

Index

A

- About dialogs, 169–170
- About Plug-ins dialog, 169
- About *Product* dialog, 499, 812–813, 816
- About *Product* Features dialog, 496–498
- about.html file, 497
- about.ini file, 497–498
- about.mappings file, 497
- aboutProduct.gif file, 497
- about.properties file, 497
- AbstractTextEditor class, 595–598, 608–609
- AbstractUIPlugin class, 216–217, 284–285, 288
- accelerator attribute, 234
- Action classes, 332, 523, 773
- Action contributions, 229
 - basics, 230–240
 - built-in filters on resources and markers, 443–445
 - context menus, 430, 585–586
 - context-sensitive help, 523
 - editors, 435–438, 445–447
 - actions, 430
 - context menus, 586
 - toolbars and menus, 244–245
 - extension points, 230, 231, 233–237
 - global, 586
 - JDT editors and views, 584–585
 - markers, 425
 - menus, 431–432
 - plug-in manifest file, 233–237, 430
 - samples, 429–443
 - SQL source code editor, 607–608
 - views, 243–244, 430, 433–438, 445–447, 586
 - Workbench menu bar, 240–243
 - Workbench toolbar, 240–243, 431–432
- Action delegates, 430
 - <action> element, 357
 - Action expressions, 238–240
 - Action sets, 241–243, 430, 464–465, 767, 769, 778
 - <action> tag, 464–466, 469–470, 773, 779
 - ActionContributionItem class, 465
 - ActionDelegate.setActiveEditor method, 437
 - actionPartSetAssociations extension point, 241
- Actions, 17
 - action delegates, 430
 - attributes, 234–235, 773
 - contributor, 356–360
 - CVS Repositories view, 150–151
 - defining search functions, 242–243
 - disabling, 332
 - editors, 356–360
 - enabling, 238, 332
 - filtering, 237–238
 - global, 336, 591
 - implementing, 771, 773
 - independent of perspectives, 242–243
 - insertion points, 236
 - JFace, 195–196
 - keyboard, 235
 - menus, 21, 25, 235–237, 332, 357, 770–771
 - Navigator view, 583
 - Package Explorer, 583
 - proxy actions, 232
 - Resource History view, 153
 - resources, 206
 - retargetable, 336, 591
 - selection by user, 232–233
 - shortcuts to, 22
 - toolbars, 25, 235–237, 241, 332, 357
 - user interface, 24–25
 - views, 332–336
 - visibility attribute, 238

- actionSets extension point, 431, 767–768, 771, 777
 - ActivateEditorPulldownDelegate class, 432
 - Active Editor (F12) keyboard shortcut, 634
 - Active help, 33, 36, 514
 - ActiveX controls, 529–530, 534, 542
 - ActiveXBrowserView class, 532
 - Adaptable interface, 300, 340, 441
 - Add... for Associated editors command, 60
 - Add Bookmark... command, 33, 637
 - Add Bookmark action, 336
 - Add Comments (Ctrl+/) keyboard shortcut, 82
 - Add CVS Repository dialog, 718
 - Add External Jars... command, 99
 - Add Import dialog, 667
 - Add Import (Ctrl+Shift+M) keyboard shortcut, 82
 - Add Java Exception Breakpoint command, 131
 - Add JRE dialog, 687
 - Add Task... command, 31, 638
 - Add to .cvsignore action, 155
 - Add to Version Control action, 155
 - Add Type as Import dialog, 664
 - Add Variable... command, 99
 - additions insertion point, 236
 - addPages method, 305, 308
 - Add/Remove Method Breakpoint command, 132
 - addResourceChangeListener method, 374, 390
 - addSaveParticipant method, 374
 - addSelectionChangedListener method, 328
 - addSelectionListener method, 255
 - Advanced Search dialog, 37, 514, 651
 - Alignment property, 535
 - AltoWeb, 3
 - anchor tag, 518
 - Annotations, 591, 596–598, 600, 605
 - Anonymous inner classes, 80, 669–670
 - Apache Ant, 7
 - application attribute, 490
 - application startup parameter, 499
 - Applications
 - domain model, 316
 - evolution of, 4
 - ProgramID, 531
 - user interface, 316
 - arch attribute, 490
 - Archive files, 519
 - arguments attribute, 425
 - assert keyword, 573
 - assertMode attribute, 573
 - Associating actions, 548
 - AST (Abstract Syntax Tree)
 - creation of, 567–570
 - derivations, 572
 - finer-grain parsing of Java source code, 572–576
 - nodes, 568–569, 572
 - transformations, 572
 - traversing, 569–570
 - AST class, 558
 - Asterisk (*) wild card, 38
 - ASTNode class, 568
 - ASTVisitor class, 569–570
 - asyncExec method, 269–270
 - Attach Source option, 134
 - Attributes
 - actions, 234–235, 773
 - displaying and editing, 339–343
 - extension points, 233–234
 - markers, 421–422
 - Auto-build, 412, 417
 - Available perspectives preference, 67
 - AWT (Abstract Window Toolkit), 194, 250, 546
- B**
- Back command, 25
 - Backing out change, 159–160
 - Base site, 172
 - bin directory, 720–721
 - Binary files, 147, 154
 - bin.includes, 509, 794–795
 - Bookmarks, 22, 33, 388–389, 422, 426, 591, 598, 605, 636–638
 - BooleanFieldEditor field editor, 292
 - Borland Software Corporation, 3
 - bottom attribute, 265
 - Branches
 - defining, 149–150, 155
 - expanding, 150
 - maintenance and new release development setup, 141, 146–147, 160, 733–743
 - names, 734
 - updating projects and storing changes in, 734–738
 - versions, 735–736
 - Branding content, 169–170, 490, 496–498, 815–817
 - Breakpoint (Ctrl+Shift+B) keyboard shortcut, 123
 - Breakpoints, 121, 128–131, 598, 694–696, 701, 704, 706–708
 - conditional, 701–702

- defining, 123, 130
 - enabling and disabling, 700–701
 - hit counts, 130, 699
 - Java exception breakpoints, 131–132
 - method breakpoints, 132
 - moving to, 128
 - suspending execution, 130, 701
 - watchpoints, 132
 - BreakpointsView class, 446
 - Browse... command, 60
 - Browsing
 - for files, 630–631
 - help, 650
 - Javadoc, 88–89
 - Bugzilla, 11–12
 - build method, 416–417
 - Build path, 105, 108–109
 - <builder>, 410
 - Builders, 200, 207, 370, 403–406, 409–419
 - associating with projects, 378–379, 412
 - build processing, 412–414
 - defining, 411, 415–416
 - disabling processing, 414
 - implementing custom, 411–419
 - managing relationship with natures, 409
 - <parameter ... > entries, 416
 - reacting to resource changes, 413–414
 - resource delta, 412
 - Building, 503–505
 - build.jars task, 508
 - build.properties file, 508–509, 792, 794–795, 799, 804–806
 - Builds
 - downloadable, 10
 - full, 412
 - headless, 451
 - incremental, 412, 417
 - manually performing, 112
 - build.update.jar, 509, 800–802
 - build.xml file, 508–509, 795, 800, 802–803
 - Button class, 251, 255, 262
 - Buttons, 252, 332
- C**
- Cache and Java elements, 559–560
 - canFinish method, 309
 - Catalyst Systems Corporation, 3
 - category method, 331
 - Change ASCII/Binary Property action, 155
 - Change events
 - querying, 392
 - resource delta, 393–397
 - types, 391
 - Change notifications and Java elements, 561–564
 - changed method, 601
 - Character-based (ASCII) files and CVS, 147
 - charEnd attribute, 425
 - charStart attribute, 425
 - Check Out As action, 149, 151
 - CheckboxTableViewer class, 318
 - CheckboxTreeViewer class, 318
 - checkout command, 144
 - class attribute, 214, 216, 218, 234, 465, 583, 600, 773, 779
 - .class files, 104–105, 135, 200, 404, 414, 557, 721, 795
 - disassembler, 565
 - Class selection filter, 238
 - Classes, 72
 - anonymous inner, 669–670
 - creation of, 110–111, 656
 - defining breakpoints, 130
 - for externalizing strings, 95
 - Help system, 514
 - hierarchy, 72–73, 115
 - instance creation and access, 558–559
 - Java model, 557–558
 - Javadoc comments, 83
 - main methods, 100
 - navigating to, 73
 - nested, 110
 - refactoring, 679–681
 - visible outside plug-in, 216, 467
 - ClassFileEditor class, 446, 585
 - Classpath, 98, 101–103, 105–108, 227, 682, 684, 795
 - ClearAllAction interface class, 358
 - Client site, creation of, 530–531
 - Close command, 65, 631, 635
 - Close editors automatically option, 28
 - Code Assist page, 78, 90, 113
 - Code Formatter, 76, 91
 - Code Generation page, 76
 - Code templates, 7, 78
 - colocation-affinity attribute, 507
 - ColorFieldEditor field editor, 292
 - ColorPropertyDescriptor property descriptor, 341

- COM (Component Object Model)
 - automation clients, 528
 - containers support, 529–534
 - Eclipse support, 527–529
- COM server, 534
- COM typelib, 540
- ComboBoxPropertyDescriptor property descriptor, 341
- Command line interface, 144
- Command line parameters,
 - application, 499
 - data, 57, 65, 166, 648, 729
 - feature, 488, 499
 - initialize, 167, 180–181
 - showlocation, 57, 65, 648
 - vm, -vmArgs, 58
 - Xdebug, -Xnoagent, -Xrunjdpw, 136
- Comments
 - adding and removing, 82
 - Commit action, 722
 - externalizing strings, 94
- Commit action, 155, 722, 728, 737
- commit command, 144
- commit method, 580
- Common Public License, 167
- Compare action, 151, 153
- Compare dialog, 42–43
- Compare Editor, 642
- compare method, 331
- Compare view, 160
- Compare With action, 42–43, 111, 141, 159–161
- Comparing
 - files, 42–43, 641–642
 - Java elements, 111
 - projects, 642
- Comparison elements, 239
- CompilationUnit class, 559, 568, 570, 577
- CompilationUnitEditor class, 446, 585
- #CompilationUnitEditorContext context menu ID, 246
- Compiler preferences, 100, 687
- Composite class, 252, 267, 279
- computeCompletionProposals method, 609–610, 612
- computeContextInformation method, 610
- Conditional breakpoints, 701–702
- Conditions, 130
- .config directory, 166–167, 371
- Configuration Changes dialog, 179, 181–182, 751, 812
- Configuration Details dialog, 500
- Configurations, 172
 - changes to, 172, 179, 750–754
 - current, 173–174, 748
 - default, 180–182
 - details on, 170–171
 - first-time startup, 178–179
 - install sites, 172–176
 - removing disabled features, 176–177
 - reverting to, 749
 - viewing, 172–174
- ConfigurationView class, 447
- Configure Branches and Versions action, 150
- configure method, 407–408, 410
- Conflicts, 729–733
- connect method, 605
- Connect page, 136–137
- Console, 124
 - error messages, 780
 - preferences, 101
- Console view, 122, 132–133, 708, 711, 729
 - clearing, 670
 - color-coding for output text, 101
 - expressions output, 103
 - program output, 132–133
 - viewing output of terminated programs, 128
- console-log option, 484
- ConsoleView class, 446
- Content assist, 78–81, 592, 666–670
 - debugging, 702–703
 - designing, 609–610
 - scrapbook pages, 103
- Content Assist (Ctrl+Space) keyboard shortcut, 78, 90, 592
- Content assistant, implementing, 610, 612–613
- Content formatting, 594, 618–621
- Content page, 798
- Content provider, 319, 322–323, 326, 354
- ContentAssistant class, 609–610
- ContentFormatter class, 619
- ContentOutline class, 360–361
- ContentOutlinePage class, 361
- Contents pane, 35–37, 648, 650
- Context menus, 19, 143, 430
 - action contributions, 585–586
 - contributing to editors, 246–247
 - contributing to views, 245–246
 - editor action contribution, 438–439
 - filtering, 245

- object contributions, 439–443
 - registering, 335
 - views, 332, 335
- CONTEXT_HELP_ID string, 522
- Context-sensitive help, 514, 519–524
- contexts.xml file, 522
- contributeToMenu method, 605
- contributeToToolBar method, 357, 605
- Contribution framework, 190, 195–196, 229–248, 429–448, 548
- contributorClass attribute, 356, 606
- ControlListener event listener interface, 255
- Controls, 252
 - arranging, 256–266
 - changing presentation, 253–254
 - configuring, 264–265
 - fill layout, 258–259
 - form layout, 263–266
 - grid layout, 260–263
 - layout data, 260
 - row layout, 259–260
 - SWT (Standard Widget Toolkit), 252
- Copy action, 336
- Copy command, 25, 52
- Copy to Clipboard action, 151
- Copying files to projects, 20
- CoreException exception, 479
- CPL (Common Public License), 12
- Cpl-v10.html file, 167
- Create a Java Class button, 72
- Create a Java Interface button, 72
- Create a Java Package button, 72
- Create a Java Project button, 71
- Create a Scrapbook Page command, 103
- Create Feature JAR command, 509
- Create New Folder... command, 106
- Create Patch wizard, 161
- Create Path action, 155
- Create Plug-in JARs command, 508
- Create Shortcut command, 63
- createActions method, 605
- createCodeFormatter method, 565
- createContents method, 282–284, 297–298, 305
- createContextMenu method, 334
- createControl method, 305, 361, 522
- createDefaultClassFileDisassembler method, 565
- createDefaultClassFileReader method, 565
- createDefaultCodeFormatter method, 565
- createDocument method, 603, 605
- createExecutableExtension method, 470
- createFieldEditors method, 290–291
- createInitialLayout method, 365
- createPartControl method, 321, 324, 332, 342, 352, 439, 523, 530–531, 533
- createPropertyEditor method, 342
- createScanner method, 565
- Current configuration, 173–174
- Custom builders, 411–419
- custom.build.properties file, 804
- customizeDocumentCommand method, 594
- Customizing
 - Eclipse, 54–66
 - Help system, 524–525
 - JRE, 58
 - markers, 423–424
 - perspectives, 54–57, 242, 644–645
 - products, building, 503–504
 - project processing, 403–406
 - resources, 206–207
 - text editor, 594–595
 - wizards, 306–307
- Cut action, 336
- Cut command, 52
- CVS (Concurrent Versions System), 4–5, 8, 139–163
 - automatic build preference setting during import, 162
 - backing out change, 159–160
 - branching, 141, 146–147, 149–150, 160, 733–743
 - character-based (ASCII) files, 147
 - checking out projects to workspace, 148–149
 - command line interface, 144
 - committing changes to, 144–145, 157, 727
 - Compare With action, 159
 - comparing workspace with, 141
 - concurrent updates to same file, 157
 - CVS Console view, 152
 - CVS Repositories view, 148–150
 - CVS Resource History view, 150–152
 - CVS Synchronize view, 154, 156
 - deleting resources, 158
 - editors, 140
 - FAQ (Frequently Asked Questions), 144
 - HEAD tag, 146

- CVS *continued*
 - history of changes to files, 143
 - ignoring local resources,
 - Add to .cvsignore action, 155
 - .cvsignore file 155, 721–722, 796
 - making application-wide changes, 158
 - managing projects, 719–722
 - merging, 141, 146–147, 730–743
 - metadata, 162
 - modifying project code, 726–729
 - moving resources between projects, 158
 - optimistic model, 144
 - overview, 143–147
 - patches, 141, 161
 - platforms, 143
 - project sets, 161–162
 - renaming projects, 158
 - retrieving files from, 144
 - rules for label decorations, 154
 - setting preferences, 717
 - synchronizing with project, 154, 156
 - updating projects, 145, 158, 734–738
 - user interface, 147–157
 - versioning, 144–147
 - viewing project differences, 154, 156
 - views, 140–141
 - workspace access, 141
- CVS Console preferences page, 152
- CVS Console view, 144, 148, 152
- CVS decorators, 717
- CVS Home web site, 8, 143
- CVS projects, 162
- CVS properties page, 162
- CVS Repositories, 140, 714
 - Branches element, 149–150
 - committing changes to, 157
 - defining location, 149, 718–719
 - displaying interactions, 152
 - information about, 718
 - known to workspace, 148–150
- CVS Repositories view, 141, 148–151, 160, 718, 720, 723–724, 730, 736
- CVS Repository Exploring perspective, 14, 140, 148–150, 718, 723, 729
- CVS repository server, 153
- CVS Resource History view, 148, 150–152, 722–723, 725, 737
- CVS server, interactions with, 148
- CVS Synchronize view, 154, 156
- .cvsignore file, 155, 721–722, 796
- CVS/NT, 714
- D**
- Damager, 614
- Data, private, 371
- data command line parameter, 57, 65, 166, 648, 729
- data object, 264
- Data source, 339
- data <workspace location> parameter, 182
- DDE (Dynamic Data Exchange), 527
- deactivateInPlaceClient method, 532
- Debug... command, 123, 133, 136, 219
- Debug action, 100, 123
- debug option, 484
- Debug perspective, 14, 121, 123, 127, 131, 133, 694, 781
- Debug Targets, 127
- Debug view, 122–124, 127–128, 694, 697, 704, 707, 710
- Debugging, 121–138, 693–712
 - activities, 122–123
 - breakpoints, 122–123, 128–133, 690–701, 704, 707–708
 - changing variable and field values, 125–126
 - cleaning up sessions, 128, 697
 - conditional breakpoints, 701–702
 - content assist, 702–703
 - controlling program execution, 123–127, 701
 - evaluating expressions, 124–125
 - exceptions, 131–132
 - hot code replace, 134–136
 - Java programs, 7, 103, 126–127, 693–703
 - Java VM, 694
 - JDT (Java Development Tools), 121–122
 - launch configurations, 133
 - manipulating programs, 127–128
 - plug-ins, 225–226
 - program output in Console view, 132–133
 - remote, 136–137, 708–711
 - resuming program execution, 126
 - run-time Workbench, 779–781
 - source code, 14
 - stack frames, 127
 - starting session, 123
 - step return, 696, 697
 - stepping into, 126, 696–697
 - stepping over, 126, 694, 696–697

- stepping through, 705
 - threads, 703–708
 - views, 121–122
 - watching variable values, 697–699
 - watchpoints, 704–707
 - debugging package, 694
 - deconfigure method, 407–408
 - decorateImage method, 338
 - decorateText method, 338
 - DecoratingLabelProvider class, 338
 - Default
 - configuration, 180–182
 - Java run-time environment, 166
 - JREs, 97, 105
 - text editors, 589, 595
 - DefaultAutoIndentStrategy class, 594
 - DefaultDamagerRepairer class, 614, 616–618
 - DefaultRangeIndicator class, 605
 - Define Branch Tag action, 150, 151, 160
 - Delete action, 336
 - Delete unmanaged resources on replace preference, 159
 - Deleting
 - projects, 47–48
 - projects at alternate locations, 641
 - Dependencies page, 222
 - Dependent plug-ins, 214
 - DEPTH_INFINITE, 552
 - Derived resources, 379–380, 717
 - DESCRIPTION constant, 395
 - Detail pane, 124–125, 576, 697
 - Development environment, 223–224
 - Diagnostics
 - error logs, 485
 - run-time tracing, 481–484
 - Dialogs
 - extension points, 274–278
 - push buttons, 524
 - settings, 217
 - storing values, 312–313
 - user interface framework, 273–314
 - dialog_setting.xml file, 313
 - dialogs.jar file, 795, 801
 - Directories
 - content, 166–167
 - selecting, 278
 - DirectoryDialog dialog, 278
 - DirectoryFieldEditor field editor, 292
 - Disabilities, 10
 - Discard Branch command, 150
 - Discard Location action, 151
 - Disconnect action, 158
 - Discovery sites, 177
 - Display class, 251–252, 269–270
 - Display command, 124
 - Display (Ctrl+D) keyboard shortcut, 124
 - Display view, 122, 124
 - Display.getCurrent method, 269
 - DisplayView class, 446
 - dispose method, 267, 322, 343, 359, 532
 - DisposeListener interface, 268
 - Distributed self-hosting Eclipse, 227
 - Distribution ZIP file, 508
 - Document class, 598, 609
 - Documentation integration scenarios, 205
 - Documentation-only plug-ins, 516
 - Document-based model, 319
 - DocumentPartitioner class, 601–602, 605
 - DocumentProvider class, 598, 600–601
 - DocumentProviderRegistry class, 598
 - Documents
 - annotation model, 598
 - damager, 614
 - managing and creating content, 598, 600
 - mapping to editors, 600–601
 - partitions, 601–602, 605–606, 619
 - read-only, 598
 - repairer, 614
 - Domain model, 316
 - doSave method, 354–355, 360
 - doSaveAs method, 355
 - Double-click behavior, 595
 - Download builds, 10
 - DTDs (Document Type Definitions), 471
- ## E
- earlyStartup method, 452
 - Eclipse, 3–4
 - accessibility, 10
 - architecture, 458–460
 - COM support, 527–529
 - Common Public License, 12, 167
 - common user interface, 187
 - configuration data, 371
 - customizing, 54–66
 - CVS, 8, 141–143, 147–157
 - developer mailing lists, 584
 - distributed self-hosting, 227

- Eclipse *continued*
 - editors, 13, 347–362
 - extensibility, 188–192, 203
 - features, 165, 169
 - first-time startup, 178–179
 - headless mode, 180
 - Help system, 8–9
 - integrating
 - context-sensitive help, 514
 - modeling tools, 5
 - other programs with, 8–10, 59–63
 - internationalization, 9
 - Java development environment, 5–8, 187
 - Java run-time environment, 166
 - online documentation, 519
 - performance, 65–66
 - perspectives, 14, 363–367
 - Platform Run-time Binary version, 524
 - run-time instance, 225–226
 - standalone self-hosting, 227
 - starting, 18
 - supported platforms, 9
 - views, 13–14, 315–344
 - Welcome page, 13
 - workspace, 13
- Eclipse About dialog, 12
- eclipse directory, 172, 504, 809
- Eclipse example plug-ins, 257
- Eclipse installation, 12
 - .config directory, 166–167
 - features, 168
 - identifying features in run-time platform, 169–171
 - plug-ins, 167–168
 - structure of, 166–174
 - Update Manager, 168–169
 - workspace directory, 166
- Eclipse Platform API Specification*, 602
- Eclipse Platform and Tools project, 10
- “Eclipse User Interface Guidelines,” 199, 316, 333, 352, 362
- Eclipse web site, 10–12, 65, 142, 227
- Eclipse-based tool, distributing, 207
- eclipse.exe file, 18, 58, 167, 626, 810
- ECLIPSE_HOME, 786
- .eclipseextension marker file, 172, 504
- .eclipseproduct file, 167, 172, 501
- Edit... command, 53, 74, 77, 88, 133
- Edit JRE dialog, 133
- Edit Template dialog, 91
- Editing
 - EMACS-style key bindings, 67
 - Java code, 78–81, 103–104
 - templates, 91
 - text, 589, 591
- Editor pane, 22
- Editor Selection dialog, 60
- Editor tab, 26
- <editor> tag, 351, 356
- EditorActionContributor class, 356–360
- editorActions extension point, 436
- <editorContribution> element, 357
- editorContribution extension point, 436
- EditorPart class, 352, 354, 439, 530, 595
- Editors, 13, 22, 198–199, 315, 321, 347, 589, 628, 631
 - action contributions, 244–245, 435–438, 445–447
 - actions, 356–360, 430
 - appearance and behavior, 199, 348–350, 356, 631
 - architecture, 348
 - comparing files, 641–642
 - content provider, 354
 - context menus, 246–247, 586
 - customizing behavior, 207
 - Eclipse definition of, 595–602
 - encoding resources, 67
 - extension points, 351–352
 - external, 351
 - file type associations, 27, 59
 - fonts, 67
 - implementation steps, 349–360
 - JDT (Java Development Tools), 69
 - label provider, 354
 - linking with Outline view, 360–362
 - mapping to documents, 600–601
 - marker bar, 33
 - maximizing and minimizing, 26, 348, 632–634
 - menu extension point ids, 586
 - message area, 631
 - models, 352–353, 355–356
 - multiple on one open document, 596
 - navigating between, 632, 634
 - Navigator view, 27–28
 - opening, 26–29, 348, 352
 - PDE (plug-in development environment), 220–222

- preferences, 67
 - replacing file contents, 642
 - reporting errors and warnings, 362
 - Save As dialog, 355
 - saving
 - changes, 348
 - input, 354–355
 - tasks, 639
 - text documents, 197–198
 - toolbar, 348
- (ETRI) Electronics and Telecommunications Research Institute, 3
- elementChanged method, 579, 561–562
- Elements
 - locating, 73
 - referencing outside projects, 77–78
 - renaming, 71
- EMACS editor, 6, 67
- Embedding (OLE) document editors, 28
- enablement attribute, 238
- enablesFor attribute, 234–235
- Error dialogs, 279, 476–477, 479–481
- Error handling and SWT (Standard Widget Toolkit), 266
- Error logs, 781
 - diagnostics, 485
 - invalid plug-ins, 179
 - Status objects, 477
 - view, 179, 222, 485
 - writing to, 485–486
- Error messages, 479–481, 780
- Errors
 - correcting, 32, 660, 781, 785–788
 - filtering, 116
 - information about, 661–662
 - Java code, 84
 - plug-ins, 222, 783
 - quick fix, 661–662
 - reporting, 31
 - Tasks view, 84
- Errors and Warnings page, 92
- Events, 542–543
 - handling, 326–328
 - dispatching loop, 251–252, 268
 - listeners, 254–255, 374
 - saving, 398–401
- Example Plug-Ins, 12
- Exception handling, 266, 479
- Exceptions, 82–83
 - breakpoint on, 131–132, 781
 - debugging, 131–132
 - details about, 477–479
- exec command (OLE), 534, 536
- exists protocols, 559
- Export... command, 23, 95
- export clause, 216
- <export> tag, 466–467
- Export wizard, 52, 161, 688
- Exporting
 - file formats, 51
 - Javadoc, 95–96
 - preferences, 280
 - resources, 49–52, 277
- Expressions
 - dialogs, 274
 - evaluating, 124–125
 - toString value, 103
 - view, 103, 122, 124–126, 702–703
- .exsd file extension, 472
- Extensibility, 165, 188–191
- <extension> element, 210, 222
- Extension install, 172, 505
- Extension page, 471
- Extension points, 188–191, 203–204, 207–211, 457, 760
 - action contributions, 230, 231, 233–237
 - attributes, 233–244, 234
 - child tags, 459
 - configuration data, 461–463
 - contributing to already-defined, 208
 - declaring new extensions, 463–474
 - defining, 208, 212, 457–458, 460–472, 767
 - dialogs, 274–278
 - editors, 351–352
 - expected interface, 190
 - extensibility, 461
 - identifier, 208
 - registry, 460, 467–469
 - relationship with extensions, 458–459
 - tag attributes, 459, 461
 - wizards, 274–278
 - XML definitions, 233–235
- Extension points,
 - org.eclipse.core.resources.builders, 411, 415, 566, 581
 - org.eclipse.core.resources.markers, 426, 581
 - org.eclipse.core.resources.natures, 406–408, 581
 - org.eclipse.help.contexts, 521

Extension points *continued*

- org.eclipse.help.luceneAnalyzer, 525
- org.eclipse.help.support, 525
- org.eclipse.help.toc, 516
- org.eclipse.jdt.core.codeFormatter, 565
- org.eclipse.ui.acceleratorConfigurations, 462
- org.eclipse.ui.acceleratorScopes, 462
- org.eclipse.ui.acceleratorSets, 462
- org.eclipse.ui.actionSets, 240, 582, 767–768
- org.eclipse.ui.actionSetPartAssociations, 208, 231
- org.eclipse.ui.decorators, 337
- org.eclipse.ui.documentProviders extension point, 598, 603
- org.eclipse.ui.editors, 349, 351, 462, 547, 549, 582
- org.eclipse.ui.editorActions, 231, 244–247, 582
- org.eclipse.ui.exportWizards, 275, 302, 304, 582
- org.eclipse.ui.importWizards, 275, 302, 304
- org.eclipse.ui.markerHelp, 426, 462
- org.eclipse.ui.markerResolution, 426
- org.eclipse.ui.newWizards, 275, 302, 304, 582
- org.eclipse.ui.perspectiveExtensions, 582, 776
- org.eclipse.ui.perspectives, 365, 582
- org.eclipse.ui.popupMenus, 231, 244–247, 358, 459, 470, 582
- org.eclipse.ui.preferencePages, 275, 281, 582
- org.eclipse.ui.projectNatureImages, 406, 462
- org.eclipse.ui.propertyPages, 275, 582
- org.eclipse.ui.resourceFilters, 328
- org.eclipse.ui.startup, 240, 439, 442–443, 451–452
- org.eclipse.ui.viewActions, 231, 243–244, 582
- org.eclipse.ui.views, 319–321, 582
- org.eclipse.update.installHandlers extension point, 508

Extension Points page, 222

Extension schema definition, 463–464

<extension> tag, 208, 459

<extension-point> tag, 208, 222, 457, 463

Extensions, 189–191, 203, 208–211, 457, 760

- adding, 204–205
- creating instance of class specified in, 470
- creation of, 210
- delayed loading, 450–452
- filters, 296
- installing features as, 809–813
- Preference dialog, 275–277, 281
- Property Page dialog, 275–277, 294–296

- relationship with extension points, 458–459
- run-time discovery, 450–452
- schema, 471–473
- views, 320–321
- Wizards, 277–278
- workspace-processing framework, 404

extensions attribute, 351

Extensions page, 222, 767, 776

External editors, 351, 547

External plug-ins, 222

External Tools, 48, 61–63, 67

Externalizing strings, 92–95

External-launch Java tools, 547

extradir attribute, 517

F

Fast views, 23, 30, 316, 637

Feature directories, 219

<feature> element, 490, 799

Feature Install wizard, 747

Feature manifest editor, 495

Feature manifest file, 219, 490–491

Feature Plug-ins dialog, 169–170, 499

Feature Project wizard, 797

-feature command line parameter, 488, 499

Feature Updates view, 174, 177–178, 746, 755

Feature Verification dialog, 748

Feature Versions dialog, 798–799

feature.properties file, 799–800

Features, 165–183, 487–511, 745–757, 789–817

- adding to product, 814
- branding content, 487–511, 804–805
- build.properties file, 509
- build.xml file, 509
- configuration, 172, 174–176, 507–508
- defining, 490–495, 502, 504–505, 790
- developer tasks, 791–808
- enabling and disabling, 168, 174, 176–177, 749–750, 757
- installing, 177–178, 181–182, 745–749, 809–813
- licenses, 170, 490, 747, 799–800
- nested, 492
- PDE development and deployment, 508–509
- prerequisites, 491–494
- primary, 488, 498–499
- root, 174, 488–489
- searching for, 177, 496, 746, 750–757
- structure, 168, 489–494
- types, 488–489

- Update Manager, 173, 501, 505–508, 754
 - version matching, 178, 492, 494
 - welcome page, 497
- features directory, 167, 172, 751, 811
- Features Updates view, 177, 747, 754, 814
- feature.xml file, 490–494, 509, 755, 797–798, 800–801, 803, 805, 815
 - identifying update site, 496
 - image files, 490–491
- Field breakpoints, 132
- Field definitions, 73
- FieldEditor class, 290
- FieldEditorPreferencePage class, 286, 290–293
- Fields
 - changing values, 125–126
 - opening definition, 72
 - restoring deleted, 111
 - viewing values, 124
 - watchpoints, 132
- File command, 8, 19, 49, 53–55, 70–72, 111, 124, 161, 171, 196, 277, 302, 351, 626–627, 631
- file comment template, 83, 90
- File Content page, 143
- File editors preferences, 27
- File menu, 28
- File Search page, 46
- File type associations, 21, 26–27, 59–61, 114
- File-based editors, 595
- FileDialog dialog, 278
- FileDocumentProvider class, 598, 603, 605, 609
- FileFieldEditor, 292
- Files, 370, 375, 382–385
 - associating
 - with editors, 26, 632
 - with task, 639
 - bookmarks, 22, 33, 637–638
 - browsing for, 630–631
 - closing, 631
 - comparing, 42–43, 144, 159, 641–642
 - concurrent updates to same, 157
 - copying and moving between projects, 25, 641
 - creation of, 20, 70, 628, 631–632
 - default action to open, 28
 - drag and drop, 20, 631
 - file type, 21, 26
 - filtering history, 152
 - importing, 20, 50
 - input streams, 384
 - navigating, 278
 - Navigator view, 20
 - properties of, 14, 40
 - read-only, 76, 380, 631
 - recovering deleted, 43–44, 200, 643
 - resources, 372–374, 377, 384
 - searching, 45–47, 74
 - selecting, 50, 278
 - synchronizing, 41, 157, 443
 - timestamp, 395
 - versioning, 41–43, 145–146
 - workspace, 41
- FillLayout layout manager, 256, 258–259
- Filter... command, 31
- filter action, 333
- filter attribute, 239
- Filtered Resources preference, 105
- Filtering
 - action expressions, 238–240
 - context menus, 245
 - errors and warnings, 116
 - extensions, 237–238, 296
 - file history, 152
 - JDT views contents, 113
 - projects in Navigator view, 646–647
 - resources, 45
 - tasks, 31–32, 44
 - views, 328–331
 - windows, 56–57
- Filters... command, 25, 45
- FilterSelectionAction, 328
- Find action, 336
- Find Next (Ctrl+K) keyboard shortcut, 74
- Find Strings to Externalize dialog, 93
- findMarkers method, 376
- Find/Replace (Ctrl+F) keyboard shortcut, 74
- firePropertyChange method, 354–355
- First-time startup, 178–179
- flags attribute, 425
- Flashline, 3
- FocusListener event listener interface, 256
- Folder Selection dialog, 684
- Folders, 370, 375, 382–385, 627
 - adding to projects, 19–20
 - changing to source folder, 109
 - copying and moving files and folders, 641
 - navigating into, 25
- Font registries, 194, 268
- FontFieldEditor, 292

- Fonts
 - editors, 67
 - managing, 267–268
 - preferences, 67
- format method, 621
- Format Source Code (Ctrl+Shift+F) keyboard shortcut, 77
- FormAttachment class, 264–266
- Formatting
 - designing, 619
 - implementing, 619–621
 - Java code, 77
 - source code, 565
 - template code, 91
 - text ranges, 594
- FormData class, 264–266
- FormLayout class, 263–266
- Forward command, 25
- Fragment manifest, 453
- <fragment> tag, 453
- Fujitsu, 3
- FULL_BUILD build, 412, 417
- FULL_SAVE event, 398, 401
- Functions
 - Java code, 75–76
 - packaging, 501–501
- G**
- GEF (Graphical Editing Framework), 271
- GEF feature, 746–747, 753
 - disabling, 749–750
 - installing, 745–749
 - prerequisites, 747
- Generate Getter and Setter dialog, 82
- Get Contents action, 153
- Get Sticky Revision action, 153, 159
- Getter and setter methods, 82, 86, 377, 662
- Global actions, 336, 591
- Go Into action, 25, 149
- Go To command, 25, 84, 128
- Grid layout, 260–263
- GridData class, 260–261
- Group marker, 236, 241, 360
- H**
- handleEvent method, 542–543
- hasNature attribute, 416
- hasNature method, 378
- hasTrailingSeparator method, 381
- HEAD development branch, 146–147, 738–742
- headless mode, 180, 451
- Heap, altering default settings, 66
- “Hello, World” plug-in, 191, 225, 723, 763–778
- Hello, World project, 715, 761–763
- “Hello World” Java source code, 22, 570–572, 656–657
- HelloWorld class, 656–657
- HelloWorld.java compilation unit, 563
- helloworld.properties file, 730–732, 736
- Help, 513
 - Active Help, 33, 36, 514
 - Command, 18, 169, 173, 344, 352, 485, 501, 513–514,
 - Contents pane, 648, 650
 - context-sensitive, 514, 519–524
 - hover help, 33
 - Infopop, 33, 36, 514, 653
 - Jakarta Lucene search engine, 514
 - Java Development User Guide, 650
 - language analyzers, 39
 - navigating online documentation, 34–37, 648
 - nonintegrated, 524
 - online documentation, 33, 35–36, 513–519, 648, 650
 - preferences, 65
 - search, 37–39, 45–46, 650–652
 - standalone mode, 514
 - Table of Contents extension, 516
 - Welcome, 352
 - Workbench User Guide, 650–651
- Help context extension, 521
- Help dialog, 235
- Help extension, declaring, 516–517
- Help (F1) keyboard shortcut, 34, 519
- Help menu, 28–29
- Help system, 8–9, 37–38, 47, 63–65, 513
 - Apache Tomcat servlet engine, 63
 - classes, 514
 - customizing, 524–525
 - Web browsers, 63–65
- helpContextId attribute, 234, 523
- HelpContexts.xml file, 521
- helpRequested method, 523
- Hewlett-Packard, 3
- Hierarchy view, 70, 72–73, 114–116, 582, 706
- Hitachi, 3
- horizontalSpacing attribute, 260

Hot code replace, 121, 126, 134–136
href attribute, 517–518

I

IAction interface, 190
IAction object, 232, 235
IActionBar.setGlobalActionHandler method, 336
IActionDelegate interface, 230, 232, 235
IActionFilter interface, 239, 443
IAction.setEnabled method, 442
IAdaptable interface, 300, 441
IAnnotationModel interface, 598
IBasicPropertyConstants.P_TEXT constant, 330
IBuffer interface, 580
IClassFile interface, 559
ICompilationUnit interface, 296, 441, 559, 561, 577–579
ICompletionProcessor interface, 609
ICompletionProposal interface, 612
icon attribute, 234
IConfigurationElement interface, 469–470
Icons
 decorations, 67
 directory, 795
 information about, 35
 Java elements, 70
 views, 323–324
IContainer interface, 372, 375–376
IContentAssistant interface, 609
IContentAssistProcessor interface, 609–610, 613
id attribute, 214, 425, 463, 490, 768
IDEs (Integrated Development Environments), 4, 188
IDispatch interface, 535–537
IDL (Interface Definition Language), 537
IDocument interface, 597–598
IDocumentPartitioner interface, 597–598, 601–602, 609
IDocumentProvider interface, 597–598
IEditorActionContributor interface, 356–357
IEditorActionDelegate interface, 244, 246, 357, 358, 437, 584
IEditorInput interface, 353
IEditorLauncher interface, 551
IEditorPart interface, 351–352
IEditorSite.setSelectionProvider method, 357
IElementChangeListener interface, 561
IExecutableExtension interface, 470
IExportWizard interface, 304
IExtension interface, 469
IExtensionPoint interface, 469
IField interface, 559, 561, 577
IFile interface, 295, 376, 384, 441, 533, 550–551, 598
IFileEditorInput interface, 353, 533
IFileState interface, 384
IFolder interface, 295, 372, 376
IFolderLayout interface, 365
IFormattingStrategy interface, 618–620
Ignore white space preference, 717
Ignored resources, 143, 717, 721
IImportContainer interface, 559
IImportDeclaration interface, 577
IImportWizard interface, 304
IInitializer interface, 559, 577
IInputSelectionProvider interface, 342
InstallHandler interface, 508
IJavaElementDelta interface, 562–563
ILabelDecorator interface, 337–338
ILabelProvider interface, 324
IllegalArgumentException exception, 266
Image
 attribute, 490–491
 registry, 194, 268
IMarker interface, 422, 443
IMarkerActionFilter interface, 443
IMember interface, 575, 577
IMenuListener interface, 334
IMethod interface, 559, 562, 577
Import... command, 20, 23, 49, 111, 630
Import dialog, 49, 51
import statements, 78–80, 661, 667, 669
 adding and removing, 82
 references to Java declarations, 104
 scrapbook pages, 103–104
<import> tag, 215
Importing
 files, 49–52, 277, 630
 Java elements, 111
 overwriting resources without warning, 50–51
 packages, 80
 preferences, 280
 Release 1.0 projects to Eclipse 2.0, 49
 Zip files, 50
<imports> tag, 453
Included features, 489
<includes...> element, 492, 495
Incoming and Outgoing mode button, 156

- Incremental builds, 66, 412, 414–419
- Incremental Find (Ctrl+J) keyboard shortcut, 53, 74
- Indent method, 535
- INewWizard interface, 304
- Info page content, 57
- Infopop, 33–35, 514, 519, 653
 - associating with user interface context, 521–524
 - links, 36
- Information, navigating, 13–14
- Information page, 799
- Inherited methods, 110–111
- Inherited preferences, 300
- init method, 282, 287, 342, 352, 356–357, 434, 776
- initialize parameter, 167, 180–181
- initializeDefaultPluginPreferences method, 285–286
- initializeDefaultPreferences method, 285–286
- Inner class, 135
- In-place activeX controls, 529
- In-place OLE documents, 529
- In-process editors
 - adding Workbench awareness, 551–553
 - implementation details, 549–553
- In-process invocation, 547–553
- inputChanged method, 325
- InputSelectionProvider interface, 327
- Insert property, 631
- Insertion points (actions), 236
- Inspect command, 124, 126
- Inspect (Ctrl+Q) keyboard shortcut, 124
- Install Configuration view, 173–176, 748–749, 756
- Install JAR files, 508, 806–807
- Install root directory, 167
- Install sites, 172–176, 507
- Installable features, 502–503, 746
- Installed JREs preferences, 97, 99, 133, 687
- Install.ini file, 167, 488, 497–499, 503, 815
- Install/Update perspective, 14, 170–171, 173, 746, 805, 813–814, 816
- Install/Update preferences, 175
- Instantiations, 3
- IntegerFieldEditor field editor, 292
- Integrated tools, 8–10
- Integration scenarios, 205–207
- Interfaces, 72
 - creation of, 110–111
 - defining for extension point expected behavior, 464–467
 - hierarchy view, 115
 - navigating to, 73
- Internal editors, 351
- Internal-launch Java, 546–547
- Internationalization, 9
- invoke method, 538
- IObjectActionDelegate interface, 247, 459, 585
- IObjectAction.run method, 470
- IOleClientSite COM interface, 530, 535
- IOleControlSite COM interface, 530, 535
- IOleFrame interface, 535
- IOleInPlaceSite interface, 530
- IPackageDeclaration interface, 559
- IPackageFragment interface, 559, 577
- IPackageFragmentRoot interface, 559
- IPageSite.registerContextMenu method, 457
- IPath interface, 381
- IPerspectiveFactory interface, 364–365
- IPluginRegistry interface, 469
- IPredicateRule interface, 606
- IProject interface, 295, 372, 376, 378, 443
- IProjectActionFilter interface, 443
- IProjectDescription interface, 378, 418–419
- IProjectNature interface, 407
- IPropertyChangeListener interface, 326
- IPropertyDescriptor property descriptor, 341
- IPropertySource interface, 339, 340, 343
- IResource interface, 245, 296, 298, 372, 376, 379, 386, 441–443, 551
- IResourceActionFilter interface, 443
- IResourceChangeEvent interface, 389
- IResourceChangeListener interface, 389, 559
- IResourceDelta interface, 390, 392, 394, 416–418, 424, 562
- IResourceDeltaVisitor interface, 386, 389, 393
- IResourceNavigator interface, 328
- IResource.refreshLocal method, 443
- IResourceVisitor interface, 385–386, 417
- IRunnableContext interface, 397
- IRunnableWithProgress interface, 397
- ISaveContext interface, 399
- ISavedState interface, 398–399
- ISaveParticipant interface, 398–399
- IScanner class, 572–573, 575–576
- isDebugging method, 481
- isDirty method, 354
- ISelection objects, 232–233
- ISelectionChangeListener interface, 327, 561

- ISelectionListener interface, 343
 - ISelectionProvider interface, 327
 - isFilterProperty method, 329–330
 - isNatureEnabled method, 378
 - isOpen method, 378
 - ISourceManipulation interface, 577
 - ISourceReference interface, 575
 - ISourceViewer interface, 596
 - isPageComplete status, 309
 - isPrefixOf method, 381
 - isReadOnly method, 380
 - isRoot method, 381
 - isSaveAsAllowed method, 355
 - isSorterProperty method, 331
 - isSynchronized method, 377
 - IStartup interface, 451
 - IStorageEditorInput interface, 353
 - IStructuredSelection interface, 233
 - isUNC method, 381
 - isValidPath method, 381
 - isValidSegment method, 381
 - ISVs (independent software vendors), 187
 - isWordPart method, 616
 - ITableContentProvider interface, 322
 - ITerminalSymbols interface, 572
 - ITextDoubleClickStrategy interface, 595, 613
 - ITextEditor interface, 595
 - ITextSelection interface, 438
 - ITextView interface, 596
 - ITreeContentProvider interface, 322
 - IType interface, 559, 577
 - IVerticalRuler interface, 596
 - IViewActionDelegate interface, 243, 246, 434, 583
 - IViewPart interface, 321, 434
 - IWhitespaceDetector interface, 616
 - IWordDetector interface, 616
 - IWorkbench instance, 217
 - IWorkbenchActionConstants interface, 236, 335–336, 360, 591
 - IWorkbenchPage.findView method, 564
 - IWorkbenchPart class, 267
 - IWorkbenchPreferencePage interface, 281, 290
 - IWorkbenchPropertyPage interface, 296
 - IWorkbenchWindowActionDelegate interface, 241–242, 465–466
 - IWorkbenchWindowPullDownDelegate interface, 241–242, 432
 - IWorkspace interface, 375, 389
 - IWorkspaceRoot API, 372, 374–376
 - IWorkspaceRunnable interface, 397
- J**
- J2EE (Java 2 Platform, Enterprise Edition)
 - specification
 - roles, 139
 - Jakarta Lucene search engine, 514
 - JAR (Java Archive) files, 114, 507, 557, 681–682
 - associating source with, 134
 - defining classpath variable, 107
 - generating for plug-ins, 792–796
 - install, 806–807
 - run-time, 792, 795–796, 806–807
 - setting Javadoc location, 89
 - WinZip, 60
 - JAR Package Specification page, 680
 - Java
 - assert keyword, 573
 - changing environment, 564
 - default run-time environment, 166
 - exception breakpoints, 131–132
 - garbage collection, 267
 - IDE (Integrated Development Environment), 4
 - keywords highlighted, 593–594
 - navigating references and declarations, 116
 - parsing code, 576
 - refactoring, 679–681
 - unresolved references, 79–80
 - views, 70
 - visibility modifiers, 216
 - working sets, 44
 - Java Editor preference page, 113
 - Java Javadoc preference page, 734
 - Java AST (Abstract Syntax Tree), 566–567
 - Java Attribute Editor, 773
 - Java Beans, 326
 - Java Browsing perspective, 14, 16, 116–117
 - Java Build Path properties, 98, 105–106, 134
 - Java builder, 414
 - Java class files, 783
 - Java classes, 72
 - Java Code Generation page, 83
 - Java Compiler preferences, 69, 92, 97, 99, 105, 135
 - Java Debug Step preferences, 128
 - Java Debugger, 121, 136–137
 - Java Development User Guide*, 35, 101, 650
 - Java Editor Code Assist page, 83

- Java Editor preferences, 78, 90
- Java editors, 7, 69, 75, 318, 348, 589
 - active, 70
 - behavior, 75–77
 - browsing generated Javadoc, 96
 - debugging, 126–127
 - hot code replace, 126
 - Outline view, 70, 360
 - updating source file, 578–581
- Java Elements Filters dialog, 658
- Java expressions, 77, 82
- .java files, 93, 104–105, 295, 403–404, 557, 578
- Java frameworks, 8
- Java Help, 516
- Java IDE, 555
- Java Installed JREs preferences, 89, 105, 134–135
- Java Line Breakpoint Properties dialog, 699, 701
- Java Metrics view, 189
- Java model
 - classes, 557–558
 - easily navigable interface to, 560
 - extending JDT, 559
 - notification scheme, 561
 - object action contribution, 574
 - objects retrieving definition, 575
 - read-only, 558
- Java nature, 403
- Java New Project preferences, 105
- Java Package Explorer view, 366
- Java packages, 795
- Java page, 74
- Java perspective, 14, 127, 656, 688
 - Package Explorer view, 70
 - selecting views in, 339
- Java preferences, 76, 78–79, 90, 103, 107, 113–114, 116, 658
- Java problem markers, 425
- Java Project Properties dialog, 99, 109
- Java Project resource, 54–55
- Java projects, 104, 267
 - build path, 101, 105–108
 - builder, 403
 - classes and interfaces creation, 110–111
 - classpath, 98, 102
 - containing scrapbook page, 103
 - creation of, 52, 70–71, 105–109, 656
 - debugging, 103, 124, 693–703
 - Eclipse-specific, 556
 - help, 524
 - Java nature, 403
 - JUnit test, 101
 - launch configurations, 101–103, 679–686
 - navigating, 70
 - references, 105–106
 - running, 73, 100–101, 657
 - viewing output, 124
- Java Refactoring preferences, 86
- Java resources, 116–117
- Java scrapbook pages, 103–104
- Java searches, 45, 74–75, 116
- Java source code
 - analyzing, 566–587
 - before-and-after view, 95
 - compiling, 566
 - content assist, 78–81
 - editing, 74–90, 103–104
 - errors, 84, 658–664
 - evaluating, 100–104
 - experimenting with execution, 7
 - externalizing strings, 92–95
 - formatting, 77
 - functions, 75–76
 - generating, 82–83, 664–670
 - global changes, 85–88
 - Javadoc, 88–89, 95–96, 668
 - JRE, 96–100
 - navigating, 114–116, 658–664
 - organizing, 85–88, 104–105
 - parsing, 572
 - refactoring, 85–88
 - refreshing local copy, 144
 - scanner, 565
 - scrapbook pages, 657
 - selecting valid Java expressions, 77
 - syntactical analysis, 557
 - templates, 89–91
 - testing, 664
 - tokenizing small chunks, 574
- Java source code editor, 557, 585
- Java Source Compare view, 732
- Java source files, 189, 414
- Java Structure Compare outline view, 732
- Java Templates preferences, 83, 91
- Java Type Hierarchy perspective, 14, 116
- Java types, 132–133
- Java views, 76

- Java VM, 709, also see “JREs (Java Runtime Environments)”
 - debugging, 694
 - parameters, 680, 709
- JavaAppearance preferences, 117
- JavaBuilder class, 566
- JavaCapabilityConfigurationPage class, 310
- JavaCore class, 558–564
- Javadoc, 736
 - Add, 83, 668, 734
 - browsing, 88–89
 - content assist, 81
 - context menu id(s), 586
 - exporting, 95–96
- javadoc.exe program, 95
- javaEditorTextHovers extension point, 581
- javaElementFilters extension point, 581
- java.exe, 58
- java.io.File, 217, 533
- java.io.IOException, 132
- java.lang.ArrayIndexOutOfBoundsException, 132
- java.lang.ClassCastException, 132
- java.lang.NullPointerException message, 132, 781
- JavaModelManager class, 559, 579
- JavaPropertyPage class, 295
- Java-specific search, 73–75
- java.text.Collator class, 331
- JavaUI class, 558, 564–565, 586–587
- java.util.Arrays package, 670
- java.util.Comparator package, 670
- java.util.Date package, 667
- javaw.exe, 58
- JDEs (Java development environments), 5, 6–8, 142, 555–556, 589
- JDK (Java Development Kit), 7
- JDK Compliance page, 97, 687
- JDOM (Java Document Object Model), 566–567
- JDT (Java Development Tools), 8, 69–70, 556, 655
 - Abstract Syntax Tree (AST), 566–572
 - analyzing Java source code, 566–577
 - APIs elements, 558
 - class creation, 656
 - Compilation Unit Editor, 577
 - compiling Java source code, 566
 - content assist, 666–670
 - debugging, 121–122
 - editors, 69, 565, 584–585
 - errors, 658, 660–662
 - ExceptionHandler class, 266
 - extending user interface, 556, 564–565, 581–587
 - externalizing strings, 92–95
 - formatting source code, 565
 - global actions, 586
 - Hierarchy view, 114–116
 - hot code replace, 121
 - Java Browsing perspective, 116–117
 - Java model, 556–560
 - Java problem markers, 425
 - Java searches, 74–75
 - Java source code generation, 664–670
 - Java Type Hierarchy perspective, 116
 - JavaCore class, 560–564
 - JavaUI class, 564–565
- JDT Plug-In Developer Guide*, 35
- JFact Text add-ons, 556
 - navigating, 658
 - Package Explorer view, 113–114
 - refactoring, 71, 85–88, 580
 - running Java programs, 657
 - Search view, 116
 - Tasks view, 116
 - ToolFactory class, 565–566
 - tuning performance, 112–113
 - UI plug-in, 204, 582
 - variable substitutions, 90
 - views, 69, 113, 584
 - workspace artifacts, 556
- JdtActionConstants, 586
- JFace, 193, 210
 - contributions, 195–196
 - dialogs, 196–197
 - embedding ActiveX controls and OLE documents, 528
 - image and font registries, 194
 - Text framework, 197–198, 589–595, 614
 - viewers, 194–195, 318–319, 322, 590
 - wizards, 196–197
- JNI (Java Native Interface) package, 249
- JRE 1.4 code APIs, 686–691
- JRE folder, 58, 166, 687
- JREs (Java Runtime Environments), 12, 18
 - customizing, 58, 686
 - default, 97, 105, 134–135
 - differing JDK levels and JREs, 96–100
 - installing, 134
 - missing method source, 133–134

- JREs *continued*
 - overriding, 102
 - running Eclipse, 96
 - scrapbook pages, 103–104
- JUnit test, 101
- justify attribute, 259
- JVM (Java Virtual Machine), also see “JREs (Java Runtime Environments)”
 - altering default heap size settings, 66
 - debugging, 136
 - hot code replace, 135
 - parameters, 58, 102
 - running instance of executing code, 127
 - scrapbook pages, 103–104
- K
- Key Bindings preference, 67
- Keyboard actions, 235
- Keyboard shortcuts, 25
 - selecting expressions, 77
 - text editor, 53
- “keyboard shortcuts” or ctrl* search expression, 38–39
- KeyListener event listener interface, 256
- Keywords highlighted, 593–594
- L
- Label class, 262
- Label decorations, 67, 336–339, 362
- Label providers, 319, 323–324, 354
- Labels preference pages, 283
- Language analyzers, 39
- Language packs, 454
- lastSegment method, 382
- Latest from Repository action, 159
- Launch configurations
 - custom plug-ins, 226
 - defining, 101–103
 - programs, 133–135, 679–686
- Launch Configurations dialog, 101–103, 136, 226, 482, 683, 710
- .launch file, 103
- launcher class, 549
- Launching Swing components, 548
- LaunchView class, 446
- Layout manager, 256–266
 - defining layouts, 257
 - FillLayout, 256, 258–259
 - FormLayout, 257, 263–266
 - GridLayout, 257, 260–263
 - RowLayout, 256, 259–260
- left attribute, 265
- Libraries page, 106, 134
- <library> tag, 216, 218, 454–455, 466
- lineNumber attribute, 425
- link attribute, 518
- link file, 505, 753–754, 810
- Linked site, 172
- Linking editor with Outline view, 360–362
- Links and Infopops, 36
- links directory, 504–505, 751
- Links page, 35–36, 648, 653
- link_to attribute, 518
- Linux operating system, 6
- List SWT widget, 318
- ListEditor field editor, 292
- Listeners, 254–255, 596
- ListSelectionDialog dialog, 278
- ListViewer class, 318, 322
- Local history, 41–42
 - Java elements, 111
 - recovering deleted files, 43–44
- Local variables, 86
 - renaming, 673
 - values, 122
- location attribute, 425
- .lock file, 182
- Locking toolbars, 25, 639
- Log Console view, 61, 67, 796
- Logging API, 486, 689, 691
- M
- main method, 101, 524, 657, 694, 705
- maintopic.html file, 517
- Make Default command, 55
- makeUNC method, 383
- makeAbsolute method, 383
- makeColumnsEqualWidth attribute, 260
- makeRelative method, 383
- Manifest files, 490–491, 759
- Manifest tags, 208
- margin attributes, 259–260, 265
- Marker file, 505
- Markers, 370, 591
 - action contributions, 425, 444
 - bar 22,76
 - concepts, 421–423
 - creating, 421–426

- help and resolution support, 426–427
 - identifying source code problems, 425
 - Tasks view, 422, 425
 - types, 422
 - views, 426
 - MARKERS constant, 395
 - match attribute, 214, 495
 - matchingFirstSegments method, 382
 - members method, 376
 - Members view, 117, 447
 - Menu bar
 - items, 21, 55
 - location of menus on, 236
 - views, 316
 - Menu manager, 333–334
 - Menu object, 432
 - menuAboutToShow method, 334
 - menubarPath attribute, 234–237, 242, 771, 773
 - Menus
 - action contributions, 431–432
 - actions, 25, 229, 235–237, 241–243, 332, 357, 770–771
 - adding, 769–770
 - editor action contributions to, 244–245
 - group marker, 360
 - location on menu bar, 236
 - referencing definition, 235–236
 - separators, 235–236, 770–771
 - views action contributions to, 243–244
 - Merant, 3
 - Merge action, 155
 - Merge wizard, 739
 - Merging, 141, 146–147, 733–743
 - message attribute, 425
 - message resource action filter, 444
 - MessageDialog class, 269, 279, 777
 - Messages.java file, 730–732
 - Metadata
 - CVS, 162
 - launch configurations as, 102–103
 - plug-in-specific areas, 280
 - .metadata directory, 40, 182, 371, 405, 425
 - MethodDeclaration class, 570
 - Methods
 - argument names, 81
 - breakpoints, 132, 704, 706
 - details about, 477–479
 - exceptions thrown by, 81
 - extracting, 86
 - Javadoc comments, 83
 - navigating to, 73
 - opening definition, 72
 - overriding, 79, 82, 669–670
 - parameters, 77, 80–81, 86
 - public keyword, 467
 - restoring deleted, 111
 - stepping into, 126
 - stepping over, 126
 - stubs, 82
 - suspending execution, 132
 - unable to find source, 133
 - viewing invocations, 124
 - Microsoft Platform SDK
 - OLE/COM Object Viewer, 531, 537
 - Microsoft Word and OLE automation classes, 534
 - MKS Software, 3
 - Models
 - associating with viewers, 325–327
 - editors, 352–353, 355–356
 - Model-view-controller relationship, 600–601
 - Modules, 144–145
 - MontaVista Software, 3
 - MouseAdapter class, 254
 - mouseDoubleClick method, 254
 - MouseListener event listener interface, 256
 - MOVED_FROM constant, 395
 - MOVED_TO constant, 395
 - Mozilla, 6, 64
 - MSAA (Microsoft Active Accessibility) APIs, 10
 - Multiple JREs, 98–99
 - MultiStatus object, 477–480
 - Multi-threaded programs, 703–708
 - Multi-user install, 182
- N**
- name attribute, 214, 216, 351, 455, 463
 - nameFilter attribute, 247
 - Namespaces, avoiding collisions, 214
 - Nature extensions, 404
 - Nature image extension point, 406
 - Nature resource action filter, 444
 - Natures, 370, 403–419
 - adding to projects, 378–379, 408–409
 - configuration process, 409–410
 - defining, 406–410
 - Navigate Open External Javadoc command, 88
 - Navigate method, 537, 539–540
 - Navigating resources, 25–26

- Navigation pane, 648
 - Contents page, 35, 651
 - Links page, 36, 653
 - printing, 37
 - Search Results page, 35, 39
 - showing and hiding, 37
 - Navigator Filters dialog, 328, 646
 - Navigator view, 14, 19, 22, 25–26, 40, 141, 318, 350, 722
 - adding actions, 583
 - comparing files, 42–43
 - editors, 27–28
 - filters, 25, 646–647
 - menu choice, 433–435
 - obtaining selections from, 343
 - recovering deleted files, 44
 - refreshing workspace, 41–42
 - resources, 40, 371
 - switching editors within, 66
 - toolbar button, 433–435
 - Nested classes, 110
 - Nested features, 492
 - New command, 19–20, 149–150
 - New Extension wizard, 210, 471–473, 767
 - New External Tool dialog, 61–62
 - New File wizard, 274, 311, 628
 - New Folder wizard, 627
 - New Java Project wizard, 106, 108
 - New Plug-in Project wizard, 761, 763
 - New Project wizard, 19, 105, 378, 626–627, 715, 761
 - New Task command, 639
 - New Variable Classpath Entry dialog, 682
 - New wizard, 19, 103, 813
 - New Working Set wizard, 647
 - NewClassWizardPage class, 310
 - NewContainerWizardPage class, 310
 - NewInterfaceWizardPage class, 310
 - NewJavaProjectWizardPage class, 310
 - NewPackageWizardPage class, 310
 - NewTypeWizardPage class, 310
 - Next > command, 86
 - Next Editor (Ctrl+F6) keyboard shortcut, 28, 634
 - Next Incremental Find (Ctrl+K) keyboard shortcut, 53
 - Next Selection (Alt+Shift+Down) keyboard shortcut, 82
 - Next View (Ctrl+F7) keyboard shortcut, 29, 637
 - nl attribute, 490
 - NL (national-language) sensitive files, 454
 - noDefaultAndApplyButton method, 283, 297
 - Nodes, AST 569–570
 - notice.html file, 167
 - null constructor, 290
 - numColumns attribute, 260
- ## O
- Object contributions, 245, 247, 439–443
 - objectClass attribute, 247, 295, 337, 441
 - objectClass comparison element, 239
 - objectContribution element, 441
 - Objects
 - adaptable, 295, 300
 - also see IAdaptable
 - displaying and editing attributes or properties, 339–343
 - label decorations, 336–339
 - objectState comparison element, 239
 - OLE (Object Linking and Embedding), 527–543
 - OleAutomation class, 536–537, 540, 542
 - OleClientSite class, 530–533, 536
 - OLE/COM Object Viewer, 531, 537
 - OleControlSite object, 530, 532, 534, 542
 - OleEditor class, 533, 536
 - OleEvent class, 542
 - OleEvent listener, 543
 - OleFrame object, 530, 532
 - OMG (Object Management Group), 3
 - Online documentation, 33, 35–36, 513, 648, 650
 - concepts, 36
 - Contents pane, 35
 - declaring, 516–517
 - index, 37–38
 - integrating, 514–519
 - navigating, 35–37
 - Print Page option, 37
 - searching, 37–39
 - Table of Contents button, 36
 - table of contents file, 516–519
 - Open action, 117, 151, 153, 348
 - Open command, 20, 631
 - OPEN constant, 395
 - Open External Javadoc (Shift+F2) keyboard shortcut, 88
 - Open (F3) keyboard shortcut, 72
 - Open source community, 6, 10–12
 - Open Type Hierarchy action, 117
 - Open Type Hierarchy command, 72–73

- Open Type Hierarchy (F4) keyboard shortcut, 72, 73
- Open Type in Hierarchy Java action, 366
- Open Type in Hierarchy (Ctrl+Shift+H) keyboard shortcut, 73
- Open Type (Ctrl+Shift+T) keyboard shortcut, 72
- Open With... command, 27, 60–61, 351, 631
- openInEditor method, 564
- openOnEclipseFile method, 551
- Operating systems
 - associations, 61
 - connecting SWT to GUI system, 250–251
 - supported by Eclipse, 9
- Optimistic model, 144
- optional attribute, 215–216
- .options file, 481, 483–484
- Oracle Corporation, 3
- Order and Export page, 108
- Organize Imports (Ctrl+Shift+O) keyboard shortcut, 82
- org.apache.lucene.analysis.Analyzer class, 525
- org.eclipse.actionSetPartAssociations extension set, 242–243
- org.eclipse.core.dom package, 567
- org.eclipse.core.internal.resources package, 784
- org.eclipse.core.resources package, 374, 581
- org.eclipse.core.resources plug-in, 369, 371, 422, 552, 783–784
- org.eclipse.core.resources.builders extension point, 411, 415, 566, 581
- org.eclipse.core.resources.markers extension point, 426, 581
- org.eclipse.core.resources.natures extension point, 406–408, 581
- org.eclipse.core.runtime plug-in, 285, 783
- org.eclipse.help package, 514
- org.eclipse.help plug-in, 524
- org.eclipse.help.luceneAnalyzer extension point, 525
- org.eclipse.help.support extension point, 525
- org.eclipse.help.toc extension point, 516
- org.eclipse.jdt.core plug-in, 559, 581
- org.eclipse.jdt.core.codeFormatter extension point, 565
- org.eclipse.jdt.core.compiler package, 572
- org.eclipse.jdt.core.dom package, 566
- org.eclipse.jdt.core.jdom package, 566
- org.eclipse.jdt.doc.isv plug-in, 519
- org.eclipse.jdt.doc.user plug-in, 519
- org.eclipse.jdt.ui file, 204
- org.eclipse.jdt.ui plug-in, 581–582
- org.eclipse.jdt.ui.PackageExplorer view id, 582
- org.eclipse.jdt.ui.TypeHierarchy view id, 582
- org.eclipse.jface.* package, 274
- org.eclipse.jface.dialogs package, 275, 278–279
- org.eclipse.jface.dialogs.Dialog class, 279
- org.eclipse.jface.dialogs.TitleAreaDialog class, 279
- org.eclipse.jface.resource package, 268
- org.eclipse.jface.util package, 326
- org.eclipse.jface.util.ListenerList class, 326
- org.eclipse.jface.wizard package, 275
- org.eclipse.pde.doc.user plug-in, 519
- org.eclipse.platform.doc.isv plug-in, 519
- org.eclipse.platform.doc.user plug-in, 519
- org.eclipse.runtime.Plugin log method, 486
- org.eclipse.swt package, 271
- org.eclipse.swt.accessibility package, 271
- org.eclipse.swt.custom package, 271
- org.eclipse.swt.dnd package, 271
- org.eclipse.swt.events package, 254–256, 271
- org.eclipse.swt.examples project, 253
- org.eclipse.swt.examples.controlexample package, 253
- org.eclipse.swt.graphics package, 271
- org.eclipse.swt.internal.awt.win32 package, 546
- org.eclipse.swt.layout package, 257–258, 271
- org.eclipse.swt.ole.win32 package, 271, 528–529
- org.eclipse.swt.ole.win32.OLE class, 532
- org.eclipse.swt.printing package, 271
- org.eclipse.swt.program package, 271
- org.eclipse.swt.widgets package, 252, 271, 275, 278
- org.eclipse.ui file, 203–204
- org.eclipse.ui.* package, 274
- org.eclipse.ui.acceleratorConfigurations extension point, 462
- org.eclipse.ui.acceleratorScopes extension point, 462
- org.eclipse.ui.actionSets extension point, 240, 582, 767–768
- org.eclipse.ui.actionSetpartAssociations, 208
- org.eclipse.ui.decorators extension point, 337
- org.eclipse.ui.DefaultTextEditor editor, 436
- org.eclipse.ui.dialogs package, 275, 278
- org.eclipse.ui.dialogs.SelectionDialog class, 279
- org.eclipse.ui.documentProviders extension point, 598, 603
- org.eclipse.ui.editors extension point, 351

- org.eclipse.ui.editorActions extension point, 244–247, 582
- org.eclipse.ui.editors extension point, 349, 462, 547, 549, 582
- org.eclipse.ui.editorsActions extension, 357
- org.eclipse.ui.examples.javaeditor project, 612
- org.eclipse.ui.exportWizards extension point, 275, 302, 304, 582
- org.eclipse.ui.help package, 514
- org.eclipse.ui.IEditorLauncher interface, 549
- org.eclipse.ui.importWizards extension point, 275, 302, 304
- org.eclipse.ui.markerHelp extension points, 426, 462
- org.eclipse.ui.markerresolution extension point, 426
- org.eclipse.ui.newWizards extension point, 275, 302, 304, 582
- org.eclipse.ui.perspectiveExtensions extension point, 582, 776
- org.eclipse.ui.perspectives extension point, 365, 582
- org.eclipse.ui.popupMenus extension point, 244–247, 358, 459, 470, 582
- org.eclipse.ui.preferencePages extension point, 275, 281, 582
- org.eclipse.ui.projectNatureImages extension point, 406, 462
- org.eclipse.ui.propertyPages extension point, 275, 582
- org.eclipse.ui.resourceFilters extension point, 328
- org.eclipse.ui.startup extension point, 240, 439, 442–443, 451–452
- org.eclipse.ui.viewActions extension point, 243–244, 582
- org.eclipse.ui.views extension point, 319–321, 582
- org.eclipse.ui.wizards.newresource package, 275
- org.eclipse.update.installHandlers extension point, 508
- org.ui.wizards.datatransfer package, 275
- os attribute, 490
- OSI (Open Source Initiative)-compliant license, 12
- Outgoing mode button, 156
- Outline view, 14, 22–23, 70, 122, 206, 360–362, 707
- Out-process invocation, 547–548
- Override and Update action, 732
- Overriding
 - inherited methods, 79
 - JREs, 102
 - methods, 82, 111, 669–670
- Overview page, 222, 767, 799–800
- Overview ruler, 22, 76, 84
- P**
- pack attribute, 259
- Package Explorer view, 70, 73, 141, 582, 656, 658, 715, 719, 723, 726, 730, 739, 783
 - abbreviating package names, 113–114
 - adding actions, 583
 - Java classes, 441
 - menu choice, 433–435
 - toolbar button, 433–435
- PackageDeclaration class, 570
- PackageExplorerCollapseNodesAction class, 434, 583
- PackageExplorerContentProvider, 325
- PackageExplorerPart class, 447
- Packages
 - abbreviating names, 113–114, 658
 - creation of, 72
 - default, 656
 - importing, 80
 - visible outside plug-in, 216
- PackagesView class, 447
- Packaging functions, 501–503, 797–803
- Packaging plug-ins, 207
- Page layout views, 365
- Paragraph class, 534, 535
- Parameter hints, 80–81
- Parameter Hints (Ctrl+Shift+Space) keyboard shortcut, 77
- Parasoft Corporation, 3
- PartControl method, 336
- PartInitException exception, 353
- Partitions, 601–602, 619
 - completion processors, 610
- Paste action, 336
- Paste command, 25, 52
- Patches, 141, 161
- path attribute, 236
- PathEditor field editor, 292
- Paths, 380–383
- Patterns, 113
- PDE (Plug-in Development Environment), 35, 199, 210, 759
 - configuration, 760
 - debugging tools, 779–781

- editors, 220–222
- Error log viewer, 318, 485
- feature development and deployment, 508–509, 792
- Plug-in Manifest Editor, 212, 471
- Plug-in Registry view, 221–222
- Runtime category, 179
- schema editor, 472–473
- step-by-step plug-in instructions, 211–219, 763–777
 - using, 220–227, 760, 782–785
- Pending Changes wizard, 752
- Performance, 65–66
- performApply method, 283, 289, 297
- performCancel method, 283, 297
- performDefaults method, 283, 297
- performFinish method, 196, 301, 309, 311
- performOK method, 282–283, 289, 297, 299–300
- period (.) activation trigger, 78
- Persistent properties, 299, 387–388
- perspective extensions extension point, 366–367
- Perspectives, 14, 30, 363–367
 - actions independent of, 242–243
 - changing default, 55
 - creation of, 364–365
 - customizing, 54–57, 644–645, 776
 - menu actions included in, 645
 - opening, 23, 31
 - preferences, 67
 - views, 365
- Pessimistic model, 144
- Platform Plug-in Developer Guide*, 35, 142, 233, 254, 271, 351, 374, 516
- Platform Runtime, 470–471
- platform.cfg file, 178–179, 811
- Platform.getDebugOption method, 482
- Platform-ui-dev mailing list, 11
- Plug-in class, 212, 216–218, 374, 467, 478, 480, 762, 764
- Plug-in Development Target Platform preference page, 714, 729
- Plug-in Development perspective, 14, 221, 719–720, 723, 726–727, 729–730
- Plug-in installation directory, 216–217
- Plug-in libraries, 715
- Plug-in manifest editor, 212, 221–222, 348, 351, 471, 508, 765
- Plug-in manifest file, see `plugin.xml` file
- Plug-in Registry view, 453, 460, 468, 780
- Plug-in view, 782
- PluginClassLoader Java class loader, 449–450
- `plugin_customization.ini` file, 497, 524–525
- `plugin_customization.properties` file, 497
- plugin-id attribute, 453
- Plug-ins, 167–168, 188, 203–228, 759–788
 - branding content, 496, 500
 - class loader, 449–452
 - contributing to toolbar, 189–190
 - copying to workspace, 783
 - creation of, 187–191, 211–219, 225–226, 451
 - configurations, 179, 226
 - debugging, 225–226, 779–781
 - development environment, 220–224, 782–785
 - diagnostics, 222, 476–477, 783
 - documentation-only, 516
 - errors, 222, 783
 - extension points, 208–219, 457–471
 - extensions, 188–191, 208–219
 - features, 207, 489, 792–803
 - fragments, 453–455
 - granularity, 452–453
 - identifying, 168, 203, 492, 764
 - installing, 212, 215, 218–219, 801
 - .metadata subdirectory, 217
 - naming, 762, 764
 - persistent properties, 387–388
 - preference management, 196, 217, 284–287
 - registry, 192, 203, 460, 465, 467–469
 - required, 214–216, 450–451, 492, 494–495
 - resources, 219, 222
 - run-time environment, 213, 216, 223–226, 450–452, 492, 795–796
 - schema builder, 403
 - session properties, 386–387
 - startup, 240, 442
 - step-by-step instructions, 763–777
 - threads, 268–269
 - trace points, 481–484
 - version, 214–215
 - viewing code, 782–785
 - visual and nonvisual aspects, 204
 - working directory, 217
 - workspace save events, 374
- plugins directory, 167–168, 172, 219, 223, 371, 515, 811
- Plug-ins view, 222, 784
- plugin-version attribute, 453

- plugin.xml file, 190, 203, 213, 219, 221, 320, 438–439, 496–497, 508, 516, 523, 586, 759, 781, 794–796
 - classes in JAR files, 218
 - creation of, 210, 213–216
 - <extensions>, 222
 - editing, 765
 - <export> tag, 466
 - <extension-point> tag, 222, 457
 - fragments, 453
 - formatted, 222
 - <import>, 214
 - <plugin> element, 213–214, 216, 218, 492, 765
 - <requires> clause, 214, 224, 285
 - <runtime>, 216
 - Source tab, 221–222, 726, 773–775
 - specifying contributions, 233–237
- PMCs (Project Management Committees), 10
- popupMenus extension point, 438, 441
- Position field, 631
- POST_AUTOBUILD event, 391, 394, 396
- POST_CHANGE event, 391, 394, 396
- PRE_AUTOBUILD event, 391, 394, 396
- PRE_CLOSE event, 391, 396
- PRE_DELETE event, 391, 396
- Preference pages
 - active, 279–280
 - configuring settings from file, 23
 - creation of, 280–289
 - default values, 282, 285–286, 288
 - field editor, 290–293
 - Overriding default behavior,
 - Apply button, 282, 283, 288
 - Cancel button, 283
 - OK button, 282, 283, 288
 - Restore and Defaults button, 283, 288
 - preference store, 280, 284, 286–287
- PreferencePage class, 281, 290
- Preferences, 23, 196, 275–277, 318, 681
 - editors, 27, 29, 67
 - exporting, 280
 - extending, 279–293
 - fonts, 67
 - importing, 280
 - inherited, 300
 - label decorations, 67
 - modifying, 282
 - perspectives, 67
 - reacting to setting changes, 289
 - saving, 23, 282, 284, 288–289
 - Workbench, 28, 42, 66–67, 374
 - Workbench Local History, 41–42
 - workspaces, 280
- Preferences page, 240, 452, 564
- preferences.ini file, 63, 524
- Preferred output level preference, 67
- pref_store.ini files, 371
- Preloading features default configuration, 181–182
- Prerequisites
 - features, 491–494, 747
 - version matching rules, 494–495
- PresentationReconciler class, 614, 616–617
- Preview view, 174, 176–177, 746–749, 752, 755
- Previous Editor (Ctrl+Shift+F6) keyboard shortcut, 28, 634
- Previous Selection (Alt+Shift+Up) keyboard shortcut, 82–83
- Previous View (Ctrl+Shift+F7) keyboard shortcut, 29, 637
- Primary features, 488, 490, 498–499, 517
- print, 37, 53, 536
- Problem Identification page, 113
- Problem markers, 422, 425–426
- Problems, correcting, 785–788
- Processes, suspending, 130
- Product branding, 500, 804–805
- Product developer tasks, 814–817
- Product.gif file, 497
- Products
 - adding features, 814
 - building custom, 503–504
 - building extensions to other, 504–505
 - installing features as extension, 809–813
- ProgramID, 531
- Programs
 - associated with files, 59–61, 632
 - associating source with, 133–134
 - debugging, 127–128, 131–132
 - execution state, 122, 130
 - External Tools, 61–63
 - launch configuration, 133–135
 - multi-threaded, 703–708
 - remote debugging, 136–137
- ProgressChange event, 542
- ProgressMonitorDialog package, 279
- Project command, 66, 112, 135, 412
- .project files, 19, 40, 49, 371, 404–405, 641, 795
- Project references, 48–49, 105–106, 318

- Project sets, 161–162
 - Project wizard, 221
 - Projects, 370, 375, 377–379, 404–406
 - action filters, 444
 - alternate location, 640
 - branch name, 153
 - build commands, 66, 403, 412–413, 783
 - comparing, 642, 729–730
 - connecting to CVS, 162
 - copying and moving files and folders, 20, 25, 52, 158, 631, 641
 - creation of, 19–21, 49, 378, 626–631
 - defaults, 47, 640, 646
 - deleting, 43–44, 47–48, 641, 643
 - descriptions, 395, 404–406
 - encapsulating version control information, 161–162
 - External Tool Builders, 48, 62–63
 - Javadoc location property, 89
 - locating elements in, 73
 - managing in CVS, 154, 156, 719–725, 727–729, 738–742
 - modifying code, 726–727
 - natures, 378–379, 403, 406–410
 - navigating, 25, 65, 395, 450
 - new window, 56, 647–648
 - partitioning among workspaces, 65
 - printing diagnostic information to console, 729
 - .project file, 641
 - Project References property, 48–49
 - Properties, 40, 48–49
 - referencing elements outside, 77–78
 - renaming under CVS, 158
 - repositories, 49, 142
 - resources, 14, 412
 - sharing, 154
 - types, 221
 - updating, 145, 158, 734–738
 - versioning, 145–146, 723–725
 - Projects page, 106
 - Projects view, 117
 - PROJECT_SAVE event, 398, 401
 - ProjectsView class, 447
 - PropagatingFontFieldEditor field editor, 292
 - Properties
 - breakpoints, 130
 - changing values, 768
 - Debug Targets, 127
 - displaying and editing, 339–343
 - OLE automation, 540–541
 - persistent, 299, 387–388
 - Property Sheet view, 341–342
 - resources, 40, 206, 386–388
 - scrapbook pages, 103
 - session, 299, 386–387
 - Properties... command, 40, 57, 63, 99, 127, 130, 175
 - Properties action, 151
 - Properties dialog, 40, 339
 - custom, 300
 - Project References page, 318
 - properties pages, 293–300
 - structure of, 276
 - *.properties files, 454
 - Properties namespace, 387
 - Properties view, 14, 40, 318, 768, 771
 - associating to Workbench selections, 342–343
 - interacting with other views, 339–343
 - Property change listener, 289
 - Property descriptors, 340–342
 - Property listeners, 542–543
 - Property Page dialog, 275–277
 - Property page extensions, 276
 - Property pages, 293
 - adding resource property access logic, 298–300
 - Apply button, 297
 - Cancel button, 297
 - implementing, 294–298
 - OK button, 297
 - persistence of data, 300
 - Restore Defaults button, 297
 - Property source, 339
 - Property view, 773
 - PropertyChangeEvent class, 326
 - propertyDescriptors array, 339–340
 - propertyID parameter, 543
 - PropertyPage class, 296
 - PropertySheet class, 340
 - PropertySheetViewer class, 318
 - PropertySource class, 343
 - Proxy actions (delegates), 232
 - Prune Empty Directories preference, 158
 - public_method code template, 666
 - Pull-down menus, 332, 431–432
- Q**
- QNX Software Systems, 3
 - QualifiedName class, 570, 572

- QualifiedName parameter, 387
- Querying change events, 392
- Question mark (?) wildcard, 38
- Quick Fix, 84, 777
- Quick Fix... command, 32
- Quick Fix (Ctrl+I) keyboard shortcut, 84, 662
- R**
- RadioGroupFieldEditor field editor, 292
- Range indication, 597
- Rational Software, 3
- readme directory, 167
- readme file extension, 213
- readme folder, 418
- readme_eclipse.html file, 167
- readme.html file, 186, 785
- Read-only
 - documents, 598
 - files, 76, 380, 631
- property, 48–49
 - resources, 380
- ReadyState property, 543
- Reassigning CVS projects, 162
- Rebuild All command, 66, 135
- Recently opened files, 28
- Reconcile, 579
- recordLineSeparator attribute, 573
- Recovering deleted
 - files, 43–44, 643
 - projects, 643
- Red Hat Linux, 3, 64
- Redo action, 336
- Redo (Ctrl+Y) keyboard shortcut, 53, 77
- Redoing refactoring, 88
- Refactor command, 86, 88, 95
- Refactoring, 7, 76, 85–88, 158, 674, 676, 679
 - actions, 109
 - classes, 679–681
 - Java, 679–681
- References
 - command 75, 116
 - navigating, 116
 - unresolved, 82
 - updating, 71
- Refresh action, 439
- Refresh command, 41, 356
- refresh method, 326, 538
- Refresh View action, 149, 151, 153
- Refreshing workspaces, 41–42, 61–62
- refreshLocal method, 552
- registerContextMenu method, 338, 439
- Relaunch command, 128
- .release file extension, 600
- Remote debugging, 136–137, 708–711
- remote.bat file, 708–711
- Remove All Terminated Launches command, 128
- Remove Bookmark command, 638
- Remove command, 176
- Remove Comments (Ctrl+ keyboard shortcut, 82
- removeClasspathVariable method, 564
- removeFileExtension method, 383
- removeFilter method, 330
- removeFirstSegments method, 382
- removeLastSegments method, 382
- removePropertyChangeListener method, 326
- removeTrailingSeparator method, 383
- RenameAction class, 327
- Reopening views, 29
- Repackaging features, 805–807
- Repairer, 614
- Replace... command, 46
- Replace from Local History dialog, 43
- Replace With command, 43, 153, 159, 356
- Replace With action, 111, 141, 159
- Replace with Branch or Version dialog, 738
- REPLACED constant, 395
- Replacing resources, 42–43
- Repositories, 8, 139–140
 - connecting to, 141
 - host name, 718
 - location, 723
 - moving projects and resources between projects, 52
 - operating disconnected from, 142
 - optimistic model, 144
 - out-of-sync, 717
 - path, 718
 - pessimistic model, 144
 - visual clues about state of work, 141
 - workspace connections, 142
- Repository providers, 140, 142–143, 161–162
- Required
 - JREs, 99
 - plug-ins, 216
- <requires> clause, 222, 224, 285, 449–450, 492, 495
- Rerun (Ctrl+F11) keyboard shortcut, 101
- Reset command, 55

- Resizing
 - editor pane, 22
 - editors, 633
 - views, 29–30
- Resolving conflicts, 730–733
- Resource API, 552
- Resource change event, 424
- Resource change listeners, 200, 355, 413–414
 - adding, 389–393
 - reacting to resource change, 397
 - resource delta, 392–397, 412
 - support for, 389
- Resource containers, 375–377
- Resource creation wizards, 196
- Resource filter extension point, 328
- Resource framework, 369
- Resource History view, 144, 153, 742
- Resource markers, 591, 596
- Resource model, 370, 372–374
- Resource Patcher wizard, 161
- Resource perspective, 14, 30, 54, 366, 626, 631, 777
 - modifying default layout, 644
 - Navigator view, 25–26
 - reorganizing views, 644
 - user interface, 21–23
- Resource tree, processing, 385–386
- Resource working sets, 44
- ResourceDeltaVisitor class, 417
- Resource.findMarker method, 424
- resource.getFullPath method, 380
- resource.getLocation method, 380
- resource.getProjectRelativePath method, 380
- ResourceNavigator class, 321, 447
- ResourceNavigatorCollapseAction class, 583
- ResourceNavigatorCollapseNodesAction class, 434
- resource.refreshLocal method, 379
- Resources, 14, 17, 200, 379–380
 - action filters, 444
 - actions, 206
 - attaching properties, 293
 - attributes, 379
 - change events, 200, 207, 388–397
 - changing type, 395
 - comparing, 42–43
 - concepts, 40–41, 369–374
 - coordinating synchronization of multiple views, 207
 - copying and moving, 52, 158, 379, 395
 - creation of, 277, 301–313
 - deleting, 158, 379
 - derived, 379–380, 717
 - editors, 13–14, 153
 - encoding, 67
 - exporting, 49–52, 277
 - filtering, 45, 328
 - ignored, 721
 - importing, 49–52, 277
 - life cycle, 206–207
 - local change history, 15
 - location of, 216, 379, 380–381, 640
 - managing, 39–47
 - markers, 395, 421–427
 - navigating, 13–14, 25–26
 - Navigator view, 371
 - persistent properties, 387–388
 - plug-ins, 219
 - previous versions information, 41–42
 - properties, 40, 206, 293–300, 386–388
 - read-only, 380
 - refreshing, 379
 - replacing, 42–43, 159, 395
 - searching, 45–47
 - session properties, 386–387
 - supporting new types, 206–207
 - synchronizing, 377, 395, 548, 551–552
 - tagging, 146, 421–423
 - temporary and permanent values, 298–300
 - transforming, 200, 411–412, 414–419
 - types, 370, 374–377
 - version control, 153, 721
 - workspace, 40–47, 157, 384
- Resources and Workspace API, 199–201, 404
- ResourceSelectionDialog dialog, 278
- ResourcesNavigator.getTreeViewer method, 244
- Restore From Local History... command, 44, 111, 200, 388
- Restoring projects, 48
- Resume command, 124
- Resume (F8) keyboard shortcut, 124
- Retargetable actions, 336, 591
- RetargetTextEditorAction class, 607
- Reusable dialogs, 278–279
- Reusable functionality, 560–566
- Reusable specialized wizard pages, 309–311
- Reuse editors to show matches preference, 67
- revealInEditor method, 564
- Reverting to configurations, 749

- Revision action, 159
 - right attribute, 265
 - Right-clicking, 19
 - Root features, 174, 176, 488–489, 496, 506, 749
 - RowData class, 259
 - RowLayout class, 260
 - RowLayout layout manager, 251, 256, 259–260
 - Rule-based partitioner, 601–602
 - RuleBasedPartitionScanner class, 601, 605, 609
 - RuleBasedScanner class, 614
 - Run command, 61, 73, 100–101, 219, 226
 - <run ...> tag, 463
 - Run action, 100–101
 - Run Ant dialog, 796, 800–801, 803, 805
 - Run As command, 100
 - run attribute, 406
 - Run button, 100, 101
 - Run Last Launched action, 241
 - run method, 232–233, 235, 241, 330, 332, 397, 435, 437, 443, 466, 726, 729–730, 732, 773, 776
 - Run to Line command, 126
 - Run to Line (Ctrl+R) keyboard shortcut, 126
 - RunAnt... action, 247
 - Runnable class, 269–270
 - <runtime> clause, 216, 222, 449
 - Run-time environment, 222–224
 - Run-time errors
 - finding and fixing, 121
 - Java programs, 101
 - Run-time JAR files, 508, 795–796, 806–807
 - Run-time libraries, 132
 - Run-time platform, identifying features, 169–171
 - Run-time tracing, 477, 481–484
 - Run-time Workbench, 101, 777–781
 - runtime.jar file, 783
- S**
- SAP, 3
 - Save As dialog, 355
 - Save command, 175
 - Save events, 398–401
 - Save participant API, 398–401
 - SaveAsDialog dialog, 278
 - saveWorkspace method, 552
 - Saving
 - editor changes, 348, 354–355
 - events, 398–401
 - launch configurations, 102–103
 - markers, 425
 - modified preference setting values, 288–289
 - perspectives, 55, 645–646
 - preferences, 282
 - Scanners, set of rules, 617
 - Scapa Technologies, 3
 - Schema builder, 403
 - Schema definition file, 463–464
 - Schema-based New Extension wizard, 471–473
 - SCM (Source Code Management) repository, 8, 44
 - Scrapbook, 7, 103–104, 657, 664
 - Search command, 37, 45, 47, 74
 - Search component, 591
 - Search (Ctrl+H) keyboard shortcut, 37, 74
 - Search Results page, 22, 35, 39, 46, 116, 648, 650–651
 - Search view, 23, 46–47, 75, 116, 652
 - SearchActionSet, 243
 - Searching
 - for features, 754–757
 - files, 45–47, 74
 - help, 45–46, 650–652
 - history of, 116
 - Java, 45
 - online documentation, 37–39
 - project build path for Java programs, 101
 - replacing text, 46–47
 - resources, 45–47
 - workspaces, 74–75
 - SearchResultView class, 447
 - segment method, 382
 - segmentCount method, 382
 - Select All action, 336
 - select method, 329
 - Select Working Set dialog, 647
 - selected attribute, 328
 - selectedFiles array, 442–443
 - selection attribute, 436
 - selection filtering, 237–238
 - SelectionAdapter class, 255
 - selectionChanged method, 232–233, 235, 240, 327–328, 343, 434, 437–438, 441, 466
 - SelectionListener event listener interface, 255–256
 - SelectionMapper class, 569
 - Selections, exceptions, 82–83
 - separator attribute, 241
 - Separators, 235–236
 - Serena Software, 3
 - Serviceability, 475

- Session properties, 299, 386–387
- Set Imports command, 103
- Settings, 17
- severity attribute, 425
- severity resource action filter, 444
- Share Project action, 154, 720
- Shareable document provider object, 598, 600
- Shared images registry, 217
- Shell class, 250–251, 267
- Shortcut area, 23, 30, 636
- Show Detail Pane command, 124
- Show Disabled Features action, 176
- Show in Package Explorer command, 73
- Show in Repository History action, 155
- Show in Resource History action, 151
- Show Next Match (Ctrl+) keyboard shortcut, 46
- Show Only Conflicts button, 156
- Show Previous Match (Ctrl+) keyboard shortcut, 46
- Show Pseudo conflicts preference, 67
- Show Source of Selected Element Only button, 70
- Show Tooltip Description (F2) keyboard shortcut, 88
- Show View dialog, 316, 321
- ShowAllAction class, 330
- showAnnotations method, 597
- showlocation parameter, 57, 65, 648
- showversion parameter, 135–136
- shutdown method, 288
- siblingControl constructor, 265
- SimpleName class, 570, 572
- SimpleWizardPage class, 305
- SingleVariableDeclaration class, 570
- SiteExplorerView class, 447
- site-files directory, 808
- site.xml file, 506–507
- Size command, 633
- SlickEdit, 3
- SNAPSHOT event, 398
- sortAction variable, 333
- sorter action, 333
- Sorting
 - tasks, 31–32
 - views, 331–332
- sortResults method, 670, 675
- Source command, 77, 82–83, 93, 110, 667
- Source code
 - associating with programs, 133–134
 - debugging, 14
 - formatting, 565
 - identifying problems, 425
 - modifying, 782–785
 - refactoring, 7
 - run-time tracing, 481–484
 - viewing, 782–785
- Source editor,
 - action contributions, 607–608
 - content assist, 609–613
 - content formatting, 618–621
 - creation of, 602–621
 - defining menu contributions, 606
 - designing, 603
 - implementing, 603, 605–608
 - registering to handle text operations, 608
 - syntax-based color highlighting, 613–618
- Source folders, 106, 108–109
- Source not found dialog, 128, 134
- Source page, 105–106, 222, 473, 767–768, 776, 779, 794
 - Java Build Path properties, 109
 - launch configuration, 133
- Source viewer
 - keywords highlighted, 593–594
 - resource markers, 596
- SourceViewer class, 318–319, 579, 596–597
- SourceViewerConfiguration class, 597, 602, 609–610, 613–614, 616–617, 619
- spacing attribute, 259
- splash.bmp file, 497
- src folder, 795
- src-resources folder, 783
- Stack frames, 125–127, 135
- Standalone self-hosting Eclipse, 227
- Standard Widget Toolkit, 210, 254
- Startup, first-time, 178–179
- startup method, 467
- startup.jar file, 167
- state attribute, 234–235
- Status objects, 477–479
- Step Into command, 123, 126, 128
- Step Into (F5) keyboard shortcut, 123
- Step Over command, 123, 126, 128, 694
- Step Over (F6) keyboard shortcut, 123
- Step Return command, 123
- Step Return (F7) keyboard shortcut, 123
- Stop Evaluation command, 104
- StringBuffer class, 580
- StringButtonFieldEditor field editor, 292

- StringFieldEditor field editor, 292
 - StringLiteral class, 570
 - Strings
 - externalizing, 92–95
 - views, 323–324
 - StringTokenizer utility class, 438
 - Structure Compare view, 733, 739–740
 - Structure creation with features, 489–490
 - StructuredViewer class, 319, 322, 329, 331
 - Style bits, 253–254
 - StyledText control, 267
 - StyledText SWT widget, 318, 579, 590
 - Styles, 590
 - Subclasses, 110, 115
 - Subtype Hierarchy (Ctrl+3) keyboard shortcut, 115
 - Subtypes, viewing, 72–73, 115
 - Superclass, 110
 - constructors generating stubs, 110–111
 - moving field or method to, 86
 - Superclass Selection dialog, 676
 - Supertype Hierarchy (Ctrl+2) keyboard shortcut, 115
 - superType resource action filter, 444
 - supported platforms, 9
 - SuSE Linux, 3, 64
 - Suspend command, 128
 - SuspendVM option, 130
 - Swing applications, 194, 250, 545–553
 - Handling system exit, 553
 - modes of invocation, 546–548
 - Switching between editors, 27
 - SWT (Standard Widget Toolkit), 193–194, 249–250, 252–254, 278, 318–319
 - arranging, 256–266
 - COM (Component Object Model) automation clients, 528
 - controls, 250, 252
 - disposing of, 532
 - embedding ActiveX controls and OLE documents, 528
 - error handling, 266
 - event-handling, 254–256, 546
 - example plug-ins, 252–253
 - integration with Swing, 545–553
 - JFace, 194
 - layout managers, 256–266
 - objects without parent widget in constructor, 267
 - operating systems, 250
 - packages, 270–271
 - threads, 268–270
 - Windows, 250
 - SWT applications, 250–252
 - SWT class, 254
 - SWT OLE integration capabilities, 527
 - SWT.CHECK style bit, 253
 - SWTError exception, 266
 - SWTException exception, 266, 269
 - SWT.HORIZONTAL, 259
 - SWT.H_SCROLL style bit, 254
 - SWT.PUSH style bit, 253
 - SWT.VERTICAL, 259
 - SWT.V_SCROLL style bit, 254
 - SYNC constant, 395
 - syncExec method, 269
 - Synchronization object, 361
 - Synchronize - Outgoing Mode view, 728
 - Synchronize Outgoing Changes action, 155–156
 - Synchronize view, 141, 157, 721–723, 727–728, 730, 737, 741
 - Synchronize with Repository action, 154, 156–157
 - Synchronize-Outgoing Mode view, 720
 - Synchronizing
 - editor and model, 355–356
 - at file level, 158
 - files, 157
 - model and view, 326–327
 - project information and CVS, 154, 156
 - at project level, 158
 - resources, 548, 551–552
 - scrolling between panes in compare views preference, 66
 - threads, 269
 - user interfaces, 561
 - views, 340, 343
 - Syntax-based color highlighting, 593–594, 613–618
 - System.exit method, 553
 - System.out.println statement, 557, 562, 784
 - systemProperty comparison element, 239
- T**
- Table class, 262
 - Table of contents, 517–519
 - Table SWT widget, 318
 - TableTree SWT widget, 318
 - Tag As Version action, 151, 155
 - Tag Resources dialog, 724
 - Tag With Existing action, 151, 160

- Tags, 144, 459
- Target Platform page, 223
- Target Platform Preferences page, 219, 782
- targetID attribute, 242–244, 246, 436
- Task list, 318, 321, 447
- Task markers, 422, 426
- TaskListLabelProvider, 324
- Tasks, 22, 591
 - associated with file, 639
 - creation of, 31, 110, 638
 - editors, 639
 - errors, 84
 - filtering, 44, 330
 - markers, 422, 425–426
 - product developer, 814–817
 - restricting, 32
 - sorting, 31–32
 - state, 638
 - users, 808–814
- Tasks view, 14, 23, 31, 70, 116, 362, 634–635, 653, 721, 783
- Team actions, 143, 147, 154, 161–162, 717, 722, 727, 734
- Team menu, 143, 154–155
- Team programming, 140
- Team setting, 717
- Team support, 141–143, 161–162
- Teamstudio, 3
- Telelogic, 3
- Templates, 89–91
- Terminate and Remove command, 128
- Terminate command, 124
- testAttribute method, 239
- TestLaunchConfiguration class, 679–681, 683, 685
- TestLaunchConfiguration launch configuration, 683
- Text
 - automatic indentation, 594
 - editing, 589, 596
 - formatting ranges, 594
 - proposed insertions, 592
 - searching for string or pattern, 46
 - styles, 590
 - syntax-based color highlighting, 613–618
- Text classes, 197, 596
- Text editors, 20, 197–198
 - annotations, 596–597
 - context information, 592
 - default, 589, 595
 - keyboard shortcuts, 53
 - markers, 591
 - tasks, 591
- Text files, 20, 53, 67
- Text Font preference, 67
- Text listeners, 596
- Text model, defining, 598
- Text viewer, 596–597
- Text widget, 197
- TextEditor class, 439, 595
- TextEditorActionContributor class, 605, 607, 609
- #TextEditorContext context menu ID, 246
- textmarker attribute, 425
- Textmarker marker type, 422
- TextOperationAction class, 608
- TextPropertyDescriptor property descriptor, 340
- TextViewer class, 318–319, 579, 596–597
- TextViewer viewer, 590
- Threads
 - creation of, 705
 - debugging, 703–708
 - non-user interface, 269–270
 - plug-ins, 268–269
 - suspending, 130
 - synchronizing, 269
 - terminating, 553
 - user interface, 268–270
- timerExec method, 270
- TimeSys Corporation, 3
- toc element, 517
- toc tag, 516
- toc.xml file, 519
- TogetherSoft, 3
- tokenizing Java source code,
 - analyzing Java source code, 566
 - tokenizeComments attribute, 572
 - tokenizeWhiteSpace attribute, 572
- Tool integration platform, 8–10
- toolAction extension point, 464
- ToolBarManager, 332
- toolbarPath attribute, 234–237, 242, 771, 773
- Toolbars, 22
 - action contributions, 431–432
 - actions, 25, 229, 235–237, 242–243, 332, 357
 - Add Trace Statements button, 189
 - Clear All button, 357
 - compressing group of icons, 639
 - definition, 237
 - editor action contributions to, 244–245

Toolbars *continued*

- icons, 55
- locking, 25
- Open the New Wizard icon, 627
- pull-down menus, 241, 431–432
- reorganizing icons, 639
- Set Import Declarations for Running Code
 - option, 103–104
- views, 243–244, 316, 332, 356

ToolFactory class, 558, 565–566

ToolFactory.createScanner method, 572–576

ToolPlugin.getWorkspace method, 374

Tools, 475

- adding options, 279–293
- building, 204
- distinct functional groups, 205
- instances of, 565–566
- preferences, 23, 552–553
- seamless integration, 475–476

Tools Package feature, 813–815

toolTip attribute, 234–235

toOSString method, 383

top attribute, 265

toString method, 324, 331, 383, 668, 698

trace messages, 481

Trace method, 484

TraceAction class, 483

Trans-enterprise Integration, 3

Transformations, 572

Tree SWT widget, 318

TreeView class, 318, 322, 435

TreeViewCollapseNodesAction class, 434–435, 583

try/catch statements, 82

type attribute, 259

TYPE constant, 395

Type Hierarchy (Ctrl+1) keyboard shortcut, 115

Type Hierarchy view, 75, 366

type resource action filter, 444

typecomment template, 83, 90

TypeHierarchyViewPart class, 446–447

typelib (interface definition), 537

Types, 72, 80

Types view, 117, 447

Typing mode field, 631

U

Undo action, 336

Undo (Ctrl+Z) keyboard shortcut, 53, 77

Undoing

- externalized strings, 94–95
- refactoring, 88

Unit testing with integrated JUnit support, 7–8

Unmanaged plug-ins, 179, 502, 811

Unresolved references, 82

Up to command, 25

Update action, 155, 157–158

update command, 144

Update from Repository action, 735

Update Javadoc Location dialog, 736

Update Manager, 165, 168–169, 171–172, 487, 745, 789

- configuration validation processing, 173, 492
- delivering features for installation, 505–508
- digital signatures for features, 748
- disabling features, 749–750
- feature definition, 494
- Feature Updates view, 177–178
- features, 173
- first-time startup, 178–179
- Install Configuration view, 174–176
- installing
 - new features, 745–749
 - plug-ins, 218
- Install/Update perspective, 170
- managing configuration processing, 178–182
- pending changes to Eclipse installation, 750–754
- preloading features on default configuration, 181–182
- Preview view, 176–177
- processed installs only known to active workspace, 506
- searching for new and updated features, 496, 751, 754–757
- unmanaged plug-ins, 219
- valid update site, 746–747
- version numbers, 178
- viewing configuration, 173–174

Update Manager Installation wizard, 490, 506

update method, 326

Update sites, 172–173, 746–747, 808, 814

updateWorkspace method, 551–552

Updating

- Java views in real time, 76
- projects, 145, 158
- resources in workspaces, 157
- source file, 578–581

uptoSegment method, 382

- Use default option, 47
- User interaction, supporting, 278
- User interfaces, 316, 626
 - actions, 21, 24–25, 195
 - adding
 - controls, 297
 - wizards, 277
 - associating Infopop with context, 522–524
 - behaviors, 199–200
 - context-sensitive help, 519–524
 - contribution-based, 195–196, 216
 - customizing for wizards, 306–307
 - CVS, 147–157
 - editors, 22, 199
 - extending JDT, 556–565, 581–587
 - extensions, 188–189
 - frameworks, 192–201
 - JFace, 193–198
 - preference values, 282, 287
 - product and feature branding, 499–501
 - property page, 297–298
 - Resource perspective, 21–23
 - Resources and Workspace API, 199–201
 - returning to original configuration, 637
 - Shortcut Area, 23
 - supported by Eclipse, 9
 - SWT (Standard Widget Toolkit), 193–194
 - synchronizing, 561
 - threads, 268–270
 - viewing online help content, 34–35
 - views, 22–23, 29–30, 199
 - Workbench, 193, 198–199
- User scenarios, 204, 207
- User tasks, 808–814
- V**
- validateName method, 374–375
- Variable references, 80
- Variables
 - changing values, 125–126
 - manipulating values, 124
 - substitutions, 90
- Variables view, 122, 124–126, 447, 576, 697, 699, 711
- Variant class, 539
- version attribute, 214–215
- Versioning
 - branches, 735–736
 - projects, 723–725
- Versions tree, 725
- Vertical ruler widget, 591
- verticalSpacing attribute, 260
- View class, 318, 320–322, 334
- View Error Message (F2) keyboard shortcut, 84
- View extension id, 365
- View filter, 730–731
- View parts, 199
- View selection provider, 339
- View sets, 430
- ViewAction class, 244
- viewAction variable, 332
- viewActions extension point, 433
- viewContribution child tags, 433
- Viewer class, 322, 330, 342
- Viewer contribution, 245–247
- ViewerFilter class, 329–330
- Viewers
 - associating with models, 325, 355
 - container for, 321
 - content provider, 322–323
 - contributing actions to context menu, 245
 - JFace, 194–195
 - label providers, 324
 - reusing, 322
 - structured, 319
 - viewport, 596
 - widgets, 195
- ViewerSorter class, 331, 333
- ViewPart class, 318, 321, 439, 530
- Viewport, 596
- Viewport listener, 596
- Views, 13–14, 22–23, 199, 315, 320–321, 631
 - action contributions, 243–244, 433–438, 445–447, 586
 - actions, 332–336
 - adding to perspective, 54
 - appearance and behavior, 23, 29–30, 199, 316, 635–636
 - basic implementation steps, 316–339
 - content provider, 317, 319
 - context menus, 245–247, 332, 335
 - context-sensitive help, 523
 - custom, 206–207
 - CVS (Concurrent Versions System), 140–141
 - debugging, 121
 - document-based model, 319
 - Eclipse-supplied, 206
 - extensibility, 335

Views *continued*

- filtering, 206–207, 328–331
 - global actions, 336
 - handling user selections, 327–328
 - hiding, 637
 - icons, 323–324
 - interacting, 339–343
 - Java, 70
 - JDT (Java Development Tools), 69
 - label decorations on objects, 336–339
 - label provider, 317, 319, 323–324
 - listing, 54
 - menu extension point ids, 586
 - menu manager, 333
 - page layout, 365
 - PDE (plug-in development environment), 220–222
 - perspectives, 365
 - Properties context menu option, 300
 - Properties dialog, 293
 - pull-down menus, 332, 356
 - registering context menu, 335
 - restoring original state, 637
 - shortcut area, 30, 636
 - sorting, 206–207, 331–332
 - strings, 323–324
 - synchronizing, 326–327, 340, 343
 - title bar, 29
 - toolbar, 316, 332, 356
 - viewers, 317, 321–322
- visibility attribute, 238
- visible attribute, 242, 768–769, 777
- visit method, 385–386, 393, 417, 570–572
- Visitors, 572
- VisualAge, 15–16, 116–117
- vitalInfoStatus method, 478
- vmargs parameter, 58
- vmparameter, 58

W

Warnings

- filtering, 116
 - Java code, 84
 - reporting, 31–32
- Watchdog-type function, 485
- Watchpoints, 121, 132, 704–707
- Web browsers, 63–65
- Web projects, 52
- Welcome pages, 22, 514, 767

- welcome.xml file, 497
- Widget events, 254–256
- widgetDefaultSelected method, 255
- widgetDisposed method, 268
- Widgets, 193–194, 252–253
 - arranging, 256–266
 - assigning context id, 523
 - container for, 321
 - containing other widgets, 252
 - disposal requirements, 267–268
 - style bits, 253–254
 - viewers, 195
- widgetSelected method, 255
- Window command, 25, 29, 31, 54–55, 56, 66, 77, 148, 173, 175, 179, 196, 252, 257, 316, 431, 455, 460–461, 635–637
- Window menu, 28, 236
- windowClosing method, 553
- Windows
 - Eclipse SDK download, 12
 - filtering, 56–57
 - multiple, 57–58, 646–648
 - operating systems, 250
 - sharing perspective, 56
 - SWT (Standard Widget Toolkit), 250
 - system registry, 60
- Windows Explorer, 20
- WinZip and JAR (Java Archive) files, 60
- Wizard Selection dialog, 302–304
- WizardDialog, 301, 311
- WizardExportPage class, 310
- WizardExportResourcePage class, 310
- WizardExternalProjectImportPage class, 309
- WizardImportPage class, 310
- WizardNewFileCreationPage class, 309–311
- WizardNewFolderMainPage class, 309
- WizardNewProjectCreationPage class, 309, 408–409
- WizardNewProjectReferencePage class, 309
- WizardPage class, 305, 309
- WizardResourceImportPage class, 310
- Wizards, 277, 301–305
 - wizard page progression, 307–309
 - creation of editor input, 350–351
 - exporting support, 301–313
 - extending Workbench resource creation, 301–313
 - extension points, 274–278
 - implementing, 305–306

- import/export support, 301–313
- Infopop, 524
- isPageComplete status, 309
- JFace, 196–197
- progress monitor, 309
- settings, 217
- store values, 278
- task-oriented processing, 277
- WizardSelectionPage class, 310
- Workbench, 193
 - active window, 252
 - associating Properties view, 342–343
 - Console, 781
 - extending resource creation, 301–313
 - main window, 252
 - markers, 422
 - menu and toolbar action contributions, 431–432
 - preferences, 28, 66–67
 - providing editor with input, 352–353
 - retargetable actions, 591
 - Status objects, 477–479
 - user interface, 193–194
- Workbench Compare preference page, 717
- Workbench Label Decorations preference page, 152–153, 337
- Workbench Preferences command, 59
- Workbench Startup preference page, 442
- Workbench editors preferences, 23, 28–29
- Workbench Local History preferences, 41–42
- Workbench menu bar, 236, 240–243
- Workbench New Folder wizard, 384
- Workbench page, 342–343
- Workbench Perspectives preferences, 55
- Workbench plug-in, 203–204, 459
- Workbench Preference store, 553
- Workbench preferences, 42, 65
 - Perform Build Automatically, 112, 162, 412
- Workbench Preferences dialog, 196–197, 200
- Workbench Preferences page, 373, 552
- Workbench toolbar, 240–243
- Workbench UI thread, 269
- Workbench User Guide*, 18, 23, 35, 39, 62, 145, 650–651
- Workbench user interface, 189–190, 198–199, 302–304
- WorkbenchChainedTextFieldEditor field editor
- WorkbenchHelp class, 522–523
- workbench.jar file, 466
- WorkbenchPart class, 321, 352
- WorkbenchViewerSorter class, 331
- Working copy, 579–581
- Working sets, 44–45, 74–75
- Workspace API, 371–374, 404
 - files and folders, 382–385
 - interfaces, 372
 - paths, 380–382
 - processing
 - resource tree, 385–386
 - workspace change events, 388–397
 - projects, 377–379
 - resources, 375–377, 379–380, 386–388
- Workspace artifacts, 556
- Workspace directory, 15, 166, 370
- Workspace extensions, 404
- workspace folder, 40, 47, 640, 687
- Workspace project, 714–718
- workspace.addChangeListener method, 397
- workspace.addSaveParticipant method, 398
- workSpaceChanged method, 552
- WorkspaceModifyOperation, 397
- Workspaces, 13, 15, 369, 372, 374–375
 - access to CVS, 141
 - backing up files, 61–62
 - comparing with CVS, 141
 - configuring, 98–99, 168–169
 - copying, 149
 - CVS managed projects appearance, 152–154
 - data command line parameter, 57
 - default location, 15, 57
 - description, 374
 - different for each JRE, 98
 - directory structure, 370–373
 - event listeners, 374
 - importing existing projects, 111
 - information about, 40
 - in-memory representation of contents, 373
 - Java-specific search, 73–75
 - JDK levels, 686
 - JREs, 58, 99, 686
 - Local History, 41–42
 - managing configuration, 171–172
 - multiple workspaces with -data command line parameter, 57
 - manipulating resource tree, 552
 - .metadata directory, 371, 552
 - moving projects between, 52, 686–691
 - partitioning projects, 65
 - physically distributed, 40

Workspaces *continued*

- preferences, 280
 - processing
 - change events, 388–397
 - resource changes, 62–63, 388–397, 548
 - projects, 370
 - references to, 374
 - refreshing, 41–42, 61–62, 65, 373, 552
 - replacing with CVS contents, 141
 - repository connections, 142, 148–150
 - resources, 40–47
 - running multiple, 65–66
 - save events, 398–401
 - searching, 74–75
 - shortcuts, 58
 - updating resources in, 157
 - working sets, 44–45
- Workspace.validateEdit method, 598
- wrap attribute, 259
- ws attribute, 490
- \$ws\$ variable, 455
- www.eclipse.org Java String constant, 539
- X**
- Xdebug parameter, 136
 - XML definitions extension points, 233–235
 - XML files, 221, 518–519
 - XML parsing error during startup, 770
 - Xnoagent parameter, 136
 - Xrunjdw parameter, 136
- Z**
- ZIP files,
 - importing from, 50,
 - delivering and installing features as, 806–807, 809