, 128–129
 - cancel parameter in Before Print events, 129–130
 - cells, 206
 - Change events, 121
 - Chart/Sheet/Worksheet collections, 170–171
 - DocumentProperties, 173–174
 - Find method, 210–211
 - names in collection, 182–183
 - OLEObject, 192
 - Open/Close methods, 160–161
 - printing workbook, 167
 - protecting workbooks, 168
 - protecting worksheets, 187–189
 - Range properties, 198–199
 - Save/Close workbook, 163–165
 - Wait parameter, 156
 - Windows collections, 176–177
 - workbooks, 159
 - worksheets, 184
 - Parameters, Outlook
 - adding/removing Stores, 445
 - attachment events, 416
 - Copy method for Application object, 430
 - Copy/Paste/Cut/Delete events, 408–409
 - copying/moving folders, 458–459
 - copying/moving items, 474
 - custom action events, 417

- Parameters, Outlook, *continued*
 - custom property pages, 373
 - displaying items in Inspector window, 478
 - e-mail events, 413–414
 - folder change events, 403–404
 - Folder/item ID, 447
 - Inspectors/Explorers collections, 431–432
 - item events, 405–406
 - items added to collections, 464–466
 - iterating over items, 460
 - MailMerge event, 267–268
 - search methods for Application object, 426–427
 - standard folders in NameSpace object, 446
 - subfolders in MAPIFolder, 451
 - view/selection change events, 401–402
 - window events, 399–400
- Parameters, Word
 - Add method for document collections, 312
 - Bookmarks, 359
 - closing all open documents, 314
 - closing/saving Document object, 317–319
 - Collapse method for Range object, 348
 - CommandBars events, 271
 - Document activation events, 256
 - Document Close events, 252–253
 - Document Print events, 257
 - document printing, 329–330
 - Document Save events, 254
 - document saving, 254
 - Find/Replace properties for Range object, 355–357
 - getting a Range, 336
 - identifying Ranges, 339
 - mouse events, 258–260
 - moving Ranges, 344–346
 - navigating Ranges, 346–347
 - New/Open events, 249–250
 - opening existing document, 312–314
 - Print events, 257–258
 - quit settings, 298
 - Range object, 342–343
 - saving all open documents, 315
 - selection events, 260–261
 - Tables collection, 360–361
 - windows in Word, 304, 306
 - Word dialog box, 299
 - XML events, 263
- Parentheses [()], index operator, 431, 479–481
- Partial classes
 - creating custom property pages, 372
 - creating VSTO add-ins, 62–63
 - in VSTO code construction, 550
- Passwords
 - data source security and, 683–684
 - protecting documents, 333–335
 - protecting workbooks, 168
- Paste event, Outlook, 408–410
- Permissions, 741–743. *See also* Security
- Persona menu Smart Tags, customizing Outlook, 368–370
- Pessimistic concurrency, in data adapters, 690
- PIAs (Primary interop assemblies). *See* Primary interop assemblies (PIAs)
- Pointer, changing mouse pointer in Excel, 146
- Policies, security. *See* Security policies
- Pop-up menus, using Smart Tags to display, 629–631
- Prerequisites, deploying VSTO solutions, 776–777
- Previewing, InfoPath forms, 507–509
- Previous method, Word document navigation, 288–289

- Primary interop assemblies (PIAs)
 - browsing, 39–43
 - deployment prerequisites, 776
 - finding VSTO extensions to Word/
Excel object models in, 537–538
 - for InfoPath, 494
 - installing, 35–36
 - overview, 34–35
 - references for creating console to
automate Word, 52–55
 - referencing, 36–39
- Printing
 - documents, 329–331
 - Before Print events in Excel, 129–130
 - Before Print events in Word, 257–258
 - printer settings in Excel, 149
 - workbooks, 167
- Private keys, 757–758
- Professional developers, 4
- ProgID
 - action classes, 660
 - COM add-ins, 914
 - recognizer classes, 651
- Programming Excel, 75–98
 - automation executables, 75
 - building managed automation add-
in, 83–85
 - COM/automation add-ins, 76–77
 - creating user-defined functions, 88–90
 - debugging user-defined functions,
90–91
 - deploying managed automation add-
ins, 91–92
 - Excel object model and, 92–97
 - research services, 82–83
 - server-generated documents, 82
 - Smart Documents/XML Expansion
Packs, 78–79
 - Smart Tags, 79–81
 - summary, 98
 - using managed automation add-in,
85–88
 - VSTO code behind, 78
 - XLA add-ins, 81–82
- Programming, in Office
 - advanced, 807–808
 - advantages of, 3–6
 - browsing PIAs, 39–43
 - collections, 10–12
 - declarative event handling, 25–28
 - dynamic event handling, 28–34
 - enumeration, 12
 - events, 23–34
 - installing PIAs, 35–36
 - methods, 20–23
 - object models, 6–10
 - objects, 7–10
 - parameterized properties, 17–20
 - PIA overview, 34–35
 - properties, 13–17
 - referencing PIAs, 36–39
 - summary, 43
- Programming InfoPath
 - introduction to, 505–508
 - previewing, 508–509
- Programming model, VSTO, 533–569
 - adding host controls dynamically,
544–545
 - aggregation and windows forms con-
sole, 540–541
 - aggregation/inheritance/implemen-
tation, 537–538
 - Bookmark host control, 561–562
 - connecting aggregates, 538–539
 - controls collection, 543
 - Document class, 556–561
 - dynamic controls, 542–543
 - dynamic controls in VSTO, 542–543
 - dynamic host items, 547–549
 - enumerating/searching Controls col-
lection, 543–544
 - event model improvements, 541–542
 - extensions to Word/Excel object
models, 555

- Programming model, VSTO, *continued*
 - Globals class in, 554–555
 - host item class and host control, 566–567
 - inspecting generated code, 549–552
 - Model-View-Controller, 535–536
 - NamedRange/XMLMappedRange/
 - List object host controls, 567–569
 - obtaining aggregated object, 539–540
 - overview, 533–534
 - removing controls, 545–546
 - saving/loading controls, 546
 - separating data and view, 534–536
 - startup/shutdown sequences, 552–554
 - summary, 569
 - “Tag” field, 541
 - workbook host item class, 565–566
 - worksheet host item class, 566
 - XMLNode and host control classes, 562–565
- Programming Outlook, 363–386
 - add-ins, 364–365
 - automation executables, 363–364
 - Collaboration Data Objects (CDO)
 - and, 382–385
 - custom property pages, 370–378
 - Outlook object model, 378–381
 - Persona menu Smart Tags, 368–370
 - Smart Tags embedded in HTML-formatted e-mail, 367–369
 - Smart Tags when Word is e-mail editor, 365–367
 - summary, 386
- Programming Word, 223–242
 - automation executables, 223
 - COM add-in, 224–225
 - creating simple research service, 233–234
 - getting started with research services, 231–233
 - programming research services, 229–230
 - registering research service, 234–236
 - research service resources, 236–237
 - server-generated documents, 229
 - Smart Documents/XML Expansion
 - Packs, 226–227
 - Smart Tags, 227–229
 - summary, 238–242
 - using research service, 236
 - VSTO code behind, 225–226
 - Word object model, 237–238
- Project, creating InfoPath project in VSTO, 494–499
- Properties. *See also* Parameters
 - aggregation, 538–539, 567–569
 - application manifest, 790–792
 - in CDO object model, 382
 - collections, 10–11
 - data binding and, 696–698, 704–705
 - DataMember, 694
 - implementing from PIA interface, 537–538
 - implementing using extenders, 540–541
 - list object host control, 706–708
 - objects, 13–17
 - OLEObject/OLEControl, 594–597
 - parameterized, 17–20
- Properties, Action task pane
 - AutoScroll, 622–623
 - avoiding, 627
 - showing/hiding, 623–625
- Properties, Excel
 - active/selected objects in Application objects, 149–151
 - active/selected objects in Workbook objects, 161
 - Address properties of Range object, 200–204
 - Application Object, 148–149
 - area of Range object, 205–206
 - Calculation/WorksheetFunction, 152

- ChartObject, 195
 - collections in Application object, 149–151
 - collections in Workbook object, 162
- Cursor property of Application Object, 146
- CustomProperties for worksheets, 186–187
- danger of EnableEvents property, 147–148
- document properties of workbooks, 162–163
- DocumentProperties of workbooks, 172–175
- embedding Excel in another application, 166–167
- file/prINTER properties, 149
- formatting cell ranges, 212–213
- Item/Count properties in workbook collection, 158–159
- ListObject, 196–197
- naming cell ranges, 166
- OLEObject, 192
- Range Object, 198–199
- regions, 208
- Save when quitting, 155
- Save workbooks, 163–165
- ScreenUpdating property of Application Object, 143–144
- Shapes property, 194
- StatusBar property, 146–147
- Value property for ranges, 208–209
- Window object, 179–181
- Windows collections, 175–176
- worksheet management, 183–185
- worksheet protection, 193
- Properties, InfoPath
 - button events/view, 519–521
 - form properties, 518–519
 - OnBeforeChange event, 512–514
 - Site/Source properties in DataDOM-Event object, 517
- Properties, Outlook
 - active/selected objects, 424
 - additional properties associated with items, 473–474
 - address books/entries, 448
 - built-in/custom properties of items, 479–482
 - changing items properties, 410–411
 - Class property for identifying item type, 471–473
 - collections in Application object, 424–426
 - CommandBars property in Explorer window, 438
 - CommandBars property in Inspector window, 442–443
 - common to items, 466–468
 - CurrentUser property of NameSpace object, 445
 - custom property pages, 371–376
 - Explorer object, 439
 - Explorer window, 437
 - Extended MAPI for changing read-only properties, 491–492
 - finding items, 461–463
 - Folders property of NameSpace object, 444
 - getting item using ID properties, 447
 - identifying MAPIFolder, 450
 - Inspector window, 441
 - items in MAPIFolder, 453
 - iterating over items, 459
 - mail properties of items, 483–486
 - MailMerge object, 267
 - MailSession property, 154–155
 - Name object, 183
 - Offline property of NameSpace object, 445
 - retrieving NameSpace object, 443
 - security dialog box and, 488–489

- Properties, Outlook, *continued*
 - selected folder/view/items of
 - Explorer object, 433–436
 - View properties of MAPIFolder objects, 457–458
- Properties, Server data
 - cached data object model, 732–733
 - cached data properties, 731–732
 - CachedDataHostItem collection, 733–734
 - CachedDataHostItem object, 734–735
 - CachedDataItem object, 735–736
 - ServerDocument object, 728–729
- Properties, Smart Tag
 - action classes, 660–664
 - Action events, 636–637
 - Actions property, 641
 - custom class, 643–647
 - object, 633–634
 - recognizer classes, 651–654
 - wise use of, 647
- Properties, Word
 - active/selected objects Application object, 284–285
 - aggregated Document objects, 560–561
 - Bookmarks property, 359
 - Browser property, 288–289
 - Cached property, 699–700
 - collections associated with Document and Range, 319–321
 - collections associated with only Document, 323
 - collections in Application object, 285–287
 - CustomizationContext property, 271
 - DefaultTab property, 300
 - dialog box fields, 301–303
 - DisplayAlerts property, 279–280
 - Document collection, 310–311
 - document formatting in Application object, 294–295
 - Document object, 315, 323–328
 - document printing, 329
 - Document windows, 317
 - E-Postage Properties, 263
 - File Dialog boxes in Application object, 295–296
 - Find/Replace properties for Range object, 355–357
 - formatting Range object, 352–354
 - grammar/spell checking, 328
 - Mouse Pointer in Application object, 280
 - NewDocument property, 291
 - NextStoryRange property in Range object, 346
 - Options property of Application object, 289–291
 - properties that identify Range object, 339
 - Properties window for adding event handlers, 246–248
 - quit settings, 298
 - Range object, 338, 340
 - Saved property of Document object, 316
 - ScreenUpdating property in Application Object, 278–279
 - StatusBar property, 281
 - Tables collection, 360–361
 - templates, 307–309, 319
 - text from Range object, 349–351
 - user information in Application object, 296
 - user interface, 282–283
 - windows, 304–307
- Property Page, using custom property pages for programming Outlook, 370–378
- Protect method
 - Word documents, 331–333
 - workbook, 168
 - worksheet, 187–192, 193

- Proxies, using binding sources, 690–691
 - Public-key cryptography, 754–755
 - Public-key tokens, 760–761
 - Public keys, 760–761
 - Publish Wizard
 - for deploying VSTO solutions, 777–779
 - generating/updating deployment manifests with, 787
 - VSTO Outlook add-ins and, 938–939
 - Publisher certificates, 761–765
 - CA (Certificate Authority) and, 763–764
 - combining with strong names, 765
 - expiration of, 764
 - license to code, 762–763
 - obtaining, 764
 - overview of, 761–762
 - PublishURL, in InfoPath form registration, 504
- Q**
- Query method, Word research services, 229–230
 - Quitting
 - closing all open Word documents, 314
 - Quit method for exiting Excel, 155
 - Quit method for exiting Word, 298–299
 - raising Quit event in Outlook, 394–397
 - raising Quit event in Word, 248–249
- R**
- RIC1-style references, in addressing, 200
 - Range object, Excel
 - addresses, 200–204
 - areas, 205–206
 - cells, 206
 - copying/clearing/deleting ranges, 209–210
 - creating new ranges, 204–205
 - editing range values, 208–209
 - finding text in ranges, 210–212
 - formatting range of cells, 212–213
 - getting Range object for cell or range of cells, 197–200
 - object model and, 94
 - Range.Locked property for worksheet protection, 191–192
 - regions, 208
 - rows/columns, 206–207
 - selecting and activating range of cells, 153
 - Range object, Word
 - changing ranges, 340–344
 - collapsing ranges, 348
 - collections associated with, 319–322
 - find and replace, 355–357
 - formatting, 352–355
 - getting a range, 336–339
 - identifying ranges, 339–340
 - inserting nonprinting characters/breaks, 351–352
 - moving ranges, 344–346
 - navigating ranges, 346–348
 - overview, 335–336
 - stories and, 346
 - text from, 349–350
 - text in, 350–351
 - Range parameter
 - Change events, 121
 - Double-Click/Right-Click events, 111–112
 - Range properties
 - parameters of, 19
 - Smart Tag Action events, 636
 - Word Tables collection, 360–361
 - RCW (Runtime Callable Wrapper)
 - COM add-ins and, 928–933
 - role in button failure issue, 31
 - Read only properties, using Extended MAPI to change, 491–492

- Reading pane, Smart Tags in HTML-formatted Outlook e-mail displayed in, 367–369
- RecentFiles property, Excel file/printer properties, 149
- Recipient object, NameSpace object, 445
- Recognize method
 - creating recognizer classes, 653–654
 - custom Smart Tag class, 643–647
- Recognizers
 - adding to PIAs, 36–39
 - creating recognizer Class, 649–656
 - in Excel, 79–81
 - registering Recognizer class, 668
 - in Word, 227–229
- Redo method, in Word Document object, 335
- References
 - addressing, 200–204
 - Range object, 198–199
 - service for mapping cookies onto host objects, 548
- RefersTo properties, Name object, 183
- Reflection, work around for locale issue, 215
- regasm.exe, 914–915
- Regions, Range Object, 208
- RegisterSolution method, InfoPath forms, 502–504
- Registration method, Word research services, 229–230
- Registry
 - Automation add-ins in, 91–92
 - COM add-ins, 224–225
 - finding Outlook add-ins in, 365
 - installing COM add-ins, 76–77
 - location of COM add-ins, 893–895
 - Smart Tag classes, 668–669
 - VSTO add-ins, 935–936, 939–940
 - Word research services, 234–236
- Regular expression, using to add Smart Tags, 639–641
- Relative address, compared with absolute address, 202
- ReleaseCOMObject, 925–932
- Removal method
 - controls at runtime, 603–604
 - New and Getting Started document task panes in Word, 291
- Remove event, Outlook item, 405
- RemoveCustomization helper method, in ServerDocument object model, 731
- Removed method, in Folders collection, 444
- RemoveHandler statement, in dynamic event handling, 28–30
- Replace method, Range Object in Word, 355–357
- Reply method, Outlook mail item, 486
- ReportError method, in DataDOM-Event object, 515–517
- Research services
 - creating simple, 233–234
 - customizing in Excel, 82–83
 - customizing in Word, 229–230
 - getting started with, 231–233
 - registering with Word, 234–236
 - resources for, 236–237
 - working with, 236
- Research task pane, registering Smart Tags to recognize text in, 366
- ResetSideBySideWith method, Word windows, 306
- Resize events, Excel, 126–127
- Resize method, controlling Windows in Word, 304
- Response parameter, Outlook, 414, 417
- Restrict method, finding Outlook item, 463–464
- Restricted security level, in InfoPath forms, 499

- Return values
 - of methods, 20–22
 - of parameterized properties, 17–20
 - of parameterless properties, 13–17
 - ReturnStatus property, of DataDOM-Event object, 512–514
 - Right-Click events
 - cancelable events and event bubbling, 117–118
 - raising in Excel, 111–116
 - Role-based security
 - vs. code-access security, 740–741
 - overview of, 740
 - Root folders, Namespace object, 444–445
 - RouteDocument, closing all open Word documents, 314
 - RowIndex parameter, 207
 - Rows property
 - Range objects, 199, 206–207
 - Word Tables, 360–361
 - Runtime Callable Wrapper (RCW)
 - COM add-ins and, 928–933
 - role in button failure issue, 31
 - Runtime Security Policy, 742
- S**
- Save
 - controls added at runtime are not saved, 604–605
 - controls in control hosting model, 591–593
 - controls in VSTO, 546
 - Outlook items, 482
 - properties in quitting Excel, 155
 - properties in quitting Word, 298
 - ServerDocument object, 728–729
 - Word file save format options, 294–295
 - workbooks, 163–165
 - workbook Name properties, 161
 - XML Options dialog box, 877–878
 - Save dialog box, Word Application object, 295–296
 - Save events
 - Document collection in Word, 315
 - Document object in Word, 317
 - in Excel, 130–131
 - overriding in InfoPath, 526–529
 - in Word, 254–255
 - Save method, Word Document object, 317–319
 - saveAsUI parameter
 - Excel, 130–131
 - Word, 254
 - SaveChanges parameter
 - closing all open Word documents, 314
 - exiting Word, 298
 - Schema Library dialog box, 855, 875–877
 - Schema properties, 735–736
 - Schemas. *See* XML, in Excel
 - ScreenRefresh method Word Application object, 279
 - ScreenUpdating property
 - in Excel Application Object, 143–144
 - in Word Application object, 278–279
 - Scrolling, in the Actions task pane, 622–623
 - Searching. *See also* Find method
 - AdvancedSearch method, 426–430
 - Controls collection, 543–544
 - search methods for Application object, 426–427
 - searching research services, 236
 - Secondary collection, 11–12
 - Security
 - Confirm/SaveAs and, 529
 - Context property and, 525
 - DataDOMEvent object and, 517
 - deploying VSTO solutions and, 777–779
 - deployment security in InfoPath, 501–502

- Security, *continued*
 - document passwords, 333–335
 - form security levels in InfoPath, 499–500
 - full trust in InfoPath, 502–504
 - information security in InfoPath, 504–505
 - .NET 1.1 security policy, 669–670
 - Outlook object model, 486–491
 - setting in InfoPath, 500–501
 - VSTO add-ins and, 938
 - VSTO control hosting model and, 589–590
- Security policies
 - AppDomain level, 747–749
 - based on identity, 740
 - combining levels, 744–745
 - deploying to user machines, 769–773
 - Enterprise level, 749–752
 - location-based levels, 749–753
 - modifying, 772–773
 - User Policy level, 745–746
 - viewing and editing levels, 769–772
- Select Case statement, 15–16
- Select methods
 - Excel ranges, 199, 208
 - SelectFolder method in Explorer objects, 433–436
 - SelectNodes method in InfoPath View object, 525–526
 - SelectText method in InfoPath View object, 525–526
 - Word ranges, 336
- Selection Change events
 - Excel, 125–126
 - Outlook, 401–403
 - Word, 260–262
- Selection events, Actions task pane, 619–621
- Selection object, Explorer, 408–410
- Selection property, Explorer, 436
- Send method, of Outlook mail item, 485–486
- SendKeys method, Excel, 156–157
- Serializing
 - in cached datasets, 702–703
 - SerializeDataInstance method, 735–736
- Server data scenarios, 713–737
 - cached data object model, 732–733
 - cached data objects/methods/properties, 731–732
 - CachedDataHostItem collection, 733–734
 - CachedDataHostItem object, 734–735
 - CachedDataItem object, 735–736
 - cautionary note about XML, 736–737
 - client-side ServerDocument utility, 724–726
 - custom handler for, 721–724
 - populating document with data on server, 713–715
 - saving/closing documents, 728–729
 - ServerDocument and ASP.NET, 716–718
 - ServerDocument class constructors, 727–728
 - ServerDocument object model, 726
 - setting up server, 718–721
 - static helper methods, 729–731
 - summary, 737
- Server-generated documents
 - customizing Excel, 82
 - customizing Word, 229
- ServerDocument object, 789–790
- Service Packs, InfoPath, 494
- Service providers, mapping cookies onto host object, 548
- Session object, in CDO, 382
- Session property, 443
- SetDataBinding method, 706–707
- SetRange method, 346
- Setup packages, 793–801

- Shapes
 - in Excel object model, 94
 - OLEObject and, 192
 - working with worksheet shapes, 194
- Shared Add-In Wizard, 904–906
- Sheets
 - accessing collection, 170
 - Activate/Deactivate events in, 104–111
 - adding to workbooks, 170–171
 - Calculate events, 118–120
 - Change events, 120–122
 - ChartObjects, 194–195
 - collection in Excel object model, 93–94
 - copying/moving, 171
 - Double-Click/Right-Click events, 111–116
 - events raised in, 24
 - Follow Hyperlink event, 123–125
 - host items and host controls, 566–567
 - iterating over open, 169
 - NewWorksheet events, 100–104
 - selection change events, 125–126
 - SheetsInNewWorkbook property, 149
- Shift, specifying in Excel, 156
- Shimming, as solution to mscoree.dll problems, 919–920
- Show Advanced XML Error Messages, XML Options dialog box, 879
- Show method
 - File Dialog boxes in Word Application object, 295–296
 - Word dialog box, 299
- Show Placeholder Text for All Empty Elements, XML Options dialog box, 879–880
- Showing, in the Actions task pane, 623–625
- ShowItemCount property, MAPI-Folder, 450
- Shutdown
 - problems related to COM add-ins, 922–925
 - raising Shutdown event in Outlook, 397
 - raising Shutdown event in Word, 248–249
 - sequences in VSTO programming model, 552–554
- Signature validation, 760
- Signing authority
 - assemblies and, 760
 - dangers of skipping signature validation, 760
 - designating, 757–759
- Site property, of DataDOMEvent object, 517
- Slashes (/ /), using to create submenus, 662
- Smart Documents
 - Actions task pane in, 611–612
 - customizing Excel, 78–79
 - customizing Word, 226–227
- Smart Tags, 629–672
 - action class, 657–667
 - actions in creating document level, 641–642
 - configuring, 631–632
 - creating application level, 647–648
 - creating application level class library, 648–649
 - creating document level, 633–638
 - custom class, 642–647
 - customizing Excel, 79–81
 - customizing Outlook when Word is e-mail editor, 365–367
 - customizing Word, 227–229
 - debugging application-level, 671
 - embedded in HTML-formatted e-mail, 367–369
 - introduction, 629–631
 - persistent tagging, 632–633

- Smart Tags, *continued*
 - Persona menu, 368–370
 - properties, 647
 - recognizer class, 649–656
 - registering/trusting application-level class library, 667–670
 - regular expressions in creating document level, 639–641
 - running/testing application-level, 670–671
 - summary, 672
 - terms in creating document level, 638–639
- Solutions, Office. *See* Office solutions
- Sort method, Outlook items, 460–461
- Source property, of DataDOMEvent object, 517
- Sources
 - data sources and security best practices, 683–684
 - overview, 682–683
 - using binding sources as proxies, 690–691
- Space (as intersection operator), 198–199, 204–205
- Spell checking
 - Excel, 153–154
 - Word, 296–298, 328–329
- Spreadsheets. *See also* Sheets
 - creating data-bound spreadsheets, 691–696
 - data-bound controls for customized, 677–681
 - data source for creating data-bound customized, 674–677
 - importing XML files and refreshing XML data in, 826–827
 - XML data in, 816–817
- Start Action, COM add-ins, 909–910
- Start parameter, Word Range object, 346
- Start property, Word Range object, 339, 340–344
- StartCaching, 701–702
- StartOf method, Word Range object, 343–344
- Startup
 - calling Startup method in InfoPath, 506
 - raising Startup event in Outlook, 394–397
 - running code after, 47–48
 - sequences in VSTO programming model, 552–554
 - in Word, 248–249
- Startup order, Com add-ins, 897–898
- Statements
 - in dynamic event handling, 28–30
 - Select Case statement, 15–16
- Status bar
 - displaying message in Excel, 146–147
 - displaying message in Word, 281
- StopCaching, 701–702
- Store, adding/removing Outlook Store, 445
- StoreID, getting Folder/Outlook item using, 447–448
- Story
 - defined, 336
 - Range object in Word and, 346
- Strings, 10–11
- Strong names, 753–761
 - child code group, 755–757
 - creating stong-name code group, 754
 - implementing, 754–755
 - overview of, 753–754
 - public keys and public-key tokens, 760–761
 - publisher certificates combined with, 765
 - shortcomings of, 762
 - strong-named assemblies, 757–760

- Structure parameter, for protecting workbooks, 168
 - Style property
 - Word Range object, 353–354
 - Word Tables collection, 361
 - Subfolders, accessing in MAPIFolder object, 450–452
 - Submit event, InfoPath, 526–529
 - Sync events, Word, 263
 - SyncScrollingSideBySide property, Word windows, 306
 - System.Security namespace, 772–773
- T**
- Tab
 - lack of support for TabIndex property in control hosting model, 590–591
 - selecting tab on dialog box in Word, 300
 - Table
 - working with in Word, 360–362
 - writing code to create, 55–57
 - “Tag” field, in VSTO programming model, 541
 - Tags, Smart. *See* Smart Tags
 - Task panes
 - Actions task pane. *See* Actions task pane
 - creating custom task panes in InfoPath, 522–525
 - working with New and Getting Started document task panes in Word, 291–294
 - Templates
 - InfoPath forms, creating, 494–499
 - InfoPath forms, registering, 502–504
 - Word Application object, 307–309
 - Word Document object, 319
 - Templates and Add-Ins, 853, 861
 - Terms, document level Smart Tags, 638–639
 - Text
 - changing insertion behavior, 580–582
 - getting from Word Range object, 349–350
 - setting in Word Range object, 350–351
 - Smart Tags for recognizing. *See* Smart Tags
 - Thread locale, 215
 - Time, in Excel locale issue, 214–215
 - Timeout parameter, Word dialog box, 298
 - TLBIMP, 40–43
 - Tokens, public-key, 760–761
 - Toolbars
 - positioning in VSTO, 583–584
 - toolbar events in Excel, 133–138
 - toolbar events in Word, 271–272
 - Toolbox, for dataset components, 693
 - ToOle method, window display color conversion, 179–180
 - Toolkits
 - Microsoft Office InfoPath Toolkit for Visual Studio 2005, 494
 - Research Services Development Extras Toolkit for Office, 230
 - ToXml, helper method Cached Data class, 733
 - Transforms, XSLT file acting on WordML, 871
 - Tree view, 869
 - Trust
 - full and partial trusts, 746
 - trusting documents, 765–769
 - Try block
 - dialog boxes and alerts in Word Application object, 280
 - ScreenUpdating property in Excel, 144
 - Type parameter, Chart/Sheet/Worksheet collections, 170
 - Type property, of Word Document object, 315

Typed datasets, in data programming,
686–688

TypeOf operator, 170, 469–470

U

Undo method

Excel, 155

Word, 335

Union operator (.)

creating new ranges using operators,
204–205

use in Range Object, 198–199

Unloading code, in different develop-
ment patterns, 48

UnReadItemCounty property, MAPI-
Folder, 450

Untyped datasets, in data program-
ming, 686–688

Updates

controlling screen updates in Excel
Application Object, 143–144

controlling screen updates in Word
Application object, 278–279

Update event in toolbar/menu
events, 136

URLs (uniform resource locators), Info-
Path forms, 501, 504

URN deployment, InfoPath forms,
501–502

User controls

in ActionsPane architecture, 613–614
adding custom user control to

Actions task pane, 616–618

custom property pages in Outlook,
370–372

User-defined functions

applying managed automation add-
in to, 85–88

building managed automation add-in
for, 83–85

creating, 88–90

debugging, 90–91

User, determining current user in
NameSpace object, 445

User IDs, data source security and,
683–684

User information, for Word Applica-
tion object, 296

User interface

Actions task pane as custom user
interface. *See* Actions task pane

controlling look of Excel, 149–150

controlling look of Word, 282–284

Windows Forms for meeting needs
of. *See* Windows Forms controls

User Policy level, 745–746

Utilities, client-side ServerDocument
utility, 724–726

V

Validation

XML Options dialog box, 878

XML schemas, 827–829

Values

collection object, 10–11

DataDOMEEvent object, 512–514

enumeration, 12

Excel Range Object, 199

FileDialog property, 17

in methods, 20–22

Mouse Pointer in Word Application
object, 280

Nothing value and button failure
issue, 30

object properties, 13–20

Range Value properties, 208–209

ScreenUpdating property and, 278

Variables

in button failure issue, 30–34

custom property pages, 376

events handling, 27–28

identifying Outlook item type,
470–471

object model hierarchy, 9–10

- VBA (Visual Basic for Applications)
 - in Office programming, 4
 - use of code-behind solution, 46
- VBScript, 496
- Verb properties, Action classes, 661–663
- View options, XML Options dialog box, 878–879
- Views
 - data-bound master-detail view on Excel spreadsheets, 677–681
 - data-bound master-detail view on Word documents, 681–682
 - focus vs. selection in InfoPath XDocument object, 525–526
 - InfoPath forms, 493
 - MAPIFolder object view settings, 457–458
 - Model-View-Controller (MVC) in VSTO, 535–536
 - selected in Explorer object, 433–437
 - separating data and view, 534–536
 - switching in InfoPath, 519–521
 - view events in Outlook, 401–403
- Visibility
 - Word documents, 317
 - Worksheets, 184–185
- Visual Basic 2005 language
 - advantages of, 5–6
 - use with PIAs, 34
- Visual Basic for Applications (VBA)
 - in Office programming, 4
 - use of code-behind solution, 46
- Visual Studio 2005
 - combining schema creation with Excel schema mapping, 816–817
 - creating XML schema for use in Word, 857–860
 - creating XML schemas, 817–820
 - support for XML schemas, 811–816
 - writing COM add-ins, 904–906
- Visual Studio 2005 Tools (VSTO)
 - additional Excel events raised in, 138–142
 - additional Word events raised in, 273–275
 - advantages of, 5
 - cached data vs. custom properties with Worksheet objects, 187
 - code behind in Excel, 78
 - code behind in Word, 225–226
 - combining XML mapping with VSTO data binding, 842–849
 - customization and trust, 746–749
 - data programming. *See* Data programming
 - deployment runtime prerequisites, 777
 - derived from Windows Forms controls, 586–589
 - introduction to, 1–2
 - LoadXml method, 887–888
 - locale issue and, 217–218
 - Outlook add-ins and, 364–365
 - programming model. *See* programming model, VSTO
 - Smart Tag support, 370
 - support for Word schema mapping, 880–881
 - support for WordML file format, 888–889
 - support for XML schema mapping, 833
 - supported/unsupported XML schemas, 830–831
 - XLA add-ins and, 82
 - XML schema added to VSTO project, 841–842
 - XMLNode control, 881–884
 - XMLNodes control, 884–887
- VSTO add-ins, 921–940
 - add-ins, 891–892
 - compared with COM add-ins, 921–922

VSTO add-ins, *continued*

- creating, 60–65, 933–938
- improvements to COM add-ins, 932–933
- installing, 939–940
- manifest update and, 938–939
- Outlook shut down problems related to COM add-ins, 922–925
- ReleaseCOMObject, avoiding, 925–932
- security and, 938

W

- Wait parameter, in SendKeys method, 156
- WdWindowState enumeration, 12
- Web caching, deploying VSTO solutions and, 802–803
- Web forms, ASPX, 718–721
- Web pages, associating web view with folder in Explorer object, 439
- Web sites, deploying VSTO solutions to, 777–785
- What parameter, Word Range object, 346–347
- Which parameter, Word Range object, 346–347
- WholeStory method, Word Range object, 346
- Wiki, 51
- Window caption, Word, 281
- Windows
 - accessing window in Excel collection, 176–177
 - accessing window in Word collection, 305–306
 - Actions task pane. *See* Actions task pane
 - Activate/Deactivate in Excel, 104–111, 167
 - Activate/Deactivate in Word, 255–257
 - adding buttons/menus to Explorer window, 438
 - arranging in Excel, 177–179
 - arranging in Word, 306–307
 - creating in Word, 304
 - display settings in Excel, 179–181
 - Document object in Word, 317–319
 - Explorer, 392–394, 437
 - Inspector, 392–394
 - iterating over open windows in Excel, 175–176
 - iterating over open windows in Word, 304–305
 - parameters for workbook protection, 168
 - positioning in Excel, 179
 - Window Sizing events in Excel, 126–127
 - window sizing events in Word, 262
 - windows events in Outlook, 399–400
- Windows Forms controls, 571–606
 - AddControl method, 603
 - adding at runtime, 597–600
 - adding to Actions task pane, 614–616
 - adding to documents, 577
 - blurry, 593
 - code behind, 584–585
 - collection, 600–602
 - in collection typed as object, 605
 - control state not saved, 591–593
 - controls added at runtime not saved, 604–605
 - deleting at runtime, 603–604
 - on document surface, 572–575
 - hosting ActiveX control, 585–586
 - inserting into Excel, 582–583
 - inserting into Word, 580–582
 - layout on document/worksheet surface, 583–584
 - limitations of control hosting model, 590–591
 - Modal/Modeless, 575–577

- modes for adding, 578–579
 - moving from ActiveX controls to, 571–572
 - not in toolbox, 579–580
 - overview, 571
 - programming. *See* Programming model, VSTO
 - properties merged from OLEObject/OLEControl, 594–597
 - security, 589–590
 - in Smart Documents, 612
 - summary, 605–606
 - VSTO controls derived from, 586–589
- WithEvents keyword
 - declarative event handling, 25–28
 - dynamic event handling, 29
 - workbook event handling, 101–103
- Word
 - add-in solutions for, 60
 - adding host controls dynamically, 544–545
 - Bookmark host control, 561–562
 - COM add-ins in, 60
 - console application for automating, 51–59
 - data binding in Word documents, 698–699
 - deploying. *See* Deploying VSTO solutions
 - Document class, 556–561
 - inserting Word controls into Excel, 582–583
 - Smart Tags in, 631–632
 - Smart Tags when Word is Outlook e-mail editor, 365–368
 - VSTO extensions to Word object models, 555
 - XML in. *See* XML, in Word
 - XMLNode and host control classes, 562–565
- Word Basic, 301–302
- Word events
 - Close Document, 252–254
 - CommandBar, 271–272
 - Document activation, 255–257
 - E-Postage, 263
 - Mail Merge, 264–271
 - mouse, 258–260
 - New/Open Document, 249–252
 - Print document, 257–258
 - Save document, 254–255
 - selection, 260–262
 - Start-up/Shutdown, 248–249
 - summary, 275
 - Sync, 263
 - Visual Studio event handlers, 246–248
 - in VSTO, 273–275
 - window sizing, 262
 - Word object model and, 243–246
 - XML, 262–263
- Word objects, 277–362
 - Application object. *See* Application objects, Word
 - Bookmarks, 358–360
 - Dialog Object, 299–303
 - Document collection. *See* Document collections, Word
 - Document object. *See* Document object
 - Range object. *See* Range object, Word summary, 362
 - Tables collection, 360–362
 - templates, 307–309
 - Windows, 304–307
- WordML file format
 - overview of, 870–871
 - VSTO support for, 888–889
 - XSLT file transform and, 871
- Workbook events
 - Activate/Deactivate, 104–111
 - Calculate, 118–120
 - Change, 120–122
 - Before Close, 128–129

Workbook events, *continued*

- Double-Click/Right-Click, 111–116
- Follow Hyperlink, 123–125
- NewWorkbook, 100–104
- Open, 131–133
- Before Print, 129–130
- raising, 24–25
- Resize events, 126–127
- Before Save, 130–131

Workbooks

- accessing document properties, 162–163
- accessing in collection, 158–159
- adding XML schemas to, 820–821
- creating/activating windows, 167
- creating new, 159–160
- embedding Excel in another application, 166–167
- host item class, 565–566
- iterating over open workbooks in collection, 157–158
- mapping schemas to, 821–826
- object default properties, 19–20
- opening existing/closing all workbooks in collection, 160–161
- printing, 167
- properties that return active/selected objects, 161
- properties that return collections, 162
- protecting, 168
- saving, 163–165
- saving in XLA format, 128
- sending as e-mail, 154–155

Worksheets. *See also* Sheets

- accessing in collection, 170
- adding controls to. *See* Windows Forms controls
- adding to collection, 170–171
- built-in WorksheetFunction property, 152
- Change events, 120–122

ChartObjects in, 194–195

- copying/moving, 171
- custom properties, 186–187
- Excel object model and, 93–94
- host item class, 566
- iterating over open sheets in collection, 169
- layout of controls on worksheet surface, 583–584
- lists, 196–197
- managing, 183–185
- names, 186
- New Worksheet events, 100–104
- OLEObjects, 192–194
- properties, 19–20
- protecting, 187–192
- range of cells. *See* Range object, Excel shapes, 194
- Wrappers, using PIAs to communicate, 34–35
- Write-only property, in object model methods, 21

X

XDocument object

- button events/view switching in forms, 520–521
- focus vs. selection methods, 525–526
- in InfoPath, 506
- OnContextChange event in, 521–525

XLA add-ins

- customizing Excel, 81–82
- Install/Uninstall events, 128

XML

- caution in using ServerDocument object model to manipulate cache, 736–737
- Import/Export events in XML data files, 128
- manipulating serialized XML directly, 703

- XML-based forms in InfoPath, 493–494
- XML file formats for server data, 714–715
- XML Document task pane, 874
- XML Expansion Packs
 - for customizing Excel, 78–79
 - for customizing Word, 226–227
- XML, in Excel, 809–849
 - adding schemas to workbooks, 820–821
 - adding schemas VSTO project, 841–842
 - appending data to lists, 829–830
 - combining Visual Studio schema creation with Excel schema mapping, 816–817
 - combining XML mapping with VSTO data binding, 842–849
 - creating schemas with Visual Studio 2005, 811–820
 - data formatting and layout, 829
 - features, 809–811
 - importing XML files and refreshing XML data in spreadsheets, 826–827
 - ListObject controls, 837–841
 - mapping XML schema data types to Excel cell formats, 831
 - mapping XML schemas to workbooks, 821–826
 - supported/unsupported schemas, 830–831
 - validating XML schemas, 827–829
 - VSTO support for XML schema mapping, 833
 - XMLMappedRange controls, 833–836
- XML, in Word, 851–889
 - adding schema to Word documents, 861
 - attributes, 860
 - combining Visual Studio schema creation with Word schema mapping, 855–856
 - creating and mapping schema into Word document, 855–857
 - creating document with mapped XML structure, 862–869
 - creating schemas with Visual Studio 2005, 857–860
 - creating XSLT file, 872–873
 - data view only, 873–874
 - exporting mapped XML to XML data file, 869–871
 - features, 851–855
 - importing XML data file into mapped document, 871–872
 - LoadXml for loading XML programmatically, 887–888
 - manually converting book-order XML file using XSLT file, 873–875
 - raising XML events, 262–263
 - saving XML document, 869–870
 - VSTO support for Word schema mapping, 880–881
 - VSTO support for WordML file format, 888–889
 - XML data view only, 873–874
 - XML Options dialog box, 861–862, 877–880
 - XMLNode control, 881–884
 - XMLNodes control, 884–887
 - XSLT file applied automatically to XML file, 875–877
- XML Map Properties dialog box
 - appending XML data to lists, 829–830
 - data formatting and layout for XML-mapped lists, 829
 - schema validation settings, 827–829

- XML maps
 - defined, 811
 - in Smart Documents, 611–612
 - using to change Actions pane contents, 620–621
 - XML Options dialog box, 877–880
 - Ignore Mixed Content check box, 861–862
 - overview of, 877
 - save options, 877–878
 - Show Advanced XML Error Messages, 879
 - Show Placeholder Text for All Empty Elements, 879–880
 - validation options, 878
 - view options, 878–879
 - XML schemas
 - adding to VSTO project, 841–842
 - adding to Word document, 861
 - adding to workbook, 820–821
 - combining Visual Studio schema creation with Excel schema mapping, 816–817
 - combining Visual Studio schema creation with Word schema mapping, 855–856
 - creating for Excel, 811–820
 - creating for Word, 857–860
 - mapping schema data type to Excel cell formats, 831
 - mapping to Word documents, 855–857
 - mapping to workbooks, 821–826
 - supported/unsupported in Excel, 830–831
 - validating in Excel, 827–829
 - VSTO support for Excel schema mapping, 833
 - VSTO support for Word schema mapping, 880–881
 - XSLT file associated with, 875–877
 - XML Source task pane, 809–811
 - XML Structure task pane, 851–853, 861
 - XMLMappedRange controls, 567–569, 833–836
 - XMLNode control
 - dynamic creation of host controls in Word/Excel, 545
 - Word XML, 562–565, 881–884
 - XMLNodes control, 884–887
 - XSD files, 817–820
 - .XSF files, 503–504
 - XSLT file
 - applied automatically to XML file, 875–877
 - creating, 872–873
 - manually converting book-order XML file using XSLT file, 873–875
 - transform of WordML, 871–872
 - .XSN files, 503–504
- Z**
- Zones, code groups, 743