Oracle® User Productivity Kit
Content Development

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Contents

1 Overview and Documentation 1

2 Get Started using the Developer 3
2.1 Review the Developer Interface 3
2.1.1 Start the Developer 4
2.1.2 Create and Manage Content Profiles 5
2.1.3 Configure Toolbars 7
2.1.4 Split the Work Area 8
2.1.5 Configure Toolpanes 8
2.1.6 Restore Default Toolbars and Toolpanes 12
2.2 Understand the Developer Basics 12
2.2.1 Open and Close the Library 12
2.2.2 Use Folders and Documents 13
2.2.3 Understand the Developer Document Types 14
2.2.4 Work with Document Editors 15
2.2.5 Link Related Documents 17
2.2.6 Reuse Documents 18
2.2.7 Document Properties 18
2.2.8 Undo/Redo Actions 18
2.3 Set Developer Defaults 19
2.3.1 General Developer Settings 19
2.3.2 Library Settings 20
2.3.3 Content Defaults 21
2.3.4 Document Defaults 25
2.3.5 Player Defaults 29
2.3.6 Preview Defaults 31
2.3.7 Recorder Defaults 32
2.3.8 Spelling Defaults 33
2.3.9 Target Applications 34
2.4 Convert Knowledge Pathways Content 35

3 Use the Developer in a Multi-user Environment 37
3.1 Create and Manage Login Profiles 37
3.1.1 Add a Login Profile 37
3.1.2 Edit a Login Profile 39
3.1.3 Delete a Login Profile 39
3.1.4 Switch the Library Login 40
3.1.5 Change Password 40
3.2 Work Online or Offline 40
3.2.1 Switch Between Online and Offline Operation 42
3.2.2 Get Documents for Offline Use 42
3.3 Check In and Check Out Documents 43
3.3.1 Check In/Out Indicators 44
3.3.2 Check In a Document 44
3.3.3 Check In All Documents 46
3.3.4 Check Out a Document 46
3.3.5 Cancel Check Out 47
3.3.6 Open a Checked-in Document 47
3.4 Version a Document 47
3.4.1 View Document History 48
3.4.2 Roll Back a Document 49
3.5 Refresh the Library and Outline Editor 49
3.6 Manage Folder Conflicts 50
3.7 Delete and Restore Documents 51
3.7.1 Delete Documents while Online or Offline 52
3.7.2 View Deleted Documents 53

3.7.3 Restore a Deleted Document 53
3.8 Manage Workflow 54
3.8.1 Assign Content State 54
3.8.2 Assign Document Ownership 55
3.9 Use and Share Custom Views 56
3.9.1 About the Sample Custom Views 56
3.9.2 Share a Custom View 57
3.10 Understand Content Permissions 57

4 Manage the Library 59
4.1 Library Design Considerations 59
4.2 Work with Folders 60
4.2.1 Create a New Folder 60
4.2.2 Reserved Characters 60
4.2.3 Rename a Folder 61
4.2.4 Move a Folder 62
4.2.5 Copy a Folder 63
4.2.6 Delete a Folder 65
4.2.7 Expand and Collapse Folders 66
4.2.8 Print Library Folder Contents 66
4.3 Work with Documents 67
4.3.1 Create a New Document 67
4.3.2 Save a Document 70
4.3.3 Open a Document from the Library 71
4.3.4 Close a Document 73
4.3.5 Delete a Document and Related Documents 73
4.3.6 Rename a Document 74
4.3.7 Move a Document (Library) 75
4.3.8 Copy Documents in the Library 76
4.3.9 Copy and Paste (Library) 76
4.3.10 Copy and Paste Special (Library) 78
4.4 View Folder Content 79
4.4.1 Sort Documents 80
4.4.2 Rearrange Columns 81
4.4.3 Add and Remove Columns 82
4.4.4 Size Columns 82
4.5 Create a Custom View 83
4.5.1 Add a New View 84
4.5.2 Configure View Columns 84
4.5.3 Configure View Sort Order 85
4.5.4 Configure View Filter 86
4.5.5 Edit an Existing View 90
4.5.6 Copy a View 91
4.5.7 Delete a View 91
4.5.8 Reset Defaults for Views 91
4.6 Understand the System Folder 92
4.6.1 Attachment Icons 92
4.6.2 Publishing Styles 92
4.6.3 Roles 93
4.6.4 Templates 93
4.6.5 Supported Languages 93
4.7 Update the Library (Service Packs) 93
4.8 Upgrade Custom Document Publishing Styles 94
4.9 Back up Content 96
4.9.1 Restore a Database 97

5 Build an Outline 98
5.1 Navigate the Outline Editor 98
5.1.1 Open a Document from the Outline Editor 99
5.1.2 Change the Outline Editor View 99
5.2 Develop an Outline 100

5.2.1 Link a New Module 101
5.2.2 Link a New Section 102
5.2.3 Link a New Topic 103
5.2.4 Link an Existing Document 104
5.2.5 Delete a Document Link 105
5.2.6 Rename a Document 106
5.2.7 Move a Document (Outline Editor) 107
5.2.8 Copy and Paste a Document (Outline Editor) 109
5.2.9 Print an Outline 110
5.2.10 Use Content Tools 111

6 Record Topic Content 121
6.1 Use the Recorder 121
6.1.1 Recorder Logic 121
6.1.2 Context Recognition in the Recorder 122
6.1.3 Start the Recorder 123
6.1.4 Record Topic Steps 123
6.1.5 Add Notes 124
6.1.6 Record Different Action Types 124
6.1.7 Record a Paste Topic 125
6.1.8 Undo 126
6.2 Use Record It! 126
6.2.1 Create Login Profile 126
6.2.2 Create a Topic or Test Document 127
6.2.3 Edit an Existing Topic or Test 129
6.2.4 Preview Your Topic 130
6.2.5 Add Optional Information 130
6.2.6 Submit Your Topic 131
6.2.7 Complete the Record It! wizard 131

7 Use the Topic Editor 132
7.1 Navigate Frames 132
7.2 Save a Topic 133
7.3 Undo and Redo in the Topic Editor 134
7.4 Control Topic Elements 134
7.5 Manipulate Frames 136
7.5.1 Insert a Missing Frame or Frames 136
7.5.2 Re-Record a Topic 136
7.5.3 Insert an Explanation Frame 138
7.5.4 Insert a No-Context Frame 139
7.5.5 Copy a Frame or Frames 139
7.5.6 Select Multiple Frames 140
7.5.7 Copy Paths 140
7.5.8 Copy Decision Frames and Paths 141
7.5.9 Delete a Frame 142
7.5.10 Recapture a Screenshot 142
7.5.11 Recapture an Action 142
7.5.12 Use Context IDs 142
7.5.13 Re-record Context IDs 143
7.5.14 Edit a Screenshot 145
7.5.15 Use Screenshot Publishing 146
7.6 Use Alternative Actions and Paths 146
7.6.1 Insert an Alternative Action 147
7.6.2 Insert an Alternative Path 147
7.6.3 Display Alternative Actions/Paths 148
7.6.4 Set the Current Action as the Default 148
7.6.5 Change the End Frame of an Alternative Path 148
7.6.6 Delete an Action 149
7.6.7 Delete a Path 149
7.7 Use Decision Frames 149
7.7.1 Insert a Decision Frame 150

7.7.2 Record Paths in a Decision Frame 150
7.7.3 Rename Paths in a Decision Frame 151
7.7.4 Edit Header Text 152
7.7.5 Reposition Paths 152
7.7.6 Remove Paths 152
7.7.7 Delete a Decision Frame 152
7.8 Edit Frame Properties 153
7.9 Edit Bubble Properties 153
7.9.1 Add Text to the Introduction and End Frames 153
7.9.2 Use Bubble Templates for a Frame 153
7.9.3 Change the Template Text Font 154
7.9.4 Add Custom Bubble Text 154
7.9.5 Insert Template Text as Custom Text 154
7.9.6 Edit Custom Bubble Text 155
7.9.7 Format Custom Bubble Text 155
7.9.8 Specify the Play Mode for Custom Text 156
7.9.9 Display Template Text in Know It Mode 156
7.9.10 Control Text for Player and Print Output 157
7.9.11 Hide a Frame for a Play Mode 157
7.9.12 Preview Frame Text for Playback and Print Output 159
7.9.13 Hide the Bubble 160
7.9.14 Select a Bubble Icon 160
7.9.15 Change the Bubble Pointer 161
7.9.16 Change the Bubble Background Color 161
7.10 Edit Action Properties 161
7.10.1 Action Types 161
7.10.2 Object Type 162
7.10.3 Object Name 162
7.10.4 Ignore Context Information 163
7.10.5 Create a New Action Area 163
7.10.6 Use Keep with Next 165
7.10.7 Set Frame Delay 165
7.10.8 Create a Jump-in Point 166
7.10.9 Keyboard Action Options 166
7.10.10 String Input Formatting Options 167
7.11 Edit External Content 171
7.11.1 Link an Attachment as a Concept: Topic Editor 171
7.11.2 Link to an Attachment from a Topic Frame 172
7.12 Use the Frame Comments Pane 177

8 Use Test It! Mode 179
8.1 Launch Test It! Mode 179
8.2 Play Test It! Mode 179
8.3 Test It! Mode in Knowledge Center 182

9 Enhance Content with Attachments 183
9.1 Attachment Considerations 184
9.2 Enhance Content with Packages 187
9.2.1 Package Considerations 188
9.2.2 Create a New Package 190
9.2.3 Edit a Package 191
9.2.4 Add Items to a Package 192
9.2.5 Move/Copy Items in a Package 194
9.2.6 Rename an Item in a Package 195
9.2.7 Delete Items in a Package 195
9.2.8 Edit Files in a Package 196
9.2.9 Create and Edit HTML Files in a Package 197
9.2.10 Delete a Package 201
9.2.11 Change the Package View 202
9.2.12 Package Behavior in Publishing 203
9.3 Enhance Content with Web Pages 204

9.3.1 Create a New Web Page 204
9.3.2 Edit a Web Page 205
9.3.3 Add and Format Text 206
9.3.4 Insert a Hyperlink 207
9.3.5 Edit Hyperlink Properties 209
9.3.6 Remove a Hyperlink 209
9.3.7 Insert an Image 210
9.3.8 Edit Image Properties 211
9.3.9 Edit an Image in a Web Page 212
9.3.10 Copy and Paste Web Page Content 212
9.3.11 Rename a Web Page 213
9.3.12 Delete a Web Page 214
9.3.13 Web Page Behavior in Publishing 214
9.4 Enhance Content with URLs 215
9.4.1 URL Behavior in Publishing 216
9.4.2 Work with Relative URLs 218
9.5 Link Attachments 223
9.5.1 Link an Attachment as a Concept: Outline Editor 224
9.5.2 Link an Attachment as a Concept: Topic Editor 225
9.5.3 Link to an Attachment from a Topic Frame 227
9.5.4 Link to an Attachment from Bubble Text 229
9.5.5 Change the ToolTip of a Frame Link 231
9.5.6 Change the Icon of a Frame Link 231
9.5.7 Manage Linked Attachments 232
9.5.8 Create a Custom Icon 239

10 Enhance Content with Sound 241
10.1 Sound Recording Best Practices 241
10.2 Record Sound 242
10.2.1 Enable Sound 243
10.2.2 Configure the Recorder for Sound 243
10.2.3 Record Sound When Recording a Topic 244
10.2.4 Use the Recorder Deskband in Automatic Record Mode 244
10.2.5 Record Sound in a Topic using the Sound Editor 244
10.2.6 Record Sound in a Web Page using the Sound Editor 245
10.2.7 Insert Sound 246
10.3 Import a Sound File 246
10.4 Export a Sound File 247
10.5 Edit Sound 247
10.5.1 Sound Editor Toolpane 247
10.5.2 Cut, Copy and Paste Sound 248
10.5.3 Delete a Sound 249
10.5.4 Select a Frame 250
10.5.5 Deselect a Sound 250
10.5.6 Adjust the Start and Stop Point of Sound in a Frame 250
10.5.7 Crop Sound to Selection 251
10.5.8 Zooming to a Sound 251
10.5.9 Adjust Sound Controls 252
10.5.10 Extend Timeline 253
10.5.11 Add Silence 253
10.5.12 Amplify Sound 254
10.6 Play Sound 254
10.6.1 Stop Sound File Playback 255

11 Enhance Content with Questions and Assessments 256
11.1 Questions and Assessments in Player Content 256
11.1.1 Questions in Player Content 256
11.1.2 Assessments in Deployed Content 257
11.1.3 Track Questions and Assessments 259
11.1.4 Understand Personalized Content (available in Professional edition only) 260
11.2 Develop Questions 261

11.2.1 Add Questions to Content 263
11.2.2 Create a Fill In Question 264
11.2.3 Create a Hotspot Question 264
11.2.4 Create a Matching Question 265
11.2.5 Create a Multiple Choice (Single Answer) Question 266
11.2.6 Create a Multiple Choice (Many Answers) Question 267
11.2.7 Create a True/False Question 267
11.2.8 Create a User-Defined Question 268
11.2.9 User-Defined Question Example 268
11.2.10 Link Questions to an Outline 273
11.2.11 Delete a Question 274
11.2.12 Preview a Question 275
11.3 Develop Assessments 275
11.3.1 Create a New Assessment 276
11.3.2 Add Questions to an Assessment 276
11.3.3 Reorder Questions in an Assessment 277
11.3.4 Delete Questions from an Assessment 278
11.3.5 Assessments for Personalized Content (available in Professional edition only) 278
11.3.6 Preview an Assessment 279
11.3.7 Delete an Assessment 280
11.4 Work with the Assessment Coverage View 280
11.4.1 Select an Assessment 281
11.4.2 Use the Questions Column 282
11.4.3 Use the Questions Associated Table 282

12 Manage Document Relationships 287
12.1 View Related Documents 287
12.2 View and Repair Broken Links 288
12.3 Broken Links in Published Content 289
12.3.1 Broken Links in Questions and Assessments 290

13 Define Glossary Terms 291
13.1 Create a Glossary 292
13.2 Edit a Glossary 292
13.3 Add a Glossary Term 293
13.4 Select a Definition Link Attachment 294
13.5 Edit a Glossary Term 295
13.6 Delete a Glossary Term 296
13.7 Assign a Glossary to a Document 296
13.8 Update Glossary Links 298
13.9 Delete a Glossary 300

14 Create Roles for Content Filtering 301
14.1 Edit a Master Role List 301
14.2 Add a Role 303
14.3 Rename a Role 303
14.4 Delete a Role 304
14.5 Update a Master Role List 305
14.6 Create a New Role List 305
14.7 Assign Roles to Modules, Sections, Topics, Questions, or Assessments 307

15 View Document Properties 309
15.1 Use the Properties Toolpane 309
15.2 Change Document Properties 310
15.2.1 Ways to Assign Properties 311
15.2.2 Assign a Property to Multiple Documents 311
15.3 General Properties 312
15.3.1 Assessments Property 313
15.3.2 Context Property 313

15.3.3 Custom Properties ... 315
15.3.4 Glossary Property ... 317
15.3.5 Keywords Property ... 317
15.3.6 Language Property ... 320
15.3.7 Name Property ... 320
15.3.8 Resolution Property ... 320
15.3.9 Group for LMS Property ... 321
15.3.10 Roles Property ... 321
15.3.11 See Also Property ... 322
15.3.12 Template Property ... 324
15.4 Question Properties ... 325
15.4.1 Associated Content Property ... 325
15.4.2 Remediation Property ... 325
15.5 Assessment Properties ... 326
15.5.1 Answer Order Property ... 326
15.5.2 Passing Score ... 326
15.5.3 Question Order Property ... 326
15.5.4 Remediation Property ... 327
15.5.5 Show Associated Content Property ... 327
15.5.6 Summary Property ... 327
15.6 Topic Properties ... 327
15.6.1 Know It? Options ... 328
15.6.2 LMS Play Modes Property ... 330
15.6.3 Play Modes Property ... 331
15.6.4 Play Sound Property ... 331
15.6.5 Show Bubbles Property ... 332
15.7 Document Output Properties ... 333
15.7.1 Required Fields and Output Results for the System Process Document ... 334
15.7.2 Add Document Revision Text ... 335

16 Preview a Topic ... 336
16.1 Preview Player Modes ... 336
16.1.1 Play See It! Mode ... 337
16.1.2 Play Try It! Mode ... 337
16.1.3 Play Know It? Mode ... 338
16.1.4 Play Do It! Mode ... 339
16.2 Preview Documents ... 340
16.2.1 System Process Document ... 340
16.2.2 Job Aid ... 340
16.2.3 Training Guide ... 340
16.2.4 Instructor Manual ... 341
16.2.5 Test Document ... 341
16.2.6 Test Results ... 341
16.3 Preview a Presentation ... 341

17 Publish Content ... 342
17.1 Deployment Formats ... 342
17.1.1 Player and LMS ... 342
17.1.2 HTML Web Site ... 346
17.1.3 Standalone Topic Files ... 346
17.2 Document Formats ... 348
17.2.1 Attachments in Document Formats ... 349
17.2.2 Options for Document Outputs ... 349
17.2.3 System Process Document ... 351
17.2.4 Job Aid ... 351
17.2.5 Training Guide ... 351
17.2.6 Instructor Manual ... 352
17.2.7 Test Document ... 352
17.2.8 Test Results ... 352
17.2.9 Test Case ... 352
17.2.10 Presentation ... 353

17.3 Use the Publishing Wizard 353
17.3.1 Publishing Destination 354
17.3.2 General Publishing Options 354
17.3.3 Advanced Options 355
17.3.4 Publishing Formats 356
17.4 Customize Publishing Styles 357
17.4.1 Create Styles 357
17.4.2 Rename a Publishing Style 357
17.4.3 Remove the Document Type from the File Name 358
17.5 Customize the Player 358
17.5.1 Customize the Player Interface Graphics 359
17.5.2 Customize Player Header Elements 360
17.5.3 Customize the Table of Contents and Search 360
17.5.4 Customize Player Mode Buttons 362
17.5.5 Customize the Player Interface Borders 362
17.5.6 Customize the Bubble Header Bar 363
17.5.7 Customize Windowed See It! Mode 364
17.5.8 Customize the My Roles and Preferences 365
17.5.9 Customize Question Elements 366
17.5.10 Customize Assessment Elements 367
17.5.11 Control "For Example" Text in String Inputs 369
17.5.12 Suppress Scores in Know It? Mode 369
17.5.13 Hide the Click Graphic in See It! Mode 369
17.5.14 Disable Player Navigation Bookmarks and Preference Settings 369
17.5.15 Disable Share link 369
17.5.16 Display Frame ID in Topic Playback 370
17.6 Customize the Presentation Format 370
17.7 Customize the Test Case Output 371
17.8 Customize Document Formats 372
17.8.1 Use Bookmarks 372
17.8.2 Publishing Template Toolbar 373
17.8.3 Insert, Move, and Delete Bookmarks 377
17.8.4 Bookmarks in Multi-topic Formats 378
17.8.5 Insert Bookmarks for Questions and Assessments 379
17.8.6 Insert Bookmarks for Custom Properties 379
17.8.7 Insert Word Fields, Static Text, and Graphic Objects 379
17.8.8 Format Bookmarks and Text 380
17.8.9 Bookmark Reference 380
17.8.10 Style Reference 392
17.8.11 Modify the Header or Footer 393
17.8.12 Check Syntax 394
17.9 Customize Logos by Category 394
17.9.1 Use the Customize Logo Tool 394
17.10 Command-Line Publishing 395
17.10.1 Use Command-Line Publishing 395
17.10.2 Execute Batch Publishing 396

18 Export / Import Content 397
18.1 Export Content 398
18.2 Import Content 400
18.3 Export and Import Sound Files in Bulk 402
18.3.1 Export Sound Files in Bulk 403
18.3.2 Use the Sound Report 403
18.3.3 Import Sound Files in Bulk 404
18.4 Extract a Developer Archive 404
18.5 Understand Developer Archives 405
18.6 Recompress a Developer Archive 407

19 Localize Content 409
19.1 Export Content for Localization 411
19.2 Import Localized Content 414

19.3 Localization using XLIFF 415
19.4 Localization Using Microsoft Word 418
19.5 Summary of the Localization Process 425

20 Customize Templates 427
20.1 Start the Template Editor 427
20.2 Edit the Template.xml File 428
20.2.1 Edit a Class 428
20.2.2 Edit an Event in a Class 429
20.2.3 Edit or Suppress Example Text for String Input Events 430
20.2.4 Add a Local Template to an Event 431
20.3 Change Instructional Text 431
20.3.1 Change Instructional Text for the Player 432
20.3.2 Change Instructional Text for Know It? Mode 432
20.4 Change the Font Format for Template Text 434
20.5 Translate Templates 434
20.5.1 Edit Event Names 435
20.5.2 Edit Key Names 435
20.5.3 Edit Shift Key Prefixes 435
20.5.4 Use Genders 436

21 Appendix A: Considerations for Setting Defaults 437
21.1 Set Workstation Defaults 437
21.1.1 Set the Windows Default Color Scheme 437
21.1.2 Set the Video Resolution and Color Depth 437
21.1.3 Change the Taskbar Settings 437
21.1.4 Turning Off Other Applications 437
21.1.5 Set the Defaults in the Target Application 438
21.2 Set Content Defaults 438
21.2.1 Set Bubble Defaults 438
21.2.2 Set Other Font and Color Defaults 438
21.2.3 Set the Frame Delay 439
21.2.4 Set Know It? Defaults 439

22 Appendix B: Development Considerations 440
22.1 Assign Development Tasks and Flow 440
22.2 Create Scripts 441
22.3 Suggestions for Developing Content 441
22.4 Create Content in Multiple Languages 442
22.5 Development Tips 443
22.6 Test the Content 444
22.6.1 Test Play Modes 444
22.7 Player Window 446
22.8 Document Outputs 446

23 Appendix C: Develop Content for Different Deployments 447
23.1 Develop Content for Deployment in the Player 447
23.1.1 Outline 447
23.1.2 Attachments: Web Pages and Packages 448
23.1.3 What Appears in Which Play Mode 448
23.1.4 Fonts and Colors 449
23.2 Develop Content for Deployment as Printed Documentation 449
23.2.1 Outline 449
23.2.2 Attachments 450
23.2.3 What Appears in the Document Outputs 450
23.3 Control Bubble Text for Document Outputs 451

1 Overview and Documentation

This suite of applications provides a synchronized content platform for creating documentation, training, and performance support across the enterprise. Its use is generally limited to a team of content authors and/or subject matter experts. The content is made available to users through a Player, document output, or a Knowledge Center. Content can also be tracked to ensure that users understand and learn the content that authors are providing.

Copyright

Version 11.1.0.1

The following components are available for installation:

Developer – The Developer is the primary content authoring tool that allows you to create and publish content easily. Using a content Library for organization and storage, you can build outlines comprised of various documents such as modules/sections, topics, glossaries, questions, and assessments. Content can then be enhanced with additional assets such as conceptual web pages, package content (such as documents, spreadsheets, presentation slide decks, web sites, flash content, HTML pages), role assignments, and so on. Content can then be published as playable simulations, various flavors of documentation output (such as job aids, training guides, instructor manuals, test and system process documents), and context-sensitive, in-application support, help systems. The Developer can be installed for one author or as a collaborative and centralized platform for authoring teams, subject matter experts, content reviewers, and so on.

Knowledge Center – The Knowledge Center is a centralized platform for content deployment, tracking, and reporting. The Knowledge Center provides the infrastructure and tools for importing, organizing, and deploying content created in the Developer (and other applications), managing users and the content that is made available to them, tracking how deployed content is used, and reporting on the content that is consumed. The extent of these capabilities depends on whether you are using the Standard edition (basic usage tracking and reporting) or the Professional edition (more sophisticated user and content management, content organization and deployment, usage tracking, and reporting capabilities typically found in learning content management systems).

You might be interested to note that all of this documentation/help was authored and published using this product.

Documentation consists of the following manuals and help systems. The PDF manuals are delivered and stored in the **documentation\language code\reference** folder where the Developer is installed. Help systems and some PDF manuals are available when you launch each product component such as the Developer, Player, Knowledge Center, and so on. Documentation can also be accessed from the documentation shortcut on the Windows Start program menu.

Content on functionality available in the Professional edition is also included in this documentation and identified as such by the phrase "available only in the Professional edition".

- **Installation and Administration**: This PDF manual provides instructions for installing the Developer in a single-user or multi-user environment as well as information on how to add and manage users and content in a multi-user installation. An Administration help system also appears in the Developer for authors configured as administrators. This manual also provides instructions for installing and configuring the Knowledge Center, including the Content Root (or content repository), and the User Import Utility.

- **Content Development**: This help system and PDF manual provides information on how to create, maintain, and publish content using the Developer. The content of this manual also appears in the Developer help system.

- **Content Deployment**: This PDF manual provides information on how to deploy content created in, and published from the Developer.

- **Content Player**: This help system provides instructions on how to view content using the Player.

- **Reports Management**: This help system and PDF manual provides instructions on how to run and manage usage tracking and other reports.

- **User and Content Management**: This help system and PDF manual provides instructions on how to create user accounts, user groups, and knowledge paths, import content, and server management.

- **In-Application Support**: This help system and PDF manual provides information on how to implement content-sensitive, in-application support for enterprise applications using Player content.

- **Upgrade**: This PDF manual provides information on how to upgrade from a previous version to the current version.

- **Knowledge Center**: This help system provides instructions on how to use the Knowledge Center options such as Knowledge Paths, Notes and Mentoring, and so on.

2 Get Started using the Developer

The Developer is a synchronized content platform for creating documentation, training, and performance support across the enterprise. Its use is generally limited to a team of content authors. The content is made available to users through a Player or document output.

The Developer allows you to create and publish content easily. Content includes simulations, in-application support, and interactive documentation. Users gain a well-rounded knowledge of software functionality, complete with an understanding of the concepts, by learning how to use a program in both a simulated environment and while working with their own data in a live environment. Simulations can be viewed in any one of the following play modes via the Player:

- *See It! Mode* enables a user to learn by watching an animated demonstration of the steps for a task being performed in a simulated environment. All of the required activities, such as moving the mouse and entering data, are completed automatically.

- *Try It! Mode* enables a user to learn interactively in a simulated environment. The user is prompted for mouse clicks and/or keystrokes to complete the task.

- *Know It? Mode* enables a user to test their knowledge of a particular task. Users are instructed to complete a particular task without step-by-step instructions. Instead, they complete the steps on their own in a simulated environment, and they are scored on how accurately they complete them.

- *Do It! Mode* enables a user to learn interactively using a live application. A user is presented with a small window on top of the live target application that displays each step for a particular task. As the user completes each step, he/she can click a button or use a hot-key combination to display the next step in the process. Within the Do It! window, a thumbnail graphic of the screen is available with a highlight indicating the area where the action should take place.

- *Print It! Mode* enables a user to display linked documentation in the form of a Job Aid or System Process Document.

2.1 Review the Developer Interface

The Developer interface is similar to most Windows applications with a movable menu and tool bar, status bar, and a main work area. The main work area can display the Library as well as any of the available document editors. If you display the Library, you can see a default set of folders and documents. The Library is the central repository of your content that can be accessed by one or more authors at the same time. The Library shows all content in the form of various folders and documents. Folders are similar to the folders on your computer that store files; however, folders in the Developer are used to store content-specific documents. Every object in the Developer is called a document and there are specific document types that you use to build content.

As you develop content and begin to create and open documents, additional work areas appear in new tabs. The document name appears in the tab and cannot be directly edited in the tab. If you want to change the name of a tab, you must change the name of the document.

Each tab is associated with a specific document editor that is launched when you open a document. For example, when you open a module document, a new tab appears, and the Outline Editor is launched in the work area. The name of the document appears in the tab with the appropriate document type icon. You can continue to open additional documents, thereby opening a new tab for each new work area. You can navigate between each tab by clicking on it and close a tab when you are finished with the content that is displayed.

A work area may have multiple panes associated with it. For example, the Library has two panes where the left pane displays folders and the right pane displays the documents that are

stored in the selected folder. The Outline Editor also has two panes where the left pane displays the outline of module, section, and topic documents and the right pane can display document details or conceptual and introduction content that is linked to each document. These different displays of document information are called views. For example, the Details View displays columns of document properties such as its Type, Last Modified Date, and so on. The Player View simulates the user interface of the Player and displays conceptual and/or introduction content that is linked to a specific document in the outline. This linked content can be web pages, documents, presentations, and so on. You can easily switch between these views using the View toolbar.

The remainder of this section describes how to start the Developer and customize various areas of the interface.

Since you can use the Developer in single or multi-user mode, the documentation includes a chapter on multi-user functionality as well various multi-user considerations. The following convention is used to identify specific multi-user functionality throughout this documentation:

Multi-user Considerations

- Information about multi-user aspects of the Developer.

2.1.1 Start the Developer

You can start the Developer from the Windows Start menu, or you can create a shortcut on your desktop.

Create Profile

When you start the Developer for the first time in a single user environment, you are asked to create a content Profile that determines where the content Library is stored on your local computer. See the *Add a Content Profile* topic in the Create and Manage Profiles chapter of this manual for more information.

When you start the Developer for the first time in a multi-user environment, you are asked to create a login Profile that controls the connection to a specific content Library on a shared server. See the *Create and Manage Login Profiles* topic in Using the Developer in a Multi-user Environment chapter of this manual for more information.

After you create and open a Profile in either a single or multi-user environment, the Start Screen appears.

Set Primary Authoring Language

When you start the Developer for the first time, you are asked to choose a primary authoring language that controls the default language for content that you create in the Developer (Language property). This setting also controls the language of the default template, and several default font settings for text. For example, if you choose Japanese or Chinese, the default is automatically set to a font that is capable of rendering these characters onscreen and in print.

Launch the Start Screen

When you launch the Developer, the Start Screen presents you with the following options:

- Open the Library
- Open an existing document
- Create a new module
- Create a new topic
- Import content

All of these options can also be performed using menu commands. As you become familiar with the Developer, you may want to suppress the display of the Start Screen by deselecting the Show this screen at startup checkbox. When you launch the Developer without the Start Screen, the Library automatically appears. To display the Start Screen at any time, choose the Start Screen command from the View menu.

The Start Screen also displays the last six modules that you opened in the Recent Modules section. The Library always appears when you close the Start Screen.

Multi-user Considerations

- If you installed a multi-user version of the product, the word "Client" appears after the Program Group and Program Name.

2.1.2 Create and Manage Content Profiles

In a single user installation, a content Profile determines the folder location on your computer where the content Library is stored. A default location is provided; however, you can choose any folder on your local computer.

You can create multiple content Profiles if you plan to use multiple libraries. You can also edit a content Profile and change the folder location and your content is moved accordingly.

Important Note: Deleting a content Profile will remove all content from your computer.

2.1.2.1 Add a Content Profile

You must create a content Profile when you start the Developer for the first time to identify the folder location on your computer where your content is stored. The folder location must be on your local computer and cannot be on a network drive. You must also have enough disk space to accommodate your content.

Note: If you receive a Proxy Authentication dialog box when you log in to the Developer, enter your username and password for the proxy server. If you select the Save my password option, the username and password information is encrypted and saved to the OdDev.exe.config file in the path for the application data, for example c:\Documents and Settings\<username>\Local Settings\Application Data\<local cache> (Windows XP) or c:\Users\<username>AppData\Local\<local cache> (Windows 7). If your password changes for the proxy server, you can open this file in a text editor and delete the tags <ProxySettings> and </ProxySettings> and all the text in between. This will cause the Proxy Authentication dialog box to open the next time you log in so that you can enter your new password.

To add a content Profile:

1. On the **Tools** menu, choose **Profiles**.
2. Click **Add** to start the Profile Wizard.
3. Click **Next** to display the Profile Name page.
4. For multi-user installation only, type the location of the Library and click **Next**.
5. Type a unique name for the profile. You will use this name if you have multiple profiles that you can use to switch between content Libraries. You cannot have multiple profiles with the same name.

   Also, if you create multiple profiles, you can configure one as the default that is automatically used every time you launch the Developer by clicking the **Make this my default profile** checkbox. The name of the active profile appears in the title bar of the Developer to identify the Library in which you are working.

6. Click **Next** to display the Data Storage Location page. You can either accept the default data storage location or choose a different folder on your computer. Click Browse if you want to change the default folder or click Next to accept the default folder. You must choose a folder on your local computer. Network drives are not permitted. The folder that you select must also be empty.

7. Click **Next** to complete the Profile Wizard.

   The last page in the Profile Wizard displays a summary of the profile including the name and data storage location.

8. Click **Finish**.

2.1.2.2 Edit a Content Profile

You can edit any content Profile that is not in use and change its name or the folder location where the Library content is stored. To edit a content Profile that is currently in use, you must first exit the Profile.

Note: Changing the location of the Library content does not change the location of other data such as preference, profile, view, or log files.

To edit a content Profile:

1. On the **Tools** menu, choose **Profiles**.

2. Select a profile from the list.

3. Click **Edit** or **Exit Profile** if you selected a profile that is in use.

4. Change the folder location or name and click **Next**.

5. Click **Finish**.

   Your content is moved from the old folder to the new folder that you specified. This may take some time depending on the size of your content.

2.1.2.3 Delete a Content Profile

Deleting a content Profile will **permanently** remove all content stored in the folder location defined in the profile.

To delete a content Profile:

1. On the **Tools** menu, choose **Profiles**.

2. Select a profile from the list.

3. Click **Delete**.

   You are warned that deleting a profile will also permanently delete all content in the Library (including any documents in the System folder).

4. Confirm the deletion or cancel.

2.1.2.4 Switch Content Profiles

If you have multiple content Profiles, you can switch between Libraries without having to close the Developer. To do this, you must have a content Profile for each Library.

To switch content Profiles:

1. On the **Tools** menu, choose **Profiles**.
2. Click a profile for a different Library.
3. Click **Open** to switch to the Library.

2.1.3 Configure Toolbars

The Developer provides the following toolbars:

- **Assessment Editor**: Displays icons for linking new or existing questions to an assessment.
- **Outline Editor**: Displays icons for linking new documents, moving, and previewing documents in the outline.
- **Question Editor**: Displays icons for creating and editing questions.
- **Standard**: Displays icons for common commands that are available across most document editors.
- **Topic Editing**: Displays icons for common topic editing commands for context, frames, screenshots, and so on.
- **Topic Navigation and View**: Displays icons for topic frame navigation and bubble text display.
- **View**: Displays icons for changing the screen layout and views.
- **Web Page Editor**: Display icons and controls for formatting a web page.

By default, the appropriate toolbar appears based on the document editor that is active. For example, when you open a web page the formatting toolbar for the Web Page Editor appears. When you close the Web Page Editor, the formatting toolbar is removed from the screen. However, you can configure each toolbar to always appear by marking the appropriate checkbox on the toolbar menu.

You can restore the toolbar display back to the installation defaults using the Restore Default Layout command on the View menu.

Multi-user Considerations

- The following toolbar is available only in multi-user installations.

  Versioning: Displays icons for document check in and check out.

To hide/display toolbars:

1. Start the Developer.
2. On the **View** menu, point to **Toolbars**, and then choose the toolbar that you want to display.

To reposition toolbars:

1. Point to the left corner of a toolbar.

2. Drag the toolbar to any position on the screen.

Note: You can also reposition the menu bar using these same steps.

Use Menu Commands

When you are working in the Developer, you may prefer to use menu commands rather than toolbar icons. If you want to hide the toolbars to provide more space on the screen, you can do so. You can display the toolbars again at any time. On the Toolbars submenu (from View menu), a checkmark next to the toolbar name means the toolbar is visible; if there is no checkmark, the toolbar is hidden.

Note: You can also drag and drop each toolbar (and menu bar) and reposition it anywhere on the screen. Use the Reset command to restore the default toolbar positions.

2.1.4 Split the Work Area

By default, the work area appears in a single layout; however, you can split the work area horizontally or vertically depending on how you prefer to work. Regardless of your choice, the entire work area is separated by a split bar that you can use to resize each work area.

Splitting the work area is useful since you can explore different areas of a document in both work areas. You can also view different documents and drag/drop or copy/paste reusable documents between work areas to help make building content easier.

When you open a document in one work area, a tab for the newly opened document automatically appears in the second work area. In other words, the same tabs appear in split work areas. However, the document displayed within a tab can be different between two work areas. For example, you can have the same module document open in two work areas but explore different sections of the outline in each.

If you split a work area that has numerous tabs open that cannot be displayed for space reasons, left and right arrow buttons appear that allow you to scroll to the tabs that do not appear. Click to close a selected tab or right click on the tab and choose Close.

Note: You cannot change the order of the tabs that appear in a window. The order is determined by the sequence in which you open documents.

To split the work area:

1. On the **View** menu, click **Horizontal Layout** to split the work area horizontally or click **Vertical Layout** to split the work area vertically.
2. Use the mouse to navigate between the different work areas.
3. Click **Single Layout** to remove a horizontal or vertical split.

2.1.5 Configure Toolpanes

Panes are used to perform many common tasks. You can display and position the following toolpanes in the Developer:

- Broken Links toolpane to display which documents contain broken links.
- Properties toolpane to set and change various document properties.
- Related Documents toolpane to display documents linked to and from a document.
- Topic Editor toolpanes designed to work specifically with the Topic Editor to create and edit bubble text, change action and frame settings, link attachments to concepts, create frame links, and add sound, as well as navigate the topic frame structure.

It is not necessary to close a toolpane before an action takes effect; it can be left open and available while you continue to work.

To open a specific toolpane, you select the command or toolbar icon for that task. You can open a toolpane from the Library or any document editor.

By default, toolpanes open in a docked, vertical or horizontal toolpane on the right side or bottom of the work area depending on the document editor/library that is active. The name of the toolpane appears in the toolpane's title bar. You can open a single toolpane or multiple toolpanes at the same time and resize and position them. The Developer remembers the arrangement and size of your toolpanes.

Note: The toolpane does not split when you enable a split layout. The information in the toolpane refers to the selection in the active layout.

By default, the appropriate toolpane appears based on the document editor or the Library that is active. For example, when you open the library or any document editor other than the Topic Editor, no toolpanes appear. However, when you open the Topic Editor, the Frame Properties toolpane appears on the right side of the screen and the Frame Structure and Sound toolpanes appear at the bottom of the screen. When you open another document editor, these toolpanes are removed from the screen. However, you can display any toolpane in any document editor or the Library by selecting the toolpane on the Toolpane menu. If you explicitly choose to display a toolpane in the Library or document editor, it will appear in any document editor that you open. For example, if you open the Properties toolpane in the Library or Outline Editor, it will appear in the Topic Editor (as a tab at the bottom of the default Topic Editor toolpanes).

Some toolpanes are designed to function with specific document editors. For example, the Frame Properties, Frame Link and Frame Structure toolpanes are designed to function in Topic Editor only. If you decide to display one of these toolpanes in a document editor other than the Topic Editor, it will not function and it appears blank or disabled.

You can restore all toolpane displays back to the installation defaults using the Restore Default Layout command on the View menu.

To open and close a toolpane:

1. To open a toolpane, on the **View** menu, point to **Panes**, and then choose the toolpane that you want to display.

2. To close a toolpane, click in the top right corner of the toolpane or deselect the corresponding menu command or toolbar icon.

2.1.5.1 Resize a Toolpane

You can resize docked or floating toolpanes. Docked toolpanes display a thick border, called a split bar, between the toolpane and the rest of the work area. Dragging the split bar allows you to increase or decrease the size of the toolpane. For floating toolpanes, drag any border or corner to resize its length and/or width.

To resize a toolpane:

1. To resize a docked toolpane, drag the split bar between the toolpane and the work area.

2. To resize a floating toolpane, drag a border or corner until the toolpane is the desired size.

2.1.5.2 Move a Toolpane

You can dock a toolpane vertically or horizontally on the right, left, top or bottom edge of the work area or float it anywhere on top of the Developer window. You move a floating or docked toolpane by dragging it by its title bar.

When you drag a toolpane, two sets of toolpane icons appear to help you select a position for docking the toolpane or positioning multiple toolpanes. One set displays icons around the perimeter of the work area and docks the toolpane at the corresponding edge. The other set, which initially appears in the center of the work area, helps you layer multiple toolpanes in a single stack or position them adjacent to one other.

You dock a toolpane by dragging its title bar to an icon corresponding to the desired docking position. If you want to float the toolpane, drop it anywhere on the work area except on a toolpane icon.

The function of each toolpane icon is described next:

Docks the toolpane at the top of the work area. For displaying adjacent toolpanes, positions the toolpane above the other docked or floating toolpane.

Docks the toolpane at the bottom of the work area. For displaying adjacent toolpanes, positions the toolpane below the other docked or floating toolpane.

Docks the toolpane on the left side of the work area. For displaying adjacent toolpanes, positions the toolpane to the left of the other docked or floating toolpane.

Docks the toolpane on the right side of the work area. For displaying adjacent toolpanes, positions the toolpane to the right of the other docked or floating toolpane.

Stacks toolpanes on top of one another in layers. Tabs appear at the bottom of the toolpane area for displaying a toolpane in the stack.

To move a toolpane:

1. To dock a toolpane, drag it by its title bar and drop it on an arrow icon corresponding to the desired docked position.

   Release the mouse button when the shaded image of the toolpane appears in the desired position.

2. To float a toolpane, drag it by its title bar and drop it anywhere in the work area, except on an arrow icon.

2.1.5.3 Display Multiple Toolpanes

When you open multiple toolpanes, you can display them in any of the following positions:

Individual docked or floating toolpanes
If you dock one toolpane in a vertical dock (left or right side) and another toolpane in a horizontal dock (top or bottom), the first toolpane you dock sizes to the full docking space, while the other toolpane resizes to fit the remaining docking space.

Stacked in a single docked or floating toolpane with multiple layers
Stacked toolpanes layer one on top of another, with the most recently opened toolpane on top.

The name of each toolpane in the stack appears in a tab at the bottom of the toolpane area. Clicking a tab moves that toolpane to the top of the stack so that you can view it. Both floating and docked toolpanes support stacking. When you move the stack, all of the toolpanes move at the same time.

Adjacent toolpanes sharing the same docked or floating area
Toolpanes can share the same docked or floating area. You can position toolpanes adjacent (side-by-side) to one another in any direction, above, below, left, or right. Adjacent toolpanes that share the same docked area (top/bottom for a vertically docked toolpane and left/right for a horizontally docked toolpane) display a Maximize icon in the title bar to expand the toolpane to the full docking area.

To stack toolpanes:

1. Drag one toolpane on top of the other until a set of toolpane icons appear on top of the dragged toolpane.
2. Drop the toolpane on the stack icon in the center of the toolpane icons.
3. To display a toolpane in the stack, click the tab of the toolpane.
4. To separate stacked toolpanes, drag the tab of the toolpane you want to move to another location in the work area.

To display adjacent toolpanes:

1. Drag one toolpane on top of the other until a set of toolpane icons appear on top of the dragged toolpane.

   The icons that appear on top of the dragged toolpane correspond to adjacent positions rather than the perimeter of the work area. For example, the Up icon places the dragged toolpane above the toolpane under it.
2. Drop the toolpane on the arrow icon corresponding to the desired adjacent position.

   Release the mouse button when the shaded image of the toolpane appears in the desired position.

Note: When you position a toolpane above or below a vertically docked toolpane, or to the left or right of a horizontally docked toolpane, a Maximize icon appears on the toolpane's title bar. Click to maximize a toolpane to fit the entire docked area or to restore it to a shared size.

2.1.5.4 Autohide a Docked Toolpane

There are two behaviors for a docked toolpane; to always appear on top of the work area, or to hide automatically when not in use. This behavior is controlled by the Pushpin icon, which appears in the right corner of the title bar for docked toolpanes. The pushpin points down when enabled and points left when disabled. By default, the pushpin is enabled and the toolpane always appears on top of the work area, sticking the toolpane to the window. Clicking the Pushpin icon unpins the toolpane. Three things happen when you unpin a toolpane; the direction of the pushpin changes, a tab for the toolpane appears, and the toolpane disappears into the border of the work area as soon as you move the mouse pointer off the toolpane. You can autohide multiple docked toolpanes.

To display a toolpane, either point to, or click the tab you want to view, or click the Pushpin icon to disable the autohide behavior. For stacked toolpanes, the pushpin controls the pinning actions for all toolpanes in the stack and creates a tab for each stacked toolpane.

To autohide a docked toolpane:

1. On a docked toolpane, click to unpin the toolpane.

   The direction of the pushpin points to the left and a tab appears next to the toolpane with the name of the toolpane.

   The toolpane hides when you move the mouse pointer from the toolpane.

2. To display the hidden toolpane, point to the toolpane tab.

   Clicking the pushpin tab temporarily sticks the toolpane to the window.

3. To disable autohide and display the toolpane always on top, click .

2.1.6 Restore Default Toolbars and Toolpanes

After you configure toolbars and toolpanes in the Developer, you may find that you want to go back to the default layout from the original installation. The Restore Default Layout command can revert the Developer user interface to display the original toolbar and toolpane configuration that was initially installed. Toolbars and toolpanes for all document editors and the library are automatically reverted back to the default layout when you run this command from the View menu.

To restore the default layout:

1. On the **View** menu, choose **Restore Default Layout**.

   The display and position of toolpanes and toolbars for all document editors and the Library is restored to the default layout of your original installation.

2.2 Understand the Developer Basics

You use the Developer to create, maintain, and publish your content Library. A typical content Library can contain hundreds, if not thousands, of documents. You can organize the Library using folders (similar to the way Windows Explorer lets you organize files on your computer). The main difference between Windows Explorer and the Library is that documents are stored in a relational database and not as individual files on a disk drive. However, this difference is largely transparent to you as you develop your content.

To help you visualize your content as you build it, the Developer offers various displays:

- The Library shows the entire content repository and its organization in folders. Each folder displays the documents that it contains or other folders and their corresponding documents. This folder structure is completely defined by an author. A System folder structure is also created during installation that contains various system-wide documents for assessment and question templates, publishing styles, topic text templates, roles, and attachment icons.

- Document editors display the content of a single document in an editor. Each document editor appears in a new tab as you open or create documents. The document editor that appears depends on the type of document that you create or open.

2.2.1 Open and Close the Library

If you choose to display the Library, it opens in a Library tab in the Developer window. If the Library is not open, you can open it from the Start Screen when you start the Developer or from the View menu. You can close the Library just as you can close any document editor. If you have multiple document editors open at the same time, you may want to close the Library

to eliminate some of the tab clutter. You can reopen the Library at any time. When you reopen the Library, it opens in the last tab position.

Note: You cannot change the order of the tabs that appear in the Developer. The order is determined by the sequence in which you open documents in the Library.

To open the Library:

1. From the Start Screen, click the **Library** link.

   or

   From the Developer, select the **View** menu and choose **Library**.

2. If you have multiple tabs open, the Library command activates the Library tab.

To close the Library:

1. Click the Library tab and either click on the Library tab or choose **Close** from the **File** menu.

2.2.2 Use Folders and Documents

The Library lets you organize and manage your content using folders and documents similar to how Windows Explorer lets you manage and organize files on your computer. When the Developer is installed and a new content database is created, a System folder is automatically created that contains subfolders and various documents that control characteristics of the publishing styles, template text, roles, and attachment icons.

As you build new content, you will create additional folders in which to store various documents such as modules, sections, topics, web pages, packages, roles, glossaries, and so on. The folder structure you create is completely up to you; however, it is recommended that you keep your folder structure simple to avoid unnecessary navigation or confusion, especially if you are working in a multi-user environment. You will probably want to create a standard folder structure for your content before you start creating documents and avoid letting authors build complicated folder structures along the way.

A folder can be opened to view its contents, which can be additional folders or documents. These objects always appear in the right pane of the Library. You can also open any document in a folder, thereby launching the appropriate document editor. Folders and documents in the Library can also be moved, copied, and deleted, although the System folder and its documents should not be altered.

Note: One exception to altering documents and folders in the system folder is when you are creating custom styles. See *Create Styles* in the Customize Publishing Styles section of the Publish Content chapter of this manual for more information.

2.2.2.1 Understand the System Folder

The System folder is automatically created when you install the Developer. It contains a series of subfolders and documents that store publishing documents, templates, master role documents, and attachment icons. The System folder is only visible in the Library and contains the following subfolders:

- Assessment Templates
- Icons
- Publishing

- Question Templates
- Roles
- Templates

Warning! You should not move, delete, or rename the System folder, its subfolders, or any documents that are contained within them. Doing so may impair the operation of the software. However, you can remove and add documents to the Icons folder without causing problems.

2.2.3 Understand the Developer Document Types

When you build content, you create, edit, and link various documents that are stored in the Library folders. The Developer provides the various document types that allow you to:

- create an outline to facilitate content presentation and navigation
- record application simulations for playback
- construct conceptual and introductory content that link to outlines and recorded frames
- develop glossary terms
- define roles for document filtering
- customize publishing style output

The following describes each document type:

Module: A module (purple book) is used to organize a specific unit of learning. It can contain other documents such as sections, topics, or even other modules to form a component of an outline.

A module can also have conceptual content linked to it that provides a general description of the content that is contained within it.

Section: A section (blue book) is very similar to a module in that it also can contain other documents such as sections, topics, or other modules. The main difference between a section and module is its visual representation that can help you differentiate between the components of your outline and locate areas in the structure faster.

A section can also have conceptual content linked to it that provides a general description of the content that is contained within it.

Important Note about Module and Section Documents: A module or section document will appear with a purple or blue book only when the document has at least one linked child document such as a topic or another module or section. However, a module or section document with no linked child documents will appear with a page icon such as for module and for section. When you create a new module or section, it automatically appears as a page icon until you link at least one additional child document. It then appears with a purple or blue icon.

Topic: A topic represents a series of recorded steps that complete a task in an application. Topics are where you record application-specific transactional content; whereas modules and sections provide the structural components of your outline.

Package: A package is a collection of one or more files that can be imported and attached to documents as additional content. For example, a package can be as simple as a document

that contains an image file or more complex where it contains multiple files that comprise an entire web site.

Web Page: A web page is an HTML page that can contain text, audio, images, and hyperlinks to other content. It can be linked to modules and sections or frames and bubble text within a topic.

Question: A question tests student knowledge on a piece of content. There are seven types of questions including Fill in, Hot Spot, Matching, Multiple Choice (single answer) Multiple Choice (many answers), True/False, and User-Defined.

Assessment: An assessment is collection of questions and topics used to test a student's knowledge of larger portions of content.

Glossary: A glossary is a list of specialized terms unique to your company, or terms that require further clarification for your users.

Role: A role generally represents the actions and activities assigned to or required or expected of a person or group. A role is used to filter topics in the Player.

Template: A template controls the bubble text that is automatically populated when you record a topic.

Publishing Project: A publishing project contains all of the files that are used in a publishing style. For example, the Training Guide publishing project has various Microsoft Word documents and XML files that control the output format of this style. You can customize a delivered style by copying the relevant publishing project document and editing the files to define your custom style.

2.2.4 Work with Document Editors

When you create or open a document for viewing or editing, it appears in its corresponding document editor. For example, when you create or open a module or section, the Outline Editor appears in a new tab. If you create or open a web page, the Web Page Editor appears, and so on. The editor that appears depends on the type of document that is opened.

The following document editors are available in the Developer:

- Outline Editor
- Topic Editor
- Web Page Editor
- Package Editor
- Glossary Editor
- Role Editor
- Question Editor
- Assessment Editor

2.2.4.1 Outline Editor

The Outline Editor displays a hierarchy of documents that is similar in design to a common table of contents. This document hierarchy appears in the left pane of the editor and is called an outline. The outline can consist of any number of module and/or section documents and their related topics and can span as many levels as you want.

The content that you see in this editor is defined by the module or section document that you open and is typically not the entire content Library. This allows you to either explore a complete outline by opening what is referred to as the "root" document or focus in on a specific area of the outline by opening a specific module/section document depending on how you have designed your outline.

The Outline Editor lets you create and modify an outline by linking new or existing documents, moving or copying existing documents, removing document links, and so on. You can also display conceptual and introductory content such as web pages, packages, and URLs or document properties such as Last Modified Date, Role, State, and so on.

2.2.4.2 Topic Editor

The Topic Editor is used to edit the frame content of a recorded topic.

2.2.4.3 Web Page Editor

The Web Page Editor allows you to create web pages that include formatted text and graphics, sound, as well as hyperlinks to other documents, images, or web sites. You can then use any web page that you create and link it to a module, section, or topic document as conceptual or introductory material or to any topic frame as supplemental transactional information.

The Web Page Editor provides basic formatting capabilities such as:

- Text formatting including bold, italics, underline, and font selection
- Paragraph alignment including left, right, centered, and justified
- Graphics support
- Hyperlinks to other documents, web pages, web sites
- Sound recording and editing

You can use the Outline and Topic Editors to link a web page to documents in the outline or individual frames in a topic.

2.2.4.4 Package Editor

The Package Editor lets you import one or more files (such as a web site, image, Microsoft Word document, PowerPoint presentation, and so on) into a package in the content Library. You can then use any package that you create and attach a file to a module, section, or topic document as conceptual or introductory material, or to any topic frame as transactional information.

The Package Editor lets you manage a package that you create by:

- Adding or removing files/folders in a package
- Navigating folders in a package
- Renaming files in a package

You can use the Outline and Topic Editors to link a file in a package to documents in the outline or frames within a topic.

2.2.4.5 Role Editor

The Role Editor is where you define a list of roles that can be used to filter topics in the Player.

2.2.4.6 Glossary Editor

The Glossary Editor allows you to create a list of terms and links to other documents such as web pages that contain their definitions.

2.2.4.7 Assessment Editor

The Assessment Editor allows you to design and edit assessments. The toolbar contains icons for linking new questions and existing questions, deleting question links and changing question order.

2.2.4.8 Question Editor

The Question Editor allows you to design questions that test student knowledge. You can create six types of standard questions or develop user-defined questions in other software applications and link them into the Developer.

Questions can exist as standalone documents in an outline or grouped together in an assessment. Questions can also be created in a Library so they can be reused.

2.2.4.9 Document in Use Message

As you open and edit documents in the various document editors, you should note the following document editing concurrency rules:

- If a document is edited in one document editor, it cannot be modified in any other document editor or the Library or deleted. For example, if you have a web page open in the Web Page editor, you cannot rename or delete that web page from the Library. Or, if you edit a module in one Outline Editor tab but that same module is open in another Outline Editor tab, you can edit the module only in the first Outline Editor tab in which you initiated editing. A "Document in Use" message is displayed in any such document editing concurrency scenario.

- Editors other than the Outline Editor (such as Web Page, Package, and Topic Editors) lock the document as soon as it is opened. Once a document is locked it cannot be changed until you close the editor.

  The Outline Editor is different from the rest of editors in that it edits multiple module/section documents. Note that, from this perspective, the root outline document is co-equal with the other module/section documents in the outline. Since a section can be part of multiple outlines, the same section can be present in multiple Outline Editors simultaneously.

- The Outline Editor does not lock the module/section documents in the outline when they are displayed or expanded. It locks them before it executes the first operation that modifies them (add or remove links to it, rename it or do anything that actually changes the document). If you create a section in an Outline Editor, the new document is created but it is not locked, but as soon as you insert something into the new section, it is locked. If you unlink the new section from the module, the document still remains locked because you can undo the unlink and then undo the changes you made to the document.

2.2.5 Link Related Documents

As you create documents, you can also link them together to form a basic content outline. For example, you might start with a module document and link several sections to it. Then, for each section, you can link one or more topics that demonstrate how to perform a series of specific tasks or transactions in an application. This is just one example of how you could link and structure content, but you have the flexibility to design it in many ways to meet your needs. For example, you could also start with a section document and link topics or other module documents to it.

As you build an outline for your content, you may also want to supplement it with conceptual information in the form of web page or package links. For example, any module/section or topic can have a link that appears as conceptual or introductory information for the document. This link can be a specific page of a web site on the Internet, a custom web page that you create within the Developer, a Microsoft PowerPoint presentation, Microsoft Word document, Flash movie, and so on. Your users can view this content from the Player once you publish the content. These are just two examples of how you can build content by creating and linking documents.

At any time you can review the links that a document contains by displaying the Related Documents toolpane or by adding the Link count or Links to property columns to the Library.

Related Document Definition by Operation

As you begin to work with the Developer, you will notice that there are many document functions that consider the inclusion of related documents such as delete and export (as well as check in/out and restore in a multi-user environment). Based on the function that you perform, different related documents are considered. For example, when you delete a module, you can also request to delete its related sections and topics. However, the module is also linked to a template and deleting a template does not make sense since a template is usually linked to many different documents in the Library. Therefore, when you delete a document and choose to include related documents, linked templates are not considered.

When you perform an operation that can impact related documents, you see a prompt asking whether you want to include the related documents as well as a View related documents hyperlink to display a list of related documents.

Note: Regardless of whether a document is included as a related document, it can always be explicitly selected, thus ensuring that it is included in the operation.

2.2.6 Reuse Documents

As you begin to build your content Library, you may find a need to reuse documents in multiple outlines. Any document that you create can be reused across multiple outlines. However, please note that any changes you make to the document are reflected in all instances where they appear. For example, if you reuse a section document that has several topics across many modules, any changes you make to the section are reflected in each module that includes the section. Changes could be as simple as a rename of the section or include additional topic links. If you do not want changes to impact other areas of reuse, then you should copy the document and use the various Paste or Paste Special options to create additional documents.

2.2.7 Document Properties

Documents have specific properties that provide additional information about the document. There are two types of properties: calculated properties that are automatically set and changed by the Developer and editable document properties that can be manually set and changed by an author.

Calculated properties provide useful information about documents. For example, every document has a unique ID, document type, creation date, and link statistics showing the number of links to and from the document. These properties appear when you are working in the Details View from the Library or the Outline Editor.

Documents such as modules, sections, topics, web pages, packages, questions, and assessments also have editable properties that impact functional aspects of the document. For example, properties for a topic include glossary, language, screen resolution, template, application, play modes, Know It? options, documentation fields, and so on. The properties you set are saved with the history of the document and travel with it on operations such as export and import. These properties appear on the Properties toolpane.

Multi-user Considerations

- In a multi-user environment, additional document properties appear that display the name of the author who has checked out the document for editing and their computer name.

2.2.8 Undo/Redo Actions

As you work with documents in the various document editors, you may find it necessary to undo or redo the editing actions that you perform. Most document editors provide an Undo and Redo command on the Edit menu for just this purpose. For example, in the Outline Editor

you can undo the linking of any document in the outline, undo the deletion of links, and so on. If you are working on a web page, you can undo the addition or editing of text, as well as any formatting commands that you perform. You can also redo actions in the same way.

There is no limit to the number of actions you can undo/redo in most document editors. However, undo/redo in the Topic Editor is limited.

Important Note: Undo/Redo is not available from the Library or the Package Editor. Also note that you cannot undo glossary term links that are created using the Update Glossary Links command.

Multi-user Considerations

- If you perform any action that requires a parent document check out such as Link New Topic (from the Outline Editor), when you undo this action, the parent document check out is NOT undone.

  Any action that involves document versioning/history cannot be undone. These actions include check in, check out, delete, restore, and rollback.

To undo/redo an action:

1. Perform an action that can be undone.
2. On the **Edit** menu, choose **Undo** or **Redo** depending on the action that you want to perform. Some editors such as the Outline Editor display the name of the action that can be undone; for example, Undo Document Rename.

2.3 Set Developer Defaults

The Developer provides a set of default settings that affect the appearance of the content that you create, as well as other settings for content preview, player and recorder behavior, spell check, and so on. Before you begin to create content, you should, at a minimum, review the settings in the Content Defaults category since these settings impact the appearance of any newly created content.

The Options dialog box (from the Tools menu) displays the categories that you can use to configure default settings for the Developer, Player, and the content that you create.

When you click on a category, the options appear in the frame on the right. Some categories such as Content Defaults have subcategories that list additional options. Click Apply when you want to save your settings for a category and then move to another category.

Restore Defaults

You can reset any option to the original defaults by clicking the Restore Defaults button at the bottom of the options frame. This only resets the options for the category you are viewing and does not change the settings for any other category. To reset the defaults for another category, you must display the options frame for that category and then click the Restore Defaults button.

2.3.1 General Developer Settings

Use this page to configure the following general Developer default settings:

- Image Editor: Use this option to specify the program used to edit topic frame screenshots. The image editor that you configure here is launched when you use the Edit Screenshot command from editable frames in the Topic Editor. You can enter the full path of your image editor, or you can use the Browse button to select the executable file.

- Do Not Ask Again: There are several dialog boxes in the Developer that display a Do Not Ask Me Again checkbox that allows you to suppress their display. Use this option to reset all dialogs that provide this option to the original installation defaults.

2.3.2 Library Settings

Use this page to configure the following default settings for the Library:

Automatically save changes every: Allows you to set the time interval that the Developer uses to automatically back up open documents. If the Developer unexpectedly terminates while you are editing a document, you can recover the last backed up copy of the document. See the content later in this topic for details. When you restart the Developer, the Recovered Documents dialog box lists any documents that have been recovered. You have the option to discard the recovered documents (reverting back to the last explicitly saved version) or open all recovered documents in their appropriate editors. When you open a recovered document, the word "(Recovered)" is appended to the name of the document in the editor tab as a visual indicator that the document is recovered. The "Recovered" indicator is not actually part of the document name and is removed when you save or close the document.

Do not use AutoRecover as a substitute for regularly saving your work by clicking Save.

Note: The Developer does not autosave package documents.

An action is required to resolve any recovery situation. These situations, actions and the resulting behaviors are described below:

Document was previously saved and an autorecover copy exists that the author wants to save.

Save: The autorecover copy becomes the current version and the older autosave version is discarded.

Document was never saved but the author wants to save the autosave copy.

Save: The author is prompted to provide a document name and save the document. The saved document becomes the latest version and the autosave is cleared. If the Developer unexpectedly terminates before an autosave was created, the document is lost because there is no copy to revert back to.

Author chooses to save an autosave copy by another name.

Save As: A copy of the autosave document is saved as the user supplied name and the autosave copy is discarded. Since it is a copy of the original, documents linked to the newly saved document (for example, the Section linked to the Topic), must be linked again.

Author chooses to discard an autosave document

Close: If the document is closed without being saved, it reverts back to the last explicitly saved version and the autosave is cleared.

Multi-user Considerations

- When the author chooses to save an autorecover document, the Developer checks out the document if necessary and replaces that version with the autorecover version. The author can then check in the new version.

Scan for Lost Documents: This option scans for problems in the local copy of the Library and tries to recover any documents that are not part of the Library. You should not have to run this scan unless you are experiencing problems with documents in the Library. Contact technical support for more information on recovering lost documents.

Multi-user Option: Available Disk Space

- This option controls the amount of disk space that is allocated to cache library documentation on your computer.

  Use the Clear Now button to remove checked in documents from your local cache and restore used disk space. This button only removes documents that exceed the Available Disk Space setting.

Multi-user Option: Network Connection

- This option is used to tune the software's performance based on the available bandwidth. At the high setting, the Developer waits less time before assuming the connection to the server has timed out. If you experience the Developer going offline unexpectedly or timing out on server operations, consider using the lower setting.

2.3.3 Content Defaults

This category allows you to configure the default properties for newly created documents. These properties control how your content appears when published. Content Defaults serve as the basis of a common style guide among the authors and can be shared between authors using the import and export content default options.

Tip: It is recommended that you set the content defaults before you add documents and record content. When the content defaults are changed, existing documents are NOT affected and continue to use the defaults that were in effect when those documents were created.

2.3.3.1 General Defaults

Use this page to configure content settings. You can override these defaults when you add each of the documents or by editing the document properties.

- **Language**: This setting controls the language assigned to a document.
- **Template**: Sets the default template language for module, section, and topic documents.
- **Screen Resolution**: Sets the default screen resolution for module, section, and topic documents.
- **Base URL for Previewing Relative Hyperlinks**: This setting is used by the Developer to find content links using Relative URL's. Set this URL to the deployment location's absolute URL. The Developer appends any relative URL's to the base URL to find the relative linked content for preview.
- **See It! Frame Delay**: The frame delay controls the amount of time that elapses between the appearance of the frame and the start of the action. The delay gives the user time to read the text in the bubble before the action starts. You can either select from the Frame Delay list or manually enter a delay time. If you choose the 0 or skip option, action frames immediately start playback of the action and non-action frames are skipped.

  The Infinite option means a user must advance the frame manually. The bubble displays the text "Press Enter to continue." The user must press ENTER to advance to the next step.

  If sound is present and Infinite is selected, the user must press Enter to continue. If sound is present and any other frame delay is selected, the frame advances automatically after the sound playback is complete.

- **Know It? Required Percentage**: Know It? mode is a play mode that enables users to test knowledge gained from training. When a topic is played in this mode, the user is expected to complete a task with little or no assistance in a simulated environment. Upon completion of the task, the user receives a score. This option is the percentage of all the steps within the task the user must answer correctly to pass. You can also change this percentage for an individual topic using the Properties toolpane.

- **Know It? Remediation**: When users fail to complete a step in Know It? mode, they can see up to four levels of remediation. By default, all four remediation options are active for any new topic that you create. You can configure the default settings for the first three levels, but the fourth level is always required. See *Remediation Levels* in Topic Properties for a definition of each level. These settings do not affect converted content. For example, if you make remediation level configuration changes first and then convert content, the converted content will have all four levels active (default settings).

2.3.3.2 Recorded Content Defaults

Use this page to configure the following defaults for recorded content:

- **Automatically record keyboard shortcuts**: While you are recording content, the Developer can automatically capture keyboard shortcuts for menu items in standard Windows menus. The Developer determines the shortcut using underlined letters in the menu name. When you record keyboard shortcuts, it is the same as recording an Alternative Action. In the Player, the keyboard shortcut appears as the Alternative Action for the current step in Try It! mode. In the Player, users are marked correct if they use the keyboard shortcut for a step in Know It? mode. Deselect this option if you do not want to capture the shortcuts in recorded content.

- **Enable automatic recording**: If enabled, the Developer can create "incremental" screenshots automatically as you drag the mouse. This process is called automatic drag and drop recording. If you do not want the Developer to automatically capture the "incremental" screenshots, deselect this option. When automatic drag and drop recording is disabled, you need to press PRINTSCREEN (or the designated screen capture key) to capture the "incremental" screenshots as you drag.

- **Distance between screenshots in pixels**: The Distance between screenshots option allows you to specify how far the mouse must move before another screenshot is captured.

- **Action area size in pixels**: The Action area size option allows you to control the size of the action area for each frame captured during the drag action. The area size is also the default size used for an action area that the Recorder recognizes as a Universal Object, Workspace, Window, or Active X object.

2.3.3.3 Bubble Defaults

This option allows you to configure default settings that control the visual display for bubbles that appear in all frames OTHER than the Introduction and End frames.

These defaults are in effect when you create and record new topics; however, you can override any of these bubble attributes when you edit a topic in the Topic Editor.

Note: You can control the default settings for the Introduction/End Frame bubbles using the Introduction/End Frame option.

Use the following options to configure the visual attributes of the bubbles. The sample bubble that appears in the center of the pane reflects the current default settings and automatically changes as you edit the settings.

- **Bubble icon**: Choose an icon that appears inside of the bubble.

- **Pointer position**: Choose from the various pointer positions for the bubble.

- **Font**: Choose the font, font style and size for the bubble text. If you are using an expanded font, such as Arial or Times New Roman, you can choose from an extended list of language characters, including Greek and Russian (Cyrillic), if available in the Script field.

- **Background color**: Choose the bubble background color.

- **Use Template Text**: The Developer uses template text to automatically generate bubble text as you record an application. The template text varies depending on the keystroke or mouse action you performed during each step. If you deselect the Use template text option, the templates are disabled, and the bubbles are empty after recording.

  If you decide to use templates, you can also add your own (custom) text to the bubble. By default, this text appears before the text that is populated by the template. The Show template text first option allows you to switch the order and have custom text appear after template text.

2.3.3.4 Introduction/End Frame Bubble Defaults

This option allows you to configure default background color and text font settings that control the visual display for the bubble that appears in the Introduction and End frame only. These settings also affect the appearance of the Introduction pane in the Developer and the Player.

Tip: If you want to control the background color and text font that appears for content displayed in the Concept pane, you should create and link a web page as the concept. In this way, you can also create a consistent appearance for content that appears in both panes.

These defaults are in effect when you create and record new topics; however, you can override any of these bubble attributes when you edit a topic in the Topic Editor.

Note: You can control the default settings for other bubbles using the Bubble option.

Use the Font and Background color options to configure the visual attributes of bubbles.

2.3.3.5 String Input Defaults

As you record content, one of the action types you record is a string input. This action occurs when you are typing text in a document or in a field in a dialog box. When a user plays the topic in Try It! mode, the user must enter the specified text to move to the next step.

You can change the look of these string inputs using the Font and Background color options to better simulate the application in which you are recording.

2.3.3.6 Glossary Defaults

Glossary terms can appear in bubble text, Introduction/End frame bubble text, and web page text.

When a glossary term appears multiple times in one location, only the first occurrence is hyperlinked after you perform the Update Glossary Links command. You can, however, select the Every Occurrence Of The Term option to have a glossary term hyperlinked whenever it appears in custom bubble text, Introduction/End frames, or web pages, regardless of the number of times the term appears.

2.3.3.7 Web Page Defaults

Use these options to preset the font name, size and background color for any web page that you create. You can also change these settings as you edit a web page using the Web Page Editor.

2.3.3.8 Assessment Defaults

Use these options to set the defaults to be used for new Assessments.

Passing score percentage: Set the minimum percentage of questions a user must get correct to demonstrate understanding of the subject matter to pass the assessment.

Question order: If the option is set to As authored, questions are presented in the order in which they were created in Developer. If set to Random order, the questions are presented in a different order each time the assessment is taken.

Answer order: If the option is set to As authored, answers are presented in the order in which they were created in Developer. If set to Random order, answers to multiple choice or matching questions are provided in random order. The answers appear in a different order each time the question is presented. For multiple choice (single answer) questions that include All of the above and/or None of the above, these answers remain in their positions at the bottom of the list of choices.

Remediation: Determines the type of feedback users receive on their responses to questions.

The following describes the five types of feedback. Remediation text appears only if it was created for the question in Developer.

- **Always**: The feedback window always displays the correct answer and remediation text.
- **Incorrect**: If the user's response is incorrect, the feedback window displays the correct answer and remediation text. If the user's response is correct, the word “Correct” appears in the feedback window.
- **User Asks**: The feedback window displays the word “Correct” or “Incorrect,” along with a Show Answer link. When this link is clicked, the correct answer and/or any remediation text appears in the feedback window.
- **Results Only**: The feedback window only displays the word “Correct” or “Incorrect.”
- **None**: No feedback provided.

Show associated content: The Associated Content link displays if this property is set, the content is selected on the Associated Content property for the question, and the Show Associated Content property is set to Yes on the assessment. Associated content can be used to create personalized content (available only in the Professional edition).

Display results summary after completing the assessment: When the Show summary at the end of assessment option is enabled, users will see an Assessment Summary page after they complete an assessment. This page displays the assessment results, which include the number of questions in the assessment and of those, the number correct, along with the user's score as a percentage. This page also displays a breakdown of each major section and the user's score for each. It also displays a list of the questions answered correctly and incorrectly.

If the Do not show summary at end of assessment option is enabled, the Assessment Summary page does not appear upon completion of an assessment, nor can a user access it later.

When the assessment is used to create personalized content from the Knowledge Center, this setting is ignored and the summary is always displayed. The Summary option is automatically selected and cannot be deselected. The Summary option is automatically enabled as the Assessment Summary page enables a user to configure his/her personalized content. When the personalized content is enabled, checkboxes appear to the left of each section listed, allowing a user to choose which sections appear in the personalized content.

2.3.3.9 Sound Defaults

Sets the topic play modes in which sound should play. For example, if See It! mode is turned off, no sound plays in See It! mode.

For new content, See It! and Try It! are set on by default. These modes can be turned off for new content by deselecting either or both modes. Existing content created in an earlier version of the Developer may also have Do It! on by default.

2.3.3.10 Export/Import Tools Options Defaults

After you configure the options in the Content Defaults, Documents, Player, Preview, and Target Applications categories, you can share these preferences with other authors. This is particularly useful in workgroup environments where multiple authors are working on the same content that requires consistent output regardless of who authored the content. In this scenario, you can create a "master" set of Content Default options, export the settings, distribute the options file to the other authors, and then have all authors import the master options into their Developer installation.

To export content defaults:

1. Configure the Content Default options that you want to export. Only the settings defined for the Content Defaults, Documents, Target Applications, and Player categories are exported.
2. On the **Tools** menu, point to **Export** and choose **Content Default Options**.
3. Browse to where you want to store the exported options file.
4. Type a name for the options file and click **Save**. You should distribute the options file (.ops) to the authors that need to import the standard settings.

To import content defaults:

1. On the **Tools** menu, point to **Import** and choose **Content Default Options**.
2. Browse to where the exported options file is stored. To import content defaults, you need to know the location of the exported content defaults file (.ops).
3. Select the file and click **Open**.

2.3.4 Document Defaults

You can configure options for each document output that are in effect whenever you preview documents from the Developer. These options are also used as the defaults when you publish documents for the first time; however, you can also override these options from the Publishing Wizard.

From the Outline Editor only, you can publish or preview the following documents for any topic:

- System Process
- Job Aid
- Training Guide
- Instructor Manual
- Test Document

- Test Case (publish only)
- Test Results
- Presentation

2.3.4.1 Options for Document Outputs

The following lists show the available Document Output options and the applicable Document formats to which they apply.

- **Text mode**: Each document output uses the text from a specific mode. Use this option to specify the mode text to use.

  Applicable formats: System Process, Job Aid, Training Guide, Instructor Manual, Test Document, Test Case, Presentation

- **Include screenshots**: Screenshots are included in a document based on the settings for the topic in the Topic Editor. This option allows you to override those settings and choose to include one screenshot per topic, one screenshot for each frame, or no screenshots.

  Applicable formats: System Process, Job Aid, Training Guide, Instructor Manual, Test Document

- **Convert screenshots to 256 colors**: Reduces the number of colors used in the screenshots, which therefore reduces the size of the published topics and improves the playback speed.

  Applicable formats: System Process, Job Aid, Training Guide, Instructor Manual, Test Document, Presentation

- **Include alternatives**: Alternative Actions and Paths appear in document and Presentation outputs. Disable this option to make the output simpler, with only one set of steps.

  Applicable formats: System Process, Job Aid, Training Guide, Instructor Manual, Test Document, Test Case, Presentation

- **Include images from packages**: Images appear if they are attached to a frame or to the concept pane.

  Applicable formats: System Process, Training Guide, Instructor Manual

- **Include images in web pages**: Images appear if they are attached to a frame or to the concept pane.

  Applicable formats: System Process, Training Guide, Instructor Manual

- **Include relative links**: Disable this option to exclude relative links from printed output.

  Applicable formats: System Process, Job Aid, Training Guide, Instructor Manual, Test Document, Presentation

- **Include assessments**: Disabling this option excludes assessments.

  Applicable formats: Training Guide, Instructor Manual

- **Include questions**: Questions in the content are included in a Training Guide or Instructor Manual. In addition, answers are included in the Instructor Manual. Disabling this option excludes questions.

  Applicable formats: Training Guide, Instructor Manual

- **Group actions by context ID**: Each action appears in a separate row in the Test Procedure table. When you select this option, the actions with the same context ID are grouped together into one test step.

  Applicable formats: Test Case

- **Include action areas**: In the Player outputs, a marquee - or highlight - appears around the action area for each frame. You can choose to include this marquee. You can also change the color of the marquee. This setting does not affect the marquee color for the Player outputs.

  Applicable formats: Presentation

- **Action area color**: Clicking the icon next to the color opens the Color dialog box, used to change the outline box color. The action area only appears if the Include action area option is on.

  Applicable formats: Presentation

- **Output format**: Published output can be in Microsoft Word, Adobe Acrobat PDF format or HTML Web Page.

  If you choose Adobe PDF format, the document is published to Word first and then converted to PDF. If you choose HTML Web Page format, the document is published to Word and then saved as a web page using the Web Page, Filtered option in Word. This creates a single HTML file, but all of the graphics are separate, linked files.

  Note for Adobe Acrobat: If you are using Microsoft Word 2003, you must have Adobe Acrobat 8.0 (or greater) Standard or Professional edition installed to create PDF output. After Adobe Acrobat is installed, make the following changes to the PDF conversion settings in Microsoft Word: From the Adobe PDF menu, choose Change Conversion Settings, and deselect the View Adobe PDF result and Prompt for Adobe PDF file name options. If you are using Microsoft Word 2007 or higher, it has built-in support for Adobe Acrobat, so a separate installation of Adobe Acrobat is not needed.

  Applicable formats: System Process, Job Aid, Training Guide, Instructor Manual, Test Document

- **Microsoft file type**: If you choose the Microsoft Word output format, you can use this option to indicate whether you want the documents to be in .doc (Word 2003) or .docx (Word 2007) format. For a Presentation format, you can choose a .ppt (PowerPoint 2003) or .pptx (PowerPoint 2007) format. For a Test Case format, you can choose an .xls (Excel 2003) or .xlsx (Excel 2007) format.

  Applicable formats: System Process, Job Aid, Training Guide, Instructor Manual, Test Document, Test Case, Presentation

- **Paper size**: The paper size is set based on the Location setting in the Regional & Language options for your operating system locale. You can override this setting by choosing a different paper size. If you customize the print template to have a special paper size (for example, to print Job Aids on smaller cards), choose the option to use the print template setting; otherwise, it will be overridden during publishing.

  Applicable formats: System Process, Job Aid, Training Guide, Instructor Manual, Test Document

- **Use encoded folder and file names**: Publishes the content using the document GUID instead of actual module, section, and topic names. Encoding shortens path names and prevents the possibility of duplicate file name in the published output. This option makes it more difficult to identify the source based on the file name.

  Applicable formats: System Process, Job Aid, Training Guide, Instructor Manual, Test Document, Test Case, Presentation

- **Format**: Use to select the Test Case output format. Options include Oracle Application Testing Suite (default), IBM Rational Quality Manager, HP Quality Center, or Other (which contains all available data in the report). Other can be used to get the data into a spreadsheet such as Excel.

  Applicable formats: Test Case

2.3.4.2 System Process Document

This format is useful for creating documents that not only include the procedures and conceptual information for system processes, but also contain information relating to intended audience, roles and responsibilities, document status, versions, and dates. Each topic is published to a separate document which includes a concept page, with information about the document and task, and the procedures for completing the task.

2.3.4.3 Job Aid

This format results in a quick reference guide, enabling users to view only the procedures for completing a task, without conceptual information. Each topic is published in a separate document which includes only the procedures for completing the task.

2.3.4.4 Training Guide

This format allows instructors to create manuals quickly for Instructor-led training. The document includes a title page, copyright information, table of contents, conceptual information, and procedures for completing all tasks included in the published outline.

Questions and/or assessments in the content are included in the Training Guide when the Include questions and/or Include assessments options are set. Note that answers to questions do not appear in the Training Guide but do appear in the Instructor manual.

In addition, if the content you publish contains glossary markups, then a glossary is included at the end of the document.

Warning! Be aware that when you publish a Training Guide, your entire selection is published as one document. If you publish a large amount of content at one time, you may encounter memory problems with Microsoft Word. Consider publishing your content in smaller chunks and then merge the contents of each Microsoft Word file after publishing from the Developer.

2.3.4.5 Instructor Manual

This format allows instructors to publish the Training Guide including instructor notes. The instructor notes are inserted in the document per topic, after the Concept, and before the Procedure. An Instructor Note heading appears in the output in the same style as Procedure text. The instructor notes are formatted like web page attachments (indented 1/2 inch from the margin in a box with a rule and shading). This is designed to make the notes stand out from the other text. The outside margin is adjusted to 2.5 inches. This allows instructors room to write their own notes.

Questions and/or assessments as well answers to the questions are included in the Instructor Manual when the Include questions and/or Include assessments options are set.

Warning! Be aware that when you publish an Instructor Manual, the entire selection is published as one document. If you publish an entire outline, the document could be very large, and you might experience problems with Microsoft Word.

2.3.4.6 Test Document

This format allows you to create documents for testing software applications. Each topic is published to a separate document. The document includes the purpose of the test, test history, time to test, test setup, and test procedure. The test procedure contains the steps for completing the task.

2.3.4.7 Test Case

This format allows you to create files that can be imported into testing software applications such as Oracle Application Testing Suite (OATS), HP Quality Center, or IBM Rational Quality Manager. If you select multiple items in the outline, the published output is combined into a single file with each topic separated by a blank row. This file can then be imported into the testing software in a single operation.

Only topics with content are included in the output; empty topics do not appear. In addition, modules and sections are not included in the output. The output is an Excel Workbook file, either .xlsx or .xls. Be sure to choose the correct version to import into your testing suite application.

Note: To export output from Microsoft Excel into HP Quality Center, you need the HP Quality Center Microsoft Add-in installed. See the *HP Quality Center* documentation for more information.

Alternative paths and actions are not included in this format, but you can change the publishing option to include them. Decision frames are automatically included and cannot be suppressed. You can edit the output in Microsoft Excel to remove any unwanted Decision frame material. Explanation frames are not included.

If context ID information is available for a frame, it is included at the end of the Action cell. The type of information will differ or may not appear, depending on the target application of the topic.

When you publish the Test Case format, you can choose from four formats: Oracle Application Testing Suite, HP Quality Center, IBM Rational Quality Manager, and Other. Each Test Case output format has a template that contains the appropriate columns. This template is called ColumnSpec.xml, and it can be customized to meet your output needs. The templates are stored in the Library under Publishing\Styles. There is a separate .xml file in each language folder. See *Customize the Test Case Output* in the Publish Content chapter for more information.

2.3.4.8 Test Results

This format allows you to create Word documents with steps and comments recorded during product testing using Record It!. Each topic is published to a separate document. The document includes the topic name, the status, the owner, the steps to complete the task, and any author notes.

2.3.4.9 Presentation

You can configure options for the Presentation output that are in effect whenever you preview a Presentation from the Developer. These options are also used as the defaults when you publish a Presentation package for the first time; however, you can also override these options from the Publishing Wizard.

2.3.5 Player Defaults

You can configure the following Player options that are in effect whenever you preview the Player modes from the Developer. This allows you to preview topics directly from the Developer in a Player environment that emulates what your users experience when they play your content from their Player environment. These options are also used as the defaults when you publish a Player package for the first time; however, you can also override these options from the Publishing Wizard.

- **Convert screenshots to 256 colors**: Reduces the number of colors used in the screenshots, which therefore reduces the size of the published topics and improves the

playback speed.

- **Create links for backward compatibility**: If you have created web pages or HTML links to content from a previous version, use this option to generate a folder structure that will allow you to keep the existing links without needing to update them. After you publish, open the folder in which you published the content and rename the Linked_folders directory to match the name of the application folder from the previous version. For example, in a previous version, you published a Player package for the WordPad application. Within that Player package, there is a folder called WordPad, in which all the content is located. If you convert that title to the current version and republish it to a Player package using the backward compatibility option, you would rename the Linked_folders folder to WordPad. The pages within this folder will redirect your existing links appropriately into the new content structure.

  Note: If you want to use this option, the module names in the content you publish MUST be unique, as the module name is used to determine the folder name.

- **Include HTML Web Site**: You can choose to include the HTML Web Site format when you publish to the Player. The HTML format is contained in a folder called html within the PlayerPackage folder. If this folder is present, the HTML Web Site format will launch if a user has a browser that is not supported by the Player.

- **Create zip file from published Player package**: You can create a zip file of the Player package in the published content folder. The zip file is created at the same level as the PlayerPackage folder. This option is helpful if you want to import the content into an LMS.

- **Include Test It! mode:** This option adds Test It! mode to the Player. Test It! mode is used to guide a tester through a test case and record the steps that are used to create a Test Document used in bug reporting. Test It! mode is launched from kp.html. When Test It! mode is included, all topics are published, no matter what other modes are enabled.

- **Sound**: By default (Medium), sound files are included in any of the Player formats at the medium playback quality. You can select one of three sound playback quality settings; Low (5.5 kHz), Medium (11 kHz), or High (22 kHz). Medium produces sound files (.FLV) in the published output roughly double that of the Low setting. High produces published sound files (.FLV) roughly double that of the Medium setting. Sound playback can be excluded by changing the setting to None.

- **Format for Print It! mode**: If you enable Print It! mode for topics using the Play Modes property, you can use this option to determine which document style is included when you publish formats that support Print It! mode. Choose "none" if you do not want publish Print It! mode (even when this mode has been enabled for topics). By default, Job Aid, System Process and Test Document are the only options for Print It! mode. However, the Training Guide and Instructor Guide can appear as choices by editing the Style.xml file for the appropriate publishing project document. If you want a publishing style to appear as a choice, modify the PrintItStyle Setting of the Style.xml file to have a value of 1.

Presentation Options

- **Marquee color**: Set the color for the action area (or highlight) that appears in See It!, Try It! and Do It! modes.

- **Play audio**: You can set how audio plays on the Player. The All available sound option (default) plays any available sound files during playback. The Keyboard and mouse clicks options play only keyboard and mouse clicks sounds during playback in See It! mode. These sounds are FLV files, delivered in the Audio folder of published content, that play automatically when keyboard and mouse clicks occur in See It! mode playback. The No Sound option disables sound during playback. The user must have

Flash 9.0 or greater installed to play sound in the Player.

- **Show introduction text**: This option controls whether the Introduction frame appears when a topic is played in the Player. Select this option to show the Introduction frame as the first frame during playback and deselect it to suppress the frame.

- **Enable users to change their Player preferences**: If you enable this option, the Player will include a Preferences link that enables any user to change the settings. If you disable this option, the Preferences link does not appear in the Player.

- **Enable skipping in Try It! mode**: Select this option to enable the user to advance to the next step in Try It! mode by pressing Enter instead of performing the action in the bubble.

- **Enable Direct Do It!**: When a user launches Player content in a context-sensitive manner from a target or web application and only one topic is returned, the topic is automatically launched in Do It! mode when this option is on. Note that the topic must also be configured for Do It mode using the Play modes property. You can close Direct Do It and display the full TOC with the View Outline link on the Action menu.

- **Key combination for advancing in Do It! mode**: Configure a key combination for advancing to the next step in Do It! mode.

- **Default play mode**: This option controls the default mode launched when double clicking on a topic in the outline.

- **Enable the forward and backward outline navigation buttons**: This option places navigational arrows in the outline of the Player. Use these arrows to move up and down the outline.

2.3.6 Preview Defaults

Use this page to configure the default publishing style used for previewing documents from within the Developer and options for displaying content in the Concept pane of the Outline Editor.

Publishing Styles

- **Category:** This option controls the category of publishing projects that is used when you preview any of the output formats. By default, the Developer includes one category of publishing project but you can also create your own by copying and modifying the delivered publishing projects, or by importing publishing project documents from another author. If you do this, you can then use this option to choose the category that you want to use when you preview a document.

  The list of styles that appear in the Preview toolbar list is determined by the category selected here and the language of the content. If there are no styles that can be previewed based on the selected language, then the language of the Developer is used. If there are no styles that can be previewed based on the language of Developer, then the Preview toolbar is disabled. Also note that the Preview list appears in the language of the Developer.

Outline Editor

- **All:** This option allows you to control the display of linked content in the Concept pane of the Outline Editor Player view as you navigate through documents in the outline. You can use this option to prevent the Developer from opening Microsoft Word or Adobe Acrobat when viewing content in the Outline Editor.

- **Packages:** This option allows you to control the display of linked content from packages in the Concept pane of the Outline Editor Player view as you navigate through documents in the outline. This option is very useful if you have linked multimedia-based content that you do not want to launch and play as you navigate through an outline. By default, any linked document in the Concept pane displays as you click a document in the outline. However, you can turn off the display of linked content in packages. If you turn off the display of linked content in packages, a message appears in the Concept pane of the Outline Editor telling you how to preview the content by clicking on the Concept pane toolbar.

- **Web Pages:** This option allows you to control the display of linked content from web pages in the Concept pane of the Outline Editor Player view as you navigate through documents in the outline. This option is very useful if you have linked multimedia-based content that you do not want to launch and play as you navigate through an outline. By default, any linked document in the Concept pane displays as you click a document in the outline. However, you can turn off the display of linked content in web pages. If you turn off the display of linked content in web pages, a message appears in the Concept pane of the Outline Editor telling you how to preview the content by clicking on the Concept pane toolbar.

- **URLs:** This option allows you to control the display of linked content from URLs in the Concept pane of the Outline Editor Player view as you navigate through documents in the outline. This option is very useful if you have linked multimedia-based content that you do not want to launch and play as you navigate through an outline. By default, any linked document in the Concept pane displays as you click a document in the outline. However, you can turn off the display of linked content from URLs. If you turn off the display of linked content from URLs, a message appears in the Concept pane of the Outline Editor telling you how to preview the content by clicking on the Concept pane toolbar.

2.3.7 Recorder Defaults

Use this page to configure the following Recorder defaults:

- **Screenshot Recording:** use the following options to control the mode of the recorder during recording:

  Manually record screenshots: Default recorder behavior that requires a PRINTSCREEN to capture a screenshot and another PRINTSCREEN to capture the associated action.

  Automatically record screenshots: Recorder behavior that requires a PRINTSCREEN to start the recording process and a PRINTSCREEN to end the recording process. All frames and actions (with the exception of point events) that occur between the two PRINTSCREENS are recorded.

  Tip: Automatic recording should be used when you know the system process you are going to record well. Since Automatic recording records every action you perform, it will also record any actions you perform inadvertently or incorrectly. You will then have to edit the topic in the Topic Editor to correct any errors. Since Manual recording requires you to press PRINTSCREEN after each action you perform, you have the opportunity to rehearse the next step without it being recorded. If the action you performed does not give the desired result, you can immediately correct it by performing the correct action before you press PRINTSCREEN.

  Time in seconds to hide recorder window before screen capture: As you record a topic, the appearance of some screens in the target application may change after a certain amount of time has elapsed. For example, some menus expand to display additional options after the mouse pointer hovers over the menu for a few seconds. To capture the correct screenshot, you can set a delay time between hiding the Recorder and capturing the screen.

- **Screenshot capture key:** By default, the Recorder uses the PRINTSCREEN key to capture screenshots and actions for a topic. If the PRINTSCREEN key is difficult or inconvenient for you to use, you can change the Recorder screenshot key. You can use any of the function keys, or a combination of any of the function keys (F1 through F12) and the ALT key, CTRL key, and/or SHIFT key.

  If you change the Recorder screenshot key, you should select a key or key combination that is not used in the target application for another purpose. For example, pressing the F1 key in some applications opens a Help window. Therefore, for those applications you would not want to use the F1 key to capture the screenshots.

- **Sound Recording:** Use these options to control how sound is recorded with a topic.

  Record sound with topic: By default, the recorder is not set to record sound with a topic. Click this option to enable sound recording on the Recorder. The display of the Recorder depends on the state of this option and the Screenshot capture mode (Automatic or Manual). See *Recorder Logic* for more on Screenshot capture mode.

  Pause Sound recording key: By default, the Recorder uses the PAUSE key to pause sound recording for a topic. If the PAUSE key is difficult or inconvenient for you to use, you can change the Recorder sound pause key. You can use any of the function keys, or a combination of any of the function keys (F1 through F12) and the ALT key, CTRL key, and/or SHIFT key.

  If you change the Sound pause key, you should select a key or key combination that is not used in the target application for another purpose. For example, pressing the F1 key in some applications opens a Help window. Therefore, for those applications you would not want to use the F1 key to pause sound recording.

- **Open the Topic Editor:** Use the following options to control the launching of the Topic Editor during recording:

  At the end of recording: Opens the Topic Editor only after you have finished recording the entire topic. This option allows you to complete all the steps in the task and then go back and confirm the actions and bubble text.

  After each screenshot: Opens the Topic Editor after you record each frame. This option allows you to confirm the action and bubble text after every step.

Note: Recorder options are stored per user. These defaults are used regardless of the Library being accessed.

2.3.8 Spelling Defaults

Use this page to control the behavior of the Spell Check tool. When you create any document, you must choose a default language for use during a spelling check.

Note: These options do not apply to Japanese, Chinese, and Korean content since the Developer does not provide spelling dictionaries for these languages. During spell check, the Developer ignores any document that has a Japanese, Chinese, or Korean Language property.

- **Ignore words in UPPERCASE:** You can choose to have words that appear in all uppercase letters be identified as errors or ignored.

- **Try to split compound words into individual words:** The Spell Check tool identifies compound words as errors. You can choose to have the Developer try to split such terms into individual words.

- **Custom dictionary:** As content authors work with the Spell Check tool, they may want to add words to a custom user dictionary. This dictionary allows authors to

indicate words that should not be identified as misspellings during future spelling checks. By default, all content authors working with a shared installation of the Developer use the same custom dictionary, Userdic.tlx. Content developers do, however, have the option to create their own custom user dictionaries, to add dictionaries used by other content authors, or to remove dictionaries. If you want to create a new dictionary for use during spelling checks, you can do so. Creating your own dictionary allows you to control which words are identified as misspellings during your spelling checks without affecting the userdic.tlx list used by all content authors.

Another content author may have already created a dictionary file that you want to use to check the spelling of content as well. You can easily add an existing dictionary to the list of lexicons used in the Spell Check tool. The existing dictionary file is not required to be a .tlx file.

You may decide that you do not want to use a custom dictionary that you have added. You can easily remove a lexicon file from the list of dictionaries you use with the Spell Check tool. Removing the file does not delete the dictionary file from the location where it is stored; it simply removes it from the list of files you can use during a spelling check.

2.3.9 Target Applications

The Developer recognition engine has “targeted” solutions for recognizing context in browser-based applications. These solutions are built specifically for each application that has a targeted solution. The Recorder currently automatically detects whether the application being recorded is a targeted solution. If a targeted application does not exist, the recognition engine associates a generic SmartMatch context with the page.

If you have many target application enabled (all target applications are enabled by default) the time needed to determine that a recorded page does not belong to any one of them can be long and can slow down recording. You can alleviate this issue by disabling target applications that you do not use.

Disabling a targeted application does not mean turning it off completely. There is a fast version of the application detection script that can not recognize all pages in the targeted application, but still work with reasonable accuracy, and much faster than the full script. The fast script is still run for disabled applications.

The Recorder displays a context icon that identifies the type of the context (ExactMatch, SmartMatch, or NoMatch) being recorded.

ExactMatch Recognition

- When you start recording in a targeted application, the recognition triggered by the first event may experience some delay, depending upon the position of the application in the enabled applications’ list. Since the rest of the recording session is likely to take place in the same application, the Developer will move it to the top of the enabled list. This way, the recognition of subsequent pages in the same application is faster.

- At the end of the recording session, the Recorder will save a list of the most recently recorded targeted applications. Before the next session starts, the recorder will restore the applications order from this list. If you record in the same targeted application, this will eliminate the initial delay.

- The Developer collects usage data on targeted applications. The number of times a context in a targeted application is recorded is accumulated and stored. The Developer also stores the date/time of the last usage. This helps to determine what targeted applications the author recorded against recently. Usage data is stored on the Windows user level on each workstation and is not exported or imported with content defaults.

SmartMatch Recognition

- In non-targeted browser applications, SmartMatch recognition is in effect. To avoid delays, you are able to configure the targeted applications you also record against. For the applications you exclude, the Developer will use the fast scripts.

This Configuration page lists all targeted applications and indicates the frequency of usage in the Use column. For example, frequently used applications are those that launched within the last 30 days. Rarely-used applications are those launched longer than 30 days ago. Applications with a value of Never are those that have never been launched. You can turn applications off and on in this dialog box by clicking the appropriate checkboxes next to the target application (or use the Select All/Clear All buttons).

Click Both ExactMatch and SmartMatch radio buttons to display a list of applications to enable or disable. Or click SmartMatch Only to enable SmartMatch for all applications.

All applications are referenced by their user-friendly names; however, you can provide your own text for each application in the Description column. These descriptions are exported and imported with content defaults.

The Recorder detects when recognition is getting slow and provides you with visual feedback. For example, the Recorder will provide a hint as to why recording is slow. You can then activate this dialog box from the Recorder and disable/enable target applications as needed.

If the Recorder recognizes a disabled application, a warning message appears to provide visual feedback that you should enable it for improved recording.

The enabled/disabled state of the applications will export and import together with content defaults. This way, administrators can set up a default environment.

If a new release or service pack adds a new targeted application, it will appear in the list as enabled.

2.4 Convert Knowledge Pathways Content

After you have converted the Knowledge Pathways database and content root structure, you must convert the content. The conversion process imports the content into the Developer Library and then publishes it to the Knowledge Center .Warning: The conversion utility only converts the published copy of the title in Knowledge Pathways. Any titles still in development, that is, in the local folder in the content root, will not be converted.

The following rules and logic are applied during the conversion process:

Title AU

The Title AU conversion has three parts. First, a folder is created at the root of the Library, named using the Title AU code. Next, a new module is created in the folder. The module name is the same as the title name. Finally, a package is created in the folder, again named with the Title AU code. The package contains all of the content from the Title Common folder, in a similar folder structure within the package.

Non-Title AUs

The conversion of non-title AUs is similar to title AUs, except that the folder in the Library is created within the Title folder.

Sections

Sections are converted to sections in the Library. The section documents are created in the appropriate AU folder.

Questions

Questions are directly converted to questions. The question documents are created in the folder for the AU in which they are located in the outline. If the questions were visible in the

outline in Knowledge Pathways, they appear in the Developer outline as well. Questions hidden in the Knowledge Pathways outline do not appear in the Developer outline; they appear in the Library view.

Note for Professional Edition only: In Knowledge Pathways, the questions were automatically associated with the content. This was important for the Personalized Content feature so that it could determine what content should be included in the personalized course. However, if you plan to use this feature in this version, be aware that the questions are not automatically associated with the content. You must associate the questions manually. See Question Properties in the View Document Properties section in this manual for more information.

Knowledge Checks

Knowledge checks are converted to sections in the outline. The section documents are created in the AU folder for the AU in which they are located in the outline. Knowledge checks are not scored in Developer, however, they are marked Complete or Incomplete for course completion.

Assessments

Assessments are directly converted to assessments. The assessment documents are created in the folder for the AU in which they are located in the outline. They do not appear in the outline, but they are automatically associated with the appropriate document. Assessments are tracked as they were in Knowledge Pathways.

Content files

For each AU, a package is created containing the content files for that AU. The files in the package are automatically linked to the appropriate documents in the outline.

Objectives

Objectives are converted to web pages and linked to the concept. If a Knowledge Pathways AU or section has both objectives and conceptual information, the objectives are placed in a web page and linked to the module or section in Developer. The conceptual material is then linked to a section created as the first item under the section.

Player Content

If you used Player content in a Knowledge Pathways title, it is converted to a package and placed in the Library in a folder corresponding to the AU folder in which it was stored in Knowledge Pathways. The topics and Know It? mode questions are linked to the appropriate documents in the outline. The Player content is not editable in the Developer, as it was published content, not source files.

Before you begin the conversion, you must know the URL to connect to the server that you have converted to Knowledge Center, and have the user name and password of an account with sufficient rights (manager or administrator) to import content.

You can convert all titles at once or choose specific titles. If a title has already been converted, it appears in grey in the list, and it cannot be selected again.

To convert Knowledge Pathways content, launch the Developer and then:

1. On the **Tools** menu, point to **Convert** and choose **Knowledge Pathways Content**. Click **Next**.

2. In the log in dialog box, click **Add**, enter the URL of the server that contains the content to be converted, and click **OK**.

3. Enter a user name and password and click **OK**.

4. Select the titles to be converted and click **OK**.

3 Use the Developer in a Multi-user Environment

This chapter describes functionality that is specific to using the Developer in a multi-user environment such as:

- Library Login Profiles
- Online and Offline Operation
- Document Check In and Check Out
- Document Version Control
- Library and Folder Synchronization (Manage Folder Conflicts, Refresh the Library and Outline Editor)
- Document Deletion and Recovery
- Workflow Properties
- Sample Custom Views

The remaining chapters describe functionality that is common to both a single-user and multi-user environments. However, you will find various multi-user considerations in places where common functions vary depending on whether you are using the Developer in a single- vs. multi-user installation.

3.1 Create and Manage Login Profiles

When you start the Developer for the first time in a multi-user environment, you are asked to create a login Profile. A Login Profile identifies the server where the content Library is installed as well as your login credentials. If you plan to access multiple content libraries, you need a separate login Profile for each.

Note: You can configure the login Profile so that you do not need to enter a user name and password each time you log in to a Library.

To create a login Profile, you need the following information:

- URL of the Library location (for example, http://server/virtual directory)
- Login credentials such as user name and password (Standard authentication only)
- Profile name of your choice

3.1.1 Add a Login Profile

The login Profile Wizard walks you through the following steps to create a login Profile.

Step 1: Identify the Library Location

The first step in creating a login Profile is to identify the server URL where the content Library is installed.

The URL must contain the virtual directory that points to web service (asmx files) and web configuration files. This allows the Developer to communicate between the local document cache and the server-side database.

Note: The Library location is not case-sensitive.

When you enter the Library URL, the Developer determines whether the Library is configured for Standard or Windows authentication and prompts for the appropriate login credentials.

Step 2: Enter Login Credentials

Your administrator will predefine each author on the server based on whether the server is configured for Windows or Standard user authentication. When you create a login Profile that connects to the server, you must enter the same login credentials that the administrator defined on the server. You will receive an error message if your login credentials do not match those defined on the server.

- If the server is configured for Windows authentication, the Use my current Windows login account option is automatically selected and your Windows user name and password are used. However, you can use a different login account if your administrator used different values when adding your account on the server. Please note that if you enter a different user name, you must include the domain or machine name as the prefix to the user name separated by a backslash (domain name\user name).

- If the server is configured for Standard authentication, the Use a different login account option is automatically selected and you are prompted to enter the same user name and password that the administrator created for you on the server. Your administrator should provide you with these credentials before you create a login Profile.

Mark the Save my password as part of this profile option if you do not want the Developer to prompt you for your password each time you log in using the profile.

Step 3: Name the Login Profile and Login

The next step is to name the login Profile. You will use this name if you have multiple Profiles that you can use to switch between content Library servers. Also, if you create multiple profiles, you can configure one as the default that is automatically used every time you launch the Developer. The name of the active Profile appears in the title bar of the Developer.

Step 4: Choose a Data Storage Location

As you use the Developer to create, view, and edit documents that are stored centrally on the server, a copy of each document is downloaded and stored locally on your computer. In this step, you can either accept the default data storage location or choose a different folder on your computer. Click Browse if you want to change the default folder or click Next to accept the default folder. The folder that you select must be empty.

Note: You must choose a folder on your local computer. Network drives are not permitted.

Step 5: Complete the Login Profile

The last step to complete a new profile is to confirm your entries and choose to log in with the new Profile or return to the Profile Editor.

To add a login Profile:

1. On the **Tools** menu, choose **Profiles**.
2. Click **Add** to start the Profile Wizard.
3. Click **Next** to display the Library Location page.
4. Type the URL to the server and virtual directory that contains the content Library that you want to access using this login Profile (for example, http://server/virtual directory). Your administrator will provide you with this information.

5. Click **Next** to display the Credentials page.

   The Developer automatically detects whether the server was installed using Standard or Windows authentication and disables the login credential options that are not valid. For example, if Windows authentication was installed, the Use a Different Login Account option is disabled. If Standard authentication was installed, you must enter a valid user name and password. Your administrator will provide you with this information.

6. Enter your login credentials and click **Next** to display the Profile Name page.

7. Type a name for the login Profile. Consider using the name of the server (Library) to identify a profile when you will have multiple Profiles that connect to different servers.

8. Click **Make this my default profile** to configure this profile as the default that is used when you launch the Developer, if desired.

9. Click **Next** to display the Data Storage Location page. Click **Browse** to change the data storage location, if desired.

10. Click **Next** to complete the Profile Wizard.

    The last page in the Profile Wizard displays a summary of the Library location, login credentials, profile name choices, and data storage location choices you have made. Before you complete the wizard, you can also choose to start the Developer automatically and log in using the default profile or return to the Profile Editor and continue to add or edit profiles.

11. Choose an option and click **Finish**.

3.1.2 Edit a Login Profile

You can edit any login Profile that is not in use and change the Library URL, profile name, or the location of the local cache. If you try to edit a login Profile that is currently in use, you must first exit the profile.

To edit a login Profile:

1. On the **Tools** menu, choose **Profiles**.
2. Select a profile from the list.
3. Click **Edit** or **Exit Profile** if you selected a profile that is in use.
4. Make the necessary changes and click **Finish**.

3.1.3 Delete a Login Profile

If you have multiple login Profiles to different Libraries, you can delete any login Profile that is no longer needed. You should avoid deleting a login Profile that is currently in use or those that you may still want to use to connect to different servers. You should also ensure that you do not have documents checked out from a server before you delete a profile that connects to that sever. Deleting a login Profile discards any changes that the author made to checked out documents.

To delete a login Profile:

1. On the **Tools** menu, choose **Profiles**.
2. Select a profile from the list.

3. Click **Delete**.

   You are warned that any changes to documents that the author has checked out will be discarded. You may want to log in first and check in all documents before you proceed to delete the Login Profile.

3.1.4 Switch the Library Login

If you have multiple login Profiles, you can switch between Libraries without having to close the Developer. To do this, you must have a login Profile for each Library. You can perform the switch from the Profiles dialog box or by clicking Connection State in the bottom right corner of the Developer screen and choosing the Switch Profile command.

To switch profiles from the Profile dialog box:

1. On the **Tools** menu, choose **Profiles**.
2. Click a profile for a different Library.
3. Click **Open** to switch to the Library.

To switch profiles from the Connection State icon:

1. Click the **Connection State** icon in the lower right corner of the Developer screen.
2. Choose **Switch Profile** from the menu and follow steps 2 and 3 above.

3.1.5 Change Password

You can change your current password at any time while you are working online. You are prompted for the new password the next time you log in.

Note: If you stored your password in a login Profile, it will be automatically updated when you complete the password change.

To change your password:

1. Make sure you are working online.
2. On the **Tools** menu, choose **Change Password**.
3. Enter your current password.
4. Type a new password.
5. Type the new password again to confirm the change.
6. Click **OK**.

3.2 Work Online or Offline

In a multi-user installation, you can use the Developer in either an online or offline mode. When you work online, you are connected to the content server through the network, an intranet, or the Internet. In this mode, you can access any document that is checked in to the server. When you access any document while online (by opening it in an editor and viewing its content), a read-only copy of the document is automatically downloaded to a local cache on your computer. If you want to edit a document that is on the server, you must first check out the document. When you do this, an editable copy of the document is downloaded to your local data storage location. After you make changes to the checked out document, you must check the document back in to the server to save the changes to the content server.

You can determine the location of the local data storage location when you create a Login Profile for the first time. The complete path of the local data storage location is displayed on the Summary page of the Login Profile Wizard for reference.

You can set the maximum available disk space for the local data storage location using the Library settings in the Developer category in Tools, Options.

Note: As you work with documents, you may see "downloading" messages when documents in the Library are downloaded from the server to your local data storage location.

Client - Server Synchronization

When you are working online, the Developer (client) installation on your local computer automatically synchronizes with the content server approximately every minute or so. The Library then updates to display all of the changes that have been checked in to the server, including new documents and folders, changes to folder and document names or properties, deleted documents, and so on. The Outline Editor also displays some of the results of this synchronization (for example, changes to document names), except for changes that were made to the outline structure (the links between the documents). To display any structural changes to the outline from the Outline Editor, you must refresh the display manually using the Refresh command on the View menu or by pressing F5. The Library also automatically synchronizes when you use commands on the Document menu such as Check In, Check Out, Get, Get All, and so on. However, you will still need to perform a refresh in the Outline Editor to see the any structure changes in the outline you have open.

Work Offline

You can also work offline when you are not connected to the server. You are working strictly with the documents that are stored in your local data storage location. You might choose to work offline for the following reasons:

- There is no connection available to the server (such as on an airplane or at another remote location with no connectivity to the content server).
- There is a connection to the content server, but it is slow (such as a dial-up connection).
- The server is unavailable for a period of time for technical reasons (such as maintenance or a power outage).

When you work offline, you can edit only the documents that you have previously checked out; however, you can view other documents that you have in your local cache that you do not have checked out. You can also create new documents but you cannot delete documents under version control when you are offline.

Note: If you are working online and your connection with the server stops (for example, the server goes offline unexpectedly), the connection state will change to Disconnected. When the server is available again, the Developer connects automatically, and the state changes back to Online.

If you plan to explicitly work offline, you should always check out documents that you need to edit before going offline. You may also want to use the Get command from the Document menu to ensure that you have local copies of the most recent documents that you want to view in addition to those that you want to edit. If you go offline and do not have copies of some documents in your local data storage location, those documents will be unavailable to you. To remedy this, you will need to go back online and "get" the documents that you need.

Note: When you create a login Profile and log in to the Developer for the first time, all documents in the System folder are automatically downloaded to your local computer. If another author checks in modifications to any of these documents such as a master role list document or publishing style, you should periodically go online and download updated documents using the Get command.

Server Connection States

There are four connection states in a multi-user environment: Online, Disconnected, Offline, and Offline/Login failed. The Connection State icon in the bottom right corner of the Developer screen identifies the state in which you are currently working.

- **Online:** You are currently connected to the server.
- **Disconnected:** You do not have a connection to the server, but would like to. You can get in this state if the network connection is dropped. When this happens, the Developer will regularly try to reconnect to the server.
- **Offline:** You explicitly chose to work offline. The Developer does not try to reconnect to the server until you explicitly go online.
- **Offline/Login failed:** The user password is incorrect, or the account does not exist on the server. You are notified of the failure to log in, and the Developer remains offline. You may also experience this state if the administrator changes your login credentials while you are working online.

3.2.1 Switch Between Online and Offline Operation

You can manually switch the Developer between online and offline modes, even while you are still connected to the server.

To manually switch between online and offline operation:

1. If you are currently working online and would like to work offline, choose **Work Offline** from the **File** menu or click the **Connection State** icon at the bottom right corner of the Developer screen and choose **Work Offline**.
2. Repeat the procedure to switch from offline to online mode.

3.2.2 Get Documents for Offline Use

If you want to work offline, there may be documents that you want to refer to, create links to, or simply view but not edit. You do not need to check these documents out from the server, since you do not want to change them. In most cases, you may already have local copies of the documents that you may need or want if you accessed these documents while working online. However, in some cases, you might not have accessed some documents that you may want to have in your local data storage location when you go offline. In this case, you use the Get command to retrieve read-only copies of these documents before you go offline.

If you are not able to identify the specific documents that you need to work offline, you can use the Get All command to download all documents in the Library to ensure that you have everything you need. However, this may take some time to download depending on the number of documents that need to be downloaded, their sizes, and the connection speed. When you use this command, there is no need to select any documents.

To get specific documents for offline use:

1. Identify the documents that you want to download locally and navigate to them using the Library or Outline Editor.
2. Select the document(s) or folder containing the documents that you want to download.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click).

3. On the **Document** menu, choose **Get**.

   You can also right-click on your selection and choose Get.

   The Related Documents dialog box appears when you perform an action on any document that has links to other documents. You can choose to process only the document(s) you selected or to process your selection and all of the related documents.

   Click the View related documents link to display a list of the related documents if you are not sure whether you want to include related documents.

   After you have made your selection, click **OK**.

   You might also receive a message if some documents could not be processed because of other constraints. You can click OK to close the message box or click the View activity log link to view the results of the action.

To get all documents for offline use:

1. On the **Document** menu, choose **Get All**.

3.3 Check In and Check Out Documents

In a multi-user environment, you use the Developer to connect (online) to a centralized content server and share documents using a version control system that allows you to check documents in and out. When you check out a document, it is copied to your local computer for viewing or editing. The document is also locked on the server to prevent any other author from making changes (however, other authors can view it). When you check in a document, it is copied from your local computer to the content server and the lock is then removed, making it available to other authors.

You can check in an interim version of a document and leave it checked out while you continue working by clicking the Keep checked out option on the Check In Comment dialog box during check in. The content is checked in and the version number incremented but the document remains checked out and unavailable for edit by other users. However, other users can view the latest version of the content.

Any document in a Library can be checked in or out depending on its current state. For example, a checked out document can only be checked in and vice versa.

New documents are automatically checked out to you. To make this content available to other authors, you must check it in.

Note: You must be online to check documents in or out.

You can check in or out one document at a time or multiple documents all at once. Just select the documents that you want from either the Library or Outline Editor. Also note that, from the Library, you can select folders on which to perform check in/out. In this case, ALL documents in the selected folders are processed. If any document in a folder has links to other documents in different folders, you have the option to process related documents.

You can also choose to include related documents during check in or out. For example, when you check a module in or out, you can choose to include all its related documents such as its sections, topics, web pages, packages, and so on. This option is available for any document type that can have links to other documents. If you check in/out a Library folder (which checks in/out every document in that folder), you can also check in/out related documents that are stored in any folder outside of the current folder that you have selected.

Important Note on Related Documents: The definition of related documents can vary based on specific operations that you can perform. For example, documents that are

considered as related during check in/out operations are different than those considered during import/export. See the *Link Related Documents* topic in the Work with Document Editors chapter of the Content Development manual for more information.

To ensure that ALL documents are checked in/out, you should consider checking in/out content by a Library folder or use the Document, Check in All command.

Note: You can only check in/out documents from the Library or the Outline Editor.

You can open any document regardless of its check in/out state. However, if you edit a document that is not checked out to you and attempt to save it, you are given the option of saving the changes (for example, check out the document, if available, and save the changes), save the document with a different name, or cancel without saving the changes.

Note: Saving changes to a document that is not checked out to you is not a recommended best practice. This functionality is designed to allow you to save changes to a document that was un-intentionally edited in Read-Only mode.

3.3.1 Check In/Out Indicators

As documents are checked in and out, icons appear to the left of the document name indicating the check in/out state as follows:

indicates that the document is checked out to you.

indicates that the document is locked and checked out to another author.

No icon indicates that the document is checked in and available to any author.

These icons appear in various places such as the Library and Outline Editor as well as on document editor tabs and various views. Also note that additional columns in the Details view of the Library and Outline Editor display the check in/out state and version number. The Checked Out By column displays the name of the author who is currently using the document.

3.3.2 Check In a Document

Checking in a document updates the Library with any changes made to the document or documents or, if it is a new document, adds it to the Library. Check in also assigns a version number if the document has changed since it was checked out. For documents that you edited, the version number is incremented by 1. For new documents, the first version is NEW indicating that the doc has not been checked in so a copy does not yet exist on the server.

Note: You can not check in a document that is open in a document editor. You must close the document and then check it in.

Comments

During check in, you can add comments that are attached to the document and can be accessed through the document history and reviewed by other authors. You are always prompted for comments during check in. However, if you check in a document with no changes, comments are not applied.

If you check out a document but do not make any changes and then check it back in, a new version number is also not applied.

If you check in multiple (new or changed) documents at one time. You can specify a different comment for each document, or you can click the Apply to all documents checkbox to have the same comment applied to all documents in your selection.

Note: Document comments are not exported or included in any published output.

Click the Keep checked out checkbox to check in an interim version of a document and leave the document checked out so you can continue editing. The version number is incremented by 1. Other users can view the updated content but can not edit the document because it is still checked out.

To check in a document:

1. Make sure you are working online.
2. From the Library or Outline Editor, select one or more documents or folders containing the documents that you want to check in. These documents can only be documents that were previously checked out to you. You cannot check in a document that was checked out by another author.
3. On the **Document** menu, choose **Check In**.

   You can also right-click on your selection and choose Check In.

   The Related Documents dialog box appears when you perform an action on any document that has links to other documents. You can choose to process only the document(s) you selected or to process your selection and all of the related documents.

   Click the View related documents link to display a list of the related documents if you are not sure whether you want to include related documents. After you have made your selection, click OK.
4. Type any comments about the document (if applicable) in the **Provide check in comments** field,
5. Click **OK**.

   You might also receive a message if some documents could not be processed because of other constraints. You can click OK to close the message box or click the View activity log link to view the results of the action.

Note: You can also use the Check In All command to check in all documents that you currently have checked out rather than selecting specific documents.

To check in content changes but leave the document checked out:

1. Make sure you are working online.
2. From the Library or Outline Editor, select one or more documents or folders containing the documents that you want to check in. These documents or folders must be checked out to you.
3. On the **Document** menu, choose **Check In**.

   You can also right-click on your selection and choose Check In.

   The Related Documents dialog box appears when you perform an action on any document that has links to other documents. You can choose to process only the document(s) you selected or to process your selection and all of the related documents.

   Click the View related documents link to display a list of the related documents if you are not sure whether you want to include related documents.

   After you have made your selection, click **OK**.

You might also receive a message if some documents could not be processed because of other constraints. You can click OK to close the message box or click the View activity log link to view the results of the action.

4. Type any comments about the document (if applicable) in the **Provide check in comments** field.

5. Click **Keep checked out** to check in content changes but leave the document checked out.

   If this option is checked, content changes are checked in and the version number is incremented. The document can be viewed but not checked out and edited by other users.

6. Click **OK**.

3.3.3 Check In All Documents

Instead of selectively checking in documents, you can also check in all of the documents that you have checked out at one time. However, please note that this action may take some time depending on the number of checked out documents that you have in the Library. Any document that you currently have checked out will be checked in to the server when you perform this action.

To check in all documents:

1. Make sure you are working online.

2. On the **Document** menu, choose **Check in All**.

3.3.4 Check Out a Document

Checking out a document locks it in the database so that you are the only one who can edit it. The document is also downloaded to the local data storage location on your computer. This allows you to disconnect from the network and work offline. The documents remain checked out and locked until you explicitly check them in to the server.

To check out a document:

1. Make sure you are working online.

2. From the Library or Outline Editor, select one or more documents or folders containing the documents that you want to check out. These documents can only be documents that are checked in to the server and not checked out to another author.

3. On the **Document** menu, choose **Check Out**.

   You can also right-click the selected document(s) or folder and choose Check Out.

   The Related Documents dialog box appears when you perform an action on any document that has links to other documents. You can choose to process only the document(s) you selected or to process your selection and all of the related documents.

   Click the View related documents link to display a list of the related documents if you are not sure whether you want to include related documents.

   After you have made your selection, click **OK**.

You might also receive a message if some documents could not be processed because of other constraints. You can click OK to close the message box or click the View activity log link to view the results of the action.

3.3.5 Cancel Check Out

If you check out a document and make changes but decide that you do not want to commit your changes to the server, you can cancel the check out and revert to the server version of the document. This action discards any changes you made to the document after it was originally checked out.

To cancel a document check out:

1. Make sure you are working online.
2. From the Library or Outline Editor, select one or more documents or folders containing the documents for which you want to cancel a check out. These documents can only be documents that are checked out to you.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click).
3. On the **Document** menu, choose **Cancel Check Out**.

   The Related Documents dialog box appears when you perform an action on any document that has links to other documents. You can choose to process only the document(s) you selected or to process your selection and all of the related documents.

   Click the View related documents link to display a list of the related documents if you are not sure whether you want to include related documents.

   After you have made your selection, click **OK**.

   You might also receive a message if some documents could not be processed because of other constraints. You can click OK to close the message box or click the View activity log link to view the results of the action.
4. Click **Yes** to complete the action or **No** to abort.

3.3.6 Open a Checked-in Document

You can open any document such as a topic, web page, package, glossary, and so on, that is checked in to the server without checking it out. When you open a checked in document, a (Read-Only) label appears on the tab next to the document name.

If you edit a checked in document, upon exit you are given the option to save the changes, save the changes to a new document or discard the changes. If you choose to save the changes, the document is checked out and the content is saved. If you choose to save as a new document, click Yes when the Save Document message appears. If you choose to discard the changes, click No.

Module and section documents that are checked in do not display a Read-Only label when you open them in the Outline Editor. You can view these document types but you cannot edit them unless you check them out first. For example, to rename a module or section, you must first check it out. Also, if you attempt to link a document to a checked in module or section, you are always prompted to check out the document before you can continue.

3.4 Version a Document

The Developer's version control system automatically keeps track of new documents and changes to existing documents as they are checked in and out of the server. A running history

of each document is created as changes are checked in. The history of a document is a sequential list of the document versions starting with 1, along with their dates, who made the changes, and any comments made during check-in to explain the changes in the document. This history allows you to view a previous version of the document and/or roll back to a previous version. History is only available when you are online.

Note: A new document is automatically assigned a version of NEW until it is checked in for the first time. The document is assigned a version of 1 after the first check-in.

3.4.1 View Document History

History displays the list of document versions with the most recent version at the top of the list. History is not available for new documents that are not under version control. You must also work online to review document history.

For each document, the following properties appear:

- Version (automatically generated during the check in, delete, or restore process)
- Author that changed the document
- Date when the document version was created
- Comments that were either user-defined when the document was checked in or automatically generated based on actions that were performed on the document. For example, system-generated comments of Deleted and Restored appear when those actions were performed on a document.

You can open and view any version of the following document types:

- Topic
- Web Page
- Package
- Glossary
- Role

When you view any version of a document, the document opens in the appropriate document editor in read-only mode.

Note: You cannot view Module, Section, or Publishing Project documents from the History dialog box.

You can also roll back to previous versions of a document.

You can resize the History dialog box to display more information such as long comments or additional vertical space for historical records. The Developer remembers the History dialog box size after you close it.

To view the version history of a document:

1. Make sure you are working online.
2. From the Library or Outline Editor, select ONE document. If you select multiple documents, the History command is unavailable.

3. On the **Document** menu, choose **History**.

4. Review the document history and choose to view or rollback to a previous version, if necessary.

3.4.2 Roll Back a Document

You can roll back a document to a previous version only if the document is checked in. Rollback replaces the current document content with the content of the version you selected for rollback. Rollback also creates a new version of a document. For example, if the current version of a document is 10 and you roll back to version 6, the Developer creates a new version number of 11 with the content from version 6. This new version of the document becomes the current document.

Note: You can roll back a document only if there is more than one version in the history and the document is checked into the server.

To roll back to a previous version:

1. Make sure you are working online.

2. From the Library or Outline Editor, select ONE document that is currently under version control and has more than one version.

3. On the **Document** menu, choose **History**.

4. Select a version of the document to roll back to. You might want to view the document before you perform a rollback to ensure that it is the version that you want since a rollback cannot be undone. You cannot view module and section documents.

5. Click **Rollback** to create a new version of the document. A comment is automatically provided to identify the document version that you rolled back to.

6. Click **Close**.

3.5 Refresh the Library and Outline Editor

When you use the Developer in a multi-user environment and you are working online, the Developer (client) installation on your local computer automatically synchronizes with the content server every minute. The Library then updates to display all of the changes that have been checked in to the server, including new documents (that are checked in) and folders, changes to folder and document names or properties, deleted documents, and so on.

The Outline Editor also displays the results of this synchronization, except for changes that were made to the outline structure (the links between the documents in the outline). To display these structural changes in the Outline Editor, you must refresh the display manually using the Refresh command on the View menu or by pressing F5. You can also manually refresh the Library using the same command or key.

The Library also automatically synchronizes when you use commands on the Document menu that involve the Library, such as Check In, Check Out, Get, and so on. However, you will still need to perform a refresh in the Outline Editor to see any changes in the content structure.

Note: Performing a manual refresh (F5) from the Library does not immediately refresh new (empty) folders that were created by other authors. The client-to-server synchronization will refresh the view of folders. However, new folders that contain documents will become visible when you perform a manual refresh.

To refresh the Library or Outline Editor:

1. On the **View** menu, choose **Refresh**.
2. You can also press F5.

3.6 Manage Folder Conflicts

Regardless of whether an author is working online or offline, folder operations are performed locally on the client computer and then synchronized with the server. Synchronizations occur in the background if the author is working online or when the author switches from offline mode to online.

Unlike documents, folders are not checked out, so they are available at all times to all authors. Consequently, your local folder structure may differ from the structure on the server due to delays in synchronization while you are working online or because you are working offline. For instance, while working offline, you create a folder under a parent that another author has deleted. The server resolves these conflicts by following prescribed conflict resolution rules. The following describes the server side conflicts that can occur for folder operations performed on the client side and the rules the server uses to resolve them.

Add Folder

Conflict: Parent folder is renamed or moved.
Resolution: The new folder is added to renamed/moved folder.

Conflict: Parent folder is deleted (not yet purged).
Resolution: Undelete parent and add new folder to it.

Conflict: New folder has same name, but different document ID, folder already on server under the parent.
Resolution: The client folder is updated to the same document ID as the folder on the server. No new folder is created.

Conflict: Folder on server already exists and was deleted.
Resolution: Undelete the folder and parent(s) if needed, and update client folder to server folder document ID.

Conflict: Parent does not exist; was purged.
Resolution: Client folder is placed in root directory of Library.

Conflict: No conflicts.
Resolution: Add folder to server.

Move Folder

Conflict: Old parent folder is renamed or moved.
Resolution: No problem. Folder moves to new location.

Conflict: New parent folder is renamed or moved.
Resolution: No problem. Folder moves to new location.

Conflict: New parent is deleted (not yet purged).
Resolution: Undelete new parent and move folder.

Conflict: Folder already moved on server (parent folder on server already contains folder with same document ID).
Resolution: No action necessary.

Conflict: Another folder with the same name is found in the new parent.
Resolution: Contents of move folder are moved into server side folder with same name. Purge (not mark as deleted) both server and client side old move folder.

Conflict: A deleted folder with the same name is found in new parent.
Resolution: Undelete the server side folder and parent(s) if needed and move the contents of the folder into the server side folder with the same name. Purge both the server and client side move folder.

Conflict: New parent does not exist (was purged).
Resolution: Abort the move. Restore the folder to old location.

Conflict: No conflicts.
Resolution: Move the folder.

Rename Folder

Conflict: Folder name already changed.
Resolution: Override name with client name. Basically last one to change the name wins.

Conflict: Folder marked as deleted.
Resolution: Undelete folder, parents if needed and rename it.

Conflict: Parent renamed or folder has moved.
Resolution: No problem since parent identified by document ID. Renamed folder moves to updated parent.

Conflict: Folder does not exist (was purged).
Resolution: Abort operation. Folder will be totally removed when done.

Conflict: No conflicts.
Resolution: Rename folder.

Delete Folder

Conflict: Folder not empty (contains undeleted documents or folders).
Resolution: If all of the documents are checked in, delete the contents of the folder and then the folder. If server side folder contains checked out documents, folder is not deleted.

Conflict: Parent folder is renamed or moved.
Resolution: No problem since parent identified by document ID. Delete the folder.

Conflict: Deleted folder was renamed.
Resolution: No problem finding folder since identified by document ID. Delete the renamed folder.

Conflict: Folder already deleted.
Resolution: Do nothing - work already done.

Conflict: Folder does not exist (was purged).
Resolution: Do nothing - work already done.

Conflict: No conflicts.
Resolution: Mark the folder as deleted.

3.7 Delete and Restore Documents

You can delete a document only from the Library; however, the implications of deleting a document vary depending on a number of factors in a multi-user environment. Some of these factors include whether you are working online or offline, whether you are working from the Library or a document editor, and whether the document is new or under version control.

This section describes the implications of a deleting a document from the Library in a multi-user environment. Note that deleting a document from the Outline Editor deletes only the link between documents and not the actual document.

3.7.1 Delete Documents while Online or Offline

When you are working online, you can delete a document ONLY when it is new and not under version control or when it is checked in to the server. You cannot delete a document that is under version control but checked out to you. If you try to delete a version-controlled document that is checked out to you, you will receive the message "Not all of the documents you selected were processed". If you click the View activity log link, you will also see the comment "Document must be checked in to delete".

A document is deemed "under version control" after the first check-in to the server. From that point on, the Developer keeps track of changes that are made by various authors and automatically assigns a version number. This is important since a deleted a document that is under version control is restorable, unless purged by your administrator. You can also roll back to earlier versions of a document that are under version control using the History command on the Document menu. It is important to note that new documents NOT under version control can be deleted but CANNOT BE RESTORED.

Note: You cannot delete versioned documents when the Developer is offline.

View Deleted Documents in the Library

Version-controlled documents that are deleted can be displayed and restored from the Deleted documents view in the Library.

View Deleted Documents and the Outline Editor

When you delete a document from the Library it is immediately removed from the folder in which it lives. However, the appearance of a deleted document in the Outline Editor is not as immediate. For example, if you delete a version-controlled module, section, or topic from the Library, the document name will continue to appear in the hierarchy of any outline in which it is used. The following icons identify a deleted, but restorable document:

Module

Section

Topic

Web Page

Package

Glossary

Role

Publishing Project

When you select a deleted document from the Outline Editor, you may see a message in either the Concept or Introduction pane that a linked document is deleted. For example, this message appears if you select a section with a linked web page (as the Concept) that has been deleted. To correct this situation, you should restore the deleted document or remove the link.

Non version-controlled documents that are deleted from the Library display the Missing Document link in the Outline Editor. Since these documents are not restorable, your only option is to remove the document from the outline using the Delete Link command on the Edit menu.

3.7.2 View Deleted Documents

The Deleted documents view shows documents under version control (checked in or out) that were deleted by all authors. Only documents that have not yet been purged by the administrator appear in this view.

For each deleted document, you can see the name of the document, the path where the document was stored when it was deleted, the deletion date, the name of the author who deleted the document, and the document type.

You can sort the documents and rearrange and resize the columns using the same procedures that you use to customize the details in the Library.

The only operation you can perform from this view is to restore any of the deleted documents. You can also restore deleted documents from the Outline Editor.

Note: You cannot open a deleted document. It must be restored before you can view its contents.

To view deleted documents from the Library:

1. On the **View** menu, choose **Library**, if necessary.
2. Click the drop-down list on the View toolbar and choose **Deleted Documents**.

3.7.3 Restore a Deleted Document

You can restore any deleted document under version control to the Library and its linked position in the Outline Editor. The Deleted Documents view in the Library displays the documents that have been deleted, but not yet purged by the content Administrator. Documents that appear in this view are only those that have been deleted after being under version control (checked in at least once). New documents that are deleted after they are created and never checked in can not be restored and do not appear in the Deleted Documents view. The Deleted Documents view and the Outline Editor let you restore documents to their original locations in the Library as well in any outline in which they are used.

If the folder where the deleted document was stored has also been deleted, the deleted folder is restored when the document is restored. If the folder has been renamed or moved, the document is restored to the renamed/moved folder.

Note: You must be working online to restore a deleted document.

If related documents were also deleted, you have the option to restore only the selected document or all related documents.

Restoring a deleted document creates a new version that is viewable in Document History. A comment of "Restored" is automatically assigned so you know that the new version was a result of performing the Restore command.

Warning! You cannot undo a Restore command.

To restore a deleted document from the Library:

1. Make sure you are working online.
2. Switch to the Deleted Documents View.
3. Select the documents that you want to restore.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click).

4. On the **Edit** menu, choose **Restore**.

   The Related Documents dialog box appears when you perform an action on any document that has links to other documents. You can choose to process only the document(s) you selected or to process your selection and all of the related documents.

   Click the View related documents link to display a list of the related documents if you are not sure whether you want to include related documents.

   After you have made your selection, click **OK**.

   You might also receive a message if some documents could not be processed because of other constraints. You can click OK to close the message box or click the View activity log link to view the results of the action.

5. If prompted, choose the option to restore the selected document only or the selected document and all related documents and click **OK**.

To restore a deleted document from the Outline Editor:

1. Make sure you are working online.
2. Open the module or section in the Outline Editor that contains deleted documents.
3. Select the deleted documents that you want to restore and perform step 4 above.

3.8 Manage Workflow

The Properties toolpane contains special properties that allow authors to track document status or State. Unlike document properties, workflow properties are maintained on the server. To change them, you must be working online and the document must be either checked in, checked out to you, or checked out to another author. Workflow properties are not embedded with the document and do not travel with them on export, import or rollback. In addition, unlike other document properties, a document can not inherit a workflow property from a parent document.

Note: When you import content, the workflow properties for documents are reset to blank, which is the default value.

3.8.1 Assign Content State

The State property is an editable property for communicating the status of a document. This is particularly helpful when collaborating with other authors in a development team. Authors can assign a state to documents from the master list defined by the administrator. The default list of States includes (blank), Not Started, Draft, In Review, and Final. Administrators can customize the list by adding, deleting or renaming the values.

A State value must be assigned; it can not be inherited from a parent document. You can assign a State to a single document or multiple documents at the same time, but only one State can be applied to a document. You can also view the State for a document in the Details View in the Library and the Outline Editor, but you can not assign State values directly from this view, unless you display the Properties toolpane.

Note: To assign or change the state of a document, you must be online. You can change the state of a document regardless of its check-in/out status.

The State property is a workflow property. Unlike other document properties, workflow properties are external properties that are saved to the server and do not travel with the document. State values are not included when you import or export content. The State field is set to blank for new documents imported into the Library. Since State values are not

embedded with a document, they are not part of a document's version and do not roll back when you roll a document back to a previous version. However, since State values are saved to the server, when an author restores a deleted document to the Library, the value for the state is also restored.

Warning! Be careful when changing a property for multiple documents that already contain values for the same property. The new values you enter for the property overwrite any existing values for all selected documents.

To assign a State value to a document:

1. Make sure you are working online.
2. Display the Properties toolpane.
3. Select the document(s) to which you want to assign a state.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click).
4. In the **Workflow** category, click in the **State** cell.
5. Select a value from the list.

Note: To remove a value, choose the blank value from the list (first value).

3.8.2 Assign Document Ownership

In many enterprises, multiple authors often work together developing content in a team environment. Team leaders typically handle large projects by assigning specific development responsibilities to authors. The Owner property allows team leaders and authors to assign documents to themselves and other authors to track who is responsible for a specific document.

You view and change document assignments for a document using the Owner property in the Properties toolpane. Document assignments also appear in the Owner column in the Details View (and other views) in the Library and Outline Editor. You cannot edit the document Owner from a view, but you can sort documents by their owner assignment.

Owner values are set by selecting an author from a predefined Owner list which is populated based on the names of the authors defined by your administrator. When the administrator deletes an author's name from the system, the name is also removed from the list and the Owner property for documents assigned to that author is reset to blank. If the administrator renames an author that was assigned to a document, updates to the Owner property occur when the document is checked into the server.

Note: The Owner list displays the author's name for Standard Authentication and the author name and domain name for Windows Authentication.

You can change the Owner to a single document or to multiple documents at the same time. Only one Owner can be set for each document.

To change the assignment of a document, you must be online and the document must be either checked in, checked out to you, or checked out to another author. When selecting multiple documents, the Owner property is not available if any of the documents in the selection are checked out to another author.

The Owner property is an external workflow property that is saved to the server and does not travel with the document. Therefore, Owner values are not included when you export a document.

Note: On import, the Owner value for documents is set to blank, which is the default value.

Since Owner values are not embedded with a document, they are not part of a document's version and do not roll back if you roll a document back to a previous version. However, if you delete a document with an Owner value and later restore the document, the server also restores the last value assigned to the document.

Note: Owner values are preserved by the server. If you delete a document and then later restore it, the server also restores the value.

To assign a document owner:

1. Make sure you are working online.
2. On the **View** menu, choose **Properties**.

   You can also right-click any document and choose **Properties**.
3. Select the document(s) to which you want to assign document responsibility.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click).
4. In the **Workflow** category, click in the **Owner** cell.
5. Select a name from the list.

3.9 Use and Share Custom Views

Several custom views of the Library are provided for each author in a multi-user installation. Each view is designed to show document attributes that are specific to a multi-user environment such as checked out documents, documents by State, documents by Owner assignment, and so on.

Each custom view can be customized, copied to create a new custom view, or removed. Any new custom view that an author creates can also be shared with another author.

3.9.1 About the Sample Custom Views

The following sample custom views are available in a client Developer installation (multi-user environment). These views appear on the View toolbar list for each author (if they were not deleted from your installation). You can use or modify any of these views or create new views to display documents based on custom criteria. You can also reset these views back to the original settings if changes were made.

- **All by owner:** This view lists all documents in the Library sorted by Owner and document Name. Documents appear in a flat view (no folder structure) and display Owner, State, Checked Out By, Version, and document Type columns.
- **All by state:** This view lists all documents in the Library sorted by State and document Name. Documents appear in a flat view (no folder structure) and display State, Owner, Checked Out By, Version, and document Type columns.
- **All checked out:** This view lists all checked out documents in the Library sorted by the author that has documents checked out (Checked Out By) and document Name. Documents appear in a flat view (no folder structure) and display Checked Out By, State, Last Modified Date, Version, and document Type columns. This view is useful for administrators who want to determine if there are any checked out documents in the Library before they perform software upgrades or other maintenance activity.

- **Checked out to me:** This view lists the documents in the Library that are checked out to the author that is running this view. The selected documents are sorted by document Name. Documents appear in a flat view (no folder structure) and display Checked Out By, Last Modified Date, Version, document Type, and Checked Out Hostname columns.

- **Deleted documents:** This view lists only deleted (but restorable) documents in the Library sorted by Owner and document Name. Documents appear in a flat view (no folder structure) and display columns for Original Location, Deletion Date, Deleted By, and document Type.

- **Details view:** This view lists all documents in the Library sorted by document Name. Documents appear in a folder structure and display columns for Checked Out By, Permission Type, Last Modified Date, Version, Type, State, and Owner.

- **Lost documents:** This view lists documents that are considered "lost" due to permission changes or a problem in the Library. The status bar of the Developer notifies you when lost documents are detected. When you display this view, you can either move the documents to a folder in the Library or delete the documents.

- **Owned by me:** This view lists the documents in the Library that have been assigned (Owner property) to the author that is running this view. The selected documents are sorted by document Name. Documents appear in a flat view (no folder structure) and display Owner, State, Checked Out By, Version, and document Type columns.

3.9.2 Share a Custom View

A custom view is specific to the author that created it. For example, if Author_A creates a view called CustomView1, Author_B will not have this view in their list. However, an author can share any custom view with another author by distributing a copy of a view file from the local cache on their computer. Any author who receives a shared custom view will need to copy the view file to the local data storage location on their computer.

You can determine the location of the local data storage location when you create a login profile for the first time. The complete path of the local data storage location is displayed on the Summary page of the Login Profile Wizard for reference.

To share a custom view:

1. Navigate to the ViewFilters\<language code> folder in your local data storage location.

2. Copy the XML file with the same name as the custom view that you want to share.

3. Distribute this file to another author and have that person copy the XML file to their local data storage location in the ViewFilters\<language code> folder on their computer.

   The author receiving the shared view should close and restart the Developer to refresh their list of views.

3.10 Understand Content Permissions

By default, all authors have complete access to all Library folders and all actions that you can perform to develop, modify, publish, and export content. However, your administrator can also restrict your ability to access content in any Library folder and perform actions on that content. An administrator can assign the following permissions:

The following permissions can be set for any folder in the Library:

- **List Folder Contents:** Authors cannot save to folders with this permission. An author can view the names of documents in a Library folder but cannot open a document in

any editor and perform actions that would change the document content or its location in the Library. An author also cannot make a copy of the document in any way.

- **Read:** An author can open a document in an editor, but cannot perform any actions that would change the document content or its location in the Library. An author can make a copy (including Save as) of the document and store it in a folder location to which they have appropriate permissions.

- **Modify:** An author has complete access to the folder and its documents and can perform any action (create, modify, copy, delete, publish, export, and so on).

When an author works in a folder with documents that have List or Read permissions, they are alerted when they cannot perform an action due to permission restrictions. Each folder and document in the Library (or the Details view of the Outline Editor) displays the active permission setting in the Permission column which can appear in any view.

If you need access to a document that has permission restrictions, you should contact your administrator to determine whether you can obtain the access that you need.

Also note the following about permissions:

- The Permission column only appears in the Details view. You can add this column to any other custom view.

- If you move a document from one folder to another, the document inherits the permissions of the folder to which it is moved.

- If you create a new folder in the Library, it will have no permissions of its own, but will inherit the permissions from the parent folder.

- Permissions are not preserved on exported content.

- Permissions are enforced when you are working online or offline.

- All authors should have at least **Read** permission to the System folder or any subfolder within it. If an author has List Folder Contents permission to the System folders, functions such as publishing/preview, role and template assignment, topic editing and recording, attachment icon assignment, and so on, will **not** work.

- If you are working offline and your administrator changes your permissions, the changes will be in effect the next time you are online. Also note that if you create documents in a folder to which you no longer have permissions, these documents will not appear in the folder when you connect to the server and work online. They will appear in the Lost document view. You can switch to the Lost document view and decide whether to delete the document or move it to a folder in which you have the appropriate permissions. Also, if you move a document to a folder in which you no longer have permissions, the move is ignored when you connect to the server and work online. A message appears on the Developer status bar alerting you when there are lost documents in the Library. You can double click on the message to automatically display the Lost documents view.

- Permissions have no impact on your ability to assign any author as the Owner. Therefore, you could assign an author as the Owner of a document in cases where the author may not have access to the document. Authors should be careful to only assign ownership to documents that are accessible to other authors.

4 Manage the Library

The Library is used to organize the documents that comprise your content for non-presentation purposes. You use these documents to create an outline in the Outline Editor for presentation to your audience in Player or document formats.

The Library displays two panes that are resizable by dragging the vertical bar to the left or right to view more of either pane. The Folders pane on the left shows the hierarchy of folders, and the Content pane on the right displays additional folders or the documents that are stored in a selected folder. The right pane also displays various folder or document properties such as icon and name, document type, and so on.

Multi-user Considerations

- As documents are checked in and out, icons appear to the left of the document name indicating the check in/out state as follows:

  indicates that the document is checked out to you.

  indicates that the document is locked and checked out to another author.

  No icon indicates that the document is checked in and available to any author.

  These icons appear in various places such as the Library and Outline Editor as well as on document editor tabs and various views. Also note that additional columns in the Details view of the Library and Outline Editor display the check in/out state and version number. The Checked Out By column displays the name of the author who is currently using the document.

4.1 Library Design Considerations

Although you can organize the Library in many ways to suit your needs, the following are some possible ways to design a folder structure in the Library:

Project centric: Create folders for each project. Within each project you can create subfolders for each application within that project. You can further organize within each application by the various document types (modules, sections, topics, packages, web pages, questions and assessments, and so on).

Application centric: A folder is created for each application, with a subfolder for each module. Within each folder are the documents that are linked to that module.

Also consider how you intend to version your content. For example, if you are building content for an application, you may want to design your Library folder structure around the version of the application and duplicate all your content from version to version.

Author or Team: If you normally divide workload by content author or teams of content authors, organizing your Library documents by team may be your best approach. This allows multiple authors to quickly see who owns a particular set of content and makes it easy to locate your documents. To organize by author or team, create a folder for each content author or group of authors. Within these folders you can employ one of the other organization methods above to further organize your documents. You may even want to organize by locations if you have different groups in different locations working on content.

Document Type: If you are doing a lot of content sharing you may find it beneficial to organize the Library by document type. This allows content authors to focus on specific types of content. For example, you may want specific authors creating all of your glossary terms or creating packages that will be used by other content authors. Organizing by type may make more sense as a second layer of organization.

Localization: If you are planning to localize your content you will want to make a complete duplicate of the source content before it is translated into the target language. To keep all of the different languages organized you should create sub-folders within your content folder hierarchy for each language.

One guideline is to keep your Library simple. Do not make overly complex folder structures and try to keep the Library between a maximum of three to five levels depending on your content.

4.2 Work with Folders

The Library displays a series of folders that contain various documents. The System folder, created by default, contains a series of folders with the system documents that are part of the Developer application. System documents include standard icon packages, publishing styles, templates, and master role lists for all supported languages.

You should create additional folders in the Library to organize your content development, similar to how you use folders on your computer to organize and manage files. However, keep in mind that the folders in the Library are not the same as folders on your computer since Developer content is stored in a database and not on a file system. The folders in the Library are purely for organization purposes.

4.2.1 Create a New Folder

You can create as many folders as you need to store and organize your content. Creating a logical folder structure makes it easier to locate documents when building an outline. It is best to start with a simple organization for your documents. If you later decide to change your folder structure, you can move folders and the documents in them to other folders.

When creating a folder, you can insert it at the root of the Library or nest it as a subfolder in another folder. In a folder hierarchy, there are parent folders and child folders. The folder currently selected in the Folders pane is the parent folder and the default location for new a folder. New folders created as subfolders of a parent are called child folders. Therefore, if you want to create a folder at the root level, you must select the folder at the top of the Library.

The following restrictions apply when creating folders:

- A parent folder cannot contain two subfolders with the same name.
- A folder name cannot be blank.
- A folder name cannot contain special reserved characters.

Long document names are supported for folders, but folder names are limited to 256 characters.

4.2.2 Reserved Characters

The following characters cannot be used in folder names. If you use reserved characters in document names, the characters appear in the published Player and document output. However, when you publish to document formats such as the Job Aid and Training Guide, the documents themselves cannot be saved with these characters in the file name, so they are converted to underscores.

- Back slash \
- Forward slash /
- Question mark ?
- Less than symbol <

- Greater than symbol >
- Colon :
- Asterisk *
- Double quote ”
- Bar |

Multi-user Considerations

- You can create, rename, move, copy, or delete a folder when you are working online or offline. The Developer follows specified rules to resolve folder conflicts (see Manage Folder Conflicts, Refresh the Library or Outline Editor). When working offline, you can only delete folders that are empty or contain new documents that have never been checked in.

  You do not have to check in or check out a folder. As you create new folders, they are created automatically on the server during synchronization or when you check in a document saved to that folder. In a multi-user environment, the team leader should create the folder structure before authors start creating content.

To create a new folder in the Library:

1. From the Library, select the folder in which you want to create a subfolder, or select the root node / of the Library to create a new folder under the root node.
2. On the **File** menu, point to **New** and choose **Folder**.

   You can also right-click the folder and choose New Folder.
3. Type a name for the folder (up to 256 characters).
4. Click **OK**.

4.2.3 Rename a Folder

You can change the name of a folder if you decide that the name does not fit the contents. The name can be any character length up to 256 characters, but blank names, duplicate names, and special reserved characters are not allowed.

Note: A parent folder cannot contain two subfolders with the same name.

Multi-user Considerations

- Folders can be renamed in the Library regardless of whether you are working online or offline.

  The following rules apply when you are working offline and then return to online status: if the renamed folder or parent folder is marked for deletion, the folder or parent will be restored; if the parent folder has been renamed/moved, the renamed folder moves to the new location; if the renamed folder has been purged, the folder will be deleted; if another author also renames the folder, the last rename is used.

To rename a folder in the Library:

1. Select the folder you want to rename in the Folders pane or Contents pane.

2. On the **Edit** menu, choose **Rename**.

   After selecting a folder, you can also click the folder name or press F2 to start edit mode.

   You can also right-click a folder and choose Rename.

3. Type the new folder name.

4. Press ENTER to save your changes.

   You can also click anywhere outside the name to save your changes.

4.2.4 Move a Folder

As you build your Library, you may find that you need to move folders to better organize your folder structure. The entire contents of the folder, including documents and subfolders, move with the folder. If the documents in the moved folder contain links, the links are not broken when the documents move. If you move a folder to a destination with a folder of the same name, the contents of the moved folder are merged with the contents of the destination folder and the moved folder is deleted.

The destination for a moved folder can be another folder or the root level of the Library. Folders can be moved in the Library using drag-and-drop or cut and paste. A cut folder does not move until it is pasted; if you do not paste the folder, it remains in its original location.

Note: When merging folders, the destination folder can contain documents with the same name; because documents have unique IDs, multiple documents with the same name can exist in the same folder.

Multi-user Considerations

- You can create, rename, move, copy, or delete a folder when you are working online or offline. The Developer follows specified rules to resolve folder conflicts (see Manage Folder Conflicts, Refresh the Library and Outline Editor). When working offline, you can only delete folders that are empty or contain new documents that have never been checked in.

  When an author moves a folder, the Developer moves all the documents in the folder, even if a document is checked out to another author.

To move a folder using cut and paste:

1. Select the folder you want to move in the Folders pane or Contents pane.

   You can select more than one folder in the Contents pane using the standard Windows selection keys (CTRL+click and SHIFT+click). You can select all items in a folder by choosing Select All from the Edit menu.

2. On the **Edit** menu, choose **Cut**.

   You can also right-click the folder and choose Cut.

3. Select the destination folder.

4. On the **Edit** menu, choose **Paste**.

   You can also right-click the folder and choose Paste.

To move a folder using drag-and-drop:

1. Select the folder you want to move in the Folders pane or Contents pane.

2. Drag the folder and drop it on the destination folder in the Folders pane or Contents pane.

   As you drag a folder, a yellow arrow also moves, indicating the selected folder in the folder hierarchy. Release the mouse button when the arrow points to the destination folder.

4.2.5 Copy a Folder

When you copy a folder to another folder in the Library, the Developer creates duplicate copies of the entire contents of the folder. If the documents in the selected folder are organized in a structure of subfolders, the Developer re-creates the subfolder structure in the copy.

Note: When you paste a folder to the same parent folder, the Developer creates a new folder named "Copy of <folder name>".

Copy and Paste
When you copy a folder that contains documents, you can paste it to create new copies of the folder and its contents. The new copies are independent documents that you can edit and rename without affecting the original documents.

Copy and Paste Special
If the copied folder contains parent documents related to child documents, such as a section linked to a topic or a topic linked to a web page, you can use the options in the Paste Special dialog box to select the type of copy you want to create. Each option produces a different result.

- **Copy (selection only)** - Choose this option to create a copy of the documents in the folder that maintain their links to the original child documents. Therefore, if the copied folder contains Section A that is linked to Topic 1 and Topic 2, the Copy (selection only) option creates a new Section B that still links to Topic 1 and Topic 2.

  If the copied folder contains both parent documents and related child documents, the Copy (selection only) option creates copies of all of the documents in the folder, BUT the new parent documents maintain their links back to the original child documents, not to the newly created child documents.

- **Duplicate (selection and related)** - This option creates duplicate copies of the parent documents and all related child documents, even if they are not stored in the folder. The links between new copies are updated so that new parent documents link to new child documents. The Duplicate option breaks all links to the original documents and creates an entirely new replica of the original. If the copied folder contains Section A that is linked to Topic 1 and Topic 2 (which can reside in any folder), the Duplicate (selection and related) option creates new copies of all of the documents and related documents and links the new Section B to new Topic 3 and new Topic 4.

  When duplicating a folder with related documents, the Developer creates a copy of the folder structure for each related document.

Note: The Duplicate (selection and related) option does not create copies of templates, master role lists, sound files, and custom icon packages. The new copies still point to the original documents for those components.

Multi-user Considerations

- Any new document that you create or link is automatically checked out to you. If you want to make a new document available to multiple authors and place the document under the Developer's version control system, you must check it in.

To copy a folder using Copy and Paste:

1. Select the folder you want to copy in the Folders pane or Contents pane.

   You can select more than one folder in the Contents pane using the standard Windows selection keys (CTRL+click and SHIFT+click). You can select all items in a folder by choosing Select All from the Edit menu.

2. On the **Edit** menu, choose **Copy**.

   You can also right-click the folder and choose Copy.

3. Select the destination folder in the Folders pane.

4. On the **Edit** menu, choose **Paste**.

   You can also right-click the folder and choose Paste.

To copy a folder using drag-and-drop:

1. Select the folder you want to copy in the Folders pane or Contents pane.
2. Hold CTRL and drag the folder to the destination folder.
3. Release the mouse button and then the CTRL key.

To copy a folder using Copy and Paste Special:

1. Select the folder you want to copy in the Folders pane or Contents pane.

   You can select more than one folder in the Contents pane using the standard Windows selection keys (CTRL+click and SHIFT+click). You can select all items in a folder by choosing Select All from the Edit menu.

2. On the **Edit** menu, choose **Copy**.

   You can also right-click the folder and choose Copy.

3. Select the destination folder in the Folders pane.

4. On the **Edit** menu, choose **Paste Special**.

5. Choose **Copy (selection only)** to create a new copy of the selection only and maintain links to the original related documents or **Duplicate (selection and related)** to create a new copy of the selection and all related documents and create the links among the copies.

6. Click **OK**.

4.2.6 Delete a Folder

If you find that you no longer need a folder, you can delete it from the Library. Deleting a folder deletes the entire contents of the folder, including all documents and subfolders. A Confirm Delete dialog box opens prompting you to confirm your deletion.

If the folder you are deleting contains documents that are linked to other documents stored in another folder, you are prompted with the choice of deleting the selection only or the selection and all related documents in other folders. Clicking the View related documents link displays a list of the related documents.

Selecting Cancel during the deletion process displays a message with a link to view the documents that have already been deleted.

Note: If a document in a deleted folder is linked to an outline, the link is broken and a Missing Document link appears in its place in the outline.

Warning! Folder deletions cannot be undone.

Multi-user Considerations

- You can delete a folder only when all of the documents in it can also be deleted. Documents under version control must be checked in and you must be working online to delete a document from the Library. You can delete new documents that have never been checked in (are not under version control) while working online or offline.

  Deleted documents that are used in any outline will continue to appear in the outline. You can either remove these broken links from the outline or restore the deleted documents as long as the administrator has not purged them.

  If you delete a folder that contains a mixture of checked in and checked out documents, the checked in documents will be deleted, and the checked out documents and the folder will remain in the Library.

  You can create, rename, move, copy, or delete a folder when you are working online or offline. The Developer follows specified rules to resolve folder conflicts (see Manage Folder Conflicts, Refresh the Library and Outline Editor). When working offline, you can only delete folders that are empty or contain new documents that have never been checked in.

  Deleted documents that have been checked in to the Library can be restored if they have not been purged by your Administrator. New documents that have never been checked in cannot be restored. Restoring a document that was part of a deleted folder restores the document and the folder.

To delete a folder:

1. Select the folder you want to delete in the Folders pane or Contents pane.

   You can select more than one folder in the Contents pane using the standard Windows selection keys (CTRL+click and SHIFT+click). You can select all items in a folder by choosing Select All from the Edit menu.

2. On the **Edit** menu, choose **Delete**.

   You can also press DELETE or right-click the folder and choose Delete.

3. If prompted that one or more documents are not restorable, click **Yes** to complete the action or **No** to abort.

The Related Documents dialog box appears when you perform an action on any document that has links to other documents. You can choose to process only the document(s) you selected or to process your selection and all of the related documents.

Click the View related documents link to display a list of the related documents if you are not sure whether you want to include related documents.

After you have made your selection, click **OK**.

You might also receive a message if some documents could not be processed because of other constraints. You can click OK to close the message box or click the View activity log link to view the results of the action.

4.2.7 Expand and Collapse Folders

When the Library opens, only the top level folders appear in the Folders pane. The Folders pane, which appears in the left pane in the Library, displays the folder hierarchy in a tree view. When you select a folder in the folder tree, its contents appear in the Contents pane to the right.

Expand/collapse symbols (+/-) appear next to folders that contain subfolders. A plus (+) symbol means that the folder is collapsed and the subfolders are hidden in the folder tree. A minus (-) symbol means that the folder is expanded and the subfolders appear in the folder tree.

Note: When selecting folders, you can select a single folder in the Folders pane and multiple folders in the Contents pane.

To expand and collapse folders:

1. Click the (plus symbol) in the folder tree to expand a folder.

   You can also double-click a parent folder in the left or right pane to expand it.

2. Click the (minus symbol) in the folder tree to collapse a folder.

Note: You can also press ENTER to expand and collapse the selected folder in the Folders pane (left pane) or open the selected folder in the Contents pane (right pane).

4.2.8 Print Library Folder Contents

You can print a report listing the contents of any folder in the Library. Included in the report is a list of folders or documents as well as the columns in the active view. To print the contents of a folder you must first select the folder from the Library. You can also customize a view to display a flat list of documents in the Library.

Note: The report does not honor column sizes that appear in the active view. You can change the page orientation or adjust the margins to modify the column sizes, or save the report to Microsoft Excel and adjust the columns there.

The report opens in a new window. Use the following toolbar icons to print the report, configure printer settings, export the report to file or graphic format, and so on.

Searches the report for specified text.

Displays the current printer settings such as the active printer, status, page range, number of copies, and so on.

Prints the report to the active printer.

Displays the current page setup such as paper size, orientation, and margins that you can change.

Displays scaling options such as scaling by a percentage of normal size and fit options.

Scrolls the report.

Zoom out. You can also enter a Zoom Factor percentage to zoom in or out.

Zoom in. You can also enter a Zoom Factor percentage to zoom in or out.

Move to the first page.

Move to the previous page.

Move to the next page.

Move to the last page.

Saves the report to PDF, HTML, Excel, or graphic format. Your selection displays additional options based on the file type you selected.

Close preview.

To print folder contents from the Library:

1. Open a folder to display its contents in the right pane of the Library.
2. On the **File** menu, choose **Print** and use the toolbar icons to print, view, or save the report to a file.

4.3 Work with Documents

Your content is constructed by creating and linking various documents. The way you add, edit, delete, find, and save documents is very similar regardless of the document type.

4.3.1 Create a New Document

You can create a new document from the Library. The new document launches in the appropriate document editor in a new tab.

Each document type has an icon associated with it that appears next to the document name in the Library and Outline Editor. For example, the icon for a module is a purple book and the icon for a topic is a piece of paper with a yellow text bubble.

Module and section documents perform the same functions and contain the same document properties. Modules and sections do not inherently contain content. They are used to link documents together to create the hierarchy for an outline.

There is no difference between a module or section document in an outline. You can create a hierarchy using all module documents, all section documents, or a combination of the two. The two document types are represented by different icons so that you can easily identify them. For instance, to visually differentiate the structure of your content, you can use modules for the highest levels in your outline and sections for sublevels.

For more information about creating other new document types from the Library, see *Create a Glossary* in the Define Glossary Terms chapter, *Create a New Web Page* under the Enhance Content with Web Pages section in the Enhance Content with Attachments chapter, *Develop Questions* in the Enhance Content with Questions and Assessments chapter, and *Create a New*

Assessment under Design Assessments in the Enhance Content with Questions and Assessments chapter.

Multi-user Considerations

- Any new document that you create or link is automatically checked out to you. If you want to make a new document available to multiple authors and place the document under the Developer's version control system, you must check it in.

4.3.1.1 Create a New Module or Section

You can create a new module or section document from the Library or any document editor. After you create and save the module/section, it opens in the Outline Editor, where you can link documents to it and build your outline.

When you create a module/section, the New Module or New Section dialog box opens giving you the opportunity to set certain document properties. Most of the default properties that appear are inherited from the settings in Tools, Options. Module and section documents contain the same properties. You can change the properties when you create the module/section or change them later. However, because all new documents that you create/link to the new module or section in the Outline Editor inherit its property settings, it is a good idea to set the necessary properties when you first create the new module/section.

A module/section has the following default properties that you can change:

- **Name**: A descriptive name for the document.

- **Location**: The folder location in the Library where this document is stored. The default folder that appears depends on where you are when you create the new document, as follows:

  If you create a new document from the Library, the default folder is the folder that is selected in the Library when you create the new document.

  If you link a new document from the Outline Editor, the default location is the same as the location of the parent document to which you are linking the new document.

- **Language**: The Language option allows you to choose the default dictionary that is used to check the spelling of a document's content. Dictionaries for English (UK & US), German, French, Spanish, Dutch, Danish, Portuguese (Brazil), Swedish, Finnish, Norwegian, and Italian are provided.

- **Template**: The Template option allows you to select another folder of template files. The template sets included with the Developer are the Standard and Microsoft templates. The Microsoft template conforms to the standards as stated in the Microsoft Manual of Style for Technical Publications. In addition to these templates, other template sets may be available to you. Alternate template sets are most useful when you are creating content for more than one application. Please contact Technical Support for more information on this option and its implementation.

- **Glossary**: The glossary document that is currently assigned to the document. The glossary document lists the words you have assigned as glossary terms. After you have set up the glossary terms and their definitions, the Developer can automatically create the links to the terms found in any document text.

- **Screen Resolution**: The Screen Resolution option allows you to determine the resolution in which the topic content is recorded. If authors attempt to record in a resolution other than the one listed in the Screen Resolution list box, a message box informs them that their resolution does not match the topic setting and indicates in what resolution they should record. While content authors are not prevented from recording in a different resolution if they choose, this option helps create greater

consistency in the content.

Please note that the Developer detects the current resolution of your computer and automatically sets the screen resolution property to match when you create new documents. Once screen resolution for a topic is set and you have saved a recording; the screen resolution cannot be changed.

To create a new module or section document in the Library:

1. Select the folder where you want to store the document.
2. On the **File** menu, point to **New** and choose **Module** or **Section**.
3. Type a name for the new document.
4. To change the folder in which the document is stored, type the folder path in the **Location** field or click **Browse**, select a different folder, and click **OK**.

   When browsing for a folder, you can use the Make New Folder button to create a new subfolder in the currently selected folder.
5. Choose the properties for the new document.
6. Click **OK**.

   The module or section opens in a new tab in the Outline Editor.

Important Note about Module and Section Documents: A module or section document will appear with a purple or blue book only when the document has at least one linked child document such as a topic or another module or section. However, a module or section document with no linked child documents will appear with a page icon such as for module and for section. When you create a new module or section, it automatically appears as a page icon until you link at least one additional child document. It then appear with a purple or blue icon.

4.3.1.2 Create a New Topic

Topics are the documents in which you record the steps (and sound if applicable) of a task or transaction in an application. You can create a topic in the Library, or while working on an outline in the Outline Editor.

When you create a topic in the Library, the Recorder automatically launches for you to capture the topic steps. After finishing the recording, the new topic opens in the Topic Editor. From the Topic Editor, you save the topic by naming it and selecting a folder in the Library in which to store it. Unlike module and section documents, you do not set properties for a topic when you create it. You can however, change the properties for a topic at any time.

Note: The Recorder does not launch when you create a new topic in the Outline Editor by linking it to an outline. When you name the topic, it is saved automatically to the same folder as the parent document.

The icon for a topic is a piece of paper with a yellow text bubble. To visually differentiate between recorded and blank topics, the topic icon appears with lines on the paper and bubble for topics with recorded content and as a blank paper and bubble for blank topics.

To create a new topic in the Library:

1. Select the **File** menu, point to **New** and choose **Topic**.

2. When the Recorder opens, record the steps (and sound, if applicable) of the topic.
3. When you are done recording the steps, click **Finish** in the Recorder window.
4. To save the topic from the Topic Editor, select the **File** menu and choose **Save**.
5. In the Save As dialog box, type a name for the new topic.
6. Navigate to the folder where you want to store the topic.
7. Click **Save**.

4.3.2 Save a Document

As you modify a module or section in the Outline Editor, the Developer automatically saves your changes. However, when you open other editors to modify a document such as a topic, package, web page, glossary, role, assessment, or question, you need to save the changes. If you have not saved your latest changes when you close the document editor, a message opens asking if you want to save the document.

The first time you save a document, the Save As dialog box opens allowing you to name the document and select a folder for storing the document. The Save As dialog box automatically filters the document display for the document type you are saving. However, if you want to see the names of all documents stored in a folder, you can use the Type field to view all documents. Once a document has been saved, its name appears in the document editor tab. Subsequent saves do not display the Save As dialog box; instead, your changes are saved to the existing document.

Note: By default, the Developer automatically creates a temporary backup copy of any open document every 10 minutes if a change has occurred. This option can be disabled or the time interval between autosaves changed in the Autosave section of the Library category on the Options dialog box.

Naming Documents

Each document in the Library is identified with a unique Document ID made up of a long series of letters and numbers, such as 3c4c7b1a-a50a-4d54-3719c6b47732. No two documents in the Library have the same Document ID. When you save the document, you give it a meaningful name, one that identifies its contents or use. There are no restrictions on the length of the name or on the characters used. You can use any combination of letters, numbers, special characters and spaces to name a document. Since the Developer treats this name as a property of the document and does not use this name to identify the document, a folder can contain multiple documents with the same name.

Save As

The Save As command provides the opportunity to create a copy of a document by opening the Save As dialog box, where you can give the document a new name and select a folder in which to store the document. This creates a new document identical to the original, with all links to the original document preserved in the new copy. For example, if a topic is linked to a web page, and you save the topic with a new name, the new copy is also linked to the same web page. The Save As command is available in any document editor except the Outline Editor. You cannot use Save As to create a new copy of an outline or section document. To create copies of these documents, you can use copy and paste.

Warning! Using Save As to save a document with the same name and to the same folder creates a copy of the original rather than overwriting it. You will be prompted that a document already exists at the save location and that saving will create a new document.

Multi-user Considerations

- When you save a checked out document, it is saved to your data storage location regardless of whether you are working online or offline. You must check the document in to insure that the server has the most recent copy. A new document is not added to the server until you check it in. If a document has never been checked in, your local copy is the only copy of that document.

  If you click the Keep checked out option on the Check In Comment dialog box during check in, the content is checked in and the version number incremented by 1 but the document remains checked out and unavailable for editing by other users.

  Open documents display check in/out indicators in the document editor tab. While you can edit a checked in or locked document, you cannot save your changes to the original document.

  If you edit a document that you did not check out (in other words, a checked out document was opened in Read-Only mode and edited) and you want to save the changes, you may still be able to save it. If you have access rights to the document and it has not been checked out by someone else, you are given the option to save the changes to the original document name. If you choose to save the changes, the document is checked out and the changes are saved. If you do not want to save the changes to the original document, you can save the document as a different document name or you can abandon the changes without saving.

Note: Saving changes to a document that is not checked out to you is not a recommended best practice. This functionality is designed to allow you to save changes to a document that was unintentionally edited in Read-Only mode.

To save a document:

1. On the **File** menu, choose **Save**.
2. Type a name for the document.
3. Navigate to the folder where you want to store the new document.

   You can use the Save in list and the icons in the dialog box to navigate folder levels. Click to create a new subfolder in the currently selected folder.
4. Click **Save**.

Note: You can also open an existing document and use Save As on the File menu to save a copy of the document with a new name and/or to another folder.

Note: If you split the layout of the work area, you must first activate the pane containing the document before saving it. The tab of the active pane shows the document name in bold text, while the text is not bold in the inactive panes.

4.3.3 Open a Document from the Library

Opening a document launches the appropriate document editor in a new tab. The document editor that launches depends on the type of document that you open. For example, when you open a module or section, the Outline Editor launches in a new tab. Opening a package or web page launches the Package or Web Page Editor in a new tab. When you open a topic containing recorded content, the Topic Editor launches. However, opening a topic that contains no recorded content launches the Recorder. Documents that open in tabs appear as the last tab on the right in the Developer window.

You can open a document from any view in the Library or Outline Editor, or use the options in the Open dialog box, which allow you to navigate and filter Library folders for specific document types. You can open multiple documents at the same time from the Library or Outline Editor, with each document opening in its own editor. You cannot, however, open two unrecorded topics at the same time because the Developer can launch only one instance of the Recorder.

Note: You can also open documents from the Start Screen, which appears when you start the Developer.

Multi-user Considerations

- If you open a document that is not checked out to you, it opens in Read-Only mode. If you decide to make any changes to a Read-Only document, upon exit you are given the option to save the document (check out and save the changes), save it as a new document, or discard the changes.

To open a document:

1. To open a single document, double-click the document.

   You can also press ENTER to open the selected document.

2. To open multiple documents, select the document(s).

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click). You can select all items in a folder by choosing Select All from the Edit menu.

3. Right-click any document in the selection and choose **Open**.

   You can also press ENTER to open all selected documents.

To open documents using the Open dialog box:

1. Select the document(s).

2. On the **File** menu, choose **Open.**

3. In the Open dialog box, navigate the Library to the folder containing the document you want to open.

   You can use the Look in list or the icons in the dialog box to navigate folder levels.

4. To filter the document display, select the document type from the **Type** list.

   To remove the filter, select All types from the Type list.

5. Select the document to open.

6. Click **Open**.

Note: To open a document from the Start Screen, click a link for a recently opened outline or click the Document link to open the Open dialog box.

4.3.4 Close a Document

Closing a document removes the tab from the work area. When you close a document, you are prompted to save if the document has changed. The Outline Editor does not prompt you to save your changes when you close since the Outline Editor automatically saves changes.

After you close a document, the next tab to the right of the closed tab becomes the active tab. However, if there are no document tabs to the right of the tab you are closing, the tab to the left becomes the active tab.

To close a document:

1. Click the document tab that you want to close.
2. On the **File** menu, choose **Close**.

   You can also right-click a tab and choose **Close**, or press CTRL+F4, or click .

Note: Choosing Close from the File menu in the Library closes the Library. You can reopen the Library by choosing Library from the View menu.

4.3.5 Delete a Document and Related Documents

You can delete a document only from the Library. Deleting a document from the Outline Editor removes the link between documents, but does not delete the document from the Library. You cannot restore deleted documents in a single-user installation. The Developer alerts you when you delete a document that cannot be restored.

If you attempt to delete a document from the Library that is used by other documents, you have the choice to delete the selection only or the selection and all related documents. Clicking the View related documents link displays a list of the related documents. The related documents list includes the direct and indirect links for each parent document selected. The direct links are the child documents that are linked to the deleted document, and the indirect links are the child documents that are linked to those documents. For example, consider a section that is linked to a topic, whose concept is linked to a web page. Deleting this section with related documents not only deletes the topic, but also deletes the web page linked to the topic. However, the Developer will NOT delete a document that is also linked to another parent not related to the deletion.

Note: When deleting a parent document with its related documents, the following document types are not included as related documents and are not deleted: sound packages, icon packages, templates, and glossary documents. You can delete sound packages, icon packages, templates, and glossary documents directly from the Library. When you delete a glossary document, the web page and package documents linked to it are not deleted unless you choose the delete with related option.

Warning! When you delete a package as a "related document", you delete the entire package and all of the files it contains, even if only one file of a multi-file package is linked to the document(s) selected for deletion.

When you delete a document in the Library that is directly linked to an outline, the document is removed from the outline and a Missing Document link appears in its place. You can delete this link in the outline as well.

Note: You cannot delete a document if it is open in another document editor. For example, you cannot delete a section from the Library that is currently open in the Outline Editor. When deleting an open document, you will be prompted to close the document in the other editor.

In some instances, you may have problems deleting a document if it was previously linked to an outline that is currently open in the Outline Editor. If Developer cannot delete the document, close the outline and try deleting the document again.

Multi-user Considerations

- Documents under version control must be checked in and you must be working online to delete a document from the Library. You can delete new documents that have never been checked in (are not under version control) while working online or offline.

  Deleted documents that are used in any outline will continue to appear in the outline. You can either remove these links from the outline or restore the deleted documents as long as the administrator has not purged them.

  Deleted documents that have been checked in to the Library can be restored if they have not been purged by your Administrator. New documents that have never been checked in cannot be restored.

To delete a document:

Note: Before deleting a document, you must close it if it is open in a document editor.

1. In the Library, select the document that you want to delete.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click). You can select all items in a folder by choosing Select All from the Edit menu.

2. On the **Edit** menu, choose **Delete**.

   You can also press DELETE or right-click the document and choose **Delete**.

   The Related Documents dialog box appears when you perform an action on any document that has links to other documents. You can choose to process only the document(s) you selected or to process your selection and all of the related documents.

   Click the View related documents link to display a list of the related documents if you are not sure whether you want to include related documents.

   After you have made your selection, click **OK**.

   You might also receive a message if some documents could not be processed because of other constraints. You can click OK to close the message box or click the View activity log link to view the results of the action.

4.3.6 Rename a Document

You can rename any document from the Library. From the Outline Editor, you can rename a module, section, or topic document, or an assessment or question directly linked to the outline.

Document names do not have to be unique. Since documents are identified by their ID, two documents with the same name can exist in the same Library folder or outline.

Note: You can also rename a document using the Name property in the Properties toolpane (General category). However, you cannot rename multiple documents at the same time using this toolpane.

Multi-user Considerations

- Before you can perform this action, you must check out the document. After you save any changes, you should check in the document to make it available to other authors and add the changes to the Developer's version control system.

The Developer preserves the name of versioned documents. When you roll back a renamed document to a previous version, the document name rolls back as well.

To rename a document:

1. Click the document that you want to rename.
2. On the **Edit** menu, choose **Rename**.

   After selecting a document, you can also click the document name or press F2 to start edit mode.

   You can also right-click a document and choose Rename.
3. Type a document name.
4. Press ENTER or click anywhere outside the name to save your changes.

4.3.7 Move a Document (Library)

As you work with documents in the Library, you may find that you need to move them to another folder due to a change in your folder structure or because the document was saved to the wrong folder. When you move a document to another folder, all links to modules, sections, assessments and other documents are maintained. Because each document is assigned a unique ID, you can move the document into a folder that already contains a document with the same name. You can move a single document or multiple documents to another folder using drag-and-drop or cut and paste. A cut document does not move until it is pasted. If you do not paste the document, it remains in its original location.

In addition to moving documents within the Library, you can also move documents from the Library to an outline, within an outline, and from one outline to another. Dragging a document from the Library into an outline links the document to the outline, but does not physically move the document from its original folder. Moving documents within an outline or to another outline, unlinks the document from its current location in an outline and relinks it to its new location in an outline.

Note: A summary message appears if some of the documents you selected could not be processed. Clicking the View activity log link in the message displays a list of the results for each document.

Multi-user Considerations

- You can move a document to another folder regardless of its check in/out state. If you move a document while working offline, the move does not appear in the Library until you switch to online mode.

  You can move a locked document (one checked out to another author) to another folder in the Library. Note that documents can be moved at any time, even while the document is open in the checked out author's Library. When the author closes the moved document, it will appear in the new location after a server refresh.

To move a document in the Library using cut and paste:

1. Select the document you want to move.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click). You can select all items in a folder by choosing Select All from the Edit menu.

2. On the **Edit** menu, choose **Cut**.

   The icon for the document appears shaded until the document is pasted.

   You can also right-click your selection and choose Cut.

3. Select the destination folder in the Folders pane.

4. On the **Edit** menu, choose **Paste**.

   You can also right-click the folder where you want to move the document and choose Paste.

To move a document in the Library using drag-and-drop:

1. Select the document you want to move.

2. Drag the document and drop it on the destination folder.

   As you drag a document, a yellow arrow also moves, indicating the selected folder in the folder hierarchy. Release the mouse button when the arrow points to the destination folder where you want to move the document.

4.3.8 Copy Documents in the Library

You can copy documents from one folder in the Library to another. When you create a copy of a document, the Developer creates a new document with a new Document ID. The new copy and the original source document are not directly linked, so you can make changes to the copy without affecting the source. For example, you may want to copy a topic if two tasks are almost identical except for the final frames. You can record the first topic, create a copy of it with a new name, and then change the copy by re-recording the final frames.

Paste vs. Paste Special

There are two paste commands in Developer for copied documents; Paste and Paste Special. If the copied document is a parent linked to other related child documents, it is important to choose the paste command that gives you the desired results. Examples of a parent document include a module or section linked to a topic, web page, package, glossary, assessment or question; or a topic linked to a web page, package, or glossary.

Note: Before copying a document, it is a good idea to check the document links in the Related Documents toolpane.

4.3.9 Copy and Paste (Library)

You can create copies of documents in the Library using copy and paste and drag-and-drop. Copying a document creates a unique document, with a new Document ID. After creating the copy, you can edit or rename it without affecting the source document.

If the original document links to other documents, the Developer breaks or maintains the links in the copy depending on the direction of the link. Pasting a copy maintains the links that go down the hierarchy (from parent to child) and breaks the links that go up the hierarchy (from child to parent).

Note: Before copying a document, it is a good idea to check the document links in the Related Documents toolpane.

The following describes how using Paste to create a copy in the Library affects document links.

Original document links to a parent.

- The link is broken. The new copy does not link to the source document's parent.

  Example: Topic1 links to SectionA

  Result: Topic1_copy not linked to SectionA

Original document links to child documents.

- The new copy links to the source document's children.

  Example 1: Section A links to Topic1 and Topic2

  Result 1: SectionA_copy maintains links to Topic1 and Topic2

  Example 2: Topic1 links to Web page1

  Result 2: Topic1_copy links to Web page1

Original document is both a child document linked to a parent and a parent document linked to child documents.

- The new copy does not link to the source document's parent, but links to the source document's children.

  Example: SectionA links to parent ModuleA, and in turn, links to child documents Topic1 and Topic2

  Result: SectionA_copy not linked to ModuleA, but maintains links to Topic1 and Topic2

Note: See *Copy and Paste Special* for information about creating a true replica where the parent and its children are copied and links are created to the new copies.

Note: Copying a document from the Library and using Paste in the Outline Editor, does not create a new document. Paste in the Outline Editor creates a link to the original document. You cannot copy a document from the Outline Editor and paste it into the Library.

Multi-user Considerations

- Any new document that you create or link is automatically checked out to you. If you want to make a new document available to multiple authors and place the document under the Developer's version control system, you must check it in.

To copy a document using Copy and Paste:

1. In the Library, select the document you want to copy.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click). You can select all items in a folder by choosing Select All from the Edit menu.

2. On the **Edit** menu, choose **Copy**.

   You can also right-click the document and choose Copy.

3. Select the destination folder in the Folders pane.

4. On the **Edit** menu, choose **Paste**.

   You can also right-click the folder and choose Paste.

To copy a document using drag-and-drop:

1. In the Library, select the document you want to copy.
2. Hold CTRL and drag the document to the destination folder.
3. Release the mouse button and the CTRL key.

4.3.10 Copy and Paste Special (Library)

If the document you are copying is a parent to related documents (child documents), you can use the options in the Paste Special dialog box to create two different paste scenarios.

Copy (selection only)

The Copy (selection only) option creates a new copy of all of the selected documents. However, the new copies of parent documents link to the original child documents, even when the child documents are included in the selection. For example, if you include a parent document and its related child documents in the copy selection, the Copy (selection only) option creates copies of all of the documents you copied, BUT the new parent documents maintain their links back to the original child documents, not to the newly created child documents.

Note: When copying within the Library, the Copy (selection only) option provides the same results as using the Paste command.

Duplicate (selection and related)

The Duplicate (selection and related) option creates new copies of the entire selection and all related documents, even if you did not include the related documents in your copy selection. The Developer updates the links so that the new parent documents link to the new child documents.

When you create a duplicate copy of a selected document or documents, the Developer creates new copies of all the documents and the documents related to the selection, including:

- Modules
- Sections
- Topics
- Web pages
- Packages
- Glossaries
- Assessments
- Questions

Note: The Duplicate (selection and related) option does not create copies of templates, master role lists, sound files, and custom icon packages linked to the copy source. The new copies still point to the original documents for those components.

To create a duplicate copy of an outline, you only need to select the highest-level document. The Developer automatically compiles a list of all related documents to include in the copy. For the highest-level parent document, the Developer creates the folder structure and substructure. Related documents that do not exist in the folder structure are copied to a new folder named Additional Related Documents.

Note: Duplicating an assessment that contains questions linked to content through the Associated Content property creates duplicate copies of assessment and question documents, plus all documents directly and indirectly linked to the questions; modules, sections, topics, web pages, packages, glossaries, and so on.

Multi-user Considerations

- Any new document that you create or link is automatically checked out to you. If you want to make a new document available to multiple authors and place the document under the Developer's version control system, you must check it in.

To copy documents using Copy and Paste Special:

1. In the Library, select the document you want to copy.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click). You can select all items in a folder by choosing Select All from the Edit menu.

2. On the **Edit** menu, choose **Copy**.

   You can also right-click the document and choose Copy.

3. Select the destination folder in the Folders pane.

4. On the **Edit** menu, choose **Paste Special**.

5. Choose **Copy (selection only)** to create a new copy of the selection only and maintain links to the original related documents or **Duplicate (selection and related)** to create a new copy of the selection and all related documents and create the links among the copies. If you choose Duplicate, you can click the **View related documents** link to display a list of the related documents if you are not sure whether you want to duplicate related documents.

6. Click **OK**.

4.4 View Folder Content

When working in a view in the Library, you can select a folder in the Folders pane on the left and the contents of the folder appear in the Contents pane on the right. To open a subfolder of a parent, you can either select it from the expanded folder tree or double-click the folder name in the Contents pane.

A view displays the properties for the documents in the selected folder in a grid arrangement. The grid displays a column heading for each property. The active view appears in the View toolbar. You can customize the view by sorting the contents by another property and rearranging and resizing the columns. The Name column appears by default as the first column on the left in the grid. This column displays the document name and an icon denoting the document type.

When working with a large amount of documents and properties, you may want to resize the panes by dragging the split bar between the Folders pane and Contents pane. You can also explore different parts of the Library by splitting the work area into a horizontal or vertical layout. Horizontal and vertical scroll bars appear in the view when the contents exceed the dimensions of the pane.

Changes to the active view are preserved, so that the next time you open the Library, you will see the same view. Using the same procedures, you can customize any view. However, each view must be customized separately. You can also customize a view using the Manage Views command on the View menu.

Document Count

When working in a view in the Library, a Count in View appears on the status bar. This allows an author, at a glance, to see the amount of content in the selected view. The objects that appear in the count depend on the selection set. When selecting a folder in the left pane, the count displays the number of objects that appear in the right pane. When selecting in the right pane, the count displays the number of objects selected. For example, if you selected a folder (with three documents under it) and a document, the count would display two objects, one for the document and one for the folder. If your display is in a flat view, the count displays the number of objects selected. If nothing is selected, count displays the total of all objects in the view.

Multi-user Considerations

- As documents are checked in and out, icons appear to the left of the document name indicating the check in/out state as follows:

  indicates that the document is checked out to you.

  indicates that the document is locked and checked out to another author.

  No icon indicates that the document is checked in and available to any author.

  These icons appear in various places such as the Library and Outline Editor as well as on document editor tabs and various views. Also note that additional columns in the Details view of the Library and Outline Editor display the check in/out state and version number. The Checked Out By column displays the name of the author who is currently using the document.

4.4.1 Sort Documents

By default, items in the Contents pane are sorted by the Name column in ascending order. Clicking on a column heading sorts the items by that property. Items can be sorted in ascending or descending order. When a column heading is clicked, a triangle appears in the column label indicating the direction of the sort. A triangle pointing up means that the items are sorted in ascending order and a triangle pointing down means that the items are sorted in descending order. Each time you click the column heading, you reverse the sort order.

Note: You can also set the sort order by editing the view definition.

If the selected folder also contains subfolders, they will appear at the top of the view, in the selected sort order.

Your last sort is saved as the default sort for the active view until you change the sort. You can also split the work area with a horizontal or vertical layout and apply a different view and sort to each work area. For example, you may want to compare documents in the same folder or different folders using two different sorts. The sort in a split layout is also preserved and the documents appear in that sort the next time a split layout opens.

To sort documents:

1. Click the column heading for the property on which you want to base the sort.

2. To change the sort order, click the column heading until the triangular indicator points up for an ascending sort or down for a descending sort.

To configure document sort order in a view definition:

1. On the **View** menu, choose **Manage Views**.
2. Add a new view or edit an existing view.
3. Click the **Sort** tab.
4. Click the down arrow and select a document attribute by which to sort documents.
5. Choose **Ascending** or **Descending** order.
6. Continue to specify secondary sort orders (optional).
7. Click **Apply** to save your changes. If you are editing the active view, the results of the view definition are immediately visible.
8. Move to the next tab or click **OK** to save the view.

4.4.2 Rearrange Columns

The property columns in the Library can be rearranged in an order that suits the way you work. Frequently-used columns can be moved so that they appear in any view without scrolling and the less frequently used columns moved to the end of the grid.

You can move a column by dragging its column heading to another position in the headings row. When you drag a column heading, a transparent image of the column heading moves with the mouse pointer. As you drag the transparent image left or right in the headings row, a black border appears around a heading below it and continues to move to the next heading as you move the mouse pointer. When you release the mouse button, the column moves to the left of the heading that displays the black border.

Note: You can also configure the column arrangement by editing any view definition. Column changes made to the active view are automatically saved in the view definition.

The Developer remembers your column order, so that the next time you open the Library or Outline Editor, the columns appear in the active view as you last arranged them.

If you split the work area into separate horizontal or vertical layouts, you can create a separate column arrangement for each work area.

To rearrange columns:

1. Drag the heading of the column you want to move and drop it on a heading in the headings row, to the left of which you want to insert the moved column.

To sequence columns in a view definition:

1. On the **View** menu, choose **Manage Views**.
2. Add a new view or edit an existing view.
3. Click the **Column Selection** tab.
4. Select one or more columns in the Used in view section and use the up or down arrows to change the position.
5. Click **Apply** to save your changes. If you are editing the active view, the results of the view definition are immediately visible.
6. Move to the next tab or click **OK** to save the view.

4.4.3 Add and Remove Columns

You can remove property columns while working in the Library or Outline Editor. Views in the Library and Outline Editor display a different subset of the total list of available property columns. If you need more information in a view, you can add one or more columns from the list of available properties.

Removing columns simplifies the view and lets you concentrate on the properties you use. If you find that you need to see the data in a deleted column, you can add the column back to the view.

The Developer preserves your last column display in the active view for the Library and the Outline Editor.

To remove a column:

1. Drag the heading of the column you want to remove down into the view and release the mouse button when a large X appears on top of the column heading.

To add a column:

1. Right-click on any column heading and choose **Column Chooser**.

   The Column Chooser window opens displaying the column headings for the hidden columns.

2. From the Column Chooser window, drag the column you want to add and drop it in a position on the column heading row.

Note: Dropping a column on top of another column heading adds the dropped column to the left of the column heading. To add a column to the end of the column headings, drop it on the right border of the last column heading.

To configure columns in a view definition:

1. On the **View** menu, choose **Manage Views**.
2. Add a new view or edit an existing view.
3. Click the **Column Selection** tab.
4. From the Available section, choose one or more columns and use the right arrow to move your selection to the Used in view section. To remove one or more columns, make your selection and click the left arrow.
5. Click **Apply** to save your changes. If you are editing the active view, the results of the view definition are immediately visible.
6. Move to the next tab or click **OK** to save the view.

4.4.4 Size Columns

You can adjust the width of a property column to view more or less of the data in the column. For instance, if you do not need to view the entire Last Modified Date, you can decrease the width of that column. If a column is not wide enough to view the entire contents, the view of the data is truncated and ends with an ellipsis (...).

Columns can be resized manually by dragging the right column border in the headings row to the desired width. You can also autofit a column using Best Fit, which automatically resizes the width of the column to fit its widest text. You can autofit a single column or all columns at the same time.

You can split the work area into separate horizontal or vertical layouts and resize the columns independently. The column widths in the split layout are preserved during the session.

Note: You can also resize columns in dialog boxes and panes that use a column heading layout.

To size columns using drag-and-drop:

1. In the headings row, point to the right border of the column you want to resize.

   The mouse pointer changes to a horizontal two-headed arrow.

2. Drag the column border left to decrease the column size or right to increase the column size.

To size columns using Best Fit:

1. Right-click the heading for the column you want to size.

2. Choose **Best Fit** to autofit a single column or **Best Fit (all columns)** to autofit all columns.

   You can also double-click the right column border in the headings row to autofit a column.

4.5 Create a Custom View

You can create an unlimited number of custom views for the Library and control the following characteristics of each view:

- Selection and order of the columns in the view
- Sort order of the documents in the view
- Selection of documents in the view

Note: Custom views are not Library-specific and are available in any Library.

After you create a custom view, it will appear in the View toolbar list.

Note: You cannot create a custom view for the Outline Editor; however, you can manually customize the Outline Details View.

If you modify the configuration settings (column selection/width and sort) of any active view outside of the View Editor, your changes are automatically saved in the view definition. For example, if you define specific columns to appear in a view, then activate that view in the Library and remove columns, those changes will be reflected in the view definition the next time you edit it in the View Editor.

Share Custom Views

Any custom view that an author creates can be shared with other authors by distributing a copy of a view file from the ViewFilters\<language code> folder in the local data storage location on their computer. You can determine the location of the local data storage location when you create a login profile for the first time. The complete path of the local data storage location is displayed on the Summary page of the Login Profile Wizard for reference. For more information, see *Share a Custom View* in the Use and Share Custom Views section of the Use the Developer in a Multi-user Environment chapter.

Multi-user Considerations

- A custom view is specific to the author who created it. It will not appear as a choice on the View toolbar list of views for all authors.

  Also note that the Developer provides sample custom views in the multi-user environment for displaying documents by owner, state, check out status, and so on.

4.5.1 Add a New View

Before you can add a new view, you should display the Library (View, Library). Although you can create a new view from other document editors, you can only apply a custom view to the Library.

From the Library, you can manage all existing views that are delivered with the Developer as well as create your own.

To add a new view:

1. On the **View** menu, choose **Manage Views**.
2. Click **New**.
3. Type a unique view name. You cannot have duplicate view names.

   You cannot use reserved characters in the view name.
4. Continue to define the column selection, sort, and filter criteria.
5. Click **OK** to save the view.

4.5.2 Configure View Columns

The Column Selection tab controls the data columns that appear in the view as well as their sequence from left to right. By default, each new view includes the Name column (to identify each document in the view). The Available section lists the columns you can choose to include and the Used in view section show the list of selected columns. For each column you include in the view, you can determine its position and width (in pixels).

To configure columns in a view definition:

1. On the **View** menu, choose **Manage Views**.
2. Add a new view or edit an existing view.
3. Click the **Column Selection** tab.
4. From the Available section, choose one or more columns and click <right arrow> to move your selection to the Used in view section. To remove one or more columns, make your selection and click <left arrow>.
5. Click **Apply** to save your changes. If you are editing the active view, the results of the view definition are immediately visible.
6. Move to the next tab or click **OK** to save the view.

To sequence columns in a view definition:

1. On the **View** menu, choose **Manage Views**.

2. Add a new view or edit an existing view.
3. Click the **Column Selection** tab.
4. Select one or more columns in the Used in view section and use the up or down arrows to change the position.
5. Click **Apply** to save your changes. If you are editing the active view, the results of the view definition are immediately visible.
6. Move to the next tab or click **OK** to save the view.

To size columns in a view definition:

1. On the **View** menu, choose **Manage Views**.
2. Add a new view or edit an existing view.
3. Click the **Column Selection** tab.
4. Select one column in the Used in View section and enter a number (in pixels) in the Column Width field (or click the up/down arrows next to the default value).
5. Click Apply to save your changes. If you are editing the active view, the results of the view definition are immediately visible.
6. Click **Apply** to save your changes. If you are editing the active view, the results of the view definition are immediately visible.
7. Move to the next tab or click **OK** to save the view.

4.5.3 Configure View Sort Order

The Sort tab controls the order that documents appear in a view. You can enter a primary sort order followed by two secondary sort criteria. Choose ascending or descending to determine the sort order.

The Organize by folders checkbox controls whether the documents appear in a folder structure (default) or as a flat list with no folders.

To configure document sort order in a view definition:

1. On the **View** menu, choose **Manage Views**.
2. Add a new view or edit an existing view.
3. Click the **Sort** tab.
4. Click the down arrow and select a document attribute by which to sort documents.
5. Choose **Ascending** or **Descending** order.
6. Continue to specify secondary sort orders (optional).
7. Click **Apply** to save your changes. If you are editing the active view, the results of the view definition are immediately visible.
8. Move to the next tab or click **OK** to save the view.

4.5.4 Configure View Filter

The Filter tab lets you control the documents that appear in a view. If you do not define filter criteria, all documents in the Library will appear when the view is active. If you want to limit the documents that appear, you should define filter criteria. For example, you could filter documents by Type and choose to show only topics.

You filter documents by creating "selection statements" that include a Column data element followed by a Condition and a specific data Value.

- **Column**: Select the column that contains the information that you want to filter; such as Type, Frame, Path, or Last Modified Date. For a complete list of the columns and their attributes, see *Select Filter Columns* in the Create a Custom View, Configure View Filter sections of the Manage the Library chapter.

- **Condition**: The criteria used to filter the column data. Condition values act as operators such as equals, not equals, is more than, is less than, and so on. The available conditions are constrained by the Column data type. For example a numeric column includes "equals", a date column includes "on or before", and a text column includes "contains". For a complete list of Conditions and their definitions, see *Use Filter Conditions* in the Create a Custom View, Configure View Filter sections of the Manage the Library chapter.

- **Value**: Use this field to add the specific comparison value for the condition. The data Value is dependent on the Column data type; the entry may be a date, number, text, or a selection from a list, such as a listed role.

You can add as many "selection statements" as you need for filter criteria. Each statement appears in the area below the Match all/any options. These options control how the selection statements are applied. For example, use Match all (and) if you only want documents that meet all of the selection criteria listed. You can also use Match any (or) if you want documents that meet any of the selection criteria listed.

You can modify the parameters of any selection statement after it is added. You can also remove one or more statements from the list or clear the entire list.

Examples
Situation 1: You want to display only topics in a view. To define a filter that displays only topics, you would create the following "selection statement":

Column = Type
Condition = in
Value = Topic

Situation 2: You want to create a view that displays all of the documents in the HR folder and its four subfolders. To define a filter that displays all of the documents in the HR path, you would create the following "selection statement":

Column = Path
Condition = contains
Value = /HR

Note: In the above example, you would deselect the Organize by folders option on the Sort tab to show all documents in the Library that meet the conditions in a single view.

To add a selection statement:

1. On the **View** menu, choose **Manage Views**.

2. Add a new view or edit an existing view.

3. Click the **Filter** tab.
4. Edit the Column, Condition, or Value fields.
5. Click **Add**.
6. Click **Apply** to save your changes. If you are editing the active view, the results of the view definition are immediately visible.

To edit an existing selection statement:

1. On the **View** menu, choose **Manage Views**.
2. Add a new view or edit an existing view.
3. Click the **Filter** tab.
4. Choose a selection statement from the list.
5. Edit the Column, Condition, or Value fields.
6. Click **Apply** to save your changes. If you are editing the active view, the results of the view definition are immediately visible.

To remove a selection statement:

1. On the **View** menu, choose **Manage Views**.
2. Add a new view or edit an existing view.
3. Click the **Filter** tab.
4. Choose a selection statement from the list.
5. Click **Remove** to erase only the selected item.
6. Click **Apply** to save your changes. If you are editing the active view, the results of the view definition are immediately visible.

To remove all selection statements:

1. On the **View** menu, choose **Manage Views**.
2. Add a new view or edit an existing view.
3. Click the **Filter** tab.
4. Click **Clear** to remove all existing selection statements.
5. Click **Apply** to save your changes. If you are editing the active view, the results of the view definition are immediately visible.

4.5.4.1 Select Filter Columns

The following lists the Columns that you can use to construct selection statements for filtering. See *Use Filter Conditions* for more information about each condition.

* Available in multi-user installation only

*** Checked Out By**: The author that has checked out a document.
Condition: in, not in, is empty, is not empty
Value: One or more valid author names

Note: Self can be used to identify the author currently logged into the Developer and running the view. For example, use Self to create a view that lists documents that are currently checked out to you.

*** Checked Out Hostname**: The computer name for the author that has a document checked out.
Condition: contains, is, does not contain
Value: Any text

Creation Date: The date a document was created.
Condition: on, on or before, on or after
Value: A valid date or select from the popup calendar

Document ID: The unique document identifier.
Condition: contains, is, does not contain
Value: Any text

Frames: The number of frames in a topic.
Condition: equals, not equals, is more than, is less than, is at least, is at most
Value: Any number from 0 to 1000.

Language: Language code assigned to the document.
Condition: in, not in
Value: One or more valid language codes.

*** Last Modified By**: The author that made the most recent modification to a document.
Condition: in, not in
Value: One or more valid author names

Last Date Modified: The most recent date when a document was modified.
Condition: on, on or before, on or after
Value: A valid date or select from the popup calendar

Link Count: The total number of document links.
Condition: equals, not equals, is more than, is less than, is at least, is at most
Value: Any number from 0 to 1000

Links To: The number of links to a document.
Condition: equals, not equals, is more than, is less than, is at least, is at most
Value: Any number from 0 to 1000

Name: The name of the document.
Condition: contains, is, does not contain
Value: Any text

Original Location: The folder path in the Library where the document resides.
Condition: contains, is, does not contain
Value: Folder path in Library. For example, /system/icons/standard.

*** Owner**: The author currently assigned as the document owner.
Condition: in, not in, is empty, is not empty
Value: One or more valid author names

Path: The folder path in the Library where the document resides.
Condition: contains, is, does not contain
Value: Folder path in Library. For example, /system/icons/standard

*** Permission**: The permission assigned to the document (as inherited from the folder permission)
Condition: in, not in
Value: List, Modify, Read

Questions: Applies to Assessments only. The number of questions in the assessment.
Condition: equals, not equals, is more than, is less than, is at least, is at most
Value: Any number from 0 to 1000

Roles: The role(s) assigned to a document.
Condition: is empty, is not empty, contains any, contains all, does not contains any, does not contains all
Value: One or more valid roles

*** State**: The current state value assigned to a document.
Condition: in, not in, is empty, is not empty
Value: One or more valid state values

Type: The type of document.
Condition: in, not in
Value: One or more valid document types

*** Version**: The current version of the document.
Condition: equals, not equals, is more than, is less than, is at least, is at most
Value: Any number or 'New' or 'new' documents

Multi-user Considerations

- The data values for the Checked Out By column are based on the users defined in the system by the Administrator. However, to filter documents that are checked out to you, choose the Self option.

  You can also use the "is empty" or "is not empty" to filter documents by check out status. For example, as an administrator, you may want to create a view that lists all documents that are checked out by any author. To do this, you can create a filter that selects documents that have the Checked Out By column that is "not empty".

4.5.4.2 Use Filter Conditions

Condition values act as operators such as equals, not equals, is more than, is less than, contains, does not contain, and so on. Both the Condition and data Value lists are constrained by the Column data type.

in
Select documents that match one or more values specified in the Value field.

not in
Select documents that do not match one or more values specified in the Value field.

is empty
Select documents with one or more property attributes that are empty.

is not empty
Select documents with one or more property attributes that are not empty.

on
Select documents that have a matching date.

on or before
Select documents that have a date that is before the date specified in the Value field.

on or later
Select documents that have a date that is after the date specified in the Value field.

equals
Select documents that have an exact matching value specified in the Value field.

not equals
Select documents that do not exactly match a value specified in the Value field.

is more than
Select documents that have a value greater than the numeric value specified in the Value field.

is less than
Select documents that have a value less than the numeric value specified in the Value field.

is at least
Select documents that have a value equal to or greater than the numeric value specified in the Value field.

is at most
Select documents that have a value equal to or less than the numeric value specified in the Value field.

contains
Select documents that contain the text specified in the Value field.

is
Select documents that exactly match the text specified in the Value field.

does not contain
Select documents that do not contain the text specified in the Value field.

contains any
Select documents that contain any of the values specified in the Value field.

contains all
Select documents that contain all of the values specified in the Value field.

does not contain any
Select documents that do not contain any of the values specified in the Value field.

does not contain all
Select documents that do not contain all of the values specified in the Value field.

Multi-user Considerations

- You can also use the "is empty" or "is not empty" to filter documents by check out status. For example, as an administrator, you may want to create a view that lists all documents that are checked out by any author. To do this, you can create a filter that selects documents that have the Checked Out By column that is "not empty".

4.5.5 Edit an Existing View

You modify any existing view at any time and make changes.

To edit an existing view:

1. On the **View** menu, choose **Manage Views**.
2. Select a view from the list.

3. Choose **Edit**.
4. Modify the view configuration settings on the Column Selection, Sort, and Filter tabs.
5. Click **OK**.

4.5.6 Copy a View

You can make a copy of an existing view as a starting place for a new view definition. When you copy an existing view, it is automatically created using the same name with " - Copy" appended to the end of the view name. You should change the name to make it more meaningful and unique; then proceed with your modifications.

To copy an existing view:

1. On the **View** menu, choose **Manage Views**.
2. Select a view from the list.
3. Choose **Copy**.
4. Change the name of the view.
5. Modify the view configuration settings on the Column Selection, Sort, and Filter tabs.
6. Click **OK**.

4.5.7 Delete a View

You can delete any custom view that you create; however, you cannot delete the Details View.

Multi-user Considerations

- You cannot delete the Deleted documents and Lost documents views.

If you delete the active view, the Details view appears in its place.

To delete an existing view:

1. On the **View** menu, choose **Manage Views**.
2. Select a valid view from the list.
3. Choose **Delete**.
4. Confirm the deletion.
5. Click **OK**.

4.5.8 Reset Defaults for Views

The Developer provides one or more sample views depending on your installation type (single vs. multi-user). For example, the Library Details View is a sample view delivered with the Developer. You can modify a sample view to meet your requirements. You can also discard your changes and reset each view back to its original settings.

To reset a sample view:

1. On the **View** menu, choose **Manage Views**.

2. Select a sample view from the list.

   You cannot reset the values for a custom view that you add.

3. Choose **Reset**.

4. Confirm your choice to reset the view.

5. Click **OK**.

4.6 Understand the System Folder

The System folder is automatically created when you install the Developer. It contains a series of subfolders and documents that store publishing documents, templates, master role documents, and attachment icons. The System folder is only visible in the Library and contains the following subfolders:

- Assessment Templates
- Icons
- Publishing
- Question Templates
- Roles
- Templates

Warning! You should not move, delete, or rename the System folder, its subfolders, or any documents that are contained within them. Doing so may impair the operation of the software. However, you can remove and add documents to the Icons folder without causing problems.

4.6.1 Attachment Icons

When you link an attachment to a topic frame, an icon is added as a clickable link that navigates to the attached content from the Player. The Developer provides five standard icons that you can use, or you can create and use custom icons of your own in addition to the standard icons.

The Icons folder contains two subfolders, called Custom and Standard. The Standard folder stores the icons that are delivered with the Developer. Each icon is included in a separate Package document. If you do not want the standard icons to appear as choices in the Frame Link Properties dialog box (Topic Editor), you can delete the package documents from the Standard folder. The Custom folder is where you should store any custom icons that you decide to create.

4.6.2 Publishing Styles

The Developer provides a variety of deployment and document styles that you can use to publish content. In addition, the Developer gives you the ability to launch published content from the Help menu of an application.

The Publishing/Styles folder contains the publishing styles. Each publishing style has specific formatting attributes that are controlled by Publishing Project documents that are delivered with the Developer. Each category or "brand" has its own subfolder. You can customize publishing styles to fit your business needs.

The In-Application Support folder contains the files necessary for launching content from the Help menu of an application. Each category or "brand" has its own subfolder. Within the subfolder, the files necessary for supported target applications are in stored in a package

document. These files are automatically published with the Player content. The In-Application Support folders and documents that appear depend on the product category that you are using. You should not alter the contents of any of these package documents. For more information, see the *In-Application Support* guide.

4.6.3 Roles

The Developer provides a series of empty master role documents for each supported language. For example, the Roles.en document is the master role document for roles in the English language as determined by the language property of the document. You should not create additional role documents for the same language, as the Developer uses only the first one created for role assignment. For example, if you make a copy of a role document for English and add roles to it, those roles do not appear as assignment choices from any topic Properties toolpane. You should also not move these documents to any other folder in the Library.

You should always use these documents to store roles that can be assigned to topics for role-based filtering in the Player.

4.6.4 Templates

The Developer uses templates to generate bubble text automatically for topics as you record an application, depending on the keystroke or mouse action performed during each step. These templates are stored in the Templates folder. There is a subfolder for each supported language, named according to the code for each language. The Developer provides two template sets for each language that you can assign to module, section, and topic documents.

4.6.5 Supported Languages

In the Library, each supported language has a specific language code. The language code is used as the name of the subfolders in the Templates folder:

cs: Czech
da: Danish
de: German
en: English
es: Spanish
es-mx: Spanish (Mexico)
fi: Finnish
fr: French
fr-ca: French (Canada)
hu: Hungarian
it: Italian
ja: Japanese
ko: Korean
nl: Dutch
no: Norwegian
pl: Polish
pt: Portuguese
ru: Russian
sv: Swedish
tr: Turkish
zh-CHS: Chinese (Simplified)
zh-CHT: Chinese (Traditional)

4.7 Update the Library (Service Packs)

When a service pack is installed to a multi-user server installation, Library updates will need to be run from the Developer as a result. The Developer automatically detects when there are Library updates that need to be applied when any user starts the Developer. If Library updates are detected, the Library Updates dialog automatically appears. Once the Library updates are applied, the Developer does not display this dialog box unless a new service pack is installed on the server.

The Library Updates dialog box lists the service packs that are installed on the server. You can selectively choose the service pack updates that you want to process, although it is highly recommended that you update the Library with each service pack listed. However, if you are using multiple Libraries, it may make sense for you to selectively choose the service pack updates for each Library (depending on the contents of the service pack). This process updates various documents in the System folder but does not impact your content.

Service pack document updates are automatically checked in to the Library. Therefore, only one user in a multi-user environment would need to run the Library Update process.

As a result of running this Library update process, a System/Service Packs/ folder is created that contains an empty package document for each service pack. You should not edit or remove these package documents or folders as they are a record of each service pack update that was applied to the server. The About the Developer (Help, About) dialog box also lists the service packs that have been applied to the server to which you are connected.

Note: Library updates can also be applied manually using the Library Updates command on the Tools menu in the Developer.

Custom Document Publishing Style Upgrades

If updates to the standard document publishing styles are included in a service pack, you can have the Developer upgrade your custom document styles with the updates from the standard document publishing styles delivered with the service pack. See *Upgrade Custom Document Publishing Styles* in the Manage the Library chapter for more information.

Important Note: A user must have Modify permission on the System folder to perform Library updates or Custom Document Publishing Style upgrades.

To update the Library with a service pack:

1. With a service pack installed on the server, have at least one user start the Developer to open the Library that you want to update. The Library Updates dialog box automatically appears listing the available service pack updates.

2. Select the service packs that you want to process.

3. Click **OK** to update the Library.

4.8 Upgrade Custom Document Publishing Styles

As you upgrade to new releases and service packs, you can upgrade any custom document publishing styles you have created in the Library. This applies to only document outputs, such as System Process, Training Guide, Instructor Manual, Test Document, Test Case, Job Aid, and Presentation. If styles are not upgraded, they will not be available for publishing or preview.

During the upgrade process for a custom document publishing style, the following things occur:

- New options in the Publishing Wizard for document styles are added to custom styles.

- New bookmarks are added to the print template files. Any legacy bookmarks that may have been used in the customization will remain, ensuring that the customizations will still work.

- Word macros, .xslt files, and other publishing files are updated as needed. If custom macro modules were created, they are preserved.

- Customizations to the default suffix (style name) and version number that are appended to the file name are preserved.

- Customizations to the publishing style name, preview name, and Publishing Wizard text are preserved.

When the upgrade process is run, it looks at all the publishing styles in the Library and identifies all the custom document styles, regardless of language or category.

For major new releases, custom document publishing styles are automatically updated during the standard Upgrade process (when you upgrade your profile). However, if you import a custom document publishing style from a previous version after an upgrade, you are prompted to upgrade the custom document style(s) when you start the Publishing Wizard or when you preview content (for the category you are publishing).

For service pack releases, the Publishing Wizard checks the styles to determine if there are customized document styles (in all languages and the category you are publishing) from a previous version. If any are found, you are prompted to upgrade the styles before continuing in the Publishing Wizard. Therefore, if an author imports a custom style from a previous version, or if an upgrade failed because of lack of permissions or check out status, the style can still be upgraded and used to publish. Individual custom document publishing style document(s) in need of upgrade do not appear on the Formats list of the Publishing Wizard. Also note that a style is checked when you preview content and you are prompted to upgrade the style you are trying to preview.

The last page of the Publishing Wizard (Formats column) does not display any publishing style that requires an upgrade. To determine if there are styles that need upgrading, just start the Publishing Wizard and you will receive notification if you there are styles that need upgrading.

Note: This process assumes that you have created custom document publishing styles by making copies of the standard document publishing styles delivered in the System folder.

If you receive the following error message during the upgrade of a custom document publishing style, you must enable access to Visual Basic in Microsoft Word and then retry the upgrade.

"Trust access to the VBA project object model is not set in Microsoft Word."

If this message appears in the Activity log, you should do the following in Microsoft Word. Then restart the Publishing Wizard, select the custom document publishing style, and confirm the upgrade of the custom style. After the upgrade is complete, you can use the custom document publishing style to publish content.

In Microsoft Word 2003:

1. On the **Tools** menu, point to **Macro**, and then click **Security**.
2. On the Trusted Publishers tab, click to select the **Trust access to the Visual Basic Project** checkbox to turn on access.
3. Click **OK** to apply the setting.

In Microsoft Word 2007:

1. Open Microsoft Word and click the **Microsoft Office** button, and then click **Application Options**.
2. Click the Trust Center tab, and then click **Trust Center Settings**.
3. Click the Macro Settings tab, click to select the **Trust access to the VBA project object model** checkbox, and then click **OK**.
4. Click OK.

In Microsoft Word 2010:

1. On the **File** menu, click **Options**.
2. Click the Trust Center tab, and then click **Trust Center Settings**.
3. Click the Macro Settings tab, click to select the **Trust access to the VBA project object model** checkbox, and then click **OK**.
4. Click **OK**.

Note: It is recommended that you change this Microsoft Word setting back after you complete the upgrade of your custom document publishing styles.

4.9 Back up Content

A well-executed backup plan is your only defense against losing all your data in the event of a disaster. Your company's system administrator should review any backup and disaster recovery plan before it is implemented.

Any backup process should be evaluated against the following criteria:

- Back up as often as you feel is necessary or your company dictates.
- Back up frequency should be based on the amount of data you are willing to lose if disaster strikes.
- Backups should be verified to ensure that the process was successful.
- Backups should be tested periodically to ensure that data can be recovered.

There are different types of Development environment installations to consider when establishing a backup plan. These installation types are not mutually exclusive; a company's backup plan should address each type that is in use.

Single User Environment

The following items must be considered for a single user installation where the Developer and the content are installed on a local workstation:

- Export the outline(s) you are currently developing on a daily basis.
- Export your entire Library on a routine basis to backup all of your content.
- Use backup software to backup your entire file structure on a routine basis.

Multi-user Environment

The following items must be considered for a multi-user installation where the Developer is installed on client machines and the Library is installed on a server:

- Ensure that all content authors have checked in all documents.
- Ensure that all content authors have logged out of the Developer.
- Perform a routine backup of the SQL or Oracle database.

Encourage authors to back up their new and checked out documents by exporting the content.

4.9.1 Restore a Database

If a database administrator restores the server database from a backup, the UpdateRestoreDate.sql script must be run to update specific fields. This is necessary because clients normally synchronize with the server in a way that only uploads or downloads the latest changes that occurred after the last synchronization. This is a differential or incremental update. This works because the server and the client assume that the time can only go in one direction: ahead, but cannot go back. This rule is violated when the server database is restored to an earlier point in time. Therefore, a special flag must be updated in the database which indicates that an incremental refresh would not work, but a full refresh is needed, because the server “went back in time”. The system cannot normally handle this situation correctly, unless the script is run.

The UpdateRestoreDate.sql script is located in the Utils folder in the location where the Developer server is installed.

5 Build an Outline

You build an outline by linking documents together in a way that best conveys the information that you want to communicate to your audience. Although there are several ways to create documents, you must use the Outline Editor to define the outline by linking module/section and topic documents to one another. For example, you can create new documents from the Library without any links and then use the Outline Editor to design the outline by linking the various documents that you have created in the Library. You can also create the outline "on the fly" by linking new documents directly from the Outline Editor.

Consider the following before deciding how to build your content:

- If you create a new document from the Library (File, New), you can predetermine the folder in which it is stored; however, you cannot link a document or view its relationship to other documents.

- If you link a new section or topic document from the Outline Editor, it is stored in the same Library folder as the parent document to which it is linked. When you link a new module, you are prompted to define its properties, at which time you can adjust the location where it is stored.

Regardless of how you build content, you will use some combination of module, section, and topic documents.

5.1 Navigate the Outline Editor

The Outline Editor displays the outline on the left and a view of either document details (or properties) or linked content on the right. By default, the Outline Editor displays the Player view that shows the Concept/Introduction panes depending on the document type you have selected. For example, module, section, and topic documents can have Concepts while topics can have both a Concept and an Introduction.

Text appears in the Introduction pane after you record topic content and enter text for the Introduction frame bubble. Only text that is marked as Visible in See It/Try It modes or Visible in Player appears in the Introduction pane.

The Concept pane displays linked content such as a web page, package, or URL. You can control the display of linked content using the Preview category in Options (on the Tools menu).

Publishing Note: When you publish content to the Player, topic introduction text will appear in the Player Concept pane if there is no linked content in the Developer Concept pane.

You can navigate the outline and display linked documents by clicking the + icon next to the document name. You can also use the left or right arrow keys or the ENTER key to expand/collapse a parent document with links. The ENTER key can also be used to open recorded topics in the Topic Editor or launch the Recorder for empty topics. Use the up or down arrow keys to move the document selection up and down the outline.

To initiate any action on a document such as link a new document, you must select it by clicking the document name. When you select a document in the outline, linked Concept/Introduction content also appears (if you linked this content to the document).

You can adjust the size of each pane by clicking and dragging the vertical or horizontal split bars that separate each pane. The Developer remembers any sizing changes that you make to these panes.

Note: You can also use the keyboard to navigate in the Outline Editor.

Expand/Collapse Modules or Sections

You can expand or collapse selected module or section documents to display its related child documents. Use the ⊞ or ⊟ toolbar icons or the Expand and Collapse commands on the View menu to expand or collapse selected modules or sections.

Multi-user Considerations

- As documents are checked in and out, icons appear to the left of the document name indicating the check in/out state as follows:

  ✔ indicates that the document is checked out to you.

  🔒 indicates that the document is locked and checked out to another author.

  No icon indicates that the document is checked in and available to any author.

  These icons appear in various places such as the Library and Outline Editor as well as on document editor tabs and various views. Also note that additional columns in the Details view of the Library and Outline Editor display the check in/out state and version number. The Checked Out By column displays the name of the author who is currently using the document.

5.1.1 Open a Document from the Outline Editor

You can open module, section, topic, question, and assessment documents from the Outline Editor. Opening a module or section displays a new Outline Editor tab so you can focus your attention on a specific part of the outline. You can open as many modules or sections as you want and then copy and paste or drag-and-drop documents between tabs or the Library. Opening a topic displays the Topic Editor if the topic has recorded content. Opening an empty topic starts the Recorder.

Opening a question or assessment document displays the Question or Assessment Editor.

Note: You can select and open multiple documents at the same time from the Library or Outline Editor.

Multi-user Considerations

- If you open a document that is not checked out to you, it opens in Read-Only mode. If you decide to make any changes to a Read-Only document, upon exit you are given the option to save the document (check out and save the changes), save it as a new document, or discard the changes.

To open a document from the Outline Editor:

1. Select one or more documents in the outline.
2. Right-click any document in the selection (if you have more than one selected) and choose **Open**.

   Modules and sections open in new Outline Editor tabs. Topics open in new Topic Editor windows.

5.1.2 Change the Outline Editor View

The default view in the Outline Editor is called the Player view, which allows you to link additional content to a module, section, or topic such as a web page, presentation, image, or other document. It has a Concept and Introduction pane. The Concept pane can display conceptual or explanatory information about a module or section, or topic that is selected in

the outline. The Concept and/or Introduction panes are empty until you link content to a document.

The Introduction Pane typically provides a short statement introducing a topic selected in the outline. The Introduction pane does not appear when a module or section is selected in the Outline Editor.

Note: Linked documents in the Concept/Introduction display only when you select one document in the outline. If multiple documents are selected, the pane is blank and disabled.

In addition to the Player View, there is also a Details view and Assessment coverage view. The Details view shows document properties such as Last Modified Date, Role assignment, and so on. Although you can sort the Details View by property column in the Library, you can not sort by property column in the Outline Editor. Also note that you can add or remove columns from the Details View. The Assessment coverage view is used to analyze linked and associated assessments to ensure that the assessment questions adequately measure competency.

Multi-user Considerations

- If you work offline and do not have a local copy of a document that is linked as a Concept or Introduction, you will see a message in the Player View instructing you to go online and perform the Document, Get command to retrieve read-only copies of the necessary documents for viewing. You can also check out the necessary documents if you want to edit them and they are not in use.

To change the Outline Editor view:

1. Launch the Outline Editor by opening a module or section document.
2. On the View toolbar, choose either the **Details View** or **Player View** depending on the view that currently appears.

5.2 Develop an Outline

You create an outline by linking new or existing documents in a multi-level hierarchy that you design using the Outline Editor. You will use a combination of modules, sections, or topics to design the outline hierarchy using as many levels as you want. Although you will typically create topic documents to capture transactional recordings of how to perform a task in an application, your use of module or section documents is completely your choice as these documents are merely containers for other documents. For example, you can choose to design an outline using just modules and topics, sections and topics, or a combination of modules, sections, and topics.

You can also link questions and/or assessments anywhere in an outline to test a user's knowledge of the content that precedes the question/assessment.

After you create an outline, you can refine it by changing document relationships, copying documents, deleting incorrect or unnecessary links, and so on. You can also embellish your outline with additional attachments in the form of web pages, packages, and URLs.

The Outline Editor will also display broken link documents.

Publishing Note: Empty module and section documents that have concept attachments are included in all published outputs. If an empty module/section has no concept attachment, it is not included in any published output. Topics with concept/introduction attachments are only included in published output if they are recorded and not empty.

Also note that if a topic has no concept link, the topic introduction text appears in the Concept pane in the Player.

See Also Links

For any module, section, and topic in an outline, you can create See Also links for related content. For example, a section can have See Also links to other module, section, or topic documents that a user can navigate to in the Player/HTML Website when a document is selected in the outline. A See Also button appears in the Player with a list of related documents that the user can navigate to. The list of See Also documents also appear in document and presentation output. You can create See Also document links using the See Also property on the Properties toolpane.

Multi-user Considerations

- When you work in a multi-user environment, you may want to periodically refresh the outline to update the content with the latest document information from the server.

5.2.1 Link a New Module

Using the Outline Editor, you can link a new module under any existing module or section document; however, you cannot link a module under a topic document. Linking a module creates a new document that is stored in the Library, as well as a new link between the module and its parent document.

Note: You can also link an existing outline.

A module/section has the following default properties that you can change:

- Name: A descriptive name for the document.
- Location: The folder location in the Library where this document is stored. The default folder that appears depends on where you are when you create the new document, as follows:

  If you create a new document from the Library, the default folder is the folder that is selected in the Library when you create the new document.

  If you link a new document from the Outline Editor, the default location is the same as the location of the parent document to which you are linking the new document.
- Language: The Language option allows you to choose the default dictionary that is used to check the spelling of a document's content. Dictionaries for English (UK & US), German, French, Spanish, Dutch, Danish, Portuguese (Brazil), Swedish, Finnish, Norwegian, and Italian are provided.
- Template: The Template option allows you to select another folder of template files. The template sets included with the Developer are the Standard and Microsoft templates. The Microsoft template conforms to the standards as stated in the Microsoft Manual of Style for Technical Publications. In addition to these templates, other template sets may be available to you. Alternate template sets are most useful when you are creating content for more than one application. Please contact Technical Support for more information on this option and its implementation.
- Glossary: The glossary document that is currently assigned to the document. The glossary document lists the words you have assigned as glossary terms. After you have set up the glossary terms and their definitions, the Developer can automatically create the links to the terms found in any document text.
- Screen Resolution: The Screen Resolution option allows you to determine the resolution in which the topic content is recorded. If authors attempt to record in a resolution other than the one listed in the Screen Resolution list box, a message box informs them that their resolution does not match the topic setting and indicates in what resolution they should record. While content authors are not prevented from recording in a different resolution if they choose, this option does help to create

greater consistency in the content.

Please note that the Developer detects the current resolution of your computer and automatically sets the screen resolution property to match when you create new documents. Once screen resolution for a topic is set and you have saved a recording; the screen resolution cannot be changed.

When you link a new module from the Outline Editor, the default properties (../) from the parent document are automatically inherited until you change them.

Multi-user Considerations

- A *Check Out Parent Document* message appears when you perform actions that impact a parent document that you do not have checked out such as linking a document, moving a document, pasting a document, deleting document links, and so on.

  Any new document that you create or link is automatically checked out to you. If you want to make a new document available to multiple authors and place the document under the Developer's version control system, you must check it in.

  See *Check In and Check Out Documents* in Use the Developer in a Multi-user Environment for more information.

To link a new module:

1. Display the Outline Editor by opening the module or section for which you want to link a new module.
2. Select the parent document to which you want link the new module.
3. On the **Link** menu, choose **New Module**.
4. Type a name for the new module and continue to modify any of the default properties, if desired.
5. Click **OK**.

   A new module is linked (and automatically saved) beneath the parent document. You can also rename the new module after it is linked and saved.

Important Note about Module and Section Documents: A module or section document will appear with a purple or blue book only when the document has at least one linked child document such as a topic or another module or section. However, a module or section document with no linked child documents will appear with a page icon such as for module and for section. When you create a new module or section, it automatically appears as a page icon until you link at least one additional child document. It then appears with a purple or blue icon.

5.2.2 Link a New Section

Using the Outline Editor, you can link a new section under any module or section document; however, you cannot link a section under a topic. Linking a new section creates a new document that is stored in the Library (same folder as the parent document) as well as a new link between the section and its parent document.

Note: You can also link an existing section.

When you link a new section from the Outline Editor, the default properties (../) from the parent document are automatically inherited until you change them.

Each section that you link is automatically named "New Section" and placed directly beneath the parent document that you have selected. If the parent document has existing linked documents, the new section appears at the end of the list. For example, if you link a new section under a module that has three existing sections, the new section appears after the third section. You should rename the new section after it is linked.

Note: You can also link a new section that is automatically linked to a new package using the New Section with Package command on the Link menu. This command streamlines the process for linking new sections with package attachments for conceptual content.

Multi-user Considerations

- A *Check Out Parent Document* message appears when you perform actions that impact a parent document that you do not have checked out such as linking a document, moving a document, pasting a document, deleting document links, and so on.

  Any new document that you create or link is automatically checked out to you. If you want to make a new document available to multiple authors and place the document under the Developer's version control system, you must check it in.

  See *Check In and Check Out Documents* in Use the Developer in a Multi-user Environment for more information.

To link a new section:

1. Display the Outline Editor by opening the module or section for which you want to link a new section.
2. Select the parent document to which you want link the new section.
3. On the **Link** menu, choose **New Section**.

   A new section is linked (and automatically saved) beneath the parent document with a default name that you should change. You can also rename the new section after it is linked and saved.

   You can also right-click the parent document and choose Link New Section.

Important Note about Module and Section Documents: A module or section document will appear with a purple or blue book only when the document has at least one linked child document such as a topic or another module or section. However, a module or section document with no linked child documents will appear with a page icon such as for module and for section. When you create a new module or section, it automatically appears as a page icon until you link at least one additional child document. It then appears with a purple or blue icon.

5.2.3 Link a New Topic

Using the Outline Editor, you can link a new topic under any module or section document. Linking a new topic creates a new document that is stored in the Library (in the same folder as its parent document) as well as a link between the topic and its parent document.

Note: You can also link an existing topic.

Each topic that you link is automatically placed beneath the parent document that you have selected. If the parent document has existing linked documents, the new topic appears at the end of the list. For example, if you link a new topic under a section that has three existing topics, the new topic appears after the third topic.

When you link a new topic from the Outline Editor, some of the default properties that appear are initially inherited from the parent module or section to which the topic is linked and other properties are initially set to the values that you have configured in the Options dialog box. For example, the general properties (Template, Language, Resolution, and Glossary) are inherited from the parent document, whereas topic-specific properties (Play Modes and Know It options) are the same as the defaults set in Options dialog box.

Empty vs. Recorded Topic

A new topic is empty until you open it and start recording. An empty topic is distinguished from a recorded topic by its icon. When you open an empty topic, the Recorder starts. You can continue to record an application or you can click Finish to cancel the recording and return to the Outline Editor. Once you start recording and click Finish, the topic opens in the Topic Editor ready for editing.

Publishing Note: Empty topics are not included in any published output.

Multi-user Considerations

- A *Check Out Parent Document* message appears when you perform actions that impact a parent document that you do not have checked out such as linking a document, moving a document, pasting a document, deleting document links, and so on.

  Any new document that you create or link is automatically checked out to you. If you want to make a new document available to multiple authors and place the document under the Developer's version control system, you must check it in.

  See *Check In and Check Out Documents* in Use the Developer in a Multi-user Environment for more information.

To link a new topic:

1. Display the Outline Editor by opening the outline or section for which you want to link a new topic.
2. Select the parent document to which you want link the new topic.
3. On the **Link** menu, choose **New Topic**.

   You can also right-click the parent document and choose Link New Topic.

   A new topic is linked (and automatically saved) and appears beneath the parent document with a default name that you should change. You can also rename the new topic after it is linked and saved.

5.2.4 Link an Existing Document

In addition to linking a new document into the outline, you can also reuse content by linking an existing document into the structure. There is no limit to the number of times you can reuse an existing document. However, inserting an existing document creates a link to the original document and does not create a copy of the existing document. Therefore, if you link multiple instances of the same document into your outline and then modify one instance of that document, your changes are reflected in all linked instances.

Note: You can also copy an existing document and link it to another document. When you copy a document, you have the option to link it as the original or link it as a copy. When it is linked as a copy, you can change the content of the copy without changing the content of the original document.

In addition to linking new and/or existing documents from the Outline Editor, you can also drag-and-drop or copy/paste documents from the Library into the outline. To do this, you need to split the view and open the Outline Editor in one pane and the Library in another. Then you can select one or more documents in the Library and either copy/paste or drag-and-drop them into the Outline Editor.

Note: When you link an existing document into the outline, the linked document retains its original property settings from when the document was created and does not inherit properties from its parent.

Multi-user Considerations

- A *Check Out Parent Document* message appears when you perform actions that impact a parent document that you do not have checked out such as linking a document, moving a document, pasting a document, deleting document links, and so on.

  See *Check In and Check Out Documents* in Use the Developer in a Multi-user Environment for more information.

To link an existing document:

1. From the Outline Editor, select a parent document to which you want to link the existing document.
2. On the **Link** menu, choose **Existing Document**.

   You can also right-click the document and choose Link Existing Document.
3. Browse to a Library folder to locate the document that you want to link.
4. Select a document and click **Link**. If you selected a module or section as the parent document, the document is linked as a child document. If you selected a topic as the parent document, the document appears directly beneath the topic at the same level (since a topic cannot have child documents).

5.2.5 Delete a Document Link

From the Outline Editor, you can delete any link between a document and its parent document. For example, you can remove a section (or module) from a module, a topic from a section or module, a section from another section, and so on.

Deleting a link does not remove a document from the Library; it only removes the link between the selected document and its parent. Deleting a link in the Outline Editor also does not remove other linked content from the document such as a web page or package attachment.

You can use either the Delete Link or Cut command to remove links. The Cut command makes the document available for pasting; however, the Delete Link command does not.

Note: You cannot remove the root document in the Outline Editor.

Find Orphan Documents

When you delete document links from an outline, the result may be orphan documents that are no longer needed. You can use the Library to find orphan documents with no relationships to other documents. To do this, add the Links to column to the Library and sort the column

show documents with zero links first. You should review the list and identify those documents that you want to delete. Keep in mind that module and section documents with zero links may be used as the root document in one or more outlines.

Multi-user Considerations

- A *Check Out Parent Document* message appears when you perform actions that impact a parent document that you do not have checked out such as linking a document, moving a document, pasting a document, deleting document links, and so on.

  See *Check In and Check Out Documents* in Use the Developer in a Multi-user Environment for more information.

To delete a document link:

1. From the Outline Editor, select the document(s) that you want to unlink.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click).

2. On the **Edit** menu, choose **Delete Link**.

   You can also right-click the document and choose Delete Link.

To delete a document link using Cut:

1. From the Outline Editor, select the document(s) that you want to unlink.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click).

2. On the **Edit** menu, choose **Cut**. You can now paste the cut document anywhere in the outline hierarchy.

   You can also right-click the document and choose Cut.

5.2.6 Rename a Document

You can rename any document from the Library. From the Outline Editor, you can rename a module, section, or topic document only.

Document names do not have to be unique. Since documents are identified by their ID, two documents with the same name can exist in the same Library folder or outline.

Note: You can also rename a document using the Name property in the Properties toolpane (General category). However, you cannot rename multiple documents at the same time using this toolpane.

Multi-user Considerations

- Before you can perform this action, you must check out the document. After you save any changes, you should check in the document to make it available to other authors and add the changes to the Developer's version control system.

  The Developer preserves the name of versioned documents. When you roll back a renamed document to a previous version, the document name rolls back as well.

To rename a document:

1. Click the document that you want to rename.
2. On the **Edit** menu, choose **Rename**.

   After selecting a document, you can also click the document name or press F2 to start edit mode.

   You can also right-click a document and choose Rename.
3. Type a document name.
4. Press ENTER or click anywhere outside the name to save your changes.

5.2.7 Move a Document (Outline Editor)

You can change the sequence of documents within a parent and/or change the link between any documents in the hierarchy by moving documents (with the exception of the root document) that are displayed in the Outline Editor. Moving a document in the Outline Editor does not change where it is stored in the Library; it only changes its sequence or link to a parent document.

To move a document, you can either drag-and-drop it using the mouse, cut and paste the document, or use the Move Up/Move Down commands on the Edit menu. Cutting a document removes it from the hierarchy until you paste it in another location (although pasting a cut document is optional). Cutting is similar to deleting a link in that it removes the relationship between a document and its parent. The difference between cutting a document and deleting a link is that cut makes the document available for pasting and the Delete Link command does not.

When you move or cut an outline or section document that has related child documents, all child documents are moved as well. For example, if you move a section that has several topics, all topics are moved and linked to the new destination document.

Note: If you move a document between outlines using drag-and-drop, the Paste Special dialog appears so you can choose the action that you want to perform.

Also note that you cannot drag-and-drop documents from the Outline Editor to the Library.

The Move Up/Move Down commands can only be used to move a document within its parent. These commands cannot be used to move documents to different parent documents. For example, if a section has multiple topics, you can use these commands to change the sequence of the topics within that section only. You cannot move a topic from one section to another. Use drag/drop or cut/paste to change parent document relationships.

Multi-user Considerations

- You can move or cut a document regardless of its check in/out state.

  A *Check Out Parent Document* message appears when you perform actions that impact a parent document that you do not have checked out such as linking a document, moving a document, pasting a document, deleting document links, and so on.

  See *Check In and Check Out Documents* in Use the Developer in a Multi-user Environment for more information.

To move a document in the Outline Editor using drag-and-drop:

1. Select the document you want to move.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click).

2. Drag the document and drop it in the desired destination within the outline.

   As you drag a document, a yellow arrow also moves along with a <documents will be inserted here> node across the content structure. Release the mouse button when the arrow and <documents will be inserted here > node appear at the destination that you want in the structure.

   If you want to move a document to a different level in the outline you must move the mouse to the left. In some cases, you may have to drag the document to the bottom of list beneath its parent to move it to higher level in the outline. For example, if you have a section that has several topic child documents and you want to move the first topic to be on the same level as the parent section, you must drag the first topic to the end of the list first and then drag the document to the left.

To move a document in the Outline Editor using cut and paste:

1. Select the document(s) that you want to cut.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click).

2. On the **Edit** menu, choose **Cut**.

   You can also right-click your selection and choose Cut.

   The document(s) immediately disappears from the outline. You can stop now if you do not want to paste the cut documents or continue to establish a new link for the cut document.

3. Point to the document where you want to establish a new link.

4. On the **Edit** menu, choose **Paste**.

   You can also right-click the document where you want to paste your selection and choose Paste.

To move a document in the Outline Editor using Move Up/Move Down:

1. Select the document that you want to move.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click).

2. On the **Edit** menu, choose **Move Up** or **Move Down** depending on the direction in which you want to move the document. The first document of the parent can only be moved down and the last document of the parent can only be moved up. You cannot move a document to a new parent using these commands.

5.2.8 Copy and Paste a Document (Outline Editor)

In addition to moving documents in the hierarchy, you can copy and paste documents to further refine the outline. When you paste a copied document, you can choose to paste it either as a link to the original document or as a copy of the original document.

You can use one of the following two Edit, Paste commands to paste copied documents:

- **Paste** - always pastes a new link to the original document(s). If the content of the original document changes, the changes are reflected in all linked instances of the document.

- **Paste Special** - presents options to either paste a new instance of the original document (Link), paste a copy of the original document as a new document but maintain links to the original related document (Copy), or paste a copy of the original document and all related documents as new documents (Duplicate).

When you duplicate a document that has child documents, all child documents are copied as well. For example, if you duplicate a section that has several topics, all topics are copied along with the section. Also, when you duplicate a document that has related documents such as web pages, packages, and glossaries, copies of the related documents are made.

Note: The Duplicate (selection and related) option does not create copies of templates, master role lists, sound files, and custom icon packages. The new, duplicated documents will reference the original documents of these types.

You can not copy documents from the Outline Editor and paste them into the Library.

Multi-user Considerations

- You can copy a document regardless of its check in/out state. However, when you paste a copied document you may be prompted to check out the parent document.

  A *Check Out Parent Document* message appears when you perform actions that impact a parent document that you do not have checked out such as linking a document, moving a document, pasting a document, deleting document links, and so on.

  See *Check In and Check Out Documents* in Use the Developer in a Multi-user Environment for more information.

  If you copy and paste a document checked out to another author, the Developer uses the latest document checked into the server.

  If you copy and paste a document while working offline, the Developer copies the document in your local cache.

  If you paste new copies of all documents using the Duplicate option of the Paste Special command, all new documents are automatically checked out to you. Document history from the original documents is removed and the version number is set to New.

To copy and paste a new instance of original document:

1. Select the document(s) that you want to copy.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click).

2. On the **Edit** menu, choose **Copy**.

   You can also right-click your selection and choose Copy.

3. Select the document where you want to paste your selection.

4. On the **Edit** menu, choose **Paste** to paste a new instance of the original document.

   You can also right-click the document where you want to paste your selection and choose Paste.

Note: You can also use the Paste Special command (from the Outline Editor) and choose the Link option to paste a link to the original document in addition to the options listed next.

To copy and paste new documents without related documents:

1. Select the document(s) that you want to copy.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click).

2. On the **Edit** menu, choose **Copy**.

   You can also right click your selection and choose Copy.

3. Select the document where you want to paste your selection.

4. On the **Edit** menu, choose **Paste Special** and select the **Copy** option to create new documents but retain links to the original related documents such as web page and package attachments, glossaries, and so on.

To duplicate documents:

1. Select the document(s) that you want to copy.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click).

2. On the **Edit** menu, choose **Copy**.

   You can also right click your selection and choose Copy.

3. Select the document where you want to paste your selection.

4. On the **Edit** menu, choose **Paste Special** and select the **Duplicate** option to create new copies of both the original selected documents and new copies of all related documents such as web page and package attachments, glossaries, and so on. Click the **View related documents** link to display a list of the related documents if you are not sure whether you want to duplicate related documents.

5.2.9 Print an Outline

You can print any outline or portion of the outline structure to a printer or file. Included in the output is the outline structure as well as the layout defined in the Details View of the Outline Editor. To print an outline, you must open either a module or section in the Outline Editor. A set of default data columns is automatically included in the output; however, you can configure which columns you want to appear in the report by switching to the Details view and customizing the columns. The Details View does not have to be displayed to print a report; however, only the Name column is included in the report when printed from the Player View.

Note: The report does not honor column sizes that appear in the Details View. You can change the page orientation or adjust the margins to modify the column sizes, or save the report to Microsoft Excel and adjust the columns there.

To print an outline, first expand the documents to show the detail that you want included in the report. For example, if you want the report to show child documents for modules/sections, make sure you expand these nodes first. Also note that deleted or missing documents are included.

The report opens in a new window. Use the following toolbar icons to print the report, configure printer settings, export the report to file or graphic format, and so on.

Searches the report for text.

Displays the current printer settings such as the active printer, status, page range, number of copies, and so on.

Prints the report to the active printer.

Displays the current page setup such as paper size, orientation, and margins that you can change.

Displays scaling options such as scaling by a percentage of normal size and fit options.

Scrolls the report.

Zoom out. You can also enter a Zoom Factor percentage to zoom in or out.

Zoom in.

Move to the first page.

Move to the previous page.

Move to the next page.

Move to the last page.

Saves the report to PDF, HTML, Excel, or graphic format. Your selection displays additional options based on the file type you selected.

Close preview.

To print an outline from the Outline Editor:

1. Open a module or section document in the Outline Editor.
2. Expand the documents to display the details that you want included in the report.
3. On the **File** menu, choose **Print** and use the toolbar icons to print, view, or save the report to a file.

5.2.10 Use Content Tools

After you build an outline, you can use the following techniques to manage and refine your content:

- Find and replace text in documents
- Replace fonts in document text

- Spell check content
- Find a document in the Library

5.2.10.1 Find and Replace Text

The Find and Replace tool allows you to locate text in your content and replace it with alternative text, if desired.

Text in the following areas is included in this operation:

- Module, section, and topic names
- Text and Object names in the Frame toolpane
- Implicit text for string inputs
- Decision frame headings and path names
- Text in Author Notes, Instructor Notes, and Expected Test Results panes in the Topic Editor.
- Jump-in point text
- Text in web pages
- Tooltips
- Glossary terms and definitions
- Keywords
- Roles
- Document output fields in the Properties toolpane
- Custom properties

Note: The names of the following document types are not included in this operation: web pages, packages, glossaries, role lists, and publishing styles.

You can start this tool from the Library or the Outline Editor only. From the Library, you must have at least one document selected or the tool is disabled. If nothing is selected in the Outline Editor, the entire outline is searched; this is equivalent to selecting the root of the outline.

In the Find and Replace dialog box, you can type the search and replacement text or select from a list of previous entries. The Developer maintains a history of the search and replace text entries in both the Find what and Replace with lists. You can search for an entire sentence, a specific word, or a portion of a word. If the word or phrase for which you are searching has capitalization or formatting, the word or phrase with which it is replaced will have the same formatting or capitalization. You can also replace text with an empty string (to delete the text) or with one or more spaces, except for document names.

By default, the selection and its related documents are searched. Clicking the View related documents link displays a list of the related documents. For this process, related documents are defined as all searchable documents that are directly or indirectly linked as children of the selection. For example, if you select a section that has topics and each of the topics has a web page linked as its concept, choosing to search related documents searches the section, the topics, and the web pages linked to the topics. Templates and package contents are not included in this operation.

If you want to search only the selected item(s), you can deselect the Include related documents option in the Find and Replace dialog box. If you deselect this option after starting a search operation, the Developer completes the current document and then proceeds to the next document in the selection, if any. You can also select this option after starting the search to include related documents for the rest of the selection.

To further define a search, you can choose options that allow you to ignore occurrences of the search text that appear as part of another word (Match whole word only) and/or to find text that exactly matches the capitalization of the search text (Match case). Special characters in a search string, such as * and ?, are treated as normal text during a search; they do not act as wildcards.

Note: The Match whole word only and Match case options do not apply to Japanese or Chinese content. That is, these find options are ignored during searches of documents whose Language property is set to Japanese or Chinese.

When the Developer finds the first instance of the text, it indicates the path in the Library to the document, plus information about where the word appears, such as a document name or web page text. You can choose to replace the text, keep searching the remainder of the content, or close the Find and Replace dialog box.

You can precisely control text replacement by confirming each instance, or you can automatically replace all occurrences of the search text if you do not want to review each replacement.

Warning! Use Replace and Replace All with caution. You cannot undo any text replaced using this tool.

Multi-user Considerations

- For changes to be made to a document using this tool, the document must be checked out. If you plan to use this tool offline, you should check out all affected documents before going offline.

  When you execute this process, the Developer searches through all of the documents in the selection, regardless of their check in/out state. If a change is necessary and the document is not checked out and if you are working online, the Developer automatically checks the document out to you and makes the change. If the document cannot be checked out, for example, if it is open in another editor or checked out to another user or you are working offline, it is skipped. At the end of the process, a summary message appears with a link to an activity log. Clicking the View activity log link in the message displays a list of the documents that were checked out to you during the process and those that could not be checked out. After you save any changes, you should check in the documents to make them available to other authors and add the changes to the Developer's version control system.

To find text:

1. From the Library or Outline Editor, select one or more documents or folders containing the documents in which you want to find text.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click).

2. On the **Edit** menu, choose **Find and Replace**.

3. Type the text you want to find in the **Find what** field. You can also select a previous entry from the **Find what** history list.

4. Select the desired **Find Options**.

5. Click **Find Next**.

   The first occurrence of the search text is displayed in the Location section, along with information describing the location of the text within the document and the location of the document within the Library. If the text cannot be found, a message box displays informing you that the text was not found in the selected content. Click **OK** to close the message box.

6. Click **Find Next** as needed to search for additional occurrences of the text.

   Each subsequent occurrence of the search text is displayed in the **Location** section of the Find and Replace dialog box.

7. Click **OK** when notified that the search is completed.

8. When you are done finding text, click **Close**.

To find and replace text:

1. From the Library or Outline Editor, select one or more documents or folders containing the documents in which you want to replace text.

2. On the **Edit** menu, choose **Find and Replace**.

3. Type the text you want to find in the **Find what** field. You can also select a previous entry from the **Find what** history list.

4. Type the replacement text in the **Replace with** list box. You can also select a previous entry from the **Replace with** history list.

5. Select the desired **Find Options**.

6. Click **Find Next**.

   The first occurrence of the search text is displayed in the **Location** section, along with information describing the location of the text within the document and the location of the document within the Library. If the text cannot be found, a message box displays informing you that the text was not found in the selected content. Click **OK** to close the message box.

7. For each occurrence of the search text, you can do one of the following:

   Click **Replace** to replace the current occurrence with the replacement text and advance to the next occurrence. If you are working in the Outline Editor, the first time you replace text, a Replace Confirmation message appears indicating that you cannot undo changes made during find and replace. Click **Yes** to replace the text and continue the search or **No** to cancel the find and replace process.

   Click **Replace All** to replace all remaining occurrences with the replacement text. If you are working in the Outline Editor, a Replace Confirmation message appears indicating that you cannot undo changes made during find and replace. Click **Yes** to replace all occurrences of the text or **No** to cancel the find and replace process.

   Click **Find Next** to skip the current occurrence without replacing the text and advance to the next occurrence.

8. When the find and replace process has completed, click **OK** to close the confirmation message box.

   If you made one or more replacements, you can also click the View activity log link to see a list of documents in which replacements were made and the number of

replacements in each document.

9. When you are done replacing text, click **Close**.

5.2.10.2 Replace a Font

The Replace Font tool allows you to locate text with specific formatting in your content and change the formatting, if desired. Only text in web pages and topics is included in font replacement.

You can start this tool from the Library or the Outline Editor only. From the Library, you must have at least one document selected or the tool is disabled. If nothing is selected in the Outline Editor, the entire outline is searched; this is equivalent to selecting the root of the outline.

In the Replace Font dialog box, you can specify the properties of both the search and replacement fonts. These properties include font family (such as Arial or Verdana), font size (in points), and font style (bold, italic, underline). In the Font field, you can type a font name or select from a list of all installed system fonts. In the Size field, you can type a value (in points) or select from a predefined list ranging from 8 to 72 pt. You can enter smaller and larger sizes if needed, but only integer values are allowed. In the Style field, you can select from a list of predefined options only.

Note: Font replacement does not include font color, paragraph justification, or bulleted/numbered list styles.

If you do not specify any of these properties, that property is ignored in the search and/or replacement. For example, if you set the Find what options to Arial, blank, and Bold, respectively, the Developer will search the selected content for bold Arial text of all sizes. Similarly, if you set the Replace with options to blank, 10, and blank, respectively, the Developer will change the size of the located text to 10 pt, but will leave the font family and style unchanged.

By default, the selection and its related documents are searched. Clicking the View related documents link displays a list of the related documents. For this process, related documents are defined as all searchable documents that are directly or indirectly linked as children of the selection. For example, if you select a section that has topics and each of the topics has a web page linked as its concept, choosing to search related documents searches the section, the topics, and the web pages linked to the topics. Templates and package contents are not included in this operation. If you want to search only the selected item(s), you can deselect the Include related documents option in the Replace Font dialog box.

To further define a search, you specify the type(s) of text to include in font replacement. In topics, you can apply font replacement to bubble text, Introduction/End frame text, string input text, and/or template text. You can also apply font replacement to web page text. You must select at least one type of text to include before you can start the font replacement process.

During font replacement, the Developer searches the specified type(s) of text in the topics and/or web pages included in the selection and replaces all occurrences of the search font with the replacement font. Font replacement is completed automatically for the entire selection, and you are not prompted to confirm each replacement.

Warning! Use font replacement with caution. You cannot undo any fonts replaced using this tool.

Multi-user Considerations

- For changes to be made to a document using this tool, the document must be checked out. If you plan to use this tool offline, you should check out all affected documents before going offline.

When you execute this process, the Developer searches through all of the documents in the selection, regardless of their check in/out state. If a change is necessary and the document is not checked out and if you are working online, the Developer automatically checks the document out to you and makes the change. If the document cannot be checked out, for example, if it is open in another editor or checked out to another user or you are working offline, it is skipped. At the end of the process, a summary message appears with a link to an activity log. Clicking the View activity log link in the message displays a list of the documents that were checked out to you during the process and those that could not be checked out. After you save any changes, you should check in the documents to make them available to other authors and add the changes to the Developer's version control system.

To replace a font in your content:

1. From the Library or Outline Editor, select one or more documents or folders containing the documents in which you want to replace a font.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click).

2. On the **Edit** menu, choose **Replace Font**.

3. In the **Find what** row, select the font family, font size, and/or font style you want to replace.

4. In the **Replace with** row, select the font family, font size, and/or font style with which you want to replace the search font.

5. In the **Apply to** field, select the text to which the font replacement should be applied.

   You can replace fonts in topic bubble text, Introduction/End frame text, string input text, template text, and/or web page text.

6. Click **OK**.

   If you are working in the Outline Editor, a Replace Confirmation message appears indicating that you cannot undo changes made during font replacement. Click **Yes** to continue or **No** to cancel the font replacement process.

   The Developer searches the topics and/or web pages included in the selection and replaces every occurrence of the search font with the specified replacement font.

7. Click **OK** when notified that the font replacement is completed or that the font cannot be found in the selected content.

   If one or more replacements were made, you can also click the View activity log link to see a list of documents in which replacements were made and the number of replacements in each document.

8. When you are done replacing fonts, click **Close**.

5.2.10.3 Spell Check Content

After recording and editing content, and especially before publishing, you should verify that the spelling of text included in the content is correct.

Text in the following areas is included in this operation:

- Module, section, and topic names

- Text and Object names in the Frame toolpane
- Implicit text for string inputs
- Decision frame headings and path names
- Jump-in point text
- Text in Author Notes, Instructor Notes, and Expected Test Results panes in the Topic Editor
- Text in web pages
- Tooltips
- Glossary terms and definitions
- Keywords
- Roles
- Document output fields in the Properties toolpane
- Custom properties

Note: The names of the following document types are not included in this operation: web pages, packages, glossaries, role lists, and publishing styles.

You can start this tool from the Library or the Outline Editor only. From the Library, you must have at least one document selected or the tool is disabled. If nothing is selected in the Outline Editor, the entire outline is searched; this is equivalent to selecting the root of the outline.

If the document(s) selected for spell checking are linked to other documents, you are prompted with the choice of checking the selection only or the selection and related documents. Clicking the View related documents link displays a list of the related documents. For this process, related documents are defined as all searchable documents that are directly or indirectly linked as children of the selection. For example, if you select a section that has topics and each of the topics has a web page linked as its concept, choosing to search related documents searches the section, the topics, and the web pages linked to the topics. Templates and package contents are not included in this operation.

By default, the Spell Check tool ignores words that are in all uppercase letters and attempts to split compound words into two words. However, you can change these settings either before initiating a spelling check or while checking your content from Spelling page of the Options dialog box.

When a misspelled word is found, the Developer identifies the Library path of the document in which the word appears, as well as the context of the word within the document. You then have the option of ignoring that particular instance or all instances of the word, changing the word in that particular location or in all locations where it appears, or adding the word to the custom dictionary.

Warning! You cannot undo any changes made during a spelling check.

When you add a word to your dictionary during a spelling check, the word is added to the custom dictionary specified in the Spelling category in the Options dialog box. While performing a spelling check, you can also switch custom dictionaries or create a new one.

Language Property

The Developer provides a dictionary for each of the following supported languages:

- Danish
- Dutch
- English
- English (United Kingdom)
- English (United States)
- Finnish
- French
- French (Canada)
- German
- Italian
- Norwegian
- Portuguese (Brazil)
- Spanish
- Swedish

During a spelling check, the Developer uses the dictionary that matches the Language property of the document it is currently checking. If the content selected for a spelling check includes documents with different assigned languages, the spelling checker switches dictionaries as needed. If no dictionary of the same language exists, the spelling checker skips the document and adds a message to the activity log.

Multi-user Considerations

- For changes to be made to a document using this tool, the document must be checked out. If you plan to use this tool offline, you should check out all affected documents before going offline.

  When you execute this process, the Developer searches through all of the documents in the selection, regardless of their check in/out state. If a change is necessary and the document is not checked out and if you are working online, the Developer automatically checks the document out to you and makes the change. If the document cannot be checked out, for example, if it is open in another editor or checked out to another user or you are working offline, it is skipped. At the end of the process, a summary message appears with a link to an activity log. Clicking the View activity log link in the message displays a list of the documents that were checked out to you during the process and those that could not be checked out. After you save any changes, you should check in the documents to make them available to other authors and add the changes to the Developer's version control system.

To spell check a document:

1. From the Library or Outline Editor, select one or more documents or folders containing the documents whose content you want to spell check.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click).

2. On the **Tools** menu, choose **Spelling**.

   You can also press the F7 key.

   The Related Documents dialog box appears when you perform an action on any document that has links to other documents. You can choose to process only the document(s) you selected or to process your selection and all of the related documents.

   Click the View related documents link to display a list of the related documents if you are not sure whether you want to include related documents.

   After you have made your selection, click **OK**.

3. If a misspelling is found, it is displayed in the Location section, along with information describing the location of the text within the document and the location of the document within the Library. Click **Ignore**, **Ignore All**, **Change**, **Change All**, or **Add**, as appropriate.

   If you are working in the Outline Editor, the first time you change a word, a Replace Confirmation message appears indicating that you cannot undo replacements made during a spelling check. Click **Yes** to continue or **No** to cancel the spell check.

4. If necessary, click Options to change the spelling options or the custom dictionary.

   To change the custom dictionary, select the dictionary from the Custom dictionary list in the Options dialog box and click OK. You can also click **User Dictionaries** in the Options dialog box to create a new custom dictionary. After you change the custom dictionary, clicking **Add** in the Check Spelling dialog box adds the word to the newly selected dictionary.

5. Click **OK** when the spelling check is complete.

   If you changed one or more misspelled words, you can also click the View activity log link to see a list of documents in which changes were made and the number of changes in each document.

5.2.10.4 Find a Document in the Library

From the Outline Editor, you can select one document and find its folder location in the Library.

In a single layout, the Library tab will open if the Library is not already displayed. If the Library is open, it will become the active tab.

Note: If the Library is using a custom view when finding a document, the view is automatically switched to the Details view.

In a split layout (horizontal or vertical), the Library is activated in the layout other than the one in which you selected the document from the Outline Editor. For example, if you have a horizontal split layout with a document selected in the Outline Editor from the top layout and you run this command, the Library is opened in the bottom layout with the folder location and document are highlighted.

To find a document in the Library:

1. Open an outline in the Outline Editor.
2. Select one document that you want to locate in the Library.
3. On the **View** menu, choose **Find in Library** to display the selected document in the Library.

6 Record Topic Content

You can record content using the full Developer or you can use the Record It! wizard. The Record It! wizard streamlines the creation of recorded content without a full Developer installation. You decide whether to install the full Developer or the Record It! wizard, or both at installation time. The Record It! wizard is designed for authors that want to create recorded topics quickly and for those that do not need the complete capabilities of the Developer. The Record It! wizard can also be used to record testing procedures and produce a printed test document.

6.1 Use the Recorder

The Recorder appears on top of the application while you are recording the task. When the Recorder is active, the Outline Editor closes, allowing the Recorder to take screen captures as you perform the steps. Each time you capture an action while recording, the Recorder disappears while the screen is captured to prevent the Recorder from appearing in the results.

The Recorder contains brief instructions to help you during the recording process. The Last recorded event field tells you the last action you captured. The Next screenshot records field indicates the next action that you will capture.

Note: If you are recording in automatic mode, the Recorder disappears after you press PRINTSCREEN and records each screen and action until you press PRINTSCREEN again. The Recorder contains brief instructions that tell you to press PRINTSCREEN to start recording and press PRINTSCREEN again to stop recording.

Note: If you are recording content that will be deployed to end users in the Player format, you should record the topics using the same version of the target application that the end users will have when playing the content. Otherwise, context sensitivity may not function properly in the Player.

6.1.1 Recorder Logic

The Recorder functions like a screen capture utility. When you record a topic, you are taking a series of pictures of the way the screen looks after each step in a task. Each screen image you capture also has an associated action. This action that you perform (mouse click or keyboard action) moves you to the next screen. The screenshot and associated action are called a frame. The recorder can be set up to function in manual recording mode (default) or automatic recording mode. You can change the recording mode in the Recorder category from Tools, Options by selecting the desired mode (Manually or Automatically record screenshots).

Automatic vs. Manual Recording

Use Automatic Recording when you are recording a familiar system process to keep errors to a minimum. In this mode, every action after you press PRINTSCREEN is recorded until the next PRINTSCREEN. Inadvertent actions are recorded and will have to be edited out in the Topic Editor.

Use Manual Recording mode when you are less familiar with the system process you are recording. This mode requires you to press PRINTSCREEN after each action you record, giving you the opportunity to correct mistakes before the recording is saved with the next PRINTSCREEN.

Manual Recording

To manually capture a screen, you press the PRINTSCREEN key on your keyboard. Because of the way the Recorder works in manual mode, two PRINTSCREENS are necessary to capture the information for one frame; one for the screenshot and one for the action. When you press PRINTSCREEN at the beginning of the topic, the Recorder captures the first screen and creates a screenshot file. When you then perform an action and press PRINTSCREEN again, the Recorder captures the action you performed and associates it with the first screen to create the first frame, and it also captures the screen as it appears as a result of performing the recorded action and creates a screenshot file.

As you record frames, two display fields in the Recorder help you keep track of what is being recorded. The **Next screenshot records** field displays the action that you have performed that will be captured the next time you press PRINTSCREEN. The **Last recorded event** field tells you the action that was captured the last time you pressed PRINTSCREEN.

Automatic Recording

To automatically capture a screen, you press the PRINTSCREEN key on your keyboard. Because of the way the Recorder works in automatic recording mode, only two PRINTSCREENS are necessary to capture the information for all frames, one to start recording and one to end the recording. When you press PRINTSCREEN at the beginning of the topic, the Recorder captures each screen and its associated action until you press PRINTSCREEN again.

Before you begin recording, the recorder displays instructions for you to press PRINTSCREEN to start recording and press PRINTSCREEN again to stop recording. The recorder is hidden after the first PRINTSCREEN so it is not recorded with the application.

Note: Point events are not recorded when using the automatic recording mode because there is no way to record the action without an event such as a mouse click; for example, when you click on a menu then move your cursor to a menu item that opens a submenu. No action occurs until you click on the submenu item. Use manual recording mode to record this type of situation because you can PRINTSCREEN on the menu item and submenu item to capture without a click.

Automatic recording mode is not supported when re-recording a topic. Re-recording a topic is always a manual process.

You can configure the Recorder to record sound during the screen capture process. The Recorder behavior depends on the configuration of several options in the Record category on the Options dialog box. See *Configure the Recorder for Sound* for more information.

6.1.2 Context Recognition in the Recorder

Context information can be used in conjunction with in-application support to provide context-sensitive help. In-application support allows the user to use SmartHelp or the target application's Help menu to launch topics that correlate to their current screen rather than the entire list of topics. The Developer provides context recognition support differently for target applications than it does for non-target applications.

For target applications, the Developer acquires the context information for each screen when the content is recorded. This type of recognition is called "ExactMatch" because content is tied to a specific screen's context ID ensuring a 100% match. A content developer just records the target application screen. The ExactMatch context indicator appears when the Recorder recognizes the context of the object. This indicator means that the context information will be captured. When the content is launched in the Player using in-application support, the Player searches for "applicable" documents and returns content containing the specific context ID.

Note: Some target applications require additional setup to capture context correctly. Refer to the In-Application Support Guide for more information about target applications.

For non-target browser-based applications, the Developer uses a statistical engine to calculate an identifier on the application screen based on information it gathers on various parts of the screen. This type of recognition is called "SmartMatch". When help is launched through SmartHelp, the SmartHelp engine searches for SmartMatch context that will match the current context. You can add a SmartHelp toolbar button to the browser which will launch context-sensitive help content for target and non-target applications. SmartMatch is not as precise as ExactMatch but it narrows the content down significantly, giving the user some level of context-sensitive help. Additionally, SmartMatch becomes more effective as you record content because more data points are accumulated to help determine the correct screen. The SmartMatch context indicator appears when the Recorder is in the SmartMatch recognition mode.

If the Recorder cannot operate in either ExactMatch or SmartMatch mode, the NoMatch context indicator appears.

A warning indicator may also appear next to the context indicator when one of the following situations is detected:

- When the Recorder determines that context recording is taking too long. Recording performance can be improved by disabling unused Target Applications.
- When the Recorder determines that you are recording against a disabled Target Application. Recording quality may be improved by enabling the Target Application you are recording. You may also need to recapture actions for other frames taken during this recording session.

Click on the currently displayed context icon (or warning icon) in the Recorder (or on the AutoRecorder deskband) to configure target application support (or stop the recording and choose the Target Applications category in Tools, Options). You can use the Target Application Configuration dialog box to enable or disable target applications or enable just SmartMatch recognition. Eliminating target applications that you do not record can increase recording performance.

Note: If the Recorder does not recognize certain objects within the target application that you are recording, you can modify the frame in the Frame Properties toolpane in the Topic Editor.

If the application you are recording is not supported, you can create Context IDs manually in the Topic Editor. For more information, see *Use Context IDs*. If the application you are recording is supported, and the correct context information was not recorded, you can also recapture the context ID only in the Topic Editor.

Note: Explanation, Decision, and No Context frames are informational and do not have Context IDs. However, if matching context occurs on multiple paths of a Decision frame, the Decision frame appears. This allows the user to choose the path appropriate to the task they are performing.

6.1.3 Start the Recorder

When you start the Recorder, the Outline Editor closes and the Recorder opens. The title of the topic appears in the Recorder's title bar. Below the title bar, the screen capture instructions tell you what key or key combination to use to record an action/screen capture.

Note: In automatic record mode, the recorder disappears when you press PRINTSCREEN and records each screen and action until you press PRINTSCREEN again. You can configure a Deskband that displays recording controls in the Taskbar when recording in automatic record mode.

To start the recorder:

1. From the Outline Editor or the Library, select an empty topic.
2. Click **Record Topic**.

   You can also double-click the topic or select the topic and press ENTER to start the Recorder.

6.1.4 Record Topic Steps

As you record a topic, you can edit the steps after each screen capture or at the end of recording, depending on the behavior option you chose for the Recorder. You can change this option as often as you feel is necessary, depending on the situation.

6.1.5 Add Notes

The Add a Note button in the Recorder is used to add notes about the content being recorded. If you are recording a topic, you can add notes on individual frames that will appear in the Author Notes field in the Topic Editor. These notes can be seen by the content administrator when checking the accuracy of your recorded content. If you are recording a test, the notes appear in the Test Results report and can be used when submitting bug information.

In Manual recording mode, the Add a Note button pauses sound recording while the note is being entered. When the note is saved, the sound recording resumes and the Recorder returns to Manual recording mode. Note that in Manual recording mode, the action and the screenshot are not recorded until you press PRINTSCREEN. If you press the Add a Note button prior to pressing PRINTSCREEN, the note is applied to the previous frame. If you press the Add a Note button after PRINTSCREEN, the note is applied to the next frame.

In Automatic recording mode, the Add a Note button pauses sound and keystroke recording while the note is being entered. When the note is saved, sound and keystroke recording resumes and the Recorder returns to Automatic recording mode. Note that in Automatic recording mode, the action and screenshot are captured as they occur so clicking the note button always applies the note to the next frame.

To add a note in the Recorder:

1. From the Recorder, click Add a Note.
2. Type the note in the Author Notes dialog.
3. Click **Save**.

6.1.6 Record Different Action Types

When recording in the Developer, you press PRINTSCREEN after each action. There are three categories of actions: Mouse, String Input, and Keyboard.

A Mouse action is any action performed with the mouse, including clicking, dragging, or pointing. The frames for each type of mouse action are recorded differently, as described in the following list:

- **Click**: A click action includes clicking, double-clicking, or triple-clicking the left, middle, or right mouse button. This action is the simplest to record. You press the PRINTSCREEN key after each click, double-click, or triple-click.
- **Drag**: A drag action is defined as clicking and holding the left, middle, or right mouse button while moving the mouse. This can include dragging to select text or cells or dragging an object (such as a graphic) across the screen. This action includes pressing the mouse button (left/middle/right button down), moving the mouse, and releasing the mouse button (left/middle/right mouse button up). A drag action, then, has several parts and involves more than one frame. First, you press and hold the mouse button and press the PRINTSCREEN key to record the first frame. By default, the Developer creates several "incremental" screenshots as you drag that serve to illustrate the area as it is highlighted, or the movement of the object you are dragging. Then, you release the mouse button to complete the action and press PRINTSCREEN again. If you disable automatic drag and drop recording, you need to press PRINTSCREEN as you drag to capture the "incremental" screenshots. When you release the mouse button after dragging, you need to press PRINTSCREEN again.
- **Point**: A point action is defined as using the mouse to point to an object on the screen, such as pointing to a menu item to display the submenu. You press the PRINTSCREEN key to capture the frame after you point to the submenu.

- **Wheel**: A wheel action is defined as rolling the center wheel button on the mouse. You press the PRINTSCREEN key after each wheel action.

Note: You can select or deselect the Enable automatic recording option on the Recorder page of the Options dialog box to enable or disable automatic drag and drop recording.

A String Input action is defined as entering text into a document or field by typing on the keyboard. You press the PRINTSCREEN key after you have typed the text to capture the screen with the text.

A Keyboard action is defined as pressing any function key, cursor movement key, or any other single key, such as ENTER, TAB, ESC, INSERT, or DELETE. This action type also includes key combinations, such as CTRL+A and SHIFT+ENTER. You press the PRINTSCREEN key after pressing the key or key combination to record the result.

6.1.7 Record a Paste Topic

If the topic you are recording contains Cut or Copy and Paste steps, it is very important that you are aware of the following situation. When you press the PRINTSCREEN key to capture a screenshot, the screenshot is placed on the Windows Clipboard; therefore, the screenshot overwrites the result of the copy or cut operation.

To record the content correctly, you must perform the Cut or Copy step again immediately before you record the Paste step. This extra step places the proper information into the live application so that the screenshot is correct. If you perform several actions before pressing the PRINTSCREEN key to capture the screenshot, the Developer only captures the last action. Therefore, you should make sure that the Paste step is the last action you perform before pressing the PRINTSCREEN key.

Note: To restore the cut text or object before recording the paste action, you need to undo the previous actions until the cut text or object reappears in the application. You can then cut it again and record pasting it in a new location.

The following procedure steps you through a basic Cut/Copy and Paste operation using the method to open the Topic Editor at the end of recording.

To record a paste topic:

1. Set up the application in which you want to record in the correct position to begin the task.
2. Switch back to the Developer.
3. Select a topic.
4. Start the Recorder.
5. Press PRINTSCREEN to record the Start screen.
6. Select the text or object you want to cut or copy.
7. Press PRINTSCREEN to capture the results of the first step.
8. Cut or copy the selected text or object.
9. Press PRINTSCREEN to capture the results of the step.
10. Select the location where you want to paste the text or object.
11. Press PRINTSCREEN to capture the results of the step.

12. In the live application, cut or copy the selected text or object again.
13. In the live application, return to the location where you want to paste the text or object.
14. Paste the selected text or object.
15. Press PRINTSCREEN to capture the results of the step.
16. Finish recording the topic as appropriate.

6.1.8 Undo

As you record a topic, you may inadvertently press the PRINTSCREEN key and capture the wrong action. You can use the Undo command in the Recorder to undo all actions back to the beginning of the topic, including the Start screen. Keep in mind that clicking Undo does NOT undo actions in the application in which you are recording. You must do that manually.

6.2 Use Record It!

Record It! is a streamlined recording mode designed to allow non-Developer content contributors such as a subject matter expert (in a multi-user installation of the Developer) to quickly create content. Record It! also allows the content contributor to edit or comment on existing content assigned to them, or record testing procedures that can be printed as a test document.

The Record It! wizard, launched from the Record It! shortcut, guides the content contributor through content creation.

When you start the Record It! wizard in a multi-user environment, you may be asked to create a Login Profile. A Login Profile identifies the server where the content Library is installed as well as your Login credentials. A content Library is the location you will save your content so it can be reviewed by a content author. Any content you create and save will be stored in the Record It! Content folder in this Library.

The Record It! wizard guides you through one of three functional paths based on your selection on the Welcome to Record It! page:

- Record a new topic
- Record a test document
- Edit an existing topic or test

6.2.1 Create Login Profile

When you launch Record It!, your default Login profile is used. If you have multiple Login profiles, you are asked to select one. If you have no Login profile, you will be prompted to create one before the Record It! wizard will launch.

Typically, your content author would provide you the following information necessary to create your Login Profile:

- URL of the Library location (for example, http://server/virtual directory)
- Login credentials such as user name and password (Standard authentication only)
- Profile name of your choice

Note: You can click the Save my password as part of the profile option when you create your profile to bypass logging into the profile each time you use the Record It! wizard.

To add a Login Profile:

1. Click **Add** to start the Profile Wizard.
2. Click **Next** to display the Library Location page.
3. Type the URL to the server and virtual directory that contains the content Library that you want to access using this login Profile (for example, http://server/virtual directory). Your administrator will provide you with this information.
4. Click **Next** to display the Credentials page.

   The Record It! wizard automatically detects whether the server was installed using Standard or Windows authentication and disables the login credential options that are not valid. For example, if Windows authentication was installed, the Use a Different Login Account option is disabled. If Standard authentication was installed, you must enter a valid user name and password. Your administrator will provide you with this information.
5. Enter your login credentials and click **Next** to display the Profile Name page.
6. Type a name for the login Profile. Consider using the name of the server (Library) to identify a profile when you will have multiple Profiles that connect to different servers.
7. Click **Make this my default profile** to configure this profile as the default that is used when you launch the Record It! wizard, if desired.
8. Click **Next** to display the Data Storage Location page. Click **Browse** to change the data storage location, if desired.
9. Click **Next** to complete the Profile Wizard.

   The last page in the Profile Wizard displays a summary of the Library location, Login credentials, profile name choices, and data storage location choices you have made.
10. Choose an option and click **Finish**.

6.2.2 Create a Topic or Test Document

When you select Create a new topic or Record a test on the Welcome to Record It! page of the Record It! wizard, the Name Your Topic page opens. This page allows you to the name the topic or test you are creating.

Before you record content, you can set your recording and document options in one of two ways:

Import Content Defaults - Allows you to import a pre-defined set of options from an .ops file.

Set Options - Allows you to set the screen capture mode, screen capture key and how sound is recorded on a topic. You can also set Test Results options for printed output.

Note: After the options have been saved, you return to the Record It! wizard regardless of what is set in the Open the Topic Editor option.

You can document the recording process by adding notes to your topic or test.

Note: If you cancel out of the wizard at any time after you record content, the content is stored in your cache. You can retrieve the content by choosing Edit an existing topic on the Welcome to Record It! page and selecting the topic on the Select Topic or Test to Edit page.

To create a topic using Record It!:

1. From the Welcome to Record It! page, click **Create a new topic**.
2. Enter the new topic name in the **Enter topic name** field.
3. Click **Import Content Defaults** or **Set Options** if you want to import or manually set recording or print output options.
4. Click ENTER to launch the Recorder.
5. Follow the Recorder screen prompts to record the content.
6. Click **Finish** in the Recorder.

To create a test using Record It!:

1. From the Welcome to Record It! page, click **Record a test**.
2. Enter the new topic name in the **Enter topic name** field.
3. Click **Import Content Defaults** or **Set Options** if you want to import or manually set recording or print output options.
4. Press ENTER to launch the recorder.
5. Follow the Recorder screen prompts to record the desired content.
6. Click **Finish** in the Recorder.

6.2.2.1 Add Notes

The Add a Note button in the Recorder is used to add notes about the content being recorded. If you are recording a topic, you can add notes on individual frames that will appear in the Author Notes field in the Topic Editor. These notes can be seen by the content administrator when checking the accuracy of your recorded content. If you are recording a test, the notes appear in the Test Results report and can be used when submitting bug information.

In Manual recording mode, the Add a Note button pauses sound recording while the note is being entered. When the note is saved, the sound recording resumes and the Recorder returns to Manual recording mode. Note that in Manual recording mode, the action and the screenshot are not recorded until you press PRINTSCREEN. If you press the Add a Note button prior to pressing PRINTSCREEN, the note is applied to the previous frame. If you press the Add a Note button after PRINTSCREEN, the note is applied to the next frame.

In Automatic recording mode, the Add a Note button pauses sound and keystroke recording while the note is being entered. When the note is saved, sound and keystroke recording resumes and the Recorder returns to Automatic recording mode. Note that in Automatic recording mode, the action and screenshot are captured as they occur so clicking the note button always applies the note to the next frame.

To add a note in the Recorder:

1. From the Recorder, click Add a Note.
2. Type the note in the Author Notes dialog.
3. Click **Save**.

6.2.2.2 Undo

As you record a topic, you may inadvertently press the PRINTSCREEN key and capture the wrong action. You can use the Undo command in the Recorder to undo all actions back to the beginning of the topic, including the Start screen. Keep in mind that clicking Undo does NOT undo actions in the application in which you are recording. You must do that manually.

6.2.2.3 Import Content Defaults

If multiple content authors are working on the same content that requires consistent output, your content administrator may create a "master" set of Content Default options (.ops file) that can be imported by each content author.

To import content defaults:

1. On the Name Your Topic page, click the **Import Content Defaults** link.
2. Browse to where the .ops file is stored.
3. Select the file and click **Open**.

6.2.2.4 Set Options

When you select Set Options from the Record It! wizard, the Options dialog box opens in the Recorder category. From this category, you can set the screen capture mode (manual or automatic), screen capture key and control sound recording on a topic.

From the Documents category, you can set the Document options for printed output.

Note: After the options have been saved, you return to the Record It! wizard regardless of what is set in the Open the Topic Editor option.

To set the recording options in Record It!:

1. From the Name Your Topic page, click **Set Options**.
2. Click the Recorder category and set the Recorder options then click **OK**.
3. Click **Next** to launch the Recorder.

To set the document output options in Record It!:

1. From the Name Your Topic page, click **Set Options**.
2. Click the Documents category and set the print options then click **OK**.
3. Click **Next** to launch the Recorder.

6.2.3 Edit an Existing Topic or Test

You can edit a topic or test when you complete the recording, or you can edit a topic you recorded previously. If you want to Edit an existing topic or test, the Select Topic or Test to Edit page displays a list of existing topics or tests for which you are the owner. Ownership is assigned on the Add Optional Information page during creation of the topic or test. You can only edit topics for which you are the owner.

To edit a topic or test:

1. From the Welcome to Record It! page, click **Edit an existing topic** and click **Next**.

2. Select the topic or test to edit and click **Next**.
   The Welcome to the Topic Editor window appears with basic instructions about how to use the Topic Editor. Click **OK** to close the window.

   or

   From the Edit Your Topic page, select **Yes, launch editor**.

3. Edit the document in the Topic Editor and save the changes.

4. Close the Topic Editor to return to the Record It! wizard.

6.2.4 Preview Your Topic

After you have recorded your content, you can preview it before you continue. You can preview the recorded topic in See It! mode as a simulation in your browser or your recorded test as a Word document. Author notes entered during the recording test process display next to the steps in this print output.

To preview a topic in See It! mode:

1. From the Preview Your Topic or Test page, click **Preview as simulation**.

2. Click **Next**.

3. View the topic in See It! mode then close the See It! window to return to the Record It! wizard.

4. Click **Next** to advance to the next page of the wizard.

To preview a test results document:

1. From the Preview Your Topic or Test page, click **Preview as test**.

2. Click **Next**.

3. View the test results in Test Results document in Word.

4. Save the document if you want to keep it then close Word to return to the Record It! wizard.

5. Click **Next** to advance to the next page of the wizard.

6.2.5 Add Optional Information

The Add Optional Information page allows you to select an owner of the topic or test and set the state of the content. If an owner is set, they are able to edit the topic or test by selecting it on the Select Topic or Test to Edit page.

Warning! If you select an owner other than yourself, you will not be able to edit the topic or test.

To add optional information to a topic or test in Record It!:

1. From the Add Optional Information page, select an owner of the topic or test from the Owner list.

2. Select the state of content from the State list.

3. Click **Next** to advance to the next page of the wizard.

6.2.6 Submit Your Topic

The Submit Your Topic page allows you to submit your topic or test to the Library so it can be reviewed by the content author. If you do not want to keep the recording, you can delete the topic or test and it will not be saved to the Library or to your local machine and can not be restored.

Note: If you get to the Submit page from the Edit a Topic or Test page and you select discard changes, only the edits made during the Record It! session are discarded. The original topic or test is not deleted.

To submit a topic or test in Record It!:

1. From the Submit Your Topic page, click **Submit topic**.
2. Enter any comments on the Check In Comment page and click **OK**.

To delete a topic or test in Record It!:

1. From the Submit Your Topic page, click **Delete topic**.
2. Click **Next** to advance to the next page of the wizard.

To discard changes to a topic or test in Record It!:

1. From the Submit Your Topic page, click **Discard changes**.
2. Click **Next** to advance to the next page of the wizard.

6.2.7 Complete the Record It! wizard

After you have submitted or deleted your topic, the last page of the wizard displays. You have the option to exit the wizard or restart the wizard to record another topic.

To exit the Record It! wizard:

1. From the Congratulations! You have completed Record It! page, click **Finish and Exit wizard**.
2. Click **Finish** to exit the wizard.

To restart the Record It! wizard to record another topic:

1. From the Congratulations! You have completed Record It! page, click **Restart wizard**.
2. Click **Finish** to complete the current wizard session and restart the wizard from the beginning.

7 Use the Topic Editor

The Topic Editor allows you to edit the frames you have recorded for a topic. You can also edit the Concept and Introduction information for the topic. The Topic Editor contains a menu bar, toolbars, and the screenshot for the current frame.

The Topic Editor also includes six properties toolpanes that provide additional information about each frame: Frame Properties, Frame Structure, Frame Comments, Sound Editor, Concept, and Frame Link.

7.1 Navigate Frames

Frames in a topic are easily navigated using the navigation icons on the toolbar in the Topic Editor. You can move forward or back one frame or jump to the Introduction or End frame of the topic. If a topic contains branches with different End frames, a menu with the available End frames appears to allow you to choose the End frame you want.

The Frame Structure is a graphical representation of each step in a topic. When displayed, it appears in its own pane in the Topic Editor. The Frame Structure pane contains a circle for every frame of the topic as follows:

Introduction Frame

Frame

End Frame

Decision Frame

Explanation Frame

Move to any frame in the topic by clicking the appropriate circle. You can also navigate using the ALT+left arrow and ALT+right arrow keys (following the default path). When you select a frame, the frame's circle changes to green and the screenshot for that frame displays in the Topic Editor.

Note: When you first open a topic, the Introduction frame displays a green circle only because it is the selected frame.

The circles are connected by lines, which indicate the flow of the topic. If an Alternative Path is available, it appears below the primary path. In addition, if an Alternative Action or Alternative Path is available for a frame, the number of available actions is displayed above the frame's circle and to the left. When you move the mouse pointer over the circles, a thumbnail image of the frame, and the unique ID of the frame appear, allowing you to identify frames easily.

Note: You can view the total number of frames for each topic from the Library or Outline Editor by adding the Frames column to any view.

The Go To menu displays commands for navigating frames. You can also use the Specific Frame command to navigate directly to a frame by Frame ID. The Frame ID can also be used as reference point for subject matter experts who review content via the Player. You can configure published Player output (and preview in the Developer) to display the Frame ID in topic playback. See *Display Frame ID in Topic Playback* in the Customize the Player section of the Publish Content chapter.

To navigate frames using the navigation icons:

1. To move to the next frame, click **Next frame**.

2. To move to the previous frame, click **Previous frame**.
3. To move to the Introduction frame, click **First frame**.
4. To move to the End frame, click **Last frame**.
5. To move to a specific frame, click **Go to Specific Frame** and enter a frame ID.

To navigate frames using the frame structure:

1. Display the Frame Structure toolpane, if necessary.
2. Move the mouse pointer over the circles in the Frame Structure toolpane to display a preview of the frame in a small window.
3. Click F to display the corresponding frame in the Topic Editor.
4. Click E to display the End frame in the Topic Editor.
5. Click S to display the Introduction frame in the Topic Editor.

7.2 Save a Topic

You can save a topic at any time from within the Topic Editor with the Save command. You can also use the Save As command to save a copy of a topic with a different name or to a different location in the Library.

Multi-user Considerations

- When you save a checked out document, it is saved to your data storage location regardless of whether you are working online or offline. You must check the document in to insure that the server has the most recent copy. A new document is not added to the server until you check it in. If a document has never been checked in, your local copy is the only copy of that document.

  If you click the Keep checked out option on the Check In Comment dialog box during check in, the content is checked in and the version number incremented by 1 but the document remains checked out and unavailable for editing by other users.

  Open documents display check in/out indicators in the document editor tab. While you can edit a checked in or locked document, you cannot save your changes to the original document.

  If you edit a document that you did not check out (in other words, a checked out document was opened in Read-Only mode and edited) and you want to save the changes, you may still be able to save it. If you have access rights to the document and it has not been checked out by someone else, you are given the option to save the changes to the original document name. If you choose to save the changes, the document is checked out and the changes are saved. If you do not want to save the changes to the original document, you can save the document as a different document name or you can abandon the changes without saving.

Note: Saving changes to a document that is not checked out to you is not a recommended best practice. This functionality is designed to allow you to save changes to a document that was unintentionally edited in Read-Only mode.

To save a topic in the Topic Editor:

1. On the **File** menu, choose **Save**.

Note: You can also open a topic and use Save As on the File menu to save a copy of the document with a new name and/or to another folder.

To save a topic with another name or in another location in the Library:

1. From the **File** menu, choose **Save As**.
2. Type a new name for the topic, if desired.
3. Navigate to the desired location to save the topic, if necessary.
4. Click **Save**.

7.3 Undo and Redo in the Topic Editor

You can undo changes that you make in the Topic Editor. If you made changes to frames other than the current frame, the Topic Editor will navigate to the frame where the change was made. For example, if you add custom text to the bubble for three different frames, and then undo all three additions, the Topic Editor navigates back to each frame where the bubble text is being undone.

If you are using sound in the Topic Editor, Undo will undo frame by frame recordings. The Topic Editor updates the frame view, frame structure, and waveform while undoing.

Undo does not affect operations with attachments in the Frame Link Properties window.

You can also redo actions that you have undone. Like Undo, if the action you are redoing occurs on another frame, the Topic Editor will navigate to that frame.

7.4 Control Topic Elements

The Topic Editor provides several tools for controlling which bubble text, frames, screenshots, and action areas appear in published content. The following summary includes a brief description of each tool and the resulting output.

Note: See the corresponding help topic for each feature in the *Topic Editor* chapter for more complete information.

Specify the Play Mode for Custom Text

Use the Visible in <Play Mode> feature to control the play mode in which text will appear. Text marked for a specific play mode will be included when you publish a Player, Presentation or document that uses that play mode. Text not marked for the play mode will be excluded. This feature is commonly used when you want to display different information in different outputs. See *Specify the Play Mode for Custom Text* in the Edit Bubble Properties section of the Use the Topic Editor chapter for more information.

This option affects Player, Presentation, and document output.

Example: You have two paragraphs in a frame bubble. You want the first paragraph to appear in the Player, but do not want it to appear in Do It! playback or the Job Aid. To control the output for the paragraphs, you select the first paragraph in the bubble and enable See It!/Try It! modes and disable Do It! mode. When publishing, make sure that Do It! is selected as the Job Aid text mode.

Control Text for Player and Print Output

Use the Visible in <Player/Print> feature to prevent custom text from appearing in the output, regardless of its play mode. By default, custom text is marked to appear in both Player and document outputs, but you can disable an output. Text that is marked to not appear in a Player output will also not appear in a Presentation output. See *Control Text for Player and Print Output* in the Edit Bubble Properties section of the Use the Topic Editor chapter for more information.

This option affects Player, Presentation, and document output.

Example: You have two similar notes in a frame; one is worded for onscreen viewing in the Player and the other worded for document output in the Training Guide. Both notes are marked for See It!/Try It! modes. To control which note paragraph is included in which output, you select each note and enable the desired output and deselect the other output. However, when publishing documents, make sure that your text mode is set to the same play mode as the custom text.

Hide a Frame for a Play Mode

Use the Show In feature to prevent a frame from appearing in a specified play mode. If you hide a frame for See It!/Try It! mode, then the frame will *not* appear in any Player, HTML Web Site, or document output published for that play mode. Note that using this option overrules other frame and play mode controls during publishing. See *Hide a Frame for a Play Mode* in the Edit Bubble Properties section of the Use the Topic Editor chapter for more information.

This option affects Player, Presentation, and document output.

Example: You have recorded a lengthy task. In Know It? mode, you want to test competency for part of the process only, for instance the first 10 frames. To exclude the remaining frames from appearing in Know It? mode, you deselect Know It? in the Show In list for each excluded frame.

Hide the Bubble

This feature applies to See It! and Try It! modes only. When the Display Bubble for this Frame icon is disabled, the entire bubble for the frame is hidden. This option is often used when your purpose is to give a "slide-like" presentation and you are providing the bubble text narrative, or you have added sound for the narrative. In these situations, the bubble text is unnecessary and might be distracting. Note that you can also use the Show Bubbles property in the Properties toolpane to hide or display all the bubbles for a topic, overriding any individual frame settings. See *Hide the Bubble* in the Edit Bubble Properties section of the Use the Topic Editor chapter for more information.

This option affects Player and Presentation output.

Disable the Action Area

You can hide the display of an action area (the marquee) on a frame when playing a topic in the Player. This feature is often used in conjunction with hiding the bubble for creating and running a slide-like presentation. See *Disable the Action Area* in the Edit Action Properties/Create a New Action Area section of the Use the Topic Editor chapter for more information.

This option affects Player and Presentation output.

Display Template Text in Know It? Mode

Template text does not appear for action frames in Know It? mode, except for string inputs (action to enter text). Hiding the template text allows you to test for competency. However, there may be steps in the process for which you do not want to penalize the user for not knowing how to perform the step; for instance, if a step is very specific to the example used. In this situation, you would want to display the template text. See *Display Template Text in Know It? Mode* in the Edit Bubble Properties section of the Use the Topic Editor chapter for more information.

This option affects Player output only.

Use Screenshot Publishing

By default, all screenshots are set for automatic selection. This means that when you publish a document output that includes screenshots, the Developer includes only those screenshots that show a change in the context setting for the action. The auto select screenshot publishing icon and tooltip change to indicate if the screenshot for the frame will be included or not included. However, you can use the other screenshot publishing icons to manually choose which screenshots to include or exclude in the published document. See *Use Screenshot Publishing* in the Manipulate Frames section of the Use the Topic Editor chapter for more information.

This option affects document output only.

7.5 Manipulate Frames

When you record a topic, you record the primary path. After recording, you can manipulate this path in several ways. You can insert missing frames and delete unnecessary ones, or you can add alternative paths to the topic. If any of the screenshots or actions were not recorded correctly, you can recapture them as well.

7.5.1 Insert a Missing Frame or Frames

You can insert frames in an existing topic. When you insert a single frame, you are recording a single action; therefore you must take two screenshots, so that the Recorder can capture the screenshot and the action you perform. When you insert multiple frames, the recording process is identical to recording a topic; the Recorder captures the starting screenshot and the successive actions and resulting screenshots for new frames.

You insert a new frame after the current frame. You should make sure that you know where in the topic you want to place the frame. You should also be sure that the screen in the application you are recording is set up to match the correct step in the task where you want to insert the frame.

To insert a missing frame or frames after the current frame:

1. Open or switch to the application in which you want to record the missing step(s), and set it up in the correct position to begin the step(s).
2. Switch back to the Developer.
3. On the **Insert** menu, choose **Missing Frames**.
4. Press PRINTSCREEN to record the screenshot.
5. Perform the action you want to record.
6. Press PRINTSCREEN to capture the results of the step.

   Repeat as necessary.
7. Click **Finish**.
8. Verify and edit the settings and the bubble text as necessary.

7.5.2 Re-Record a Topic

Re-recording a topic allows you to capture screenshots and actions using the original topic as a guide. This feature is useful when the topic text has been translated and the frame screenshots need to be recaptured in a different language. It can also be used to capture new screenshots if the screens have changed or if steps have been added to or removed from procedures in the target application.

When you re-record a topic, you can start from any frame you choose. The Recorder opens with a Preview of Original window that displays the frame screenshot on the left and the frame bubble text on the right. The mouse pointer changes to a magnifying glass, as it moves over the Preview the Original window, allowing you to zoom in/zoom out as necessary to set up the screenshot. The bubble text used in the preview window is from the active preview mode in the Topic Editor. As you press PRINTSCREEN to record these steps, the Recorder advances to the next frame automatically.

Note: Two visual cues are displayed when re-recording a Decision frame. First, the Next screenshot field shows Decision Frame Screenshot. Secondly, the decision paths of the Decision frame display in the bubble area of the re-recorder (however, the links are not active).

The re-recording process begins on the currently selected frame, so you can choose the frame on which you want to begin by navigating to it in the Topic Editor. Once the Recorder opens in Re-recorder mode, the Previous and Next Frame arrows allow you to navigate forward and/or backwards within the current path to locate the appropriate frames to be re-recorded. Frames can be added within the flow of the re-recording process via the Insert Frame icon. Inserted frames can be undone by clicking the Undo icon. As you navigate the frames, only the steps where you press PRINTSCREEN are re-recorded.

The re-recording process ends automatically when you reach the end of the topic. You can also end the process at any time using the Finish button in the Recorder. This flexibility allows you to stop re-recording and restart it again on any frame.

The re-recording process and the Preview of Original window handle the different types of frames as follows:

- Action frame: After the screenshot has been recorded, it advances to the next frame in the sequence of the topic.
- Explanation frame: These frames are skipped. The Topic Editor automatically copies the screenshot from the following frame and uses it as the background for the Explanation frame.
- Alternative Actions/Paths: When a frame has an Alternative action or path, the Alternative icon appears in the Preview of Original window between the screenshot and the bubble. Clicking this icon will scroll through all of the alternatives. You can choose which alternative you want to record. Note that Alternative actions that were automatically captured when you recorded the topic will not be captured during re-recording.
- Decision frames: The Preview of Original window displays the Decision frame links, and you can choose which path to re-record.

Note: Automatic recording mode and the Undo button are not supported when re-recording a topic. Re-recording a topic is always a manual process.

To re-record the topic starting at the current frame:

1. On the **Edit** menu, choose **Re-record Topic**.
2. Set up the target application at the appropriate screen.
3. If necessary, use the Previous Frame or Next Frame arrows to navigate to the frame to be re-recorded.
4. Press PRINTSCREEN to capture the screenshot.
5. If necessary, use the Previous Frame or Next Frame arrows to navigate to the next frame to be re-recorded.

6. Press PRINTSCREEN to capture the actions and screenshots.

7. Repeat Steps 5 and 6 as necessary.

   The Recorder closes automatically when you re-record the last frame in the topic. If you want to stop the re-record process before the end of the topic, click Finish in the Recorder window.

To insert a frame during re-recording of a topic:

1. On the **Edit** menu, choose **Re-record Topic**.

2. Set up the target application at the appropriate screen.

3. Press PRINTSCREEN to start the re-record process.

4. If necessary, use the **Previous Frame** or **Next Frame** buttons to navigate to the frame before where you want to insert a frame.

5. Click the **Insert Frame** button to start Insert mode.

6. Press PRINTSCREEN to capture the screenshot. The **Undo** button activates if you want to undo the insert.

7. If want to continue re-recording, click the **Insert Frame** button to exit Insert mode and use the **Previous Frame** or **Next Frame** buttons to navigate to the next frame to be re-recorded.

8. Press PRINTSCREEN to each time you want to re-record any action and screenshot. The Recorder closes automatically when you re-record the last frame in the topic. If you want to stop the re-record process before the end of the topic, click **Finish** in the Recorder window.

7.5.3 Insert an Explanation Frame

You can insert an Explanation frame to provide additional information about a step in the topic. No action is associated with this type of frame; it is simply a screenshot image and a bubble with text.

Note: Explanation, Decision, and No Context frames are informational and do not have Context IDs.

An Explanation frame is always inserted after the current frame. The screenshot used for the Explanation frame is the same screenshot used for the frame that follows the Explanation frame. In the empty bubble, you can enter text that explains something about the step or call the user's attention to something on the screen. Explanation frames appear in See It!, Try It!, and Do It! modes; they do not appear in Know It? mode unless the bubble text is marked to appear in that mode.

Note: Explanation frame text can be set to appear in Know It? mode by selecting the text in the bubble and enabling the Visible in Know It icon in the Frame toolpane.

By default, the Explanation frame bubble appears in the middle of the screen, but you can move it to any location. You can also change the bubble type to one with a pointer and move the bubble so that it points to an element on the screen.

When an Explanation frame appears in the Player in Try It! mode, users are prompted to press ENTER after viewing the frame to continue playing the topic. In See It! mode, however, the user will not be prompted to press ENTER to continue. Instead, the topic displays the Explanation frame for the delay time specified in the Options dialog box and then continues playing automatically. If a default delay of 5.0 seconds is set, the Explanation frame will

display for that length of time and then proceed to the next frame. However, if you change the Delay time(s) setting in the Frame Properties toolpane to Infinite, users will receive a prompt to press ENTER to continue. If you set a delay time value for an Explanation frame with sound, the frame advances automatically after the sound plays, overriding the set value.

To insert an Explanation frame after the current frame:

1. Select the frame after which the Explanation frame will be inserted.
2. On the **Insert** menu, choose **Explanation Frame**.

   The frame is inserted, as indicated by the in the Frame Structure, and the bubble contains the default text “Press Enter to continue.”
3. Enter the desired text and adjust the settings as necessary.

7.5.4 Insert a No-Context Frame

After you have recorded a topic, including all actions that reference recognized objects, you can insert a No-context frame to incorporate actions you were unable to record during the initial recording. On a No-context frame, you can specify an action and reposition and resize the action area to reference the appropriate object. These frames appear in See It!, Try It!, and Do It! modes in the Player.

A No-context frame is always inserted after the current frame. The screenshot used for the No-context frame is the same screenshot used for the frame that follows the No-context frame. You must also enter any bubble text that should be displayed, as there is no template text for No-context frames. No-context frames can be inserted after any action, Introduction, Explanation or Decision frame.

Note: Explanation, Decision, and No Context frames are informational and do not have Context IDs.

To insert a No-context frame after the current frame:

1. On the **Insert** menu, choose **No-context Frame**.
2. Type text and adjust settings as necessary.

Tip: You can also create a No-context frame during the initial recording by pressing PRINTSCREEN a second time to record an additional frame. If no action is associated with a frame, the frame is recorded as a No-context frame. If the frame is recorded with an action, you can display the frame in the Topic Editor and click the **Ignore context** icon in the Frame toolpane to turn the frame into a No-context frame.

7.5.5 Copy a Frame or Frames

You can copy a frame or frames to another location in the same topic or into another topic. This feature allows you to easily duplicate sections of a topic that have the same steps, without having to record them again.

Any frame can be copied, including the Start frame. The copied frames are not linked to the original frames, but any links they contain to other documents such as attachments, icons, manual hyperlinks, glossary terms, and sound properties will be preserved.

Tip: You can duplicate a frame by copying and pasting it without changing the selected frame in the frame structure.

When you copy a frame, the frame's properties are also copied, including the screenshot, all actions and alternative actions, jump-in points, bubble text and bubble properties, Context

IDs, "include this screenshot" settings, frame link settings and tooltips, custom sound, links and broken links, action areas, and the "keep with next" setting. The template language and the screen resolution are not copied.

To copy a single frame:

1. Select the frame you want to copy.
2. On the **Edit** menu, choose **Copy Frames**.
3. Select the frame after which you want to paste the copy.

   You can open a different topic in the Topic Editor, or switch to a topic already open, if desired.
4. On the Edit menu, choose **Paste Frames**.

7.5.6 Select Multiple Frames

You can select multiple consecutive frames with SHIFT+click. Selected frames are indicated in a dark green color. When multiple frames are selected, the active frame is the last frame you selected. Its screenshot and properties appear in the main Topic Editor window, and it is highlighted in the frame structure with the same light green selection color used to indicate an active single frame.

You cannot edit multiple frames. When you select multiple frames, the topic editor displays the screenshot and properties of the last selected frame, because it is the active frame. If you click anywhere in the editor, the frame structure shows only the active frame as selected.

You can deselect multiple frames by clicking any frame without pressing the Shift key or by editing the active frame.

When you paste frames, they appear after the selected frame in the frame structure. You **cannot** paste frames in these situations:

- after an end frame
- into an empty topic
- into topics with different screenshot resolutions

In a recorded topic, the screenshot for the first recorded action frame is also used for the Start frame. Therefore, if you paste a frame immediately after the Start frame, the screenshot for the start frame will update to match the new first frame.

To select multiple frames:

1. Select a frame.
2. Press SHIFT and click another frame to select multiple frames.

   The frames you clicked are selected, along with all frames in between them.

7.5.7 Copy Paths

You can select and copy an entire path or multiple paths. When you paste a path immediately before the end frame of a topic or a branch path, the screenshot for the end frame updates to reflect the last frame of the path you pasted.

When you copy an end frame into a path that already has an end frame, the end frame you are pasting is converted to an Explanation frame. When you copy an action frame with alternative paths, the currently chosen path will be copied and pasted with the frame.

Select Paths

You can select multiple paths using CTRL+click. The CTRL+click method will select the path from the first frame in the path that you select through the end of the path, either the end frame of a branch path or the point where an alternative path rejoins the main path.

To select a path:

1. Click the first frame in the path that you want to select.
2. Press CTRL and click another frame later in the same path.

   The path is selected from the first frame you clicked through the last frame on the path.
3. To add another path to the selection, press CTRL and click in the path.

To copy multiple frames or paths:

1. Select the frames or paths you want to copy.
2. On the **Edit** menu, choose **Copy Frames**.
3. Select the frame after which you want to paste the copied frames or paths.

   You can open a different topic in the Topic Editor, or switch to a topic already open, if desired.
4. On the **Edit** menu, choose **Paste Frames**.
5. Click **OK** to respond to any prompts as necessary.

7.5.8 Copy Decision Frames and Paths

Several rules apply when you copy and paste a Decision frame and its paths.

- Part of the primary path, including a Decision frame; not including a branch or alternative path is copied

  - The selected frames, including the Decision frame are pasted
- Decision frame and the primary path including the frame where the alternative path rejoins, and the alternative path to the selection is copied

  - The selected path structure, including the Decision frame, the primary path, and the alternative path is pasted
- Decision frame and part of an alternative path or a branch path is copied

  - The frames are pasted into an existing path, not as a new alternative or branch path
- Decision frame and entire branch path, including the end frame is copied

  - The frames are pasted into an existing path, and the end frame of the path is converted to an Explanation frame

- Decision frame and multiple branch paths is copied

  - The Decision frame and the first selected branch are pasted into the existing path, and the structure of the other branch paths is pasted

7.5.9 Delete a Frame

Before a frame can be deleted, you must delete all Alternative Actions or Alternative Paths that begin on the frame. Although you can select multiple frames, you can only delete individual frames.

To delete the current frame:

1. On the **Delete** menu, choose **Frame**.
2. Click **Yes**.

7.5.10 Recapture a Screenshot

If the screenshot for a frame is incorrect, you can recapture it without having to re-record the entire frame. Make sure that the screen in the target application is set up correctly. When you press PRINTSCREEN, the Recorder captures the screen and automatically reopens the Topic Editor.

To recapture the screenshot for the current frame:

1. On the **Edit** menu, point to **Recapture** and choose **Screenshot**.
2. Activate the target application and navigate to the appropriate screen.
3. Press PRINTSCREEN.

7.5.11 Recapture an Action

If the action for a frame is incorrect, you can recapture it without having to re-record the entire frame. While you do not necessarily have to be on the same screen in the target application as when the screen was first captured, it is recommended. When you press PRINTSCREEN, the Recorder captures the action and automatically reopens the Topic Editor.

To recapture the action for the current frame:

1. On the **Edit** menu, point to **Recapture** and choose **Action**.
2. Activate the target application and perform the action you want to recapture.
3. Press PRINTSCREEN.

7.5.12 Use Context IDs

Context IDs are provided by target applications and non-target browser-based applications as identifiers for individual screens. They can be used in conjunction with in-application support to provide context-sensitive help. In-application support allows the user to use SmartHelp or the target application's Help menu to launch topics that correlate to the current screen. The Player then launches the topic at the specified screen, rather than at the beginning of the topic.

For target applications, the Developer automatically acquires the unique context ID for a screen when the content is recorded. This creates an ExactMatch Context ID type. For non-target browser-based applications, a Context ID can be generated. This generated Context ID is called a SmartMatch Context ID type and cannot be edited. When you record an application

screen, the Context ID type is set in the Type field on the Context ID dialog box. Recording non-target applications that are not browser-based, creates blank Context IDs.

Note: You cannot edit Context IDs for the Start/End, Decision, Explanation, and No context frames. Context IDs created when recording browser-based applications have a context type of SmartMatch can not be edited. If the application screen changes, you must recapture the context to change the context ID.

The Context ID dialog box has five columns:

Name: A user-friendly name for the value. It can be any text. For unsupported applications, the default value for this field is Context ID. For supported applications, the caption for the value is captured and placed in this field.

Value: The value of the context ID.

ID: Allows you to indicate a specific part of the Context ID for search purposes. It can be used as a grouping mechanism. It is a required field, and it must be unique.

ID as Prefix: When deselected, allows the search engine to ignore the prefix. For unsupported applications, this field must be false.

Searchable: Indicates whether the Context ID information for the frame is indexed. If it is not indexed, you will not be able to use it to integrate context-sensitive help. The default is true.

The Context ID dialog box differs for supported target applications vs. non-supported applications. Supported target applications have information in all five columns, and may have multiple rows for a single frame. Non-supported applications simply display Context ID in the Name column.

You can add new rows to the bottom of the grid. This allows you to provide additional context values or to fix a corrupt context ID. You can also delete rows as necessary. All editing is done inside the grid itself; simply click the cell you want to edit.

Note: You can add the Context IDs field to document outputs by customizing the document format publishing projects. See *Customize Document Formats* for more information on customizing document output.

To enter or modify a context ID for the current frame:

1. On the **Edit** menu, choose **Context ID**.
2. Click in the cell you want to edit, and change text as necessary.
3. Click to add a row at the bottom of the grid.
4. Click to delete the selected row.
5. Click **OK** to save your changes or **Cancel** to exit without saving.

7.5.13 Re-record Context IDs

If you previously recorded content and the context ID has changed in the application, you can recapture the context ID only instead of re-recording all of the content. There are several reasons for recapturing context IDs.

- When the content was initially authored, the Developer was unable to capture the context (either SmartMatch or ExactMatch) for the recorded screens. However, the software or application was updated and the recorded screens now have context (or

altered context values), so you just want to refresh the topics with the context information, without losing or overwriting anything else.

- Changes have been made to what was used as context in a particular application and previously captured context information is no longer valid.

- The application context is changed by the application development team and recorded context is no longer valid for the recorded application.

Although re-recording the topic or recapturing the frame's action also captures the context ID, those methods replace any customizations you have made to the object type, object name, action, or action area. Re-recording the context ID captures the values for the screen without overwriting your action modifications.

To add or change context recognition for previously recorded content, you must re-record the context ID for each screen that has a new context. When re-recording context IDs, you can start from any frame you choose. The Recorder opens with a Preview of Original window that displays the frame screenshot on the left and the frame bubble text on the right. The mouse pointer changes to a magnifying glass, as it moves over the Preview the Original window, allowing you to zoom in/zoom out as necessary to set up the screenshot. The bubble text used in the preview window is from the active display mode in the Topic Editor. As you perform the action and press PRINTSCREEN to record the context ID, the Recorder advances to the next frame automatically.

Before starting the re-record process, it is a good idea to choose the frame on which you want to begin by navigating to it in the Topic Editor. However, if you are on the wrong frame when the Recorder opens in Re-recorder Context mode, the Previous and Next Frame arrows allow you to navigate forward and/or backwards within the current path to locate the appropriate frames for re-recording the context. As you advance through the topic frames, by either performing the steps or manually navigating the frames, only the screen context on the current frame is re-recorded when you press PRINTSCREEN. After pressing PRINTSCREEN, the Recorder “light” (top-right) flashes to indicate that new context information was captured, overwriting the previous value.

The re-recording context process ends automatically when you reach the end of the topic. You can also end the process at any time using the Finish button in the Recorder. This flexibility allows you to stop re-recording and restart it again on any frame.

Note: Automatic recording mode and the Undo button are not supported when re-recording context for a topic. Re-recording context is always a manual process.

The re-recording process and the Preview of Original window handle the different types of frames as follows:

- Action frame: After the context ID has been recorded, it advances to the next frame in the sequence of the topic.

- Explanation frame: These frames are skipped because these frames are informational and do not have context IDs.

- Alternative Actions/Paths: When a frame has an Alternative action or path, the Alternative icon appears in the Preview of Original window between the screenshot and the bubble. Clicking this icon will scroll through all of the alternatives. You can choose which alternative you want to capture. You may need to restart the re-record process to capture the context ID for each Alternative action and path. Note that Alternative actions that were automatically captured when you recorded the topic will not be re-captured during re-recording. You must manually re-record those Alternative actions to capture the context IDs.

- Decision frames: The Preview of Original window displays the Decision frame links, and you can choose which path to re-record. However, once the path is re-recorded, the Recorder does not return to the Decision frame to access the other paths. To re-record the context for the additional paths, it is best to end your re-recording and then restart the context re-record process from the Decision frame for each path.

- No-context frame: You can capture the context and context ID for this frame by recording the action.

- Drag & Drop Sequences: For frames containing drag & drop sequences, only the button down part of a context can be recorded. The rest of the drag sequence is skipped during re-record, including the button up.

Note: You can manually change the ExactMatch context IDs in the Context ID dialog box. SmartMatch context IDs cannot be edited so you must recapture the Context ID if the application screen changes. See *Context Recognition in the Recorder* in the Record Topic Content chapter for more information on the difference between ExactMatch and SmartMatch.

To re-record the context ID starting at the current frame:

1. On the **Edit** menu, choose **Re-record Context IDs**.
2. Set up the target application at the appropriate screen.
3. If necessary, use the Previous Frame or Next Frame arrows in the Recorder to navigate to the frame to be re-recorded.
4. Press PRINTSCREEN to start recording.
5. Perform the action as indicated in the Recorder window.
6. Press PRINTSCREEN to capture the context ID for the screen.
7. Repeat Steps 5 and 6 as necessary.

   The Recorder closes automatically when you re-record the last frame in the topic. If you want to stop the re-record process before the end of the topic, click Finish in the Recorder window.

7.5.14 Edit a Screenshot

When you choose to edit a screenshot, the Developer starts the frame image editor you specify on the General Developer Settings page of the Options dialog box and opens the screenshot in that application. You then edit the screenshot using that application. When you save the file and close the application, the Developer updates the screenshot in the Topic Editor.

Note: When you edit screenshots in a frame image editor, the Developer temporarily converts the screenshots, which are in .png format, into .bmp format. Therefore, the frame image editor you use must be able to support .bmp format images.

To edit the screenshot for the current frame:

1. On the **Edit** menu, choose **Edit Screenshot**.
2. Edit the screenshot as necessary.
3. Save the screenshot in the frame image editor application.
4. Close the frame image editor.

7.5.15 Use Screenshot Publishing

You can change the inclusion of screenshots when a topic is published in one of the document formats. Note that screenshots do not appear in the Test Case format. The Auto Select Screenshot to Print automatically option includes screenshots based on changes in the context settings as determined by the Developer during the publishing process. This is the default setting. The Include Screenshot in Print and Do not Include Screenshot in Print options offer manual control over which screenshots appear in the printed document.

These options are available on all frames except the Introduction frame, which takes its screenshot from the first frame. If you include Decision or End frames, the color graphic, rather than the grayscale graphic that appears during topic playback, appears in the document.

Note: Changing this option only has an effect if the Include field on the Documents page of the Options dialog box is set to Topic Settings and the Include field on the Formats page of the Publishing Wizard is also set to Topic Settings. If they are set to any other option, changing the screenshot inclusion method at the frame level has no effect.

The icons in the toolbar indicate whether the screenshot for the current frame will be included when the topic is included in the document format.

The screenshot for the current frame will be included automatically.

The screenshot for the current frame will NOT be included automatically.

The screenshot for the current frame has been selected manually to be included, and it would also appear automatically.

The screenshot for the current frame has been selected manually to be included, and it would NOT appear automatically.

To change the automatic print setting for the current frame:

1. On the **Edit** menu, point to **Screenshot Publishing** and choose **Auto Select Screenshot to Print**, **Include Screenshot in Print**, or **Do Not Include Screenshot in Print**.

Note: There are also icons available on the Topic Editing toolbar for these options.

7.6 Use Alternative Actions and Paths

Often, the application for which you are recording content has multiple ways to complete a task. You can accommodate these ways in your content by using Alternative Actions and Paths.

The recording process when inserting Alternate Actions and/or Paths varies based on two factors:

- Sound/No Sound
- Manual or Automatic Recording

When recording an Alternate Path or Alternate Action with sound in manual mode, the first PrintScreen captures the Frame Sound of the new path or action. Subsequent PrintScreen's record both the action and the sound.

When recording an Alternate Path with sound in automatic mode, the first PrintScreen records the start screen and sound for the new path. Subsequent PrintScreen's continue to record both the action and the sound.

When recording an Alternate Action with sound in automatic mode, the first PrintScreen records the start screen and sound for the new action. The next PrintScreen ends the action.

7.6.1 Insert an Alternative Action

As you are recording a topic, you may have to choose one of several possible actions for completing a task. For example, you may need to decide between pressing the Tab key and clicking the mouse to move the insertion point to the next available field. If you want to document some of these alternative methods for your users, you can insert Alternative Actions within the topic. Alternative Actions are single actions that accomplish the same result as the primary action.

To insert an Alternative Action, you must determine on which frame the Alternative Action should appear. When you click the Insert Alternative Action command, the Topic Editor closes and the Recorder opens. After performing the action you want to record and pressing PRINTSCREEN, the Recorder closes and the Topic Editor reopens with the Alternative Action displayed.

Alternative Actions are not available in See It! mode. In the Player, a user can select the Show next Alternative action icon to display an action in Try It! and Do It! modes.

To insert an Alternative Action on the current frame:

1. On the **Insert** menu, choose **Alternative Action**.
2. Set up the application in which you want to record to display the screen on which the Alternative Action should be performed.
3. Perform the action you want to insert.
4. Press PRINTSCREEN.

7.6.2 Insert an Alternative Path

As you are recording a topic, you may have to choose one of several possible methods for completing a task. For example, you may need to decide between using a menu path and clicking a toolbar icon. If you want to document some of these alternative methods for your users, you can insert Alternative Paths within the topic. While Alternative Actions can display a single action only, Alternative Paths may include several steps. These paths may be shorter or longer than the primary path, or an equivalent number of steps. Alternative Paths guide the user through alternative steps to accomplish the same task as the primary steps.

To insert an Alternative Path, you must determine which frame is the starting point for the path. You also need to identify the frame that is the end point, which is where the path rejoins the main path of the topic. When you insert an Alternative Path, the current frame becomes the starting point for the path and the Frame Structure is automatically displayed if necessary to allow you to select the appropriate end frame. When positioned in the Frame Structure, the mouse pointer changes into a black arrow attached to a circle with the letter **E**. You can use the arrow to designate the end frame for the path.

You do not need to record a start screen for an Alternative Path. The screenshot for the frame already exists; you are simply recording a new action to associate with that screenshot. You press PRINTSCREEN after every action completed in the Alternative Path, and you must click the Finish button in the Recorder to end recording the Alternative Path when you reach the designated end frame.

Alternative Paths are not available in See It! mode. In the Player, a user can select the Show next Alternative action icon to follow a path in Try It! mode and Do It! mode.

To insert an Alternative Path beginning on the current frame:

1. On the **Insert** menu, choose **Alternative Path**.
2. Use the black arrow to click the circle representing the frame you want to use as the end frame of the Alternative Path.
3. Set up the application in which you want to record to display the starting screen of the first action of the Alternative Path.
4. Perform the first action you want to record.
5. Press PRINTSCREEN to capture the action.
6. Perform the next action you want to record.
7. Press PRINTSCREEN to capture the results of the step.

   Repeat as necessary to complete the Alternative Path.
8. Click **Finish**.

7.6.3 Display Alternative Actions/Paths

Just as you edit the frames of the primary path, you can edit the Alternative Action frame and the frames in an Alternative Path. To edit these frames, you must navigate to them. While you do not need to display the Frame Structure to edit Alternative Actions or Alternative Path frames, it is helpful to display the Frame Structure to verify that you are working with the appropriate frame.

To display an Alternative Action or Path for the current frame:

1. On the **Go to** menu, choose **Next Action** or **Previous Action**.

7.6.4 Set the Current Action as the Default

After inserting an Alternative Action or Path, you may decide to use the Alternative Action or Path as the primary action or path. This is especially useful as only the primary action or path displays in See It! mode. The original primary action becomes an Alternative Action or an Alternative Path.

To set the current action as the default action:

1. Display the Alternative Action or the first frame of the Alternative Path you want to use as the default action.
2. On the **Edit** menu, choose **Set Action as Default**.

7.6.5 Change the End Frame of an Alternative Path

When you create an Alternative Path, you must specify an end frame for the path. If you decide later that the path should reconnect at a different frame, or you chose the incorrect end point when you recorded the topic, you can change the end point of an Alternative Path. When you change the end point of the path, the other frames in the path are not affected. For example, if another frame in that path has a different Alternate Path with a different end point, that end point will not change.

Changing the end point only affects the currently selected action. If the end frame in an Alternative Path has an Alternative Action, and you change the end point for one action, the Alternative Action will still connect to the original end point. Two paths will appear in the Topic Editor. You must select the Alternative Action and change its end point separately.

To change the end frame of an Alternative Path:

1. Click the final frame in the Alternative Path.
2. On the **Edit** menu, choose **Modify End Point**.

   You can also click the **Modify end point** button in the Frame toolpane.
3. Use the black arrow to click the circle representing the frame you want to use as the new end frame of the Alternative Path.

7.6.6 Delete an Action

You may want to remove a particular Alternative Action that is incorrect, or one that is no longer needed. You cannot delete the only action for a frame.

To delete an Alternative Action from the current frame:

1. Display the action you want to delete.
2. On the **Delete** menu, choose **Action**.
3. Click **Yes**.

7.6.7 Delete a Path

If an Alternative Path is no longer needed, you can remove it. You can delete all frames of an Alternative Path along with the first action of the path. You can also delete a portion of the path beginning at the currently displayed frame and including all subsequent frames. You cannot remove a frame containing Alternative Paths. You must first delete all Alternative Paths that use that frame as their starting point before you can delete the frame itself.

To delete an Alternative Path from the current frame:

1. Display the first action of the path you want to remove.
2. On the **Delete** menu, choose **Path**.
3. Click **Yes**.

7.7 Use Decision Frames

When you are recording topics, you may find that several tasks share common steps. Instead of recording separate topics, you can insert a Decision frame to allow your users to choose from two or more options. For example, from the Print dialog box in your application, you can print all pages in the document, the current page only, or a range of pages. For each task, you follow the same steps to open the Print dialog box and start the printing process. You could record the steps for printing all pages and then insert a Decision frame to record the other print options instead of creating individual Print topics. Decision frames provide a way to document multiple tasks rather than different methods of accomplishing the same task.

Note: Explanation, Decision, and No Context frames are informational and do not have Context IDs.

The recording process when inserting Decision Paths varies based on two factors:

- Sound/No Sound
- Manual or Automatic Recording

When recording a Decision Path with sound in manual mode, the first PrintScreen captures the start frame of the new Decision Path. Subsequent PrintScreen's record both the action and the sound.

When recording a Decision Path with sound in automatic mode, the first PrintScreen records the start screen and sound for the new Decision Path. Subsequent PrintScreen's continue to record both the action and the sound.

7.7.1 Insert a Decision Frame

When you insert a Decision frame, it is placed after the currently selected frame in the Topic Editor. The existing path becomes the first path on the Decision frame, so you will be asked to provide a name for the path. Decision frames are represented in the Frame Structure as a dark blue circle with the letter **D**. A Decision frame utilizes the screenshot from the following frame and lists the available paths as hyperlinks.

From a Decision frame, you can create an Alternative Path, which rejoins the existing path, or you can create a Branch Path, which has a different ending point. For example, you could create Alternative Paths for printing the current page and a range of pages. You could create a Branch Path for setting print options, which requires that the Print dialog box be open, but does not result in anything being printed.

Note: Explanation, Decision, and No Context frames are informational and do not have Context IDs.

To insert a Decision frame after the current frame:

1. On the **Insert** menu, choose **Decision Frame**.
2. Enter a name for the current path.
3. Click **OK**.

7.7.2 Record Paths in a Decision Frame

After you have inserted a Decision frame, you can record additional paths that your users can launch from the Decision frame. These paths allow users to choose from a variety of available tasks. When you record a Decision frame path, you must capture both the actions and screenshots needed to accomplish the task. You do not need to record an Introduction frame, however, as the path will be launched from the default Decision frame screenshot.

Before you create a new Decision frame path, you must decide whether the new path will rejoin the primary path. If the new path will rejoin the primary path, you will create a new Alternative Path. If the new path will not rejoin the primary path, you will create a new Branch Path.

Decision Alternative Paths can also rejoin the primary path at or before the Decision frame, thereby creating a “loop.” If you create a looping Alternative Path, the path is represented by a line with an arrow that appears above the primary path in the Frame Structure window.

Note: You can change the end frame of a Decision Alternative Path. See *Change the End Frame of an Alternative Path* for more information.

Decision frames appear in See It!, Try It!, and Do It! modes (and not Know It? mode). When you play or preview a topic in See It!, Try It!, or Do It! mode, the available Decision frame paths are listed as links in the mode bubble. Clicking a link launches the appropriate Decision frame path.

To create an Alternative Path for a Decision frame:

1. In the Decision Properties dialog box, click **New Path**.
2. Click **Alternative**.
3. Enter a name for the new path.
4. Click **OK**. The mouse pointer turns into an arrow with a circle containing the letter **E** when placed over the Frame Structure.
5. Click the frame where the Decision Alternative Path will rejoin the primary path.
6. Set up the application in which you want to record to display the starting screen of the first action of the Decision Alternative Path.
7. Perform the first action of the path.
8. Press PRINTSCREEN.
9. Continue to record the actions and screenshots needed to complete the path.
10. Click **Finish**.

To create a Branch Path for a Decision frame:

1. In the Decision Properties dialog box, click **New Path**.
2. Click **Branch**.
3. Enter a name for the new path.
4. Click **OK**.
5. Set up the application in which you want to record to display the starting screen of the first action of the Decision Alternative Path.
6. Perform the first action of the path.
7. Press PRINTSCREEN.
8. Continue to record the actions and screenshots needed to complete the path.
9. Click **Finish**.

7.7.3 Rename Paths in a Decision Frame

When you insert a Decision frame, the existing path is identified by the text you enter in the Create New Decision Path dialog box or Create New Branch dialog box. You can, however, change the path name as this text is displayed in the Decision frame.

To rename a path in a Decision frame:

1. Click the entry in the **Path list** list box in the Decision Properties window.

2. Click **Rename path**.
3. Enter the text you want to display in the Decision frame.
4. Click **OK**.

7.7.4 Edit Header Text

In addition to the text representing links to various paths, Decision frames display Header text that instructs users how to proceed. The Header text appears in the Header textbox in the Decision Properties window. By default, the Header text is “Please select from the following choices.” You can edit the Header text to provide more descriptive information for your users.

To edit the header text in a Decision frame:

1. Drag to select the text in the **Header** textbox in the Decision Properties window.
2. Type the text you want to display in the Decision frame.

7.7.5 Reposition Paths

By default, the first path displayed in a Decision frame is the first path you recorded. If you have multiple paths available in a Decision frame, you may want to rearrange the order in which they are listed. You can change the position of the paths by using the Move path up and Move path down buttons.

Warning: The default path cannot be a loop that rejoins before the Decision frame.

To reposition paths in a Decision frame:

1. Click the path you want to move in the **Path list** list box in the Decision Properties window.
2. Click **Move path up** or **Move path down**, as appropriate.

7.7.6 Remove Paths

After you have created Decision frame paths, you may decide that you want to delete one or more of them. When you remove one path, the remaining paths are not affected.

To remove a path from a Decision frame:

1. Click the path you want to remove in the **Path list** list box in the Decision Properties window.
2. Click **Delete path**.
3. Click **Yes** to confirm the deletion.

7.7.7 Delete a Decision Frame

You must delete all paths other than the primary path before you can delete the Decision frame itself. If you attempt to delete the Decision frame without deleting the attached paths, you will receive an error message explaining that the frame contains alternatives and cannot be deleted.

To delete a Decision frame:

1. Open the Topic Editor and navigate to a Decision Frame.

2. On the **Delete** menu, choose **Decision Frame**.

3. Click **Yes**.

7.8 Edit Frame Properties

The Frame toolpane in the Topic Editor contains settings that allow you to change the appearance of the bubble and bubble text, as well as describe the action performed in the frame.

The Frame toolpane has two sections, separated by a divider bar. The section above the divider bar contains the options for the bubble and bubble text, and the section below the divider bar contains the settings for the action. You can drag the divider bar up or down as needed, for example, to see more of the bubble text in the upper section.

7.9 Edit Bubble Properties

The buttons in the upper section of the Frame Properties toolpane allow you to:

- change the text that appears in the bubble
- set text formatting (for example, bold, italics, and alignment)
- select the position of the bubble pointer
- change the background color of the bubble
- link an attachment to bubble text
- decide in which play modes and output types the text appears

Any changes you make apply to the current frame only.

7.9.1 Add Text to the Introduction and End Frames

The Introduction frame appears in the lower right pane in the Player when a user selects a topic in the outline. You can also set it to appear as the first frame before the action frames during playback. It typically contains a short statement introducing the topic; however, you can add any text that you desire. The End frame appears during playback in the Player as the last frame of the topic after the action frames. It typically contains a short statement about the result of the actions performed in the topic. Like the Introduction frame, you can add any text you feel is necessary.

To enter text into the Introduction or End frame, you must display the Frame Properties toolpane, and then type the text in the text edit pane. As you type, the text appears in both the text edit pane and the bubble in the frame.

To add text to an Introduction or End frame:

1. Navigate to the **Introduction** or **End frame**.

2. Display the Frame Properties toolpane, if necessary.

3. Click in the text edit pane and enter the text.

7.9.2 Use Bubble Templates for a Frame

The Developer generates default text for the bubble for each frame using the action settings to determine the correct template text to use.

If the template text is not the text you want for a particular frame, you can choose not to use it. If you deactivate the template text, it is cleared from the bubble and you must enter the bubble text manually.

Note: This setting can be applied to all frames on the Bubble page of the Content Defaults section of the Options dialog box. You can change this setting, but it is not recommended.

To use or disable the bubble templates for the current frame:

1. Display the Frame Properties toolpane, if necessary.
2. Click **Use templates**.

7.9.3 Change the Template Text Font

When you record topics, the template text in the bubbles is formatted with the default font set on the Bubble page in the Content Defaults section of the Options dialog box. You can change this font for the current frame while you are in the Topic Editor.

Note: You cannot change the font color for template text. If you must change the color, you can insert the template text as custom text and then format it. Be aware that if you do this, it is no longer template text.

To change the font for the template text for the current frame:

1. Display the Frame Properties toolpane, if necessary.
2. Click **Template fonts** and choose the font and attributes.
3. Click **OK**.

7.9.4 Add Custom Bubble Text

You can add your own custom text to the bubble in addition to the template text. You enter the text in the text edit pane of the Frame Properties toolpane. By default, the text you enter appears before the template text, so that users read it first before performing the action. It is good practice to separate custom text from template text with an extra blank line, to make it more readable.

You can change this default for all frames on the Bubble page of the Content Defaults section of the Options dialog box. For an individual frame, you can deselect the Show custom text first option to show the template text first.

To add custom bubble text to the current frame:

1. Display the Frame Properties toolpane, if necessary.
2. Click in the text edit pane.
3. Enter the custom text.
4. Click **Show custom text first**, if desired.

7.9.5 Insert Template Text as Custom Text

When you disable template text, the bubble is empty and you must enter custom text. You can also convert template text into custom text and then edit it in the text edit pane. When you insert template text as user text, the default template text is imported into the text edit pane, disabling the template text from displaying in the bubble.

To insert template text as user text on the current frame:

1. Display the Frame Properties toolpane, if necessary.
2. Click **Insert template text as user text**.
3. Edit the text.

7.9.6 Edit Custom Bubble Text

You can edit any custom text you enter in the bubble. In the text edit pane, there are icons that enable you to cut, copy, paste, and delete text. You must select text in the text edit pane to enable these icons. You cannot use the text editing icons to edit the template text for a frame.

Cut the selected text.

Copy the selected text.

Paste the contents of the Clipboard.

Delete the selected text.

To edit custom bubble text for the current frame:

1. Display the Frame Properties toolpane, if necessary.
2. Select the text you want to edit in the text edit pane.
3. Edit the text as desired.

7.9.7 Format Custom Bubble Text

You can format any custom text you enter in the bubble. In the text edit pane there are icons that enable you to bold, italicize, underline, and change the color of text, as well as change the font for the custom text. In addition, you can choose how to align text horizontally within the bubble.

Change the font for the selected text.

Prevent selected text from wrapping to the next line. (Places a dotted green line under the text).

Align the selected text to the left side of the bubble.

Center the selected text horizontally.

Align the selected text to the right side of the bubble.

Justify the text.

Bold the selected text.

Italicize the selected text.

Underline the selected text.

Change the color of the selected text.

To format custom bubble text for the current frame:

1. Display the Frame Properties toolpane, if necessary.
2. Select the text you want to format in the text edit pane.
3. Apply the formatting as desired.

7.9.8 Specify the Play Mode for Custom Text

By default, custom text is set to appear in See It!, Try It!, and Do It! modes. This applies to text for the Introduction and End frames as well. You can specify the play modes in which the custom text appears. For example, for certain frames, you may find that the custom text is inappropriate for all play modes, or you may also want to add custom text to a frame for specific use in Know It? mode to provide users with a hint. You can select the text in the text edit pane, and then deselect or select the Visible in See It!/Try It!, Visible in Do It!, and Visible in Know It? icons below the text edit pane to specify the desired mode.

The text is visible in See It! and Try It! modes only.

The text is visible in Know It? mode only.

The text is visible in Do It! mode only.

For certain actions, you may find that the custom text is inappropriate for all play modes and can exclude it from a particular mode. If you do not want custom text to appear in See It!, Try It!, and/or Do It! modes, you need to select the text in the text edit pane, and then deselect the mode icon(s).

Note: Explanation frames provide a method for adding information to a topic. While Explanation frames automatically appear during playback in See It!, Try It!, and Do It! modes, they do not appear in Know It? mode. If you wish to include Explanation frame text in the Know It? playback, you can select the text and enable the Visible in Know It? icon. Be aware that deselecting all of the Explanation frame text for Do It! mode causes the playback to skip the Explanation frame entirely.

Intro/End Frames in Know It Mode

When a user plays a topic in Know It? mode, the Introduction bubble appears. This bubble typically includes instructions for completing the task, and in many situations it will differ from the Introduction text for the other modes. By default, Introduction/End frame text does not display in Know It? mode. For this reason, you should enter and designate text for the Introduction/End frames for Know It? mode only. For example, for a topic in Know It? mode, you want the Introduction text to be "Complete the steps for printing a document." or "Print a document." In this situation, you can enter the instruction text, select it, and then select the Visible in Know It? icon. Next, you would deselect the Visible in See It!/Try It! and Visible in Do It! icons to exclude the text from displaying in those modes.

When a user completes a task in Know It? mode, the End frame appears. Just as with the Introduction text, you may want to enter text that is appropriate for Know It? mode and designate it for Know It? mode only.

7.9.9 Display Template Text in Know It Mode

Template text appears in See It!, Try It! and Do It! modes by default for all frames. The Visible in See It!/Try It! and Visible in Do It! icons below the text edit pane are selected automatically. On frames where the user is required to enter text, the Template text visible in

Know It? mode icon is also selected, as such actions may require the user to enter specific text to perform the step correctly.

Note: When you select an Introduction or End frame; the Template text visible in Know It? mode icon is not available because Introduction and End frames contain only custom text.

7.9.10 Control Text for Player and Print Output

The play mode for which custom text is marked determines in what playback or print output the text will appear. By default, custom text that is marked to be visible in See It! and Try It! modes will appear in the Player for those modes, in the Presentation output, and in the System Process Document and Training Guide documentation; text that is marked to appear for playback in Do It! mode will appear in the Job Aid and Test Document. However, you may want custom text to appear during playback, but not appear in your training manual. Conversely, you may want text to appear in the printed documentation, but not in the Player.

Using the Visible in Player and Visible in Print icons, you can separately control whether your custom text appears for Player and Presentation output only, a Print output only, or for both.

Note: Selecting or deselecting the Visible in Player or Visible in Print icons affects the visibility of the selected text in all selected play modes for Player or print output. If custom text is marked for both See It/Try It and Do It modes, deselecting the Visible in Print icon means that the text will not appear in any printed output.

To control the text for the Player and print outputs for the current frame:

1. Display the Frame Properties toolpane, if necessary.
2. In the text edit pane, select the text you want to include or remove from a particular output.
3. Select or deselect **Visible in Player** or **Visible in Print**.

7.9.11 Hide a Frame for a Play Mode

By default, all action frames appear in the output for all play modes. You can choose to hide a frame from appearing in the published output for a specific play mode with the Show In option. For example, when testing competency, you may wish to hide a number of frames from appearing in Know It? mode because your procedure includes steps that may not be important to evaluate. When you hide a frame for a play mode, the frame does not appear when the user plays the topic for that mode and the frame step does not appear in print documents published with that play mode. That is, deselecting a frame for the Do It! play mode means that the frame will not appear in Do It! mode in the Player and the step will not appear in a Job Aid, or other documents published using Do It! as the selected text mode. With the Show In option, you can assign different frames, or steps, to different outputs.

Note: With ExactMatch context sensitivity, hidden frames are not included in the results of a search; instead, the next frame with the same context ID (if it exists), will be returned.

When you disable a play mode for a frame that contains custom text marked to appear for that play mode, a red diagonal line appears through the Visible in <Play Mode> icon to indicate that although the text is enabled for that play mode, the text will not appear because the entire frame is hidden. For example, a frame contains custom text for which the Visible in See It!/Try It! play mode icon is enabled; however, the frame is disabled for See It!/Try It! mode in the Show In list. To indicate that the custom text will *not* appear in published output, the Visible in See It!/Try It! icon displays a red diagonal line.

You can use the Display list in the Topic Editor to view your text and frame settings. When you preview a hidden frame, a message appears in the bubble indicating that the bubble and screenshot will not appear in this play mode.

Note: Although Know It? mode is enabled in the Show In list for Explanation frames, Explanation frames do not appear in Know It? mode because, by default, custom text is not marked as visible for that play mode. Explanation frames appear in Know It? mode when custom text is enabled for that play mode.

To hide the current frame for a play mode:

1. In the Frame Properties toolpane, click **Show in** .

   A list of play modes appears.

2. Clear a checkbox to hide a frame in a play mode or select a checkbox to include the frame in a play mode.

7.9.11.1 Hidden Frames in Publishing

The Show In option overrules other frame and play mode controls during publishing. For example, if you disable a frame for See It!/Try It! mode, then the frame will not appear even if the text is marked as visible in See It!/Try It! mode.

Note: The HTML Web Site publishing format produces a static version of Try It! mode. Therefore, frames that are disabled for See It!/Try It! mode will not appear in the published HTML output.

Document Output

When you publish a document based on a play mode, publishing skips those frames which are hidden for that play mode, and ignores any other bubble text and screenshot inclusion settings for the frame. Conversely, enabling a play mode in the Show In list does NOT guarantee that the frame will be included in the published output. If a frame is set to show for a play mode, then publishing evaluates if the custom text is marked for both the selected play mode and to appear in print, and if the screenshot is marked for inclusion in publishing. See *Use Screenshot Publishing* in the Manipulate Frames section of the Use the Topic Editor chapter for more information about screenshot inclusion.

Warning! If a published topic includes an alternative action or path where the primary action/path is hidden, the alternative action or path will NOT be included in the published document even if the Include alternatives publishing option is enabled.

7.9.11.2 Rules for Hiding and Skipping Frames

There are several rules that determine if a frame can be hidden or skipped.

- **All frames hidden**: If all of the frames in a topic are hidden for a specified play mode, publishing for that play mode reports an error in the activity log.
- **Exceptions**: Not all frames can be hidden. You cannot hide Introduction or End frames. You can hide Explanation, Decision, No Context, and Action frames.

  Note: Although you cannot hide Introduction and End frames using the Show In option, you can skip them by hiding the bubble. See *Skipped Frames* below.

- **Alternative Actions**: In Try It!, Do It!, and Know It? modes, hiding the primary action in a frame also hides the alternative action, and conversely, hiding the alternative action also hides the primary action.

  Note: Alternative Actions are not available in See It! mode.

- **Alternative Paths**: In Try It!, Do It!, and Know It? modes, hiding the frame for any alternative path disables the frame for all alternative paths. If the Alternative Path frame is hidden for a play mode, the Player skips that frame and continues to use the primary path.

  Note: Alternative Paths are not available in See It! mode.

- **Decision frames**: If the Decision frame is hidden for a play mode, the Decision frame is skipped and the Player continues to use the default path.

- **Jump-in points**: Jump-in points that point to a frame that is hidden for a play mode will not appear in the Jump-in point list.

- **Scoring**: In Know It? mode, hidden frames are not part of the calculated score.

- **In-application Support (Exact Match only)**: Hidden frames are not returned in a search; instead, the search returns the next frame with the same context ID (if one exists) or the topic and section are ignored if the hidden frame is the only one with context.

Skipped Frames

There are other situations where frames are hidden by being skipped. Hiding the bubble for certain frames also skips them. See the *Hide the Bubble* topic in the Edit Bubble Properties section of the Use the Topic Editor chapter for more information about hiding the bubble.

The following frames are skipped when you hide the bubble:

- Start and End frames in See It! and Try It! modes

- Explanation frames in See It! and Try It! modes

- Action frames with the Delay Time set to Infinite in See It! mode only

These frames are also skipped in the following situations:

- Explanation frames with the Delay Time set to "Skip" and no custom bubble text marked for See It!/Try It! modes: The frame is skipped when played in See It! and Try It! modes.

- Explanation frames with the Delay Time set to "Skip" and custom text marked for See It!/Try It! modes: The frame is skipped in See It! mode, but appears in Try It! mode.

- Explanation frames in Do It! and Know It? modes if the bubble has no text marked for display in those play modes: These are skipped even if the frames contain sound.

- Decision frames in Know It? mode are skipped.

7.9.12 Preview Frame Text for Playback and Print Output

You can preview how your custom text for a frame will appear in the Player and Printed outputs in each play mode using the Display list in the Topic Editing toolbar. By default, the bubble displays the template and custom text as they appear when you play the topic in See It! and Try It! modes. However, you can check how the text appears for each mode in the Player and print output. There are six display modes; Player - See It!/Try It!, Player - Know It?, Player - Do It!, Print - See It!/Try It!, Print - Know It,? and Print - Do It!.

Note: You can use the Print - See It!/Try It! view to see how the text will appear in the System Process Document, Training Guide, and Instructor Manual. The Print - Do It! views allows you to see how the text will appear in the Job Aid, Test Document, and Test Case.

Tip: You can also access the display modes using the View menu and the Display submenu. A checkmark appears next to the selected display mode on the menu.

7.9.13 Hide the Bubble

You can prevent the bubble from appearing during playback in See It! and Try It! modes. This allows you to create the equivalent of a PowerPoint slide show, and then record sound to narrate it if desired. In this case, a bubble on each "slide" would not be appropriate.

This option allows you to hide the bubble on a frame-by-frame basis. You must turn off the action areas manually if you do not want them to show. If you turn the action area off, you may want to make sure that the Enable skipping in Try It! mode option is selected when you publish the content so that the frames can be advanced by pressing Enter in Try It!; if there are no action areas, there is no visual cue as what to do to advance the frame, and you may have difficulty advancing the frame.

If sound has been recorded for the topic or the frame, all frames displayed during See It! mode playback advance automatically when the sound has finished playing. The only exception is for frames with sound and the delay set to infinite. In this case, Press Enter to continue displays and the frame will not advance until the user presses Enter. In Try It! mode, all frames are shown, but the frames must be advanced manually by either performing the correct action or pressing Enter. No remediation is shown if you perform the incorrect action.

If there is no sound with the topic, turning off the bubble has the following affect on the various frame types in See It! and Try It! modes:

- **Introduction/End**: See It! and Try It! is skipped
- **Explanation**: See It! and Try It! is skipped
- **Decision**: See It! and Try It! is included; user must choose a path
- **Action**: See It! and Try It! bubble is hidden; action area displayed unless it has been turned off
- **No-context**: See It! and Try It! bubble is hidden; action area displayed unless it has been turned off
- **Frames with infinite time delay**: See It! is skipped and in Try It! bubble is hidden; action area displayed unless it has been turned off

Note: If there are alternative actions on a frame and you hide the bubble, the bubble is hidden for all actions.

To hide the bubble for the current frame:

1. Display the Frame Properties toolpane, if necessary.
2. Click **Display bubble for this frame** to toggle the bubble off for the frame.

7.9.14 Select a Bubble Icon

Each bubble can contain a default icon before the text. By default, no icon appears. You can choose an icon for the current frame by using the Bubble icon in the Frame Properties toolpane.

To select an icon for the bubble for the current frame:

1. Display the Frame Properties toolpane, if necessary.
2. Click **Bubble icon** and choose a bubble icon.

7.9.15 Change the Bubble Pointer

The bubbles appear with a default shape and pointer location. You can choose from nine different pointer locations, which will effectively relocate the bubble on the screen. You cannot relocate a bubble if the bubble will not fit on the screen in the new position.

To change the bubble pointer for the current frame:

1. Display the Frame Properties toolpane, if necessary.
2. Click **Pointer position** and choose a pointer position.

7.9.16 Change the Bubble Background Color

The default background color for all bubbles is yellow. You can change this default for the current frame. This option is useful for calling attention to certain steps.

To change the background color of the bubble for the current frame:

1. Display the Frame Properties toolpane, if necessary.
2. Click **Background color** and choose a background color.
3. Click **OK**.

7.10 Edit Action Properties

The lower section of the Frame Properties toolpane contains settings that describe the action performed in the frame. As you record a topic, the Developer automatically enters information for these settings, which vary according to the type of action performed. The Developer uses these settings to determine the appropriate bubble text based on the template assigned to the topic. You can change many of the settings as appropriate for your needs.

7.10.1 Action Types

The Action type setting indicates the type of action taken for the current frame. There are three basic action types: keyboard, string input, and mouse. A keyboard action occurs when you press a key on the keyboard to accomplish a task. A string input action occurs when you enter text into a document, field, dialog box, and so on. A mouse action includes clicking, double-clicking, pointing, rolling the wheel, and dragging. While the Developer automatically determines the action, you can change this setting if necessary. The following lists the possible actions:

Point: Using the mouse to point to an object on the screen. Most often used when displaying a submenu.

Drag: Clicking and holding either mouse button while moving the mouse. This action includes dragging to select text or cells, or dragging an object (such as a graphic) across the screen.

Keyboard: Pressing any function key, cursor movement key, or any other single key, such as ENTER, TAB, ESC, INSERT, or DELETE. This action also includes key combinations, such as CTRL+A, SHIFT+ENTER, and ALT+TAB.

Left button down
Left button up: Pressing and holding the primary mouse button (the left mouse button for a right-handed user); releasing the mouse button. These actions are used before and after drag events to indicate the start and end of the drag.

Left click
Left double-click
Left triple-click: Using the primary mouse button.

Left begin drag: Holding the primary mouse button down and moving the mouse.

Right button down
Right button up: Pressing and holding the secondary mouse button (the right mouse button for a right-handed user); releasing the mouse button.

Right click
Right double-click
Right triple-click: Using the secondary mouse button.

Right begin drag: Holding the secondary mouse button down and moving the mouse.

Middle button down
Middle button up: Pressing and holding the middle mouse button; releasing the mouse button.

Middle click
Middle double-click
Middle triple-click: Using the middle mouse button.

Middle begin drag: Holding the middle mouse button down and moving the mouse.

Wheel: Rolling the middle mouse wheel.

String input: Entering text into a document or a field by typing on the keyboard.

Note: If you record an action that uses a keyboard combination involving the SHIFT, CTRL, or ALT keys, the Topic Editor records the action as a keyboard action and automatically selects the Alt, Control, or Shift option in the Frame Properties toolpane, as appropriate.

7.10.2 Object Type

The Object type setting refers to the type of object on which you performed the action. The Developer determines the object type or class automatically, based on the Template Set selected. The Developer then determines which template text to use for the bubble text. Each Template Set may contain different text for the same object type.

The Object type list is divided into an upper and lower section, separated by a horizontal line. All object types appear in the lower section. The upper section contains a list of the most commonly used object types. As you change object types, the new entries are added to the upper section; older entries in the upper list are removed to make room for the new ones. The upper section then becomes a personalized list of the objects you frequently use, making object type changes faster and easier to manage.

7.10.3 Object Name

The Object name setting refers to the name of the object on which you performed the action. This name is entered in the appropriate place in the bubble template to tell the user which icon to click, which menu item to click, or which option to select. The Developer determines the name of the object from the programming of the application itself. If you want to alter the object name, you can use the Object name field in the Frame Properties toolpane to do so.

To edit the object name for the current frame:

1. Display the Frame Properties toolpane, if necessary.
2. Click the **Object name** field.
3. Edit the object name as desired.

7.10.4 Ignore Context Information

You can choose to ignore the context information for a particular frame. This action clears all the context information settings (SmartMatch or ExactMatch type) except for the action in the Action type list box. The context information determines the template text in the bubble; when context information is removed, the bubble is empty. You must then manually enter the text that you want to display in the frame's bubble.

Ignore Context provides the opportunity to document actions and objects that are not normally recognized. For example, you can use Ignore Context to document a non-recognized scrolling action. You can move and resize the action area to reference the scroll bar and then enter text in the Frame toolpane instructing the user to scroll as necessary.

To ignore context information for the current frame:

1. Display the Frame Properties toolpane, if necessary.
2. Click **Ignore context**.
3. Click **Yes** to confirm the action, if applicable.
4. Move and resize the action area.
5. Click the text edit pane in the Frame Properties toolpane and enter bubble text.

7.10.5 Create a New Action Area

The action area indicates where the action takes place in a frame. In the Topic Editor, it is designated by a red rectangle overlaying the frame's screenshot.

You may find that you need more than one action area to accommodate an action on a particular frame. For example, if you are recording the action of clicking the Home button in a browser and two screen elements (toolbar and navigation bar) contain the Home button, you could have an action area for each button.

To create a new action area for the current frame:

1. Display the Frame Properties toolpane, if necessary.
2. Click **Modify action areas** and choose the **Create new action area** command.
3. Resize and reshape the new action area.

7.10.5.1 Delete an Action Area

After creating new action areas on a frame, you may decide that you do not want to use all the action areas. You must have at least one action area on a frame unless the frame is a Decision frame or the action for the frame is a keyboard action.

To delete an action area from the current frame:

1. Display the Frame Properties toolpane, if necessary.
2. Click the action area you want to delete.
3. Click **Modify action areas** and choose the **Delete action area** command.
4. Click **Yes** to confirm the deletion.

7.10.5.2 Copy an Action Area

If you have edited action areas on a frame and the subsequent frame uses the same action areas, you can copy the action area from the previous frame instead of repeating your work. All action areas from the previous frame are copied to the current frame, simultaneously replacing any existing action areas on the current frame.

To copy action areas from the previous frame to the current frame:

1. Display the Frame Properties toolpane, if necessary.
2. Click **Modify action areas** and choose the **Copy action area** command.

7.10.5.3 Resize an Action Area

Most often, the Developer is able to determine the correct menu, menu entry, icon, or other object, and the action area is sized and positioned automatically. At times, however, you may need to resize the action area to select the correct location or to indicate a specific choice in a list. The Developer includes three methods to resize the action area.

- **Selection handles**: Drag a selection handle to resize in a specific direction. Drag a corner selection handle to resize both horizontally and vertically.
- **Redraw mode**: Resize using a combination of the left mouse button and the CTRL key. Hold CTRL and press the left mouse button to position the upper left corner of the action area. Then drag the mouse to redefine the size of the area. The mouse pointer changes into a crosshair as you drag. When you release the left mouse button and the CTRL key, you position the lower right corner of the action area. Using CTRL in conjunction with the right mouse button will not activate redraw mode.
- **Double-clicking the mouse**: Double-click the left mouse button within the existing action area to indicate the upper left corner. Hold the SHIFT key and double-click the left mouse button within the existing action to indicate the lower right corner.

Note: While recording, the action area defaults to the size specified in the Area Size field on the Recorder tab in the Options dialog box if the Recorder recognizes the object as a Universal Object, Workspace, Window or Active X object.

To resize the action area using the selection handles:

1. Point to a selection handle on the action area.
2. Drag the selection handle in the desired direction and release the mouse button.

To resize the action area using redraw mode:

1. Hold the CTRL key and click the left mouse button within the existing action area in the location where you want the upper left corner of the action area to appear.
2. Drag to extend the action area over the area of the screen you want to reference.
3. Release the mouse button and the CTRL key where you want the lower right corner of the action area to appear.

To resize the action area by double-clicking the mouse:

1. Double-click the left mouse button within the existing action area in the location where you want the upper left corner of the action area to appear.

2. Hold the SHIFT key and double-click the left mouse button within the existing action area in the location where you want the lower right corner of the action area to appear.

7.10.5.4 Move an Action Area

You can move an action area easily by dragging it or by using redraw mode. Be aware that double-clicking on the screen will resize the action area.

To move the action area by dragging:

1. Point to any area within the action area. The mouse pointer changes into a four-headed arrow.
2. Hold the left mouse button and drag the action area to any location and release the mouse button.

To move an action area using redraw mode:

1. Hold the CTRL key and click the left mouse button outside of the existing action area in the location where you want the upper left corner of the action area to appear. The mouse pointer changes into a crosshair and the upper left corner of the action area is positioned in the new location.
2. Drag to extend the action area over the area of the screen you want to reference.
3. Release the mouse button and the CTRL key where you want the lower right corner of the action area to appear.

7.10.5.5 Disable the Action Area

When you play a topic in Try It! mode, a rectangle appears around the area in which you must click or type to move to the next frame. You can disable the action area in Try It! mode to prevent the rectangle from appearing. The Action area on/off option affects the current frame only.

To disable the action area for the current frame:

1. Display the Frame Properties toolpane, if necessary.
2. Click **Action area on/off**.

7.10.6 Use Keep with Next

The Keep with Next option displays the steps for the current frame and the following frame together during the topic playback in Do It! mode. When the topic is played back, the steps are presented together, separated by the word “Next.” For some actions, such as selecting a menu and then selecting the menu command, this option is enabled by default.

To display the current frame with the next frame in Do It mode:

1. Display the Frame Properties toolpane, if necessary.
2. Click **Keep this action with next action in Do It!**.

7.10.7 Set Frame Delay

The delay refers to the amount of time a frame is visible before the action takes place during See It! mode. The default value of 5.0 is five seconds. You can create as much of a delay as you feel necessary for the user to understand or read the information on the screen. There is a

predefined list of delay options from which you can choose, or you can enter the desired delay time in the Delay time(s) list box. The following bullets describe the predefined options:

- **Skip**: The step does not display at all. This option is only available for Introduction, End, Decision and Explanation frames.
- **0**: There is no delay before the animated mouse pointer begins to move for an action frame. This option is not available for Introduction, End, Decision and Explanation frames.
- **5.0**: There is a 5-second delay before the animated mouse pointer begins to move for an action frame.
- **10.0**: There is a 10-second delay before the animated mouse pointer begins to move for an action frame.
- **Infinite**: The user must press the ENTER key to advance to the next step of the topic. When you set the delay to Infinite, the text “Press Enter to continue.” appears automatically in the bubble in See It! mode.

When sound files are available for a frame and sound is activated, if the delay is set to Infinite the user must press the ENTER key to advance. For all other delay values, the frame advances automatically after the sound finishes.

This setting can be applied to all frames on the General page of the Content Defaults section of the Options dialog box. The time set here is the default for all newly recorded and inserted frames, with the exception of Decision frames, which automatically default to Infinite. Changing the setting here does not change the delay time for existing content.

7.10.8 Create a Jump-in Point

Jump-in Points are available to users in the Player. An arrow icon appears on the See It!, Try It!, and Do It! buttons in the Player window. Clicking the icon opens a window containing a list of Jump-in point links to various frames within a topic. The Beginning of the Topic Jump-in point displays by default. These links allows a user viewing content in the Player to start a topic at a point other than at the beginning. For example, if you have a topic that covers many screens, you can create Jump-in Points to allow users to move directly to the screen with which they need help, instead of navigating the entire topic.

The Frame Properties toolpane in the Topic Editor includes a Jump-in point textbox at the bottom. You can enter a descriptive name for a frame in this textbox to create a Jump-in point. You cannot create Jump-in points for Introduction/End or Explanation frames.

Note: the Jump-in point field is at the bottom of the toolpane. You may need to maximize the display to see it.

To create a Jump-in point for the current frame:

1. Display the Frame Properties toolpane, if necessary.
2. Click the **Jump-in point** field.
3. Type the text you want to appear as the link to the Jump-in point.

7.10.9 Keyboard Action Options

If the action is a keyboard action, two extra options appear in the Frame toolpane. These options enable you to specify what key was pressed. The Key field contains a list of the keys on a keyboard, including: Backspace, Delete, Down, End, Enter, Escape, F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12, Home, Insert, Left, Page Down, Page Up, PrintScreen, Right,

Space, Tab, Up, and so on. If any other key is pressed, you need to select the <Character> option and then type the specific key in the Char key (character key) field.

You can change these settings if necessary, but it is not recommended.

Note: If the keyboard action involves the ALT, SHIFT, or CTRL key, the appropriate checkbox is selected automatically in the Frame toolpane.

7.10.10 String Input Formatting Options

If the action is a string input action, these settings are available.

- **Implicit text**: The text in this textbox appears as selected text before the input text is entered in the simulation modes. It is the default text that appears in an edit field, the text that is replaced by a string input.
- **Input text**: The text in this list box appears when the topic is played in See It! mode. It is also the text that the user must type when the topic is played in Try It! and Know It? modes. Depending upon the options set, this text may also appear to users in Do It! mode.
- **String input font**: Clicking this icon opens the Font dialog box and allows you to change the font attributes of the input text.
- **String input background color**: Clicking this icon opens the Color dialog box and allows you to choose the color for the background of the input text.
- **String input case sensitivity**: Clicking this icon activates case sensitivity in Try It! and Know It? modes. The user must enter text in the proper case to advance to the next step automatically.
- **Set as password field**: Clicking this icon displays string input text as asterisks instead of characters as it is typed during playback in See It!, Try It!, and Know It? modes. This option is useful for recording password screens.

If you want to edit the input text or add other possible entries, you must use the String input options icon. See *Input Text Options* for further information.

Note: By default, string input text is set to appear in Know It? mode as it may be critical for users to enter specific text. However, you can turn off the display of this text by de-selecting the Template text visible in Know It mode icon in the Frame toolpane.

7.10.10.1 Input Text Options

You have several options available to modify input text. You can add additional entries to be displayed in Know It? and Do It! modes, replace input text in all three modes, delete entries, change the default entry, or clear the string input list. In addition, the available options allow you to have multiple “concrete” entries, which are specific text that can be entered, and several “meta” entries, which allow for a range of non-specified text in Know It? and Do It! modes. You must have at least one concrete entry in the Input text list for every string input action.

7.10.10.2 Replace Input Text

After recording a string input action in a topic, you may decide that you would prefer other text to be displayed in the action. You can change the text that is entered in See It!, Try It!, Do It! and Know It? modes.

Warning: If you replace the text for a string input action, be sure to recapture the affected screenshots. Otherwise, the bubble text and screenshot will not match for See It! and Try It! mode. For example, if you recorded a topic in which "Peter" is entered into a Name field and later, you replace "Peter" with "John," the screenshot in the next frame will still display "Peter."

To replace input text on the current frame:

1. Display the Frame Properties toolpane, if necessary.
2. Click **String input options** and choose **Replace text**.
3. Enter the desired text.
4. Click **OK**.

7.10.10.3 Delete Input Text

By default, every string input action has two entries listed in the Input text list; the text you entered and < Something >. These entries restrict what users can enter in Try It! mode to exactly the text you entered, while still allowing users to enter any text in Know It? and Do It! modes. If you want to add additional possible entries for Try It! mode, or use the < Anything > or < Blank > entries, you can delete the < Something > entry and then add option(s). You can also delete concrete entries or other meta entries if you decide not to use them.

Note: You must have at least one concrete entry in the Input text list. If there is only one concrete entry in the list, the Delete entry option is unavailable for that entry.

To delete input text from the current frame:

1. Display the Frame Properties toolpane, if necessary.
2. Click the **Input text** list box.
3. Click the entry you want to delete.
4. Click **String input options** and choose **Delete entry**.

7.10.10.4 Add New Text to the Input Text List

After deleting the default < Something > entry from the Input text list, you can add other concrete entries to the list. If you add concrete entries to the list, those entries appear in Know It? and Do It! modes and will satisfy the string input action; additional concrete entries do not affect See It! and Try It! modes. You cannot add text to the Input text list if the list includes the < Something > or < Anything > entry.

To add new text to the input text list for the current frame:

1. Display the Frame Properties toolpane, if necessary.
2. Delete any existing meta entry.
3. Click **String input options** and choose **Add new text**.
4. Enter text.
5. Click **OK**.
6. Repeat as necessary.

7.10.10.5 Add Meta Entries to the Input Text List

After deleting the default < Something > entry from the Input text list, you can add other meta entries to the list. The following bullets list the possible meta entries and their impact:

- **Anything**: When a string input action using the < Anything > entry is played in Know It? mode, a user can enter any text or leave the field blank and move to the next step. For example, a user may see the following instructions for completing a field: Enter information into the Subject field. Enter a valid value (for example, “Meeting on Tuesday”) or leave blank.

- **Something**: When a string input action using the < Something > entry is played in Know It? mode, a user must enter some text to satisfy the step. The text entered may or may not be the concrete entry created by the content author. For example, a user may see the following instructions for completing a field: Enter information into the Subject field. Enter a valid value (for example “Meeting on Tuesday”).

- **Blank**: When a string input action using the < Blank > entry is played in Know It? mode, a user must enter the same concrete entry created by the content author or leave the field blank and move to the next step. For example, a user may see the following instructions for completing a field: Enter information into the Subject field. Enter “Meeting on Tuesday” or leave blank.

- **No meta entry**: If no meta entry is included in the Input text list, a user must enter one of the concrete entries to satisfy the string input action in Know It? mode. For example, a user may see the following instructions for completing a field: Enter information into the Subject field. Enter “Meeting on Tuesday” or “Tuesday's Meeting”.

Note: You cannot add the < Something > or < Anything > entries if the Input text list includes more than one concrete entry.

Note: You can only include one meta entry in the Input text list for a string input action. In the Player, the string input text appears as described in the preceding bullets. In Do It! and Try It!, users can move to the next step using the Next Step button in the Player.

To add meta entries to the input text list for the current frame:

1. Display the Frame Properties toolpane, if necessary.
2. Delete any existing meta entry or any multiple concrete entries.
3. Click **String input options** and choose **Add 'anything'**, **Add 'something'**, or **Add 'blank'**.

7.10.10.6 Set the Default Text Entry

The default input text entry will be used in both See It! mode and Try It! mode, and it will be the first entry listed in Do It! mode. After recording a string input action in a topic and adding new text, you may decide that you prefer to use one of the new concrete entries as the default. You cannot use a meta entry as the default entry, however.

Warning: If you set a new default for the string input action, be sure to recapture or edit the affected screenshots. Otherwise, the bubble text and screenshot will not match for See It! and Try It! mode. For example, if you recorded a topic in which "Peter" is entered into a Name field and later, add "John" and set "John" as the default, the screenshot in the next frame will still display "Peter."

To set the default input text entry for the current frame:

1. Display the Frame Properties toolpane, if necessary.
2. Click the **Input text** list box.
3. Click an entry.
4. Click **String input options** and choose **Set to default**.

7.10.10.7 Clear the Input Text Entry List

If you want to remove all of the entries from the Input text list, except for the default entry, you can clear the list. You can then add new entries or simply leave the default entry as the only entry for the action.

To clear the input text entry list for the current frame:

1. Display the Frame Properties toolpane, if necessary.
2. Click **String input options** and choose **Clear list**.

7.10.10.8 String Input Scoring in Know It Mode

There are two ways that string inputs are scored in Know It? mode. If the step uses a validated string input, the user must enter the string input exactly as indicated by the content author in the bubble for the step to be scored as correct. Therefore, if the bubble prompts the user to enter “AB31S” into an Account field, the step will be counted as incorrect if the user mistypes the entry as AB33S.

If you use an unvalidated string input, any entry typed in the field will be scored as a correct entry. Users will not be penalized for incorrectly typing an entry.

When a user types an entry that matches the text that appears in the bubble, Know It? mode scores the step as correct and automatically advances to the next step. This action occurs for both validated and unvalidated string inputs. Know It? mode does not automatically advance to the next step if the user types an entry that is different from the entry in the bubble. If the step does not automatically advance, the user has a choice of either editing the entry to match the example, or clicking the Typing Complete button in the Know It? mode bubble to submit the current entry. The entry will then be scored as correct or incorrect depending on its validation status.

Note: For content created with the Japanese or Chinese versions of the Developer, a string input step will not automatically advance when the end user types a correct entry. The user needs to click the Typing Complete button to submit their entry.

Note: A user can use normal editing functions to correct a string input entry. Mouse actions such as dragging and keyboard actions such as the BACKSPACE and DELETE keys are allowed.

The meta entry used for the input step controls whether a string input will be a validated or an unvalidated one. The possible meta entries and their impact are listed below:

- **Something**: Creates an unvalidated string input. When a string input action using the < Something > entry is played in Know It? mode, the user must enter some text to be scored as correct. The text entered may or may not be the concrete entry created by the content author. For example, if a user is prompted to enter “Tuesday”, the step will be counted as correct if the user enters “Monday” or “123”. However, leaving the field blank will be scored as a mistake.

- **Anything**: Creates an unvalidated string input. When a string input action using the < Anything > entry is played in Know It? mode, the user can enter any text or leave the field blank, to be scored as correct.

- **Blank**: Creates a validated string input. When a string input action using the < Blank > entry is played in Know It? mode, the user must enter the same concrete entry created by the content author or leave the field blank, to be scored as correct. Any other entry, including a typing mistake, is scored as incorrect.

- **No meta entry**: Creates a validated string input. If no meta entry is included in the Input text list, the user must enter one of the concrete entries to be scored as correct. Any other entry, including a typing mistake, is scored as incorrect.

7.11 Edit External Content

In the Topic Editor, you can link attachments to a specific frame. This allows you to include explanatory information for a specific step in the topic.

7.11.1 Link an Attachment as a Concept: Topic Editor

You can manage the concept of a topic directly from the Topic Editor. This allows greater efficiency in editing topics and their concepts and also provides a clearer representation of the overall organization of the topic. You can perform the same concept-related tasks from the Topic Editor as are available from the Outline Editor. The Concept toolpane also provides a preview of the linked concept attachment.

To link an existing package file or web page as a concept from the Topic Editor:

1. Display the Concept toolpane, if necessary.
2. Click **Create link**.
3. In the Link to pane, select **Document in Library**.

   If desired, you can select **Packages** or **Web pages** in the **Type** field to further filter your selection.
4. Navigate the Library to the folder containing the package file or web page to which you want to link.
5. Select the desired package file or web page document.
6. Click **OK** or press ENTER.

Note: At step 2, you can also click Create new web page to create a new web page and link to it in one step. When you do so, you first specify the name of the web page and the Library folder in which it should be saved. The Concept toolpane then closes, and an empty web page opens in a new tab. After you complete the web page, you can preview its contents in the topic by reactivating the Topic Editor tab.

To link a URL as a concept from the Topic Editor:

1. Display the Concept toolpane, if necessary.
2. Click **Create link**.
3. In the Link to pane, select **URL**.
4. In the **Address** field, type or paste the target URL.

   If a Base URL was set, you can enter a relative URL beginning with ../.
5. Click **Go** or press ENTER.

   While selecting a URL, you can also enter a base URL and then follow links in the preview displayed in the results pane to reach your desired target.
6. Click **OK** or press ENTER.

To create and link a new package as a concept from the Topic Editor:

1. Display the Concept toolpane, if necessary.
2. Click to launch the Package Wizard and click **Next**.
3. Browse to and choose the files/folders that you want to add to the package and click **Next**.
4. Type a name for the new package and browse to a location in the Library where you want it saved (if you do not want to save it in the default location).
5. Click **Next**.
6. Choose a file in the package that will launch in the Concept pane. Navigate through any folders contained in the new package, if appropriate.
7. Click **Next** to finish.

7.11.2 Link to an Attachment from a Topic Frame

Within a topic, you can link from any frame to one or more attachments. Attachments linked at this level provide information to your users as they view a topic. For example, you might link from a frame to a spreadsheet listing department codes or other reference information that users need at a particular step in a procedure. Like concept and bubble text links, links to attachments from topic frames become part of the parent document. If you then move the topic or reuse it elsewhere in your content, the linked attachment remains associated with that frame of the topic. Conversely, deleting the link to an attachment from a topic frame in one location removes the link in all places where the topic is used.

The Frame Link toolpane of the Topic Editor provides the tools for linking to and managing the links to attachments from topic frames. When linking to a package file or web page, you can filter the display to include packages or web pages only and navigate through the Library folders to the specific file you want to link. When linking to a URL, you can type or paste a base URL and then follow links in the preview displayed in the results pane of the Insert Hyperlink dialog box to reach your desired target.

Note: An absolute URL represents the fixed location of a piece of content without regards to its context. A Relative URL is a shortened version of the full URL that only makes sense when used in context. The full URL is constructed by taking a Base URL (set in the General Content Defaults) and appending the Relative UR set when creating a hyperlink). Here is an analogy to help clarify. Let's say you asked me where my brother lives and I said "right next to my house". If you didn't know where I lived, this information would not be useful. However, if you did know where I lived, then you could find my brother's house by locating my house and then find his next door. In this case, my house is an example of the Base URL and "right next to my house" is an example of the Relative URL.

Relative URLs are useful when the content developer is not sure of the location where the content will be deployed. They allow the content developer to link to content outside of the Library in the Developer.

The Base URL can be set in the Developer and can be changed, if necessary, in the Player Package after publication.

Note: If a Base URL is set in the General Content Defaults, you can enter a Relative URL (beginning with../) when inserting a hyperlink for a URL on the Insert Hyperlink dialog.

The procedure for linking to an attachment from a topic frame differs slightly from that for concepts and bubble text. When you link to an attachment from a topic frame, you can select an icon for the link and add a tooltip. The icon appears in the frame bubble when the user views the topic in the Player, and the tooltip appears when the user rests the mouse pointer

over the link icon. The icon and tooltip are stored with the link itself, rather than with the attachment. Therefore, when you link to the attachment from another location in your content, you can choose to add a different icon and/or tooltip, if desired.

Unlike concepts and bubble text, which can link to only one attachment, a single topic frame can link to multiple attachments. You manage all of the attachments linked at the frame level from the same dialog box, but you can assign a different icon and/or tooltip to each of the links. You can also change the order in which multiple attachments are linked to a single topic frame. As you navigate among the frames in a topic with the Frame Link toolpane open, the display updates dynamically to show the links for each frame. This provides a simple means of managing all frame links in a topic and analyzing the overall topic layout.

To link to an existing package file or web page from a topic frame:

1. With the topic open in the Topic Editor, navigate to the frame from which you want to link to a package file or web page.
2. Display the Frame Link toolpane, if necessary.
3. In the empty row in the Frame Link toolpane, click the **Name** field to activate it.
4. Click **Create link**.
5. In the Link to pane, select **Document in Library**.

   If desired, you can select **Packages** or **Web pages** in the **Type** field to further filter your selection.
6. Navigate the Library to the folder containing the package file or web page to which you want to link.
7. Select the desired package file or web page document.
8. Click **OK** or press ENTER.
9. An icon is added to the link by default. If desired, change the link icon.
10. The word "Link" is added as the default tooltip. If desired, change the link tooltip.

Note: You can repeat steps 3-10 to link to additional package files or web pages from the same frame or click to close the Frame Link Properties toolpane.

Note: At step 4, you can also click Create new web page to create a new web page and link to it in one step. When you do so, you first specify the name of the web page and the Library folder in which it should be saved. The main Developer window then becomes the active window, displaying an empty web page in a new tab. After you complete the web page, you can continue managing frame links in the topic by reactivating the Topic Editor window; the Frame Link Properties window remains open throughout the process.

To link to a URL from a topic frame:

1. With the topic open in the Topic Editor, navigate to the frame from which you want to link to a URL.
2. Display the Frame Link toolpane, if necessary.
3. In the empty row in the Frame Link toolpane, click the **Name** field to activate it.

4. Click **Create link**.
5. In the Link to pane, select **URL**.
6. In the **Address** field, type or paste the target URL.

   If a Base URL was set, you can enter a relative URL beginning with ../.
7. Click **Go** or press ENTER.

   While selecting a URL, you can also enter a base URL and then follow links in the preview displayed in the results pane to reach your desired target.
8. Click **OK** or press ENTER.
9. An icon is added to the link by default. If desired, change the link icon.
10. The word "Link" is added as the default tooltip. If desired, change the link tooltip.

Note: You can repeat steps 3-10 to link to additional URLs from the same frame or click to close the Frame Link Properties toolpane.

To create and link a new package from a topic frame:

1. Display the Frame Link toolpane, if necessary.
2. In the empty row in the Frame Link toolpane, click the **Name** field to activate it.
3. Click to launch the Package Wizard and click **Next**.
4. Browse to and choose the files/folders that you want to add to the package and click **Next**.
5. Type a name for the new package and browse to a location in the Library where you want it saved (if you do not want to save it in the default location).
6. Click **Next**.
7. Choose a file in the package that will launch from the frame. Navigate through any folders contained in the new package, if appropriate.
8. Click **Next** to finish.

7.11.2.1 Link to an Attachment from Bubble Text

As you enter custom text in bubbles and Introduction/End frames, you can link to an attachment from this text. For example, you could use a web page linked at this level to provide a definition of a term. Linked text appears in the frame bubble in color and underlined. When a user clicks linked text while viewing a topic in the Player, the attachment is displayed. If the attachment is a package file, the file opens in its parent application. If the attachment is a web page or URL, it opens in a new, independent browser window.

Note: When a glossary term is used in a manually created bubble text link, no glossary link is created during glossary markup. That is, text used in manually created bubble text links is excluded from glossary markup.

The Bubble Text Link Properties dialog box of the Topic Editor provides the tools for linking to and managing the links to attachments from bubble text. When linking to a package file or web page, you can filter the display to include packages or web pages only and navigate

through the Library folders to the specific file you want to link. When linking to a URL, you can type or paste a base URL and then follow links in the preview displayed in the results pane of the Insert Hyperlink dialog box to reach your desired target. The Bubble Text Link Properties dialog box also provides a preview of the linked attachment.

Note: An absolute URL represents the fixed location of a piece of content without regards to its context. A Relative URL is a shortened version of the full URL that only makes sense when used in context. The full URL is constructed by taking a Base URL (set in the General Content Defaults) and appending the Relative UR set when creating a hyperlink). Here is an analogy to help clarify. Let's say you asked me where my brother lives and I said "right next to my house". If you didn't know where I lived, this information would not be useful. However, if you did know where I lived, then you could find my brother's house by locating my house and then find his next door. In this case, my house is an example of the Base URL and "right next to my house" is an example of the Relative URL.

Relative URLs are useful when the content developer is not sure of the location where the content will be deployed. They allow the content developer to link to content outside of the Library in the Developer.

The Base URL can be set in the Developer and can be changed, if necessary, in the Player Package after publication.

Note: If a Base URL is set in the General Content Defaults, you can enter a Relative URL (beginning with../) when inserting a hyperlink for a URL on the Insert Hyperlink dialog.

Like concept and frame links, a link to an attachment from bubble text becomes part of the parent document. If you then move or reuse the topic, the linked attachment remains associated with that text in the topic. Conversely, deleting the link to an attachment from bubble text in one location removes the link in all places where the topic is used.

To link to a package file or web page from bubble text:

1. With the topic open in the Topic Editor, navigate to the frame from which you want to link to a package file or web page.
2. Select the bubble text to be linked.
3. In the Frame Properties toolpane, click **Bubble text link**.
4. Click **Create link**.
5. In the Link to pane, select **Document in Library**.

   If desired, you can select **Packages** or **Web pages** in the **Type** field to further filter your selection.
6. Navigate the Library to the folder containing the package file or web page to which you want to link.
7. Select the desired package file or web page document.
8. Click **OK** or press ENTER.

Note: At step 4, you can also click Create new web page to create a new web page and link to it in one step. When you do so, you first specify the name of the web page and the Library folder in which it should be saved. The Bubble Text Link Properties dialog box then closes, and an empty web page opens in a new tab. After you complete the web page, you can preview its contents in the topic by reactivating the Topic Editor tab, selecting the appropriate

bubble text, and again displaying the Bubble Text Link Properties dialog box as in step 3 above.

To link to a URL from bubble text:

1. With the topic open in the Topic Editor, navigate to the frame from which you want to link to a URL.
2. Select the bubble text to be linked.
3. In the Frame Properties toolpane, click **Bubble text link**.
4. Click **Create link**.
5. In the Link to pane, select **URL**.
6. In the **Address** field, type or paste the target URL.

   If a Base URL was set, you can enter a relative URL beginning with ../.
7. Click **Go** or press ENTER.

   While selecting a URL, you can also enter a base URL and then follow links in the preview displayed in the results pane to reach your desired target.
8. Click **OK** or press ENTER.

To create and link a new package from bubble text:

1. With the topic open in the Topic Editor, navigate to the frame from which you want to link to a new package file.
2. Select the bubble text to be linked.
3. In the Frame Properties toolpane, click **Bubble text link** to display the Bubble Link Text Properties dialog box.
4. Click to launch the Package Wizard and click **Next**.
5. Browse to and choose the files/folders that you want to add to the package and click **Next**.
6. Type a name for the new package and browse to a location in the Library where you want it saved (if you do not want to save it in the default location).
7. Click **Next**.
8. Choose a file in the package that will launch when the bubble text is clicked. Navigate through any folders contained in the new package, if appropriate.
9. Click **Next** to finish.

7.11.2.2 Change the Tooltip of a Frame Link

When you link to attachments at the frame level, you can provide tooltips for the links. These tooltips appear when a user rests the mouse pointer over the link icon while viewing the topic in the Player. By default, the word "Link" is added as the tooltip when the link is created; however, you can change the link tooltip at any time. For example, you might want to use a

tooltip that identifies the attachment contents, to provide users with information about the attachment before they launch it.

If you plan to deploy content to one or more Player outputs, use of tooltips is particularly important, especially for links to package files. For example, if a link launches a Flash animation that is several megabytes in size, you might use a tooltip such as "Flash animation of business process (4.65 MB)" to alert users before they click the link. Without such tooltips, users do not have a good indication of the type of content they will be launching or its purpose.

Tip: Although there is no limit to the length of a tooltip, concise, descriptive tooltips are most useful.

To change the tooltip of a frame link:

1. Display the Frame Link toolpane, if necessary.
2. Select the row listing the link for which you want to change the tooltip.
3. In the **Tooltip** field, delete the current text and type the desired tooltip.

7.11.2.3 Change the Icon of a Frame Link

When you create a link to an attachment from a topic frame, an icon is added to the link by default; however, you can change the link icon at any time. This icon appears in the frame bubble when a user views the topic in the Player, indicating that additional information is available. Users can then click the icon to launch the linked material. By standardizing your use of link icons, you can provide your users with a consistent visual cue as to the type of information available through each link. You can also add a tooltip for each link to provide a brief text description of the linked attachment.

The Developer comes with a standard set of link icons. You can also create your own custom icons, if desired.

To change the icon of a frame link:

1. Display the Frame Link toolpane, if necessary.
2. Select the row listing the link to which you want to change the icon.
3. In the icon column, click the down arrow to display the list of available icons.
4. Select the desired icon.

7.12 Use the Frame Comments Pane

The Frame Comments pane contains three multi-line text fields for entering comments about the frame:

- Author Notes - Enter comments about the frame in this field. Comments added to a frame when recording content also appear in this field. These notes appear in the Test Results publishing style.
- Instructor Notes - Enter instructor note; for example, the steps necessary to get the expected result.
- Expected Test Results - Enter the expected result of the action of this frame. These comments display after the bubble text during Test It! playback and also in the Test Results publishing style.

When a topic opens within Test It! mode, the Frame Comments pane opens in the horizontal view with the Author Notes field expanded and the Expected Test Results and Instructor Notes fields collapsed below it. When a topic opens from the Topic Editor, the Frame Comments pane is displayed vertically on the right side.

To enter Author Notes, Expected Results or Instructor Notes for the current frame:

1. Display the Frame Comments toolpane, if necessary.
2. Select the field in which you want to enter text.
3. Enter the comment text.

8 Use Test It! Mode

Test It! is a special playback mode designed to allow testers to run manual test scripts against a live application. A modified version of Do It! mode guides the tester through the steps of the test case. Testers can mark steps as passed or failed, and their own comments, and generate bug reports.

8.1 Launch Test It! Mode

Test It! mode cannot be launched from a published Player package like other playback modes. It must be launched from kp.html.

Note: Test It! mode playback does not support jump-in points

Within the folder where you published the content, there is a file called kp.html. When you open this file in your browser, it contains the outline structure and provides a list of all the outline items. Next to the topics are links, including one for the topic and one for Test It! mode.

To launch Test It! from kp.html:

1. In Windows Explorer, navigate to the location of the published content.
2. Open the folder containing the published content.
3. Open the **kp.html** file in your browser.
4. Scroll as necessary to locate the desired topic.
5. Click the **Topic** link next to the topic name to launch the topic in a window, and then click **Test It!**.

   or

   Click the **Test It!** link next to the topic name to launch directly into Test It! mode.

8.2 Play Test It! Mode

In Test It! mode, you are guided through a task while you perform it in the live application. This unique mode makes it possible for you to test the steps of an application. In addition, you can enter comments, mark steps passed or failed, and create a bug report with the steps to recreate the problem.

When a topic is played in Test It! mode, the Test It! window opens on top of the target application. A frame appears before the Introduction frame for the topic. This frame contains the estimated time for the test and any setup instructions that should be done before starting the test. When you advance past this first frame and the Introduction frame of the topic, the top section of the window includes the instructions for completing the step. The Expected Results section appears below the instructions and displays any text that the test author entered about what should happen.

You can mark each step as passed, failed, or skipped. Restarting Test It! mode clears the step markings as well as the history of the steps. The following options appear at the bottom of the window:

- Go to previous frame: Returns to the previous frame. If you mark a step passed, failed, or skipped, this mark is not reset if you move to the previous step.

- Mark this step as passed: Mark the step as passed and moves to the next step.
- This step passed: Indicates that the step passed.
- Mark this step as failed: Mark the step as failed and moves to the next step.
- This step failed: Indicates that the step failed.
- Skip this step: Skips the frame without marking it either pass or fail. If the step has already been marked as passed or failed, it does not change the mark.
- This step was skipped: Indicates that the step was skipped.
- Add notes to this step: Opens the Test Step Notes window in which you can enter comments about the step.

Note: After you save a note and close the Test Step Note window, if you go back to the previous step and reopen the Test Step Note window, the note that you previously added appears with the option to edit it.

- Opens steps to recreate web page: Opens the Steps to recreate window in which the steps up to and including this step appear. These steps can then easily be copied and pasted into a bug report. Only steps marked passed or failed appear in the web page.

Note: Decision and Explanation frames cannot be marked pass or fail. For frames which have alternative actions or paths, only the action that you execute can be marked. You can test alternative actions or paths by moving back to the previous step and choosing a different path.

The bottom section of the Test It! window displays a graphic that illustrates how the screen should appear in the live application for the step. On the graphic, a marquee surrounds the area in which you should perform the action in the live application. You can drag the graphic to reposition it within the Test It! window, if necessary. You can also drag the lower right corner of the Test It! window to resize it and display more of the graphic or you can use the Show/Hide Graphic button to toggle the display of the graphic in the Test It! window. You can also move the Test It! window to another area of the screen by dragging the title bar to the desired location on the screen.

The last frame in the playback is the Result summary page. It displays the total number of steps that were passed, failed, and skipped; the total number of steps in the test; and the overall test result (passed or failed). It also contains a link to view a full test case report. This report is a modified version of the Test Document publishing style. It has a title page with the purpose of the test, the test history, the time for the test, and the test setup. The detailed part of the report contains columns with the action, the expected results, the test step notes, and the results (pass or fail).

Control the topic playback using the following Actions link that appears in the bubble:

- **Show next alternative action**: Display other ways to perform the current step. This link appears only when other ways to perform the current step are defined in the authoring process.

- **Next Step**: Advance to the next step.
- **Previous Step**: Return to the previous step.
- **Restart Playback**: Return to the first step in the topic and restart the task.
- **Display Concept**: Display the conceptual information for the task. This link appears only if conceptual task information exists.
- **Attachments**: Display individual links that launch additional information related to the current screen. This link appears only if additional information exists for the current screen.
- **Play**: Display links to launch the topic in See It! or Try It! mode or print the topic with Print It! mode (if Print It! mode is enabled). After viewing the step in See It! or Try It! mode, you can continue in that mode or press ESC to return to Do It! mode.
- **Preferences**: Display the current preference settings for the Player. If this link does not appear, your administrator has preset all of the preferences and has prevented them from being changed.
- **Help**: Display the Player help.
- **View Outline**: This link only appears if the topic was launched in a context-sensitive manner from a target or web-based application. Close the topic and return to the outline in the Player.
- **Log Out**: Log out of the Player. This action appears only if the content you are viewing is tracked via the Knowledge Center.
- **Close Topic**: Close the topic in current play mode and return to the topic launch point.

To play a topic in Test It! mode:

1. Start the target application.
2. Launch Test It! mode for the topic you want to test.
3. Click **Next Step** to start, if necessary.
4. Perform the currently displayed step as indicated.
5. Mark the step pass, fail, or skip.
6. Click **Next Step**.
7. Repeat to complete all steps for the task.
8. Click the **View detailed report link**, if desired.

   Note: You can print this report to an XPS file. If you do, and some of the icons do not appear in the file, open the Page Setup dialog box for printing in your browser and select the option to print background colors and images.
9. Click **Close** to finish.

8.3 Test It! Mode in Knowledge Center

You can publish the Player to Knowledge Center with Test It! mode included. When you launch the Player through Knowledge Center, you can play Test It! mode. Test It! mode is not tracked, nor will the results be included in any Knowledge Center reports.

When a Player with Test It! mode is published to or imported into Knowledge Center, [Test] will be appended to the title. This is to differentiate it from a regular Player for learning purposes.

9 Enhance Content with Attachments

In an outline, module and section documents supply the headings for organizing the content, and topics supply the recorded steps and sounds (if applicable) for completing each task.

You can supplement your content with additional conceptual and explanatory information by linking to attachments from the documents in the outlines. Attachments can include files developed in external applications, custom web pages with descriptive text and graphics, and Internet and intranet web sites.

Types of Attachments

There are three types of attachments to which you can link documents in an outline. They include:

- Package files
- Web pages
- URLs

Packages are containers in your Library that hold one or more files. Any type of file can be stored in a package, including word processing documents, graphics, computer animations, and so on. You can link from any document in your outlines to any individual file in a package. The package file appears in the Concept pane or is launched in its native application when a user selects the link in the Player.

Note: The precise appearance and behavior of package files depends on the setup and Windows Explorer settings of the computer on which they are viewed.

Web pages are documents that you create in the Developer for displaying additional text and graphics in the Player or document output. You can create a simple web page to define a term or a more complex one that includes graphics and links to other web pages, package files, sound and external URLs.

You can also link from your content to an Internet or intranet web site through its URL address. The web site appears in the Concept pane of the Player or is launched in a new browser window when a user clicks the link, provided that the user is online and has access to the target site.

Link Attachments

You can link from your content to an attachment at the following three levels:

- The concept of a module, section, or topic
- A frame of a topic
- Bubble text in a topic frame, including Introduction and End frames

An attachment linked as the concept of a module, section, or topic appears in the Concept pane when the user selects the document to which it is linked from the table of contents in the Player.

Note: Some types of package files might launch in their native applications rather than appearing in the Concept pane.

When a frame of a topic is linked to an attachment, an icon representing the attachment appears in the bubble in Try It! mode or in the window in Do It! mode for that frame. The user can point to the icon to read a tooltip describing the attachment and click the icon to open the

attachment. Bubble text linked to an attachment appears in the frame as a hyperlink. Users can click the hyperlinked text in the Try It! bubble or Do It! window to view the attachment. An attachment linked at the frame or bubble text level always opens in a new window.

Note: Attachments linked to frames or bubble text are not available in See It! or Know It? play mode.

Attachments can also be included in some document outputs, namely, the System Process Document, Instructor Manual, and Training Guide. The actual outcome depends on the type of attachment and the level at which it is linked. In general, package graphics, web pages, and the addresses of URLs linked at the concept and frame levels appear in document outputs; all other types of package files and the contents of URL link targets do not. See *Package Behavior in Publishing*, *Web Page Behavior in Publishing*, and *URL Behavior in Publishing* for more detail.

Note: The Job Aid, Test, and Test Case document outputs do not include attachments.

You can link to attachments while working in the Outline Editor (concepts only) or Topic Editor.

Once you have created a link from a document to an attachment, the link essentially becomes part of the parent document. As a result, you do not need to re-create or repair these links every time you move or reuse the parent document in your outlines. Links are also maintained if you move or copy the parent document in the Library.

9.1 Attachment Considerations

One question you must consider when using attachments is the type of attachment you want to use in each case. The three general types of attachments you can use, namely, package files, web pages, and URLs, have different characteristics that affect which might be more appropriate in a given situation. The following discussion provides a comparison of several aspects of the different types of attachments and a summary of their relative capabilities.

Purpose/Complexity

A primary consideration is the purpose of the attachment and the level of complexity of the information it must convey. For example, if an attachment provides the definition of a term, a simple, text-only web page is probably the easiest, most straightforward option. Web pages are also appropriate for presenting more complex arrangements of text and graphics, as well as for providing access to a collection of different resources from a single location through hyperlinks.

Packages allow great flexibility, because they can contain essentially any type of file. Thus, packages are the preferred option for information that is best presented in its native format, such as tabular data contained in an Excel spreadsheet or a multimedia presentation.

Finally, URL links can be used to send users directly to an Internet or intranet site or to provide such Internet-based functionality as email contact.

Attachment Location

Another consideration is the location in which the attachment is saved, specifically, whether it is included in the Library or not. Both packages and web pages are saved as Library documents, whereas Internet or intranet sites linked as URL attachments are external to the Library. This difference can be important when you publish to Player outputs. In particular, packages and web pages are incorporated directly in your output during publishing, whereas URL attachments are always accessed from their external locations, which might be updated or removed over time. As a result, users might find a URL attachment to be missing or unavailable if, for example, the Internet address of a URL link target is changed after you create the link in your content.

Note that, for package and web page attachments, location within the Library is not important. That is, you can link from any module, section, or topic document to any package file or web page stored anywhere in the Library; the package/web page and the parent document do not need to be in the same folder. This provides great flexibility in how you organize your Library,

while also allowing you to reuse your package files and web pages by linking to each one as many times as needed throughout your content.

User System Setup and Connectivity

When you publish to Player outputs, the setup and connectivity of your users' computer systems also impact your choice of attachments, especially for packages and URLs.

For packages, you should avoid any file types that your users are unlikely to be able to view directly. For example, if you link to a flowchart saved as a package file in native Microsoft Visio format but your users have neither Microsoft Visio nor the Microsoft Visio Viewer installed on their computers, they are unable to access the flowchart. A more effective approach to using the same flowchart as a package file would be to export it from Microsoft Visio in a more common format, such as a standard graphics format, for which your users are more likely to have an appropriate application. In addition to the application itself, you should also consider the version supported in your users' workplace, to ensure that it is compatible with the version in which you create the file(s).

Note: The precise appearance and behavior of package files depends on the user's computer operating system, its settings, and the settings for the Web browser on that system.

For URL attachments, the primary considerations involve connectivity, as with any other use of Internet or intranet sites. In particular, your users must be online when viewing your content to access linked URLs, and their connection speed should be sufficient for the contents of the target sites. They should also have any necessary plug-ins installed. Finally, if you plan to link to any limited-access or otherwise restricted Internet or intranet sites, you should ensure that your users have appropriate permissions or user accounts to access these sites.

In contrast to package files and URLs, web page attachments present minimal system issues. Because they are constructed in standard HTML and because they are incorporated in your published output, you can consider web pages as a reliable choice for attachments if you are uncertain of your users' setups.

File Creation and Maintenance

You create and maintain web pages entirely within the Developer using the Web Page Editor. Whenever you make and save changes to a web page, the changes are immediately reflected throughout your content wherever the web page is linked.

You also create and maintain packages in the Developer. Packages provide the advantage of allowing you to incorporate a variety of documents, in a variety of formats, into the Library. You can copy documents into a package from an external location and then edit them directly from the package.

Finally, you create and maintain URLs entirely outside the Library. This allows you to use preexisting Internet and intranet content, as well as functionality such as email, but also requires that the content be maintained separately. For example, you must ensure that the URL address of the link target does not change, in which case the site would no longer be accessible from your content. In addition, when a target site is updated, you should ensure that it remains relevant as a link from your content. Relative URLs can be used to help minimize URL link maintenance.

Player Outputs

In general, users can access all attachment types in all Player outputs. See *User System Setup and Connectivity* above for certain limitations.

For each frame link, web page hyperlink, or bubble text link, users access the attachment by clicking on the link icon or hyperlinked text, respectively; the attachment always launches in a new, independent window. For each concept link, the attachment generally appears directly in the Concept pane of the Player.

You should especially consider the behavior of concept attachments in relation to package files, such as external documents and multimedia files, which you might not want to launch directly in the Concept pane. For example, you might prefer that a large graphic or detailed

spreadsheet appear in its own window, rather than in the limited region of the Player's Concept pane. Alternatively, your users might prefer that a Flash animation play only when they specifically click on a link to activate it, rather than having it launch automatically in the Player when they select the document to which it is linked as the concept. In such cases, a better alternative is to use a concept link to a web page that, in turn, contains some explanatory text and a hyperlink to the desired package file. This approach provides greater control over how and when package files used as concepts are displayed.

Document Outputs

Only three types of document outputs ever include linked attachments: the System Process Document, Training Guide, and Instructor Manual. For these three document formats, the behavior differs depending on the type of attachment and the level at which it is linked.

- Web pages that are directly linked at the concept and frame levels are included in document outputs.

- Package files that are graphics appear in document outputs, whether they are directly linked at the concept and frame levels or inserted in web pages. All other types of package files are excluded from document outputs.

- The addresses of URL attachments linked at the concept and frame levels are included in document outputs, in the format "Please refer to:" followed by the address. When text in a web page or bubble text links to a URL attachment, the address of the link target is included in parentheses after the link text.

Therefore, if you wish to include an attachment in your document outputs, use a web page or a package graphic.

Summary

The following information summarizes various factors that you should consider in determining which type of attachment best meets your needs in a particular situation:

- Package file

  Advantages:
  Flexible, allows use of virtually any type of file
  Saved in Library so incorporated directly in published Player outputs
  Graphic files included in document outputs when linked at the concept and frame levels or inserted as images in web pages

  Disadvantages:
  User setup/access issues for Player outputs, depending on file type
  Excluded from document outputs if anything other than a graphic
  For concept links, consider launching from a hyperlink in a web page, rather than linking directly

- Web page

  Advantages:
  Saved in Library so incorporated directly in published Player outputs
  Always compatible with users' systems because created in standard HTML
  Can include links to other attachments
  Included in document outputs when linked at the concept and frame levels

  Disadvantages:
  Limited web functionality (for example, no tables, no scripting)

- URL

  Advantages:
  Can use existing, independently maintained content
  Can use email, ftp, and other URL-based links
  Address included in document outputs when linked at the concept, frame, and bubble text levels
  Can use Relative URLs

  Disadvantages:
  Users must be online to access (also consider speed of connection)
  Users must have appropriate permissions for access
  Site (URL address and content) must be maintained separately from Library content
  Decreases the occurrence of broken links because the URL is constructed from an established Base URL with the Relative URL added.

9.2 Enhance Content with Packages

You can enhance your content by linking it to images, web sites, multimedia presentations, Microsoft Word documents, PowerPoint presentations, and so on. To use such resources in the Developer, you create package documents, which are essentially containers that allow you to add externally created material to the Library. For example, you can create a package that contains either a collection of related folders and files in the case of a web site or multimedia presentation or a single file such as a Word document. You can then link to a single file in the package as the concept of a module, section, or topic document or as explanatory information for a specific frame or bubble text in a frame of a topic.

When you publish your content to a Player output, your users can view the linked package material in Try It! and Do It! modes. In general, package files linked at the concept level appear in the Concept pane of the Player window or launch in their native application when a user selects the document to which they are linked. The specific behavior depends on the type of package file and the user's system setup. When linked at the frame or bubble text level or when linked in a web page, the package file launches in its native application when a user clicks on the link icon or hyperlinked text or graphic.

Note: Package files that are linked to frames or bubble text are not available in See It! or Know It? play modes in the Player.

With one exception, linked package files do not appear in document outputs; the exception is graphic files. Graphics linked at the concept and frame levels are included when you publish document types that include attachments, namely, the System Process Document, Training Guide, and Instructor Manual. In addition, package graphic files inserted as images in web pages also appear in these document outputs. See *Package Behavior in Publishing* for more detail.

To use a package in the Developer, you must complete two basic steps. First, you create and add files to the package, and then you link to a file in the package from the appropriate module, section, topic, or frame. Once you have created a package in a Library, you can use it multiple times by linking to its files from various locations throughout your content.

User System Setup

It is important that you understand your users' system setup before you link to package files from your content. When you link to a file that was developed in an external application, such as a Microsoft Excel workbook, a Microsoft Project file, or a Flash video, you need to consider whether your users have the appropriate applications and plug-ins to launch this content from their desktops. If a user's browser or system is not configured so that it can open a particular type of package file, the Player displays an error. Therefore, you should plan carefully to anticipate and avoid such situations.

Note: The precise appearance and behavior of package files depends on the setup and Internet Explorer settings of the computer on which they are viewed.

Package Graphic Files

Package graphic files display at their actual size in the Player. When published to document outputs, directly linked package graphics appear at actual size or are resized in Microsoft Word to be ½ pages, whichever is smaller. When inserted in a web page, the package image is sized appropriately according to web page behavior in document outputs.

Note that the formats for package graphics that are supported by the Developer are those that are supported natively by Microsoft Word 2003 and 2007. These include:

- Graphics Interchange Format (GIF)
- Joint Photographic Experts Group (JPEG/JPG)
- Macintosh (PICT)
- Portable Network Graphics (PNG)
- Windows bitmap (BMP)
- Run-length encoded (RLE)
- Device-independent bitmap (DIB)
- Windows Enhanced Metafile (EMF)
- Windows Metafile (WMF)

All non-native graphics formats are not exported to Word.

In using package graphic files, however, you must also consider whether you intend to publish to Player outputs in addition to document outputs, as not all of the formats supported by Microsoft Word work well in online, browser-based formats.

9.2.1 Package Considerations

Although packages can contain multiple files of different types and even an internal folder structure, the Developer regards each package as a single document. The file(s) and/or folder(s) within a package are components of the package, rather than Developer documents as such. These facts have implications for how packages function in the Developer and how best to use them. The main considerations for packages are how many items a package should contain, what the items in the package should be named, and whether the package should have an internal folder structure.

Number of Package Items

When creating packages, you need to decide whether each package document should hold a single file or multiple files. Although there is no limit to the number of files and folders you can add to a package, it is generally a good idea to create packages with a single file or a few related files rather than to add all of your external files to one package.

Because the Developer regards each package as a single document, tasks such as publishing and exporting affect an entire package, even if only part of it is needed. For example, when you publish a document that is linked to a file in a package, all of the files in the package are included in the published output, even those files that are not linked to the document being published. This is undesirable, as publishing unused files takes longer and increases the size of the published output.

Nevertheless, there are situations in which you must keep multiple files in a single package. For example, suppose that you want to use a package to link to a custom web site that consists of several linked pages containing graphics (rather than making the site available on a server and linking to it as a URL attachment). To do so, you must copy the entire file and

folder structure of the web site into one package for the hyperlinks in the web site to work and the graphics to appear properly.

Naming of Package Items

Each package is a Developer document and, as such, is identified by its Document ID, rather than its name. In contrast, package items are NOT Developer documents and do not have Document IDs. Rather, each package item is identified by the Document ID of the package in which it is stored and its name, as well as its relative path within the folder structure of the package, if relevant (see below). This difference has a number of consequences:

First, if a package contains multiple files and/or folders, the name of each item at a given level of the package must be unique. This is identical to the requirement for folder names (but not document names) in the Library.

Second, when you link to a package attachment, you actually link to a single file within the package, not the overall package document. To uniquely identify the target of such a link, the link path must include the name of the package file, as well as its relative path within the folder structure of the package, if relevant (see below). As a result, if you change either the name or the relative path of the package file, you break the link to it. Therefore, it is recommended that you establish final names for all package items before linking to them.

Warning! The Broken Links tool does not penetrate packages and cannot detect when links to package files are broken.

In contrast, because Developer documents are uniquely identified solely on the basis of Document IDs, a package can be renamed and/or moved within the folder structure of the Library without breaking any links to the files it contains. This is identical to the behavior of all other Developer documents, such as modules, topics, glossaries, and so on.

Warning! It is best to avoid using ampersands "&" or percent signs "%" in a package file name. Document attachment names with those characters may not open depending on the protocol for your security layer for deployed content. Document attachment names with ampersands or percent signs will NOT open if you are using the Knowledge Center to deploy your content.

Internal Structure of a Package

If you do choose to store multiple files in a single package, you might want to organize them using a folder structure within the package. For example, in the case of a custom web site such as that mentioned in Number of Package Items, the package must have an internal folder structure identical to that of the source.

As stated above, when you link to a package file, the link path includes the relative path of the file within the package. It is therefore recommended that you keep the internal package folder structure relatively simple so as to avoid creating excessively long link paths (>255 characters). In addition, if you change the relative path of a package file after linking to it, you break the link. Therefore, it is recommended that you establish the final internal structure of a package before linking to any items it contains.

Warning! The Broken Links tool does not penetrate packages and cannot detect when links to package files are broken.

In summary, when using packages, you should consider the following recommendations:

- Store one or a few related files in each package.
- Use unique package file and folder names.
- Use relatively simple internal folder structures, if possible.
- Establish the file names and internal folder structure, if any, before linking to any items in a package.

9.2.2 Create a New Package

Before you create a package, you need to identify the folders/files on your local computer or network server that will comprise the package. Package content is always created from material outside the Library. Once you identify the material to include in a package, you use the Package Editor to create a new package and add the file(s) and/or folder(s) that you want into the new package. Then, you can save the package with a name of your choice, store it anywhere in the Library, and link to the file(s) in the package from your content.

You can create a package from the main File menu available in the Library or any other document editor. When you create a new package, the Package Editor launches in a new tab and displays an empty package where you can add files and folders. After creating a new package, you can name it and save it to any folder in the Library. The name of the package appears in the Package Editor tab.

You can also create a new package from the Concept pane in the Outline Editor using the Create New Package icon. Or, you can create and link a new package to new section using the New Section with Package command on the Link menu.

If you save a package to the wrong folder in the Library, you always have the option to move the package document to another folder. You can also rename a package just as you would any other document. If you rename a package containing items to which you have linked from other documents, topic frames, or bubble text, the links remain unaffected. That is, renaming a package does not break any links to the items it contains; however, renaming a package item does break the links to that item.

Warning! Although the Undo/Redo commands are available in the Package Editor for most actions, you cannot undo the actions of adding, deleting, renaming, moving, or copying package items/folders.

Multi-user Considerations

- Any new document that you create or link is automatically checked out to you. If you want to make a new document available to multiple authors and place the document under the Developer's version control system, you must check it in.

  See *Check In and Check Out Documents* in Use the Developer in a Multi-user Environment for more information.

To create a new package from the File menu:

1. On the **File** menu, point to **New** and choose **Package**.
2. Add items to the package.
3. Save the new package document.

   You can also close the tab and click **Yes** in response to the Save Document message.

   When you save a package for the first time, you are prompted to provide a name for it. Enter a name for the package by typing over the default name. Although the package name does not have to be unique, it is recommended that you provide a meaningful name so you can easily find the package later.

To create and link a new package as a concept from the Outline Editor:

1. With an outline open in the Outline Editor, display the Player View.

2. Select a document in the outline from which you want to create a link.
3. From the Concept pane, click to launch the Package Wizard and click **Next**.
4. Add items to the package and click **Next**.
5. Type a name for the new package and browse a location in the Library where you want it saved (if you do not want to save the package using the default name and location).
6. Click **Next**.
7. Choose a file in the package that will launch in the Concept pane. Navigate through any folders contained in the new package, if appropriate.
8. Click **Finish**.

To link a new section and package to an outline:

1. With an outline open in the Outline Editor, display the Player View.
2. Select a document in the outline from which you want to link a new section with an associated package document.
3. On the **Link** menu, choose **New Section with Package** to launch the Package Wizard and click Next.
4. Type a name for the new section.
5. Click **Next** and Add items to the package.
6. Click **Next** and type a name for the new package. You can also browse to specify a location in the Library where you want to save the new package (if you do not want to save the package using the default name and location).
7. Choose a file in the package that will launch in the Concept pane. Navigate through any folders contained in the new package, if appropriate.
8. Click **Finish**.

9.2.3 Edit a Package

You can open a package at any time in the Package Editor to modify its contents. For each package that you open to edit, an independent instance of the Package Editor opens in a separate tab, allowing you to edit multiple packages at one time. When you edit a package, you can add, move/copy, rename, delete, and/or edit the files and folders in the package. As you make such changes, the name of each item at a given level of the package must remain unique.

Warning! Moving, renaming, or deleting a package item that is linked to a document creates broken links in your content. Because the Broken Links tool does not penetrate packages, it cannot detect when links to items within packages are broken. Therefore, if you plan to perform any of these actions on a package item, you should first remove any links to it from your content.

Folders

You can store package items at the root of a package, or you can create a folder structure in the package to organize the items. Folders in a package behave similarly to folders in the Library; they can be named, renamed, deleted, moved, and copied. When naming folders in a package, duplicate names and blank names, as well as certain reserved characters, are not

permitted. Once you have created folders, you can move or copy items into the folders in the current package using cut/copy and paste or drag-and-drop.

Warning! Adding folders to a package increases the Library path to the files in those folders. If you choose to create folders in your packages, it is best to keep the folder names short and to create only a simple folder hierarchy. Long folder names and/or a complex folder structure with multiple levels can create problems if the paths to the package files exceed the maximum Windows file system length.

The Package Editor does not save empty folders. If you save a package that contains a folder with no content, the folder will not be there the next time you open the package.

Folders can also be added to a package from a file system. When you copy an existing folder from a local or network drive, the folder and its entire contents are copied to the package.

You can navigate the folders in a package by double-clicking the folder icon to drill down through the folder structure. The Location field at the top of the Package Editor tab displays the folder path. To move back through the folders, use the Up One Level icon to the right of the Location field until you reach the root of the package.

Changes to a package are not automatically saved. You can save a package as you are working with it or save it as prompted when you close the package.

Multi-user Considerations

- Before you can perform this action, you must check out the document. After you save any changes, you should check in the document to make it available to other authors and add the changes to the Developer's version control system. Note that you check out and in the overall package document; you cannot check out/in individual package items.

  A new version of a package document is created upon check in whenever you add, delete, rename, or edit an item in the package. Only the overall package is versioned; the items themselves are not versioned. Therefore, if you decide to undo changes to a package by rolling back to an earlier version, you return ALL items in the package to that version.

To edit a package:

1. Open the package in the Package Editor.
2. Edit the package as necessary.

   You can add, move/copy, rename, delete, and/or edit the files and folders contained in the package.
3. Save and close the package.

Tip: To create a new folder in the Package Editor, on the File menu, point to New and select Folder. You can also right-click in a blank area in the Package Editor and choose New Folder from the context menu. A new folder icon appears in the Package Editor window with the folder name in edit mode. Type a name for the folder and press ENTER.

You can also click on the Package Editor toolbar to add a folder and all of its contents from your computer or network drive.

9.2.4 Add Items to a Package

You can add one or more files and/or folders to a package document from any drive on your computer or local network. The files/folders that you add to packages are not removed from

your local computer/server unless you specifically choose to remove them, rather than copying them.

The Add Files icon allows you to browse your computer or network to select files to add to the package. The Add folder icon allows you to browse your computer or network and select folders (and all its content) to include in a package.

You can also add both files and folders to a package by copying or moving them from their location on your computer or network to an open package using one of the following procedures:

- Drag-and-drop from a window on your computer to an open package to create new copies of the files/folders
- Copy from a window on your computer and paste in an open package to create new copies of the files/folders
- Hold SHIFT and drag-and-drop from a window on your computer to an open package to move the files/folders from your computer to the package
- Cut from a window on your computer and paste in an open package to move the files/folders from your computer to the package

Warning! When copying files and folders with very long, complicated names from your computer to a package, the Package Editor might truncate some file and folder names to an 8.3 (MS-DOS compatible) file format. After copying such files and folders, check the copies in the package.

When adding items to a package, file and folder names at the same level within a package must be unique. Therefore, if you attempt to add a file with a duplicate name to the same folder in a package, you are prompted to replace the original with the new file. If two distinct package files must keep the same name, you can either create a new package for the additional file or create a separate folder for it in the same package.

Tip: If you plan to localize your content, you should consider a language-neutral naming convention for package items. This will help you avoid having to re-create links to package files in the translated content.

To add files only to a package:

1. On the **Edit** menu, select **Add Files**.
2. In the Open dialog box, browse your computer or network to select the file(s) you want to add to the package.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click). In this case, the files must be located in the same source directory to be added to the package at the same time.
3. Save the package.

To add files and folders to a package:

1. Organize your desktop so that you can simultaneously view both the package open in the Developer window and a Windows Explorer window.
2. In Windows Explorer, navigate to a source directory on your computer or server and select the files/folders that you want to include in the package.

3. Copy and paste or drag-and-drop the selected files/folders into the Package Editor tab.

   -or-

   On the **Edit** menu, select **Add folder** and browse to a folder that you want to include in the package. Click **OK** to include the folder and all of its contents (including subfolders and their files). You can also make a new folder on your computer and include it in the package.

4. Save the package.

9.2.5 Move/Copy Items in a Package

After creating packages and adding items to them, you might find that you want to move items from one package to another. For example, you might want to keep all of the files used in one section in a single package rather than creating a separate package for each file.

Items in a package can be moved or copied to another package using cut/copy and paste. You can also drag-and-drop items between packages by splitting the work area and viewing different packages in the two panes of the layout. When you drag-and-drop an item between packages, a new copy of the item is created in the destination package. To move an item between packages using drag-and-drop, hold the SHIFT key while dragging.

Note: If the source and destination are different folders within the same package tab, drag-and-drop moves the item rather than copying it.

When moving and/or copying items in a package, file and folder names at the same level within a package must be unique. Therefore, if you attempt to copy or move a file with a duplicate name to the same folder in a package, you are prompted to replace the original with the new file. If two distinct package files must keep the same name, you can either create a new package for the additional file or create a separate folder for it in the same package.

Warning! Moving a package item that is linked to a document creates broken links in your content. Because the Broken Links tool does not penetrate packages, it cannot detect when links to items within packages are broken. Therefore, if you plan to move a package item, you should first remove any links to it from your content.

Multi-user Considerations

- Note that if you want to move items between two packages, you must check out both packages. If you want to copy items between two packages, you need to check out only the destination package.

To move or copy items in a package:

1. Open the source package containing the items you want to move or copy.
2. Open the destination package into which you want to move or copy the package items.
3. Split the layout of the work area.
4. Display the source package in one layout pane and the destination package in the other layout pane.
5. Use drag-and-drop or cut/copy and paste to move or copy the items between the packages.

   To move items, hold the SHIFT key and drag the items from the source package to the destination package. You can also use the **Cut** and **Paste** commands to move items between packages.

To copy items, drag the items (or hold the CTRL key and drag the items) from the source package to the destination package. You can also use the **Copy** and **Paste** commands to copy items between packages.

The Cut, Copy, and Paste commands are also available on the Edit menu.

6. Save the packages.

9.2.6 Rename an Item in a Package

You can rename any file or folder that is contained in a package. Long document names are supported for package items, but special reserved characters are not allowed.

Warning! It is best to avoid using ampersands "&" or percent signs "%" in a package file name. Document attachment names with those characters may not open depending on the protocol for your security layer for deployed content. Document attachment names with ampersands or percent signs will NOT open if you are using the Knowledge Center to deploy your content.

When renaming items in a package, file and folder names at the same level within a package must be unique. Therefore, if you attempt to assign a duplicate name to a package item, you receive an error. If two distinct package files must keep the same name, you can either create a new package for the additional file or create a separate folder for it in the same package.

Warning! Renaming a package item that is linked to a document creates broken links in your content. Because the Broken Links tool does not penetrate packages, it cannot detect when links to package files are broken. If you need to rename a package item, you should do so before linking to it from your content.

Tip: If you plan to localize your content, you should consider a language-neutral naming convention for package items. This will help you avoid having to re-create links to package files in the translated content.

To rename an item in a package:

1. Open the package in the Package Editor.
2. Select the package item.
3. Click the document name or press the F2 key to start edit mode.

   You can also right-click a document and choose Rename.
4. Type the document name.
5. Press ENTER to save your changes.

   You can also click anywhere outside the document name to save your changes.

9.2.7 Delete Items in a Package

You can delete any folder or file in a package. Deleted package items are sent from the package in the Developer to the Windows Recycle Bin.

Warning! Deleting a package item that is linked to a document creates broken links in your content. Because the Broken Links tool does not analyze packages, it cannot detect when links to items within packages are broken. Therefore, if you plan to delete a package item, you should first remove any links to it from your content.

If you later discover that you improperly deleted a package item, you can restore the deleted item from the Windows Recycle Bin to its original package, as long as you have not emptied the Recycle Bin. To do so, you must first open the package in the Package Editor.

Multi-user Considerations

- You must check out the package both to delete items from the package and to restore deleted package items from the Windows Recycle Bin.

To delete items in a package:

1. Open a package and select the folder(s) and/or file(s) that you want to delete.
2. On the **Edit** menu, choose **Delete**.

   You can also press DELETE or right-click the folder or file and choose Delete from the context menu.
3. Click **Yes** to confirm the deletion and move the items to the Windows Recycle Bin.

   You can restore a deleted item from the Windows Recycle Bin to its original package, as long as the Recycle Bin has not been emptied. However, before you restore the item, you must first open the package in the Package Editor.
4. Save the package.

9.2.8 Edit Files in a Package

You can edit the content of any file in a package by opening it directly from the Package Editor.

The file opens in its native application so you can make your changes.

Note: HTML files automatically open the Developer HTML Editor regardless of the application that was used to originally create the file.

You can use any one of the following methods to open a file from the Package Editor:

- Double-click the file name.
- Right-click the file name and choose Open.
- Right-click the file name and choose Open with.
- Drag the file into an open instance of the native application.

Before you save or close the package, be sure to save and close any open documents. Depending on the native application you are using to edit the file, you will receive different messages if you try to close the Package Editor while the file is still open. For example, with applications such as Microsoft Word or Excel, you will be prevented from saving or closing the package until the files are closed. If you are using other applications such as Notepad, you are warned that the file may be open and should be closed, but you can force the Package Editor to save or close anyway.

The messages could also vary depending on the method you used to open the file from the Package Editor. If you used either of the first two, the scenarios as described in the previous paragraph apply. If you used either of the last two methods, the Package Editor cannot determine reliably if the file is open, so you will receive a warning that the files may be open.

If the file you want to edit is also being maintained outside the Library, you can move or copy it from the Package Editor to your computer or a local server.

You can move or copy an item from a package to your desktop using standard Windows controls as follows:

- To move an item, drag the item (or hold the SHIFT key and drag the item) from the package to your desktop. You can also use the Cut and Paste commands.
- To copy an item, hold the CTRL key and drag the item from the package to your desktop. You can also use the Copy and Paste commands.

Warning! Dragging a package item from the Package Editor to your desktop or a local network removes the file from the package. Press CTRL while dragging to copy the file and leave the original in place in the package.

9.2.9 Create and Edit HTML Files in a Package

Use the HTML Editor to edit any existing HTML documents contained within a package in the Library. You can also create new HTML documents which can be saved and copied into the package you are editing.

Publishing Note: HTML files stored in packages are not published in document outputs. See Package Behavior in Publishing in the Enhance Content with Packages section of the Enhance Content with Attachments chapter.

To edit HTML files in a package:

1. Open a package in the Package editor.
2. Double-click HTML file that you want to edit and it opens in the HTML editor. You can also right-click the file and choose Open to edit the file in the HTML editor or Open with... to open it in another program.
3. Edit and save the file using the HTML toolbar functions.
4. Save the package.

To create a new HTML file in a package:

1. Open a package in the Package editor.
2. On the **Edit** menu, select **New HTML File** to open an empty document in the HTML editor.
3. Edit and save the document using the HTML toolbar functions.
4. Save the package.

The HTML editor toolbars provide the following functions:

Source: Display the HTML source code for the current document. You can view or edit the source code. Press Source again to go back to normal text.

Save: Save the page you are editing.

Save As: Save the page you editing with a different name. You must provide a different file name. The document is saved in the package you are editing.

Preview: Display the HTML page in a new or active browser window for preview purposes. You can also preview the HTML page by linking it to a document in the Developer Concept pane.

Cut: Cut the selected text to the clipboard.

Copy: Copy the selected text to the clipboard.

Paste: Paste the data copied to the clipboard (with or without formatting).

Paste as plain text: Paste content as plain text.

Paste from Word: Paste content copied from Microsoft Word or similar applications.

Print: Print the current document.

Undo: Undo the most recent action.

Redo: Redo the most recent action.

Find: Find a word or phrase in the document.
Replace: Find and replace a word or phrase in the document.

Select All: Select all of the text in the document.

Remove Format: Remove the formatting from the selected text.

Use this toolbar to insert various form functions into the HTML page. After you insert and of these form functions into a page, you can right click on it to edit its properties. The properties control various settings on the how the form function appears and behaves when the HTML page is viewed in a browser.

Insert Form: Insert a form.

Insert Checkbox: Insert a checkbox.

Insert Radio Button: Insert a radio button

Insert Text Field: Insert an editable text field.

Insert Text Area: Insert a multi-line text area. You can configure the text area size by defining the number of rows and columns.

Selection Field: Insert a selection field that can list, selectable, predefined values.

Button: Insert a clickable button. You can also specify text to appear on the button as well as a Reset or Submit button type.

Image Button: Insert a clickable image button.

Hidden Field: Insert a hidden field that does not appear when the HTML file is viewed in a browser.

Bold: Formats selected text in bold.

Italic: Formats selected text in italics.

Underline: Formats selected text with an underline.

Strike Through: Formats selected text as strike through.

Subscript: Subscript is a way to put an index to a letter or to a number. The subscript has a smaller font than the normal text.

Superscript: Superscript works in the same way as the subscript but instead of placing the index in the bottom you place it in the top. This function is usually used in mathematical equations to write the "to the power of" function.

Insert Numbered List: Inserts a numbered list or changes the format of selected text to a numbered list. This icon also removes an existing numbered list (to a Normal format).

Insert Bulleted List: Inserts a bulleted list or changes the format of selected text to a bulleted list. This icon also removes an existing bulleted list (to a Normal format).

Decrease Indent: Decrease the text indentation. Repeated clicks continue to decrease the text indentation until the text is no longer indented.

Increase Indent: Increase the text indentation. Repeated clicks continue to increase the text indentation.

Block Quote: Format a block of text to identify quotations.

Create Div Container: Create blocks that hold part of the contents with the Div Container button.

Sets the text alignment to left, centered, right or justified.

Link: Link selected text to a URL, anchor in the text or E-mail". Depending on which option you choose different options and bookmarks will appear in the window. For example:

if you choose **URL**, you will need to specify the type of protocol you want to use for your link. You can choose from http://, https://, ftp://, news:// or <other>. You also need to specify the URL you want your link to refer to. Choose Browse to link to a file in the package that contains the HTML file you are working on, a file on your computer, or a URL address. On the Target tab, use the Target field to specify the type of window in which the link will appear. You may choose from <frame> (also supply a Target Frame name), New Window (_blank), Topmost Window (_top), Same Window (_self), Parent Window (_parent). If you choose <popup window>, you can also specify various settings that control the popup display behavior such as size and position and other options.

if you choose **Link to anchor in text**, select an existing anchor name in the By Anchor Name field. You can also link by Element Id if the source HTML has Ids defined.

if you choose **E-mail**, specify the e-mail address to which you want the link to refer to. Also specify the subject of the message and the message text which is sent to the e-mail address.

Regardless of Link Type you choose, use the Advanced tab to configure the following link settings:

Id: specifies the ID of the link.

Language Direction: sets the language direction from left to right (LTR) or from right to left (RTL).
Access Key: sets up an access key to the link.

Name: specifies the link name.

Language Code: defines the code of the language e.g. en, pt, pl.

Tab Index: defines the tab index.

Advisory Title: specifies the description of the target object.

Advisory Content Type: specifies the MIME type of the target object.

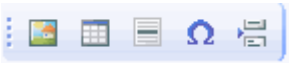
Stylesheet Classes: specifies the name of the CSS class.

Linked Resource Charset: specifies the charset of the target object.

Style: defines the style.

Unlink: Remove an existing link in selected text.

Anchor: Inserts a new link anchor (by providing an anchor name) or modifies an existing link anchor. You can use anchors as a mechanism for linking to other text.



Insert Image: Insert an image into the document. Use the Image Properties dialog box to set the following properties. The image file is automatically saved in the package you are editing at the time you insert it.

The Image Info tab controls the following:

URL: defines the URL address of the image. Choose Browse to link to a file in the package that contains the HTML file you are working on, a file on your computer, or a URL address.

Alternative Text: puts the descriptions of the image if you want it to be different than the image name.

Width: specifies image width.

Height: specifies image height.

Border: specifies the size of the border you want to place around the image.

HSpace: defines the size of the horizontal gap.

VSpace: defines the size of the vertical gap.

Align: specifies the alignment of the image. You can choose from: Left, Abs Bottom, Abs Middle, Baseline, Bottom, Middle, Right, Text Top or Top.

The Link tab controls the following:

URL: defines the URL address of the image.

Target: defines the target of the image (for advanced users). You can choose from New Window (_blank), Topmost Window (_top), Same Window (_self) or Parent Window (_parent).
The Advanced tab controls the following:

Id: specifies the ID of the image.

Language Direction: sets the language direction from left to right (LTR) or from right to left (RTL).

Language Code: specifies the language code e.g. en, pt, pl.

Long Description URL: specifies the description of the page.

Stylesheet Classes: specifies the name of the CSS class.

Advisory Title: specifies the description of the target object.

Style: specifies the style.

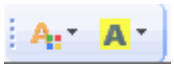
Insert Table: Insert or edit a table by adjusting the table properties such as number of rows and columns, width and height, borders, alignment, cell padding, and so on. You can then right-click in a table to perform additional functions such as insert/delete rows, cells, columns, and so on.

Insert Horizontal Line: Insert a horizontal line where your cursor is positioned.

Insert Special Character: Insert a special character where your cursor is positioned. Use your mouse to highlight the character that you want and click the character to select it from the character chart.

Insert Page Break for Printing: Insert a page break where your cursor is currently positioned.

Styles & formatting determine the appearance and semantic value of your document. You may use the drop down boxes to apply styles, set the font, its size, and so on. To remove the applied style select the style name again.



Text Color: Change the color of selected text.

Background Color: Change the background color of selected text.

Show Blocks: Show where the block element boundaries are in text.

9.2.10 Delete a Package

Deleting a package deletes the package document from the Library, along with all of the items it contains. You can delete a package only from the Library, just as you would delete a document of any other type.

Deleting a package that contains items linked to your content creates broken links. Therefore, if you plan to delete a package, you should first remove any links from your content to the files it contains.

Tip: You can use the Broken Links tool to identify any broken links in your content that result from deleting a package. However, you cannot use this tool to identify broken links resulting from deleting, moving, or renaming items within packages.

The situation might also arise in which you attempt to delete a package as a related document. For example, if a package file is the concept of a module and you delete the module with related documents, the package is deleted as a related document. Note that the entire package is deleted, not just the file linked as the concept of the module. However, you cannot delete a package as a related document if any file it contains is linked to any other document that is not selected for deletion.

Consider the following two examples involving a package named Package AB that contains the files File A and File B:

- First, suppose that File A is linked as the concept of Module A but File B is not linked to any other document. If you delete Module A with related documents, Package AB, including both File A and File B, is deleted. The entire package is deleted, even though only one of the files it contained was linked to the document being deleted.

- Now suppose that File A is linked as the concept of Module A and File B is linked as the concept of Module B. If you now attempt to delete Module A with related documents, Package AB is NOT deleted, because of the link between File B and Module B. Further, File A is also not deleted, even though it was directly linked to the document being deleted and is not linked to any other document. In this case, the selected document is successfully deleted, but the related package document is left intact.

Therefore, you cannot create any broken links in your content by deleting a package as a related document.

Multi-user Considerations

- Documents under version control must be checked in and you must be working online to delete a document from the Library. You can delete new documents that have never been checked in (are not under version control) while working online or offline.

  Deleted documents that have been checked in to the Library can be restored if they have not been purged by your Administrator. New documents that have never been checked in cannot be restored.

9.2.11 Change the Package View

Just as you can change how you view files and folders in Windows Explorer, you can change the view for items in a package. The four views for packages are Large Icons, Small Icons, List, and Details. The Large Icons view is the default. The Large Icons, Small Icons, and List views display only the names of the package items. To see additional properties for each item in the package, such as file size, file type, and date modified, use the Details View.

If you split the work area using the horizontal or vertical layout, you can choose a separate view for the package in each pane of the layout.

By default, the package items in a view are arranged alphabetically by the Name property. If you view the package items in the Details View, which displays the properties for each item, you can use the column headings to rearrange the items by sorting the view on the different properties. The other views, which do not contain column headings, can be arranged by the Name, Type, and Date Modified properties.

Note: The icon representing each file in the package views is the standard Windows icon for the associated file type.

To change the package view:

1. Open a package.
2. Right-click in a blank area in the Package Editor window.
3. Point to **View** and choose a view.

To arrange the icons in the package view:

1. Open a package.
2. Right-click in a blank area in the Package Editor window.
3. Point to **Arrange Icons** and choose a property.

9.2.12 Package Behavior in Publishing

The behavior of package files in publishing depends on the type of published output, the type of package file, and the level at which the package file is linked, as described below.

Player Outputs

Package files linked at all levels are included in all Player outputs in Try It! and Do It! modes. When linked at the concept level, most package files appear directly in the Concept pane when the user selects the parent document. Depending on the type of file, some concept package files open in a new window instead. When linked at the frame or bubble text level or when linked from a web page, users access the package file by clicking on the link icon or hyperlinked text/image. In these cases, all package files open in a new window, although the precise appearance and behavior of package files depends on the setup and browser settings of the computer on which they are viewed (see *Package Considerations*).

Warning! If a user's browser/system does not support a specific type of package file, the browser displays an error when the user attempts to access the linked package file, whether in the Concept pane or through a link. Therefore, you should consider your users' system setup when determining which types of package files to use.

Note: Package files linked to frames or bubble text are not available in See It! or Know It? play modes in the Player.

Document Outputs

With one exception, package files do not appear in document outputs. The exception is graphic files, which can be included when you publish a System Process Document, Training Guide, or Instructor Manual. Specifically, package graphic files linked directly at the concept and frame levels are included in these document outputs. Package graphic files linked to bubble text are excluded from all document outputs.

When linked at the concept level, the package graphic appears immediately after the name of the parent document to which it is linked. When linked at the topic frame level, the package graphic immediately follows the screen shot and steps for the frame to which it is linked. It appears in a lightly shaded box that is indented slightly to set it off from the surrounding content, with the link icon to its left. Although the graphic appears within the borders of the shaded box, it does not have a shaded background. When the same frame links to multiple package graphics or other attachments that are included in document outputs, each attachment is displayed as a separate item, in the order in which it is linked. If desired, you can use publishing format options to exclude directly linked package graphic files from all document outputs.

In addition, package graphics inserted as images in web pages can also be included in the above document outputs. In this case, the images appear as part of the web page, for web pages linked at the concept and frame levels. If desired, however, you can use publishing format options to exclude web page images, including those linked through packages, from all document outputs.

Finally, if a glossary term links to a graphic in a package as its definition link, the graphic appears in the Glossary section of a published Training Guide or Instructor Manual.

The maximum size for package graphics in document outputs is ½ page, so graphics that are larger than this are scaled accordingly and those that are smaller appear at full size.

Note: The Job Aid, Test, and Test Case document outputs do not include linked package files.

9.3 Enhance Content with Web Pages

You can enhance your content by creating web pages and linking to them from any module, section, or topic document as a concept or from any frame in a topic as explanatory information. In a web page, you can create flexible arrangements of text, sound, images, and hyperlinks, just as you would with a standard web authoring tool. One exception is that the Web Page Editor provides only a controlled subset of HTML functionality, to ensure that your web pages can be both displayed online and transferred properly to print documentation. In addition, the web pages that you create in the Developer are saved in the Library, so they are incorporated directly in your published output, thus minimizing the possibility of broken links, access problems, or other browser issues.

Note: The Web Page Editor does not provide access to the page HTML for direct editing. Rather, you make all changes to the content and formatting of your web pages using the tools available in the Web Page Editor interface.

When you link to a web page as the concept of a module, section, or topic, users can access the web page from the Concept pane in the Player window. When you link to a web page from a frame in a topic, an icon representing the link appears in the bubble in Try It! mode or in the bubble or window in Do It! mode for that frame. If the web page is linked to the Introduction frame of a topic, its icon appears in the Introduction pane of the Player window. In each case, a user can click the icon to view the contents of the web page.

In addition, you can link to web pages from bubble text in a topic frame or from text or graphics in another web page. Users can view the linked web pages by clicking the hyperlinked text or graphic appearing when they view your content in the Player window.

You can also add sound to a web page and link the web page to a Module, Section or Topic and have the sound play back through the Concept pane. See *Add Sound on a Web Page* for details.

Web pages linked at the concept and frame levels are also included in selected document outputs, namely, the System Process Document, Training Guide, and Instructor Manual. See *Web Page Behavior in Publishing* for more detail.

To use a web page in the Developer, you must complete two basic steps. First, you create the web page, and then you link it to the appropriate module, section, topic, or frame. Once you have created a web page in a Library, you can use it multiple times by linking to it from each location in your outlines where you want the users to be able to access it.

Note: Web pages linked to frames or bubble text are not available in See It! or Know It? play modes in the Player.

9.3.1 Create a New Web Page

You can create a web page from the main File menu available in the Library or any other document editor. When you create a new web page or open an existing web page, the Web Page Editor launches in a new tab and displays an empty web page (or the selected web page)

where you can add and format text, sound, insert images and hyperlinks, and so on. You can save the web page to any folder in the Library and then link to it from one or more documents anywhere in the Library.

If you save a web page to the wrong folder in the Library, you always have the option to move the web page document to another folder. You can also rename a web page at any time without breaking any links from your content to the web page.

Note: The Web Page Editor does not support split views. In a split view, a tab appears for the web page in each pane, with the contents of the web page displayed in the active pane and a Click here to make this Web Page Editor active link appearing in the other. Clicking the link switches the active display of the web page to the other pane.

Multi-user Considerations

- Any new document that you create or link is automatically checked out to you. If you want to make a new document available to multiple authors and place the document under the Developer's version control system, you must check it in.

  See *Check In and Check Out Documents* in *Use the Developer in a Multi-user Environment* for more information.

To create a new web page:

1. On the File menu, point to **New** and choose **Web Page**.
2. Edit the empty web page to include the content that you want.

   You can both create new content directly using the Web Page Editor and copy and paste material from other sources, such as word processing documents and Internet sites.
3. Save the new web page.

   You can also close the tab and click Yes in response to the Save Document message.

   When you save a web page for the first time, you are prompted to provide a name for it. Enter a name for the web page by typing over the default name. Although the web page name does not have to be unique, it is recommended that you provide a meaningful name so you can easily find the web page later.

Note: Web pages are not saved automatically, so you should save your work periodically as you add content to your web page.

9.3.2 Edit a Web Page

You can open a web page at any time in the Web Page Editor to modify its contents. For each web page that you open to edit, an independent instance of the Web Page Editor opens in a separate tab, allowing you to edit multiple web pages at one time. When you edit a web page, you can add any combination of text, hyperlinks, sound, and images and also copy and paste external content.

Note: Web pages are not saved automatically, so you should save your work periodically as you edit the content of your web page.

Tip: You can undo any change you make in a web page by selecting Undo from the Edit menu before saving the web page. Once you save the web page, you can no longer undo earlier changes.

Multi-user Considerations

- Before you can perform this action, you must check out the document. After you save any changes, you should check in the document to make it available to other authors and add the changes to the Developer's version control system.

To edit a web page:

1. Open the web page in the Web Page Editor.

   You can open a web page for editing from the Library, Outline Editor (Concept pane), or Topic Editor (Concept, Frame Link, and Hyperlink Properties toolpanes).

2. Add text, hyperlinks, sound and/or images as desired.

3. Save and close the web page.

9.3.3 Add and Format Text

You can type text in the Web Page Editor window just as you would in any word processing or web authoring tool. As you type the text, it reflects the default formatting, but you can use the toolbar icons and controls above the main window to change the formatting as desired. Alternatively, you can set up the desired formatting options before adding any text so that the specified formatting is applied as you type. The formatting options supported by the Web Page Editor provide flexibility but also ensure that your published content will be presented well in both Player and document outputs.

Note: You can preset the default font settings and background color for the Web Page Editor using Tools, Options. These defaults apply to all newly created web pages, but not those that already exist. This feature is useful in helping to set consistent standards for the appearance of your web pages.

Font - Changes the font family/style of the selected text.

Font size - Changes the font size of the selected text.

B - Bolds the selected text.

I - Italicizes the selected text.

U - Underlines the selected text.

- Aligns the paragraph to the left of the web page.

- Aligns the paragraph to the center of the web page.

- Aligns the paragraph to the right of the web page.

- Justifies the paragraph.

- Formats the text as a bulleted list.

- Formats the text as a numbered list.

- Changes the color of the selected text.

- Changes the background color of the web page. The background color setting always applies to the entire web page, regardless of its contents (text and/or other graphics).

Note: In new web pages, numbered lists take the font style and size set in the web page default options (in new web pages) or in immediately preceding text if different from the default settings. However, you can change the numbering style and size by applying formatting to the text in the list paragraphs (that is, applying text formatting after applying the numbered list paragraph format). In addition, you can change the color of the numbers or bullets in lists by applying a text color to the text in the list paragraphs. You cannot change the size or style of the bullets, however.

Several of the formatting controls are toggle commands, namely, bold, italic, underline, numbered list, and bulleted list. This means that clicking the toolbar button once applies the format and clicking a second time removes the format.

The Web Page Editor also supports both paragraph returns (ENTER or CTRL+M) and line breaks (SHIFT+ENTER or CTRL+SHIFT+M). These elements are useful in controlling the layout of your web pages. For example, you can use a line break in a bulleted paragraph to create the type of layout.

- This is a bulleted paragraph.

  This is an indented line created using a line break.

- This is another bulleted paragraph created with a paragraph return.

You can use nonbreaking spaces to keep two or more adjacent words in the same line of text. For example, you can use nonbreaking spaces between the parts of a multiword product name to ensure that the name always appears as a unit and is never broken across lines by text wrapping. This provides some control over how your web pages are displayed in the user's browser, even if the browser window is resized.

In addition to typing text directly in the Web Page Editor, you can also add text (and graphics) created in an external application using copy and paste. However, the pasted selection might appear somewhat different than the original depending on the formatting used. Any formatting not supported by the Web Page Editor, such as tables and sub- and superscripts, is removed when the web page is saved.

To add and format text in a web page:

1. Position your cursor at the location on the web page where you want to add text.
2. Type the text.
3. To apply a character format, select the text you want to format and use the appropriate toolbar buttons and controls.

   To apply a paragraph format, position your cursor in the paragraph you want to format and use the appropriate toolbar buttons.

   To apply a background color to the entire web page, use the appropriate toolbar button.

9.3.4 Insert a Hyperlink

Within a web page, you can create a hyperlink from specific text or from an image to additional information, such as another web page, a detailed flow diagram, or a web animation. When the user activates a web page hyperlink in the Player, the target opens in a new, independent browser window.

When inserting a hyperlink, you can choose from two types of targets as follows:

Document in Library: Link another web page or a file saved in a package.

This option allows you to link to another attachment contained in the Library. For example, you could link from a word in a web page to another web page containing its definition. This option can be particularly appropriate for package files used as concepts. Rather than linking directly to the package file, you can link to a web page that, in turn, contains a hyperlink to the package file. This approach provides greater control over how and when package files used as concepts are displayed.

Package File Parameters/Bookmarks

The Developer supports URL parameters or bookmarks to files in packages, such as:

test.html?a=1&b=2
test.html#bookmark
test.html?a=1&b=2#bookmark

When you insert a link to a file saved in a package, you can use the Name field on the Insert Hyperlink Browse dialog to select a file inside a package and add parameters/bookmarks after the selected filename (no space).

URL: Link to an intranet or Internet site.

This option allows you to link to web content that is maintained outside the Library. You can use link any valid URL, such as mailto and ftp links, provided that your users have appropriate access when they view the content. Examples: Corporate web site, web-based feedback form, or help desk e-mail.

To test the targets of your hyperlinks from the Web Page Editor, right-click the link and select Open Hyperlink. You can also use SHIFT+click to open the targets of your hyperlinks from the Web Page Editor. For web pages and package files, this command opens the target in a new Developer tab. For URLs, the target opens in a new, independent browser window.

When viewing your web page from outside the Web Page Editor (for example, in the Concept pane of the Outline Editor), you can test your hyperlinks simply by clicking on them. In this case, the target of each hyperlink opens in a new, independent window. However, if you need to edit a hyperlink, you must open the web page containing it in the Web Page Editor.

If you have web content that has not yet been deployed or the final deployment server is unknown, you can still create the URL links using relative URL addresses. Relative URLs are addresses which are relative to a configurable base address. By using URL conventions, you enter a path relative to a base address. If the web content is deployed locally or on an accessible server, you can enter a temporary base address to preview and check the relative links. See *Work with Relative URLs* in the Enhance Content with URLs section of the Enhance Content with Attachments chapter for more information.

Note: When a glossary term is used in a manually created web page hyperlink, no glossary link is created during glossary markup. That is, text used in manually created hyperlinks is excluded from glossary markup.

To insert a hyperlink in a web page:

1. Select the text or graphic you want to use as the hyperlink hotspot.
2. On the **Insert** menu, select **Hyperlink**.

3. On the Link to pane, select the type of hyperlink target as **Document in Library** or **URL**.

4. Depending on your selection in step 3, navigate to the target document or file or type or paste the target URL in the **Address** field.

   When selecting a URL, you can also enter a base URL and then follow links in the preview displayed in the results pane to reach your desired target.

5. Click **OK** or press ENTER.

   The presence of the hyperlink is indicated by underlining of the selected text or outlining of the selected image.

9.3.5 Edit Hyperlink Properties

After you have inserted a hyperlink in a web page, you might need to change its properties. In addition to changing the target URL or file, you can add text to display as a tooltip. For example, you might use the tooltip "terminology" for a hyperlink to a web page providing a detailed definition of a term.

Location
Path to the hyperlink target.

You can change the hyperlink target by clicking the Browse button in the Hyperlink Properties dialog box to select a new target file or URL.

Tooltip
Text used as a tooltip for the hyperlink.

The tooltip appears when a user points to the hyperlink when viewing the web page in the Player. Tooltips display the same behavior in the Developer when you view your web page from the Outline Editor or the Topic Editor (for example, in the Concept pane of the Outline Editor). If the target of a hyperlink in a web page is a URL, its tooltip also appears in document outputs that include the web page. (See *Web Page Behavior in Publishing* for more detail.)

If this field is left blank, no tooltip appears.

To edit hyperlink properties:

1. Right-click the hyperlink and select **Hyperlink Properties** from the context menu.

2. Edit the target location and/or tooltip as needed.

3. Click **OK**.

9.3.6 Remove a Hyperlink

If you decide that you no longer need a hyperlink from your web page to a particular target, you can easily remove the link. The contents of the web page remain otherwise unaffected, and the target is simply unlinked; it is not deleted from the Library or other source location.

To remove a hyperlink:

1. Right-click the hyperlink.

2. Select **Remove Hyperlink** from the context menu.

9.3.7 Insert an Image

You can add images to your web page from files stored in packages in the Library, saved on your computer or a local intranet, or available on the Internet. The Web Page Editor supports png, jpg/jpeg, and gif image file formats.

When inserting an image, you can choose from three types of sources as follows:

Image in Library: Inserts an image saved in a package in the Library.

The image displayed on the web page is linked to the package graphic file. Therefore, if you update the package file, the image displayed on the web page is automatically updated as well. However, if you move, delete, or rename the package file, you create a broken link, and a "file not available" indicator replaces the image on the web page.

Because this option allows for easy image reuse and maintenance, it is preferable for images used many times throughout your content.

Image on My Computer: Inserts an image saved elsewhere on your computer or a network.

The image is embedded in the web page; that is, it becomes part of the web page document and is not available in the Library as a separate file.

This option is preferable for images used only once or a few times.

URL: Inserts an image located on an Internet or intranet site.

For images obtained from Internet or intranet sites, you must enter (type or copy/paste) the complete URL of the image file itself. The complete URL includes the URL of the site on which it is located, plus the path to the image file within the site structure. When you insert a URL image in a web page, the image is linked to its source and is updated whenever the source file changes. However, if the source file is moved, deleted, or renamed, the link is broken, and a "file not available" indicator replaces the image on the web page. Therefore, you must be sure to use exactly the same file name and path within the site structure each time you change the source image for the link to be maintained.

To insert an image:

1. Position your cursor at the location on the web page where you want to insert the image.
2. On the **Insert** menu, select **Image**.
3. On the Link to pane, select the type of image source as **Image in Library**, **Image on My Computer**, or **URL**.
4. Depending on your selection in step 3, navigate to the desired image in the Library or on your computer/server or type/paste the target URL in the **Address** field.
5. Click **OK**.

   If you later decide that the image is not needed on the web page, you can delete it by simply selecting it and pressing DELETE.

9.3.8 Edit Image Properties

You can set the following properties for any image inserted in a web page:

Source
Path to the image source file.

You can change the image displayed by clicking the Browse button in the Image Properties dialog box to select a new source file or URL. All other image properties except size remain unchanged for the new image.

Alternative text
Text used as a tooltip (mouse-over text) for the image.

The tooltip appears when a user points to the image when viewing the web page in the Player. Tooltips display the same behavior in the Developer when you view your web page from the Outline Editor or the Topic Editor (for example, in the Concept pane of the Outline Editor).

If this field is left blank, no tooltip appears.

Use actual image size
Displays the image at its full size in the source file. The values in the Height and Width fields reflect the actual image dimensions and cannot be edited when this option is selected.

You can change the image size by deselecting this option and typing new values in the Height and Width fields. Alternatively, you can adjust the size of the image by dragging its anchors directly on the web page.

If you later choose to undo any changes made to the size of the image, simply select this checkbox again to revert to the original size.

Height
Image height, in pixels or points. When the Use actual image size option is deselected, you can modify the image height by typing the desired value in the Height field.

Width
Image width, in pixels or points. When the Use actual image size option is deselected, you can modify the image width by typing the desired value in the Width field.

Units
Choose the height and width size unit in pixels or points.

Preserve aspect ratio
Maintains the ratio between the height and width of the image, to prevent distortion as you resize the image from the Image Properties dialog box. With this option selected, you can type a new value in the Height or Width field, and the value of the other dimension is updated automatically when you tab or click off your entry.

Note that this option applies ONLY when you resize an image from the Image Properties dialog box; it does not affect changes made by dragging the image anchors directly on the web page.

Border
Width of the image border, in pixels.

For images that are not hyperlinks, the border is black.

If an image with a border functions as a hyperlink, its border appears in the default link color. If an image without a border functions as a hyperlink, a 2-pixel colored border is automatically added to indicate the presence of the hyperlink, although you can also increase the width of this border, if desired.

Alignment
Vertical or horizontal alignment of the image relative to the line containing it.

The vertical alignment options are Top, Middle, and Bottom. Top aligns the top of the image with the top of the tallest item in the line, Middle aligns the center of the image with the baseline, and Bottom aligns the bottom of the image with the baseline. In each case, the line wraps to the bottom of the image. These options have no visual effect if the image is on a line by itself.

The remaining options concern horizontal alignment. Left places the image at the left margin and wraps subsequent text along the right side of the image. Similarly, Right places the image at the right margin and wraps subsequent text along the left side of the image. If the image is on a line by itself (that is, if text wrapping is not important), you can use the paragraph alignment controls instead to obtain the same effect.

To edit image properties:

1. Double-click the image to display the Image Properties dialog box.

   You can also right-click the image and select **Image Properties** from the context menu.

2. Change the image properties as needed.

3. Click **OK** or press ENTER.

   You can also click Apply to see the effects of your changes without closing the dialog box and then make further changes to the image properties if needed.

9.3.9 Edit an Image in a Web Page

You cannot edit images directly from the Web Page Editor. Instead, you must edit the original image file in an appropriate application and then update the image in the web page as follows:

Image in Library
Replace the image file in the package, using exactly the same file name. Because the image in the web page is linked to the package file, it updates automatically.

Image on My Computer
Edit the image properties, replacing the Source entry with the path to the edited image file. All other image properties except size remain unchanged.

URL, embedded
Edit the image properties, replacing the Source entry with the path to the edited image file. All other image properties except size remain unchanged.

URL, linked
Replace the image on the source Internet or intranet site, using exactly the same file name and path to the image file within the site structure. Because the image in the web page is linked to the source file, it updates automatically.

9.3.10 Copy and Paste Web Page Content

In addition to creating new web page content directly in the Web Page Editor, you can also copy and paste content developed in another application, such as a word processing document or Internet site. You can then modify the pasted content using the formatting controls available in the Web Page Editor. For example, you could paste a column of data from a spreadsheet and then format the resulting paragraphs as a bulleted list. Note, however, that the Web Page Editor supports only the formatting options available through its toolbar. These formatting options provide flexibility but also ensure that your published content is presented well in both Player and document outputs. As a result, your pasted content might not look

identical to the selection copied from the external source, and you should always use the Web Page Editor controls after pasting content to ensure that it is formatted as intended.

Tip: Always save your web page after pasting content from external applications and before applying Web Page Editor formatting. Because saving a web page removes any unsupported formatting, this allows you to see a valid starting point for the pasted content and ensures that any subsequent formatting you apply is preserved.

The following are some points to consider when pasting content into your web pages.

Text

- Fonts that are not supported are converted to the default font style and size.
- Tabs are converted into nonbreaking spaces.
- Numbered and bulleted lists are converted to standard, left-aligned paragraphs. The number or bullet in each list item is pasted as a character or graphic, respectively, and the tab separating the number/bullet from the item text is converted into nonbreaking spaces. That is, the appearance of the lists is maintained but not the functionality.

  To obtain list functionality, you should delete the pasted numbers/bullets and apply the desired list format using the Web Page Editor controls.
- Tables are converted into paragraphs, one paragraph for each cell. The cells are converted in order across rows from left to right and then from top to bottom. If you need a table presentation, a better alternative is to create the table in an external file, save the file in a package, and then link to the package file. You can also save the table in a graphical format and insert it as an image.

Images

- Images from Internet or intranet sites can be copied using copy and paste or drag-and-drop. In both cases, you can choose to embed or link the image. If you embed the URL image, the image becomes part of the web page document. The result is exactly the same as for an image inserted from your computer.

  In contrast, a linked image is updated whenever the source file changes. However, if the source file is moved, deleted, or renamed, the link is broken, and a "file not available" indicator replaces the image on the web page.
  The linked URL option is preferable for images that are maintained on an Internet or intranet site, especially if they are updated frequently. You must be sure, however, to use exactly the same file name and path within the site structure each time you change the source image for the link to be maintained.
- Images from external documents can be copied using copy and paste or CTRL+drag-and-drop. These images are always embedded; that is, they are treated exactly the same as images inserted using the Images on My Computer option.
- Inserted images can be duplicated or moved within a web page using copy/paste or cut/paste, respectively. The pasted image retains all of the properties (alternative text, size, and border) of the original.

9.3.11 Rename a Web Page

You can rename a web page just as you would any other document. If you rename a web page to which you have linked from other documents, topic frames, or bubble text, the links remain unaffected. That is, renaming a linked web page does not break any links in your content.

Note: You can rename a web page only from the Library.

9.3.12 Delete a Web Page

You can delete a web page only from the Library, just as you would delete a document of any other type.

Deleting a web page that is linked to your content creates broken links. Therefore, if you plan to delete a web page, you should first remove any links to it from your content.

Tip: You can use the Broken Links tool to identify any broken links in your content that result from deleting a web page.

Multi-user Considerations

- Documents under version control must be checked in and you must be working online to delete a document from the Library. You can delete new documents that have never been checked in (are not under version control) while working online or offline.

  Deleted documents that are used in any outline will continue to appear in the outline. You can either remove these links from the outline or restore the deleted documents as long as the administrator has not purged them.

  Deleted documents that have been checked in to the Library can be restored if they have not been purged by your Administrator. New documents that have never been checked in cannot be restored.

9.3.13 Web Page Behavior in Publishing

The behavior of web pages in publishing depends on the type of published output, the level at which the web page is linked, and the content of the web page, as described in this section.

Player Outputs

Web pages linked at all levels are included in all Player outputs in Try It! and Do It! modes, and all hyperlinks within the web pages are active. When linked at the concept level, the web page appears directly in the Concept pane when the user selects its parent document. When linked at the frame or bubble text level, users access the web page by clicking on the link icon or hyperlinked text, respectively. In these cases, the web page opens in a new browser window. Similarly, for hyperlinks within web pages, the link target always opens in a new window.

Warning! If the target of a web page hyperlink is a package file or URL, you must ensure that your users have the appropriate setup and access to view the target of the link. Otherwise, the browser displays an error when the user attempts to access the linked attachment through the web page hyperlink.

Note: Web pages linked to frames or bubble text are not available in See It! or Know It? play modes in the Player.

Document Outputs

Only three types of document outputs ever include linked attachments such as web pages: the System Process Document, Training Guide, and Instructor Manual. For these three documents, the outcome depends on the level at which the web page is linked and its contents. Specifically, web pages linked at the concept and frame levels are included in document outputs. Web pages linked to bubble text are excluded from all document outputs.

When linked at the concept level, the web page appears immediately after the name of the parent document to which it is linked. When linked at the topic level, the web page immediately follows the screen shot and steps for the frame to which it is linked. It appears in a lightly shaded box that is indented slightly to set it off from the surrounding content, with the link icon to its left. When the same frame links to multiple web pages or other attachments that are included in document outputs, each attachment is displayed as a separate item, in the order in which it is linked.

Further details on the appearance of a web page depend on the combination of text, images, and/or hyperlinks it contains.

- Web page background color is not preserved.
- If a web page contains formatted text, the bold, italic, underline, text color, and numbered and bulleted list formatting is preserved, but the font style and font size are not. The default font style and size, as specified in the publishing styles, are used instead.
- All images inserted in web pages (as embedded images, linked package graphics, and linked URLs) are also included in document outputs. Although the images appear within the borders of the shaded box, the images themselves do not have a shaded background. The maximum image size is 1/2 page; graphics larger than this are scaled accordingly and those smaller appear at full size. If the image is also hyperlinked, the image is included in the document, but the hyperlink is ignored.

  If desired, you can use the publishing format options to exclude web page images from all document outputs.
- Web page hyperlinks are included in document outputs only when the target is a URL (not another web page or a package file) and the hyperlink is from text, not an image. In this case, the hyperlink tooltip appears in place of the linked text, followed by the target URL in parentheses. The target URL functions as an active link in the document output.

  Consider the following example:

  A web page linked as a topic concept contains the text "You can find more information at the Microsoft web site." with a hyperlink from the words "Microsoft web site" to the target URL "www.microsoft.com". Further, the tooltip of the hyperlink is "Microsoft Corporation web site". Upon publication to the System Process Document, for example, the result for this URL hyperlink is "You can find more information at the Microsoft Corporation web site (www.microsoft.com)."

Note: The Job Aid, Test, and Test Case document outputs do not include linked attachments.

9.4 Enhance Content with URLs

In addition to package files and web pages, you can also enhance your content by linking it to URLs. This allows you to link to information that is created and maintained outside the Library and is accessed directly on the Internet or a local intranet. You can use this option for any valid URL, including mailto and ftp links. For example, you can use a URL attachment to link from the Introduction frame of a topic to your corporate web site. Alternatively, you can use a mailto URL link to your help desk to allow users to easily submit questions or comments while they are viewing your content in the Player.

Note: Clicking a mailto link in the Developer or Player launches the default e-mail program specified on the user's computer and opens a new mail message with the mailto address included in the To field. You can also include a default subject and/or message text by using the "subject" and/or "body" attributes of the mailto tag.

When you use links to URL attachments, you must take three issues into consideration:

- First, your users must be online when viewing content in the Player to access URL links. In addition, you should take into account the speed of their Internet connection, especially if the target sites contain many graphics and/or multimedia components.
- Second, you must ensure that the path to the target of the link always remains valid; that is, you must not move the target of the link from its current location on the Internet or intranet. If the path to the target does change, you must update the link in

the Developer and republish your content. Otherwise, your users will encounter a "page not available" browser error when they try to access the URL by clicking the link.

- Third, you must ensure that your users have appropriate access and an appropriate setup to view the target of the link. For example, if the target of the link is located on a secure server, your users must be authorized to access the server. Likewise, if the target of the link employs plug-ins, you should ensure that your users have the appropriate plug-ins installed before they attempt to view the linked content.

When you link to a URL as the concept of a module, section, or topic, users can access the target Internet or intranet site from the Concept pane in the Player window. When you link to a URL from a frame in a topic, an icon representing the link appears in the bubble in Try It! mode or in the bubble or window in Do It! mode for that frame. If the URL is linked to the Introduction frame of a topic, its icon appears in the Introduction pane of the Player window. In each case, a user can click the icon to view the contents of the target Internet or intranet site.

In addition, you can link to URLs from bubble text in a topic frame or from text or an image in a web page. Users can view the target Internet or intranet site by clicking the hyperlinked text or graphic appearing when they view your content in the Player window.

URLs linked at the concept and frame levels and in web pages are also included in selected document outputs, namely, the System Process Document, Training Guide, and Instructor Manual. See *URL Behavior in Publishing* for more detail.

Note: URL attachments that are linked to frames or bubble text are not available in See It! or Know It? play modes in the Player.

9.4.1 URL Behavior in Publishing

The behavior of URLs in publishing depends on the type of output and the level at which the URL is linked.

Player Outputs

Like links to package files and web pages, links to URLs are included in all Player outputs in Try It! and Do It! modes. For URLs linked at the concept level, the target of the link appears in the Concept pane. For example, if your corporate web site is the concept of a module, the Concept pane displays the home page of the web site when the user selects the module document. The display is fully functional, so that users can explore the site using its navigation buttons and links. For URLs linked at the frame or bubble text level, users access the link target by clicking on the link icon or hyperlinked text, respectively; in both cases, the link target opens in a new browser window. The same is true for hyperlinks to URLs within web pages.

Note: Users must be online when viewing your content to access linked URLs. They should also have a sufficient connection speed, any necessary plug-ins, and all appropriate permissions or user accounts to access the target sites.

Note: URL attachments linked to frames or bubble text are not available in See It! or Know It? play modes in the Player.

Document Outputs

Only three types of document outputs ever include linked attachments such as URLs: the System Process Document, Training Guide, and Instructor Manual. For these three documents, the outcome depends on the level at which the URL is linked.

Direct links to URLs at the concept and frame levels appear in the same format: the text "Please refer to:" is followed by the address of the target. For example, a concept link to the Microsoft web site appears as "Please refer to: www.microsoft.com". The URL address functions as an active text hyperlink in the document output that your users can use to directly access the target of the link.

When linked at the concept level, this text appears immediately after the name of the parent document to which it is linked. When linked at the topic level, this text immediately follows the screen shot and steps for the frame to which the URL attachment is linked. It appears in a lightly shaded box that is indented slightly to set it off from the surrounding content, with the link icon to its left. When the same frame links to multiple URLs or other attachments that are included in document outputs, each attachment is displayed as a separate item, in the order in which it is linked.

Unlike package and web page attachments, URLs linked to custom bubble text in action frames are also included in document outputs. In this case, the address of the target appears in parentheses immediately after the linked text and again functions as an active text hyperlink. For example, the bubble text "You can find more information at the Microsoft web site." with a link from the text "Microsoft web site" would appear as "You can find more information at the Microsoft web site (www.microsoft.com)."

Web pages can also contain hyperlinks to URLs. Such hyperlinks are included in document outputs as part of the web pages to which they belong under the following conditions:

- The web page is linked at the concept or frame level.
- The hyperlink is from text in the web page, not an image.

In this case, the hyperlink tooltip (if defined) appears in place of the link text, followed by the address of the target URL in parentheses. The URL address functions as an active text hyperlink in the document output. Consider the following example:

A web page linked as a topic concept contains the text "You can find more information at the Microsoft web site." with a hyperlink from the words "Microsoft web site" to the same target as above (www.microsoft.com). Further, the tooltip of the hyperlink is "Microsoft Corporation web site". Upon publication to the above document outputs, the result for this URL hyperlink is "You can find more information at the Microsoft Corporation web site (www.microsoft.com)." with an active link from the text "www.microsoft.com" to the web site.

Note: The Job Aid, Test, and Test Case document outputs do not include linked URL attachments.

An absolute URL represents the fixed location of a piece of content without regards to its context. A Relative URL is a shortened version of the full URL that only makes sense when used in context. The full URL is constructed by taking a Base URL (set in the General Content Defaults) and appending the Relative URL set when creating a hyperlink). Here is an analogy to help clarify. Let's say you asked me where my brother lives and I said "right next to my house". If you didn't know where I lived, this information would not be useful. However, if you did know where I lived, then you could find my brother's house by locating my house and then find his next door. In this case, my house is an example of the Base URL and "right next to my house" is an example of the Relative URL.

Relative URLs are useful when the content developer is not sure of the location where the content will be deployed. They allow the content developer to link to content outside of the Library in the Developer.

The Base URL can be set in the Developer and can be changed, if necessary, in the Player Package after publication.

Note: If a Base URL is set in the General Content Defaults, you can enter a Relative URL (beginning with ../) when inserting a hyperlink for a URL on the Insert Hyperlink dialog box.

To insert a Relative URL:

1. Display the Insert Hyperlink dialog box.

This dialog opens by clicking **Create link** from a number of locations including the Concept, Frame properties, and Frame Links panes.

2. On the Link to pane, select **URL**.
3. Enter the Relative URL beginning with ../ in the **Address** field.

   When typing the Relative URL, the full URL displays in the Full URL field.
4. Click **Go** to preview the link to the URL.
5. Click **OK**.

9.4.2 Work with Relative URLs

You can link Developer content to Internet or intranet web pages or other content files such as documents and spreadsheets on a web server by linking to the document's URL address. Linking to a URL allows you to access content that is maintained outside of the Library.

When linking to a URL, you can type the entire absolute address of the linked content and preview it to confirm the correct address. However, you may want to link to content that has not yet been deployed, and you are unsure of the final web server for deployment. For example, you create supplemental content that is used by several customers who deploy it on different servers. In this case, you cannot enter the absolute address of the URL.

If the linked content will be located in a common base path, you can use relative URLs instead of absolute. Relative URLs are addresses which are relative to a configurable base address. The base address can be set in the Developer for previewing and in the Player package after publishing. With relative URLs, you can temporarily load the web content locally, or on a server you can access, and then create and verify the links in your content. After deploying the linked content on the permanent web server, you can edit one file in the published Player content with the location. Using relative URLs also makes it easier to update the content if the web server is moved to another location.

When using relative URLs, you do not enter the base address; instead you enter the rest of the URL path using standard URL conventions (see *Add a Relative URL* in the Enhance Content with URLs, Work with Relative URLs sections of the Enhance Content with Attachments chapter for more information about standard URL conventions).

Example: You want to create links to the following URLs on a web server:

http://abc-srv/us/support/index.html
http://abc-srv/us/downloads/index.html
http://abc-srv/us/products/middleware/default.html
http://abc-srv/us/products/database/list.doc

With "http://abc-srv/us" as the base URL address, you can use the following relative addresses to create the links:

./support/index.html
./downloads/index.html
./products/middleware/default.html
./products/database/list.doc

9.4.2.1 URL Links in Content

Links to a URL can appear in several locations in the content. Listed below are the locations where you can create these links and the methods for linking them.

- Concept for modules, sections and topics

  In the Outline Editor, select **Create link** in the Concept pane, and select **URL** in the Link to pane. See *Link an Attachment as a Concept: Outline Editor* in the Link Attachments section of the Enhance Content with Attachments chapter.

  In the Topic Editor, display the Concept pane, select **Create link**, and select **URL** in the Link to pane. See *Link an Attachment as a Concept: Topic Editor* in the Link Attachments section of the Enhance Content with Attachments chapter.

- Link in a web page (embeds the URL link in the web page)

  In the Web Page Editor, select the text or an image, on the **Insert** menu, choose **Hyperlink**, and select **URL** in the Link to pane. See *Insert a Hyperlink* in the Enhance Content with Web Pages section of the Enhance Content with Attachments chapter.

- Link in a topic frame

  In the Topic Editor, display the Frame Link pane, select **Create link**, and select **URL** in the Link to pane. See *Link to an Attachment from a Topic Frame* in the Link Attachments section of the Enhance Content with Attachments chapter.

- Link frame text

  In the Topic Editor, select the bubble text, select **Bubble text link** in the Frame Properties pane, and select **URL** in the Link to pane. See *Link to an Attachment from Bubble Text* in the Link Attachments section of the Enhance Content with Attachments chapter.

- Glossary definition

  In the Glossary Editor, add a new term, select the **Definition Link** cell and the **Browse** button, select **Create link**, and select **URL** in the Link to pane. See *Select a Definition Link Attachment* in the Define Glossary Terms chapter.

Note: Although you can link images from a URL, relative URLs do not apply to images.

9.4.2.2 Specify a Base URL

When using relative URLs, you can specify a base URL path. This base URL is not used in publishing, but allows you to preview your relative links to verify that the address is valid.

You specify a base URL path using the Browse button for the Base URL for Previewing Relative Hyperlinks setting on the General page in the Options dialog box. A base URL path must begin with "http://" or "https://". You can type the address or copy and paste it from another location, such as your browser. If the content is deployed on a locally shared web folder or on an accessible server, you can use the Go button to preview and verify the location. The base path should point to a target directory, but can also point to a filename.

When you preview a relative link in the content, the Developer combines the base URL (in the Options dialog box) with the Relative URL (as specified in the link) to create the path that the system uses to find the target URL. If you change the base URL path, preview automatically uses the new setting for newly created AND existing relative URL links. If you enter a relative URL with no base URL specified, you are notified that a base address for the relative URL is not set.

The base URL path applies to the entire Library and is included in the exported content defaults, so it can be shared with other authors. If different authors use different base URLs, all the relative links may not work. However, if you are using multiple Libraries, each Library can have its own base path.

In published content, the system resolves relative links by combining the relative paths with the current location of the Player's index.html file, which it considers the base URL path. However, the resolved links are tagged as relative links and can be updated in post-publishing. Once the target URL content is deployed on its final server, you can modify the baseUrl variable in the config.js file in the published Player content and enter this address.

9.4.2.3 Add a Relative URL

All absolute and relative hyperlinks to a URL are added using the Address field in the Insert Hyperlink dialog box. The Insert Hyperlink dialog box also contains a Full URL field, which shows the base path if one is set in the Options dialog box, plus the appended relative URL. The Full URL field is a calculated field; meaning that it is not editable. When you first open the Insert Hyperlink dialog box, the base URL path does not appear; however, as you enter a relative URL, the Full URL field updates to show the entire URL link as it is being typed. Depending on the relative URL convention you use, the Full URL inserts all or part of the base path and appends the relative address.

Note: If the linked content is not accessible or available for you to install locally, you can still create the links with relative URLs without setting a base URL; however, the linked content cannot be previewed. After the linked content is deployed, you can set the base URL path in post-publishing to resolve the links. See *Publish Relative URL Links* in the Enhance Content with URLs, Work with Relative URLs sections of the Enhance Content with Attachments chapter for more information.

URL Conventions

When entering a relative URL, the Developer follows standard URL conventions of dots and slashes as defined by webreference.com. The following list describes the standard conventions. The examples below each convention show the relative address typed into the Address field and the resulting Full URL when the base URL path is set to "http://wsgsrv/hr-content/en/us."

. (one period)

- This notation refers to the current directory. During publishing, the base path is defined as "./" (period slash); therefore, you should use the notation "./" to start a relative URL that you want appended to the full base URL.

  Relative address = ./support/supportoffices.doc
  Full URL = http://wsgsrv/hr-content/en/us/support/supportoffices.doc

.. (two periods)

- This notation indicates the parent directory. Using this in a relative URL removes everything up to the previous slash in the base URL.

  Relative address = ../au/contacts.html
  Full URL = http://wsgsrv/hr-content/en/au/contacts.html

/ (one slash)

- A relative URL that begins with / (a slash) always replaces the entire path name of the base URL.

  Relative address = /training/schedule.xls
  Full URL = http://wsgsrv/training/schedule.xls

/ / (two slashes)

- A relative URL that begins with // (2 slashes) always replaces everything from the hostname onward.

Relative address = //sales-content/contracts.html
Full URL = http://sales-content/contracts.html

<targetfilename> (no notation)

- An Address field that contains a target file with no relative URL notation characters points to the base URL. Therefore, if the target file is located in the base URL folder, you can enter the file name without a relative URL notation.

  Relative address = default.html
  Full URL = http://wsgsrv/hr-content/en/us/default.html

Note: You cannot use URL conventions to navigate to an address higher than the root of the base URL path.

Enter an Absolute URL

You can link to another URL outside of the base URL path if you enter an absolute URL in the Address field. Typing http:// or https:// in the Address field indicates that you are not entering a relative URL, and therefore, not using the base URL path.

Relative address = http://xyzserver/salescontent/home.html
Full URL = http://xyzserver/salescontent/home.html

9.4.2.4 Preview Relative URL Links

If you have set a base URL in the Options dialog box that is accessible, you can preview your relative URL links to ensure their accuracy. If you set an incorrect path to the hyperlinked content or one that is not accessible at this time, the system will not be able to preview the outline content. However, the link may still be valid once the content is fully deployed.

There are three places to preview a relative link; in the Insert Hyperlink dialog box, in the Concept pane in the Outline Editor, and in a topic preview.

Insert Hyperlink Preview

You can preview a link after typing it in the Insert Hyperlink dialog box by clicking the Go button in the dialog box. If the Full URL is accessible and is correct, the target web page appears in the dialog box.

Concept Pane Preview

You can preview a relative link used as the concept of a module, section, or topic from the Concept pane in the Outline Editor. If you link a relative URL without setting a base URL, a message notifies you that the base address is not set.

A concept may link to a relative URL in several ways:

- The concept is the URL link

  You can test this link by selecting the document in the outline and viewing the results in the Concept pane.

- A web page linked to the concept contains a hyperlink to a relative URL that you manually inserted

  You can test this link by clicking the link in the Concept pane to see if the correct target opens.

- A web page linked to the concept contains a glossary term that links to a relative URL

  You can test this link by clicking the link in the Concept pane to see if the correct target opens.

Note: You will not be able to preview relative URLs in the Concept pane if you suppressed the preview of URLs and/or web pages on the Preview page in the Options dialog box.

Topic Preview

You can use Preview in the Outline Editor to preview single topics in Try It! mode and check the relative URLs in frame links, manual bubble text links, and glossary links.

Tip: After the web content is deployed, you can change the base URL in the Options dialog box to the final location.

Document Preview

Only relative URLs appear in previewed or published documents. Depending if the document type you are previewing includes attachments, you can view the relative links in topic concepts and frame links. Although the links appear clickable in the previewed document, they do not resolve with the base URL as they do in the Player. During document preview, the Developer defines the base path (./) as a location in your local Preview folder, which means that the links do not point to the full URL.

Note: The relative links in published documents only point to the correct target if the documents are placed in the base URL folder of the hyperlinked content on the deployment server. See *Publish Relative URL Links* in the Enhance Content with URLs, Work with Relative URLs sections of the Enhance Content with Attachments chapter for more information.

9.4.2.5 Publish Relative URL Links

Relative URLs are used because there are situations where the exact deployment location is not known at the time of content authoring. You know the document structure of the Internet/intranet site to which you are linking, but not the server location. By using a relative URL, you can create the hyperlinks and set the base URL path after publishing.

Player Outputs: Updating the Root Location

The Publishing Wizard uses the location of the Player's index.html file as the base URL path to resolve the relative links; however another base URL path can be specified after publishing.

For the Player/LMS and HTML outputs, you can set the base URL path by editing the 'baseUrl" variable located in the config.js JavaScript file in the root of the published PlayerPackage folder (same level as play.exe). After adding the base URL to the JavaScript file, the relative links update during runtime. Updating the base URL in post-processing ONLY applies to relative URLs; there is no impact on absolute URLs.

To edit the base URL path, open the config.js file in Notepad and navigate to the "`baseUrl`" variable. To add the correct base URL, enter the path between single quotes, as shown in the example below.

```
baseUrl='http://wsgserver/en/us';
```

Post-processing the base URL by editing the JavaScript file only applies to Player/LMS and HTML outputs. Because standalone topic files (TPCs) are usually downloaded and played locally, you cannot use post-processing to resolve the relative links for these files. You will need to use absolute URLs if you plan to publish standalone topic files. Furthermore, in LMS deployments, the relative URL must be updated prior to importing the content into an LMS to ensure that the proper path is resolved.

Note: You should check the content links after deploying the Player content and linked content on the web server(s).

Warning! If JavaScript is turned off, the post-processing will not run and the paths to the relative links cannot be updated.

Document Outputs

Unlike Player outputs, the relative links in published documents are not updatable post-publishing. When you open a published document, only the relative links appear, but the links

are active, and can be clicked. The Developer defines the base path (./) for documents as the location where the document is stored and uses that path to resolve the relative URL. Therefore, if you want to be able to use relative links to open a target URL while viewing a document online, the document must be stored in the base URL location of the deployed web content; then the relative links will resolve to the correct full URL.

If storing the linked content and the documents in the same location on the web server is not possible, another option is to omit the relative links from published documents. All document output styles (System Process, Job Aid, Test Doc, Training Guide, Instructor Manual, Presentation), except the Test Case, have an Include Relative Links publishing option. This option allows you to control whether the links appear in the output.

Note: If you want to include links in your documents and you cannot resolve the relative links, you may have to manually edit the links in each document post-publishing with absolute URLs so that they work properly for each document. Another option is to wait until the web content is deployed, and then replace all of the relative URLs in the Developer content with absolute URLs and republish as necessary.

9.5 Link Attachments

To supplement the basic structure and step-by-step procedures provided by your module, section, and topic documents, you link from these documents to attachments. Attachments can be package files, web pages, or URLs.

You can link from your outlines to an attachment at the following three levels:

- The concept of a module, section, or topic
- A frame of a topic
- Bubble text in a topic frame, including Introduction and End frames

You can link to attachments while working in the Outline Editor (concepts only) or Topic Editor.

Once you have created a link from a document to an attachment, the link essentially becomes part of the parent document. As a result, you do not need to re-create or repair these links every time you move or reuse the parent document in your outlines. Links are also maintained if you move or copy the parent document in the Library.

The procedure for linking to an attachment at a given level is the same, regardless of the type of attachment. When you link to an attachment from a topic frame, you also select an icon that appears during topic playback in the Player to alert the user to the presence of a link and provide access to the linked information. You can also assign a tooltip to the link, for example, to provide a brief description of the linked attachment.

Multi-user Considerations

- Before you can perform this action, you must check out the parent document. After you save any changes, you should check in the parent document to make it available to other authors and add the changes to the Developer's version control system.

  You do not need to check out the attachment, only the parent document. In addition, you can link to an attachment even if it is checked out to another user.

  When you are working offline, you can link to an attachment only if it is available in your local cache. Therefore, if you plan to work offline, you should ensure that you have a local copy of any attachment to which you want to link. To do this, you can either check out or get the attachment(s), depending on whether you plan to edit them or to have access to read-only copies. If you go offline and do not have copies of some attachments in your local cache, those attachments will be unavailable to you as you work offline. To remedy this, you need to go back online and get the documents that you need.

9.5.1 Link an Attachment as a Concept: Outline Editor

You can use the Player View in the Outline Editor to link a package file, web page, or URL as the concept of a module, section, or topic document. The linked attachment then appears in the Concept pane of the Outline Editor, resembling the display in the Player window. To assist in the maintenance of concept links in the Developer, the linked attachment is also identified at the top of the pane. If the attachment is a package file or web page, the file name and location in the Library are shown; if the attachment is a URL, its absolute path is shown instead. For module and section documents, the concept expands to fill the entire right side of the Developer window, whereas for topic documents, both the concept and the introduction frame appear. If the size of the linked attachment is greater than the size of the concept pane, scroll bars allow you to view all areas of the concept.

Note: Depending on your computer system setup and browser settings, some types of package documents might not appear in the Concept pane.

The Concept pane in the Outline Editor provides the tools for linking to and managing the links to concept attachments. When linking to a package file or web page, you can filter the display to include packages or web pages only and navigate through the Library folders to the specific file you want to link. When linking to a URL, you can type or paste a base URL in the Address field and then follow links in the preview displayed in the Insert Hyperlink dialog box to reach your desired target.

The link to the concept of a parent document is saved with the document. Therefore, the concept link is maintained when the parent document is copied or moved to another outline. Conversely, deleting the link to an attachment from a parent document in one outline removes the link in all outlines where the parent document is used. The concept link to an attachment is also maintained when you copy or move a parent document in the Library or Outline Editor.

If a linked web page contains sound, controls for sound playback display in the Concept pane.

Note: You can control the display of linked content using the Preview category in Options (on the Tools menu). By default, linked content automatically appears in the Concept pane when you select a document in the outline. However, you can turn this off for all documents or selectively turn off the display by document type. If you turn off the display of linked content, you can click for any document in the outline to display the linked content.

Note: From the Concept pane, you can also click Create new web page to create a new web page and link to it in one step. When you do so, you first specify the name of the web page and the Library folder in which it should be saved. The Web Page Editor then launches in a new tab, displaying an empty web page. After you complete the web page, you can preview its contents directly in the Outline Editor tab.

To link a package file or web page as a concept from the Outline Editor:

1. With the outline open in the Outline Editor, display the Player View.
2. Select the document from which you want to create a link.
3. In the Concept pane, click **Create link**.
4. In the Link to pane, select **Document in Library**.

   If desired, you can select **Packages** or **Web pages** in the **Type** field to further filter your selection.
5. Navigate the Library to the folder containing the package file or web page to which you want to link.
6. Select the desired package file or web page document.

7. Click **OK** or press ENTER.

To link a URL as a concept from the Outline Editor:

1. With the outline open in the Outline Editor, display the Player View.
2. Select the document from which you want to create a link.
3. In the Concept pane, click **Create link**.
4. In the Link to pane, select **URL**.
5. In the **Address** field, type or paste the target URL.

   If a Base URL was set, you can enter a relative URL beginning with ../.
6. Click **Go** or press ENTER.

   While selecting a URL, you can also enter a base URL and then follow links in the preview displayed in the results pane to reach your desired target.
7. Click **OK** or press ENTER.

To create and link a new package as a concept from the Outline Editor:

1. With an outline open in the Outline Editor, display the Player View.
2. Select a document in the outline from which you want to create a link.
3. Click to launch the Package Wizard and click **Next**.
4. Add items to the package and click **Next**.
5. Type a name for the new package and browse a location in the Library where you want it saved (if you do not want to save the package using the default name and location).
6. Click **Next**.
7. Choose a file in the package that will launch in the Concept pane. Navigate through any folders contained in the new package, if appropriate.
8. Click **Next** to finish.

9.5.2 Link an Attachment as a Concept: Topic Editor

You can manage the concept of a topic directly from the Topic Editor. This allows greater efficiency in editing topics and their concepts and also provides a clearer representation of the overall organization of the topic. You can perform the same concept-related tasks from the Topic Editor as are available from the Outline Editor. The Concept toolpane also provides a preview of the linked concept attachment.

To link an existing package file or web page as a concept from the Topic Editor:

1. Display the Concept toolpane, if necessary.
2. Click **Create link**.

3. In the Link to pane, select **Document in Library**.

   If desired, you can select **Packages** or **Web pages** in the **Type** field to further filter your selection.

4. Navigate the Library to the folder containing the package file or web page to which you want to link.

5. Select the desired package file or web page document.

6. Click **OK** or press ENTER.

Note: At step 2, you can also click Create new web page to create a new web page and link to it in one step. When you do so, you first specify the name of the web page and the Library folder in which it should be saved. The Concept toolpane then closes, and an empty web page opens in a new tab. After you complete the web page, you can preview its contents in the topic by reactivating the Topic Editor tab.

To link a URL as a concept from the Topic Editor:

1. Display the Concept toolpane, if necessary.

2. Click **Create link**.

3. In the Link to pane, select **URL**.

4. In the **Address** field, type or paste the target URL.

   If a Base URL was set, you can enter a relative URL beginning with ../.

5. Click **Go** or press ENTER.

   While selecting a URL, you can also enter a base URL and then follow links in the preview displayed in the results pane to reach your desired target.

6. Click **OK** or press ENTER.

To create and link a new package as a concept from the Topic Editor:

1. Display the Concept toolpane, if necessary.

2. Click to launch the Package Wizard and click **Next**.

3. Browse to and choose the files/folders that you want to add to the package and click **Next**.

4. Type a name for the new package and browse to a location in the Library where you want it saved (if you do not want to save it in the default location).

5. Click **Next**.

6. Choose a file in the package that will launch in the Concept pane. Navigate through any folders contained in the new package, if appropriate.

7. Click **Next** to finish.

9.5.3 Link to an Attachment from a Topic Frame

Within a topic, you can link from any frame to one or more attachments. Attachments linked at this level provide information to your users as they view a topic. For example, you might link from a frame to a spreadsheet listing department codes or other reference information that users need at a particular step in a procedure. Like concept and bubble text links, links to attachments from topic frames become part of the parent document. If you then move the topic or reuse it elsewhere in your content, the linked attachment remains associated with that frame of the topic. Conversely, deleting the link to an attachment from a topic frame in one location removes the link in all places where the topic is used.

The Frame Link toolpane of the Topic Editor provides the tools for linking to and managing the links to attachments from topic frames. When linking to a package file or web page, you can filter the display to include packages or web pages only and navigate through the Library folders to the specific file you want to link. When linking to a URL, you can type or paste a base URL and then follow links in the preview displayed in the results pane of the Insert Hyperlink dialog box to reach your desired target.

Note: An absolute URL represents the fixed location of a piece of content without regards to its context. A Relative URL is a shortened version of the full URL that only makes sense when used in context. The full URL is constructed by taking a Base URL (set in the General Content Defaults) and appending the Relative UR set when creating a hyperlink). Here is an analogy to help clarify. Let's say you asked me where my brother lives and I said "right next to my house". If you didn't know where I lived, this information would not be useful. However, if you did know where I lived, then you could find my brother's house by locating my house and then find his next door. In this case, my house is an example of the Base URL and "right next to my house" is an example of the Relative URL.

Relative URLs are useful when the content developer is not sure of the location where the content will be deployed. They allow the content developer to link to content outside of the Library in the Developer.

The Base URL can be set in the Developer and can be changed, if necessary, in the Player Package after publication.

Note: If a Base URL is set in the General Content Defaults, you can enter a Relative URL (beginning with../) when inserting a hyperlink for a URL on the Insert Hyperlink dialog.

The procedure for linking to an attachment from a topic frame differs slightly from that for concepts and bubble text. When you link to an attachment from a topic frame, you can select an icon for the link and add a tooltip. The icon appears in the frame bubble when the user views the topic in the Player, and the tooltip appears when the user rests the mouse pointer over the link icon. The icon and tooltip are stored with the link itself, rather than with the attachment. Therefore, when you link to the attachment from another location in your content, you can choose to add a different icon and/or tooltip, if desired.

Unlike concepts and bubble text, which can link to only one attachment, a single topic frame can link to multiple attachments. You manage all of the attachments linked at the frame level from the same dialog box, but you can assign a different icon and/or tooltip to each of the links. You can also change the order in which multiple attachments are linked to a single topic frame. As you navigate among the frames in a topic with the Frame Link toolpane open, the display updates dynamically to show the links for each frame. This provides a simple means of managing all frame links in a topic and analyzing the overall topic layout.

 To link to an existing package file or web page from a topic frame:

1. With the topic open in the Topic Editor, navigate to the frame from which you want to link to a package file or web page.
2. Display the Frame Link toolpane, if necessary.
3. In the empty row in the Frame Link toolpane, click the **Name** field to activate it.

4. Click **Create link**.

5. In the Link to pane, select **Document in Library**.

   If desired, you can select **Packages** or **Web pages** in the **Type** field to further filter your selection.

6. Navigate the Library to the folder containing the package file or web page to which you want to link.

7. Select the desired package file or web page document.

8. Click **OK** or press ENTER.

9. An icon is added to the link by default. If desired, change the link icon.

10. The word "Link" is added as the default tooltip. If desired, change the link tooltip.

Note: You can repeat steps 3-10 to link to additional package files or web pages from the same frame or click to close the Frame Link Properties toolpane.

Note: At step 4, you can also click Create new web page to create a new web page and link to it in one step. When you do so, you first specify the name of the web page and the Library folder in which it should be saved. The main Developer window then becomes the active window, displaying an empty web page in a new tab. After you complete the web page, you can continue managing frame links in the topic by reactivating the Topic Editor window; the Frame Link Properties window remains open throughout the process.

To link to a URL from a topic frame:

1. With the topic open in the Topic Editor, navigate to the frame from which you want to link to a URL.

2. Display the Frame Link toolpane, if necessary.

3. In the empty row in the Frame Link toolpane, click the **Name** field to activate it.

4. Click **Create link**.

5. In the Link to pane, select **URL**.

6. In the **Address** field, type or paste the target URL.

   If a Base URL was set, you can enter a relative URL beginning with ../.

7. Click **Go** or press ENTER.

   While selecting a URL, you can also enter a base URL and then follow links in the preview displayed in the results pane to reach your desired target.

8. Click **OK** or press ENTER.

9. An icon is added to the link by default. If desired, change the link icon.

10. The word "Link" is added as the default tooltip. If desired, change the link tooltip.

Note: You can repeat steps 3-10 to link to additional URLs from the same frame or click to close the Frame Link Properties toolpane.

To create and link a new package from a topic frame:

1. Display the Frame Link toolpane, if necessary.
2. In the empty row in the Frame Link toolpane, click the **Name** field to activate it.
3. Click to launch the Package Wizard and click **Next**.
4. Browse to and choose the files/folders that you want to add to the package and click **Next**.
5. Type a name for the new package and browse to a location in the Library where you want it saved (if you do not want to save it in the default location).
6. Click **Next**.
7. Choose a file in the package that will launch from the frame. Navigate through any folders contained in the new package, if appropriate.
8. Click **Next** to finish.

9.5.4 Link to an Attachment from Bubble Text

As you enter custom text in bubbles and Introduction/End frames, you can link to an attachment from this text. For example, you could use a web page linked at this level to provide a definition of a term. Linked text appears in the frame bubble in color and underlined. When a user clicks linked text while viewing a topic in the Player, the attachment is displayed. If the attachment is a package file, the file opens in its parent application. If the attachment is a web page or URL, it opens in a new, independent browser window.

Note: When a glossary term is used in a manually created bubble text link, no glossary link is created during glossary markup. That is, text used in manually created bubble text links is excluded from glossary markup.

The Bubble Text Link Properties dialog box of the Topic Editor provides the tools for linking to and managing the links to attachments from bubble text. When linking to a package file or web page, you can filter the display to include packages or web pages only and navigate through the Library folders to the specific file you want to link. When linking to a URL, you can type or paste a base URL and then follow links in the preview displayed in the results pane of the Insert Hyperlink dialog box to reach your desired target. The Bubble Text Link Properties dialog box also provides a preview of the linked attachment.

Note: An absolute URL represents the fixed location of a piece of content without regards to its context. A Relative URL is a shortened version of the full URL that only makes sense when used in context. The full URL is constructed by taking a Base URL (set in the General Content Defaults) and appending the Relative UR set when creating a hyperlink). Here is an analogy to help clarify. Let's say you asked me where my brother lives and I said "right next to my house". If you didn't know where I lived, this information would not be useful. However, if you did know where I lived, then you could find my brother's house by locating my house and then find his next door. In this case, my house is an example of the Base URL and "right next to my house" is an example of the Relative URL.

Relative URLs are useful when the content developer is not sure of the location where the content will be deployed. They allow the content developer to link to content outside of the Library in the Developer.

The Base URL can be set in the Developer and can be changed, if necessary, in the Player Package after publication.

Note: If a Base URL is set in the General Content Defaults, you can enter a Relative URL (beginning with../) when inserting a hyperlink for a URL on the Insert Hyperlink dialog.

Like concept and frame links, a link to an attachment from bubble text becomes part of the parent document. If you then move or reuse the topic, the linked attachment remains associated with that text in the topic. Conversely, deleting the link to an attachment from bubble text in one location removes the link in all places where the topic is used.

To link to a package file or web page from bubble text:

1. With the topic open in the Topic Editor, navigate to the frame from which you want to link to a package file or web page.
2. Select the bubble text to be linked.
3. In the Frame Properties toolpane, click **Bubble text link**.
4. Click **Create link**.
5. In the Link to pane, select **Document in Library**.

   If desired, you can select **Packages** or **Web pages** in the **Type** field to further filter your selection.
6. Navigate the Library to the folder containing the package file or web page to which you want to link.
7. Select the desired package file or web page document.
8. Click **OK** or press ENTER.

Note: At step 4, you can also click Create new web page to create a new web page and link to it in one step. When you do so, you first specify the name of the web page and the Library folder in which it should be saved. The Bubble Text Link Properties dialog box then closes, and an empty web page opens in a new tab. After you complete the web page, you can preview its contents in the topic by reactivating the Topic Editor tab, selecting the appropriate bubble text, and again displaying the Bubble Text Link Properties dialog box as in step 3 above.

To link to a URL from bubble text:

1. With the topic open in the Topic Editor, navigate to the frame from which you want to link to a URL.
2. Select the bubble text to be linked.
3. In the Frame Properties toolpane, click **Bubble text link**.
4. Click **Create link**.
5. In the Link to pane, select **URL**.
6. In the **Address** field, type or paste the target URL.

   If a Base URL was set, you can enter a relative URL beginning with ../.
7. Click **Go** or press ENTER.

   While selecting a URL, you can also enter a base URL and then follow links in the

preview displayed in the results pane to reach your desired target.

8. Click **OK** or press ENTER.

To create and link a new package from bubble text:

1. With the topic open in the Topic Editor, navigate to the frame from which you want to link to a new package file.
2. Select the bubble text to be linked.
3. In the Frame Properties toolpane, click **Bubble text link** to display the Bubble Link Text Properties dialog box.
4. Click to launch the Package Wizard and click **Next**.
5. Browse to and choose the files/folders that you want to add to the package and click **Next**.
6. Type a name for the new package and browse to a location in the Library where you want it saved (if you do not want to save it in the default location).
7. Click **Next**.
8. Choose a file in the package that will launch when the bubble text is clicked. Navigate through any folders contained in the new package, if appropriate.
9. Click **Next** to finish.

9.5.5 Change the ToolTip of a Frame Link

When you link to attachments at the frame level, you can provide tooltips for the links. These tooltips appear when a user rests the mouse pointer over the link icon while viewing the topic in the Player. By default, the word "Link" is added as the tooltip when the link is created; however, you can change the link tooltip at any time. For example, you might want to use a tooltip that identifies the attachment contents, to provide users with information about the attachment before they launch it.

If you plan to deploy content to one or more Player outputs, use of tooltips is particularly important, especially for links to package files. For example, if a link launches a Flash animation that is several megabytes in size, you might use a tooltip such as "Flash animation of business process (4.65 MB)" to alert users before they click the link. Without such tooltips, users do not have a good indication of the type of content they will be launching or its purpose.

Tip: Although there is no limit to the length of a tooltip, concise, descriptive tooltips are most useful.

To change the tooltip of a frame link:

1. Display the Frame Link toolpane, if necessary.
2. Select the row listing the link for which you want to change the tooltip.
3. In the **Tooltip** field, delete the current text and type the desired tooltip.

9.5.6 Change the Icon of a Frame Link

When you create a link to an attachment from a topic frame, an icon is added to the link by default; however, you can change the link icon at any time. This icon appears in the frame

bubble when a user views the topic in the Player, indicating that additional information is available. Users can then click the icon to launch the linked material. By standardizing your use of link icons, you can provide your users with a consistent visual cue as to the type of information available through each link. You can also add a tooltip for each link to provide a brief text description of the linked attachment.

The Developer comes with a standard set of link icons. You can also create your own custom icons, if desired.

To change the icon of a frame link:

1. Display the Frame Link toolpane, if necessary.
2. Select the row listing the link to which you want to change the icon.
3. In the icon column, click the down arrow to display the list of available icons.
4. Select the desired icon.

9.5.7 Manage Linked Attachments

After you create links from your content to attachments, you might need to change the properties of one or more of the links. For example, you might choose to link from a particular document to a different attachment or to not link from that document to any attachment at all. If the link is from a topic frame, you might also choose to change the link icon or tooltip or to change the order of multiple attachments linked to the same frame.

You can perform any of these actions using the same controls as you used to create the initial links. Specifically, the Concept pane in the Outline Editor and the Concept Properties dialog box provide the tools for managing the links to concept attachments. The Frame Link Properties toolpane in the Topic Editor provides the tools for managing the links to frame attachments. Finally, the Bubble Text Link Properties dialog box provides the tools for managing the links from bubble text.

9.5.7.1 Change a Link Target

Once you have created a link from your content to an attachment, you might need to change the target of the link. You do not need to delete the link to the current attachment first; you can simply redirect the link to the new target.

To change the attachment linked as a concept from the Outline Editor:

1. With the outline open in the Outline Editor, display the Player View.
2. Select the document for which you want to change the linked concept attachment.
3. In the Concept pane, click **Create link**.
4. On the Link to pane, select the type of link target as **Document in Library** or **URL**.
5. Depending on your selection in the preceding step, navigate to the target document or file or type or paste the target URL in the **Address** field.

   When selecting a URL, you can also enter a base URL and then follow links in the preview displayed in the results pane to reach your desired target.
6. Click **OK** or press ENTER.

To change the attachment linked as a concept from the Topic Editor:

1. Display the Concept toolpane, if necessary.
2. Click **Create link**.
3. On the Link to pane, select the type of link target as **Document in Library** or **URL**.
4. Depending on your selection in the preceding step, navigate to the target document or file or type or paste the target URL in the **Address** field.

   When selecting a URL, you can also enter a base URL and then follow links in the preview displayed in the results pane to reach your desired target.
5. Click **OK** or press ENTER.

To change an attachment linked at the frame level:

1. With the topic open in the Topic Editor, navigate to the frame for which you want to change a linked attachment.
2. Display the Frame Link toolpane, if necessary.
3. In the list of linked attachments, select the row of the linked attachment to be changed.
4. Click **Create link**.
5. On the Link to pane, select the type of link target as **Document in Library** or **URL**.
6. Depending on your selection in the preceding step, navigate to the target document or file or type or paste the target URL in the **Address** field.

   When selecting a URL, you can also enter a base URL and then follow links in the preview displayed in the results pane to reach your desired target.
7. Click **OK** or press ENTER.
8. Click to close the Frame Link Properties toolpane.

To change an attachment linked to bubble text:

1. With the topic open in the Topic Editor, navigate to the frame containing the bubble text for which you want to change the linked attachment.
2. In the Frame toolpane, click **Bubble text link**.
3. Click **Create link**.

4. On the Link to pane, select the type of link target as **Document in Library** or **URL**.

5. Depending on your selection in the preceding step, navigate to the target document or file or type or paste the target URL in the **Address** field.

   When selecting a URL, you can also enter a base URL and then follow links in the preview displayed in the results pane to reach your desired target.

6. Click **OK** or press ENTER.

9.5.7.2 Edit a Linked Package File

If you need to edit a package file that is linked to your content, you can access the package that contains the file directly from the parent document to which it is linked. This saves you the step of having to navigate through the Library to locate the package and open it directly.

Multi-user Considerations

- Before you can perform this action, you must check out the document. After you save any changes, you should check in the document to make it available to other authors and add the changes to the Developer's version control system. You need to check out only the package, not the parent document to which the package file is linked.

  If the package is not checked out, you will be prompted to check it out before proceeding. Click Yes to continue and edit the package. Click No to cancel the process and return to your starting point; the package does not open in read-only mode.

To edit a package file linked as a concept from the Outline Editor:

1. With the outline open in the Outline Editor, display the Player View.
2. Select the document for which you want to edit the linked concept package file.
3. In the Concept toolpane, click **Edit package**.

   The package containing the linked file opens in a new tab for editing.
4. Double-click the file to open it in its native application, and edit the file as necessary.
5. Save the file and close the application.
6. Save and close the package.

   In the Outline Editor, the Concept pane refreshes, showing the changes to the concept package file.

To edit a package file linked as a concept from the Topic Editor:

1. With the topic open in the Topic Editor, on the **View** menu, point to **Panes** and choose **Concept**, if necessary.
2. Click **Edit package**.

   When you do so, the Concept Properties dialog box closes, and the main Developer window becomes the active window, displaying the package containing the linked file in a new tab for editing.

3. Double-click the file to open it in its native application, and edit the file as necessary.
4. Save the file and close the application.
5. Save and close the package.

   You can preview the changes from the topic by reactivating the Topic Editor window and again displaying the Concept Properties dialog box as in step 2 above.

To edit a package file linked at the frame level:

1. With the topic open in the Topic Editor, navigate to the frame for which you want to edit the linked package file.
2. On the View menu, point to Panes and choose **Frame Link**, if necessary.
3. In the list of linked attachments, select the row of the package file to be edited.
4. Click **Edit package**.

   When you do so, the main Developer window becomes the active window, displaying the package containing the linked file in a new tab for editing.
5. Double-click the file to open it in its native application, and edit the file as necessary.
6. Save the file and close the application.
7. Save and close the package.

To edit a package file linked to bubble text:

1. With the topic open in the Topic Editor, navigate to the frame containing the bubble text for which you want to edit the linked package file.
2. In the Frame toolpane, click **Bubble text link**.
3. Click **Edit package**.

   When you do so, the Bubble Text Link Properties dialog box closes, and the main Developer window becomes the active window, displaying the package containing the linked file in a new tab for editing.
4. Double-click the file to open it in its native application, and edit the file as necessary.
5. Save the file and close the application.
6. Save and close the package.

   You can preview the changes from the topic by reactivating the Topic Editor window, selecting the appropriate bubble text, and again displaying the Bubble Text Link Properties dialog box as in step 3 above.

9.5.7.3 Edit a Linked Web Page

If you need to edit a web page that is linked to your content, you can access the web page for editing directly from the parent document to which it is linked. This saves you the step of having to navigate through the Library to locate the web page and open it directly.

Multi-user Considerations

- Before you can perform this action, you must check out the document. After you save any changes, you should check in the document to make it available to other authors and add the changes to the Developer's version control system. You need to check out only the web page, not the parent document to which it is linked.

  If the web page is not checked out, you will be prompted to check it out before proceeding. Click Yes to continue and edit the web page. Click No to cancel the process and return to your starting point; the web page does not open in read-only mode.

To edit a web page linked as a concept from the Outline Editor:

1. With the outline open in the Outline Editor, display the Player View.
2. Select the document for which you want to edit the linked concept web page.
3. In the Concept toolpane, click **Edit web page**.

   The web page opens in a new tab for editing.
4. Edit the web page as necessary.
5. Save and close the web page.

   In the Outline Editor, the Concept pane refreshes, showing the changes to the concept web page.

To edit a web page linked as a concept from the Topic Editor:

1. With the topic open in the Topic Editor, display the Concept toolpane, if necessary.
2. Click **Edit web page**.

   When you do so, the Concept Properties dialog box closes, and the main Developer window becomes the active window, displaying the web page in a new tab for editing.
3. Edit the web page as necessary.
4. Save and close the web page.

   You can preview the changes from the topic by reactivating the Topic Editor window and again displaying the Concept Properties dialog box as in step 2 above.

To edit a web page linked at the frame level:

1. With the topic open in the Topic Editor, navigate to the frame for which you want to edit the linked web page.
2. Display the Frame Link toolpane, if necessary.
3. In the list of linked attachments, select the row of the web page to be edited.
4. Click **Edit web page**.

   When you do so, the main Developer window becomes the active window, displaying the web page in a new tab for editing.

5. Edit the web page as necessary.

6. Save and close the web page.

To edit a web page linked to bubble text:

1. With the topic open in the Topic Editor, navigate to the frame containing the bubble text for which you want to edit the linked web page.

2. In the Frame Properties toolpane, click **Bubble text link**.

3. Click **Edit web page**.

   When you do so, the Bubble Text Link Properties dialog box closes, and the main Developer window becomes the active window, displaying the web page in a new tab for editing.

4. Edit the web page as necessary.

5. Save and close the web page.

   You can preview the changes from the topic by reactivating the Topic Editor window, selecting the appropriate bubble text, and again displaying the Bubble Text Link Properties dialog box as in step 3 above.

9.5.7.4 Delete an Attachment Link

You can delete the link to an attachment from a document, topic frame, or bubble text at any time. For example, you might decide that an attachment linked at the fourth frame of a topic should be linked at the sixth frame instead. In this case, you cannot just change the link target; you need to completely remove the link from the fourth frame. When you delete the link to an attachment, you are not deleting it; you are simply removing the link. The attachment is still in the Library and available for use.

You can delete links to attachments from the Outline Editor (concepts only) or from the Topic Editor (topic concepts and frame and bubble text links).

To delete the link to a concept attachment from the Outline Editor:

1. With the outline open in the Outline Editor, display the Player View.

2. Select the document from which you want to delete the attachment link.

3. In the Concept toolpane, click **Delete link**.

To delete the link to a concept attachment from the Topic Editor:

1. With the topic open in the Topic Editor, display the Concept toolpane, if necessary.

2. Click **Delete link**.

3. Click **OK**.

To delete the link to a frame attachment:

1. With the topic open in the Topic Editor, navigate to the frame from which you want to delete the link to an attachment.

2. Display the Frame Link toolpane, if necessary.
3. In the list of attached documents, select the row of the attachment link to be deleted.
4. Click **Delete link**.
5. Click to close the Frame Link toolpane.

To delete the link to a bubble text attachment:

1. With the topic open in the Topic Editor, navigate to the frame from which you want to delete the link to a bubble text attachment.
2. In the Frame Properties toolpane, select the underlined bubble text with the hyperlink that you want to remove and click **Bubble text link**.
3. Click **Delete link**.
4. Click **OK**.

9.5.7.5 Change the Icon of a Frame Link

When you create a link to an attachment from a topic frame, an icon is added to the link by default; however, you can change the link icon at any time. This icon appears in the frame bubble when a user views the topic in the Player, indicating that additional information is available. Users can then click the icon to launch the linked material. By standardizing your use of link icons, you can provide your users with a consistent visual cue as to the type of information available through each link. You can also add a tooltip for each link to provide a brief text description of the linked attachment.

The Developer comes with a standard set of link icons. You can also create your own custom icons, if desired.

To change the icon of a frame link:

1. Display the Frame Link toolpane, if necessary.
2. Select the row listing the link to which you want to change the icon.
3. In the icon column, click the down arrow to display the list of available icons.
4. Select the desired icon.

9.5.7.6 Change the ToolTip of a Frame Link

When you link to attachments at the frame level, you can provide tooltips for the links. These tooltips appear when a user rests the mouse pointer over the link icon while viewing the topic in the Player. By default, the word "Link" is added as the tooltip when the link is created; however, you can change the link tooltip at any time. For example, you might want to use a tooltip that identifies the attachment contents, to provide users with information about the attachment before they launch it.

If you plan to deploy content to one or more Player outputs, use of tooltips is particularly important, especially for links to package files. For example, if a link launches a Flash animation that is several megabytes in size, you might use a tooltip such as "Flash animation of business process (4.65 MB)" to alert users before they click the link. Without such tooltips, users do not have a good indication of the type of content they will be launching or its purpose.

Tip: Although there is no limit to the length of a tooltip, concise, descriptive tooltips are most useful.

To change the tooltip of a frame link:

1. Display the Frame Link toolpane, if necessary.
2. Select the row listing the link for which you want to change the tooltip.
3. In the **Tooltip** field, delete the current text and type the desired tooltip.

9.5.7.7 Change the Order of Multiple Frame Links

More than one web page can be linked to a topic frame. By default, the attachments appear in the order in which they were linked. However, you can easily change the order of the linked attachments.

To change the order of multiple frame links:

1. Open the topic in the Topic Editor.
2. Navigate to the frame for which you want to change the link order.
3. Display the Frame Link toolpane, if necessary.
4. In the list of linked attachments, select the row of an attachment whose order you want to change.
5. Use the **Move Up** and **Move Down** arrows to move the attachment to the desired position in the list.
6. Repeat steps 4 and 5 as needed to obtain the desired order of linked attachments.
7. Click to close the Frame Link toolpane.

9.5.8 Create a Custom Icon

In addition to using the standard icons, you can create your own custom icons. You might want to create a custom icon that is consistent with those used in existing documentation, for example, or one that is based on your company logo. You can also make a new icon by starting with an existing icon, editing it as necessary, and saving it with a new name.

To be used as a custom icon, a graphic file must satisfy the following constraints:

- It must be 22 pixels x 22 pixels in size.
- It must be saved in .png, .jpg, or .gif format.
- It must be saved in a package in the Library folder System/Icons/Custom.

An empty Custom folder is present in your Library by default, even if your content does not currently include custom icons.

Note: The color depth for icons is unrestricted, although 8- or 16-bit color is typically sufficient.

When you change the icon of a frame link, you see a preview of each icon file saved in the folders System/Icons/Standard and System/Icons/Custom. You cannot browse to any other Library location to select an icon saved elsewhere. Also, if any file saved in a package in either of these folders does not satisfy the requirements for use as an icon (22 pixels x 22 pixels;

.png, .jpg, or .gif format), you will not be able to select it as an icon. In this case, you must edit the file in the package in order to use it as an icon.

You can simplify icon management by taking the following approach:

- Save only one icon per package.
- Use the same name for the package and the icon file it contains.
- Ensure that only valid icon files, contained in packages, are saved in the Library folders System/Icons/Standard and System/Icons/Custom.

Multi-user Considerations

- Any new document that you create or link is automatically checked out to you. If you want to make a new document available to multiple authors and place the document under the Developer's version control system, you must check it in.

  See *Check In and Check Out Documents* in Use the Developer in a Multi-user Environment for more information.

To create a custom icon:

1. In your image editing software, create a graphic appropriate for use as a link icon. You can also make a new icon by starting with an existing icon and editing it as necessary.

   An icon graphic must be 22 pixels x 22 pixels and must be of .png, .jpg, or .gif format.

2. Create a new package.
3. Add the image file to the package.
4. Save the package in the folder System/Icons/Custom.

Tip: To simplify icon management, use the same name for the custom icon file and the package in which it is saved.

Warning! No size or format validation is performed when you add a custom icon to the Library. Therefore, you should verify that the file satisfies the requirements for use as an icon before adding it to the Library.

10 Enhance Content with Sound

The Developer provides the tools that you need to create and edit sound to deploy in your content without any specialized audio applications. You can add sound during topic recording using the Recorder (with sound enabled) or to an existing topic using the Topic Sound Recorder.

Once recorded, you can use the Sound Editor to make adjustments to recordings.

Sound can be created on a frame by frame basis but when you edit a frame, the sound file for the previous and next frames (if they exist) are combined with the current sound file. This allows for a seamless adjustment of sound with the neighboring frames. Once saved, the files are split back out to the associated frames but are stored together with the sounds that make up the topic.

10.1 Sound Recording Best Practices

Audio recording is a noise-sensitive process that requires a quiet space, free from typical ambient office sounds such as voices, phones, air-conditioning, street noise, and so on. Choose an office space to record in that has minimal evident street noises. Listen for air-conditioning hum, voices, and other obvious noise in the space. If there are blinds in the windows, lower them to further reduce outside noise. If you are recording in more than one session, be sure to record in the same space each time. This reduces obvious changes in sound quality.

Selecting a Microphone

There are many microphones available to use with your computer. DO NOT use the internal microphone on your computer; it is not appropriate to record narration, as it will pick up hard-drive and cooling-fan noise. USB microphones are primarily made for low budget applications and are not recommended for professional recording. These microphones tend to add background noise and have limited dynamic range.

Noise cancellation or rejection microphones are recommended. These microphones only pick up the sound from directly in front of the microphone. A windscreen helps cut the sound of the speakers breathing. Some microphones listen for sound from all directions and are not recommended because they will pickup extraneous sounds during recording.

Microphones designed for the telephone are not a good choice because they usually use only mid range frequencies to reduce bandwidth requirements. Choose a microphone with a wide frequency range (100Hz to 15kHz). Analog microphones are preferable because they plug directly into the audio card microphone input and can take advantage of the computer's pre-amp instead of the lesser quality pre-amp typically found in a USB cable.

When using an external microphone, always turn off the Line In and Internal Mic controls to prevent interference in the recording quality. Close any extraneous applications on your computer, particularly those with alerts and sounds, such as email that has new mail notification. These sounds will record with the audio if not turned off.

For additional microphone information, go to http://www.microphones.com.

Position Microphone

Choose a microphone with a headset mount or a stand. If you are using a free-standing microphone, always place the microphone in the same location to help ensure recording levels are the same for each recording session. With free standing microphones, you often have to turn up the gain to increase the signal enough to get a good recording. Turning up the gain also turns up the background noise. Moving closer to the microphone can eliminate the need to turn up the gain but often creates an uncomfortable position and is not ideal for long recording sessions. If you are using a headset, position the microphone several inches away and below your mouth so that when you speak, you are speaking over the microphone. This reduces the risk of distorting the signal into the computer. A headset with a flexible boom microphone that moves with the speaker is ideal for long recording sessions.

Create a script for your narration

Scripts are helpful when you record audio. They ensure that the final presentation flows coherently and incorporates the appropriate level of detail, ensuring that the audio portion delivers easily and the message is clear and succinct.

Create a test recording to determine the proper levels

Record the narration for the first page of your presentation using the Sound Recorder's VU meter to monitor and review the audio for quality.

Record in one session

It is very clear when a narrator has recorded audio at different times and on different equipment. This can distract learners. If possible, plan enough time to record your presentation, play it back, and edit the audio in a single session.

Set Sound Playback and Record Options

Do not mute the speaker on your computer while you are recording because sounds are used to indicate Record and Pause states.

To prevent feedback, set your Windows audio to mute the Playback microphone. These instructions are specific to Windows XP. If you are running a different version of Windows, they will be similar, but not exact.

To set sound playback and record options:

1. Open the Control Panel.
2. Double-click **Sounds and Audio Devices**.
3. Click the **Audio** tab to display the sound playback and recording options.
4. In the Sound Playback section, click **Volume** to display the Volume Control window.
5. For Microphone, choose **Mute** to disable the device and prevent feedback during recording.
6. Close the Volume Control window.
7. In the Sound Recording section, click the **Volume** to display the Recording Control window.
8. For Microphone, choose **Select** to enable the device to record.
9. If using an external microphone, turn the volume all the way down on the **Line In** and **Internal Mic** to prevent interference in the recording quality.
10. Close the Recording Control window to return to the Sounds and Audio Devices Properties window.
11. Click the **Apply** to save changes.
12. Click the **OK** exit the Sounds and Audio Devices Properties window.

10.2 Record Sound

You can record sound at:

- **Content creation**: When the content is created via the Recorder (for example, when recording a topic) or via the Sound Editor toolpane (for example, when recording sound on a new web page).

- **Post content creation**: Using the Sound Editor toolpane (for example, replacing the sound on an existing web page).

10.2.1 Enable Sound

You enable sound in the Developer by selecting a few settings on the Options dialog box accessed from the Tools menu.

Sound settings are located in the Recorder categories:

Recorder category

- **Sound Recording**: Use these options to control how sound is recorded with a topic.

  Record sound with topic: By default, the recorder is not set to record sound with a topic. Click this option to enable sound recording on the Recorder. The display of the Recorder depends on the state of this option and the Screenshot capture mode (Automatic or Manual). See *Recorder Logic* for more on Screenshot capture mode.

  Note: This setting can be overridden on the Recorder at the beginning of the recording session.

- **Pause Sound recording key**: By default, the Recorder uses the PAUSE key to pause sound recording for a topic. If the PAUSE key is difficult or inconvenient for you to use, you can change the Recorder sound pause key. You can use any of the function keys, or a combination of any of the function keys (F1 through F12) and the ALT key, CTRL key, and/or SHIFT key.

  If you change the Sound pause key, you should select a key or key combination that is not used in the target application for another purpose. For example, pressing the F1 key in some applications opens a Help window. Therefore, for those applications you would not want to use the F1 key to pause sound recording.

10.2.2 Configure the Recorder for Sound

The Recorder behavior varies based on how the Screenshot capture mode (Manual or Automatic) and Sound Recording (Record sound with topic) are set.

The Recorder behavior is summarized below.

- **Record sound with topic is On**

  Screenshot capture is Manual: Sound icons are active. "Press PrintScreen to begin Recording" message displays. The Recorder records Start Screen sound. A screenshot (with associated sound) is recorded with each additional PrintScreen.

  Screenshot capture is Automatic: Sound icon is On. "Press PrintScreen to record Start Screen Sound" message displays. The Deskband activates and Start Screen sound is recorded. A second PrintScreen begins recording a screenshot for each keystroke (and sound if any) until the next PrintScreen. The camera icon flashes to indicate when a screenshot is taken.

- **Record sound with topic is Off**

  Screenshot capture is Manual: Sound icon is muted, volume and VU meter disabled. "Press PrintScreen to begin recording" message displays. The Start Screen is recorded. A screenshot is recorded with each PrintScreen. A camera clicking sound indicates when the screenshot is taken.

  Screenshot capture is Automatic: Sound icon is muted. The Deskband activates and keystrokes are recorded until the next PrintScreen. No sound is recorded. The camera icon flashes and the camera clicking sound indicates when a screen shot is taken.

10.2.3 Record Sound When Recording a Topic

If sound is enabled in Tools, Options, the icons for recording sound appear at the bottom of the Recorder.

Starts recording sound on the current screen. This icon is only active until the first screenshot of the session is taken.

Opens the Sound Tuning Wizard for adjusting sound playback and recording volume. This icon is only active in Pause mode.

Visual indicator of the amplitude of the speaker's voice.

How these icons function depends on the Screenshot capture mode (Manual or Automatic).

10.2.4 Use the Recorder Deskband in Automatic Record Mode

A deskband is a dockable window on your desktop that is designed to minimize programs you want to keep running but only use on occasion. These programs do not take up space on the Taskbar and only display when necessary.

If the Recorder is configured to record sound and is in automatically record screenshot mode, the camera sound that occurs when recording a frame is disabled so it is not part of the recording. When you press PRINTSCREEN during the recording process, the Recorder deskband appears in the taskbar providing a visual camera cue that a screenshot is being taken. The Recorder deskband also contains other icons to make adjustments to sound recordings.

Opens the Author Notes dialog for adding comments or testing notes.

When sound is being recorded, the Pause button displays.

When sound recording is paused, the Record button displays.

Opens the Sound Tuning Wizard for adjusting sound playback and recording volume. This icon is only active in Pause mode.

This is a visual scale depicting the recording level. Levels range from no color (no recording level), through Green, Dark Green, Yellow and Red (Very High recording level).

This visual indicator appears when a screenshot is taken if the Recorder is configured to automatically record screenshots. This space on the deskband also displays the type of context being recorded. See *Context Recognition in the Recorder* in the Record Topic Content section of the Content Development Guide for more information.

10.2.5 Record Sound in a Topic using the Sound Editor

Record Sound on the Sound Editor toolpane of the Topic Editor lets you record sound on a frame or series of frames of an existing topic.

The mode of the Sound Recorder depends on the selection when the Record Sound button is pressed. If a sound segment is selected, the Sound Recorder opens in Record Selection mode and the new sound replaces the selected segment. If nothing is selected, the Sound Recorder opens in Record Frame mode and the new sound replaces the sound on the frame.

You can select and tune a recording device in the Sound Tuning Wizard. The Sound Recorder displays the name of the selected device. If the selected device is not connected, a message is displayed. You can either reconnect the device or run the Sound Tuning Wizard and select another device.

Note: Record Sound is inactive on selections that cross frames.

To record sound on an existing topic or web page:

1. Click the location in the waveform where you want to record sound.
2. Click **Record Sound**.

   The Sound Recorder opens in Record Sound mode and recording begins.
3. Record the desired sound using the or to navigate the frame structure if recording over multiple frames.
4. Click **OK** when you are finished recording.

10.2.6 Record Sound in a Web Page using the Sound Editor

Record Sound on the Sound Editor toolpane of the Web Page Editor lets you record sound on a web page.

The mode of the Sound Recorder depends on the selection set when the Record Sound button is pressed. If a sound segment is selected in the waveform, the Sound Recorder opens in Record Selection mode and the new sound replaces the selected segment. If no selection set is made in the waveform, the Sound Recorder opens in Record Sound mode and the new sound displays in the waveform if no sound has previously been recorded or replaces any sound previously recorded in the waveform on the web page.

You can select and tune a recording device in the Sound Tuning Wizard. The Sound Recorder displays the name of the selected device. If the selected device is not connected, a message is displayed. You can either reconnect the device or run the Sound Tuning Wizard and select another device.

To record sound on a web page:

1. Display the Sound Editor toolpane in the Web Page Editor.
2. Click **Record Sound**.
3. Record the desired sound.
4. Click **OK**.

   The newly recorded sound covers the entire waveform and replaces any exiting sound on the web page.

To record over a selected sound segment on a web page:

1. Display the Sound Editor toolpane in the Web Page Editor.
2. Left click and drag in the waveform to select the sound segment to be recorded over.
3. Click **Record Sound**.

   The Sound Recorder opens in Record Sound mode and recording begins.
4. Record the desired sound.

5. Click **OK**.

   The newly recorded sound replaces the selected sound.

10.2.7 Insert Sound

Insert Sound allows you to insert a new segment of sound into the waveform. For example, if you need to insert a new sentence or paragraph into your recording, you can insert the sound instead of rerecording the entire sound file. Clicking Insert Sound opens the Sound Recorder in Insert Sound mode. The toolbar is identical to Sound Recorder in Record Frame mode but the new sound is inserted at the selection point without overwriting the existing sound in the waveform.

Note: Insert Sound is inactive if a segment is selected in the waveform. Sound can only be inserted at a marker in a waveform

To insert sound:

1. Click the location in the waveform to insert a new recording.
2. Click **Insert Sound**.

   The Sound Recorder opens in Insert Sound mode and begins recording.
3. Record the desired audio or use the Sound Recorder toolbar to make adjustments.
4. Click **OK**.

   The new sound is added to the waveform without overwriting the existing sound.

10.3 Import a Sound File

If you have access to a prerecorded sound file that you want to use in your content, you can import the sound file. Supported file formats include .aiff, .aif, .au, .mp3, .snd, .wav or .wma. The imported sound file is embedded into the topic.

Note: You can not import an .mp3 file into a web page.

Importing .mp3 files into topics

You can import an .mp3 file into a topic but you can not edit it in the Sound Editor. To edit an .mp3 file, export it, edit it using a valid MP3 editor and import the file back into the Sound Editor.

Note: You can import sound files in bulk to a Library. This allows you to use a central folder for your sound files. See *Import Sound Files in Bulk* for more information.

To import a sound file:

1. From the Sound Editor toolpane select the frame or web page where you want to import a sound file.
2. Click **Import Sound**.
3. In the Import Sound dialog box, click the **Look in** list box and choose the drive where the file is located.
4. Open the folder where the file is located and choose the desired sound file.
5. Click **Open**.

   The sound file is imported into the selected frame.

10.4 Export a Sound File

After you have recorded sound for your content, you can edit it or use it in another application by exporting the sound file.

Note: You can export sound files in bulk from your outline. This allows you to use a central folder for your sound files. See *Export Sound Files in Bulk* for more information.

To export a sound file:

1. From the Sound Editor toolpane select the frame or web page with the sound to export and click **Export Sound**.
2. Navigate to the destination export location and select (or enter) a file name.
3. Click **Save**.

10.5 Edit Sound

The Developer has a fully functional Sound Editor built in to the Topic Editor. You can edit sound frame by frame or across frames on a topic or edit the sound on a web page using the Sound Editor toolpane.

Note: Each time sound playback or recording is started, the Sound Editor checks to see if the playback and recording device last used are still available. If the device is no longer connected, a warning message displays. You can reconnect the device and click OK or click Cancel to launch the Sound Tuning Wizard. See *Adjust Sound Controls* in the Enhance Content with Sound chapter of the Content Development manual for more information on the Sound Tuning Wizard.

10.5.1 Sound Editor Toolpane

The Sound Editor toolpane is used to manipulate the sounds associated with each frame of a topic or a web page. The Sound Editor toolpane is made up of a waveform and a toolbar.

The waveform is a visual representation of the shape and form of the sound signal. You can use the Sound Editor controls to locate, select and edit, all or parts of the sound in the waveform.

Note: When you edit sound for a topic, the Sound Editor toolpane displays a temporary sound file made up of the current frame and the sound from the previous and next frames (if they exist). When the file is saved, the sound file is stored as three separate sound files.

Opens the Audio Import dialog box for importing sound into the current frame or web page.

Opens the Audio Export dialog box for exporting sound from the current frame or web page.

Launches the Sound Recorder to record sound on a frame or frames or on a web page.

Opens the Sound Recorder in an insert mode so a new piece of sound can be added at the insertion point without overwriting any existing sound.

Plays the sound from the beginning of the waveform or from a selection point if one is selected.

Pauses the playback of a sound file. Once the Play or Play frame buttons are pressed, they are replaced by the Pause button.

Plays the sound from the beginning to the end of the current frame. This icon does not display when editing sound on a web page.

Stops the playback of the sound file.

Cuts the selection to the clipboard and removes it from the waveform.

Copies the selection to the clipboard and retains it in the waveform.

Inserts the copied or cut selection. The selection is inserted at the cursor or replaces the selection.

Deletes the selection in the waveform. Delete selection reduces the timeline of the waveform. This is grayed out if nothing is selected.

Selects the current frame in the waveform when editing sound on a topic. Selects the entire waveform when editing sound on a web page.

Deselects any selection set.

Allows you to adjust the start of frame sound. When the icon is clicked, the cursor location becomes the new beginning of the frame. Any sound to the left of the cursor becomes part of the previous frame. You can also adjust the frame sound start position by dragging the frame start marker. If no previous frame exists, this button is grayed out. This icon does not display when editing sound on a web page.

Allows you to adjust the end of frame sound. When the icon is clicked, the cursor location becomes the new end of the frame. Any sound to the right of the cursor becomes part of the next frame. You can also adjust the frame sound end position by dragging the frame end marker. If no next frame exists, this button is grayed out. This icon does not display when editing sound on a web page.

Removes all sound that is not selected and replaces it with the selection. Frame markers are preserved when cropping sound in a topic. This button is grayed out if nothing is selected.

When editing sound in topic, this menu contains three preset zoom levels (Zoom to Current Frame, Zoom to Previous and Next Frame, Zoom to Selection) for zooming in the waveform.

When editing sound in a web page, this icon zooms to the selection set in the waveform. The icon is grayed out when nothing is selected.

This menu contains options to extend the timeline, add silence in the waveform, and adjust the amplification of the sound level.

Opens the Sound Tuning Wizard for adjusting the playback and recording volume.

10.5.2 Cut, Copy and Paste Sound

The Topic Sound Editor contains tools for copying, cutting and pasting pieces of sound in the waveform.

Cuts the selected portion of the waveform to the clipboard. The waveform updates and removes the cut selection. Cut is disabled until a selection is made in the waveform.

Copies the selected portion of the waveform to the clipboard. The waveform is left unchanged. Copy is disabled until a selection is made in the waveform.

Inserts sound from the clipboard into the waveform. The pasted sound is added to the waveform at the insertion point. Paste is disabled unless something has been copied or cut to the clipboard.

To copy and paste a piece of sound:

1. Click and drag in the waveform to select the piece of the sound you want to copy.
2. Choose **Copy**.

   You can also right-click your selection and choose Copy.
3. Select the desired location to paste your selection.

   The destination location can be within the current waveform or a waveform in another topic.
4. Choose **Paste** to paste a new instance of the copied sound.

   You can also right-click the waveform where you want to paste your selection and choose Paste.

To cut a piece of sound:

1. Left click and drag in the waveform to select the piece of the sound you want to cut.
2. Choose **Cut**.

   You can also right-click your selection and choose Cut.

To cut and paste a piece of sound:

1. Left click and drag in the waveform to select the piece of the sound you want to cut.
2. Choose **Cut**.

   You can also right-click your selection and choose Cut.
3. Select the desired location to paste your selection.

   The destination location can be within the current waveform or a waveform in another topic.
4. Choose **Paste** to paste a new instance of the copied sound.

   You can also right-click the waveform where you want to paste your selection and choose Paste.

10.5.3 Delete a Sound

If you do not want a segment of existing sound, you can delete it and compress the waveform by the size of the deletion. Delete is only active if a piece of sound is selected in the waveform.

To delete a piece of sound:

1. Left click and drag in the waveform to select the piece of the sound you want to delete.

2. Click **Delete Selection**.

10.5.4 Select a Frame

When working with sound across frames, the sound displaying in the Sound Editor is often over more than just the current frame. If you want to work with only the sound on a frame, you can use Select Frame to highlight the piece of sound associated with the current frame.

To select the current frame in the waveform:

1. Choose **Select Frame**.

   The sound associated with the current frame is highlighted in the waveform.

10.5.5 Deselect a Sound

Many Sound Editor functions are applied against a selection that you make in the waveform. When a piece of sound is selected, either by Select Frame or by clicking and dragging in the waveform, the Deselect button becomes active. Use Deselect to cancel the selection displayed in the waveform.

To deselect a sound in the waveform:

1. Choose **Deselect All**.

   Any selected piece of sound in the waveform is deselected.

10.5.6 Adjust the Start and Stop Point of Sound in a Frame

When working with sound recorded over a series of frames, you may need to adjust where the sound begins and/or ends on a specific frame. You can make these adjustments with Set Frame Sound Start and Set Frame Sound End or by dragging the frame start and end markers. Any pieces of sound excluded from the frame by the adjustment become part of the sound for the previous or next frame. For example, if the start marker is moved 3 seconds to the right, those three second that were part of the current frame become part of the previous frame. If no previous or next frame is available, the buttons are disabled.

To set the start of frame sound:

1. Click the location in the waveform of a frame where you want the current frame sound to start.

2. Click **Set start of frame sound**.

   The solid yellow vertical line marks where the frame sound starts. Any sound to the left of this marker that was previously in the frame becomes part of the previous frame sound. Any sound to the right of this marker that was previously in the frame become part of the sound for the next frame.

To set the end of frame sound:

1. Click the location in the waveform of a frame where you want to sound to end.

2. Click **Set end of frame sound**.

   The solid yellow vertical line marks where the frame sound ends. Any sound to the right of this marker that was previously in the frame becomes part of the next frame sound. Any sound to the left of this marker that was previously in the frame become part of the sound for the previous frame.

10.5.7 Crop Sound to Selection

When editing sound, you may need to remove the sound before and after the sound. For example, you made final edits and you want to discard some extraneous sound before and after your edited sound. You can make these adjustments by cropping sound with Crop Sound to Selection by selecting the sound you want to keep. All sound in the waveform that is not selected is replaced with the selection. Your selection set can be across frames and the frame markers will be preserved.

If no sound is selected, the button is disabled.

To crop the sound in a frame:

1. Click and drag in the waveform to select the piece of the sound you want to crop to.
2. Click **Crop to selection**.

   All frame sound in the waveform that is outside the selection set is replaced with the selection.

10.5.8 Zooming to a Sound

When working with sound in the Sound Editor, the waveform often displays sound across more than one frame. The ability to zoom makes it easier to keep track of the frame sound on which you are working.

The Sound Editor provides the following zoom modes:

- **Zoom to Current Frame**: Centers the current frame in the waveform with portions of the previous and next frames on either side. The gray slider bar shows the duration of the current frame with respect to the entire sound file.
- **Zoom to Previous and Next Frame**: Displays the entire waveform (previous, current and next frames). The gray slider bar spans the entire waveform.
- **Zoom to Selection**: Displays the selected piece of sound in the waveform. The gray slider bar shows the duration of the selected sound with respect to the entire sound file.

Once a zoom mode is selected, it remains the mode until a different mode is selected. The active mode is indicated with a checkmark in the Zoom menu. Dragging the gray slider changes the zoom and removes the checkmark next to the selected predefined zoom mode.

Note: The Sound Editor toolpane in the Web Page Editor only contains the Zoom to selection mode.

To zoom to the current frame:

1. From the **Zoom** menu, click **Zoom to Current Frame**.

   The current frame displays in the middle of the waveform with portions of the previous and next frame on either side.

To zoom to the previous and next frames:

1. From the **Zoom** menu, click **Zoom to Previous and Next Frame**.

   The entire previous, current, and next frames display in the waveform.

To zoom to a selected piece of sound:

1. Left click and drag in the waveform to select the piece of the sound you want zoom.
2. From the **Zoom** menu, click **Zoom to Selection**.

   The selected sound only displays in the waveform.

10.5.9 Adjust Sound Controls

You can adjust the sound quality using the Sound Tuning Wizard.

Step 1: Adjust the Playback Volume

The first page of the wizard steps you through the selection of a sound playback device and adjustments to the playback volume. When the wizard is launched for the first time (after installation or upgrade), the playback device defaults to the sound playback default device set in the Control Panel. You can override this default on the wizard by selecting a different device from the Playback device list box.

Note: Master volume and/or Wave volume controls differ by operating system. See your operating system documentation if these adjustment sliders do not appear in the Sound Tuning Wizard on your operating system.

Use the Play button to play a standard sound so you can adjust the volume settings.

Note: If you press the Cancel button, volume changes are not saved.

Step 2: Adjust the Recording Volume

The second page of the wizard steps you through the recording device selection and the recording volume settings. When the wizard is launched for the first time (after installation or upgrade), the recording device defaults to the recording default device set in the Control Panel. You can override this default by selecting a different device from the Recording device list box.

You have the option to manually or automatically set the recording level. If you choose to manually set the recording level, you can adjust the recording volume by moving the slider. The recording level meter is a color coded scale ranging from Too low to Too high with an Optimal recording level in between. Use the Record button to record sample audio and the Play button to play the sample to see the recording level. If you choose to automatically set recording levels, the volume defaults to 75%. When you record a sample, the level is adjusted to the 75% range.

Note: If you are automatically setting the recording level, the Recording volume slider is disabled but moves to the appropriate level during recording.

Step 3: Completing the Sound Tuning Wizard

The final page of the wizard confirms completion of the sound wizard. It reminds you that the wizard will appear again if the device settings are changed outside of the wizard or that you can launch the wizard directly from the Sound Editor.

Note: Each time the playback or recording starts, the Sound Editor checks to see if the playback and recording device last used are still available. If the device is no longer connected, a warning message displays. You can reconnect the device and click OK or cancel to launch the Sound Turning Wizard.

To adjust sound volume:

1. Click **Sound Tuning Wizard** on the Sound Editor toolbar.

2. Choose a playback device in the **Playback device** list box, if necessary.

   Adjust the **Wave volume** and **Master volume** sliders and click **Play** to test the sample audio.

3. Click **Next** to display the Adjust the Recording Volume page.

   Choose a recording device in the **Recording device** list box, if necessary.

   Choose **Manual recording level setting** or **Automatic recording level setting** option. If you selected the **Manual recording level setting**, adjust the Recording volume slider to the desired level. Try to keep the recording level as close to Optimal as possible.

4. Click **Record** to record test audio.

5. Click **Stop** to stop recording.

6. Click **Play** to listen to the playback.

   Check the **Recording level** to see if the recording is at the desired level.

7. If you are manually recording level settings, adjust the **Recording volume** slider and repeat the test recording, if necessary.

8. Click **Next** to complete the wizard.

9. Click **Finish**.

Note: If the sound settings have changed, the next time you play the sound a dialog box appears giving you the option to restore the previous setting, open the Sound Tuning Wizard to turn you settings or skip tuning and continue with the current settings.

10.5.10 Extend Timeline

You can add silence to the end of the waveform to extend the timeline. The time added is always at the end of the waveform regardless of what is selected. The silence added is designated in minutes and seconds.

To add silence to the end of a frame:

1. On the **Options** drop-down list, choose **Extend Timeline**.

2. Select the amount of silence to be added using the spinbox control.

3. Click **OK**.

10.5.11 Add Silence

Add silence allows you to add a user specified amount of silence at the point selected in the waveform. If a selection point is made in the waveform, the Add Silence dialog opens allowing you to specify the amount of time (in minutes and seconds) of silence to be added at that point. If a piece of sound is selected in the waveform, silence replaces that piece of sound. If no selection point is made, silence is added at the beginning of the waveform.

To add silence at a selected point:

1. Select an insertion point in the waveform.

2. On the **Options** drop-down list, choose **Add Silence**.

3. Select the amount of silence to be added using the spinbox control.
4. Click **OK**.

To add silence over a selected piece of sound:

1. Left click and drag to select a piece of sound in the waveform.
2. On the **Options** drop-down list, choose **Add Silence**.

   The selected sound is replaced with silence.

10.5.12 Amplify Sound

Amplify allows you to increase or decrease the audio signal of the selected sound resulting in a louder or softer sound.

Amplify is disabled if no sound is selected in the waveform. Once a selection is made in the waveform, the Amplify menu item is enabled. Use the slider control or spinbox to increase amplification by up to 400% or decrease amplification to as low as 1%.

To amplify a sound:

1. Left click and drag in the waveform to select the sound to amplify.
2. On the **Options** drop-down list, choose **Amplify**.
3. Increase or decrease the amplification using the slider or spinbox control.
4. Click **OK**.

10.6 Play Sound

After you have recorded or imported sound, you can play it to verify the audio. You can play sound for a single frame, a series of 3 consecutive frames, or a selection in the waveform.

Since sound can be recorded over a series of frames, the sound playback may cover more than one frame. The sound that displays in the waveform is one temporary sound file that maybe made up of the previous, current, and subsequent frames. This sound file is one file in the Sound Editor, but it is stored as three separate files.

Note: You need Flash 9.0 or later to play content with sound through the Player or when previewing topics from the Outline Editor. Flash is not necessary to play sound that is embedded as a concept from the Outline Editor.

To play the entire sound file on a web page:

1. Click **Play** without making a selection in the waveform.

To play the entire sound file on a topic:

1. Place the cursor at the beginning of the previous frame or do not make a selection in the waveform, then click **Play**.

To play the sound file from a selection point to the end of the file:

1. Click a selection point in the waveform.

2. Click **Play**.

To play a selection of a sound file:

1. Select beginning point and drag to select the end point in the waveform.
2. Click **Play**.

To play the sound associated with a frame:

1. Click **Play Frame**.

To pause the sound file:

1. Click **Play** or **Play Frame**.

   The playback begins and the button changes to the Pause button.

2. Click **Pause**.

   The playback pauses.

3. Click **Pause** again to resume playback.

10.6.1 Stop Sound File Playback

You can stop a sound file at any point during the playback. Stopping the playback sets the sound file back to the starting point; it does not pause the sound file at the point at which you stopped playback.

Note: The starting point of playback can be the beginning of the sound file, the selection point in the wave file or the beginning of a selected section of the waveform.

To stop the playback of the sound file:

1. Click **Play** or **Play Frame**.
2. Click **Stop**.

11 Enhance Content with Questions and Assessments

Questions test a user's skills, competency, and learning in a subject matter. Questions can appear directly in the table of contents in the outline for a Player or document output, or they can be included in assessments. An assessment is a collection of questions and topics used to test a user's knowledge of larger portions of content.

Questions and assessments can be published to the Training Guide and Instructor Manual print styles. This can be set using the Include Assessments and Include Question options on the Training Guide or Instructor Manual Document outputs. Questions and assessments that are in an outline are published to print outputs. Related assessments are grouped together in the output under the title Associated Assessments.

Note: You can add questions and assessments to publish to other print styles besides the Training and Instructor Manual styles. Questions and assessments are not part of In-application support launches. See *Insert Bookmarks for Questions and Assessments* and *Bookmark Reference* under the Customize Document Formats section in the Publish Content chapter for more information.

Questions and assessments have properties that are global defaults but can be changed for individual questions or assessments. The properties set for the assessment override individual properties set on each question to ensure consistent presentation of the questions in the assessment. See *Question Properties* and *Assessment Properties* in the View Document Properties chapter of the Content Development manual for more information on these properties.

11.1 Questions and Assessments in Player Content

How a user interacts with questions and assessments in the content depends on the deployment method and the settings you choose. For example, there are specific pre-assessment and post-assessment options that you can set in the Professional edition of the Knowledge Center. It is important to know your deployment method, understand what user options are available for questions and assessments in that deployment, know if usage tracking is available in your deployment, and have a general understanding of how you want to utilize questions and assessments in your content before you start creating them.

11.1.1 Questions in Player Content

Questions that appear in the table of contents (linked directly to the outline) are also called inline questions. Inline questions often follow a topic and may test comprehension of the concepts linked to the topic or evaluate proficiency with specific procedures.

Depending on the question type, users may be required to select one or more answers, type the answer text, click an area of a graphic, or select matching items. Users can select the Do Not Know option if they do not wish to guess. If questions are being tracked, selecting Do Not Know counts as an incorrect response.

When creating questions, you should use the question's Associated Content property to link it to the module, section, or topic on which the question is based. Setting the Associated Content property provides the following advantages:

- **Question remediation:** A Show Associated Content link appears after the user answers a question. Clicking the link allows the user to open the document linked to the question. However, you can disable the Show Associated Content link for questions in assessments.

- **Assessment analysis:** Associating content with assessment questions allows you to use the Assessment Coverage View to analyze if you are providing a balanced assessment that adequately covers the content.

- **Personalized content:** For content deployed in a Knowledge Path (available in the Professional edition only), users can view a filtered version of the full content based on assessment results.

Question remediation

Remediation provides feedback after the user answers a question. In the Developer, authors can set the type of question feedback for each question. Feedback can simply indicate if the answer was correct or incorrect, show the correct answer if the user answers incorrectly, display remediation text fully explaining the correct answer, or provide a link to view the remediation. See *Remediation Property* in the Question Properties section of the View Document Properties chapter for more information about question remediation.

Your decision to include remediation for questions may depend on your deployment method. It is a good idea to provide complete remediation as a learning tool. Users who answer a question incorrectly are highly motivated at that time to know why their answer is wrong and understand the correct response. The correct answer, along with remediation text with a reason why the answer is correct, and a link to the content on which the question is based, provides an opportunity for a memorable learning event and reinforcement. However, if you are tracking user responses in the Knowledge Center or an LMS, you may want to refrain from providing remediation for pre-assessment or inline questions until the user takes a post-assessment so that you can compare scores and gauge the effectiveness of your content.

When content is deployed through a Knowledge Path in the Knowledge Center (available in Professional edition only), a pass or fail indicator appears next to the question in the table of contents after answering a question.

Note: In the Professional edition of the Knowledge Center, you can choose to honor the question remediation settings from the Developer or override these settings with another remediation option. You can also override assessment remediation settings.

11.1.2 Assessments in Deployed Content

Assessments are containers that can hold one or more questions. In addition to questions, assessments can also include topics. Topics are added to an assessment as Know It? questions; meaning that only the Know It? play mode is included. Know It? questions evaluate skills; they test if a user can independently perform the topic procedures with minimal prompting. After the user takes an assessment, an Assessment Summary page appears showing the assessment results.

Assessments that are directly linked to modules and sections in the outline appear in the outline's table of contents and are known as inline assessments. Assessments may also be associated with module and section documents in the outline. These associated assessments do not appear in the table of contents, but can be designated as pre-assessments and/or post-assessments for content deployed in the Professional edition of the Knowledge Center or LMS. Associated assessments do not appear in a Player output.

Assessments have their own remediation property in the Developer that override the remediation settings for each individual question in the assessment. A uniform assessment remediation provides a consistent look and feel for the assessment.

Note: In the Professional edition of the Knowledge Center, you can choose to honor the assessment remediation settings from the Developer or override these settings with another remediation option.

Although assessments are often presented along with the published content, assessments can also be deployed as individual activities. If you are employing user tracking, you can use an assessment to perform a needs analysis before you begin development. The results of the assessment can help you determine a baseline of what your audience knows, and therefore a starting point for developing your content. This saves the time, money, and the effort of developing needless content. Conversely, presenting an assessment a few days or weeks after a user completes the content shows the effect of training retention.

Note: If you are deploying content in the Professional edition of the Knowledge Center, assessments can be used to determine personalized content. Personalized content is a filtered version of the full content based on the assessment results. See *Understand Personalized Content* in this chapter.

11.1.2.1 Inline Assessments

Assessments can be directly linked to a module or section in the outline and appear in the table of contents. Assessments that appear in the outline are also known as inline assessments. Assessments can be placed anywhere in the table of contents as a child document of the module or section to which it is linked. For example, an assessment in the outline at the end of a module or section can function as a review of the material in that module or section.

Inline assessments can function as pre-assessments and post-assessments by where they are placed in the outline. In a Player output, an assessment that precedes a section of content lets the user know what content areas they need to learn and what they can skip. An assessment that follows a section of content lets the user know what content they need to re-review to gain competency in the subject matter.

In the Knowledge Center (Professional edition only), inline assessments can be used to create personalized content.

11.1.2.2 Pre- and Post-Assessments (available in Professional edition only)

After bringing published content into the Professional edition of the Knowledge Center, you can set up knowledge paths and activities, and specify pre- and post-assessments and choose the settings for each.

In the Knowledge Center, only assessments associated with the parent document added as an activity to a Knowledge Path can be designated as pre- and/or post-assessments. Inline assessments directly linked to the outline cannot be selected when setting up the pre- and post-assessment for an activity. Assessments associated with sub-level headings (not linked as an activity) are ignored. Assessments are associated with a parent document through the Assessments property in the Properties toolpane in the Developer.

A pre-assessment appears before the user starts an activity and records baseline knowledge prior to viewing the content. A pre-assessment can be set as a required activity, which means that the user must take the pre-assessment before starting the content. Pre-assessments can only be taken once. When setting up a pre-assessment in a Knowledge Path, an author can designate a place-out score. When a user's assessment score meets or exceeds the place out score, the content associated with the assessment is marked as completed and the user can bypass the subject matter and proceed to the next activity.

A post-assessment appears after the subject matter and can also be set as a required activity with a required passing score, which specifies the score that users must achieve before advancing to the next activity. Post-assessment scores can be compared with pre-assessment scores to determine the level of knowledge gained from completing the subject matter. Pre- and post-assessments also help define personalized content.

An Assessment Summary page appears after the user takes a pre- or post-assessment. The Assessment Summary page in the Professional edition of the Knowledge Center provides options for taking personalized content and selecting the content to be included. You can, however, use the Manager in the Knowledge Center to disable the appearance of the summary page for a pre-and/or post-assessment if personalized content is not enabled.

Note: When publishing content to be used in a knowledge path, you can publish the entire outline and add the individual sections of the outline as activities to the knowledge path. It is not necessary to publish each activity separately.

See *Activity Properties* in the Create a Knowledge Path section in the Manage Knowledge Paths chapter of the User and Content Management guide for more information on assessment and summary page options in the Knowledge Center.

11.1.2.3 Assessment Summary Page

After taking an assessment in the Player, Knowledge Center, or LMS, an Assessment Summary page may appear if it is enabled. This page displays the assessment results, which include the number of questions in the assessment and the number questions answered correctly, along with the user's score as a percentage.

The Assessment Summary page also includes a Section Summary and Response Summary. The Section Summary displays a breakdown of each document (module, section, or topic) directly linked to the same parent as the assessment and the user's score as a percentage for each. A passed question is scored as 100% and a failed question as 0%. Therefore, if a user correctly answers 3 out of 4 questions linked to a section, the pass percentage for that section would be 75%. The Response Summary displays a list of the questions indicating if they were answered correctly or incorrectly. After viewing the results, users can print this page.

In deployment methods that include content tracking, users can return to the Assessment Summary page at any time in post-assessments and inline assessments by selecting the assessment in the outline and clicking the Show summary link in the Concept pane. If content is deployed without tracking, the summary page results are not available once the user selects another outline item.

Note: The section breakdown and score is based on linking the outline documents to the Associated Content property for questions. If assessment questions are not linked to the content, the Assessment Summary page does not include a Section Summary.

You can choose to show or hide the Assessment Summary page in the Player using the Summary property on the Properties toolpane for the assessment. If the Summary is hidden, the Assessment Summary page does not appear upon completion of an assessment, nor can a user access it later.

Assessment Summary Page in the Professional Edition

The Assessment Summary page appears after the user takes a pre- or post-assessment. You can, however, use the Manager in the Knowledge Center to disable the appearance of the summary page for a pre-and/or post-assessment.

In addition to providing assessment results, the Assessment Summary page in the Professional edition of the Knowledge Center provides options for taking personalized content and selecting the content to be included. If the section score falls below the passing score set for the assessment, the section content is required for the personalized content and cannot be excluded. Conversely, if the section score meets or exceeds the passing score, the user can optionally add the section that they passed for additional learning reinforcement.

Since content is tracked in the Professional edition, users can return to a completed Assessment Summary page to view or print the results.

See *Activity Properties* in the Create a Knowledge Path section in the Manage Knowledge Paths chapter of the User and Content Management guide for more information on summary page options in the Knowledge Center.

11.1.3 Track Questions and Assessments

Depending on your installation, responses to inline questions and assessments and pre- and post-assessments are tracked. Inline questions and inline assessments are tracked when deployed through the Player in the standard installation of the Knowledge Center or through a Knowledge Path in the Professional installation of the Knowledge Center. Tracking reports are available in the Reports section in the Knowledge Center for users with the appropriate permissions. You can run one of the sample custom reports, customize an existing report, or create a new one.

In the Professional installation, additional reports are available for tracking pre- and post-assessments, or you can create new reports using external tools, such as Microsoft Excel, to query the tracking database.

11.1.4 Understand Personalized Content (available in Professional edition only)

Personalized content can be taken after a user takes a pre-assessment, post-assessment, or an assessment in the outline (inline assessment). Personalized content is a customized version of the full content based on a user's assessment results. Content that the user has mastered with a passing score in the assessment is not included in the personalized content.

The purpose of the personalized content is to allow a user to complete an objective assessment of his/her skills in the subject matter and then take a subject, or retake a subject, that contains only the content upon which the user needs to focus. Personalized content does not create a new subject outline, but rather filters the full content to show only the content that is necessary for the user to learn.

When you create an assessment, you should include questions based on, and associated with, the subject content. It is particularly important that these questions provide a representative sampling of the subject material if an organization uses the personalized content feature. For content to appear in personalized content, you must associate the questions in the assessment with the content (module, section, or topic) by setting the Associated Content property for each question.

When a user completes an assessment, the Assessment Summary page displays a list of sections upon which assessment questions were based and the user's score on the questions for each section. A user can also choose to add content that has been successfully passed to the personalized content for additional reinforcement. Personalized content can be started from the Assessment Summary page. Users can switch between personalized content and full content at any time. Personalized content is only available if the Knowledge Center administrator has enabled the Personalized Content option for the content.

11.1.4.1 Design the Assessment

Personalized content can be enabled for inline assessments or pre- and post-assessments. You may choose to include a pre- and post-assessment associated with the major headings in your outline, but also include several smaller inline assessments to test retention just after learning.

Note: To designate an assessment as a pre-assessment and/or post-assessment in the Professional edition of the Knowledge Center, you must associate the assessment to the parent level document using the Assessments property for the parent document. See *Assessments for Personalized Content* in this chapter for more information.

When designing assessments for personalized content, you should start by identifying the sections (parent documents) of your content for which you want to test competency. Consider the amount of content coverage for each assessment (the level in the outline you want to associate with one or more assessments). You can create several smaller assessments linked to each subheading in your content or fewer, larger assessments linked to the major headings.

Questions in the assessment can cover the concepts that appear in the Concept pane for modules, sections, and topics. They can also include important information found in action frames and Explanation frames. You can add topics (Know It? questions) to the assessment to test competency with a process. In Know It? mode, it is important that you include additional text in frames that need further explanation and remove frames from Know It? mode that contain actions you do not want to test.

Use the Assessment Coverage View to make sure that your questions are associated with the content in your outline and the dispersal of your questions adequately covers the content. Personalized content is based on setting the Associated Content property for questions, so this is a mandatory step if you want to incorporate the personalized content feature.

A common scenario for using personalized content is to include a pre-assessment and post-assessment. After users take the pre-assessment, they can switch to personalized content based on the assessment results. The personal content includes only the content that was failed. After completing the personal content, users can take the post-assessment to see if

they have successfully mastered the content material and processes. Based on the post-assessment, the user can continue personalizing the content until it is fully mastered.

Place-Out Scores
Pre-assessments allow place-out scores. Place-out scores allow the user to skip content based on the results. Skipped content includes all the sub-level content associated with the assessment's parent. If you permit an assessment to place the user out of the content, make sure that your assessments are not placed at too high a level, in other words, covering too many processes or too much information causing a user to place out of too large a section of content. Place-out scores may result in users placing out of content they failed. For example, if you permit a place-out score of 80% for an assessment with five questions, the user can fail a question, score 80%, and never be required to learn the content associated with the failed question. If you are using place-out scores, it is a good idea to provide several questions for important concepts to thoroughly test competency and avoid placing out of content based on a single question.

11.1.4.2 Configure Personalized Content

The Assessment Summary page displays sections for the questions included in the assessment, each with a checkbox to its left. A user can select the sections he/she wants to include in the personalized content based on the individual scores. For example, a user would probably include a section for which he/she scored a 50% and exclude a section for which the score was 100%.

Depending on the options set in Knowledge Center's Manager, some sections are selected by default on the Assessment Summary page. A training manager can set scores to exclude or include sections in the personalized content automatically. A training manager can also set an exclusion percentage which represents an acceptable score on a section. When a user meets or exceeds the exclusion percentage, he/she has demonstrated competency in the subject matter and does not need to include the section in the subject. The checkboxes to the left of sections meeting the exclusion percentage are unmarked by default. If desired, a user can still include these sections in the personalized content by selecting them. A training manager can also set a required percentage which represents an unacceptable score on a section. When a user falls below the required percentage, he/she has not demonstrated competency in the subject matter and needs to include the section in the subject. The checkboxes to the left of sections falling below the required percentage are marked by default and cannot be deselected. Sections with scores falling in between the exclusion percentage and required percentage are selected by default; however, a user can deselect these sections as desired.

Each time a user takes an assessment, the personalized content results are updated to reflect the user's most recent score. A user can reconfigure the personalized content each time he/she accesses the personalized content results.

When a user completes an assessment in the User interface, the Summary page displays a list of sections upon which assessment questions were based and the user's score on the questions for each section.

Warning: Questions tied to the top level of the outline are not used in configuring the personalized content as you cannot exclude (or test out of) the entire course.

See *Activity Properties* in the Create a Knowledge Path section in the Manage Knowledge Paths chapter of the User and Content Management guide for more information about setting up personalized content.

11.2 Develop Questions

There are six standard question types that provide a wide variety of ways to test a user's understanding of the content. Additionally, questions can be created in other applications such as Flash and brought into the Developer as User-Defined questions.

Questions are created or edited using the Question Editor. You can create the following question types:

- **Fill in**: A question is presented and the user fills in an answer.
- **Hot Spot**: An image is presented with hotspots (areas of the image) that the user chooses to identify the correct answer to the question.
- **Matching**: A question is presented where the user must match the choices in the right column with the choices in the left column.
- **Multiple Choice (Single Answer)**: A question is presented where the user must select one correct answer from a list of possible answers.
- **Multiple Choice (Many Answers)**: A question is presented where the user must select more than one correct answer from a list of possible answers.
- **True/False**: A question is presented where the user indicates whether a statement is true or false.
- **User-Defined**: A question of any type created in another application and imported into the Developer.

Questions can exist as standalone documents in an outline or grouped together in an assessment. Questions are stored in the Library so they can be reused.

Note: You can modify the Question Template in the Library to customize the appearance of questions in the Developer and published output. See *Customize Question Elements* in the Customize the Player section of the Publish Content chapter of this guide for more information.

There are four basic components in most question types (with the exception of the User-Defined question):

- Question text
- Response text with correct answer
- Remediation text that provides supporting feedback about the correct answer (optional)
- Background image (optional except for hotspot questions)

Each question type (except User-Defined) contains placeholders for adding the question text, responses and remediation.

As you create a question, you can preview it at any time to review how it will function and appear to users. You can return to the question and continue editing as needed. In addition, you can change questions types at any time for a new or existing question using the Question type list in the Question Editor. Changing the question type applies the template for the selected type. Depending on the question type, some or all of your existing response text may not appear after you change question types. You can, however, return to the original question type to restore the text.

The following icons appear on the Question Editor toolbar and vary depending on the question type:

Add Option: Adds a new choice to the question. If a response is selected, the new response is added after the selected one. If no response is selected, a new response is added to the end of the responses but before any static responses such as None of the Above or All of the above. For Hotspot questions, adds a new hotspot that is labeled with a number one more than the previous hotspot.

Applicable question types: Multiple Choice (Single Answer), Multiple Choice (Many Answers), Matching, Hotspot

Update Link: Defines the location of the package containing the user-defined question code.

Applicable question types: User-Defined

Update Image: Applies a background image to a question. This icon opens the Background Images Property dialog where you can select an image and assign alternative text that appears when you mouse over the image. After inserting the image, you can rearrange the image and question box by dragging them to other positions. To move a question box, drag it by the blue Question header at the top.

You should size an image before inserting it in the question, since it cannot be resized in the Question Editor. You can, however, resize the width of the question box by horizontally dragging any of the square edit handles that appear after you click the box. You cannot make the question box smaller than its default minimum size.

To delete an inserted image, click the image and click Delete on the toolbar. Only one image can be inserted into a question. Inserting a second image automatically replaces the first image.

Applicable question types: True/False, Fill in, Multiple Choice (Single Answer), Multiple Choice (Many Answers), Matching, Hotspot

Move Up: Moves a selected response choice up one row in the response choice list.

Applicable question types: Multiple Choice (Single Answer), Multiple Choice (Many Answers), Matching

Move Down: Moves a selected response choice down one row in the response choice list.

Applicable question types: Multiple Choice (Single Answer), Multiple Choice (Many Answers), Matching

Reset Layout: Resets the question to the default layout with the image positioned at the top left corner and the question/response box beneath it. This icon is only active when there is a background image.

Applicable question types: True/False, Fill in, Multiple Choice (Single Answer), Multiple Choice (Many Answers), Matching, Hotspot

Edit: Indicates the Question Editor is in Edit mode so you can modify the question content. When you launch the Question Editor, it is in Edit mode by default.

Applicable question types: True/False, Fill in, Multiple Choice (Single Answer), Multiple Choice (Many Answers), Matching, Hotspot

Preview: Displays the question as it would appear in published output such as the Player or LMS so you can interact with the question as a user.

Applicable question types: True/False, Fill in, Multiple Choice (Single Answer), Multiple Choice (Many Answers), Matching, Hotspot

Note: A broken link can cause a question to be excluded from publishing. See *Broken Links in Questions and Assessments* in the Manage Document Relationships chapter of the Content Development manual for more information on possible reasons for broken links.

11.2.1 Add Questions to Content

There are several ways to create and add questions to content in the Developer.

- **Create a question in the Library:** Questions created in the Library can be linked to one or more content outlines or added to assessments.

- **Add questions to an outline in the Outline Editor:** Link new and existing questions to appear in the outline's table of contents. See *Link a Question to an Outline* in the Develop Questions section of the Enhance Content with Questions and Assessment chapter.

- **Add questions to an assessment using the Assessment Editor:** Add new or existing questions to an assessment. See *Add Questions to an Assessment* in the Develop Assessments section of the Enhance Content with Questions and Assessment chapter.

- **Add questions to an assessment using the Assessment Coverage View:** Analyze and balance assessments by adding new and existing questions to assessments using the Assessment Coverage View. See *Work with the Assessment Coverage View* in the Enhance Content with Questions and Assessment chapter for more information about using this view.

Note: See the help for each question type in the *Develop Questions* section of the Enhance Content with Questions and Assessment chapter for more information about creating each question type.

11.2.2 Create a Fill In Question

Fill In questions require a user to read a question and type an answer. Fill-in questions test a user's recall rather than just recognition as in a multiple choice question. However, because fill-in questions require an exact text match, you should reserve this question type for specific response text. Fill-in questions may penalize a user for providing an acceptable alternative response or a spelling error. Be sure to phrase the question so that there is only one clear answer. In addition, it is best to restrict this question type to a single word, unless the phrase has no ambiguity.

To create the answer for a Fill In question, it is necessary to enter the word or phrase in the Response area that constitutes a correct response. Fill In answers are not case-sensitive; however, a user must match the text in the Response field exactly. For example, if a user enters Window and the correct answer is window, the answer is correct. However, if a user answers Windows, the answer is incorrect.

To create a Fill In question:

1. On the **File** menu, choose **New**, point to **Question**, and choose **Fill In**.
2. Click **Click to add question text** and type the question text.
3. Click the **Response** field and type the correct answer.
4. Click **Click to add remediation text** and add remediation text, if desired.
5. Save the question.

11.2.3 Create a Hotspot Question

A hotspot question includes a graphic with multiple highlighted areas or "hotspots" that prompts the user to identify the area of the graphic that constitutes the correct answer.

To create a hotspot question, you should first include a background image. Background images can be stored on your computer or saved in package documents and stored in the Library. You should size the background image before inserting it into the question since you cannot resize it in the Question Editor.

Once the background image appears in the hotspot question, you identify the hotspot areas by adding options. Each time you click **Add Option**, a red box (with the number incremented by one) appears on the top left corner of the background image. If you add multiple hotspots, they will appear one on top of the other. You can drag and drop the red box to reposition the hotspot. You can also drag any of the edit handles to resize a hotspot.

Note: To delete a hotspot area, click the hotspot area to display the edit handles and click .

When you view the question in Preview or in the Player, the question box may cover some of the background image and hotspots. You can reposition the question box by dragging it by its blue Question header to a new location.

To create a Hotspot question:

1. On the **File** menu, choose **New** point to **Question**, and choose **Hotspot**.
2. Click **Update Image** to add a background image.
3. Click **Click to add question text** and enter the question text.
4. Click **Add Option** and drag the red box labeled 1 so that it identifies the first hotspot area on the background image.
5. Click the hotspot and drag the sizing handles to resize the hotspot accordingly.
6. Repeat steps 4 and 5 for each hotspot that you want to add to the background image.
7. Select the hotspot number that represents the correct answer in the **Response** list.

   The number displays as the correct answer in the **Correct** field.
8. Click **Click to add remediation text** and add remediation text, if desired.
9. Save the question.

11.2.4 Create a Matching Question

Matching questions can be used to put a list of steps in the correct order or match the responses in one column to the questions in another column.

Matching questions show a column of choices on the left and a column of responses on the right. The responses in the right column are numbered sequentially. Each choice in the left column has an answer box next to it where the user enters the corresponding choice number from the right column. The user can also drag the answer text from the right column over the corresponding answer box in the left column. The number automatically fills in the box.

When creating the question text that appears above the match columns, you should explain how to answer the matching question. For example, “Match the terms and definitions by typing the number corresponding to the definition in the answer box next to the correct term. You can also drag the definition to the answer box.”

There are three steps to complete for creating the matching question items;

- Enter a series of choices in one of the columns.
- In the remaining column, create any number of choices that match up with the choices in the other column, but in random order. A common use for a matching question is to match terms and definitions. You can place the terms and definitions items in either column. Generally it is recommended to place the shorter items in the response column on the right, since the user has to read through every choice in the response

column to make each match.

If the purpose of the matching question is to put steps in the appropriate order, you can type “Step 1, Step 2” and so on in the one column and type the list of steps in varied order in the other column.

To make the matching question more challenging and reduce guessing, you can include more choices in one of the columns.

You can also use a response multiple times; that is, a choice in one column can match more than one choice in the other column. For example, you may have categories in the right column that match several choices in the left column. For matching food groups, "fruit" would be the correct response for both "apple" and "orange". If responses are used more than once, it is a good idea to mention this in the question text; for example, "You can use the answers in the right column once, more than once, or not at all."

- In the answer box for each choice in the left column, enter the number from the right column that creates the match. This establishes the correct answer order the user must enter to answer the question correctly.

Note: If you choose to randomize answers in an assessment, the answers in the right column will appear in a different sequence than the original creation order.

To create a matching question:

1. On the **File** menu, choose **New**, point to **Question**, and choose **Matching**.
2. Click **Click to add question text** and enter the question text.
3. Click **Click to add choice text** and enter the first choice text in the left column.
4. Press ENTER to create each subsequent choice and repeat step 3 for each choice.
5. In the right column, click **Click to add choice text** and enter the first choice text.
6. Press ENTER to create each subsequent and repeat step 5 for each choice.
7. In the answer box next to each choice in the left column, enter the number of the matching response choice from the right column.

   The order displays in the Correct area.
8. Click **Click to add remediation text** and add remediation text, if desired.
9. Add a background image, if desired, and position the question on or around the image.
10. Save the question.

11.2.5 Create a Multiple Choice (Single Answer) Question

Multiple choice (single answer) questions require users to read a question and select one answer from a list of possible answers. To create the answer for a multiple choice (single answer) question, it is necessary to create a list of choices and then select the one option that constitutes a correct response. In the Response area, you create the choices to be displayed to users, and then mark the correct answer. To create challenging multiple choice questions, it is important that the incorrect choices be plausible.

Two standard answers are also available for multiple choice (single answer) questions; All of the above and None of the above. You can choose the Include All of the above or Include None of the above option when all answers listed are correct or incorrect. You can also include both

options to make the question more challenging for the user. These answer options always appear at the bottom of the list of answers.

To create a Multiple Choice (Single Answer) question:

1. On the **File** menu, choose **New**, point to **Question**, and choose **Multiple Choice (Single Answer)**.
2. Click **Click to add question text** and enter the question text.
3. Click **Click to add choice text** and enter the first choice text.
4. Press ENTER and create each subsequent choice.
5. Click the **Include All of the above** and/or the **Include None of the above** checkboxes, if desired.
6. Click the appropriate choice to indicate the correct answer.
7. Click **Click to add remediation text** and add remediation text, if desired.
8. Add a background image, if desired, and position the question on or around the image.
9. Save the question.

11.2.6 Create a Multiple Choice (Many Answers) Question

Multiple choice (many answers) questions require users to read a question and select more than one answer from a list of possible answers. The author can choose to tell the user how many answers to select by setting the Show the number of correct answers option. The exact number of correct items appears in parentheses after the question. If the Show the number of correct answers option is not set, the user must determine how many of the answers are correct.

To create the answer for a multiple choice (many answers) question, create the list of choices and then mark which of those choices are correct.

To create a Multiple Choice (Many Answers) question:

1. On the **File** menu, choose **New**, point to **Question**, and choose **Multiple Choice (Many Answers)**.
2. Click **Click to add question text** and enter the question text.
3. Click **Click to add choice text** and enter the first choice text.
4. Press ENTER and create each subsequent choice.
5. Click the **Show the number of correct answers** checkbox, if desired.
6. Click the box to the left of the appropriate choices to indicate the correct answers.
7. Click **Click to add remediation text** and add remediation text, if desired.
8. Save the question.

11.2.7 Create a True/False Question

True/False questions require the user to read a statement and indicate whether it is true or false. To create the answer for a True/False question, it is necessary to select either the True or False option provided in the Response area.

To create a True/False question:

1. On the **File** menu, choose **New**, point to **Question**, and choose **True/False**.
2. Click **Click to add question text** and enter the question text.
3. Click the radio button to the left of the appropriate choice to indicate the correct answer.
4. Click **Click to add remediation text** and add remediation text, if desired.
5. Save the question.

11.2.8 Create a User-Defined Question

User-defined questions are created outside of the Developer, using HTML, DHTML, Macromedia Flash, or another application. These questions may be of a type not available in the Developer, such as drag-and-drop, or you may have similar questions already created. For a new or existing user-defined question to be included, it must contain the necessary JavaScript code to communicate with the Developer for scoring and tracking purposes.

Note: User-Defined Questions do not appear in published documents such as the Training Manual or Instructor Guide.

Once you have created a valid file, you add it to a package so it can be linked to a User-Defined question object in the Developer.

To add a user-defined question, you click Update Link and navigate to the appropriate package. After selecting the question file, enter a correct score percentage (0-100%) in the Correct Score field that will be compared to what is deemed a passing score in the user-defined question. This information is passed back to the Professional edition.

You can preview the question after it is saved but you can not edit the question in the Developer.

Warning! Deleting a package that contains the code for a user-defined question creates broken links in your content. Therefore, if you plan to remove the package, you should first remove any links to that user-defined question. Moving, renaming, or deleting a package item that is linked to a document creates broken links in your content. Because the Broken Links tool does not penetrate packages, it cannot detect when links to items within packages are broken. Therefore, if you plan to perform any of these actions on a package item, you should first remove any links to it from your content.

See *Broken Links in Questions and Assessments* in the Manage Document Relationships chapter of the Content Development manual for more information.

11.2.9 User-Defined Question Example

Use this very simple question example to create a User-Defined question to observe its behavior in the Developer. The code can be modified to meet your question needs.

This sample code includes diagnostic feedback that appears at the top of the question. There are 4 parameters (kpnextpage, kpmode, kpfeedbk, kprnda) that are populated from the Knowledge Center and one parameter (kpremed) populated from the Developer.

kpnextpage: This parameter is the full URL to the portal page where tracking data is sent.

kpmode: This parameter indicates if a question is being played within a course, pre-assessment, or post-assessment.

kpfeedbk: This parameter indicates if feedback is enabled within the assessment. The parameter is on, by default, for courses.

kprnda: This parameter indicates if answers are randomized in order. This parameter is off, by default, for courses.

kpremed: This parameter indicates the remediation mode currently set within the course or assessment.

Note: To remove these parameters from your question, delete the bolded code from the example code.

Sample User-Defined Question Code

```
<html>
<head>
<meta content="en-us">
<meta content="text/html; charset=windows-1252">
<title>Custom Question Page</title>
<script>

var isIE = (navigator.appName.indexOf("Microsoft") != -1) ? true :
false;

function GetQueryStringValue(param) {

var strQueryString;

if (self.location.search.length>1) {
  // this was a get request where the results are in location.search
(URL?...)
  strQueryString = self.location.search.substr(1);
}
else if (self.location.hash.length>1) {
  // this used the hash method (URL#...)
  strQueryString = self.location.hash;
}

var QueryItems = strQueryString.split("&");
for (var i=0; i < QueryItems.length; i++){
  var QueryItem = QueryItems[i];
  var intEqPos = QueryItem.indexOf("=")
  var strName = QueryItem.substr(0, intEqPos)
  if (strName == param) {
   return QueryItem.substr(intEqPos+1)
  }
}

// no querystring item found
return "";
}

var kpmode = GetQueryStringValue("kpmode");
var kpremed = GetQueryStringValue("kpremed");
var kpfeedbk = GetQueryStringValue("kpfeedbk");
var kprnda = GetQueryStringValue("kprnda");
var kpResultURL = GetQueryStringValue("kpnextpage");
```

```
function SendResult(score, answer){

// code to send score and answer back to Knowledge Pathways

// get the nextpage and target from querystring


if (kpResultURL == "") {
  // we must have an URL
  alert("no result URL supplied.");
  return false;
}


if (isNaN(score)) {
  // the score must be numeric
  alert("the score must be a numeric value.")
  return false;
}



// send get request back to the target frame
if ((kpResultURL.indexOf("?") >= 0) ||  (kpResultURL.indexOf("#") >=
0)){
  // the url already contains a ? or #, append to current querystring
  window.location.href = kpResultURL + "&score=" + score + "&answer=" +
escape(answer);
}
else {
  window.location.href = kpResultURL + "?score=" + score + "&answer=" +
escape(answer);
    }


return true;
}

function ProcessResult() {

// determine if the answer is correct, if correct score = 1
// else the score is 0

var objForm = window.document.QuestionForm;
var score;
var message;

var answer = "";

for (var i=0; i<objForm.elements.length;i++) {
  if (objForm.elements[i].name == "answer") {
   if (objForm.elements[i].checked) {
    if (i == 0) {
     // correct answer setting score to 1
     score = 1;
     if (kpfeedbk == "1") {
      if (kpremed == "0") {
       // remediation not enabled
       message = "Correct!";
```

```
      }
      else {
       message = "Correct! 1+1 does equal 2.";
      }
      alert(message);
     }
    }
    else {
     // incorrect answer setting score to 0
     score = 0;
     if (kpfeedbk == "1") {
      if (kpremed == "0") {
       message = "Incorrect.";
      }
      else {
       message = "Incorrect. 1+1 equals 2.";
      }
      alert(message);
     }
    }
    // pull the answer from the radio options value
    answer = objForm.elements[i].value;
   }
  }
}

SendResult(score, answer)
}

</script>
</head>

<body>
<h3>User-Defined Question Example</h3>
<p>Available parameters:</p>
<Script>
document.write("kpmode indicates if the question is being played within
a course, pre-assessment or post-assessment.</b>");
if (kpmode != "") {
  switch(kpmode){
   case "0":
    document.write("Question was launched from a <b>Course</b>");
    break;
   case "2":
    document.write("Question was launched from an <b>Assessment</b>");
    break;
  }
  document.write("<br><br>");
}

document.write("kpremed indicates the remediation mode currently set
within the course or assessment.</b>");
if (kpremed != "") {
  switch(kpremed){
   case "0":
    document.write("Remediation mode(kpremed) is <b>(0) Off</b>");
    break;
   case "1":
    document.write("Remediation mode(kpremed) is <b>(1) User
Asks</b>");
```

```
    break;
   case "2":
    document.write("Remediation mode(kpremed) is <b>(2)
Incorrect</b>");
    break;
   case "3":
    document.write("Remediation mode(kpremed) is <b>(3) All</b>");
    break;
  }
  document.write("<br><br>");
}

document.write("kpfeedbk indicates if feedback is enabled within the
assessment. Always enabled in courses.</b>");
if (kpfeedbk != "") {

  switch(kpfeedbk){
   case "0":
    document.write("Feedback(kpfeedbk) is <b>NOT enabled</b>");
    break;
   case "1":
    document.write("Feedback(kpfeedbk) is <b>enabled</b>");
    break;
  }
  document.write("<br><br>");
}

document.write("kprnda indicates if answers should be randomized in
order. Always disabled in courses.</b>");
if (kprnda != "") {
  switch(kprnda){
   case "0":
    document.write("Random Answer(kprnda) is <b>NOT enabled</b>");
    break;
   case "1":
    document.write("Random Answer(kprnda) is <b>enabled</b>");
    break;
  }
  document.write("<br><br>");
}

document.write("kpnextpage indicates the full URL to the Portal page to
which tracking data must be sent.</b>");
if (kpResultURL != "") {
  document.write("Tracking data URL: <b>" + kpResultURL + "</b>");
  document.write("<br><br>");
}

</script>

<form method="GET" action=""  name="QuestionForm" target="">
  <p>Example question:</p>
  <p>1+1=</p>
  <p><input type="radio" value="2" checked name="answer">2</p>
  <p><input type="radio" name="answer" value="42">42</p>
  <p><input type="button" value="Submit" name="Submit"
onClick="ProcessResult(); return false">
  <input type="reset" value="Reset" name="B2"></p>
```

```
</form>
</body>
</html>
```

To create a User-Defined question using the example HTML:

1. Copy the User-Defined example HTML and paste into Notepad or other program and save with an .htm extension.
2. On the **File** menu, point to **New**, and choose **Package**.
3. Add the .htm file to the package.
4. Save the new package document.
5. On the **File** menu, point to **New**, point to **Question**, and choose **User-Defined**.
6. Click **Update Link** and navigate to the package containing the user-defined question.
7. Select the .htm file.
8. Click **Open**.
9. Select the percentage of correct answers (0-100%) needed to pass the question in the **Correct Score** field.
10. Save the question.

To create a User-Defined question:

1. On the **File** menu, point to **New**, point to **Question**, and choose **User-Defined**.
2. Click **Update Link** and navigate to the package containing the user-defined question.
3. Select the file containing the code.
4. Click **Open**.
5. Select the default value in the **Correct Score** field.
6. Save the question.

11.2.10 Link Questions to an Outline

Questions can be directly linked to an outline so that they appear in the outline's table of contents. Questions that appear in the table of contents are known as inline questions. Inline questions are often used for reinforcement and are usually placed immediately after the concept or topic they are testing.

In the Outline Editor, you add questions to the outline by linking them to any module or section document. If you want to add a question after a topic, you can select the topic and add a question; however, the question links to the selected topic's parent. After adding a question to the outline, you can move it to another position. Moving the question to another parent, deletes the link to the original parent and reestablishes it to the new parent. Moving a question in the outline does not change its location in the Library, but you can also move the question to another folder in the Library.

New questions are added to the outline with the name "New Question" and are stored in the same folder as the parent. After adding the new question, you can give it a more meaningful name in the outline.

Linking a new question in the Outline Editor does not open the Question Editor. You must open the question to create the question text and responses.

You can preview and test a question from the Outline Editor by selecting the question in the outline and answering it in the Question Preview pane that appears to the right of the question. Use the Take question again button to clear your answer and test a different response.

Questions can be linked to multiple locations within the outline or to other outlines. Deleting a link to a question removes it from the outline but the question remains in the Library and other linked locations. Deleting the question in the Library removes the question from the Library and breaks links to that question in all outlines.

Note: During playback, users can select questions in the outline. If content is tracked, inline questions are tracked in reports as pass/fail, but are not used to determine personalized content (available in the Professional edition only).

To link a new question to an outline:

1. Display the Outline Editor by opening the outline to which you want to link a new question.
2. Select the module or section document to which you want to link the new question.

   Note: You can also select a topic or another question to insert a new question under it, but the question will link to the selected document's parent.
3. On the **Link** menu, point to **New Question** and choose the type of question to create.

   You can also right-click the parent document in the outline, point to Link New Question and choose the question type.

   A new question is linked (and automatically saved) and appears in the outline beneath the parent document with the default name, that you should change. You can also rename the new question after it is linked and saved.
4. To open the question in the Question Editor, click **Edit question** in the Question Preview pane or double-click the question in the outline.

Note: You can link existing questions to an outline using the Link menu and Existing Document command. You can select multiple questions using the standard Windows selection keys (CTRL+click and SHIFT+click). You can also link questions to an outline by copying them from the Library and pasting them to the parent document in the Outline Editor or by splitting the work area and dragging questions from the Library in one work area to the open outline in the other work area.

11.2.11 Delete a Question

You can permanently delete a question you no longer need from the Library.

If the question is part of an assessment, it is deleted from the assessment as well. However, if you delete a question from an outline or an assessment, you are only removing the link and the question remains in the Library where it was created.

Warning! Deleting a question from the Library may create broken links in your content. Deleting a package item that contains the code for a user-defined question or the package

itself creates broken links in your content. Therefore, if you plan to perform any of these actions you should first remove any links to that question.

Multi-user Considerations

- Documents under version control must be checked in and you must be working online to delete a document from the Library. You can delete new documents that have never been checked in (are not under version control) while working online or offline.

To delete a question from the Library:

1. Navigate to the location in the Library where you want to delete a question.
2. On the **Edit** menu, choose **Delete**.
3. Click **Yes** to delete the selected question.

   The question is permanently deleted from the Library and from any assessments in which it was included.

11.2.12 Preview a Question

You can preview a question at any time by clicking Preview on the Question Editor toolbar. This allows you to interact with the question just as the user would in the Player or in an LMS.

To preview a question:

1. Open the question that you want to preview in the Question Editor.
2. Click **Preview** on the Question Editor toolbar.
3. Answer the question and review any remediation feedback, if available.
4. Click **Take question again** to preview the question again.

11.3 Develop Assessments

An assessment is a collection of questions or questions and topics that help determine a user's level of understanding of the content. You create and edit assessments in the Developer using the Assessment Editor by linking existing questions or by creating new questions. Assessments can be added anywhere in the Library or outline; however, only assessments linked to or set as associated assessments to an outline are available for publishing.

Note: You can modify the Assessment Template in the Library to customize the appearance of assessment summary page in the Developer and published output. See *Customize Assessment Elements* in the Customize the Player section of the Publish Content chapter for more information.

The Assessment Editor is used to design and manage assessments. The Assessment Editor toolbar contains icons for linking new and existing questions, deleting links to questions and changing question order.

Link New Question: Links a new question (of any type) to the assessment.

Link Existing Question: Browses the Library to link existing questions or topics to the assessment.

Delete Link: Removes the link for the selected document (question or topic) to the assessment. The document remains in the Library but is no longer linked to the assessment.

Move Up: Moves the selected document(s) up one row.

Move Down: Moves the selected documents(s) down one row.

Note: Assessments are also important for personalized content if you are using the Professional edition. Personalized content uses assessment results to allow a user to modify the full subject by excluding sections for which he/she has demonstrated competency. This feature allows users to concentrate on the sections in which they had the most difficulty. If you are using assessments as a way for a user to narrow down content to focus on, you should design assessments that cover a representative sample of the subject material. See *Work with the Assessment Coverage View* in the Enhance Content with Questions and Assessments chapter.

11.3.1 Create a New Assessment

When you create an assessment, it opens in a new tab in the Developer. You can link to existing questions or topics from the Library or create and link new questions to populate the assessment. You can link new and/or existing questions from the Assessment Editor toolbar or from the Link menu. Once a question is linked, it displays in the assessment.

When you close the assessment you can save it to the desired location in the Library.

To create a new assessment in the Library:

1. On the **File** menu, point to **New** and choose **Assessment**.
2. Save the assessment.

To create and link a new assessment in an outline:

1. Display the Outline Editor by opening the outline to which you want to link a new assessment.
2. Select the module or section document to which you want to link the new assessment.
3. On the **Link** menu, choose **New Assessment**.

   You can also right-click the parent document in the outline and choose Link New Assessment.

   A new assessment is linked (and automatically saved) and appears in the outline beneath the parent document with the default name, that you should change. You can also rename the new assessment after it is linked and saved.
4. To open the assessment in the Assessment Editor, click **Edit assessment** in the Assessment Preview pane or double-click the assessment in the outline.

Note: You can link existing assessments to an outline using the Link menu and Existing Document command. You can select multiple assessments using the standard Windows selection keys (CTRL+click and SHIFT+click). You can also link assessments to an outline by copying them from the Library and pasting them to the parent document in the Outline Editor or by splitting the work area and dragging an assessment from the Library in one work area to the open outline in the other work area.

11.3.2 Add Questions to an Assessment

When you link an existing question in the Library, the question is added to the assessment but also remains in the Library for use in other assessments or outlines.

If you create a question from the File menu, it is saved in the Library but not linked to any assessment.

You can link a new or existing question to an assessment from the Link New Question or Link Existing Question options on the Assessment Editor toolbar. You can also use the Link menu or context menu to link new or existing questions.

To link a new question to an assessment:

1. Create or open an assessment in the Assessment Editor.
2. On the **Link** menu, point to **New Question** and choose the type of question to create.
3. Type a name for the new question and save the question to the desired Library location.
4. Double-click the new question in the assessment to edit it in the Question Editor.
5. Save the changes to the question.
6. Save the assessment.

To link an existing question to an assessment:

1. Create or open an assessment in the Assessment Editor.
2. On the **Link** menu, choose **Existing Question**.
3. Navigate in the Library to find the question or questions you want to add to the assessment.
4. Select a question and click **Open**.

   You can select multiple questions using the standard Windows selection keys (CTRL+click and SHIFT+click).

   You can also link existing questions to an outline by copying them from the Library and pasting them to the parent document in the Outline Editor or by splitting the work area and dragging questions from the Library in one work area to the open outline in the other work area.
5. Save the assessment.

11.3.3 Reorder Questions in an Assessment

After you include questions in an assessment, you can reorder them. During playback, assessment questions can appear in the same order they appear in the Assessment Editor if the Question Order property (of the assessment) is set to As authored (default). However, you can have questions appear in random playback order by changing this property to Random order. See *Assessment Properties* in the View Document Properties chapter of the Content Development guide for more information on random question order.

Note: You can override the Question Order property for associated assessments (linked using the Assessments property) when setting up pre- and post-assessments in the Professional edition of the Knowledge Center.

To reorder questions in an assessment:

1. Open an assessment.
2. Select one or more questions that you want to reposition.
3. Click or on the Assessment Editor toolbar as necessary until the questions are in the desired location.

   You can also use drag-and-drop to move questions to another location.
4. Save the assessment.

11.3.4 Delete Questions from an Assessment

You can delete questions from an assessment at any time. This deletes the link to the question in the assessment but the question remains in the Library.

To delete a question from an assessment:

1. Open the assessment.
2. Select one or more questions that you want to delete.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click).
3. From the **Edit** menu, choose **Delete Link** to remove the linked question from the assessment.
4. Save the assessment.

11.3.5 Assessments for Personalized Content (available in Professional edition only)

Assessments can be used to create personalized content when deployed in the Professional edition of the Knowledge Center.

To enable personalized content, an assessment must be designated as a pre-assessment or post-assessment associated with a parent document in the outline, or linked directly to an outline as an inline assessment. Personalized content is based on associating the questions in an assessment with a document in the outline using the question's Associated Content property.

When deploying content in a Knowledge Path, you can specify which assessment to use as a pre-assessment and post-assessment. Pre-assessments and post-assessments have their own features and options that you can set in the Knowledge Center Manager.

In order to designate a pre-assessment and/or post-assessment, assessments must be associated to the parent level document in the outline using the Assessments property for the parent. After the parent document is added as an activity in a Knowledge Path, you choose which of the associated assessments are to be used as a pre-assessment and a post-assessment.

While inline assessments appear in the table of contents for the deployed outline, pre-assessments and post-assessments do not. Instead, they appear as nodes (headings) before the subject activity (for pre-assessments) and after the subject activity (for post-assessments) in the Knowledge Path.

See *Design the Assessment* in the Understand Personalized Content section in the Questions and Assessments in Player Content section in this chapter.

To associate an assessment:

1. Create an assessment in the Library.
2. In the Outline Editor or Library, select the parent module or section.
3. Display the Properties toolpane.
4. In the **General** category, click ... in the **Assessments** cell.
5. From the Associated Assessments for Knowledge Center dialog box, click **Add associated assessment**, navigate to the assessment(s) to be associated and click **Open**.
6. Click **OK** to close the Associated Assessments for Knowledge Center dialog box.
7. Open the associated assessment(s).
8. In the **Assessments** category of the Properties toolpane, set the desired properties for the assessment(s).

   Note: The Developer settings for Answer order, Passing score %, Question order, Remediation, Show Associated Content, and Summary properties can be overridden when setting up the pre-assessment and post-assessment in the Professional edition of the Knowledge Center.
9. Add questions to the assessment(s).
10. Open each question from the assessment or select the question in the Library. In the **Question** category of the Properties toolpane, set the **Associated Content** property to a document in the outline linked directly or indirectly to the assessment's parent.

    Note: You can also use the Assessment Coverage View to add questions to an assessment and set the Associated Content property.
11. Save the assessment(s).

11.3.6 Preview an Assessment

You can preview an assessment prior to publishing the content from the Outline Editor. To preview an assessment, it must be included in an outline. When you select an assessment from any outline, the first question displays in the Assessment Preview pane. You can move through the questions in the order that they were defined in the Assessment Editor using the arrow keys.

To preview and test an associated assessment, you can temporarily link it to a module or section.

To preview an assessment:

1. Open any outline containing an assessment.
2. Click the assessment you want to preview.
3. Answer the questions and review feedback using or or move the slider to advance through the questions.

11.3.7 Delete an Assessment

You can delete an assessment from any outline as needed. When you delete an assessment from an outline, only the link to the outline is deleted; the assessment and the questions it contains are unaffected and remain in the Library.

If you delete an assessment from the Library, the assessment is removed from the Library and from any linked outline. The Missing document icon displays in all locations where the assessment was linked to an outline. Deleting the selected document only, deletes the assessment without deleting the questions in the assessment.

Warning: If you delete an assessment with related documents, questions that link to that assessment only will also be deleted. Questions that link to other assessments or outlines will not be deleted since they are used by other documents. To see where a question is used, select the question and open the Related Documents toolpane. The bottom pane lists the other assessments that link to the question or a parent module or section if the question is used as an inline question in an outline.

Note: Deleting an assessment can cause broken links in your content. See *Broken Links in Questions and Assessments* in the Manage Document Relationships chapter of the Content Development manual for more information.

Multi-user Considerations

- Documents under version control must be checked in and you must be working online to delete a document from the Library. You can delete new documents that have never been checked in (are not under version control) while working online or offline.

To delete an assessment:

1. In the Library, select the assessment you want to delete.
2. On the **Edit** menu, choose **Delete**.
3. Click **Delete my selection** to delete the assessment only or **Delete my selection and related documents** to delete the assessment and any questions linked to it.

Note: You can see which documents are related to the selected assessment by clicking the View related documents link.

11.4 Work with the Assessment Coverage View

The Assessment Coverage view is an Outline Editor view for analyzing assessments to ensure that the assessment questions adequately measure competency as related to the content linked to the assessment. The analysis in the Assessment Coverage view is based on associating a question with a module, section, or topic using the Associated Content property for the question. See *Associated Content Property* under Question Properties in the View Document Properties chapter for information about setting the Associated Content property for a question.

Note: You can include questions in your content by linking them directly to a module or section in the outline structure (inline questions), or by including them in a linked or associated assessment, or both. You can include assessments in your content by linking them directly to the outline structure (inline assessment), or by associating them with a parent document such as a module or section using the Assessments property.

The Assessment Coverage view serves several functions.

- It shows the question coverage in an assessment by the parent document in the outline to which the assessment is associated or linked.

- It shows the question coverage for all documents (modules, sections, topics) in the outline, allowing you to see the areas of the outline that have no associated questions in the assessment.

- It shows questions in an assessment that have no associations with documents in the outline.

- It helps authors find additional questions that can be added to improve coverage.

The Assessment Coverage view includes three components:

- **Assessment section**: Used to select the assessment you want to analyze or improve.

- **Questions Associated section**: Used to view which questions in the current assessment are associated with the currently selected item in the outline. You can also use the tools in this section to add or delete questions.

- **Questions column**: This column is added to the Outline pane when you display the Assessment Coverage view. The numeric value in the Questions column shows the number of questions in the selected assessment that are associated with each document in the outline and its children, if the document is a parent.

Associating content with a question determines if the content document will appear in personalized content (available only in the Professional edition). See *Understand Personalized Content* in the Enhance Content with Questions and Assessments chapter for more information.

To open the Assessment Coverage View:

1. From the Outline Editor, click on the View toolbar and choose **Assessment coverage view**.

11.4.1 Select an Assessment

The first step in using the Assessment Coverage view is to select the assessment you want to build or whose coverage you want to examine from the Select an Assessment list. All assessments directly linked as an inline assessment to a parent document (module or section) in the open outline, or associated with a module or section in the outline (through the Assessments property), appear in the Select an Assessment list; however, you can also work with assessments not linked or associated with the outline.

Note: While an assessment is selected in the Assessment Coverage view, it is considered open and cannot be renamed from the Library.

After selecting an assessment, the view shows the Library location of the assessment and a question count, which is the total number of questions and topics (Know It? questions) in the selected assessment. The Open Assessment button opens the selected assessment in the Assessment Editor, where you can see the full assessment and the question order.

Note: You can undo your actions in the Assessment Coverage view until you select a different assessment from the Select an assessment list. Although it is possible to make content changes to the outline in the Assessment Coverage view, such as linking new sections and topics, it is a good idea to reserve those changes for the Player view because the Player view and Assessment Coverage view maintain separate undo lists. If you make outline changes while in the Assessment Coverage view and then change assessments, you will lose the ability to undo your content changes.

Multi-user Considerations

- The assessment selected in the Assessment Coverage view is considered open and cannot be checked in from the Library. However, if the assessment is linked directly to the outline structure, you can select it from the Outline pane while working in the Assessment Coverage view and check it in.

To select an assessment:

1. Click the **Select an assessment** .
2. Select an assessment from the list or click **Other** and browse the Library to select another assessment.

11.4.2 Use the Questions Column

The Assessment Coverage view includes a Questions column in the Outline pane. The value in this column indicates the number of questions in the selected assessment that are associated with each document in the outline (through the question's Associated Content property). For example, if a topic is associated with two questions in the assessment, a "2" appears in the Questions column for the topic. Parent documents (modules and sections) show the number of questions that are associated directly with the module and section itself, plus the number of questions associated with the child documents belonging to the module or section.

Assessments may also include topics. Adding a topic to an assessment adds a Know It? question to the assessment for testing competency in completing the task. When you add a topic (Know It? question) to an assessment, it is automatically associated with the topic itself, and therefore, included in the Question column count for the topic. For example, if a topic is associated with one question and also added as a Know It? question in the assessment, a "2" appears in the Question column for the topic.

The Questions column shows the dispersal of questions in the outline so that you can create an assessment with balanced coverage. For example, a "0" in the column for a topic indicates that the selected assessment contains no questions associated with that topic. Selecting the assessment's parent document (the document to which it is linked) shows all of the questions and topics (Know It? questions) associated with the parent and child documents. Questions that are included in the selected assessment and are also directly linked to the outline structure (inline questions) are only counted once in the Questions column.
Note: You can compare the Question count in the Assessment section to the value in the Questions column for the assessment's parent document. If the values do not agree, the assessment includes questions whose Associated Content field is not set, or set to documents not linked to the assessment's parent.

11.4.3 Use the Questions Associated Table

The information in the Questions Associated table varies with the selected assessment and the document selected in the Outline pane. The table is filtered to show only those questions and topics (Know It? questions) in the assessment associated with the selected document. In other words, how many questions have you assigned to test competency for this specific document. For example, if you select a topic for which you have created and associated two questions, those two questions appear in the table. If you also add the topic itself as a Know It? question to the assessment, the filtered list will show three items, the two questions and the topic. Selecting a parent document, such as a module or section, displays a table of all the questions and topics associated with the parent document plus all child documents.

The filtered table includes the following columns:

- **Name**: Name of the question.
- **Type**: Indicates if the assessment item is a Question or Topic (Know It? question).

- **Associated Content**: Lists the name of the document associated with the question as set in the Associated Content property. In the case of a Know It? question, the topic itself is listed, as the Know It? question tests the topic and is associated with itself.

- **Path**: Library path to the assessment item.

Questions in the assessment that do not have their Associated Content property set (not linked to any content), are NOT included in the filtered table. The questions in the table do not appear in the same order as in the assessment. To compare the full assessment and see the order in which the questions will appear, you can open the selected assessment using the Open Assessment button in the view.

Note: A question can have only one document associated with it (for example, only one document can be set as the Associated Content property). However, a single document (module, section, or topic) can be associated with multiple questions. To quickly associate a document with several questions, select the questions in the Library and use the Properties toolpane to assign the same document as the Associated Content property for all of the selected questions. See *Associated Content Property* under Question Properties in the View Document Properties chapter for information about setting the Associated Content property for a question.

11.4.3.1 Improve Question Coverage

After viewing the dispersal of questions in the outline, you can use the tools in the view to strengthen the assessment by providing better question coverage. For example, if you see that one topic has no associated questions and another has five, you may want to balance the coverage in the assessment by adding one or two questions to one topic and removing questions from the other.

While you will want to use the Assessment Coverage view to analyze an assessment after you create it, it is also a good place to begin building an assessment. Using the view to link a new or existing question with a document in the outline, adds the question to the selected assessment and automatically sets the Associated Content property for the question to the document selected in the outline; in effect, mapping the question to your content. You can also clear the Associated Content property for a question, which removes the association, but does not remove the question from the assessment.

Note: The Publishing Wizard includes a warning in the activity log if a published assessment contains questions that do not have the Associated Content property set. You can open the activity log from the final Publishing Wizard screen and view which assessments were affected.

11.4.3.2 Add Questions to the Assessment

If you determine that a selected assessment does not provide adequate coverage for the content, you can use the tools in the view to strengthen the assessment. The tools let you link new or existing questions to the assessment and find additional questions related to the content that could be added to improve coverage.

Link New Question
Use the Link New Question list arrow to add new Fill in, Hotspot, Matching, Multiple Choice (Single Answer), Multiple Choice (Many Answers), True/False, and User-Defined questions. When adding the question, you are prompted to name it and select a folder for saving the question (defaults to the same folder where the document is saved). The new blank question is added to the selected assessment and automatically associated with the document selected in the outline, so it also appears in the Questions Associated table. You can double-click the question in the Questions Associated table to open it in the Question Editor and add the content for the question.

Link Existing Question
Use this option to browse the Library and add an existing question or topic (Know It? question) to the selected assessment. When you link an existing question associated with

another document, you automatically break the original association and set the Associated Content property of the question to the currently selected document.

When you add a topic (Know It? question) that is outside of the assessment's coverage (either not linked to the outline or not linked to the assessment's parent), the Know It? question is added to the assessment, but no association is made with the selected document. Instead, the Know It? question is associated with the topic itself, and therefore does not appear in the Questions Associated table for the selected document.

When you add an existing question (question or Know It! topic) that is already part of the assessment, a Duplicate Questions or Topics message opens telling you that the question item is already part of the assessment and will not be added. Duplicate question items are not added since a question or topic can occur only once in an assessment.

Delete Link
Use this option to remove the question from the assessment. Deleting the question link does not delete the question from the Library or delete the association between the question and the document.

Clear Associated Content
Use this option to clear the Associated Content property for the selected question. The question remains in the assessment, but since it is no longer associated with a document, it is removed from the Questions Associated table. Clearing the association between a question and a document reduces the associated question count by one. You cannot clear the association for a Know It? question, but you can remove the question from the assessment.

Note: You can undo your actions in the Assessment Coverage view until you select a different assessment from the Select an assessment list.

Multi-user Considerations

- The Associated Content property is an attribute of the question, therefore the question must be checked out to you to associate it with a document. However, the content that is being associated does not have to be checked out.

  The Assessment document must be checked out to add a new question. The system automatically checks out the assessment and question when you associate a question with a document.

11.4.3.3 Suggest Questions

The Suggest Questions dialog box shows questions that are associated with the selected document, or linked in the outline to the selected parent document (module or section) as a child document, but are not included in the selected assessment. For example, if you open Suggest Questions for a topic in the outline, the questions listed all have their Associated Content property set for the topic but are not included in the selected assessment. The suggested questions may be part of another assessment, such as a pre-assessment, or just independent questions in the Library. If the selected outline item is a parent document, the list includes any questions directly associated with the parent or with a child document, and questions linked in the outline (as inline questions) to the parent or any of its children.

In addition to listing the questions and topics associated with a document, the Suggest Questions list provides additional columns of information including the reason for suggesting a question or topic;

- **Add**: This column shows an empty checkbox next to each question or topic in the list. Select a checkbox to add the question or topic to the selected assessment.

- **Name**: This column displays the name of the suggested question or topic.

- **Type**: This column indicates if the suggested question is a question or topic.

- **Associated Content**: This column indicates the document that is associated with the question through the Associated Content property. See *Associated Content Property* under Question Properties in the View Document Properties chapter for information about setting the Associated Content property for a question.

- **In Outline**: A checkmark in this column indicates that the reason for suggesting the question or topic for a selected document is that the question or topic is a child document linked to the outline, but not included in the assessment.

- **Associated with Selection**: A checkmark in this column indicates that the question is associated with the selected document or one of its child documents, but is not included in the assessment.

  Tip: The questions that appear in Suggest Questions may be associated with the outline document but linked to another assessment. For example, you may want to include separate questions in your pre- and post-assessments, so several questions may be associated with the same document. If you add a question to one assessment that is already linked to another assessment, the question will appear in both assessments. If you wish to use unique questions in each assessment, you can indicate which questions belong to which assessments by appending the assessment name to the question name. You can also create separate folders for each assessment and its questions. Then the Path column for each question will tell you the assessment for which the question is designed.

- **Path**: This column displays the location in the Library of the suggested question or topic.

Note: You can undo your actions in the Assessment Coverage view until you select a different assessment from the Select an assessment list.

Multi-user Considerations

- The Associated Content property is an attribute of the question, therefore the question must be checked out to you to associate it with a document. However, the content that is being associated does not have to be checked out.

  The Assessment document must be checked out to add a new question. The system automatically checks out the assessment and question when you associate a question with a document.

11.4.3.4 Set Associated Content

The Set Associated Content list shows questions in the selected assessment that are NOT associated with the selected document or its children. When you select a question from the list, you set the association of the question to the document selected in the outline. If the question is already associated with another document, selecting the question changes the question's Associated Content property. However, when you close the Set Associated Content list, you will be notified that the Associated Content property was updated. You can use the View activity log link to see which question was affected.

- **Add**: This column shows an empty checkbox next to each question or topic in the list. Select a checkbox to add the question or topic to the selected assessment and set the Associated Content property.

- **Name**: This column displays the name of the suggested question or topic.

- **Path**: This column displays the location in the Library of the suggested question or topic.

Note: You can undo your actions in the Assessment Coverage view until you select a different assessment from the Select an assessment list.

Multi-user Considerations

- The Associated Content property is an attribute of the question, therefore the question must be checked out to you to associate it with a document. However, the content that is being associated does not have to be checked out.

  The Assessment document must be checked out to add a new question. The system automatically checks out the assessment and question when you associate a question with a document.

12 Manage Document Relationships

As you build your content and link various documents, you may need to review the relationships between documents and repair broken links that resulted from deleted or unavailable documents.

The Developer provides toolpanes that allow you to:

- View Related Documents
- View Broken Links

You can display these toolpanes from the Library or any document editor. When you use these toolpanes from the Library or Outline Editor, you must select one document to view its related documents or broken links. When you display these toolpanes and open a document in a document editor, these panes automatically display the results for the open document.

Note: The Related Documents and Broken Links toolpanes are empty if you select multiple documents from either the Library or Outline Editor. Select only ONE document to display the appropriate results.

You can open any document listed in either the Related Documents or Broken Links toolpane by double-clicking the document name.

Publishing Note: Broken links are automatically removed from any published output. However, errors will be generated during the publishing process and are listed in the activity log, which you can view at the end of publishing.

Multi-user Considerations

- If you open a document that is not checked out to you, it opens in Read-Only mode. If you decide to make any changes to a Read-Only document, upon exit you are given the option to save the document (check out and save the changes), save it as a new document, or discard the changes.

12.1 View Related Documents

Any document can have links to other documents as well documents that link to it. For example, a section can have one or more modules that link to it as well links to topic, web page, or package documents. You can view both documents that link to the current file and documents that the current file links to using the Related Documents toolpane.

The top section of the toolpane displays the name of the selected document and a list of documents that it links to. The bottom section of the toolpane displays the documents that link to the selected document (parent documents). The Library Details View displays a Link Count and Links To column that calculates the total number of document links from the top and bottom sections of the Related Documents toolpane, respectively.

Note: You can resize either section of the pane by dragging the horizontal split bar up or down.

Broken links are also displayed in this pane; however, you can also display the Broken Links toolpane to show only broken links and not related documents.

Multi-user Considerations

- If you perform this operation while you are working offline, only the documents in your local cache are considered.

To view related documents:

1. Display the Related Documents toolpane.
2. Select ONE document that you want to review from the Library or Outline Editor.
3. Review the document links.
4. Double-click the name of any document in either section of the toolpane to open a related document.
5. Continue selecting other documents to review their related links.

12.2 View and Repair Broken Links

As you develop content, you will want to ensure that there are no broken links between documents. In most cases, broken links result when linked documents are deleted and not available.

To help you track the state of links between documents, you can display the Broken Links toolpane from the Library or any document editor and repair broken links for selected documents. For example:

- If you are working in the Library, select one document to view its broken links.
- If you open a document in an editor (other than the Outline Editor) such as a web page or glossary, broken links are displayed for the open document.
- If you are working in the Outline Editor, the results are based on the selected document. For example, if you select the root document in the Outline Editor, broken links are displayed for all documents that appear in the outline as well as any related documents. As you select other documents in the outline, broken links are displayed for the selected document and child documents as well as their related documents.

The top of the Broken Links toolpane displays the document you have selected or opened in an editor. If there are broken links for the selected document they will automatically appear in the toolpane once a document is selected or opened. The Name column shows the related documents that have broken links and the Broken Link column identifies the document to which the link is broken.

If the broken link is the result of a deleted document, you will see Missing Document in the Broken Link column. You can repair a broken link by removing the link to the missing document. For example, if a section has a broken link because a linked topic was deleted, you can open the section in the Outline Editor and remove the missing topic from the section. If a broken link results because a glossary document was deleted, you can open the Properties toolpane for the document and either remove the linked glossary or assign a different glossary.

Note: Broken link documents also appear in left pane of the Outline Editor so you see where they are in the context of the outline.

Link to Package File

A broken link cannot be detected when you have a document that links to a file in a Package and the file is then deleted from the Package.

Multi-user Considerations

- Broken links can happen for several reasons, and, in most cases, can result from working offline. For this reason, it is recommended that if you do work offline and establish links between documents, you should periodically go back online and check in your work.

  A broken link can be created the following ways:

  - You create a link to a document that was deleted by another author.

  - You create a link to a new document that exists in your local cache but has not been checked in to the server. This will appear as a broken link to other authors who view the source document until you check in the new document.

  - You create a link to an external document on your computer that is not visible to the other users.

  - A link target URL existed at the time the link was created but it was deleted or renamed.

  - A link can be broken because you are offline and you do not have a document in your local cache that a document is linked to. You should go online and get the appropriate documents that you need.

  Broken links are represented in two ways. The Missing Document label appears for a broken link document that was new (not under version control) and deleted. A document that is under version control and deleted is identified by its name and a red X on top of the standard document icon. To repair this type of broken link you can either restore the deleted document or remove the link to the document.

To view broken links:

1. Display the Broken Links toolpane.
2. Select ONE document that you want to review from the Library or Outline Editor.

   If the Broken Links toolpane remains empty when you select a document, there are no broken links. If broken links exist for the selected document, each document with a broken link appears. You should take the appropriate steps to fix any broken links that are reported.

12.3 Broken Links in Published Content

Most broken links (links to a document in the Library such as module, section, topic documents, questions, assessments, package files, or web pages) are automatically detected and removed during publishing from any Player or document format. However, links to external content such as URL links or graphic links to external files cannot be verified at time of publishing. If these links are broken, they may appear in published content.

In online formats such as the Player, the browser will handle a missing URL or graphic file with a standard "content not found" message. In document formats, the Developer will include the bad URL in the document and let Microsoft Word display the standard "content not found" message when the author launches the link.

If attachment icon links are broken (but the attachment itself exists), the Developer inserts a stock graphic icon so the online users will have something to click, rather than displaying a broken image link.

Note: Although broken links are removed in publishing, the source content is unaffected and will still have broken links that should be fixed.

12.3.1 Broken Links in Questions and Assessments

Questions and Assessments, like other document types, can contain broken links for a variety of reasons.

If the link to a question is broken, the question is excluded from the published output. This occurs if the question is deleted from the Library. If the question is renamed or moved to another location in the Library, the link remains intact.

The following scenarios describe how broken links in questions and assessments affect publishing:

Background graphic is missing from package

If the background graphic used in a question was removed from the package where it resided, a broken graphic image displays in the Preview pane but the question does not display in the Broken Links pane. A Broken Link message is created in the Activity Log but the question publishes without a graphic.

Package with background graphic is missing

If the package with the background graphic used in a question was removed, a broken graphic image displays in the Preview pane and the question displays in the Broken Links pane. A Broken Link message is created in the Activity Log but the question publishes without a graphic.

Package with content used in a question is missing

If the package with content used in a question was removed, a message indicating the package may have been deleted displays in the Preview pane and the question displays in the Broken Links pane. A Broken Link message is created in the Activity Log. The question does not publish but the other content publishes.

File linked to content in a package is missing

If the file linked to content in a package was removed, a message indicating the file can not be found displays in the Preview pane but the question does not display in the Broken Links pane. A Broken Link message is created in the Activity Log and the question does not publish.

Broken link to question template

If a link to the question template is broken, the question does not appear in the Preview Pane but does appear in the Broken Links pane. A Broken Link message is created in the Activity Log and the question does not publish.

Broken link to associated content

If a link to associated content is broken, the question displays in the Broken Links pane. An error message is created in the Activity Log and the question publishes without the associated content.

Assessments links to a deleted question

If an Assessment links to a question that was deleted, a message indicating the question does not exist displays in the Preview Pane and the assessment appears in the Broken Link pane. A Broken Link message is created in the Activity Log and the Assessment publishes without the question.

Note: See *View and Repair Broken Links* in the Manage Document Relationships chapter of the Content Development manual for information on resolving broken links.

13 Define Glossary Terms

As you create content, you might use specialized terms unique to your company or terms that require further clarification for your users. You can use glossaries to provide definitions for these terms.

Use of glossaries involves three steps:

First, you create a glossary document using the Glossary Editor. Each glossary document contains a list of terms and definitions, where the definitions are attachments to which the terms link. You can also specify a tooltip for each definition link, along with conditions describing markup of each term (match whole word and match case). Using the Glossary Editor, you can add, edit, and delete terms. You can also create multiple glossary documents and use them for different parts of your content.

You next assign one or more glossaries to your content using the Properties toolpane. You can assign glossaries in this way from the Library, Outline Editor, and Web Page Editor. In addition, in the Outline Editor and Topic Editor, you can use property inheritance to ensure that the appropriate glossary is automatically assigned to children created under a parent document to which a glossary has been assigned. Glossaries can be assigned only to modules, sections, topics, and web pages.

The final step in using glossaries is glossary markup, or updating glossary links, which can be done from the Glossary Editor, Library, and Outline Editor. When you update glossary links, the Developer searches the text in your content for occurrences of glossary terms. When it finds a term that matches the selected markup conditions (match whole word and match case), it creates a link to the attachment specified as the definition link. By default, when a glossary term appears multiple times in one location, only the first instance of the term is marked as a glossary link. You can also change the glossary default settings to have all occurrences of all terms marked as glossary links.

If you later make any changes to a glossary, to glossary assignments, or to text containing glossary terms, you must update the links again.

Glossary markup affects text in frame bubbles in topics, including Introduction and End frames, and text in web pages. However, if a glossary term is included in the text of a manually created bubble text link or web page hyperlink, no additional glossary link is created during glossary markup. That is, text used in manually created links is skipped during glossary markup. For example, suppose that a frame bubble in a topic contains the text "Save this file to your local disk." and you create a link from the phrase "local disk" to a web page attachment. Further suppose that the glossary assigned to this topic contains the term "disk" with a different attachment as its definition link. If you then update the glossary links for the topic, the original link to the web page is left intact, and no glossary link is created from the word "disk" to the definition link attachment.

Note that document names, package files, and templates are all excluded from glossary markup.

When you publish your content to Player outputs, glossary terms appearing in bubble text in topic frames or web page text are linked to their definitions as in the Developer. Users can click glossary links to display the attachments containing the definitions of the glossary terms. When you publish content that contains glossary markup to a Training Guide and Instructor Manual, a glossary is included as a list of terms and definitions at the end of the document. If you publish content containing more than one glossary to one of these document outputs, the glossaries are merged and presented as one alphabetical list. If a term appears in more than one of the merged glossaries, it is listed multiple times, once for each glossary in which it appears. However, only those terms with definition link attachments that typically appear in document outputs are included in the glossary. Specifically, the types of definition links included in the glossary sections of document outputs are package files (graphics only), web pages, and URLs (addresses only). Therefore, if a definition link is a non-graphic package file,

such as an Excel spreadsheet, the corresponding term is not included in the document glossary.

13.1 Create a Glossary

You create and manage glossaries using the Glossary Editor. You can create a glossary from the main File menu available in the Library or any other document editor. When you create a new glossary or open an existing glossary, the Glossary Editor launches in a new tab and displays an empty glossary (or the selected glossary) where you can add, edit, and delete terms and change their properties (such as tooltip). You can save the glossary to any folder in the Library and then assign it to one or more documents anywhere in the Library.

If you save a glossary to the wrong folder in the Library, you always have the option to move the glossary document to another folder. You can also rename a glossary at any time without breaking any links from your content to the glossary.

Note: You can open multiple glossaries at the same time. Each glossary appears in its own tab.

In addition to its name, each glossary document has a language assigned to it. The default language of a new glossary document is the language of the Developer. However, you can change the language of the glossary in the Properties toolpane.

Multi-user Considerations

- Any new document that you create or link is automatically checked out to you. If you want to make a new document available to multiple authors and place the document under the Developer's version control system, you must check it in.

  See *Check In and Check Out Documents* in Use the Developer in a Multi-user Environment for more information.

To create a new glossary:

1. On the File menu, point to **New** and choose **Glossary**.
2. Add terms to the glossary.
3. Save the new glossary.

   You can also close the tab and click Yes in response to the Save Document message.

   When you save a glossary for the first time, you are prompted to provide a name for it. Enter a name for the glossary by typing over the default name. Although the glossary name does not have to be unique, it is recommended that you provide a meaningful name so you can easily manage multiple glossaries.

   Long document names are supported.

13.2 Edit a Glossary

You can open a glossary at any time in the Glossary Editor to modify its contents. For each glossary that you open to edit, an independent instance of the Glossary Editor opens in a separate tab, allowing you to edit multiple glossaries at one time. When you edit a glossary, you can add, edit, or delete glossary terms, where each glossary entry consists of a term (the text to be matched for markup), a link to an attachment that provides its definition, a tooltip (optional), and markup conditions (match whole word and/or match case).

After making any changes to a glossary, you should update glossary links to apply your changes.

Multi-user Considerations

- Before you can perform this action, you must check out the document. After you save any changes, you should check in the document to make it available to other authors and add the changes to the Developer's version control system.

  When you add, edit, or delete glossary terms, you are editing the glossary document, so you must check the glossary out. When you assign a glossary to a document or update glossary links, you are not editing the glossary document itself, so you do not need to check the glossary out. In these cases, you are editing the parent documents to which the glossary is assigned, so you must instead check out the parent documents.

To edit a glossary:

1. From the Library, open the glossary document that you want to edit.
2. Add, edit, and/or delete glossary terms as needed.
3. Save and close the glossary document.

   When you close a glossary document to which you have made and saved changes, you are prompted to update glossary links. Click **Yes** to update links for all documents to which the glossary is assigned, or click **No** to close the glossary without updating links.

   If you have not saved the changes before closing the glossary, you are prompted to save the glossary and update links, to save the glossary without updating links, or not to save the glossary. Select the appropriate option and click **OK**, or click **Cancel** to keep the glossary open without saving changes.

13.3 Add a Glossary Term

Each glossary entry consists of a term (the text to be matched for markup), a link to an attachment that provides its definition, a tooltip (optional), and markup conditions (match whole word and/or match case). Glossary terms can include both spaces and special characters, and there is no limit to the length of a term. However, each term must include at least one non-space character and cannot begin or end with one or more spaces. In addition, glossary terms must be unique, on a case-insensitive basis, within a glossary document. Therefore, for example, one glossary cannot include both the terms "document" and "Document". You must enter a valid term before you can set any of the properties of the glossary entry (definition link, tooltip, markup conditions).

You can use any type of attachment (package file, web page, or URL) as a definition link. In the Developer and in published Player outputs, glossary terms appearing in bubble text in topic frames or web page text are linked to their definition attachments. Users can click glossary links to display the attachments containing the definitions of the glossary terms. Glossaries are also included in the Training Guide and Instructor Manual as a list of terms and definitions at the end of the document. If you publish content containing more than one glossary to one of these document outputs, the glossaries are merged and presented as one alphabetical list. If a term appears in more than one of the merged glossaries, it is listed multiple times, once for each glossary in which it appears. However, only those terms with definition link attachments that typically appear in document outputs are included in the glossary. Specifically, the types of definition links included in the glossary sections of document outputs are package files (graphics only), web pages, and URLs (addresses only). Therefore, if a definition link is a non-graphic package file, such as an Excel spreadsheet, the corresponding term is not included in the document glossary.

You also have the option to enter text for a tooltip that identifies the link contents. These tooltips appear in the Player when a user rests the mouse pointer over the link text. For example, because these links apply to glossary terms, you might use the tooltip "definition". However, the length of the tooltip is not limited, and you can use a different tooltip for each term, if desired.

Tip: Although there is no limit to the length of a tooltip, concise, descriptive tooltips are most useful.

In addition, you can specify that the glossary term must match the whole word only, preventing words containing the glossary term from being marked as glossary links. For example, if the Match Whole Word option is selected for the glossary term “test”, the word “testing” is not marked as a glossary link. You also have the option to require glossary terms to match the specified case, so that words that are not typed in uppercase and lowercase letters exactly as the term in the glossary document are not marked as glossary links.

After adding glossary terms, you should update glossary links to apply your changes.

To add a glossary term to a glossary document:

1. In the empty **Glossary Term** cell in the bottom row of the table, type the term.
2. In the **Definition Link** cell in the same row, select an attachment for the definition link.
3. In the **Tooltip** cell in the same row, type a tooltip, if desired.
4. Set the markup conditions.

   By default, **Match Whole Word** is selected, and **Match Case** is not selected. Change a setting by checking or clearing the appropriate checkbox.
5. Continue adding terms or save and close the glossary document.

   When you close a glossary that is assigned to one or more documents after making changes to it, you are prompted to update the glossary links. Select Save the glossary and update the links and click OK to close the glossary and update links. Otherwise, you can select Save the glossary and click OK to close the glossary without updating links. Click Cancel to close the glossary document without saving changes.

Tip: To navigate in the glossary, you can click in the desired cell or press TAB to move one cell to the right or SHIFT+TAB to move one cell to the left.

13.4 Select a Definition Link Attachment

When you create a new glossary term, you must also select a corresponding definition link, which is an attachment containing the definition for the term. If you do not select a definition link attachment for a term, no glossary links are created in your content for that term. A definition link can be any type of attachment: package item, web page, or URL. When you publish your content to Player outputs, glossary terms appearing in bubble text in topic frames or web page text are linked to their definitions as in the Developer. Users can click glossary links to display the attachments containing the definitions of the glossary terms. Glossaries are also included in the Training Guide and Instructor Manual as a list of terms and definitions at the end of the document. If you publish content containing more than one glossary to one of these document outputs, the glossaries are merged and presented as one alphabetical list. If a term appears in more than one of the merged glossaries, it is listed multiple times, once for each glossary in which it appears. However, only those terms with definition link attachments that typically appear in document outputs are included in the glossary. Specifically, the types of definition links included in the glossary sections of document outputs are package files (graphics only), web pages, and URLs (addresses only). Therefore, if a

definition link is a non-graphic package file, such as an Excel spreadsheet, the corresponding term is not included in the document glossary.

To select a package file or web page as a definition link for a glossary term:

1. In the Definition Link cell for the term, click ....
2. In the Edit Definition Link dialog box, click **Create link**.
3. In the Link to pane, select **Document in Library**.

   If desired, you can select **Packages** or **Web pages** in the **Type** field to further filter your selection.
4. Navigate the Library to the folder containing the package file or web page to which you want to link.
5. Select the desired package file or web page document.
6. Click **OK** or press ENTER.

Note: At step 3, you can also click Create new web page to create a new web page and link to it in one step. When you do so, you first specify the name of the web page and the Library folder in which it should be saved. The Web Page Editor then launches in a new tab, displaying an empty web page.

To select a URL as a definition link for a glossary term:

1. In the **Definition Link** cell for the term, click ....
2. In the Edit Definition Link dialog box, click **Create link**.
3. In the Link to pane, select **URL**.
4. In the **Address** field, type or paste the target URL.

   If a Base URL was set, you can enter a relative URL beginning with ../.
5. Click **Go** or press ENTER.

   While selecting a URL, you can also enter a base URL and then follow links in the preview displayed in the results pane to reach your desired target.
6. Click **OK** or press ENTER.

13.5 Edit a Glossary Term

You can edit a glossary term, if necessary, from the Glossary Editor. In addition to changing the text of the term itself, you can change the tooltip, select a different attachment for the definition link, or change the markup conditions (match whole word, match case). You make these changes in the same way as when you add a new glossary term.

Note: Glossary terms can include both spaces and special characters, and there is no limit to the length of a term. However, each term must include at least one non-space character and cannot begin or end with one or more spaces. In addition, glossary terms must be unique, on a case-insensitive basis, within a glossary document. Therefore, for example, one glossary

cannot include both the terms "document" and "Document". You must enter a valid term before you can set any of the properties of the glossary entry (definition link, tooltip, markup conditions).

After editing one or more glossary terms, you should update glossary links to apply your changes.

13.6 Delete a Glossary Term

If a glossary term is no longer needed or appropriate, you can delete it by deleting the entire entry from the glossary document. Deleting the glossary term and updating links for the glossary from which it was deleted removes the glossary links from affected text; however, the link text itself is not deleted. The attachment (web page or package) used as the definition link is also not deleted. (URL attachments used as definition links are obviously not affected, as they are external to the Developer.)

13.7 Assign a Glossary to a Document

Once you create a glossary, you can assign it to one or more documents in the Library. A glossary can be assigned to a document in two ways: through manual assignment and through inheritance from the document's parent.

You can manually assign a glossary while working in the Library, Outline Editor, or Web Page Editor, using the Properties toolpane. A glossary can be assigned only to modules, sections, topics, and web pages. Although no module or section text is marked up when glossary links are updated, assigning glossaries to modules and sections is useful for inheritance purposes, as described.

Tip: You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click). However, you must select only document types that support glossaries. If a multi-document selection in the Library includes a document type that does not support glossaries, such as a package, the Glossary property does not appear in the Properties toolpane.

Warning! Be careful when changing a property for multiple documents that already contain values for the same property. The new values you enter for the property overwrite any existing values for all selected documents.

Glossaries can be assigned through property inheritance only in the Outline and Topic Editors. If you assign a glossary to a module or section, all new module, section, and topic documents that you link as children of this document while working in the Outline Editor inherit the parent's glossary setting. Similarly, any new web page that you create from the Concept pane of the Outline Editor inherits the glossary of its parent. Likewise, if you assign a glossary to a topic, any new web pages that you create while working in the Topic Editor, for example, as new frame attachments, inherit the topic's glossary setting. However, new documents that are not linked (documents that are created using the File, New command) and existing documents that are linked as children of the document do NOT inherit any property settings.

Once you have assigned a glossary to a document, you still must update glossary links to create glossary links in that document.

If a glossary is no longer appropriate for a document, you can change or remove the assigned glossary using the Properties toolpane. Changing or removing the glossary assigned to a parent does not automatically change the glossary for any child documents, even those that inherited their glossary from the parent. You must change the glossary for each child document manually.

In addition, changing or removing the glossary assigned to a document does not automatically update glossary links. Therefore, after making any changes in glossary assignments, you must update glossary links to apply the new glossary to the affected documents.

Note: You can view the glossaries assigned to selected documents in the Related Documents toolpane. However, you cannot use the Related Documents toolpane to change glossary assignments.

Multi-user Considerations

- Before you can perform this action, you must check out the document. After you save any changes, you should check in the document to make it available to other authors and add the changes to the Developer's version control system. If you are changing the glossaries of multiple documents at the same time, all selected documents must be checked out. The Glossary property is not available for editing if one or more documents in a multi-document selection are not checked out.

  You do not need to check out the glossary, only the parent document(s). In addition, you can link to a glossary even if it is checked out to another user.

  When you are working offline, you can link to a glossary only if it is available in your local cache. Therefore, if you plan to work offline, you should ensure that you have a local copy of any glossary to which you want to link. To do this, you can either check out or get the glossary, depending on whether you plan to edit it or to have access to a read-only copy. If you go offline and do not have a copy of a glossary in your local cache, that glossary will be unavailable to you as you work offline. To remedy this, you need to go back online and get the documents that you need.

To assign a glossary to a document:

1. Display the Properties toolpane.
2. From the Library or Outline Editor, select the document(s) to which you want to assign a glossary.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click). However, glossaries can be assigned only to modules, sections, topics, and web pages.
3. In the Properties toolpane, click the **Glossary** property.
4. Click .
5. Navigate the Library to the folder containing the desired glossary.
6. Click **Open** or press ENTER.

   After assigning a glossary to a document, be sure to update glossary links.

To remove a glossary assigned to a document:

1. Display the Properties toolpane.
2. From the Library or Outline Editor, select the document(s) from which you want to remove an assigned glossary.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click). However, you must select only module, section, topic, and/or web page documents to which the same glossary has been assigned.
3. In the Properties toolpane, click the **Glossary** property cell.

4. Press DELETE to clear the glossary field.

   After removing an assigned glossary from a document, be sure to update glossary links.

13.8 Update Glossary Links

The final step in using glossaries is glossary markup, or updating glossary links. You can update glossary links from the Glossary Editor, the Library, or the Outline Editor.

When you update glossary links from the Glossary Editor, all documents to which the open glossary is assigned are updated.

When you update glossary links from the Library or Outline Editor, the selection and its related documents are included by default. Clicking the View related documents link displays a list of the related documents. For this process, related documents are defined as all searchable documents that are directly or indirectly linked as children of the selection. For example, if you select a section that has topics and each of the topics has a web page linked as its concept, choosing to search related documents searches the section, the topics, and the web pages linked to the topics. Templates and package contents are not included in this operation.

From the Library, you must have at least one document selected or the tool is disabled. If nothing is selected in the Outline Editor, the entire outline is searched; this is equivalent to selecting the root of the outline.

The documents that are included in glossary markup from the Library and Outline Editor do not all have to have the same assigned glossary, but each one must have an assigned glossary to be updated. The appropriate glossary is applied to each document, regardless of the glossary used to update any document to which it is related.

During glossary markup, the Developer searches the text in your content for occurrences of glossary terms. When it finds a term that matches the selected markup conditions (match whole word and match case), it creates a link to the attachment specified as the definition link. By default, when a glossary term appears multiple times in one location, only the first instance of the term is marked as a glossary link. You can also change the glossary default settings to have all occurrences of all terms marked as glossary links.

If you later make any changes to a glossary, to glossary assignments, or to text containing glossary terms, you must update the links again.

Glossary markup affects text in frame bubbles in topics, including Introduction and End frames, and text in web pages. However, if a glossary term is included in the text of a manually created bubble text link or web page hyperlink, no additional glossary link is created during glossary markup. That is, text used in manually created links is skipped during glossary markup. For example, suppose that a frame bubble in a topic contains the text "Save this file to your local disk." and you create a link from the phrase "local disk" to a web page attachment. Further suppose that the glossary assigned to this topic contains the term "disk" with a different attachment as its definition link. If you then update the glossary links for the topic, the original link to the web page is left intact, and no glossary link is created from the word "disk" to the definition link attachment.

Note that document names, package files, and templates are all excluded from glossary markup.

Note also that glossary markup does not create recursive links. Therefore, if a web page that is used as the definition link for a term includes text containing the same term, no glossary link is created, so that the web page is not linked to itself by glossary markup.

Once created, a glossary link functions just like any other link to an attachment, such as a hyperlink inserted in a web page. Therefore, you can edit or remove the link, if desired. However, any changes that you make to a glossary link apply only to that link and do not affect the entry for the glossary term in the glossary document. In addition, if you later update

glossary links again, the text used in a manually edited glossary link is excluded from glossary markup and is not overwritten with a new glossary link.

Multi-user Considerations

- For changes to be made to a document using this tool, the document must be checked out. If you plan to use this tool offline, you should check out all affected documents before going offline.

  When you execute this process, the Developer searches through all of the documents in the selection, regardless of their check in/out state. If a change is necessary and the document is not checked out and if you are working online, the Developer automatically checks the document out to you and makes the change. If the document cannot be checked out, for example, if it is open in another editor or checked out to another user or you are working offline, it is skipped. At the end of the process, a summary message appears with a link to an activity log. Clicking the View activity log link in the message displays a list of the documents that were checked out to you during the process and those that could not be checked out. After you save any changes, you should check in the documents to make them available to other authors and add the changes to the Developer's version control system.

  To update glossary links, you do not need to check out the glossary, only the parent document(s). In addition, you can update links with a glossary even if it is checked out to another user. However, the glossary markup in this case will not reflect any changes made to the glossary after it was checked out.

  When you are working offline, you can update glossary links only if the glossary is available in your local cache. Therefore, if you plan to work offline, you should ensure that you have an up-to-date local copy of any glossary you plan to use. To do this, you can either check out or get the glossary, depending on whether you plan to edit it or to have access to a read-only copy. If you go offline and do not have a copy of a glossary in your local cache, you will be unable to update glossary links for any documents to which it is assigned as you work offline. To remedy this, you need to go back online and get the documents that you need.

To update glossary links from the Glossary Editor:

1. Open the glossary document, if necessary.
2. On the **Edit** menu, choose **Update Glossary Links**.

   If you have unsaved changes in the glossary, you can also choose **Save and Update** from the **File** menu to save your changes and update glossary links in one step.

   The Developer searches all documents to which the glossary is assigned and updates links for glossary terms found in those documents.

To update glossary links from the Library or Outline Editor:

1. Select the document(s) for which you want to update glossary links.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click). If you do not select a document in the Outline Editor, the entire outline is updated.

2. On the **Edit** menu, choose **Update Glossary Links**.

   The Developer searches all selected documents and their directly related children and updates links for glossary terms found in those documents to which a glossary is assigned.

13.9 Delete a Glossary

If a glossary is no longer needed or appropriate, you can delete it just as you would delete a document of any other type. You can delete a glossary only from the Library.

Deleting a glossary removes the glossary document from the Library, but does not delete the package files and web pages used as definition links unless you explicitly choose to delete related documents as well. The links created using the glossary are also not removed when the glossary is deleted. Therefore, if you delete the glossary with related documents, you break these links. Moreover, deleting a glossary does not remove the glossary from the documents to which it was assigned. Therefore, if you delete a glossary that is assigned to one or more documents, you break the glossary assignment links. You can use the Broken Links tool to identify any broken links in your content that result from deleting a glossary.

To avoid breaking links when you delete a glossary document, you should first ensure that it is not assigned to any documents. To do this, you can use the Related Documents tool to find all of the documents to which the glossary is assigned (parent documents). Then, select the parent documents in the Library or Outline Editor and use the Properties toolpane to remove the glossary from these documents or to assign a different glossary. If you plan to delete the glossary's related documents as well (child documents used as definition links), you should also update glossary links for the parent documents, to remove any links created using the glossary to be deleted. After completing these steps, you can select the glossary document from the Library and delete it without creating any broken links.

Multi-user Considerations

- Documents under version control must be checked in and you must be working online to delete a document from the Library. You can delete new documents that have never been checked in (are not under version control) while working online or offline.

  Deleted documents that have been checked in to the Library can be restored if they have not been purged by your Administrator. New documents that have never been checked in cannot be restored.

14 Create Roles for Content Filtering

Role-based filtering allows users to quickly locate modules, sections, topics, questions or assessments based on their job function or department. While developing content, you can create a list of roles corresponding to your intended users and assign the roles to the appropriate documents. During publishing, you can tailor your output by publishing selectively to one, several, or all roles. In the Player, users can then choose from a list of available roles to display only the content that is relevant to their job function; they can also toggle to display the entire outline if necessary. You can also create document outputs, such as Training Guides, that contain information relevant to only specific roles. In addition, the assigned roles populate the Roles/Responsibility field when you publish a System Process Document.

Note: See Also links can also be filtered by Role. If a linked document has a role assigned to it that matches a role set on the parent document, the See Also link appears in the Player output. If no matching role exists, the See Also link is excluded from the Player output.

Working with roles in the Developer requires two basic steps: First, you create the roles, and then you assign these roles to the appropriate documents. You use the Role Editor to create and manage roles in master role list documents. You assign roles and view role assignments at the document level through the Properties toolpane in the Library or Outline Editor. Once you assign one or more roles to a document, the role assignment is saved as a property of the document and travels with it on operations such as export and import.

By default, the Developer comes with one empty master role list for each language installed. These role lists are stored in the System/Roles folder and are named according to language. The default name of a role list document is Roles, followed by the two-letter abbreviation of the language of the document. For example, the Roles.en document is the master role list for the English language. Additional roles that are not included in any role list can also exist in your content, for example, when you import content with new roles. To simplify role assignment, however, it is recommended that you always update the master role list to include these additional roles whenever they exist.

When you assign roles to modules, sections, topics, questions or assessments, the Developer determines the language of the selected document(s) and displays a list of all roles in the master role list for that language, as well as any additional roles that are in use in the selected documents. You can assign roles to modules, sections, topics questions or assessments, and all of the documents selected for role assignment at one time must be of the same language.

Warning! Do not delete the role list for any language. Doing so will disable role assignment for that language.

Once you assign one or more roles to a document, the role assignment is saved as a property of the document. If you later make changes to these roles in a master role list, the document assignment is not updated. Therefore, it is recommended that you define and finalize your role lists before assigning roles to documents. Otherwise, you must manually update each document to which obsolete roles are assigned to reflect the changes in the master role list.

14.1 Edit a Master Role List

By default, the Developer comes with one empty master role list for each language installed. If needed, you can also create role lists for additional languages. You use the Role Editor to add, rename, and/or delete roles in these master role lists.

In addition, content that you import might be assigned to roles that are not included in the master role list for the appropriate language. From the Role Editor, you can easily update the master role list to include such additional roles whenever they exist.

Tip: It is recommended that you define and finalize your role lists before assigning roles to documents. If you later rename or delete a role that has been assigned to one or more topics, you should update the role assignments automatically when you save the changes to the role list.

You can access the Role Editor from the Library or Outline using the Manage Roles item on the Edit Menu. The Role Editor can also be opened using the Manage button on the Assign Roles dialog box. Using these methods, the Developer determines the appropriate language master role list to open based on the following:

- **No document selected**: Master role list opens in the default language specified on the General Tab of the Content Defaults category on the Options dialog box.
- **Document selected**: Master role list opens in the language associated to the document.
- **Document selected in a language where no Master Role List exists**: New master role list is created and opens in that language.
- **Multiple documents of different languages are selected**: The master role list for each selected language opens in a separate tab.

You can open the master role list in a specific language by opening the associated Role file from the System/Roles folder in the Library.

Multi-user Considerations

- Before you can perform this action, you must check out the document. After you save any changes, you should check in the document to make it available to other authors and add the changes to the Developer's version control system.

If you rename or delete a role that is assigned to one or more documents, you will be prompted to update the role assignments automatically when you save your changes to the master role list. If you choose to do this, the Developer searches through all of the documents with the same language as the master role list, regardless of their check in/out state. If a change is necessary and the document is not checked out and if you are working online, the Developer automatically checks the document out to you and makes the change. If the document cannot be checked out, for example, if it is open in another editor or checked out to another user or if you are working offline, it is skipped. At the end of the process, a summary message appears with a link to an activity log. Clicking the View activity log link in the message displays a list of the documents that were checked out to you during the process and those that could not be checked out. After you save any changes, you should check in the documents to make them available to other authors and add the changes to the Developer's version control system.

If a document cannot be checked out to update a renamed or deleted role, you will need to update the role assignment for that document manually.

Automatic updating of assignments for a role that is renamed or deleted is available only at the time the change is made. If you choose not to update role assignments automatically at that time, you will need to update them manually for all documents to which the renamed or deleted role was assigned.

To edit a master role list:

1. Navigate in the Library to the System/Roles folder.
2. Open the role list to which you want to add the role.

   If the Add Roles in Use message box appears, click Yes to add these roles to the role list or No to proceed without adding the roles. See *Update a Master Role List* for further detail.

3. Add, rename, and/or delete roles as necessary.

4. Save and close the master role list.

   If you renamed or deleted any roles that are assigned to one or more documents, you are prompted to update these role assignments when saving your changes. Click **Yes** to save the master role list and update role assignments or **No** to save the master role list without updating role assignments.

   If you have not saved the changes before closing the master role list, you are prompted to save the master role list and update role assignments, to save the master role list without updating role assignments, or not to save the master role list. Select the appropriate option and click **OK**, or click **Cancel** to keep the master role list open without saving changes.

   If you choose not to update role assignments automatically when saving your changes, you will need to update them manually for all documents to which the renamed or deleted role was assigned.

14.2 Add a Role

You can add one or more roles to a role list using the Role Editor.

Each role consists of a text description of a group of users, such as a department name or job function. Roles can include both spaces and special characters, and there is no limit to the length of a role name. Each role must include at least one non-space character and cannot begin or end with one or more spaces. In addition, roles are not case sensitive and must be unique within a role list document. Therefore, for example, one role list cannot include both the roles "author" and "Author".

To add a role to a role list:

1. In the role list to which you want to add a role, click the empty **Role** cell in the bottom row of the table.

2. Type the name of the role.

3. Continue adding roles or save and close the role list document.

Tip: To navigate in the role editor, you can click in the desired cell or press TAB to move one row down the list or SHIFT+TAB to move one row up the list.

14.3 Rename a Role

After you have created roles, you might need to rename them. For example, you might have inadvertently misspelled a role and need to correct it. Roles can include both spaces and special characters, and there is no limit to the length of a role name. Each role must include at least one non-space character and cannot begin or end with one or more spaces. In addition, roles are not case sensitive and must be unique within a role list document. Therefore, for example, one role list cannot include both the roles "author" and "Author".

If you rename a role that is assigned to one or more documents, you must also update the role assignments of the document(s). It is recommended that you update role assignments automatically when prompted to do so after saving changes to the master role list. If the role assignment for a document cannot be updated automatically at that time, for example, if the topic is open in the Topic Editor, or if you choose not to update role assignments automatically, you must manually update each topic to which obsolete roles are assigned to reflect the changes in the master role list.

Tip: You can use find and replace to update role assignments.

Warning! If you rename a role in the master role list but do not update role assignments to remove the original role from all documents, the original role remains in the Library as an additional role in use and will be added back to the role list if you automatically update the role list before it is removed from all document(s). To completely rename a role, you must both rename it in the role list and update all documents to which the original role was assigned.

To rename a role:

1. In the role list, select the role you want to rename.
2. Type the changes.

   Note that this renames the role in the role list only and does not update any documents that might have been assigned to this role.
3. Save and close the role list document.

   It is recommended that you update role assignments automatically when prompted to do so after saving changes to the master role list. If you choose not to update role assignments automatically at this time, you will need to update them manually for all topics to which the renamed role was assigned.

14.4 Delete a Role

In addition to removing roles from documents, you can delete them from a role list.

If you delete a role that is assigned to one or more documents, you must also update the role assignments of the document(s). It is recommended that you update role assignments automatically when prompted to do so after saving changes to the master role list. If the role assignment for a document cannot be updated automatically at that time, for example, if a topic is open in the Topic Editor, or if you choose not to update role assignments automatically, you must manually update each document to which obsolete roles are assigned to reflect the changes in the master role list.

Tip: You can use find and replace to update role assignments.

Warning! If you delete a role from the master role list but do not update role assignments to remove this role from all documents, the role remains in the Library as an additional role in use and will be added back to the role list if you automatically update the role list before it is removed from all document(s). To completely delete a role from the Library, you must both delete it from the role list and remove it from all documents to which it is assigned.

To delete a role from a role list:

1. In the role list, select the row of the role you want to delete.

   Note that you must select the entire row; you cannot simply delete the text name of the role.
2. Click **Delete** or press DELETE.
3. Save and close the role list document.

   It is recommended that you update role assignments automatically when prompted to do so after saving changes to the master role list. If you choose not to update role assignments automatically at this time, you will need to update them manually for all documents to which the deleted role was assigned.

14.5 Update a Master Role List

Although you create and manage roles using role lists, additional roles can exist in your Library that are assigned to one or more documents but are not included in any role list. Such roles can arise as a result of conversion or import, as described later in this section.

During import, the Developer identifies all roles used in the imported content. It then compares these roles to the master role list of the same language. If any of these roles is not included in the appropriate master role list, the Developer attempts to add the role to the role list. If the role cannot be added to the list, for example, if the master role list is open in an editor, the role is still kept in the content but is not included in any role list.

When you open a role list for which such roles exist, you are prompted to add these roles to the role list. Clicking Yes adds these roles to the role list; clicking No opens the role list without adding the roles. In the latter case, you can still update the master role list to include such roles from within the Role Editor.

Although you can allow roles to continue to exist in your Library as additional roles in use that are not included in any role list, this is not recommended, as such roles are available for role assignment only in certain cases. (See *Assign Roles to Modules, Sections, or Topics* for further detail.) Rather, it is recommended that you include all roles in use in your content in the appropriate master role list, thus making them available for assignment to all documents of the same language.

To update a master role list from the Role Editor:

1. On the **Edit** menu, choose **Update Master Role List**.

   The Developer searches documents of the same language as the role list and adds any roles that are not currently in the document.

2. Save and close the role list document.

14.6 Create a New Role List

By default, the Developer comes with one empty master role list for each language installed. Each master role list can be used to assign roles to all documents of the same language. Therefore, you need to create a new role list only if your content includes a language for which no role list currently exists.

Note: Only one role list can be used to assign roles to documents of a given language. If multiple role lists exist for the same language, only the oldest (the first one created) is used to populate the role assignment selection list. For example, if you make a copy of the Roles.en document and add roles to it, those new roles do not appear as assignment choices for any English documents. Therefore, you should not create more than one role list for any language.

Warning! Do not delete the role list for any language. Doing so will disable role assignment for that language.

To create a new role list, you must start with an existing role list. For example, you can set up all necessary roles in an existing role list and then create new role lists for other languages using this initial list as a model.

Tip: You can change the language of a role list from the Properties toolpane.

You can create a new role list from the Library or the Role Editor. From the Library, you simply copy and paste the entire role list document. From the Role Editor, you save the original role list as a new document.

The original master role lists in the Library are named according to language. For example, the Roles.en document is the master role list for the English language. Although you do not have

to follow this convention in naming new role lists, it is recommended that you provide a meaningful name so you can easily find the new role list later.

All role list documents must be saved in the System/Roles folder to be used for role assignment.

Multi-user Considerations

- Any new document that you create or link is automatically checked out to you. If you want to make a new document available to multiple authors and place the document under the Developer's version control system, you must check it in.

  See *Check In and Check Out Documents* in Use the Developer in a Multi-user Environment for more information.

To create a new role list from the Role Editor:

1. Open the master role list you want use as the basis for the new role list.
2. On the **File** menu, choose **Save As**.
3. In the Save As dialog box, type a name for the new role list.

   Although there are no restrictions on the name of a role list, it is recommended that you provide a meaningful name so you can easily find the new role list later.

   Both the **Type** field and the **Save in** field should read "Roles".
4. Click **Save** or press ENTER.
5. Use the Properties toolpane to set the language of the new role list.

To create a new role list from the Library:

1. Navigate to the System/Roles folder.
2. Select the master role list you want use as the basis for the new role list.
3. On the **Edit** menu, choose **Copy**.

   You can also right-click your selection and choose Copy.
4. On the **Edit** menu, choose **Paste** to paste a new copy of the original role list.

   For steps 4 and 5, you can also right-click in a blank area in the Contents pane or right-click a folder in the Folders pane and choose Paste from the context menu. You can paste the new role list document in any Library folder, but it cannot be used for role assignment unless it is saved in the System/Roles folder.
5. If desired, rename the new role list document.

   Although this step is optional, it is highly recommended. There are no restrictions on the name of a role list, but it is recommended that you provide a meaningful name so you can easily find the new role list later.
6. Use the Properties toolpane to set the language of the new role list.

14.7 Assign Roles to Modules, Sections, Topics, Questions, or Assessments

Once you have created roles using role lists, you can assign the roles to one or more modules, sections, or topics. This step is necessary to allow both role-selective publishing in the Developer and role-based filtering in the Player.

You can assign roles while working in the Library or Outline Editor, using the Properties toolpane. Roles can be assigned to module, section, topic, question or assessment documents, and all of the documents selected for role assignment at one time must be of the same language.

Tip: You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click). However, you must select only modules, sections or topics, as no other document types support roles. If a multi-document selection in the Library includes a document type that does not support roles, such as a package, the Role property does not appear in the Properties toolpane.

When you select documents for role assignment, the Developer determines the language of the selected document(s) and displays a list of all roles in the master role list for that language. If any additional roles are in use in the selected documents but are not on the role list, they are also shown. Note that inclusion of these additional roles depends on the specific document(s) selected for role assignment, rather than just language. Consequently, such roles are available for role assignment only if the document(s) to which they are assigned are included in the selection. It is therefore recommended that you always update the master role list to include these additional roles whenever they exist.

If no role list exists for the language of the selected document(s), role assignment is not enabled.

Warning! Do not delete the role list for any language. Doing so will disable role assignment for that language.

To assign a role to a document, you simply select the checkbox next to the desired role in the Assign Roles dialog box. To remove the role from the document, clear the checkbox. Note, however, that, if you remove a document from all roles, the document will appear in the Player only if role-selective filtering is turned off.

If you select multiple documents for property assignment, the checkboxes for the property values can have any of three initial states:

- Unselected (clear): The value is not assigned to any of the selected documents.
- Selected (checked): The value is assigned to all of the selected documents.
- Partially selected (gray with gray checkmark): The value is assigned to some, but not all, of the selected documents.

You can check or clear any checkbox, regardless of its initial state, to assign the value to or remove it from ALL of the selected documents. If you do not change the state of a partially selected checkbox, the assignment of the corresponding value remains unchanged (assigned to some, but not all, of the selected documents). However, once you click a partially selected checkbox, you cannot restore it to its initial state. Therefore, when assigning property values to documents, you should select only those documents to/from which you want to add/remove the same value(s).

Once you assign one or more roles to a topic, the role assignment is saved as a property of the topic document. If you later make changes to these roles in a master role list, the topic assignment must also be updated. It is recommended that you update role assignments automatically when prompted to do so after saving changes to the master role list. If the role assignment for a topic cannot be updated automatically at that time, for example, if the topic

is open in the Topic Editor, or if you choose not to update role assignments automatically, you must manually update each topic to which obsolete roles are assigned to reflect the changes in the master role list. Therefore, it is recommended that you define and finalize your role lists before assigning roles to topics.

Tip: You can use find and replace to update role assignments.

Multi-user Considerations

- Before you can perform this action, you must check out the document. After you save any changes, you should check in the document to make it available to other authors and add the changes to the Developer's version control system. If you are assigning roles to multiple documents at the same time, all selected documents must be checked out. The Roles property is not available for editing if one or more documents in a multi-document selection are not checked out.

  You do not need to check out the role document, only the document(s) to which roles are being assigned. In addition, you can assign roles even if the appropriate master role list is checked out to another user, although only the roles in the latest checked in version of the role list will be available for assignment.

  To assign roles while working offline, you should ensure that you have the latest version of the appropriate master role list(s) available in your local cache. To do this, you can either check out or get the role list, depending on whether you plan to edit it or to have access to a read-only copy. If you go offline and do not have a current copy of a role list in your local cache, some of the roles on the role list might be unavailable to you as you work offline. To remedy this, you need to go back online and get the documents that you need.

To assign roles to one or more documents:

1. Display the Properties toolpane.
2. From the Library or Outline Editor, select the document(s) to which you want to assign roles.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click). However, all documents included in your selection must have the same language.
3. In the **General** category, click in the **Roles** cell then click ....
4. In the Assign Roles dialog box, select the role(s) to which you want to assign the selected document(s).

   To include a role, click the checkbox next to its name. To remove a role, clear the checkbox next to its name.

   You can also use the Select All button to include all roles or the Clear All button to remove all roles from the selection. These buttons apply to all roles listed in the Assign Roles dialog box, whether they are included in the master role list or are available as additional roles for the selected documents.
5. Click **OK** or press ENTER.

15 View Document Properties

Documents contain two types of properties; those that are calculated and those that you can manually edit. Examples of calculated properties are the columns that display on the Details view such as Document ID, Checked Out By, Version, and Frames. Modules, sections, topics, web pages, and packages have editable properties that you can set and change at any time. These properties display in the Properties toolpane. The properties you set are saved with the document and travel with it on operations such as export and import.

Initial Values

Some editable document properties start with an initial value. The initial value assigned depends on how the document was created. New documents that are created by linking them to an outline inherit the same value as the parent. New documents created in the Library as stand-alone documents not linked to a parent, adopt the system setting in the Options dialog box as the initial value. As with any editable property, you can change document's initial value at any time.

Note: There are several exceptions to the rules. The Resolution property is set prior to recording and can not be edited on the Properties toolpane after recording. Additionally, Workflow properties do not travel with the document on import or export.

15.1 Use the Properties Toolpane

Editable document properties are viewed and modified in the Properties toolpane, which can be opened from the Library and all document editors. By default, the Properties toolpane opens docked on the right side of the Developer window. However, you can undock, move, and resize the Properties toolpane as needed.

Properties are grouped under categories in the Properties toolpane. Depending on the selected document type, different categories and properties appear. When you select a document, categories such as General, Topic, and System Process Document may appear. You can expand and collapse categories to show or hide the related properties. The expand/collapse state of any category is saved as you navigate to other documents.

When you select a property, its description appears at the bottom of the toolpane. The bottom of the toolpane also displays warning messages when you cannot change the properties for a document.

The Properties toolpane is divided into two columns, with the name of the property in the left column and the value assigned to the property in the right column. You can resize the columns by dragging the vertical border between them. In addition, you can resize the height of the description pane at the bottom of the toolpane to view more or less of the text. When the descriptive pane or a property column is not large enough to display the full contents, pointing to the truncated text displays the full text in a tooltip.

Toolpane Views

The Categorized and Alphabetical buttons that appear at the top of the Properties toolpane control how you view the properties. The Categorized view, which is the default, displays the properties organized by category names. The Alphabetical view removes the category names and sorts all properties in alphabetical order.

Note: The Properties toolpane does not split when you enable a split layout. The properties in the toolpane refer to the document selected in the active layout.

Multi-user Considerations

- To change general, topic, and document output properties, you must check out the document. A message appears at the bottom of the toolpane if any of the documents in a selection are read-only. You can change general, topic and document output properties while working online or offline.

To change workflow properties, you must be working online and the document can be either checked in or checked out to you. Properties in this category include Assigned to and State.

15.2 Change Document Properties

You can leave the Properties toolpane open as you modify properties. The contents of the toolpane change as you move from document to document. If you select multiple documents and change a property, the change is applied to all selected documents. When the selection includes multiple documents of mixed document types, the only properties that are available for editing are the properties that the document types have in common. Only editable properties appear in the Properties toolpane.

You can open the Properties toolpane from the Library or any document editor. Property changes made from the Library or Outline Editor are automatically saved to the document. If you change a property from another editor, such as the Web Page editor, you will be prompted to save your changes when you close the editor. You cannot change properties for a document open in another editor. For example, if you open a web page or topic, you cannot change properties for the open documents from the Library. A warning message appears at the bottom of the Properties toolpane indicating that the document is open and that you must close it to modify the document properties.

Undo Document Properties

Most document editors (for example, Outline, Glossary, and Role editors) have an Undo command that will allow you to undo a property change. You can not undo property changes from the Web Page or Package editors or from the Library. There is no limit to number of actions you can undo/redo in the Outline Editor.

If you are changing properties from an editor that does not allow undo, and you are still in the property cell, you can press CTRL+Z or right-click in the cell and choose Undo from the context menu to undo a property change. Once you click outside a cell, you cannot undo your changes.

Multi-user Considerations

- Before you can perform this action, you must check out the document. After you save any changes, you should check in the document to make it available to other authors and add the changes to the Developer's version control system. When you select a checked in document, a Read-Only message appears at the top of the Properties toolpane. If you are changing the properties of multiple documents at the same time, all selected documents must be checked out. Properties are not available for editing if one or more documents in a multiple document selection are not checked out.

  You can change workflow properties for documents that are checked in or checked out to you.

To change properties for a document:

1. Display the Properties toolpane.

   You can also right-click any document and choose Properties or press F4.

2. Select the document(s) whose properties you want to change.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click).

   You can also edit the properties for a web page or package open in a document editor.

3. Click the property cell in the Properties toolpane and make the necessary changes.

Note: The Developer automatically saves property changes made while you are working in the Library or Outline Editor. For properties that you type directly in a cell, you can press ENTER or click outside of the property cell to finalize your entry.

15.2.1 Ways to Assign Properties

How you enter or change the value for a property depends on the type of property. The methods for assigning property values include:

- Text entry: For properties such as keywords and document output fields, you type a value for the property directly into the corresponding cell in the Properties toolpane. For properties that may contain a large amount of text, such as an instructor note or a table, a browse button (...) appears in the cell. Clicking the browse button opens a window where you can enter text or create the table.

- Selection of a single value from a list: A drop-down arrow appears in the property cell for properties where you select a single value from a preset list of values. These properties include language and screen resolution.

- Selection of multiple values from a list: A drop-down arrow or browse button appears in the property cell for properties where you can select multiple values from a preset list of values and checkboxes. You can select or clear one or more checkboxes.

15.2.2 Assign a Property to Multiple Documents

You can select multiple documents and change one or more properties at the same time. If the selected documents have different values for the same property, the property value appears blank in the property cell or dialog box. Entering new text or selecting a new value applies the property value to all the selected documents.

Warning! Be careful when changing a property for multiple documents that already contain values for the same property. The new values you enter for the property overwrite any existing values for all selected documents.

Assign Checkbox Properties

Properties such as roles, play modes, and remediation levels allow you to assign multiple values. The available values for these properties appear in a checkbox list. You assign property value(s) by selecting one or more checkboxes.

If you select multiple documents for property assignment, the checkboxes for the property values can have any of three initial states:

- Unselected (clear): The value is not assigned to any of the selected documents.

- Selected (checked): The value is assigned to all of the selected documents.

- Partially selected (gray with gray checkmark): The value is assigned to some, but not all, of the selected documents.

You can check or clear any checkbox, regardless of its initial state, to assign the value to or remove it from ALL of the selected documents. If you do not change the state of a partially selected checkbox, the assignment of the corresponding value remains unchanged (assigned to some, but not all, of the selected documents). However, once you click a partially selected checkbox, you cannot restore it to its initial state. Therefore, when assigning property values to documents, you should select only those documents to/from which you want to add/remove the same value(s).

15.3 General Properties

The General Properties category appears for all document types. Depending on how a document was created, the initial property values for a document either default to the settings in Tools, Options or are inherited from the parent document.

When you create a new module or section document from the Library, you have the opportunity to change the default settings for the Language, Template, and Screen Resolution properties. These defaults are then passed to any new module, section or topic documents that are linked to the parent in the Outline Editor. For example, if you create a new Purchasing module with a screen resolution of 800 x 600, and then link a new Purchase Orders section and Reviewing a Purchase Order topic, the new documents inherit the same screen resolution as the parent module.

Existing documents inserted into an outline retain their original properties, even if they do not match the property settings of the parent. For example, if you link the Working with Vendors section with a screen resolution of 1024 x 768 to the Accounts Payable module, the linked section retains it original screen resolution settings. However, if you now create/link new documents to the Working with Vendors section, the new documents inherit the new screen resolution.

You can change the properties in the General category for a single document or several documents at the same time.

Warning! Be careful when changing a property for multiple documents that already contain values for the same property. The new values you enter for the property overwrite any existing values for all selected documents.

The General Properties category includes the following properties:

- Assessments
- Context
- Custom properties
- Glossary
- Group for LMS
- Keywords
- Language
- Name
- Resolution
- Roles
- See Also
- Template

Multi-user Considerations

- To change properties, you must check out the document.

15.3.1 Assessments Property

The Assessments property allows you create an association between a module or section and a course, even if it is not included in the course. By setting an assessment as a property of the module or section, the assessment can then be selected as a pre-assessment or post-assessment in the Professional edition.

Note: The Assessments property only applies to content deployed in a Knowledge Path in the Professional edition of the Knowledge Center.

To associate an assessment to a module or section:

1. Display the Properties toolpane.
2. From the Library or Outline Editor, select the document(s) to which you want to associate with an assessment.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click). However, all documents included in your selection must have the same language.
3. In the **General** category, click the **Assessments** cell then click ....
4. In the Associated Assessments for Knowledge Center dialog box, click **Add associated assessment**.
5. In the Add Assessments dialog box, navigate to the desired assessment and click **Open**.
6. Click **OK**.

15.3.2 Context Property

The Context Property allows you to define a relationship between a topic(s) and a non-topic document such as sections and modules. This relationship allows for better search results because searching and finding the non-topic document also finds the related topics.

The Context button opens the Context dialog box which is used to add relationships from existing topics to non-topic documents and/or create Context IDs for new topics that are related to non-topic documents.

15.3.2.1 Context for Topic verses Non-Topic Documents

Context, that allows for better search results, can be applied to individual frames that make up a topic or associated, in a broader sense, to non-topic documents that can be related to one or more topics.

Topic documents

Context is added to a topic (on a frame by frame basis) during the recording process. You can view the context ID for any frame in the Context ID dialog box.

Context can also be manually added to a topic, on a frame by frame basis, if the match type is ExactMatch or NoMatch. You cannot add context to frames with a context type of SmartMatch because they are fuzzy matches, not specific Context IDs.

The Context ID dialog box opens from within a topic by clicking on the toolbar or by choosing Context ID from the Edit menu.

Non-topic documents

Context can be assigned to a non-topic document such as a section or module. This allows you to define relationships between topics and non-topic documents ensuring that related documents appear in a topic. For example, each time a user works through the process of

filling out a purchase order form (for example, a series of topics), a link to the actual purchase order form (for example, a non-topic document) can be provided. In the Developer, the author can associate each frame of the process with the non-topic document. They can also associate the entire topic with a section or module.

Note: Frames added to a process after the context association was made to a non-topic document are not automatically associated to the non-topic document. The author must manually make the association to the new frames. However, if a topic is associated directly with a topic or section, any new frames added to the topic automatically inherit the association to the topic or section.

Context relationships for non-topic documents are set up from the Context field in the General category of the Properties toolpane. The Context field displays the name of each topic associated with the non-topic document. The Context button opens the Context dialog box which is used to add relationships from existing topics to non-topic documents and/or create Context IDs for new topics that are related to non-topic documents. The Context dialog box contains two tabs: Topic Contexts and Context Names.

The Topic Contexts tab is where you create Context IDs for non-topic documents by selecting existing topics with context. This relationship insures that when you look at the section, the associated topics also appear. The Add Topic Contexts button opens the Add Existing Topic Contents dialog box where you can select existing topics with context to relate to the non-topic document.

Note: Context can also be added to non-topic documents by copying context from an existing topic and pasting it to a non-topic document or by capturing the context by recording screen(s) of the relevant application.

The Context Names tab is where you create additional Context IDs or edit the existing Context IDs of supported application screens associated with a non-topic document. The Create New Context button opens the Recorder in order to record an application screen. Once recorded, the Context Name field is filled with a context name and the Screen View show a snapshot of the captured screen. The Edit Context button opens the Context ID dialog box. You can add additional context names or edit the captured Context ID context name. This allows you to find specific context via a user-friendly name without having to understand all of the parts that make up the context ID.

To add context to a section/module:

1. Select a section or module document in the outline.
2. Click in the **Context** field in the Properties toolpane then click ... to open the Context dialog box.
3. With the Topic Contexts tab active, click **Add topic contexts** to open the Add Existing Topic Contexts dialog box.
4. Select the existing topic(s) to be associated with the document and click **OK**.

   The selected topics display on the Topic Contexts tab.
5. Click **OK**.

15.3.2.2 Copy Context

Context can be copied from a frame within a topic and pasted to a non-topic asset such as a section or module. This copies all rows of the context ID into the section or module. Context IDs can not be pasted from one frame into other frames.

Context can also be copied from a section or module to another section or module. Since multiple contexts can be associated to a section/module, you can copy single Context IDs or all Context IDs associated with a section to another section.

To copy context from a topic frame to a section/module:

1. Open a topic in the Topic Editor.
2. Select a frame with context that you want to copy.
3. On the **Edit** menu, choose **Copy Frames**.
4. In the outline, select the section or module to which you want to paste the context.
5. If necessary, open the Properties toolpane of the section or module.
6. Click ... in the **Context** field to open the Context dialog box.
7. From the Context Name tab, click the **Paste Context** button.
8. Click **OK** to save the context.

To copy context between sections/modules:

1. If necessary, open the Properties toolpane of the section or module.
2. Click ... in the **Context** field to open the Context dialog box.
3. From the Topic Contexts tab, select the topic(s) within the section to be copied and click the **Copy Context** button.
4. Click **OK**.
5. Navigate to the Context dialog box of the destination section.
6. From the Topic Contexts tab, click **Paste Context**.
7. Click **OK**.

15.3.3 Custom Properties

You can add custom properties to any document type that appears in the outline: modules, sections, topics, questions, and assessments. Custom properties are metadata, which can be used to add searchable information to the item, such as author, author email, date, and so on. This information is included when you use the Find and Replace command in the Developer, so you can locate specific content more easily. In addition, you can include this table in document outputs. See the *Customize Document Formats* section of the Publish Content chapter for more information.

The property table is blank by default and does not contain prepopulated field names. There are three columns in the table. The Field column is for the name of the field, while the Value column is the content of the field. The Bookmark Name field is generated automatically from the text in the Field column. The bookmark name must be unique, as the bookmark can be used to add the custom property field to the document output on its own (not as part of the table), as duplicate bookmarks are not allowed. Using the bookmarks separately can be useful to place an author's name on the cover of a manual, for example. See the *Use Bookmarks* section in the *Customize Document Formats* section of the Publish Content chapter for more information.

You can add more rows to the Custom Properties table, delete rows, and move rows up and down to rearrange the order. The text in the first cell of the table appears in the Properties toolpane when you select a document that contains this custom property.

If a multiple topic selection contains existing table text, the table dialog box displays the common table rows that appear in ALL of the selected topics. The common table row can appear in different row positions in the selected topics as long as the text in the row is identical. If the selected topics contain no common table rows, the table appears blank.

Warning! The changes made to a table for a multiple topic selection affect all of the selected topics, and overwrite any existing values. Therefore, the table rows that do not appear in a multiple selection because they are not common to the entire selection are deleted.

To add custom properties:

1. Display the Properties toolpane.
2. In the Library or Outline Editor, select the topic to which you want to add property values.
3. In the **General** category, click ... in the **Custom properties** cell.
4. The Custom Properties dialog box opens with a blank row ready for text entry.
5. Type the text in the appropriate cell. Press TAB to move from one cell to the next. A new row is automatically added.
6. Click **OK** to save the changes.

   You can also click **Cancel** if you do not want to save your changes.

Tip: All cells allow multi-line entries. You can create multiple lines in a cell by letting the text word-wrap or by pressing Shift+ENTER to insert new lines. Scroll arrows appear in multi-line cells for navigating through the text.

To insert a new row:

1. Select a row and click + to add a new row below the selected row.
2. Type the text in the appropriate cell.
3. Click **OK** to save the changes.

   You can also click **Cancel** if you do not want to save your changes.

To delete a row:

1. Select the row you want to delete and click ×.
2. Click **OK** to confirm the deletion.

   You can also click **Cancel** if you do not want to save your changes.

To sequence a row:

1. Select a row and click ↑ or ↓ to move the row to a new position in this list.

2. Click **OK** to save the changes.

   You can also click **Cancel** if you do not want to save your changes.

15.3.4 Glossary Property

Once you create a glossary, you can assign it to one or more documents in the Library. A glossary can be assigned to a document in two ways: through manual assignment and through inheritance from the document's parent.

You can manually assign a glossary while working in the Library, Outline Editor, or Web Page Editor, using the Properties toolpane. A glossary can be assigned only to modules, sections, topics, and web pages. Although no module or section text is marked up when glossary links are updated, assigning glossaries to modules and sections is useful for inheritance purposes, as described below.

Tip: You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click). However, you must select only document types that support glossaries. If a multi-document selection in the Library includes a document type that does not support glossaries, such as a package, the Glossary property does not appear in the Properties toolpane.

Warning! Be careful when changing a property for multiple documents that already contain values for the same property. The new values you enter for the property overwrite any existing values for all selected documents.

Glossaries can be assigned through property inheritance only in the Outline and Topic Editors. If you assign a glossary to a module or section, all new module, section, and topic documents that you link as children of this document while working in the Outline Editor inherit the parent's glossary setting. Similarly, any new web page that you create from the Concept pane of the Outline Editor inherits the glossary of its parent. Likewise, if you assign a glossary to a topic, any new web pages that you create while working in the Topic Editor, for example, as new frame attachments, inherit the topic's glossary setting. However, new documents that are not linked (documents that are created using the File, New command) and existing documents that are linked as children of the document do NOT inherit any property settings.

Once you have assigned a glossary to a document, you still must update glossary links to create glossary links in that document.

If a glossary is no longer appropriate for a document, you can change or remove the assigned glossary using the Properties toolpane. Changing or removing the glossary assigned to a parent does not automatically change the glossary for any child documents, even those that inherited their glossary from the parent. You must change the glossary for each child document manually.

In addition, changing or removing the glossary assigned to a document does not automatically update glossary links. Therefore, after making any changes in glossary assignments, you must update glossary links to apply the new glossary to the affected documents.

Note: You can view the glossaries assigned to selected documents in the Related Links toolpane. However, you cannot use the Related Links toolpane to change glossary assignments.

15.3.5 Keywords Property

When a user performs a search in the Player, the Player performs a full text search of the text in the content you have created. You may, however, want to link text not used in the content to specific documents. The Keyword property allows you to attach words or text that relate specifically to your organization that might not occur in the content.

Note: Keywords can be assigned to module, section, or topic documents.

Keywords act like an index for locating documents and allow users to quickly find relevant content. For example, if members of your organization are required to use special formatting features to create end of month reports, you might want to attach the name of the monthly report as a keyword to all documents that could assist users with format features needed for report creation. It is very important for content authors to develop good keywords that enable users to quickly find the information they need.

Note: Document text is not indexed for Far Eastern languages. The only way for Search to work in the Player for such languages is for authors to attach keywords.

Keywords travel with the document, so that each time you reuse or export/import the document, the keywords are also reused or exported/imported.

15.3.5.1 Assign Keywords

Keywords are assigned to module, section, or topic documents from the Library or Outline Editor. You can select a single or multiple documents and assign one or more keywords to the selection.

There is no limit on the number of characters in a keyword, nor is there a limit to the number of keywords a document may contain. However, the Keywords field is limited to a total of 1024 characters. Multiple keywords in the same document are separated by a comma (,), for example, "order, payment, vendor". Spaces added before or after a keyword are ignored.

Note: You can copy a comma delimited list of words from Microsoft Word or Notepad and paste it into the Keywords field. The copied text cannot include paragraph marks.

Keywords are not case sensitive, you can type them in upper or lower case. If the keyword for topic A is "print" and the keyword for topic B is "Print", both topics A and B are indexed under the same keyword "print". The Developer automatically reorders the keywords for a document in alphabetical order and removes any duplicate keyword entries.

Note: Although you can enter a phrase (multiple words separated by spaces) for a single keyword entry, the Developer treats each word in the phrase as a single keyword. The Developer will not remove a duplicate word if it is part of a phrase.

Warning! Be careful when changing a property for multiple documents that already contain values for the same property. The new values you enter for the property overwrite any existing values for all selected documents. To assign additional keywords to multiple documents, see *Rules for Assigning and Deleting Keywords* in the Keywords Property section of the General Properties section of the View Document Properties chapter of this manual.

Multi-user Considerations

- Before you can perform this action, you must check out the document. After you save any changes, you should check in the document to make it available to other authors and add the changes to the Developer's version control system.

  In a multiple selection, you cannot add, edit or delete keywords unless all documents are checked out.

To assign a keyword:

1. Display the Properties toolpane.
2. In the Library or Outline Editor, select the topics(s) to which you want to assign a keyword.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click).

3. In the **General** category, click the **Keywords** cell.

4. Type the first keyword.

5. To assign additional keywords, type a comma (,) and then type the next keyword.

Note: To append a keyword to existing keywords, click at the end of the keywords, type a comma and the new keyword.

Note: You can move or copy keywords from one topic to another. You can right-click in the Keywords cell and use the commands on the context menu to cut, copy, and paste selected keywords. You can also use the Select All command to select all the keywords in the cell.

15.3.5.2 Delete Keywords

You can remove a keyword from a document by deleting the keyword in the Keywords field. You can also edit an assigned keyword to correct it.

Note: To delete or edit keywords for multiple documents, see *Rules for Assigning and Deleting Keywords* in the Keywords Property section of the General Properties section of the View Document Properties chapter of this manual.

Multi-user Considerations

- Before you can perform this action, you must check out the document. After you save any changes, you should check in the document to make it available to other authors and add the changes to the Developer's version control system.

  In a multiple selection, you cannot add, edit or delete keywords unless all documents are checked out.

To delete a keyword:

1. Display the Properties toolpane.

2. In the Library or Outline Editor, select the document(s) for which you want to delete a keyword.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click).

3. For a single document or multiple documents with identical keywords, select the text in the **Keywords** cell and press DELETE.

4. To delete all keywords for multiple documents with different keywords assigned, type any text in the blank **Keywords** cell, then select the text and press DELETE.

15.3.5.3 Rules for Assigning and Deleting Keywords

The results of assigning keywords depend on whether you are assigning keywords to one document or multiple documents and if those documents already contain existing keywords. The following list describes the rules for assigning keywords:

- Selection: One document with no keyword assigned
  Display in Toolpane: Keywords cell appears blank
  Actions Available: You can add a new keyword.

- Selection: One document with an existing keyword
  Display in Toolpane: Keyword appears in Keywords cell
  Actions Available: You can edit, delete, or append to existing keywords.

- Selection: Two or more documents that contain no existing keywords
  Display in Toolpane: Keywords cell appears blank
  Actions Available: You can add a new keyword. The keyword is assigned to all selected topics.

- Selection: Two or more documents that contain identical existing keywords
  Display in Toolpane: Keywords appear in Keywords cell
  Actions Available: You can edit, delete, or append to existing keywords.

- Selection: Two or more documents that contain different existing keywords
  Display in Toolpane: Keywords are NOT displayed. The Keywords cell appears blank
  Actions Available: You can enter a new keyword. The new keyword will overwrite any existing keywords in the selected documents. You cannot append keywords if different keywords are assigned.

15.3.6 Language Property

The Language property indicates the default language of the content and determines the language dictionary that is used to check the spelling of the document. If you assign a language to a document for which no Developer dictionary exists, the spelling checker skips checking the document.

New documents created from the Library inherit the default language setting. New module, section, and topic documents created in the Outline Editor automatically inherit the language of their parent.

You can also view the Language property for documents in the Details View in the Library or Outline Editor.

Note: The Language property for a topic also determines the publishing styles that are available for preview and the master role list that is used for assigning roles.

15.3.7 Name Property

The Name property is the name the author gave to the document when it was created/saved. You can use this property to rename a document.

Note: The document must be checked out to change the name. The Name property is not available for a multiple document selection.

15.3.8 Resolution Property

The Resolution property determines the screen resolution in which the content is recorded. The resolution is determined by the dimensions in the Width and Height properties.

To set the resolution, you can select a setting for the width or height from a list. Selecting a setting for one dimension automatically adjusts the other dimension to the correct setting. When you select a width of 1024 pixels, the Developer automatically sets the height to the matching dimension of 768 pixels.

If authors attempt to record in a screen resolution other than the assigned resolution, a message box informs them that their resolution does not match the setting for the topic and indicates in what resolution they should record. While authors are not prevented from recording in a different resolution if they choose, this property does help to create greater consistency in the content.

The Resolution property for recorded topics is read-only; you cannot change the resolution for a topic that has already been recorded.

15.3.9 Group for LMS Property

You use the Group for LMS property to indicate to a Learning Management System that a module or section should be considered as one unit in the outline. These units can be launched and tracked individually when a user accesses the content.

A group cannot contain another group. If you designate a high-level outline item to be grouped for an LMS, any groups at a lower level within its structure are ignored. For example, if there is a module which contains 3 sections, and you designate the module and all 3 sections to be grouped for an LMS, only the module is considered a group.

The Group for LMS property is set to No by default. If you do not change it for any item in the outline, then the LMS generates the full outline. If you change the Group for LMS property to Yes for the top-level item (module or section) in the outline, the LMS displays an outline with only that item in it, and a user must launch that item to see the content. If you change this property to Yes for items which are at lower levels in the outline, the LMS generates an outline showing only those items, and they are each individually launchable.

Although scored items within the LMS group (assessments, inline questions, and topics with Know It? mode available) display a pass or fail indicator in the outline when completed, the LMS group as a whole is an unscored item and its completion status is either "completed" or "incomplete". See *LMS Groups* in the Deploy the Player through an LMS section in the Deploy the Player chapter of the Content Deployment guide.

Note: This property is not needed for topics, as they are considered individual units by default.

To change the Group for LMS property:

1. Display the Properties toolpane.
2. In the Library or Outline Editor, select a module or section.
3. In the **General** category, click the **Group for LMS** cell.
4. Click the arrow to the right of the cell and select the desired option.

15.3.10 Roles Property

Role-based filtering allows users to quickly locate documents based on their job function or department.

For each language, there is a separate master role document to which you can add the roles that correspond to your company roles. You can then use this master role list to assign roles to modules, sections, or topics.

Roles are assigned to one or more document from either the Library or the Outline Editor using the Roles property. The Roles property opens the Assign Roles dialog box, from which you can select a single role or multiple roles to assign to the selected document(s).

Note: If roles assigned to a document appear truncated in the toolpane, you can point to the Roles property to display a tooltip showing the assigned roles.

Roles travel with the document so that each time you reuse or export/import the document, the roles are also reused or exported/imported.

You can view the roles assigned to documents in the Properties toolpane or in the Roles column that appears in the Details View in the Library or Outline Editor.

Removing Roles from Documents

You can choose to remove one or more roles from one or more documents by clearing the appropriate checkbox in the Assign Roles dialog box.

Warning! Be careful when changing a property for multiple documents that already contain values for the same property. The new values you enter for the property overwrite any existing values for all selected documents. If some of the documents in a multiple document selection already contain roles, adding or removing roles overrides the original role assignments for all selected documents. See *Assign Roles to Modules, Sections, or Topics* in the Create Roles for Content Filtering in this manual for more information about changing roles for multiple topics.

To assign roles to one or more documents:

1. Display the Properties toolpane.
2. From the Library or Outline Editor, select the document(s) to which you want to assign roles.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click). However, all documents included in your selection must have the same language.
3. In the **General** category, click ... in the **Roles** cell.
4. In the Assign Roles dialog box, select the role(s) to which you want to assign the selected document(s).

   To include a role, click the checkbox next to its name. To remove a role, clear the checkbox next to its name.

   You can also use the Select All button to include all roles or the Clear All button to remove all roles from the selection. These buttons apply to all roles listed in the Assign Roles dialog box, whether they are included in the master role list or are available as additional roles for the selected documents.

   You can also use the Manage button to open the Roles property (in the language you are using) in the System folder to edit or add roles.
5. Click **OK** or press ENTER.

15.3.11 See Also Property

The See Also property allows author to create a relationship between a document and other related content. Use this property to link modules, sections, or topics from an outline or library to other modules, sections or topics in the Outline Editor or Library for publishing to the Player. When the content is viewed in the Player, the See Also links display. The user can click on these links to see the content the author has connected to the content being viewed.

You create a See Also link on a module, section or topic by setting the See Also property in the General section of the Properties pane.

Multi-user Considerations

- Before you can perform this action, you must check out the document. After you save any changes, you should check in the document to make it available to other authors and add the changes to the Developer's version control system.

See Also links can be published to the Player. Content selected with See Also links not selected during publishing causes the target of the link to be included in the publishing output. This creates a self-contained package so no content is lost.

Note: See Also links can be published to any element (module/section/topic) below the selected root element. The root element is not published, so there is nothing to link a See Also link.

See Also in the Player output

When content is published to the Player, a See Also drop down for a selected document displays in the top right corner of the Player if there is linked content. The order of the See Also links on the Player drop down list is determined by the order the related documents on the See Also property dialog box. When the user clicks on a See Also document in the Player, the related content opens in a separate window. The left pane contains a See Also table of contents that contains all See Also documents for the selected document (module, section or topic).

Note: The See Also table of contents or any documents launched from the See Also table of contents do not contain additional See Also links. See Also links are only available from the original parent document.

Filter See Also links by role

See Also links can be filtered by role. When you publish to the Player, if you filter by role the linked documents must have the same role property set for the See Also link to appear on the drop down list. Like any other role-based filtering, this can be useful to provide related content to the user based on roles. For example, you may have different roles set up for new employees then you do for existing employees. The new employee role might include how to file out a timecard while the existing employee would have no need for this content. By filtering by these roles, the same content can be used but customized to the needs of each experience level. See the *Create Roles for Content Filtering* topic of the Manage Document Relationships section in the Content Development manual for more information on role-based filtering.

See Also links to missing documents

See Also links that refer to missing or deleted documents creates a warning message in the activity log. The missing document also displays in the Broken Links pane. If all of the See Also links related to a document are broken, the See Also drop down list will not display in the Player.

Customizing See Also links

The appearance of the See Also link drop down list and button text in the Player can be customized in the skin.css file by editing the following elements. The See Also text font, font size, color and background color is controlled by the .tocFrameText element. The background color, size and border of the See Also button are controlled by the .tsep element. The arrow button can be changed by replacing the seealsoarrow graphic in the img folder of the Player style. See the *Customize the Player* topic of the Publish Content section of the Content Developer manual for more information on customizing the player interface.

Note: When Knowledge Center content is converted for use in the Developer, using Convert>Knowledge Center from the Tools menu, existing Related Sections are converted to See Also links.

To link a See Also document:

1. Display the Properties toolpane.
2. From the Outline Editor or Library, select a parent document(s) to which you want to link an existing document(s).

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click).
3. In the **General** category, click ... in the **See Also** cell.

4. In the See Also dialog box, click and navigate to the document(s) you want to link to the parent document(s) and click **Open**.

   You can use the **Type** field to filter by topic, section or module, if necessary.

5. Click **OK**.

   The newly linked documents display in the See Also field on the Properties toolpane.

To change the order of related documents:

1. Display the Properties toolpane.
2. Select a document with See Also links you want to reorder.
3. In the **General** category, click in the **See Also** cell.
4. In the See Also dialog box, select a document(s) and click or to change the order of how the related documents will appear in the output.
5. Click **OK**.

To delete See Also links:

1. Display the Properties toolpane.
2. From the Outline Editor or Library, select a document(s) from which you want to delete a See Also link(s).
3. In the **General** category, click in the **See Also** cell.
4. In the See Also dialog box, select a document(s) to remove and click .

   The See Also link to the document is deleted but the document still exists in the Library.

5. Click **OK**.

15.3.12 Template Property

The document template determines the text used for bubble text and action properties. The Template property allows you to browse the Library and select another template set. The template sets included with the program are the Standard and Microsoft templates. The Microsoft template conforms to the standards as stated in the Microsoft Manual of Style for Technical Publications. In addition to these templates, other template sets may be available to you.

You can use the template to modify the text used in bubbles for action and object types. For example, you can change the template text for a Left click action to display the bubble text "Click on" instead of "Click the". Templates are read-only, but you can create a copy of the template with a new name, edit the text in the new template and use the Template property to assign the new template to your content.

If you are creating content for a language other than the default Developer language, you can select the template for that language. However, you can set only one language per document. If you need to produce the same content in multiple languages, you can follow the localization process to create a copy of your outline based on another language template.

Note: Templates are stored in the Library by language in the System/Templates folder.

15.4 Question Properties

The Question Properties category applies to all types of questions. Some of the initial property values are pre-filled but you can override the values by changing the properties for an individual question or multiple selected questions.

The Question Properties category includes the following properties:

- Associated Content
- Remediation

Warning: Be careful when changing a property for multiple documents that already contain values for the same property. The new values you enter for the property overwrite any existing values for all selected documents.

15.4.1 Associated Content Property

This property allows you to link remedial content, within the Developer, to a question to help reinforce the answer. Clicking the property opens the Select Associated Content dialog box for linking a module, section or topic to the question. This property can also be updated from the Set Associated Content button on the Assessment coverage view for questions in an assessment that do not have associated content.

This property works in conjunction with the Show Associated Content *option* set on the assessment. The Show Associated Content property on the assessment makes all questions in the assessment available for linking remedial content. The Show Associated Content option selected in the Assessment category on the Options dialog box must also be checked to allow for remedial content on questions within an assessment. All three must be set for associated content to display.

When a question is viewed in the Question Preview in the Developer or published to the Player, a Show Associated Content link displays in the Remediation area after the question is answered.

Note: Content selected as associated content is also used to create personalized content in the Professional edition.

15.4.2 Remediation Property

This property determines the type of feedback a user receives after answering a question.

The following describes the four types of feedback. Remediation text appears only if it was created for the question in Developer.

- **Always:** The feedback always displays the correct answer and remediation text explaining why the answer is correct.
- **Incorrect:** If the user's response is incorrect, the feedback displays the correct answer and remediation text that explains why the correct answer is correct. If the user's response is correct, the word “Correct” appears in the feedback.
- **User Asks:** The feedback displays the word “Correct” or “Incorrect,” along with a Show Answer link. When this link is clicked, the correct answer and/or any remediation text appears in the feedback.
- **Results Only:** The feedback only displays the word “Correct” or “Incorrect.”

Note: When questions are part of an assessment, the assessment's remediation property overrides the remediation property set for an individual question. If you import the assessment into the Knowledge Center (available in the Professional edition only), the

remediation defaults from the Developer. These settings can be overridden for pre/post assessments in the Knowledge Center (available in the Professional edition only).

15.5 Assessment Properties

The properties in the Assessments category apply specifically to assessments. New assessments inherit certain defaults from the Assessment category on the Options dialog box; such as Passing score percentage and Question order. After an assessment is created, you can change the properties of a single assessment or several assessments at the same time. Assessment properties only appear in the Properties toolpane for a multiple selection if all selected documents are assessments.

The Assessment properties category includes the following properties:

- Answer order
- Passing score %
- Question order
- Remediation
- Show Associated Content
- Summary

Warning: Be careful when changing a property for multiple documents that already contain values for the same property. The new values you enter for the property overwrite any existing values for all selected documents.

15.5.1 Answer Order Property

Use the Answer Order Property to change the order of the answers on multiple choice questions in an assessment.

If the Answer order property is set to As authored, answers are presented in the order in which they were created in Developer.

If the Answer order property is set to Random order, answers to multiple choice questions are provided in random order. The answers appear in a different order each time the question is presented. For multiple choice (single answer) questions that include All of the above and/or None of the above, these answers remain in their positions at the bottom of the list of choices.

Note: The default answer order is set on the Answer Order option in the Assessment category on the Options dialog box.

15.5.2 Passing Score

This property is the percentage of correct answers needed to pass an assessment. The range is from 0 to 100 (default). This value is used to track scoring in the Professional edition or an LMS. This information appears on the summary page in the Player when the student is done taking an assessment.

15.5.3 Question Order Property

Use the Question order property to change the question order for an assessment.

If the Question order property is set to As authored, questions are presented in the order in which they were established in the assessment.

If the Question order property is set to Random order, questions are presented in a different order each time the assessment is taken.

Note: The default question order is set on the Question Order option in the Assessment category on the Options dialog box.

15.5.4 Remediation Property

This property determines the type of feedback a user receives on the response to a question.

The following describes the five types of feedback. Remediation text appears only if it was created for the question in Developer.

- **Always:** The feedback always displays the correct answer and remediation text explaining why the answer is correct.
- **Incorrect:** If the user's response is incorrect, the feedback displays the correct answer and remediation text that explains why the correct answer is correct. If the user's response is correct, the word “Correct” appears in the feedback.
- **User Asks:** The feedback displays the word “Correct” or “Incorrect,” along with a Show Answer link. When this link is clicked, the correct answer and/or any remediation text appear in the feedback.
- **Results Only:** The feedback only displays the word “Correct” or “Incorrect.”
- **None:** No feedback is provided for a question.

Note: When questions are part of an assessment, the assessment's remediation property overrides the remediation property set for an individual question. If you import the assessment into the Knowledge Center (available in the Professional edition only), the remediation defaults from the Developer. These settings can be overridden for pre/post assessments in the Knowledge Center (available in the Professional edition only).

15.5.5 Show Associated Content Property

This property, when set to Yes, allows remedial content associated with questions to display when taking an assessment. This property works in conjunction with the Associated Content property set on each question and the Show Associated Content option selected in the Assessment category on the Options dialog box. You will receive warning messages when publishing if some of the questions are missing the Associated Content property.

When content is viewed in the Question Preview in the Developer or published to the Player, a Show Associated Content link displays in the Remediation area when a question is answered.

Note: Content selected as associated content is also used to create a personal course in the Professional edition.

15.5.6 Summary Property

This property determines if a Summary page displays upon completion of an assessment, viewing the assessment in the Question Preview in the Developer or when published to the Player. If this property is set to Show Summary (default), a summary displays comparing the actual score to the passing score and a breakdown of correct and incorrect answers.

15.6 Topic Properties

The properties in the Topic category apply specifically to topic documents. New topics inherit certain topic defaults from the Options dialog box, such as the default play modes and Know It? options. After you create topics, you can change the properties for a single topic or several topics at the same time. Topic properties only appear in the Properties toolpane for a multiple selection if all the selected documents are topics.

The Topic Properties category includes the following properties:

- Know It? Remediation
- Know It? Required %
- LMS Play Modes
- Play Modes
- Play Sound
- Show Bubbles

Warning! Be careful when changing a property for multiple documents that already contain values for the same property. The new values you enter for the property overwrite any existing values for all selected documents.

Multi-user Considerations

- To change properties, you must check out the document.

15.6.1 Know It? Options

The Know It? options are available if Know It? play mode is selected for a topic. Know It? options for new topics are set in the Options dialog box, but you can change them on a per topic basis. Know It? options include the Know It Required % and Know It Remediation properties.

Warning! Be careful when changing a property for multiple documents that already contain values for the same property. The new values you enter for the property overwrite any existing values for all selected documents.

15.6.1.1 Know It? Required Percent

When you create a new topic, it inherits the required percentage for Know It? mode from the defaults set in the Options dialog box. This percentage is the score a user needs to achieve in order to pass the assessment for the current topic. You can enter any value between 0 and 100.

There may be some specific topics for which you want to change the passing percentage. You may want to lower it for certain difficult tasks or raise it for common tasks. You can change the required percentage for Know It? mode for one or more topics using the Know It Required % property in the Properties toolpane. You can type any value between 0 and 100 and it is not necessary to type the % sign.

Note: If all of the topics in a multiple selection are assigned the same required percentage, the value appears in the Know It Required % property cell. If the topics have different percentages assigned, the Know It Required % property cell appears blank.

Warning! Be careful when changing a property for multiple documents that already contain values for the same property. The new values you enter for the property overwrite any existing values for all selected documents.

Note: Changing default Know It? options in the Options dialog box affects new topics only.

To change the Know It? Required % for a topic:

1. Display the Properties toolpane.

2. In the Library or Outline Editor, select the topic(s) whose required percentage you want to change.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click).

3. In the **Topic** category, click the **Know It Required %** cell.

4. Type a value between 0 and 100 and press ENTER or click outside the cell.

15.6.1.2 Know It? Remediation Levels

When you create a new topic, it inherits the remediation levels for Know It? mode from the defaults set in the Options dialog box. Remediation provides feedback for users when they perform an incorrect action in Know It? mode.

When a user fails to complete a step in Know It? mode, they can see up to four levels of remediation. Of the four levels, you can configure whether any combination of the first three listed in the following content are active for a topic. The fourth level is always active. When users fail to complete a step on the first attempt, they are marked incorrect for that particular step. The following lists the four levels of remediation that are available, although you can only configure the first three for a specific topic or set global defaults for all new topics.

- **Level 1:** User told to try again, the bubble informs you that your action was incorrect and to try again.

- **Level 2:** User provided with instructions, the bubble informs you that the action was incorrect and provides instructions for completing the step.

- **Level 3:** User provided with instructions plus action area, the bubble informs you that the action was incorrect and provides instructions for completing the step and a highlighted area indicating where the action should take place.

- **Level 4:** The Step is Completed for You, the bubble informs you that the action was incorrect and states that the action will now be completed for you.

You can view and change the remediation levels assigned to a topic in the Know It Remediation property cell in the Properties toolpane. When activated, the Know It Remediation property cell displays a drop-down list from which you can select and deselect remediation levels. A short description of each level appears at the bottom of the list. You can change remediation levels for one or more topics.

Note: If all of the topics in a multiple selection are assigned the same remediation levels, the levels appear in the Know It Remediation property cell. If the selected topics have different remediation levels assigned, the Know It Remediation property cell appears blank. Levels common to all selected topics appear active in the Remediation drop-down list, and the levels that differ appear grayed out. You can make changes to active or grayed out levels. See *Assign a Property to Multiple Documents* for more information about changing remediation levels for multiple topics.

Warning! Be careful when changing a property for multiple documents that already contain values for the same property. The new values you enter for the property overwrite any existing values for all selected documents.

Note: Changing default Know It? options in the Options dialog box affects new topics only.

To change the Know It? remediation levels for a topic:

1. Display the Properties toolpane.

2. In the Library or Outline Editor, select the topic(s) whose remediation level you want to change.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click).

3. In the **Topic** category, click in the **Know It Remediation** cell.

   A list of remediation levels appears.

4. Select a checkbox to include a remediation level or clear a checkbox to remove a remediation level.

5. Press ENTER or click outside of the cell.

15.6.2 LMS Play Modes Property

The play modes assigned to a topic with the LMS Play Modes property determine which play modes are available when the topic is launched from the Player in the Knowledge Center with the Professional edition or from another LMS. This gives you the flexibility to set different play modes in the LMS then other deployments. For example, you may want Try It!, Do It! and Print It! modes available for a targeted-application deployment but Try It! and Know It! mode for an LMS deployment.

Note: Content played through the Player Table of Contents in Usage Tracking mode with the Standard edition honors the Play Modes property.

These play modes can be set separately from the Player play modes. New topics automatically have See It!, Try It! and Know It! modes enabled for LMS playback, but you can change the play mode for a topic after it is created.

You can view the LMS play modes assigned to a topic in the LMS Play Mode property cell in the Properties toolpane. You change the play modes for one or more topics by selecting or deselecting play modes from the LMS Play Mode drop-down list. A short description of each play mode appears at the bottom of the list.

Note: When publishing a topic with no play modes set (in the Player or LMS styles), the topic appears in the outline and the concept (if applicable) displays with no play modes.

If you select multiple topics, the play mode settings you select apply to the entire selection, and overwrite any previous settings for that property. See *Assign a Property to Multiple Documents* for more information about changing play modes for multiple topics.

Note: If all of the topics in a multiple selection are assigned the same play modes, the modes appear in the LMS Play Mode property cell. If the topics have different play modes assigned, the LMS Play Mode property cell appears blank.

To change the LMS play mode for a topic:

1. Display the Properties toolpane.

2. In the Library or Outline Editor, select the topic(s) for which you want to change play modes.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click).

3. In the Topic category, click in the **LMS Play Modes** cell.

   A list of play modes appears.

4. Select a checkbox to include a play mode or clear a checkbox to disable a play mode.

15.6.3 Play Modes Property

The play modes assigned to a topic determines which play modes will be available when a user plays the topic in the Player. New topics automatically have all play modes enabled, but you can change the play mode for a topic after it is created.

You can view the play modes assigned to a topic in the Play Mode property cell in the Properties toolpane. You change the play modes for one or more topics by selecting or deselecting play modes from the Play Mode drop-down list. A short description of each play mode appears at the bottom of the list.

Warning! If you select multiple topics, the play mode settings you select apply to the entire selection, and overwrite any previous settings for that property. See *Assign a Property to Multiple Documents* for more information about changing play modes for multiple topics.

Note: If all of the topics in a multiple selection are assigned the same play modes, the modes appear in the Play Mode property cell. If the topics have different play modes assigned, the Play Mode property cell appears blank.

To change the play mode for a topic:

1. Display the Properties toolpane.
2. In the Library or Outline Editor, select the topic(s) for which you want to change play modes.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click).
3. In the **Topic** category, click in the **Play Modes** cell.

   A list of play modes appears.
4. Select a checkbox to include a play mode or clear a checkbox to disable a play mode.
5. Press ENTER or click outside of the cell.

15.6.4 Play Sound Property

The sound play modes assigned to a topic determines which play modes with sound enabled will be available when a user plays the topic in the Player. New topics automatically have sound in See It! and Try It! modes enabled, but you can change the play sound mode for a topic after it is created.

You can view the sound play modes assigned to a topic in the Play Sound property cell in the Properties toolpane. You change the play modes for one or more topics by selecting or deselecting play modes from the Play Sound drop-down list. A short description of each play mode appears at the bottom of the list.

Warning! If you select multiple topics, the play mode settings you select apply to the entire selection, and overwrite any previous settings for that property. See *Assign a Property to Multiple Documents* for more information about changing play modes for multiple topics.

Note: If all of the topics in a multiple selection are assigned the same play modes, the modes appear in the Play Sound property cell. If the topics have different play modes assigned, the Play Sound property cell appears blank.

To change the play sound mode for a topic:

1. Display the Properties toolpane.
2. In the Library or Outline Editor, select the topic(s) where you want to change the sound play mode.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click).
3. In the **Topic** category, click in the **Play Sound** cell.

   A list of play modes appears.
4. Select a checkbox to include a play mode or clear a checkbox to disable a play mode.
5. Press ENTER or click outside of the cell.

15.6.5 Show Bubbles Property

The Show Bubbles property allows you to turn all bubbles on or off in a topic. You can prevent the bubble from appearing during playback in See It! and Try It! modes. This allows you to create the equivalent of a PowerPoint slide show, and then record sound to narrate it if desired. In this case, a bubble on each "slide" would not be appropriate.

There are three options in the Show Bubbles property:

- **Always**: All bubbles show for the topic.
- **Never**: No bubbles show for the topic.
- **Use frame settings**: Uses the settings on each frame to determine if the bubble appears. This is the default value.

Using this option does not update the settings on the individual frames. It acts as an override and ignores the settings. This option does, however, turn off all of the action areas for the topic. Since the action areas are not present, you may want to make sure that the Enable skipping in Try It! mode option is selected when you publish the content so that the frames can be advanced by pressing ENTER in Try It! mode; if there are no action areas, there is no visual cue as what to do to advance the frame, and you may have difficulty advancing the frame.

If sound has been recorded for the topic or the frame, all frames displayed during See It! mode playback advance automatically when the sound has finished playing. The only exception is if the Delay has been set to Infinite on the frame. In this case, the user is prompted to Press ENTER to continue to the next frame. In Try It! mode, all frames are shown, but the frames must be advanced manually by either performing the correct action or pressing Enter. No remediation is shown if you perform the incorrect action.

If there is no sound associated with the topic, turning off the bubble has the following affect on the various frame types in See It! and Try It! modes:

- Introduction/End Frames
  See It! and Try It!: Skipped
- Explanation frames
  See It! and Try It!: Skipped
- Decision frames
  See It! and Try It!: Included; user must choose a path

- Action frames
  See It! and Try It!: Bubble hidden; action area displayed unless it has been turned off

- No-context frames
  See It! and Try It!: Bubble hidden; action area displayed unless it has been turned off

- Frames with Infinite time delay
  See It!: Skipped
  Try It!: Bubble hidden; action area displayed unless it has been turned off

Note: If there are alternative actions on a frame and you hide the bubble, the bubble is hidden for all actions.

To show or hide bubbles for a topic:

1. Display the Properties toolpane.
2. In the Library or Outline Editor, select the topic(s) for which you want to change bubble settings.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click).
3. In the **Topic** category, click in the **Show Bubbles** cell.
4. Select Always, Never, or Use frame settings.

15.7 Document Output Properties

The document output for a published System Process Document, Test Document, and Instructor Manual can contain fields that display information about a topic. The fields included in each output vary by document type.

Some of the document field values in the published output are generated by the Developer from information taken from the topic. Developer-generated field data includes the name of the document, the roles assigned to the topic, and the date the document was generated. Fields that are not generated by the Developer are left blank for you to enter the appropriate topic information.

For a System Process Document, user-defined fields may include the department, revision number, the name of the person who last changed the document, and the status of the document. For a Test Document, these fields include the purpose of the test being performed (note that the text in this field will also appear on the Test Case format), the estimated time, and the required test setup. For an Instructor Manual, you can add instructor notes that relate to a topic.

You enter document output text directly in the Properties toolpane or in a text entry dialog box for those properties that appear in tables or allow multi-line entries, such as Instructor Notes. You can enter and edit document field values for a single topic or multiple topics.

Warning! Be careful when changing a property for multiple documents that already contain values for the same property. The new values you enter for the property overwrite any existing values for all selected documents.

Multi-user Considerations

- To change properties, you must check out the document.

To add text to document output fields:

1. Display the Properties toolpane.
2. In the Library or Outline Editor, select the topics(s) to which you want to add document output text.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click).

   If you try to edit the properties for a topic open in the Topic Editor, a message appears prompting you to close the topic.
3. In the Properties toolpane, expand the heading for the document output category (for example, System Process Document, Test Document, and so on).
4. Type the text directly in the property cell or click ... and enter the text in the text entry dialog box.

15.7.1 Required Fields and Output Results for the System Process Document

The System Process Document includes property tables for Required fields and Output results. These property tables are blank and do not contain prepopulated field names. They can be used to enter custom field names and comments.

When creating entries for either the Required Fields or Output property, you can add more rows to the table, delete rows, and move rows up and down to rearrange the order. The text in the first cell of the table appears in the Properties toolpane when you select a document that contains text for either property.

If a multiple topic selection contains existing table text, the table dialog box displays the common table rows that appear in ALL of the selected topics. The common table row can appear in different row positions in the selected topics as long as the text in the row is identical. If the selected topics contain no common table rows, the table appears blank. The changes made to a table for a multiple topic selection affect all of the selected topics, and overwrite any existing values. Therefore, the table rows that do not appear in a multiple selection because they are not common to the entire selection are deleted.

To add a Required field or Output result:

1. Display the Properties toolpane.
2. In the Library or Outline Editor, select the topic to which you want to add property values.
3. In the **System Process Document** category, click ... in the **Required fields** or **Output** cell.
4. The Required Fields or Output dialog box opens with a blank row ready for text entry.
5. Type the text in the appropriate cell. Press Tab to move from one cell to the next. A new row is automatically added.
6. Click **OK** to save the changes.

   You can also click **Cancel** if you do not want to save your changes.

Tip: All cells allow multi-line entries. You can create multiple lines in a cell by letting the text word-wrap or by pressing Shift+ENTER to insert new lines. Scroll arrows appear in multi-line cells for navigating through the text.

To insert a new row:

1. Select a row and click to add a new row below the selected row.
2. Type the text in the appropriate cell.
3. Click **OK** to save the changes.

   You can also click **Cancel** if you do not want to save your changes.

To delete a row:

1. Select the row you want to delete and click .
2. Click **OK** to save the changes.

   You can also click **Cancel** if you do not want to save your changes.

To sequence a row:

1. Select a row and click or to move the row to a new position in this list.
2. Click **OK** to save the changes.

   You can also click **Cancel** if you do not want to save your changes.

15.7.2 Add Document Revision Text

The System Process Document, Test Document, and Job Aid publishing formats allow you to assign revision text that is appended to the topic filename (after the Document Type) when you publish these formats.

Revision text is appended to the topic file name as follows:

Syntax: `Topic Name_Document Type_Revision.file extension`

16 Preview a Topic

You can preview a selected topic only from the Outline Editor in any of the Player modes such as See It!, Try It!, Do It!, and Know It?; document formats such as the System Process Document, Job Aid, Test Document, Training Guide, and Instructor Manual; and the Presentation format.

Note: You can only preview one topic at a time and the topic must have been recorded. You can also only preview a topic in a Player mode if that mode has been enabled on the Properties toolpane of the topic.

When you preview a topic in any format, the Developer uses the settings configured in the Documents, Player, and Presentation options (Tools menu). The Developer also uses the Category setting in the Preview Defaults option to determine which category of publishing styles should be used for previewing content. You should review these settings in Tools, Options before you preview a topic.

Set the Default Preview

You can choose any of the publishing styles as the default preview using the Preview list box on the toolbar. The Preview list box indicates the current preview default. Click to preview the topic using the current default or click the down arrow in the Preview list box and select a different format. Your selection becomes the new default.

Multi-user Considerations

- You can preview a topic while working online and offline; however, you should note that the only local content is used in the preview. For example, you can not choose to preview sever vs. local content; however, you do have this option when publishing content. A message appears when you try to preview a topic that you do not have in your local cache. If this happens, you should go online to preview the document or use the Get command to download the topic and return to working offline.

  Also note that you can not preview deleted, but restorable documents. You must first restore the document to preview it.

To preview a topic:

1. From the Outline Editor only, select the recorded topic that you want to preview.
2. On the **File** menu, point to **Preview** and choose one of the formats listed. The Player modes are listed first followed by the document formats.

   You can also click the down arrow to the right of the **Preview** list box on the Standard toolbar and choose one of the formats listed. Then click to preview the topic.
3. Review the topic and close it when you are finished.

16.1 Preview Player Modes

While the Player preview gives you a good idea of how the topic will appear in the Player, some differences do exist. For example, when you preview in Player mode you do not see the entire Player interface such as the outline and other controls for searching, filtering by role, and so on. However, this option allows you to test a recorded topic to verify that all the frames and bubble text are correct.

See It! and Try It! modes both use simulated environments, while Do It! mode uses a live environment where you interact with the live application. In See It! mode, you watch while the simulation progresses. In Try It! mode, you click in the location indicated or type the specified

text to advance to the next frame. In Know It? mode, you are required to complete a particular task and are scored on how well you complete the task.

Note: The appropriate Play Modes property must be set on the topic to preview it in a particular mode.

16.1.1 Play See It! Mode

See It! mode enables you to learn by watching an animated demonstration of tasks being performed in a simulated environment. As tasks are performed, information is provided explaining the steps being performed.

You can pause the playback at any time by clicking the Pause link in the bubble. Then, when you are ready, you can click the Resume link to continue the playback. You can stop the playback at any time by clicking the Close button in the bubble, or manually advance by pressing the ENTER key. You can also press ESC to exit.

Control the topic playback using the Actions link that appears in the bubble.

- **Resume:** Close the Action menu and resume the topic playback.
- **Print It!:** Displays a document that was provided for the topic by your content provider. This link only appears if a document was provided for Print It! mode.
- **Preferences:** Display the current preference settings for the Player. If this link does not appear, your administrator has preset all of the preferences and has prevented them from being changed.
- **Help:** Display the Player help system.
- **Close Topic:** Close the topic in current play mode and return to the topic launch point.

16.1.2 Play Try It! Mode

Try It! mode enables you to learn a task by practicing in a simulated environment with step-by-step instructions and guidance throughout the task. If you make a mistake, you are prompted to try again. Whenever text input is required, the text must be entered EXACTLY as suggested to advance to the next step. If the step does not automatically advance after you enter the requested input, you may need to modify your entry. If you feel that your entry is also an acceptable one, you can click the Typing Complete button to submit it. If your entry is also considered a correct response, the step will advance. Otherwise, you will be prompted to enter the requested text. Because you are using a simulated environment, your actions will have no impact on actual system data or settings.

Control the topic playback using the Actions link that appears in the bubble.

- **Next Step:** Advance to the next step.
- **Previous Step:** Return to the previous step.
- **Restart Playback:** Return to the first step in the topic and restart the task.
- **Show next Alternative action:** Display other ways to perform the current step. This link only appears when other ways to perform the current step are defined in the authoring process.
- **Display Concept:** Display the conceptual information for the task. This link only appears if conceptual task information exists.

- **Print It!:** Displays a document that was provided for the topic by your content provider. This link only appears if a document was provided for Print It! mode.

- **Attachments:** Display individual links that launch additional information related to the current screen. This link only appears if additional information exists for the current screen.

- **Preferences:** Display the current preference settings for the Player. If this link does not appear, your administrator has preset all of the preferences and has prevented them from being changed.

- **Help:** Display the Player help system.

- **Close Topic:** Close the topic in current play mode and return to the topic launch point.

16.1.3 Play Know It? Mode

Know It? mode enables you to test your knowledge of a task in a simulated environment. When you click the Know It? icon, you are presented with the score needed to pass, and you may also receive instructions for completing the Know It? or other pertinent information. You can then start to perform the required steps for completing the current task. Once you start the task, you may not see any further instructions for completing it, depending on how the task was structured by the content author. Since Know It? mode is a simulated evaluation, you must perform the steps of the topic exactly as they were recorded during content creation. If Try It! mode includes alternative methods of performing a step, either method will be scored properly in Know It? mode.

If you are unable to complete a step, you can click the Show Step link in the Know It? bubble. When you click this link, a window opens, informing you that you will be graded as incorrect if the Player completes the step for you. You can then confirm the action by clicking Yes or cancel the action by clicking No. If you cancel the action, you can attempt to complete the step. If you confirm the action, the step is completed for you and you are marked incorrect for that particular step. Once the step is complete, you can then complete the remaining steps in the task.

If you fail to complete a step, you will see up to four levels of remediation. Following are the four levels of remediation:

Level 1: User told to try again
The bubble informs you that your action was incorrect and to try again.

Level 2: User provided with instructions
The bubble informs you that the action was incorrect and provides instructions for completing the step.

Level 3: User provided with instructions plus action area
The bubble informs you that the action was incorrect and provides instructions for completing the step and a highlighted area indicating where the action should take place.

Level 4: The Step is Completed for You
The bubble informs you that the action was incorrect and states that the action will now be completed for you.

Although you cannot control the playback in Know It? mode, you can use the Actions link that appears in the bubble to access the following links:

- **Preferences:** Display the current preference settings for the Player. If this link does not appear, your administrator has preset all of the preferences and has prevented them from being changed.

- **Help:** Display the Player help system.

- **Close Topic:** Close the topic in current play mode and return to the topic launch point.

You can exit Know It? mode at any time by clicking the Close button in the Know It? bubble or by pressing ESC. When you attempt to exit Know It? mode, you are presented with two options that enable you to: 1) exit the Know It? without being scored; or 2) return to the Know It? and complete the task.

When you complete the Know It? steps, you are presented with your score as a percentage of steps completed properly without assistance. Therefore, you are scored correct only when you complete a step right the first time. The passing score and a Result field also appear in the assessment results. The Result field displays “Pass” or “Fail” to indicate if you passed or failed the assessment.

16.1.4 Play Do It! Mode

With Do It! mode, you are guided through a task while you perform it in the live application. This unique mode makes it possible for you to accomplish real work while you learn.

When a topic is played in Do It! mode, the Do It! window opens on top of the target application. The top section of the window includes step-by-step instructions for completing the task. When you complete a step, you click the Next Step button to display instructions for the next step or to skip a step. The Previous Step button appears after you perform the first step in the topic, allowing you to move back to a previous step. If a key combination was set in the Preferences window, you can use that combination to advance to the next step in Do It! mode. A key combination is not available to navigate back to the previous step, however.

Note: The key combination to advance in Do It! mode does not work in Firefox.

The bottom section of the Do It! window displays a graphic that illustrates how the screen should appear in the live application for the step. On the graphic, a marquee surrounds the area in which you should perform the action in the live application. You can drag the graphic to reposition it within the Do It! window, if necessary. You can also drag the lower right corner of the Do It! window to resize it and display more of the graphic or you can use the Show/Hide Graphic button to toggle the display of the graphic in the Do It! window. You can also move the Do It! window to another area of the screen by dragging the title bar to the desired location on the screen.

Note: When using the Firefox browser, you can install the Firefox plug-in that always keeps the browser on top to keep the Do It! window on top of the application window.

Control the topic playback using the Actions link that appears in the Do It! window.

- **Show next Alternative action:** Display other ways to perform the current step. This link only appears when other ways to perform the current step are defined in the authoring process.

- **Next Step:** Advance to the next step.

- **Previous Step:** Return to the previous step.

- **Restart Playback:** Return to the first step in the topic and restart the task.

- **Display Concept:** Display the conceptual information for the task. This link only appears if conceptual task information exists.

- **Attachments:** Display individual links that launch additional information related to the current screen. This link only appears if additional information exists for the current screen.

- **Play:** Display links to launch the topic in See It!, Try It!, or Print It! mode (if Print It! mode is enabled). After viewing the step in See It! or Try It! mode, you can continue in that mode or press ESC to return to Do It! mode.

- **Preferences:** Display the current preference settings for the Player. If this link does not appear, your administrator has preset all of the preferences and has prevented them from being changed.

- **Help:** Display the Player help system.

- **View Outline:** This link only appears if the topic was launched in a context-sensitive manner from a target or web-based application. Close the topic and return to outline in the Player.

- **Close Topic:** Close the topic in current play mode and return to the topic launch point.

16.2 Preview Documents

In addition to previewing topics in the various Player modes, you can also preview a topic in any of the following document formats:

- System Process
- Job Aid
- Training Guide
- Instructor Manual
- Test Document
- Test Results

Each of these preview options appears below the Player modes on the Preview list box. When you choose one of these options, the document appears in Microsoft Word, Adobe Acrobat, or an HTML Web Page, depending on the options you selected for the format you are previewing. If more than one output format is chosen, the last item in the list (HTML Web Page) is used.

16.2.1 System Process Document

This format is useful for creating documents that not only include the procedures and conceptual information for system processes, but also contain information relating to intended audience, roles and responsibilities, document status, versions, and dates. Each topic is published to a separate document which includes a concept page, with information about the document and task, and the procedures for completing the task.

16.2.2 Job Aid

This format results in a quick reference guide, enabling users to view only the procedures for completing a task, without conceptual information. Each topic is published in a separate document which includes only the procedures for completing the task.

16.2.3 Training Guide

This format allows instructors to create manuals quickly for Instructor-led training. The document includes a title page, copyright information, table of contents, conceptual information, and procedures for completing all tasks included in the published outline.

Questions and/or assessments in the content are included in the Training Guide when the Include questions and/or Include assessments options are set. Note that answers to questions do not appear in the Training Guide but do appear in the Instructor manual.

In addition, if the content you publish contains glossary markups, then a glossary is included at the end of the document.

Warning! Be aware that when you publish a Training Guide, your entire selection is published as one document. If you publish a large amount of content at one time, you may encounter memory problems with Microsoft Word. Consider publishing your content in smaller chunks and then merge the contents of each Microsoft Word file after publishing from the Developer.

16.2.4 Instructor Manual

This format allows instructors to publish the Training Guide including instructor notes. The instructor notes are inserted in the document per topic, after the Concept, and before the Procedure. An Instructor Note heading appears in the output in the same style as Procedure text. The instructor notes are formatted like web page attachments (indented 1/2 inch from the margin in a box with a rule and shading). This is designed to make the notes stand out from the other text. The outside margin is adjusted to 2.5 inches. This allows instructors room to write their own notes.

Questions and/or assessments as well answers to the questions are included in the Instructor Manual when the Include questions and/or Include assessments options are set.

Warning! Be aware that when you publish an Instructor Manual, the entire selection is published as one document. If you publish an entire outline, the document could be very large, and you might experience problems with Microsoft Word.

16.2.5 Test Document

This format allows you to create documents for testing software applications. Each topic is published to a separate document. The document includes the purpose of the test, test history, time to test, test setup, and test procedure. The test procedure contains the steps for completing the task.

16.2.6 Test Results

This format allows you to create Word documents with steps and comments recorded during product testing using Record It!. Each topic is published to a separate document. The document includes the topic name, the status, the owner, the steps to complete the task, and any author notes.

16.3 Preview a Presentation

You can preview a topic in the Presentation format. This preview option appears at the bottom of the Preview list box. When you choose this option, the document appears in Microsoft PowerPoint.

17 Publish Content

The publishing process copies content out of the development environment, restructures it, and creates one of two types of outputs: content that you can deploy to end users through a Player or a series of document files. You can customize both the Player and the documents, as well as create your own custom publishing styles.

17.1 Deployment Formats

When you publish to any one of the Deployment formats, the Developer creates a package which can then be placed on a web server for users to view the content and play the topics. The package can also be distributed to end users to play offline on their local computers.

17.1.1 Player and LMS

This publishing format creates a package for the Player and an LMS. The Player interface includes a customizable header (showing a default image or custom image/html page), Outline/Search pane, and a content pane. Users can play topics in See It!, Try It!, Do It!, and Know It? modes. They can also select Print It! mode to view and print a document of the process covered in the topic.

You can launch the Player when the publishing process is complete. If you publish just the Player format, the option to launch the content automatically is selected and you can launch it directly from the Publishing Wizard. If you want to launch it later, navigate to the location where you published and open the Publishing content folder. Within that folder, open the PlayerPackage folder and double-click the Play.exe file to launch the Player.

For complete information on using the Player, see the *Content Player* manual or online help.

The Player and LMS options page on the Publishing Wizard contains 5 subcategories (Content, Player Preferences, Print It!, LMS Options, Knowledge Center Publishing). Subcategories are collapsible/expandable so you can view only the options of interest. The following publishing options are available for the Player:

Content

- **Sound**: By default (Medium), sound files are published at the medium playback quality. You can select one of three sound playback quality settings; Low (5.5 kHz), Medium (11 kHz), or High (22 kHz). Medium produces sound files (.FLV) in the published output roughly double that of the Low setting. High produces published sound files (.FLV) roughly double that of the Medium settings. Sound playback can be excluded by changing the setting to None.

- **Convert screenshots to 256 colors**: Reduces the number of colors used in the screenshots, which therefore reduces the size of the published topics and improves the playback speed.

- **Create links for backward compatibility**: If you have created web pages or HTML links to content from a previous version, use this option to generate a folder structure that will allow you to keep the existing links without needing to update them. After you publish, open the folder in which you published the content and rename the Linked_folders directory to match the name of the application folder from the previous version. For example, in a previous version, you published a Player package for the WordPad application. Within that Player package, there is a folder called WordPad, in which all the content is located. If you convert that title to the current version and republish it to a Player package using the backward compatibility option, you would rename the Linked_folders folder to WordPad. The pages within this folder will redirect your existing links appropriately into the new content structure.

  Note: If you want to use this option, the module names in the content you publish MUST be unique, as the module name is used to determine the folder name.

- **Include HTML Web Site**: You can choose to include the HTML Web Site format when you publish to the Player. The HTML format is contained in a folder called html within the PlayerPackage folder. If this folder is present, the HTML Web Site format will launch if a user has a browser that is not supported by the Player.

- **Create zip file from published Player package**: You can create a zip file of the Player package in the published content folder. The zip file is created at the same level as the PlayerPackage folder. This option is helpful if you want to import the content into an LMS.

- **Include Test It! mode**: This option adds Test It! mode to the Player. Test It! mode is used to guide a tester through a test case and record the steps that are used to create a Test Document used in bug reporting. Test It! mode is launched from kp.html. When Test It! mode is included, all topics are published, no matter what other modes are enabled.

Player Preferences
With the Player output, you also have the following options.

- **Marquee color**: Set the color for the action area (or highlight) that appears in See It!, Try It! and Do It! modes.

- **Play audio**: You can set how audio plays on the Player. The All available sound option (default) plays any available sound files during playback. The Keyboard and mouse clicks options play only keyboard and mouse clicks sounds during playback in See It! mode. These sounds are FLV files, delivered in the Audio folder of published content, that play automatically when keyboard and mouse clicks occur in See It! mode playback. The None option disables sound during playback. The user must have Flash 9.0 or greater installed to play sound in the Player.

- **Default playback mode**: This option controls the default mode launched when double clicking on a topic in the outline.

- **Show introduction text**: This option controls whether the Introduction frame appears when a topic is played in the Player. Select this option to show the Introduction frame as the first frame during playback and deselect it to suppress the frame.

- **Enable users to change their Player preferences**: If you enable this option, the Player will include a Preferences link that enables any user to change the settings. If you disable this option, the Preferences link does not appear in the Player.

- **Enable skipping in Try It! mode**: Select this option to enable the user to advance to the next step in Try It! mode by pressing Enter instead of performing the action in the bubble.

- **Enable outline navigation buttons**: This option places navigational arrows in the outline of the Player. Use these arrows to move up and down the outline.

- **Enable Direct Do It!**: When a user launches Player content in a context-sensitive manner from a target or web application and only one topic is returned, the topic is automatically launched in Do It! mode when this option is on. This option is off by default. Note that the topic must also be configured for Do It mode using the Play modes property. You can close Direct Do It and display the full TOC with the View Outline link on the Action menu.

- **Key combination for advancing in Do It! mode**: Configure a key combination for advancing to the next step in Do It! mode.

  Note: The Key combination to advance in Do It! mode does not work in Firefox.

Print It!

- **Format for Print It! mode**: If you enable Print It! mode for topics using the Play Modes property, you can use this option to determine which document style is included when you publish formats that support Print It! mode. Choose "none" if you do not to want publish Print It! mode (even when this mode has been enabled for topics). By default, Job Aid, System Process, and Test Document are the only options for Print It! mode. However, the Training Guide and Instructor Guide can appear as choices by editing the Style.xml file for the appropriate publishing project document. If you want a publishing style to appear as a choice, modify the PrintItStyle Setting of the Style.xml file to have a value of 1.

- **Text mode**: Each document output uses the text from a specific mode. Use this option to specify the mode text.

- **Include screenshots**: Screenshots are included in a document based on the settings for the topic in the Topic Editor. This option allows you to override those settings and choose to include one screenshot per topic, one screenshot for each frame, or no screenshots.

- **Convert screenshots to 256 colors**: Reduces the number of colors used in the screenshots, which therefore reduces the size of the published topics and improves the playback speed.

- **Include alternatives**: Alternative Actions and Paths appear in document and Presentation outputs. Use this option to make the output simpler, with only one set of steps.

- **Include relative links**: Relative links are included in all printed output with the exception of Test Case. Turn this option off to exclude relative links from printed output.

- **Output format**: Published output is in HTML Web Page.

  If you choose Adobe PDF format, the document is published to Word first and then converted to PDF. If you choose HTML Web Page format, the document is published to Word and then saved as a web page using the Web Page, Filtered option in Word. This creates a single HTML file, but all of the graphics are separate, linked files.

  Note for Adobe Acrobat: If you are using Microsoft Word 2003, you must have Adobe Acrobat 8.0 (or greater) Standard or Professional edition installed to create PDF output. After Adobe Acrobat is installed, make the following changes to the PDF conversion settings in Microsoft Word: From the Adobe PDF menu, choose Change Conversion Settings, and deselect the View Adobe PDF result and Prompt for Adobe PDF file name options. If you are using Microsoft Word 2007 or higher, it has built-in support for Adobe Acrobat, so a separate installation of Adobe Acrobat is not needed.

- **Microsoft file type**: If you choose the Microsoft Word output format, you can use this option to indicate whether you want the documents to be in .doc (Word 2003) or .docx (Word 2007) format.

- **Paper size**: The paper size is set based on the Location setting in the Regional & Language options for your operating system locale. You can override this setting by choosing a different paper size. If you customize the print template to have a special paper size (for example, to print Job Aids on smaller cards), choose the option to use the print template setting; otherwise, it will be overridden during publishing.

LMS Options

This publishing option creates learning specification compliant course material. It performs all the tasks required to generate content files that are ready to be integrated with your Learning

Management System without any JavaScript programming or HTML manipulation. The output is AICC and SCORM compliant. See the *Content Deployment* manual for more information about deploying the content on an LMS server.

- **SCORM version**: The content is compliant with the specifications for SCORM 1.2 and 1.3 (SCORM 2004). This allows you to select the SCORM version for publication. Regardless of the SCORM version you publish, the published content includes the files necessary for the other version. You do not have to republish to use the content for the other version.

- **Prefix URL**: Allows you to enter the URL prefix that points to the location where the package will be placed on the LMS server. Each URL in the appropriate AICC and SCORM file is prefixed with this text. The path should include http://, followed by the name of the server and the folder name.

Knowledge Center Publishing
This option allows you to use content created in the Developer and publish it to the Knowledge Center server (available only in the Professional edition). If the title (content) already exists in the Knowledge Center content root, it is updated with the new published content. If the title (content) does not exist, a new title is created with the new published content. As soon as the title is published to the Knowledge Center, users can access it and view the content. If you have the Professional edition installed, the title can also be used in knowledge paths, which are a way to organize the content into curricula through which the user can advance.

- **Publish content to Knowledge Center**: Select this option to publish new content to or update existing content directly to the Knowledge Center server. When this option is selected, the current Knowledge Center server settings appear. If you are using this option for the first time, the settings are empty. Use the Server Settings button to specify the login credentials.

- **Server Settings**: This button opens a login screen. You click Add to specify the URL for the Knowledge Center server, and then either enter a valid username and password, or use your Windows login account. You may also need to select a workgroup. The Knowledge Center server administrator should supply you with the server URL and the login information that you need. The settings will be saved with the publishing settings for the publishing destination.

  Note: If the server settings are incorrect or missing and the publishing process is unable to connect with to the Knowledge Center server, the content is still published to a Player package and the error is logged in the Activity log. You can upload a title manually to the Knowledge Center server, if necessary. See the *Manage Titles* section in the User and Content Management Manual for more information.

  Note: If you receive a Proxy Authentication dialog box when you log in, enter your username and password for the proxy server. If you select the Save my password option, the username and password information is encrypted and saved to the kcLogin.xml file in the path for the application data, for example c:\Documents and Settings\<username>\Application Data\User Productivity Kit (Windows XP) or c:\Users\<username>\AppData\User Productivity Kit (Windows 7). If your password changes for the proxy server, you can open this file in a text editor and delete the tags <ProxyAuthentication> and </ProxyAuthentication> and all the text in between. This will cause the Proxy Authentication dialog box to open the next time you log in so that you can enter your new password.

- **Current Server Settings**: The Authentication, Connection and Workgroup information currently being used to connect to the Knowledge Center server displays below the Server Settings button.

17.1.2 HTML Web Site

If you publish content for an HTML Web Site, the result is a tree of hyperlinked HTML files. Users can view the content via a browser. Exported content appears in a static version of Try It! mode suitable for posting to an Intranet or Internet site. With this method, users can view content without downloading a Web plug-in or installing content.

Note: The HTML Web Site is designed to conform to Section 508c requirements for accessibility. The site meets the following requirements: it can be read by a screen reader such as JAWS; it is not color dependent; the font size can be changed by the user; it is fully functional without using a mouse; and it does not depend on an audio track for functionality.

Users access the content by launching the index.html page in the HTMLPages folder in the Publishing Content folder in the location where you published. This page displays a table of contents page showing the outline. Each topic has a link. If there is an attachment, a Concept link appears next to the topic name.

After clicking a topic link, users can navigate the static version of Try It! mode using the available navigation links. Each frame is a separate HTML page. The frame pages contain a graphic showing the recorded target application screen with the action listed below the image. One action appears in each page, and a red border indicates the action area for the frame. To navigate through the topic, users can either click in the action area or click the navigation hyperlinks that appear below the graphic. Hyperlinked text appears below the frame to view any attachments as appropriate. The text used for the links is the tooltip as defined by the content author. Alternative Actions, Alternative Paths, and Decision frames are included as well. In addition, a Keyword Index link appears on the Table of Contents page. After clicking this link, users see each keyword followed by a list of the topics in which it appears. The topic names on this page are hyperlinked to the appropriate topic.

The graphics are in .png format and are linked to each HTML document as appropriate.

The following areas do not appear in the HTML Web Site output:

- Jump-in points
- Roles
- Unrecorded topics

The following publishing options are available for the HTML Web Site:

- **Convert screenshots to 256 colors**: Reduces the number of colors used in the screenshots, which therefore reduces the size of the published topics and improves the playback speed.

17.1.3 Standalone Topic Files

This option creates a content source with a file (.odtpc) for each topic. Each standalone topic file contains everything needed for playback in See It!, Try It!, Know It? or Do It! modes without having to be associated with a content source.

To play standalone topic files, you must install the Topic Player. Once this Player is installed, a user can then double-click the topic (.odtpc) file and play it in any mode. If you have the Developer installed on your computer, you can double-click on a standalone topic file to launch it without installing the Topic Player.

The following publishing options are available for Standalone Topic Files:

Content

- **Sound**: By default (Medium), sound files are published at the medium playback quality. You can select one of three sound playback quality settings; Low (5.5 kHz), Medium (11 kHz), or High (22 kHz). Medium produces sound files (.FLV) in the published output roughly double that of the Low setting. High produces published sound files (.FLV) roughly double that of the Medium settings. Sound playback can be excluded by changing the setting to None.

- **Convert screenshots to 256 colors**: Reduces the number of colors used in the screenshots, which therefore reduces the size of the published topics and improves the playback speed.

Output

- **Use encoded folder and file names**: Publishes the content using the document GUID instead of actual module, section, and topic names. Encoding shortens path names and prevents the possibility of duplicate file name in the published output. This option makes it more difficult to identify the source based on the file name.

Print It!

- **Format for Print It! mode**: If you enable Print It! mode for topics using the Play Modes property, you can use this option to determine which document style is included when you publish formats that support Print It! mode. Choose "none" if you do not want to publish Print It! mode (even when this mode has been enabled for topics). By default, Job Aid and System Process are the only options for Print It! mode. However, other styles can appear as choices by editing the Style.xml file for any publishing project document. If you want a publishing style to appear as a choice, modify the PrintItStyle Setting of the Style.xml file to have a value of 1.

- **Text mode**: Each document output uses the text from a specific mode. Use this option to specify the mode text.

- **Include screenshots**: Screenshots are included in a document based on the settings for the topic in the Topic Editor. This option allows you to override those settings and choose to include one screenshot per topic, one screenshot for each frame, or no screenshots

- **Convert screenshots to 256 colors**: Reduces the number of colors used in the screenshots, which therefore reduces the size of the published topics and improves the playback speed.

- **Include alternatives**: Alternative Actions and Paths appear in document and Presentation outputs. Use this option to make the output simpler, with only one set of steps.

- **Include relative links**: Disable this option to exclude relative links from printed output.

- **Output format**: Published output is in HTML Web Page.

  If you choose Adobe PDF format, the document is published to Word first and then converted to PDF. If you choose HTML Web Page format, the document is published to Word and then saved as a web page using the Web Page, Filtered option in Word. This creates a single HTML file, but all of the graphics are separate, linked files.

  Note for Adobe Acrobat: If you are using Microsoft Word 2003, you must have Adobe Acrobat 8.0 (or greater) Standard or Professional edition installed to create PDF output. After Adobe Acrobat is installed, make the following changes to the PDF

conversion settings in Microsoft Word: From the Adobe PDF menu, choose Change Conversion Settings, and deselect the View Adobe PDF result and Prompt for Adobe PDF file name options. If you are using Microsoft Word 2007 or higher, it has built-in support for Adobe Acrobat, so a separate installation of Adobe Acrobat is not needed.

- **Microsoft file type**: If you choose the Microsoft Word output format, you can use this option to indicate whether you want the documents to be in .doc (Word 2003) or .docx (Word 2007) format.

- **Paper size**: The paper size is set based on the Location setting in the Regional & Language options for your operating system locale. You can override this setting by choosing a different paper size. If you customize the print template to have a special paper size (for example, to print Job Aids on smaller cards), choose the option to use the print template setting; otherwise, it will be overridden during publishing.

17.2 Document Formats

Document formats allow you to publish content in various predefined documents that can appear in Microsoft Word (.doc or .docx), HTML, and Adobe Acrobat (.pdf) format. To publish document formats, Word 2003 or greater is required. Publishing to Adobe Acrobat (.pdf) format requires Adobe Acrobat 8.0 if you are using Word 2003.

Important Publishing Note: If you are using Microsoft Office 2003, you must install the Microsoft Office Compatibility Pack for Word, Excel, and PowerPoint 2007 File Formats. You can download this compatibility pack from the Microsoft Office Download Center. In addition, all Microsoft Office Products must have the latest updates and security fixes.

Note: All document formats are designed to conform to the following Section 508c requirements for accessibility: the document can be read by a screen reader such as JAWS, except for headers, footers, and image alternative text; and the text background shading is formatted to meet legibility standards for the visually impaired.

Document Type and Version

When you publish any of the Document formats except Presentation, the document type is appended to the filename of each document published. The following lists the document types.

- System Process: SPD
- Job Aid: JOBAID
- Training Guide: TRAIN
- Instructor Manual: INSTMAN
- Test Document: TEST
- Test Results: TESTRESULTS
- Test Case: TC

If a revision number has been assigned to a topic, the revision number is also appended. This allows you to maintain multiple versions of different published output.

The document name is separated from the document type and revision number by an underscore. For example, a topic file name for a System Process is TopicA, the resulting published document is TopicA_SPD.doc. If the assigned revision value is 2, the published document name is TopicA_SPD_2.doc.

You can remove this document type extension if desired. See *Remove the Document Type from the File Name* in the Customize Publishing Styles section.

17.2.1 Attachments in Document Formats

Sections which have no topics but do have a concept attachment are included in the Training Guide and Instructor Manual styles. Attachments are also included in the document formats as follows:

- **Instructor Manual, Training Guide, System Process**: web pages, graphics in packages, URLs as static text plus hyperlink, link icons
- **Test Case, Job Aid, Test Document**: no attachments included

Web pages and graphics in packages linked to frames and concepts will appear as inline graphics in the document formats. All graphics will retain any property settings made in the Web Page editor. Links to files other than graphics in packages will be excluded. A link to an external file will be shown as a hyperlink, with the static text "Please refer to:" before it.

Note: Supported graphic types are .gif, .jpg, .pict, .png, .bmp, .rle, .dib, .emf, and .wmf.

There are several special considerations for links in web pages. If a web page contains a link to an external file or URL, the tooltip text for the link will appear in the document, with the address in parentheses ( ) after it. A link to an internal file or web page in the Library is not included.

17.2.2 Options for Document Outputs

The following lists show the available Document Output options and the applicable Document formats to which they apply.

- **Text mode**: Each document output uses the text from a specific mode. Use this option to specify the mode text to use.

  Applicable formats: System Process, Job Aid, Training Guide, Instructor Manual, Test Document, Test Case, Presentation

- **Include screenshots**: Screenshots are included in a document based on the settings for the topic in the Topic Editor. This option allows you to override those settings and choose to include one screenshot per topic, one screenshot for each frame, or no screenshots.

  Applicable formats: System Process, Job Aid, Training Guide, Instructor Manual, Test Document

- **Convert screenshots to 256 colors**: Reduces the number of colors used in the screenshots, which therefore reduces the size of the published topics and improves the playback speed.

  Applicable formats: System Process, Job Aid, Training Guide, Instructor Manual, Test Document, Presentation

- **Include alternatives**: Alternative Actions and Paths appear in document and Presentation outputs. Disable this option to make the output simpler, with only one set of steps.

  Applicable formats: System Process, Job Aid, Training Guide, Instructor Manual, Test Document, Test Case, Presentation

- **Include images from packages**: Images appear if they are attached to a frame or to the concept pane.

  Applicable formats: System Process, Training Guide, Instructor Manual

- **Include images in web pages**: Images appear if they are attached to a frame or to the concept pane.

  Applicable formats: System Process, Training Guide, Instructor Manual

- **Include relative links**: Disable this option to exclude relative links from printed output.

  Applicable formats: System Process, Job Aid, Training Guide, Instructor Manual, Test Document, Presentation

- **Include assessments**: Disabling this option excludes assessments.

  Applicable formats: Training Guide, Instructor Manual

- **Include questions**: Questions in the content are included in a Training Guide or Instructor Manual. In addition, answers are included in the Instructor Manual. Disabling this option excludes questions.

  Applicable formats: Training Guide, Instructor Manual

- **Group actions by context ID**: Each action appears in a separate row in the Test Procedure table. When you select this option, the actions with the same context ID are grouped together into one test step.

  Applicable formats: Test Case

- **Include action areas**: In the Player outputs, a marquee - or highlight - appears around the action area for each frame. You can choose to include this marquee. You can also change the color of the marquee. This setting does not affect the marquee color for the Player outputs.

  Applicable formats: Presentation

- **Action area color**: Clicking the icon next to the color opens the Color dialog box, used to change the outline box color. The action area only appears if the Include action area option is on.

  Applicable formats: Presentation

- **Output format**: Published output can be in Microsoft Word, Adobe Acrobat PDF format or HTML Web Page.

  If you choose Adobe PDF format, the document is published to Word first and then converted to PDF. If you choose HTML Web Page format, the document is published to Word and then saved as a web page using the Web Page, Filtered option in Word. This creates a single HTML file, but all of the graphics are separate, linked files.

  Note for Adobe Acrobat: If you are using Microsoft Word 2003, you must have Adobe Acrobat 8.0 (or greater) Standard or Professional edition installed to create PDF output. After Adobe Acrobat is installed, make the following changes to the PDF conversion settings in Microsoft Word: From the Adobe PDF menu, choose Change Conversion Settings, and deselect the View Adobe PDF result and Prompt for Adobe PDF file name options. If you are using Microsoft Word 2007 or higher, it has built-in support for Adobe Acrobat, so a separate installation of Adobe Acrobat is not needed.

  Applicable formats: System Process, Job Aid, Training Guide, Instructor Manual, Test Document

- **Microsoft file type**: If you choose the Microsoft Word output format, you can use this option to indicate whether you want the documents to be in .doc (Word 2003) or .docx

(Word 2007) format. For a Presentation format, you can choose a .ppt (PowerPoint 2003) or .pptx (PowerPoint 2007) format. For a Test Case format, you can choose an .xls (Excel 2003) or .xlsx (Excel 2007) format.

Applicable formats: System Process, Job Aid, Training Guide, Instructor Manual, Test Document, Test Case, Presentation

- **Paper size**: The paper size is set based on the Location setting in the Regional & Language options for your operating system locale. You can override this setting by choosing a different paper size. If you customize the print template to have a special paper size (for example, to print Job Aids on smaller cards), choose the option to use the print template setting; otherwise, it will be overridden during publishing.

  Applicable formats: System Process, Job Aid, Training Guide, Instructor Manual, Test Document

- **Use encoded folder and file names**: Publishes the content using the document GUID instead of actual module, section, and topic names. Encoding shortens path names and prevents the possibility of duplicate file name in the published output. This option makes it more difficult to identify the source based on the file name.

  Applicable formats: System Process, Job Aid, Training Guide, Instructor Manual, Test Document, Test Case, Presentation

- **Format**: Use to select the Test Case output format. Options include Oracle Application Testing Suite (default), IBM Rational Quality Manager, HP Quality Center, or Other (which contains all available data in the report). Other can be used to get the data into a spreadsheet such as Excel.

  Applicable formats: Test Case

17.2.3 System Process Document

This format is useful for creating documents that not only include the procedures and conceptual information for system processes, but also contain information relating to intended audience, roles and responsibilities, document status, versions, and dates. Each topic is published to a separate document which includes a concept page, with information about the document and task, and the procedures for completing the task.

17.2.4 Job Aid

This format results in a quick reference guide, enabling users to view only the procedures for completing a task, without conceptual information. Each topic is published in a separate document which includes only the procedures for completing the task.

17.2.5 Training Guide

This format allows instructors to create manuals quickly for Instructor-led training. The document includes a title page, copyright information, table of contents, conceptual information, and procedures for completing all tasks included in the published outline.

Questions and/or assessments in the content are included in the Training Guide when the Include questions and/or Include assessments options are set. Note that answers to questions do not appear in the Training Guide but do appear in the Instructor manual.

In addition, if the content you publish contains glossary markups, then a glossary is included at the end of the document.

Warning! Be aware that when you publish a Training Guide, your entire selection is published as one document. If you publish a large amount of content at one time, you may encounter memory problems with Microsoft Word. Consider publishing your content in smaller chunks and then merge the contents of each Microsoft Word file after publishing from the Developer.

17.2.6 Instructor Manual

This format allows instructors to publish the Training Guide including instructor notes. The instructor notes are inserted in the document per topic, after the Concept, and before the Procedure. An Instructor Note heading appears in the output in the same style as Procedure text. The instructor notes are formatted like web page attachments (indented 1/2 inch from the margin in a box with a rule and shading). This is designed to make the notes stand out from the other text. The outside margin is adjusted to 2.5 inches. This allows instructors room to write their own notes.

Questions and/or assessments as well answers to the questions are included in the Instructor Manual when the Include questions and/or Include assessments options are set.

Warning! Be aware that when you publish an Instructor Manual, the entire selection is published as one document. If you publish an entire outline, the document could be very large, and you might experience problems with Microsoft Word.

17.2.7 Test Document

This format allows you to create documents for testing software applications. Each topic is published to a separate document. The document includes the purpose of the test, test history, time to test, test setup, and test procedure. The test procedure contains the steps for completing the task.

17.2.8 Test Results

This format allows you to create Word documents with steps and comments recorded during product testing using Record It!. Each topic is published to a separate document. The document includes the topic name, the status, the owner, the steps to complete the task, and any author notes.

17.2.9 Test Case

This format allows you to create files that can be imported into testing software applications such as Oracle Application Testing Suite (OATS), HP Quality Center, or IBM Rational Quality Manager. If you select multiple items in the outline, the published output is combined into a single file with each topic separated by a blank row. This file can then be imported into the testing software in a single operation.

Only topics with content are included in the output; empty topics do not appear. In addition, modules and sections are not included in the output. The output is an Excel Workbook file, either .xlsx or .xls. Be sure to choose the correct version to import into your testing suite application.

Note: To export output from Microsoft Excel into HP Quality Center, you need the HP Quality Center Microsoft Add-in installed. See the *HP Quality Center* documentation for more information.

Alternative paths and actions are not included in this format, but you can change the publishing option to include them. Decision frames are automatically included and cannot be suppressed. You can edit the output in Microsoft Excel to remove any unwanted Decision frame material. Explanation frames are not included.

If context ID information is available for a frame, it is included at the end of the Action cell. The type of information will differ or may not appear, depending on the target application of the topic.

When you publish the Test Case format, you can choose from four formats: Oracle Application Testing Suite, HP Quality Center, IBM Rational Quality Manager, and Other. Each Test Case output format has a template that contains the appropriate columns. This template is called ColumnSpec.xml, and it can be customized to meet your output needs. The templates are stored in the Library under Publishing\Styles. There is a separate .xml file in each language

folder. See *Customize the Test Case Output* in the Publish Content chapter for more information.

17.2.10 Presentation

If you publish content for a Presentation, a separate PowerPoint file is created for each topic, each of which can be launched from a main page. This page displays a table of contents page showing the outline. If a concept exists for a module, section, or topic, a Concept link appears next to the name. The names of the modules and sections are not links; however each topic has a link.

When you click a topic link, a PowerPoint presentation launches. You can then view the PowerPoint slideshow to navigate the topic in a static version of Try It! mode. Each frame is a separate slide in the presentation. The slide contains a graphic showing the screenshot, with the bubble text next to it. A box on the screenshot indicates the action area or areas for the frame. To navigate through the topic, use standard PowerPoint methods. If a frame has attachments, the attachment icons will appear above the bubble text. You can click the icons to access the attachments, if the presentation is being viewed online. If the presentation is printed, hyperlinked content is not included. Alternative Actions, Alternative Paths, and Decision frames are included as well, and links are provided to choose paths.

The following areas do not appear in the Presentation output:

- Jump-in points
- Roles
- Keywords
- Unrecorded topics

You can launch the Presentation when the publishing process is complete. If you publish just the Presentation format, the option to launch the content automatically is selected and you can launch it directly from the Publishing Wizard. If you want to launch it later, navigate to the location where you published and open the Publishing content folder. Within that folder, open the Presentation folder. You can then choose to launch the index.html file or play.exe to display the table of contents, or open any of the PowerPoint files for a specific topic.

17.3 Use the Publishing Wizard

The Publishing Wizard steps you through the publishing process. There are several screens of options, each of which is described in more detail in the following sections.

When the publishing process is finished, you have a number of options on the final screen:

- **Launch the content automatically**: For Player packages, this option launches the Player window and displays the content. If you publish to multiple formats, or if you publish to document formats only, this option is disabled. In addition, if an error occurs during publishing, this option becomes View activity log. The log helps you to determine what caused the publishing error.
- **Open the folder where the content was published**: This option opens a Windows Explorer browser window and displays the contents of the folder where the content was published.
- **Configure Player Options for In-Application Support**: This option opens the Configuration Utility for the In-Application Support window used to set the ExactMatch Application Scripts, SmartMatch and Default Content URL's for In-Application Support. This link option opens the local Configuration Utility for the content in the publishing destination folder when you publish locally; if you choose to publish the content to the content server, this option opens the Configuration utility for the content on the

server.

Note: If the server settings are incorrect or missing and the publishing process is unable to connect with the server, the content is still published to a Player package; however, this option does not appear.

- **Open the Knowledge Center Manager**: This option opens the Manager used for managing content and users in Knowledge Center. Use this option to do additional configuration for content deployment through the Knowledge Center (available only in the Professional edition).

  Note: If the server settings are incorrect or missing and the publishing process is unable to connect with the server, the content is still published to a Player package; however, this option does not appear on the final screen of the Publishing Wizard.

- **Close the Publishing Wizard**: This option closes the Publishing Wizard without opening any windows or displaying content.

17.3.1 Publishing Destination

The first time you publish, the default destination location is set to the My Documents folder on your local computer. You can change this either by browsing to a new location or typing a path. If you change the location, it becomes the new default location for the next time you publish.

It is essential to understand the importance of the destination location when you publish content.

Publishing settings

The first time you publish to a specific destination location, the Developer saves the publishing settings you used to that location. These settings include the output formats that were published and the options for each individual format. Each time you publish to that same location, the settings in the Publishing Wizard will reflect the ones specified for that location. You can change the options as necessary each time you publish to that location, and the changes are saved for the next time you publish.

Incremental publishing

Incremental publishing allows you to update published content quickly. When you publish content to a destination location, the Developer records the publishing data. When you publish the same content to the same location, the Developer accesses the publishing data and only the changes are published, including new content, changes to the existing content, and deletions. Because only the changes are published, the publishing process is much faster. Therefore, if you want to publish the changes to an outline, you publish the entire outline without having to select individual items in the outline structure.

Replace Published Content

If you choose to publish a different content selection to a destination in which you have already published, the Developer will warn you and ask you whether you want to replace the old content. If you continue, the result depends on the type of format to which you are publishing:

- **Player formats**: Old content is deleted for the same format. If you select fewer formats to publish, the published content for other formats is kept.

- **Document formats**: Old content is kept.

17.3.2 General Publishing Options

There are options for selective publishing, publishing by role, and skipping advanced options.

Selective Publishing

You can choose to publish the entire outline or just the items you selected in the outline. If you are publishing to a format which has a table of contents, such as a Player package, a training guide, or an instructor manual, your results may differ depending on what you have selected and what you have open in the Outline Editor. Note the following:

- The entire hierarchy of sections and modules above the selection is included, in a direct line up to the highest level of the outline.
- The name of the highest level in the hierarchy, that is, the name that appears on the tab of the document window you are publishing from, will appear in the title bar of the Player, and on the title page for the Training and Instructor Manuals.

For example, you have Topic 1 and Topic 2, both of which are contained in Section A. Section A is in turn contained in Module 1. You open the Module 1 document in the Outline Editor, select Topic 1, and choose to publish only that topic to a Player package. After publishing, in the Player window, Module A will appear in the title bar of the window, Section A appears as the highest level in the outline pane on the left, and Topic 1 appears below Section A. If, however, you open the Section A document in the Outline Editor and publish only Topic 1 to a Player Package, Section A appears in the title bar of the resulting Player Package and the outline pane contains only Topic 1.

Publish by Role

You can choose to publish by roles to filter content. If you have roles assigned to the content you are publishing, the Publish by roles option is available. When you select it, the Select Roles button becomes available, which opens the Select Roles dialog box. The list of roles includes only the roles available for the content you are publishing. You can select as many roles as desired. Only the items in the selected content that are associated with the specified roles will be included in the published output.

Multi-user Considerations

- **Publish by States**
  In a multi-user environment, you also have the option to publish by states. This allows you to filter the content to publish only those items that are indicated as ready. When you select the Publish by states option, the Select States button becomes available. In the Select States dialog box, you can select the states to publish as desired. Only the items in the selected content that are associated with the specified states will be published. If you specify roles as well as states, only items that meet all the specified criteria will be published. Items with no state assigned will always be excluded. If you select the Publish by state option and then do not choose any states, you will be notified that you have made an invalid selection.

Skip Advanced Options

There is an option to skip the Advanced Options page. When it is disabled, the Advanced Options page appears next in the Publishing Wizard. In addition, your choice for this setting becomes the default until you change it again.

17.3.3 Advanced Options

On the Advanced Publishing Options page, you can choose the category and language in which you want the published output to appear. The category defines which logos and formatting will be used for player and print outputs. The language changes the language of the Player and help files as well as the default headings in the print outputs. It does not affect the bubble text or the template text.

You can use the publishing settings from another location. This allows you to easily reuse settings from other published content to help ensure consistency. The settings are stored in the Publishing.Project.xml file, located at the root of the publishing destination folder. When you want to import settings, you do not need to select the .xml file; you only need to navigate to the publishing destination folder where it is located.

Multi-user Considerations

- In a multi-user environment, when you are online, you also have the option to choose local or server content. Local content includes the locally edited copies of all selected documents that you have checked out and the server versions of those not checked out to you. Use this option for documents in progress for review. Server content includes only the checked in versions of the selected documents. Any local changes to checked out documents are ignored. Use this option for final versions of documents.

17.3.4 Publishing Formats

Deployment formats allow you to publish content for users to play topics in the various play modes.

Document formats allow you to publish content in various predefined documents that can appear in a Microsoft Word (.doc or .docx) document, an Adobe Acrobat (.pdf) format, a Microsoft PowerPoint presentation, or a Microsoft Excel spreadsheet.

The first time you publish, the options for the format or formats you choose to publish will default to the ones that are set in the Options dialog box. You can change the options each time you publish, if desired. You can also reset them back to the settings on the Options page.

Important Publishing Note: If you are using Microsoft Office 2003, you must install the Microsoft Office Compatibility Pack for Word, Excel, and PowerPoint 2007 File Formats. You can download this compatibility pack from the Microsoft Office Download Center. In addition, all Microsoft Office Products must have the latest updates and security fixes.

To publish content:

1. On the **File** menu, choose **Publish**.
2. Enter the location to which you want to publish, or click **Browse** to navigate to the location or create a new folder.
3. Click **Next** to display the Select Publishing Options page of the Publishing Wizard.
4. Choose to publish the entire outline or the selected documents only.
5. If desired, specify to publish by roles, and select the roles from the list.
6. If desired, specify to publish by states, and select the states from the list.
7. Click **Next** to display the Formats and Options page of the Publishing Wizard, or deselect **Skip Advanced Options Page** and click **Next** to display the Advanced Publishing Options page of the Publishing Wizard.
8. Select the format(s) to which you want to publish.
9. For each format that you choose to publish, select the desired options.
10. Click **Publish**. When the publishing process finishes, the Publishing Complete page of the Publishing Wizard appears.
11. Select the desired launch option.
12. Click **Finish** to launch the content, open the folder, or close the Publishing Wizard.

17.4 Customize Publishing Styles

Publishing styles are Publishing Project documents that are stored in the System/Publishing/Styles folder in the Library. Within the Styles folder, each category has a folder. Each output format has its own Project document, such as Job Aid and Player.

You can use categories to create customized styles to change the branding, that is, the logo, or format the appearance of the published output. You can also create categories with only certain published outputs, such as Job Aid and Training Guide, to limit the publishing outputs available to the content authors.

Note: If you create custom publishing styles, you should document your customizations so you can easily re-apply them, if necessary, after a software upgrade.

17.4.1 Create Styles

You can create custom styles as needed for any publishing format. To customize the appearance of any style, you should first make a copy of the publishing project document that you want to modify. It is not recommended that you customize the standard styles that ship with the Developer.

When you copy a publishing style in the Library, you can place the copy within the same folder in the Library, or you can create a new folder and subfolder structure to contain the customized styles. If you place the copy in the same folder, the style name will be listed twice on the Formats and Options screen of the Publishing Wizard. See *Rename a Publishing Style* for information on how to change the name. If you create a new folder structure, the name of the folder appears as a category on the Advanced Publishing Options page of the Publishing Wizard.

Follow these basic steps to create a custom style or styles:

- Copy the style or styles that you want to customize.
- Customize the style documents as desired. The style documents are packages, and you can edit the files as you would files in any other package.

In-Application Support Warning

In the Publishing folder in the Library, there is a folder, named according to the installed brand, in both the Styles and the In-Application Support folders. These matching folder names are necessary so that the required files for in-application support are published with the content.

If you create a custom publishing category folder in the Styles folder in the Library, and you use the custom category to publish your content, be aware of the following. You MUST create a copy of the branded folder under the In-Application Support folder, paste it back to the In-Application Support folder, and rename the copy to the exact name that you used for your custom category folder in the Styles folder. The structure of the two folders MUST match exactly. If you do not do these steps, the files necessary for in-application support will not be published with the content.

17.4.2 Rename a Publishing Style

If you make a copy of a publishing style in the same subfolder as the original, the style name will be listed twice on the Formats and Options page in the Publishing Wizard. In order to rename the publishing style, you must modify a line in the style.resources.xml file for the appropriate language in the Lang folder for the publishing style.

In the package, open the lang folder and then the folder for the appropriate language. Open the style.resources.xml in any text editor, such as Notepad. Near the top of the file there should be a line that has the name of the style in between <Resource ID> and </Resource> codes. For example, for the System Process style, the line looks like this:

```
<Resource Id="StyleName">System Process</Resource>
```

To change the name of the style, edit the text between the codes. Save and close the file and save the style package.

17.4.3 Remove the Document Type from the File Name

Several of the document formats append the document type to the file name. For example, the System Process document appends _SPD, the Job Aid appends _JOBAID and so on. You can remove these document types from the file name in the publishing style, so that you will not have to remove it manually after publishing. There are two things to remember; first, changing the publishing style affects every document published using the style, and second, to change it in more than one style, you will need to edit the publishing style separately for each document type.

In order to remove the document type, you must modify a line in the styleconfig.xml file for the publishing style.

Open the publishing style, and then open the styleconfig.xml in any text editor, such as Notepad. This file should have the document type extension in between <DocumentNamePrefix> and </DocumentNamePrefix> codes. For example, for the System Process style, the line looks like this:

```
<DocumentNamePrefix>SPD</DocumentNamePrefix>
```

Delete the text between the codes; in the example above, delete SPD. Save and close the file and save the style package.

17.5 Customize the Player

There are numerous ways you can customize the Player interface and the topic playback, including changing the logo, changing the search, preferences and help icons, changing the "For Example" text in string inputs, and suppressing the scores in Know It? mode. Additionally, you can change style sheet elements such as dividers, background colors or text colors. You can also localize the Player resources.

For all Player formats, you can modify the files in the published output or the Player publishing project in the Library. If you modify the files in the published content, only that published content will be affected. If you modify the files in the publishing project in the Library, the changes apply to all content you publish after making the change. After making the changes, you must republish any existing content to apply the changes.

To make global changes, you change the Player publishing style. The Player publishing style is located in the System/Publishing/Styles/<category> folder in the Library. Images are stored in the /img folder within the Player publishing style.

To make one time changes to published output, you change the images in the player published output folders. Images are stored in the \Publishing Content\PlayerPackage\img folder in the location where you published your output.

See *Customize Publishing Styles* for more information about copying, renaming and editing publishing styles.

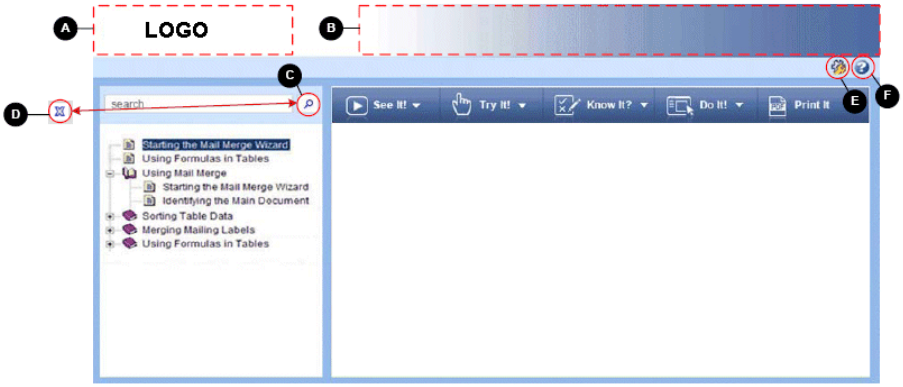
Note: If you create custom publishing styles, you should document your customizations so you can easily re-apply them, if necessary, after a software upgrade.

Note: The full screen Player and the windowed See It! Player share the same skin.css file but the frame can be styled separately with a few modifications that are specific to the windowed See It! Player. See the *Customize Windowed See It!* section for more information.

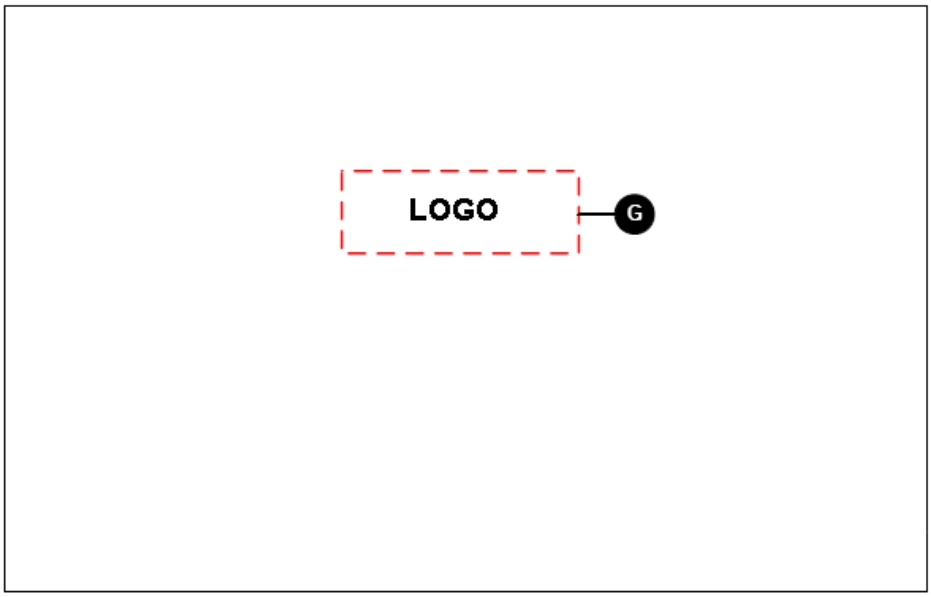
17.5.1 Customize the Player Interface Graphics

You can customize many of the graphics in the Player interface to fit your corporate look and feel.

There are two basic steps. First, create a graphic file that is the correct size and save it with the correct name. Then, insert the graphic in the style so that it appears in the proper Player location.



Gateway page



The logo can be customized in two locations in the Player. The first location is on the Gateway page when you start up the Player. This graphic is called large_logo.gif. The second location is in the top left corner of the Player interface. This graphic is called small_logo.gif.

Note: You can also use the Customize Logo tool in the Developer to replace the logo. If you use this tool, the logo should be no larger than 230x44 pixels.

Other Player graphics, such as the banner, search, preferences, help, and log out icons can also be customized.

Note: When See Also links are present in the published content, the See Also menu displays next to the preferences and help buttons.

The See Also text style and background color can be changed in the .TocFrameText element in the skin.css file. The arrow button can be replaced in the img folder of the Player style (seealsoarrow.png).

- **A**: small_logo.gif; 162x44 pixels
- **B**: banner_image.png; 425 x 1 pixels.

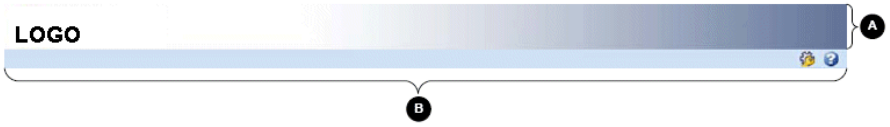
  Note: The default banner_image.png automatically will size to the height of the logo (small_logo.gif). If banner_image.png is changed to a fixed size, (recommended size is: 425 x 54 pixels), and you change the height of the logo, you must resize the banner image 10 pixels higher than the new height of the logo.
- **C**: searchbtn.gif; 23x21 pixels
- **D**: clear.gif; 23x21 pixels
- **E & F**: actionbar.png; 128x16 pixels

  Note: In order to make a change to the preferences and help buttons you must open the actionbar.png and replace the desired icons with icons equal in size (16x16 pixels). It's important to not change the size of the actionbar.png.
- **G**: large_logo.gif; 241x94 pixels
- logout_button.gif; 16x16 pixels (not shown)
  This icon appears only when the content being viewed is tracked via the Knowledge Center.

When you have modified the file to the correct size, save it as the appropriate .gif file name and copy it into the publishing project files or the published content located in the Library.

17.5.2 Customize Player Header Elements

You can customize the Player header to fit your corporate look and feel. Aside from changing the Logo, Banner, See Also menu and Preferences and Help icon graphic, you can change the gradient color of the header and the height and color of the divider bar. These changes are made by editing the associated lines in the skin.css file. Skin.css is located in the System/Publishing/Styles/<category>/Player folder of the Library. For example, if you want to increase the header divider height, find the .headerDivbar element in the skin.css file and change the height from 21px to the desired height.

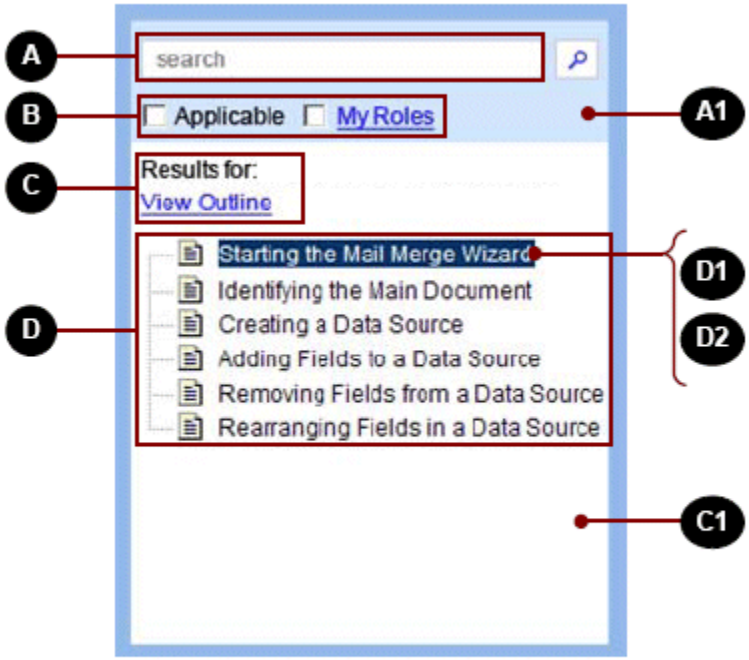


- **A**: Element is .header. Specifies the color of the gradient fill. Changes the color of the right column of the color table that controls the gradient color. The left column of the table is #FFFFFF (white) and cannot be edited. Changing the color only applies if the banner_image.png is 1 pixel in. Default values are height 54 pixels and background color #5A75A2.
- **B**: Element is .headerDivbar. Specifies the height of the header divider bar. Changes color of the header divider bar. Default values are height 21 pixels and background color #CDE2FD.

17.5.3 Customize the Table of Contents and Search

You can customize stylesheet elements to change the look and feel of the Player search frame and TOC. Locate the CSS Element you want to change in the skin.css file and change it to the desired value. For example, if you want to change the background color of the search area, find the .tocSearchColor element in the skin.css file and change the color value. The skin.css

file is located in the root directory of the Player publishing project document located in the System/Publishing/Styles/<category>/Player folder of the Library.



- **A**: Element is .tocSearch. Defines the font type, size and color for the text within the search bar. Default values are Arial font-family, Helvetica, sans-serif, font size 12 pixels and color #000000.

- **A1**: Element is .tocSearchColor. Changes the background color in the search area. Default value is background color #CDE2FD.

- **B**: Element is .tocSelectionText. Defines the font type, size and color for the “Applicable” and “My Roles” link text. Default values are Arial font-family, Helvetica, sans-serif, font size 12 pixels and color #000000.

- **C**: Element is .tocFrameText. Defines font type, size and color of the “Results for” and “View Outline” link text. Also defines the search results text that displays below “Results for” when the search is initiated. Default values are Arial font family, Helvetica, sans-serif, font size 12 pixels and color #000000.

- **C1**: Element is .tocFrameText. Defines the color of the Outline background. Default value is background color #CDE2FD.

- **D**: Element is .treeControlNode. Defines font type, size, and color of text within the Outline. Also changes the background color of the Outline text. Default values for the text are Arial font family, Helvetica, sans-serif, font size 10 pixels and color #000000. Default value for the background color is #FFFFFF.

  Element is .thover. Changes the color of the text while hovering. Also changes the background color of the text while hovering. Default value for the text color is #00CCFF. Default value for the background color is #FFFFFF.

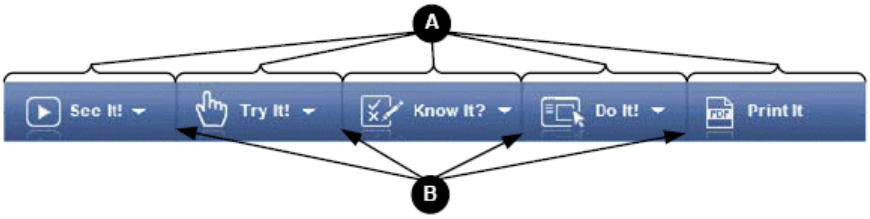
- **D1**: Element is .tselected. Changes the background color of the text when selected in the Outline. Default value for the color is #FFFFFF.

- **D2**: Element is .tselected. Changes the font color of the text when selected in the Outline. Default value for the color is #003366.

You can also customize the icons used for the outline tree display. The graphics for these icons are stored in the treecontrol.png file in the \img folder in the Player publishing style or the published Player package. Open the file and replace the desired graphics with graphics of equal size (16x16 pixels). It is important not to change the size of the treecontrol.png itself (387x18).

17.5.4 Customize Player Mode Buttons

You can customize the color of the Player's Mode buttons to fit your corporate look and feel. These changes are made by editing the associated lines in the skin.css file. Skin.css is located in the System/Publishing/Styles/<category>/Player folder of the Library. For example, if you want to change the color of the mode buttons upon mouse over, find the .navCellOn element in the skin.css file and change the color value.



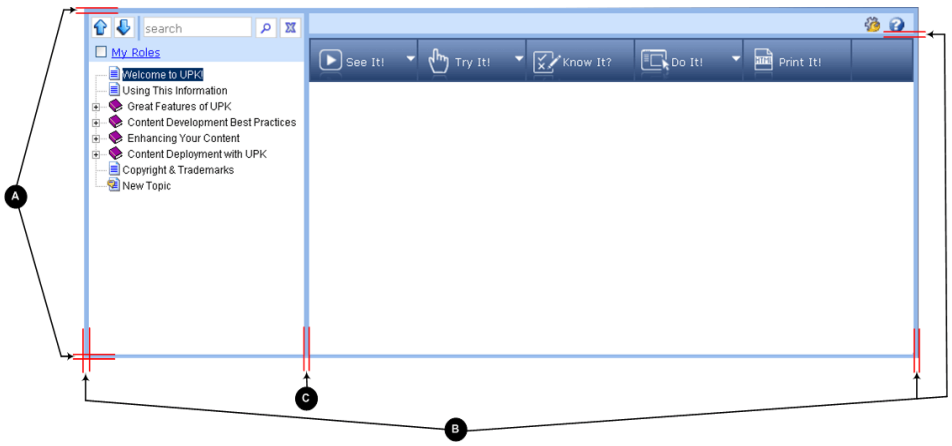
- **A**: Element is .navCellOff. Changes the color of the buttons when the mouse is not hovering over the button. Default value is background color #305BA2.

  Element is .navCellOn. Changes the color of the buttons when the mouse is hovering over the button. Default value is background color #467ED8.

- **B**: Element is .dividerColor. Changes the color of the divider lines between the buttons Default value is background color #3E5782.

17.5.5 Customize the Player Interface Borders

You can customize the color of the Player interface borders to fit your corporate look and feel. These changes are made by editing the associated line in the skin.css file. Skin.css is located in the System/Publishing/Style/<category>/Player folder of the Library.



The .background element allows you to change the color of the (A) horizontal bar, (B) vertical bar, and (C) vertical divider bar. For example, to change the margin color to green, change the background color in the .background element to #00FF00. The default background color is #94B8E9.

17.5.6 Customize the Bubble Header Bar

In the See It!, Try It, and Know It? play modes, there is a header bar with the mode name at the top of the bubble. You can change the color of the header bar and the color and font of the text.

Header Bar Color

To change the color of the header bar, you edit graphic files. You must change the color in all of them in order to change the color of the entire header bar. The graphics are located in the System/Publishing/Styles/<category>/Player/img folder in the Library.

b_01.gif - - The left end of the header bar.

b_02.gif - - The middle section of the header bar.

b_03empty.gif - - The right end of the header bar for the windowed See It! mode. This graphic only affects windowed See It! mode. It does not affect the standard Player, as a Close button graphic is used instead.

Header Bar Text Color and Font

To change the color of the text in the header bar of the bubble, you edit values in the Player.css file. It is located in the System/Publishing/Styles/<category>/Player folder of the Library.

Note: If you change the font size of the header text, you may experience unexpected results. Publish a sample topic with the new settings to verify the results before you publish the final package for release.

- **.CurvedBoxText**: Changes the color and font of the mode name text to the left in the bubble header in See It!, Try It, and Know It? play modes. Default values are color white, Arial font-family, Helvetica, sans-serif, font size 9 points, no text decoration.
- **.CurvedBoxNav**: Changes the color and font of the "Actions" text in the bubble header in See it! and Try It! play modes. Default values are color #ccffff; Arial font-family, Helvetica, sans-serif, font size 9 points.

Header Bar for Do It!

To customize the header bar color and the text color, you edit the guideit.xslt file. This is located in the System/Publishing/Styles/<category>/Player folder of the Library.

Edit the color in these statements to change the background color:

```
<td id="movePopup" valign="middle" style="BACKGROUND-COLOR: #003366;"
nowrap="yes">
<td id="movePopup" valign="top" width="100%" align="right" style="BACKGROUND-COLOR:
#003366;">
```

Edit this statement to change the font size or font color:

```
<a style="FONT-SIZE: 10pt;COLOR: white;FONT-WEIGHT: bold;FONT-FAMILY: Arial,
Helvetica, sans-serif">
```

Note: If you change the font size of the header text, you may experience unexpected results. Publish a sample topic with the new settings to verify the results before you publish the final package for release.

17.5.7 Customize Windowed See It! Mode

You can customize various screen elements and graphics for the windowed See It! mode. Graphic elements can be changed by replacing files in the Player Package. Other elements, such as the color of the frame or the navigation bar can be changed in the skin.css file.

The windowed See It! shares the same skin.css file with the full screen Player. However, there are several customizations specific to the windowed See It!. Other customizations will also change the full Player.

- .backgroundWindowed - Controls the frame around the windowed See It!. The full Player uses .background to control the frame. |
- actionbar.png - Contains all the graphics for the action bar. If you want different graphics for the Preferences and Help buttons, you can replace them using this graphic.

As with customization for the Player as a whole, you can make changes to the Player publishing style, which will affect all published content, or make one-time only changes in the published Player Package.

The various customizable elements are listed below.

- Content area border
- Frame
- Navigation buttons
- Navigation bar
- Preferences and Help buttons
- Bubble
- Action area (rectangle)
- Click symbol

Window Elements

You can customize the color of the frame, the content area border, and the navigation bar.

- **.backgroundWindowed:** Changes the color of the thick frame around the windowed See It! player. Default value is background color #94B8E9.
- **.PlayerCombination:** Changes the color of the content area border (thin line between the thick frame and the content area) and the navigation bar (area with controls at the bottom off the windowed See It! player). Default values are #3E5782.

Graphic Elements

You can change the following graphic elements by editing the graphic files. The graphic files are located in the System/Publishing/Styles/<category>/Player/img folder in the Library.

actionbar.png

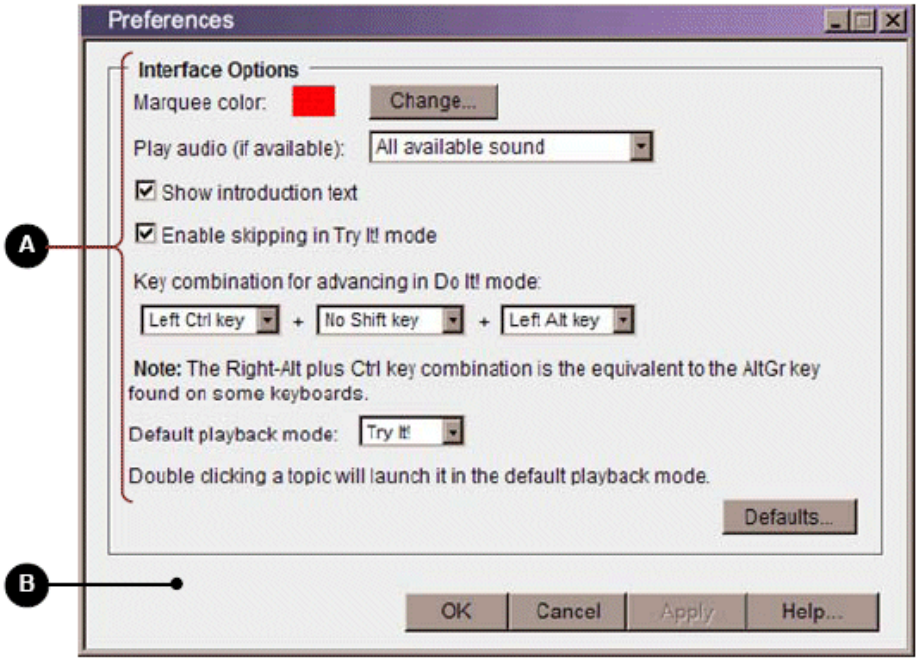
If you want a different graphic to appear for the Help and/or Preferences button(s) in the windowed See It! player, delete the second Help and/or Preferences graphic(s) within the actionbar.png graphic and replace it with the new graphic(s). The graphic being replaced must be replaced by a graphic of the same size (16 x 16 pixels).

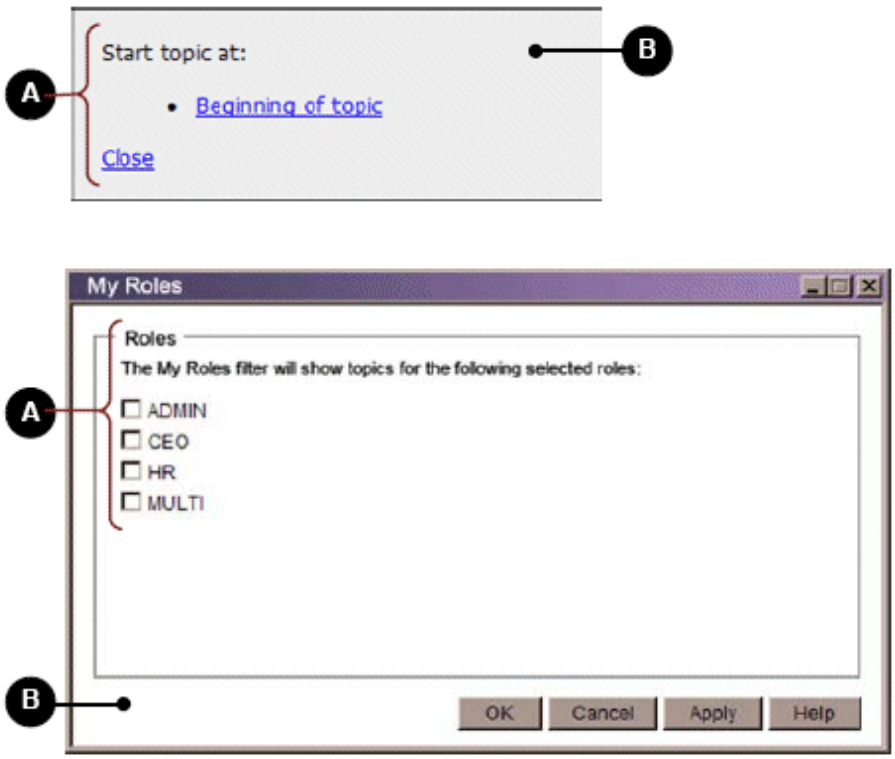
bullseye.gif - Click symbol graphic (H)

log out.gif - Log out icon. This icon appears only if the content you are viewing is tracked via the Knowledge Center.

17.5.8 Customize the My Roles and Preferences

You can customize the text attributes and background colors of the Player's My Roles and Preferences window to fit your corporate look and feel. These changes are made by editing the associated lines in the skin.css file. Skin.css is located in the System/Publishing/Styles/<category>/Player folder of the Library. For example, if you want to change the size of the font of the text in the My Roles and Preferences windows, find the .textWindows element in the skin.css file and change the font size value.





- **A**: Element is .textWindows. Defines font type, size and color of the text in the My Roles and Preferences windows. Also defines background color of Preferences window. Default values are Arial font-family, Helvetica, sans-serif font size 12 pixels, font size 12 px, color #000000, background color #EEEEEE.

- **B**: Element is .windowsBgColor. Defines background color of the My Roles window. Default value is background color #FFFFFF.

17.5.9 Customize Question Elements

You can customize the way questions look in the Player and the Developer by editing the resources.xml and question.css files. This enables you to customize the question default text to match a localized Player or Developer interface.

The resources.xml file is the language resource file that contains question template specific language elements such as button text, and Question and Response heading text. The question.css file is the style sheet that controls icons and header elements such as background color.

Note: It is recommended that you create a copy of the Standard template in the Question Templates folder. Rename the copy and make your customizations to the copy. This provides a backup so you can restore the original if necessary. In addition, when you upgrade to a newer version of the Developer, your customized template will not be overwritten.

Customize the resources.xml file

You can customize the text for any of the HTML_strings in the resources.xml file. These changes can appear in both the Developer and the published output depending on the string you modify and the format you publish.

You can customize the standard question text, such as the OK button or the Question heading text, if your company uses different terminology in questions. Open the resources.xml file in any text editor and edit the appropriate lines. For example, if you want to change the OK

button text to YES, find the Html_Response element and change the text from OK to YES as in the following example.

<Html_OK xml:id="Html_Response">OK</Html_OK>
<Html_OK xml:id="Html_Response">YES</Html_OK>

The Standard template is located in the System/Question Templates folder in the Library. The resources.xml file is located inside the lang/<language code> folder. The resources.xml file is also located in lang folder for each language in the published output.

Customize the question.css file

You can customize the look of the Question header, Response header and Assessment bar of questions in the Player and Developer. You can replace the Question and Response icons, change border and background colors of the headers and the font of the header text by editing the appropriate lines in the question.css file. For example, if you want to increase the font size of the text in the Assessment Bar, find the .AssessmentBar element in the question.css file and change the font from 10px to the desired font.

The Standard template is located in the System/Question Templates folder in the Library. The question.css file is located at the root of the template package.

The following elements are fully customizable. Additional elements in the question.css file can be customized for appearance (for example, font) but not for positioning. Only properties that already exist for the element can be customized. No new additional properties can be added.

- .NewQuestionHeaderIcon: Defines the icon in the top bar and the background color for the question. Default values are url(question_icon.gif) no-repeat, 7 pixels center; padding left: 31pixels.
- .NewResponseHeaderIcon: Defines the icon in the top bar and the background color for the response. Also changes color of the header divider bar. Default values are url(response_icon.gif) no-repeat; 7 pixels center; padding left: 31 pixels.
- .AssessmentBar: Defines the assessment bar at the bottom of an assessment. Default values are background color #FFFFC0, text align left; font size 10 pixels, border top width thin, border top style solid and border top color #B2B1B5.

Warning!: Customization of any other files is not supported.

17.5.10 Customize Assessment Elements

You can customize the way assessments look in the Player and the Developer by editing the resources.xml and assessment.css files. This enables you to customize the assessment default text to match a localized Player or Developer interface.

The resources.xml file is the language resource file that contains assessment template specific language elements (such as headings or buttons) that appear on the Summary page when a user completes an assessment. The assessment.css file is the style sheet that controls icons and header elements such as background color.

Note: It is recommended that you create a copy of the Standard template in the Assessment Templates folder. Rename the copy and make your customizations to the copy. This provides a backup so you can restore the original if necessary. In addition, when you upgrade to a newer version of the Developer, your customized template will not be overwritten.

Customize the resources.xml file

You can customize the text for any of the HTML_strings in the resources.xml file. These changes can appear in both the Developer and the published output depending on the string you modify and the format you publish.

You can customize the Summary page text, such as the Print button or the Question Name heading text, if your company uses different terminology in assessments. Open the resources.xml file in any text editor and edit the appropriate lines. For example, if you want to change the Print button text to Print Summary, find the resource id element and change the text from Print to Print Summary as in the following example.

<resource id="print">Print</resource>
<resource id="print">Print Summary</resource>

The Standard template is located in the System/Assessment Templates folder in the Library. The resources.xml file is located inside the lang/<language code> folder. The resources.xml file is also located in the lang folder for each language in the published output.

Customize the assessment.css file

You can customize the look of the Question header, Response header and Assessment bar of questions in the Player and Developer. You can replace the Question and Response icons, change border and background colors of the headers and the font of the header text by editing the appropriate lines in the assessment.css file. For example, if you want to increase the font size of the text in the Assessment Bar, find the .AssessmentBar element in the assessment.css file and change the font from 10px to the desired font.

The Standard template is located in the System/Assessment Templates folder in the Library. The assessment.css file is located at the root of the template package.

The following elements are fully customizable. Additional elements in the assessment.css file can be customized for appearance (for example, font) but not for positioning. Only properties that already exist for the element can be customized. No new additional properties can be added.

- #responsesum, #assessmentsum, #sectionsum: Controls the color of the summary text and the text that appears in the table below the Section Name. Both default values are rgb(100,100,100).
- #responsesum td, #sectionsum td: Controls the color and thickness of the table. Default is Border-top 1px solid #b2b1b5. Border top 1px is the thickness. Solid is the line type/style which can be solid, double, groove, dotted, or dashed. #b2b1b5 is the default color.
- .theader: Controls the background color of the table heading. Default background-color is #cde2fd.
- .theader: Controls the color of the heading text. Default color is black.
- .graycolor: Controls the color shading of every other row in the table. Default is background-color: rgb(240,240,240).
- .tlastline: Controls the border color of the bottom row of the table. Default is border-bottom: 1px solid #b2b1b5.
- .notlastline: Controls the border of each column (except the last column). Default is border-right: 1px solid #b2b1b5.
- .resultdiv: Controls the border around the "Score in Percentage". Default is border-right: 1px solid #b2b1b5. Defaults are width: 155px; height: 10px; border: 1px solid green; position: absolute; top: 2px; left: 40px.
- .resultdiv2: Controls the image to define the fill color of the "Score in Percentage". Defaults are position: absolute; top: 1px; left: 1px; height: 8px; background-image: url('green.gif').

Warning!: Customization of any other files is not supported.

17.5.11 Control "For Example" Text in String Inputs

If meta entries are used in a string input step, you may prefer to remove the “for example” text (“Tuesday”) from appearing during playback. When you suppress the “for example” text, the bubble for a meta entry changes from Enter a valid value (for example, “Tuesday”) to Enter a valid value.

You can edit templates using the Template Editor. See *Customize Templates* for more information.

17.5.12 Suppress Scores in Know It? Mode

When a user plays a topic in Know It? mode, the Introduction frame displays the score that is needed to pass the topic. At the end of a Know It? topic, a frame appears displaying the user's final score and if the user passed the topic assessment.

You can prevent the user from seeing either the score needed at the beginning of the topic or the final score frame at the end of the topic by editing the config.js file in the root of the published Player package. You can also configure this setting in the Player Publishing style using the config.xml file. To suppress the score needed information at the beginning of the topic and the final score frame at the end of the topic, edit the value of the `ShowScoreNeeded` variable to “false”.

Another option is to display the score needed at the beginning of the topic, but suppress the scoring screen that appears at the end of the topic. To use this option, leave the `ShowScoreNeeded` variable as “true” and change the value of the `trackFeedBack` variable to “false”.

17.5.13 Hide the Click Graphic in See It! Mode

In See It! mode, when the animation plays for an action step, there is a graphic that looks like an "impact" symbol which appears when the mouse simulates the clicking action. You can prevent the user from seeing this graphic by editing the config.js file in the root of the published Player package. You can also configure this setting in the Player Publishing style using the config.xml file. This can be useful if you are creating the equivalent of a PowerPoint slide show and have hidden the bubbles for the topic. (See *Show Bubbles Property* for more information.) In this case, it would be desirable for the click graphic to be hidden.

To suppress this graphic, edit the `HideClickMark` variable and change the value to true.

17.5.14 Disable Player Navigation Bookmarks and Preference Settings

By default, published Player content saves outline bookmarks and preference settings in cookies that are saved on a user's computer. With outline bookmarks, a user can exit and restart the Player, and it will automatically display the last document the user was viewing. Settings changes on the Preferences dialog are also saved by default.

You can disable this functionality in the config.js file in the published Player package by editing the config.js file in the root of the published Player package. You can also configure this setting in the Player Publishing style using the config.xml file. Edit the `EnableCookies` variable and change the value to false.

17.5.15 Disable Share link

The Share link allows users to share a topic or other asset with other users. The user can click the **Share** link in the Player interface and copy and paste the URL into an e-mail or other messaging software to send to others.

The ShareLink parameter in the uiconfig.js is set to True by default. To prevent the Share link from appearing, remove the ShareLink parameter.

The uiconifg.js file is located in the Player publishing style. The Player publishing style is located in the System/Publishing/Styles/<category> folder in the Library.

17.5.16 Display Frame ID in Topic Playback

A unique frame ID for a topic appears on the Topic Editor toolbar as you navigate to each frame. This ID can be used as a reference point as you develop content and distribute it to subject matter experts for review. The expert can reference the frame ID in the Player so you can quickly find the corresponding frame in the Topic Editor. You can enable the display of the frame ID by configuring a variable.

To enable the frame ID for all packages you publish, edit the config.xml file at the root of the Player publishing style in the System\Publishing\Styles\<category> folder. To enable the frame ID display in a published Player package, edit the config.js file at the root of the package. In either case, locate the `ShowFrameID` variable in the file and change the value to one of the following:

On - The frame ID is always visible.
Off - The frame ID is not visible.
Key - The frame ID is enabled by a key combination. Authored keys always take precedence over the frame ID key. Possible key combinations are limited to Shift + function keys, Shift+F1 through Shift+F12. Notation in the file should be ShiftF1, ShiftF2, and so on.

17.6 Customize the Presentation Format

The Presentation output uses a Microsoft PowerPoint template called PresentationTemplate.pptx to control the format and layout of the presentation. Each language has is own template file. A folder for each language is located in the lang folder within the print style. To make any customization, you modify the PowerPoint template.

Important Publishing Note: If you are using Microsoft Office 2003, you must install the Microsoft Office Compatibility Pack for Word, Excel, and PowerPoint 2007 File Formats. You can download this compatibility pack from the Microsoft Office Download Center. In addition, all Microsoft Office Products must have the latest updates and security fixes.

The template contains two slides with pre-defined layouts and text, one for the title slide and one for the steps.

Change the Logo

The logo appears at the top left corner of each slide. You can change this logo as desired by replacing it on the two slides in the template with your own company logo. With this method, it can be any size that fits appropriately on the slide.

Note: You can also use the Customize Logo tool in the Developer to replace the logo. If you use this tool, the logo should be no larger than 230x44 pixels.

Change the Slide Theme

You can apply any slide theme or design you wish. Depending on the position of the elements in the design, you may need to adjust the position of the placeholder images and text boxes. You can also apply a background color to the slides.

Configure the Slide Layout

The second slide in the presentation contains the default layout for the steps. You can rearrange or resize these text boxes as desired. Note that at a minimum, there must be one image placeholder for the graphic and one text box placeholder for the bubble text for each step.

Adjust Paper Size

By default, the slides are sized for an onscreen show. If you will be printing the presentations, you can set a page size in the Page setup dialog box.

Change Font and Font Attributes

You can change the default font in the text boxes as desired. You can also change the font attributes such as color, size, and weight (bold).

Title of Slide
You can change or delete the title of the slide.

Transition Effects
By default, there are no transition effects. You can set the default transition effect as desired.

See *Customize Publishing Styles* for more information about copying, renaming and editing publishing styles.

Note: If you create custom publishing styles, you should document your customizations so you can easily re-apply them, if necessary, after a software upgrade.

17.7 Customize the Test Case Output
For the Test Case, the publishing process uses an xml file which contains column definitions for all the columns that can be exported from the Developer into the file. The xml file is located in the lang folder within the Test Case publishing style. Each language has an xml file; customize the languages you need. In addition, each format within the Test Case style has its own xml file:

HP Quality Center: ColumnSpec.xml

Oracle Application Testing Suite: OATS_ColumnSpec.xml
IBM Rational Quality Manager: Rational_ColumnSpec.xml
Other: Other_ColumnSpec.xml

To customize the output, edit the .xml file in an editor of your choice. Before you customize the style, it is highly recommended that you make a copy of it and then make your modifications to the copy. See *Customize Publishing Styles* for more information about copying, renaming, and editing publishing styles.

Important Publishing Note: If you are using Microsoft Office 2003, you must install the Microsoft Office Compatibility Pack for Word, Excel, and PowerPoint 2007 File Formats. You can download this compatibility pack from the Microsoft Office Download Center. In addition, all Microsoft Office Products must have the latest updates and security fixes.

Include or Exclude Columns
You can specify the columns you want. By default, the columns that are required for import into each format are included. In addition, the .xml file contains definitions for all of the data that can be retrieved from the Developer database. Within each column definition, between the <col> and </col> tags, there is an export parameter with a yes or no value. Yes means that the column will be included in the output.

Note: The Output and Required Fields columns have an additional parameter for fixed width font. These columns contain the information in the Output and Required fields tables. In order to represent the tables properly, table columns are separated by spaces, and each table row is on a separate line. This information is easier to read when it is formatted with a fixed width font such as Courier. Therefore, by default, the fixedWidthFont parameter has a value of Yes for these two fields. If you want these fields to appear in a proportional font, change the parameter to No.

Change the Column Name
Another parameter within the column definition tags is header. This value is the text for the column name. You can change the text in between the <header> and </header> tags to whatever you wish. Do not change the xml:id reference or its value.

Repeat Topic Data
By default, the data in the columns repeats for every row in the topic. If you do not want this information to repeat for every row, you can use the repeat parameter in the <data> tag. A value of Yes causes the data to appear in each row of the topic; a value of No causes the data to appear in the first row of the topic only.

Set a Default Value

You can use the <defaultvalue/> tag to set a default value for a column if the value specified in the <data> tag is blank. Modify the <defaultvalue/> tag so that it has begin and end tags, and enter the text for the default value between tags. For example, <defaultvalue>XYZ Company</defaultvalue>, which places the XYZ Company text in the field if the <data> tag returns a blank value.

Note: The value in the Step column is set to integer in the OATS_ColumnSpec.xml.

Set Column Width

Each column is set with a default width. The <width> tag specifies the width of the column expressed in the number of characters. For example, if the default font is Arial 10, then a column width of 10 displays 10 characters, which is equal to 75 pixels. If the font is changed to Courier New, the column width still displays 10 characters, but the column is resized to 85 pixels. You can edit the value of the <width> tag to suit your needs.

17.8 Customize Document Formats

Document outputs use a Microsoft Word template called PrintTemplate.docm to control the format and layout of the document. The template contains bookmarks, styles, document settings, and pre-defined text. Bookmarks are the mechanism used to insert and position the fields in the document and styles are used to format the fields. Document settings affect the page layout, such as paper size and margins. Pre-defined, or static, text can appear in several places in any template, usually the header and footers and the labels for the fields in the body of the document. The template also contains a toolbar which allows you to insert the desired bookmarks in the template you want to customize.

Important Publishing Note: If you are using Microsoft Office 2003, you must install the Microsoft Office Compatibility Pack for Word, Excel, and PowerPoint 2007 File Formats. You can download this compatibility pack from the Microsoft Office Download Center. In addition, all Microsoft Office Products must have the latest updates and security fixes.

Each print style has a lang folder, and within it is a folder for each language. Each language has is own template file. To make any customization, you modify the publishing style for the specific language.

Follow these basic steps to customize a document format:

- Create a new publishing style. See *Customize Publishing Styles* for more information about copying and renaming publishing styles. It is highly recommended that you do not customize a standard template; you should make a copy and make your edits to the copy.
- Open the new publishing style package that you copied, navigate to the lang/<language> folder, and open the PrintTemplate.docm file.
- Make the edits to the PrintTemplate.docm file as desired by inserting or deleting bookmarks, Word fields, static text, or graphic elements. Be sure to use Check Syntax to verify that there are no errors in your changes to the bookmarks.
- Save the edited template in the publishing style, and then save the package.
- Publish the content using your new publishing style. Be sure to select the correct category and language on the Advanced Publishing Options page.

17.8.1 Use Bookmarks

Bookmarks have two parts: the bookmark name and the descriptive text in angled brackets (<>). The entire bookmark is enclosed in grey square brackets ([ ]). To display the grey brackets, you must turn on all formatting marks, plus select the Bookmarks option on the

View tab of the Options dialog box in Microsoft Word. This is important, because if you want to move a bookmark, you need to make sure that you select the entire bookmark.

Types of bookmarks

There are three basic types of bookmarks:

- Single field: Bookmarks with a single piece of data, such as topic name, status, document ID, or creation date.

- Multiple fields: Bookmarks with multiple fields, most often in a table. Examples include the Required fields table, Output table, and Table of Properties in the System Process Document, the Instructor Guide notes, and the table of Context IDs.

  This type of bookmark also includes the bookmarks which insert the concepts for the modules, sections, and topics as well as the list and table of action steps, the table of attachments, the screenshot, and the table of glossaries.

- Repeating: Bookmarks that contain definitions to allow insertion of multiple items, such as rows in a table or multiple attachments to a frame. These bookmarks may also contain table definitions, placeholders for graphics, and static text.

17.8.2 Publishing Template Toolbar

The PrintTemplate.docm file includes a toolbar. There are five menu items, three of which allow you to insert bookmarks. In some cases, the menus will insert several bookmarks or an entire structure, such as a table of action steps for a topic.

If Word is set to English, Spanish, French, German, or Japanese, the Publishing Template toolbar appears in the same language by default when you open the template. If Word is set to any other language, the template toolbar appears in English by default. You can use the Language menu to choose the language in which the toolbar is displayed.

If you are working with Word 2007, you must use the Add-ins ribbon to view the toolbar. If you are using Word 2003 with the compatibility pack and the toolbar does not appear automatically, you should check the macro security. It must be set to Medium or lower. You must also have the latest updates from Microsoft (sp3).

Outline Menu

- **Outline Name**: Inserts the name of the outline. The outline name is the text in the tab that was active when you published.

- **Modules and Sections submenu**

  Module and Section: Inserts the pair of repeating tags required to define the beginning and end of the module or section. Any bookmarks for the contents of the module or section should be included between these bookmarks, such as the module or section name, concept, or topics.

  Name, with Style Defined in Template: Inserts and formats the names of modules and sections, using the style defined in this template. With this bookmark, all the modules and sections use the Heading 1 style in Word, and all of the topic names use Heading 2. These are the default bookmarks.

  Name, with Style Referenced to Outline Level: Inserts and formats the names of modules and sections, using the outline level style. The outline levels use the various Heading styles in Word. You may need to modify several styles, depending on how many levels you have in your content.

  Concept, with Format Defined in Template: Inserts and formats the web pages used for concepts for modules and sections, using the style and formatting in the

template. These bookmarks will honor the text alignment as set in the Developer. They will also honor any image properties set on images in web pages.

Concept, with Format Defined in Developer: Inserts and formats the web pages used for concepts for modules and sections, using the formatting from the Web Page Editor in the Developer. Any formatting or style changes you make in the template will be ignored.

Table of Context IDs: Inserts a table of Context IDs for modules and sections. The context ID table has three columns: Context Name, Application Name, and Context IDs. Each of these columns contains a corresponding bookmark to insert the data. There is also a hidden bookmark at the beginning of the heading row to allow the rows to repeat for multiple Context IDs.

- **Questions & Assessments submenu**

Question: Inserts the pairs of repeating tags required to define the beginning and end of each question type. A dialog box allows you to choose the question types you want to include in the document.

Assessment: Inserts the pairs of repeating tags required to define the beginning and end of an assessment. A dialog box allows you to choose the question types you want to include in the assessment.

Associated Assessment Link: Inserts the pairs of repeating tags required to provide a list of links to associated assessments.

Associated Assessment: Inserts the pairs of repeating tags required to define the beginning and end of an associated assessment. A dialog box allows you to choose the question types you want to include in the assessment.

- **Topics submenu**

Topic: Inserts the pair of repeating tags required to define the beginning and end of a topic in a multiple topic output format. Any bookmarks for the contents of the topic should be included between the beginning and ending topic bookmarks, such as name, concept, or action steps.

Name, with Style Defined in Template: Inserts and formats the name of the topic, using the style defined in this template. You can, therefore, create a style specifically for the topic name, no matter its position in the outline hierarchy.

Name, with Style Referenced to Outline Level: Inserts and formats the name of the topic, using the outline level style. The outline levels use the various Heading styles in Word; topics are always Heading 2.

Concept, with Format Defined in Template: Inserts and formats the web pages used for topic concepts, using the style and formatting in the template. These bookmarks will honor the text alignment as set in the Developer. They will also honor any image properties set on images in web pages.

Concept, with Format Defined in Developer: Inserts and formats the web pages used for topic concepts, using the formatting from the Web Page Editor in the Developer. Any formatting or style changes you make in the template will be ignored.

Play Modes: Inserts a list of topic play modes, as specified in the Properties toolpane for the topic.

Know It? Remediation Levels: Inserts the Know It? remediation levels, as specified in the Properties toolpane for the topic.

Know It? Required Score: Inserts the Know It? passing score, as specified in the

Properties toolpane for the topic.

Number of Frames: Inserts the number of frames in the topic.

- **Frames submenu**

  Frame: Inserts the pair of repeating tags required to define the beginning and end of a frame. These bookmarks should be between the beginning and ending tags for the topic.

  Table of Action Steps: Inserts a customizable table of action text, including the introduction frame text. This set of bookmarks also includes the begin and end tags for the frames. There is a hidden bookmark in the heading row of the table which controls the multiple rows. When you select this menu, a dialog box appears allowing you to select various options. You can choose whether the text style for the action steps is controlled by the style in the Topic Editor or by the style you set in the template. A series of checkboxes allows you to choose whether to include action images for each step, attachments, Context IDs, and Decision and alternative path action text, for example, Go to step x.

  List of Action Steps: Inserts a customizable list of action text, including the action text. This set of bookmarks also includes the begin and end tags for the frames. This option creates a list of the action steps that does not use a table. When you select this menu, a dialog box appears allowing you to select various options. You can choose whether the text style for the action steps is controlled by the style in the Topic Editor or by the style you set in the template. A series of checkboxes allows you to choose whether to include action images for each step, attachments, Context IDs, and Decision and alternative path action text, for example, Go to step x.

  Table of Attachments: Inserts customizable table of attachments. This set of bookmarks must be included between the begin and end tags for the frame. When you select this menu, a dialog box appears allowing you to select various options. You can choose whether the text style for web pages is controlled by the style in the Topic Editor or by the style you set in the template. Checkboxes allow you to choose whether to include action attachment icons and images in packages.

  Screenshot: Inserts the bookmark for a screenshot placeholder.

  Author Notes: Inserts the bookmark for the author notes from the Topic Editor.

  Expected Test Results: Inserts the bookmark for the expected test results from the Topic Editor.

  Instructor Notes: Inserts the bookmark for the instructor notes from the Topic Editor.

- **Publication Date**: Inserts the date on which the document was last published

- **Table of Glossaries**: Inserts a table of glossary terms, as in the Training Guide. There are bookmarks to define the beginning and ending of the Glossary table. In addition, there is a bookmark to insert the glossary term.

Details Menu

- **Checked Out by Author**: Inserts the person's name to whom the document is checked out as indicated in the Checked Out By field in the Details view in the Developer.

- **Checked Out on Workstation**: Inserts the workstation's name on which the document is checked out as indicated in the Checked Out Hostname field, which can

be added to the Details view in the Developer.

- **Creation Date**: Inserts the date on which the document was created as indicated in the Creation Date field, which can be added to the Details view in the Developer.

- **Custom Properties**: Inserts a table of custom properties. It has two columns, name and value. These fields are specified in the General section of the Properties toolpane in the Developer.

- **Document ID**: Inserts the document ID as indicated in the Document ID field, which can be added to the Details view in the Developer.

- **Keywords**: Inserts the keywords assigned to the module, section, or topic in a comma separated list, as specified in the Properties toolpane.

- **Language**: Inserts the language of the module, section, or topic, as specified in the Properties toolpane for the topic.

- **Last Modified By**: Inserts the person's name who last modified the document as indicated in the Last Modified By field, which can be added to the Details view in the Developer.

- **Last Modified Date**: Inserts the date on which the document was last modified, as indicated in the Last Modified Date field in the Details view in the Developer.

- **Links Count**: Inserts the number of items linked from the document as indicated in the Link Count field, which can be added to the Details view in the Developer.

- **Links To**: Inserts the number of items linked to the document as indicated in the Links To field, which can be added to the Details view in the Developer.

- **Owner**: Inserts the person's name who owns the document, or to whom it is assigned, as indicated in the Owner field in the Details view in the Developer.

- **Roles**: Inserts a list of roles assigned to the document, as specified in the Properties toolpane for the topic or in the Roles field in the Details view.

- **State**: Inserts the state of the document, such as Draft, as specified in the Properties toolpane for the topic or in the State field in the Details view.

- **Type**: Inserts the document type, such as Section or Topic, as indicated in the Type field, which can be added to the Details view in the Developer.

- **Version**: Inserts the version of the document as indicated in the Version field in the Details view of the Developer.

Topic Properties Menu

- **System Process Document submenu**

  Output Table: Inserts a table of output results. This is the Output - Results and Comments table for the System Process Document as specified in the Properties toolpane for the document. Each column has a bookmark to insert the data. There is a hidden bookmark at the beginning of the heading row to control the repetition of multiple rows in the table.

  Required Fields Table: Inserts a table of required fields. This is the Required Field(s) and Comments table for the System Process Document as specified in the Properties toolpane for the document. Each column has a bookmark to insert the data. There is a hidden bookmark at the beginning of the heading row to control the repetition of

multiple rows in the table.

Table of Properties: Inserts a table of properties. This is the first table in the System Process Document. It includes Department, Responsibility/Role (list of roles), File Name (this is a Word field), Revision (version number appended to the document type at publication), Document Generation Date (the date on which the document was last published), Date Modified, Last Changed By (SPD property field; the person's name who last modified the document in the Developer), Status (SPD property field), Trigger (SPD property field), and Additional Information (SPD property field). All of these fields are as specified in the Properties toolpane in the Developer.

- **Test Document submenu**

  Additional Validation: Inserts the Additional information to validate the test, as specified in the Test Document section of the Properties toolpane in the Developer.

  Estimated Time: Inserts the Estimated time to complete the test, as specified in the Test Document section of the Properties toolpane in the Developer.

  Purpose of Test: Inserts the Purpose of the test, as specified in the Test Document section of the Properties toolpane in the Developer.

  Test Document Revision: Inserts the Test Document Revision, as specified in the Test Document section of the Properties toolpane in the Developer.

  Test Setup: Inserts the Test setup, as specified in the Test Document section of the Properties toolpane in the Developer.

- **Instructor Manual Notes**: Inserts the Instructor notes, as specified in the Instructor Manual section of the Properties toolpane in the Developer.

- **Job Aid Revision**: Inserts the Job Aid Revision, as specified in the Job Aid section of the Properties toolpane in the Developer.

17.8.3 Insert, Move, and Delete Bookmarks

You can add bookmarks to the PrintTemplate.docm file from the Developer Publishing Toolbar or from the Bookmark dialog box in Word. You can use the toolbar to add extra information to the template easily.

You can also make substitutions with the toolbar. For example, the default template for the Training Guide uses the text formatting for concept web pages as set in the template. If you want to use the formatting as it is in the Developer, you can delete everything between and including the ModuleSectionConcept beginning and ending tags, and then use the toolbar to easily insert the bookmarks for the Developer-formatted web pages.

You can also insert bookmarks using the Bookmarks dialog box in Microsoft Word. You can access this dialog box with the Bookmarks command from the Insert ribbon in Word 2007 or the Insert menu in Word 2003. You will see in the list that the bookmarks have numbers appended to the name. In Word, each bookmark must have a unique name. The numbers are also used to identify beginning and ending bookmarks for a block, such as ForEachAttachment_Begin_1 and ForEachAttachment_End_1. The Check Syntax feature uses these numbers to verify that all necessary pairs are present.

See the *Bookmark Reference* topic in the Customize Document Formats chapter of the Content Development manual to determine the bookmark that you want to insert, then enter it in the Bookmark Name field at the top of the Bookmark dialog box, appending a number. You can insert any bookmark, including those, such as FrameID, that are not present by default in any of the output formats.

Note: If you insert Developer bookmarks in the headers or footers of the template, they will be ignored during the document processing. Microsoft Word fields, such as the document name, the page number, or the date of publication will be honored.

Move and Delete Bookmarks

When you select bookmarks to move or delete them, you should make sure that you select the entire bookmark, including the grey brackets at the beginning and the end and the no-width non breaking space before the bookmark.

You cannot copy bookmarks; you must move them using cut and paste. When you delete multiple bookmarks, especially a block of bookmarks, make sure you delete both the beginning and ending tags. If there are extra tags, you will receive an error when you check the syntax or attempt to use the template.

At the end of the template, there are bookmarks that you should not delete. These bookmarks control the images for the action areas, screenshots, packages, and web pages. If they are missing, the template will not be processed correctly during publishing. If you delete these bookmarks, you should replace them by copying them from an unmodified template.

17.8.4 Bookmarks in Multi-topic Formats

The structure of the bookmarks in multi-topic formats such as the Training Guide and Instructor Manual is complex. To help you better understand the structure of the bookmarks and how they work in these documents, a high-level overview of the sections in the order as they appear in the document is below.

```
ForEachModuleSection_Begin
     {ModuleSectionConcept}
     ForEachChildOutlineItem_Begin (Iterates through all the outline items
inside a module or section to include them in the document.)
           Topic_Begin (the topic definition)
               TopicConcept_begin
                   {Webpage}
               TopicConcept_end
               ForEachFrame_Begin
                   {LeadinFrameType}
                   {NormalFrameType}
                   {DecisionFrameType}
                   {EndFrameType}
               ForEachFrame_End
          Topic_End
          Question_Begin (Question definition for single questions in the
outline.)
               {QuestionName}
               {QuestionImage}
               FillInQuestionType
               MultipleChoiceSingleAnswerQuestionType
               MultipleChoiceManyAnswerQuestionType
               TrueFalseQuestionType
               MatchingQuestionType
               HotspotQuestionType
          Question_End
          Assessment_Begin (Assessment definition for assessments in the
outline, including how questions in the assessment are shown.)
               {AssessmentName}
               Question_Begin (Definition for questions in the assessment.)
                    {QuestionName}
                    {QuestionImage}
                    FillInQuestionType
                    MultipleChoiceSingleAnswerQuestionType
                    MultipleChoiceManyAnswerQuestionType
                    TrueFalseQuestionType
                    MatchingQuestionType
```

```
                    HotspotQuestionType
               Question_End
          Assessment_End
          Related_Assessment_Link
     ForEachChildOutlineItems_End
ForEachModuleSection_End
ForEachRelatedAssessment_Begin (Definition for Related Assessment.)
     Assessment_Begin
         {AssessmentName}
              Question_Begin
                   {QuestionName}
                   {QuestionImage}
                    FillInQuestionType
                    MultipleChoiceSingleAnswerQuestionType
                    MultipleChoiceManyAnswerQuestionType
                    TrueFalseQuestionType
                    MatchingQuestionType
                    HotspotQuestionType
               Question_End
     Assessment_End
ForEachRelatedAssessment_End
{Glossary}
```

17.8.5 Insert Bookmarks for Questions and Assessments

You can insert bookmarks for Questions and Assessments in the print templates (PrintTemplate.docm) of the Instructor Manual or Training Guide. The bookmarks control how Questions and Assessments will appear in these printed documents.

Bookmarks for Questions and Assessments are added to the print template from the Outline menu in Microsoft Word. Selecting Questions from the menu opens the Insert Questions dialog box. You select the type of question bookmarks you want to add plus the option to include bookmarks for the correct answer and/or remediation text when publishing the Training Guide or Instructor Manual.

17.8.6 Insert Bookmarks for Custom Properties

If you have created custom properties for documents, you can use the Custom Properties menu command on the Details menu of the template toolbar to insert a table of the custom properties and their values. You can also insert individual custom properties outside the table, using the following format:

`CP_<bmname>_Val_<N>`

Example: CP_authorname_val_1

Parameters for the bookmark:

CP
Indicates that the bookmark is for a custom property.

<bmname>
The name of the bookmark as shown in the Custom Properties table in the Developer.

val
The value of the bookmark from in the Custom Properties table in the Developer.

<N>
A unique number for the bookmark.

17.8.7 Insert Word Fields, Static Text, and Graphic Objects

In addition to bookmarks, the template contains static text for labels for parts of the document and for field labels, and Word fields.

Insert Word Fields

You can insert any standard Word fields, such as date printed or last saved date. You can also use these in the header and the footer. You access the Field dialog box using the Field command on the Insert ribbon in Word 2007 or the Insert menu in Word 2003.

Insert Static Text or Graphic Objects

You can edit existing static text or add any static text anywhere on the template. You can also add graphic images or drawings, such as a line to separate sections or a graphic on the title page of the training manual.

17.8.8 Format Bookmarks and Text

If you have standard Word styles that you use for your documentation, you can copy them into the print template and use them for the printed outputs. You can also modify the existing styles in the template.

Note: If you use bookmarks that use the formatting as set in the Developer, any formatting in template will be ignored.

You can also format bookmarks by formatting the name of the bookmark. This will override the style that is applied to the bookmark. For example, if you want the Start frame text to be bold or larger than the text for the action frames, you do not need to create another style.

17.8.9 Bookmark Reference

The following list contains all of the bookmarks available in the PrintTemplate.docm template. It also indicates whether you can insert the bookmark through the menus on the Developer Publishing Template toolbar, or if you need to insert it manually in the Bookmark dialog box in Microsoft Word. See the *Publishing Template Toolbar* topic in the Customize Document Formats chapter for more information. This list will be useful if you delete a bookmark by mistake and want to insert it again, especially if the bookmark is not available from the toolbar.

- **ActionText**: Inserts action text with formatting indicated in this template. Action text refers to the bubble text. It is inserted as a part of the Table of Action Steps and the List of Action Steps, both of which are on the Frames submenu of the Outline menu.

- **AdditionalInformation**: Inserts additional information to be published with the document, as specified in the System Process Document section of the Properties toolpane in the Developer. It is inserted as part of the Table of Properties on the System Process Document submenu of the Topic Properties menu.

- **AdditionalValidation**: Inserts additional validation as specified in the Test Document section of the Properties toolpane in the Developer. It can be inserted from the Test Document submenu of the Topic Properties menu.

- **AllOfTheAbove_Begin** and **_End:** A pair of bookmarks containing localizable text for the All of the Above option for the Multiple Choice Single Answer (MCSA) question type. Inserted as part of the set of bookmarks for the question.

- **ApplicationName**: Inserts the application name as indicated in the Topic Editor. It is inserted as part of the Table of Context IDs on the Modules and Sections submenu of the Outline menu.

- **Assessment_Begin**: Beginning of a repeating bookmark for an assessment. It is inserted as part of an Assessment from the Questions and Assessments submenu on the Outline menu.

- **Assessment_End**: End of a repeating bookmark for an assessment. It is inserted as a pair with the begin tag. It can be inserted from the Questions and Assessments submenu on the Outline menu.

- **Assessment_Name**: Inserts the name of the assessment. It is inserted as part of the Assessment option on the Questions and Assessments menu on the Outline menu. It should be located between the beginning and end tags for an assessment.

- **AssociatedAssessmentHeader_Begin**: Beginning of a repeating bookmark that inserts the title "Associated Assessments" in the document. It is inserted as part of the Associated Assessment option from the Questions and Assessments submenu of the Outline menu.

- **AssociatedAssessmentHeader_End**: End of a repeating bookmark that inserts the title "Associated Assessments" in the document. It is inserted as a pair with the begin tag. It is inserted as part of the Associated Assessment or Associated Assessment Link option from the Questions and Assessments submenu of the Outline menu.

- **AssociatedAssessmentLink**: Inserts a link to associated assessments. It should be located between the ForEachAssociatedAssessmentLink repeating tags. It is inserted as part of the Associated Assessment Link option from the Questions and Assessments submenu of the Outline menu.

- **AttachmentIcon**: Inserts the attachment icon for items attached to frames in a topic. It should be located between the ForEachAttachment repeating tags. It is inserted as a part of the Table of Action Steps and the List of Action Steps, both of which are on the Frames submenu of the Outline menu.

- **CheckedOutByAuthor**: Inserts person's name to whom the document is checked out as indicated in the Checked Out By field in the Details view in the Developer. It can be inserted from the Details menu.

- **CheckedOutonWorkstation**: Inserts workstation's name on which the document is checked out as indicated in the Checked Out Hostname field, which can be added to the Details view in the Developer. It can be inserted from the Details menu.

- **ContextIDs**: Inserts the context IDs as indicated in the Properties toolpane or the Topic Editor. It should be located between the ForEachModuleSectionCtx or ForEachFrame repeating tags. It is inserted as part of the Table of Context IDs on the Modules and Sections submenu of the Outline menu.

- **ContextName**: Inserts the context names as indicated in the Properties toolpane or the Topic Editor. It should be located between the ForEachModuleSectionCtx or ForEachFrame repeating tags. It is inserted as part of the Table of Context IDs on the Modules and Sections submenu of the Outline menu.

- **CorrectAnswerNum**: Inserts the number of correct answers for a Multiple Choice Many Answer (MCMA) question. Inserted as part of the set of bookmarks for the question.

- **CreationDate**: Inserts the date on which the document was created as indicated in the Creation Date field, which can be added to the Details view in the Developer. It can be inserted from the Details menu.

- **CustomProperty**: Inserts the name of the custom property. It is inserted as part of the Custom Property table, which is available from the Details menu.

- **CustomPropertyValue**: Inserts the value of the custom property. It is inserted as part of the Custom Property table, which is available from the Details menu.

- **DecisionFrameType_Begin**: Beginning of a repeating bookmark for decision frame paths. It is inserted as a part of the Table of Action Steps and the List of Action Steps, both of which are on the Frames submenu of the Outline menu.

- **DecisionFrameType_End**: End of a repeating bookmark for decision frame paths. It is inserted as a part of the Table of Action Steps and the List of Action Steps, both of which are on the Frames submenu of the Outline menu.

- **DecisionHeader**: Inserts the header text for a decision frame. It is inserted as a part of the Table of Action Steps and the List of Action Steps, both of which are on the Frames submenu of the Outline menu.

- **DecisionText**: Inserts the text of a decision frame path. It must be located between the ForEachDecision repeating tags. It is inserted as a part of the Table of Action Steps and the List of Action Steps, both of which are on the Frames submenu of the Outline menu.

- **Define_Hotspot_Begin**: Beginning of a bookmark that controls the hotspot graphics within the template. Do not delete. Must be inserted manually.

- **Define_Hotspot_End**: End of a bookmark that controls the hotspot graphics within the template. Do not delete. Must be inserted manually.

- **Define_PackageImage_Begin**: Beginning of bookmark that controls the package graphics within this template. Do not delete. Must be inserted manually.

- **Define_PackageImage_End**: End of bookmark that controls the package graphics within this template. Do not delete. Must be inserted manually.

- **Define_QuestionIcon_Begin**: Beginning of a bookmark that controls the graphic for the question icon. Do not delete. Must be inserted manually.

- **Define_QuestionIcon_End**: End of a bookmark that controls the graphic for the question icon. Do not delete. Must be inserted manually.

- **Define_QuestionImage_Begin**: Beginning of a bookmark that controls the background graphic for the question. Do not delete. Must be inserted manually.

- **Define_QuestionImage_End**: End of a bookmark that controls the background graphic for the question. Do not delete. Must be inserted manually.

- **Define_ResponseIcon_Begin**: Beginning of a bookmark that controls the graphic for the response icon. Do not delete. Must be inserted manually.

- **Define_ResponseIcon_End**: End of a bookmark that controls the graphic for the response icon. Do not delete. Must be inserted manually.

- **Define_Screenshot_Begin**: Beginning of repeating bookmark that controls the screenshot graphics within this template. Do not delete. Must be inserted manually.

- **Define_Screenshot_End**: End of repeating bookmark that controls the screenshot graphics within this template. Do not delete. Must be inserted manually.

- **Define_WebpageImage_Begin**: Beginning of bookmark that controls the web page graphics within this template. Do not delete. Must be inserted manually.

- **Define_WebpageImage_End**: End of bookmark that controls the web page graphics within this template. Do not delete. Must be inserted manually.

- **Department**: Inserts the department as specified in the System Process Document section of the Properties toolpane in the Developer. It is inserted as part of the Table of Properties on the System Process Document submenu of the Topic Properties menu.

- **DeveloperWebpageText**: Inserts web page text with formatting as defined in the Developer. It is inserted as a part of the Table of Action Steps and the List of Action Steps, both of which are on the Frames submenu of the Outline menu on the toolbar, as well as Concept, with format defined in Developer, on the Topics and Modules and Sections submenus on the Outline menu.

- **DocType**: Inserts the document type, such as Section or Topic, as indicated in the Type field, which can be added to the Details view in the Developer. It can be inserted from the Details menu.

- **DocumentID**: Inserts the document ID as indicated in the Document ID field, which can be added to the Details view in the Developer. It can be inserted from the Details menu.

- **EndFrameType_Begin**: Beginning of a repeating bookmark for end frames. It is inserted as a part of the Table of Action Steps and the List of Action Steps, both of which are on the Frames submenu of the Outline menu.

- **EndFrameType_End**: End of a repeating bookmark for end frames. It is inserted as a part of the Table of Action Steps and the List of Action Steps, both of which are on the Frames submenu of the Outline menu.

- **EstimatedTime**: Inserts the estimated time as specified in the Test Document section of the Properties toolpane in the Developer. It can be inserted from the Test Document submenu of the Topic Properties menu.

- **FillInQuestionType_Begin**: Beginning of a set of bookmarks for a Fill-in question. It is inserted as part of the Question option on the Questions and Assessments submenu of the Outline menu.

- **FillInQuestionType_End**: End of a set of bookmarks for a Fill-in question. It is inserted as part of the Question option on the Questions and Assessments submenu of the Outline menu.

- **ForEachAlternative_Begin**: Beginning of a repeating bookmark for alternative actions and paths on a frame. Must be inserted manually.

- **ForEachAlternative_End**: End of a repeating bookmark for alternative actions and paths on a frame. Must be inserted manually.

- **ForEachAssociatedAssessment_Begin**: Beginning of a repeating bookmark for associated assessments. It is inserted as part of the Associated Assessment option on the Questions and Assessments submenu of the Outline menu.

- **ForEachAssociatedAssessment_End**: End of a repeating bookmark for associated assessments. It is inserted as part of the Associated Assessment option on the Questions and Assessments submenu of the Outline menu.

- **ForEachAssociatedAssessmentLink_Begin**: Beginning of a repeating bookmark for associated assessment links. It is inserted as part of the Associated Assessment Link option on the Questions and Assessments submenu of the Outline menu.

- **ForEachAssociatedAssessmentLink_End**: End of a repeating bookmark for associated assessment links. It is inserted as part of the Associated Assessment Link option on the Questions and Assessments submenu of the Outline menu.

- **ForEachAttachment_Begin**: Beginning of a repeating bookmark for attachments. It is inserted as a part of the Table of Action Steps and the List of Action Steps, both of which are on the Frames submenu of the Outline menu.

- **ForEachAttachment_End**: End of a repeating bookmark for attachments. It is inserted as a part of the Table of Action Steps and the List of Action Steps, both of which are on the Frames submenu of the Outline menu.

- **ForEachChildOutlineItem_Begin**: Beginning of a repeating bookmark to insert each section, topic, question, and assessment in order.

- **ForEachChildOutlineItem_End**: End of a repeating bookmark to insert each section, topic, question, and assessment in order.

- **ForEachDecision_Begin**: Beginning of a repeating bookmark for decision frames. It is inserted as a part of the Table of Action Steps and the List of Action Steps, both of which are on the Frames submenu of the Outline menu.

- **ForEachDecision_End**: End of a repeating bookmark for decision frames. It is inserted as a part of the Table of Action Steps and the List of Action Steps, both of which are on the Frames submenu of the Outline menu.

- **ForEachFrame_Begin**: Beginning of a repeating bookmark for frames. It is inserted as a part of the Table of Action Steps and the List of Action Steps, both of which are on the Frames submenu of the Outline menu.

- **ForEachFrame_End**: End of a repeating bookmark for frames. It is inserted as a part of the Table of Action Steps and the List of Action Steps, both of which are on the Frames submenu of the Outline menu.

- **ForEachGlossary_Begin**: Beginning of a repeating bookmark for glossaries. It is inserted as part of the Table of Glossaries on the Outline menu.

- **ForEachGlossary_End**: End of a repeating bookmark for glossaries. It is inserted as part of the Table of Glossaries on the Outline menu.

- **ForEachModuleSection_Begin**: Beginning of a repeating bookmark for modules and sections. It is inserted as a pair with the end tag. It can be inserted from the Modules and Sections submenu on the Outline menu.

- **ForEachModuleSection_End**: End of a repeating bookmark for modules and sections. It is inserted as a pair with the begin tag. It can be inserted from the Modules and Sections submenu on the Outline menu.

- **ForEachModuleSectionCtx_Begin**: Beginning of a repeating bookmark for table of context IDs. It is inserted as part of the Table of Context IDs on the Modules and Sections submenu of the Outline menu.

- **ForEachModuleSectionCtx_End**: End of a repeating bookmark for table of context IDs. It is inserted as part of the Table of Context IDs on the Modules and Sections submenu of the Outline menu.

- **ForEachTopic_Begin** and **_End**: Repeating bookmarks for topics. Do not use; have been replaced by Topic Definition bookmarks. These remain to support legacy templates.

- **FormattedActionText**: Inserts action text with formatting indicated in the Developer. Action text refers to the text in the bubble. It is inserted as a part of the Table of Action Steps and the List of Action Steps, both of which are on the Frames submenu of the Outline menu.

- **FrameAuthorNotes**: Inserts author notes added to topic during recording or in the Author Notes field in the Topic Editor. It can be inserted from the Frames submenu on the Outline menu.

- **FrameExpectedTestResults**: Inserts the text entered in the Expected Test Results field in the Topic Editor. It can be inserted from the Frames submenu on the Outline menu.

- **FrameID**: Inserts the frame ID as indicated in the Topic Editor. It must be inserted manually.

- **FrameInstructorNotes**: Inserts the text entered in the Instructor Notes field in the Topic Editor. It can be inserted from the Frames submenu on the Outline menu.

- **GlossaryTerm**: Inserts the glossary term. Inserted as part of Table of Glossaries. It should be located inside the ForEachGlossary repeating tags. It is inserted as part of the Table of Glossaries on the Outline menu.

- **Goto_Begin**: Beginning of a repeating bookmark for GoTo steps for alternatives and decision frames. It is inserted as a part of the Table of Action Steps and the List of Action Steps, both of which are on the Frames submenu of the Outline menu.

- **Goto_End**: End of a repeating bookmark for GoTo steps for alternatives and decision frames. It is inserted as a part of the Table of Action Steps and the List of Action Steps, both of which are on the Frames submenu of the Outline menu.

- **HotSpotImage**: Inserts a placeholder for the action image. It is inserted as a part of the Table of Action Steps and the List of Action Steps, both of which are on the Frames submenu of the Outline menu.

- **HotspotQuestionType_Begin:** Beginning of a set of bookmarks for a Hotspot question. It is inserted as part of the Question option on the Questions and Assessments submenu of the Outline menu.

- **HotSpotQuestionType_End**: End of a set of bookmarks for a Hotspot question. It is inserted as part of the Question option on the Questions and Assessments submenu of the Outline menu.

- **IfGlossary_Begin**: Beginning of a conditional bookmark if there are glossaries. It is inserted as part of the Table of Glossaries on the Outline menu.

- **IfGlossary_End**: End of a conditional bookmark if there are glossaries. It is inserted as part of the Table of Glossaries on the Outline menu.

- **IfHotspotImage_Begin**: Beginning of a conditional block for hotspot images for frames. Must be inserted manually.

- **IfHotspotImage_End**: End of a conditional block for hotspot images for frames. Must be inserted manually.

- **IfIMNotes_Begin**: Beginning of a conditional bookmark if there are Instructor Notes. It is inserted as part of the Instructor Manual Notes command on the Topic Properties menu.

- **IfIMNotes_End**: End of a conditional bookmark if there are Instructor Notes. It is inserted as part of the Instructor Manual Notes command on the Topic Properties menu.

- **IfNotShowNumberOfCorrectAnswer_Begin**: Beginning of a set of bookmarks to insert the "Select all that apply" text for a Multiple Choice Many Answer question in which the number of correct answers is not specified. The text can be localized. Inserted as part of the set of bookmarks for the question.

- **IfNotShowNumberOfCorrectAnswer_End**: End of a set of bookmarks to insert the "Select all that apply" text for a Multiple Choice Many Answer question in which the number of correct answers is not specified. The text can be localized. Inserted as part of the set of bookmarks for the question.

- **IMNotes**: Inserts the Instructor Notes as specified in the Instructor Manual section of the Properties toolpane in the Developer. It should be between the IfIM_Notes repeaters. It is inserted as part of the Instructor Manual Notes command on the Topic Properties menu.

- **IfRemainingSteps_Begin**: Beginning of conditional bookmark if there are remaining steps for an alternative or decision path. It is inserted as a part of the Table of Action Steps and the List of Action Steps, both of which are on the Frames submenu of the Outline menu.

- **IfRemainingSteps_End**: End of conditional bookmark if there are remaining steps for an alternative or decision path. It is inserted as a part of the Table of Action Steps and the List of Action Steps, both of which are on the Frames submenu of the Outline menu.

- **IfShowNumberOfCorrectAnswer_Begin**: Beginning of a set of bookmarks to insert the "Select # of the following." text for a Multiple Choice Many Answer question in which the number of correct answers is specified. The text can be localized. Inserted as part of the set of bookmarks for the question.

- **IfShowNumberOfCorrectAnswer_End**: End of a set of bookmarks to insert the "Select # of the following." text for a Multiple Choice Many Answer question in which the number of correct answers is specified. The text can be localized. Inserted as part of the set of bookmarks for the question.

- **IteratingRowAlternatives**: Controls alternative step repeating and numbering. Do not delete. Must be inserted manually.

- **IteratingRowOutputResult**: Controls repeating rows in the in the Output Results table in the System Process Document. Do not delete. Must be inserted manually.

- **IteratingRowRequiredField**: Controls repeating rows in the Required Fields table in the System Process Document. Do not delete. Must be inserted manually.

- **JARevision**: Inserts Job Aid revision appended to the document type at publication as specified in the Job Aid section of the Properties toolpane in the Developer. It can be inserted from the Topic Properties menu.

- **Keywords**: Inserts the keywords assigned to the document in a comma separated list, as specified in the Properties toolpane for the topic. It can be inserted from the Topic Properties menu.

- **KnowItRemediation**: Inserts Know It? remediation levels as specified in the Topic section of the Properties toolpane in the Developer. It can be inserted from the Topics submenu on the Outline menu.

- **KnowItScore**: Inserts Know It? required scores as specified in the Topic section of the Properties toolpane in the Developer. It can be inserted from the Topics submenu on the Outline menu.

- **Language**: Inserts the language of the content as specified in the Properties toolpane in the Developer. It can be inserted from the Details menu.

- **LastChangedby**: Inserts the person's name that last modified the document as specified in the System Process Document section of the Properties toolpane in the Developer. It is inserted as part of the Table of Properties on the System Process Document submenu of the Topic Properties menu.

- **LastModifiedBy**: Inserts the person's name who last modified the document as indicated in the Last Modified By field, which can be added to the Details view in the Developer. It can be inserted from the Details menu.

- **LastModifiedDate**: Inserts the date on which the document was last modified, as indicated in the Last Modified Date field in the Details view in the Developer. It can be inserted from the Details menu.

- **LeadinFrameType_Begin**: Beginning of a repeating bookmark for lead-in frames text. It is inserted as a part of the Table of Action Steps and the List of Action Steps, both of which are on the Frames submenu of the Outline menu.

- **LeadinFrameType_End**: End of a repeating bookmark for lead-in frames text. It is inserted as a part of the Table of Action Steps and the List of Action Steps, both of which are on the Frames submenu of the Outline menu.

- **LinkCount**: Inserts the number of items linked from the document as indicated in the Link Count field, which can be added to the Details view in the Developer. It can be inserted from the Details menu.

- **LinksTo**: Inserts the number of items linked to the document as indicated in the Links To field, which can be added to the Details view in the Developer. It can be inserted from the Details menu.

- **MatchingQuestionType_Begin**: Beginning of a set of bookmarks for a Matching question. It is inserted as part of the Question option on the Questions and Assessments submenu of the Outline menu.

- **MatchingQuestionType_End**: End of a set of bookmarks for a Matching question. It is inserted as part of the Question option on the Questions and Assessments submenu of the Outline menu.

- **MCSAQuestionType_Begin**: Beginning of a set of bookmarks for a Multiple Choice Single Answer question. It is inserted as part of the Question option on the Questions and Assessments submenu of the Outline menu.

- **MCSAQuestionType_End:** End of a set of bookmarks for a Multiple Choice Single Answer question. It is inserted as part of the Question option on the Questions and Assessments submenu of the Outline menu.

- **MCMAQuestionType_Begin**: Beginning of a set of bookmarks for a Multiple Choice Many Answer question. It is inserted as part of the Question option on the Questions and Assessments submenu of the Outline menu.

- **MCMAQuestionType_End**: End of a set of bookmarks for a Multiple Choice Many Answer question. It is inserted as part of the Question option on the Questions and Assessments submenu of the Outline menu.

- **MergeTables**: Controls merging multiple glossary tables into one table in the Training Guide and Instructor Manual. Do not delete. Must be inserted manually.

- **ModuleSectionConcept_Begin**: Beginning of a repeating bookmark for concepts. It is inserted as part of Concept, with Format Defined in Developer and Concept, with Format Defined in Template on the Modules and Sections menu on the Outline menu.

- **ModuleSectionConcept_End**: End of a repeating bookmark for concepts. It is inserted as part of Concept, with Format Defined in Developer and Concept, with Format Defined in Template on the Modules and Sections menu on the Outline menu.

- **ModuleSectionName**: Inserts module and section names, with style defined in this template. It can be inserted from the Modules and Sections menu on the Outline menu.

- **NoneOfTheAbove_Begin** and **_End**: A pair of bookmarks containing localizable text for the None of the Above option for the Multiple Choice Single Answer (MCSA) question type. Inserted as part of the set of bookmarks for the question.

- **NormalFrameType_Begin**: Beginning of a repeating bookmark for normal frames. It is inserted as a part of the Table of Action Steps and the List of Action Steps, both of which are on the Frames submenu of the Outline menu.

- **NormalFrameType_End**: End of a repeating bookmark for normal frames text. It is inserted as a part of the Table of Action Steps and the List of Action Steps, both of which are on the Frames submenu of the Outline menu.

- **OLModuleSectionName**: Inserts module and section names in outline, with style referenced to outline level. It can be inserted from the Modules and Sections menu on the Outline menu.

- **OLTopicName**: Inserts topic name in outline, with style referenced to outline level. It can be inserted from the Topics menu on the Outline menu.

- **OutlineName**: Inserts the outline name. The outline name is the text in the tab that was active when you published. It can be inserted using the Outline command on the Outline menu.

- **OutputComment**: Inserts the output comment as specified in the Output table in the System Process Document section of the Properties toolpane in the Developer. It is inserted as part of the Table of Properties on the System Process Document submenu of the Topic Properties menu.

- **OutputResult**: Inserts the output result as specified in the Output table in the System Process Document section of the Properties toolpane in the Developer. It is inserted as part of the Table of Properties on the System Process Document submenu of the Topic Properties menu.

- **Owner**: Inserts the person's name who owns the document, or to whom it is assigned, as indicated in the Owner field in the Details view in the Developer. It can be inserted from the Details menu.

- **PackageImage**: Inserts a placeholder for an image in a package. It is inserted as a part of the Table of Action Steps and the List of Action Steps, both of which are on the Frames submenu of the Outline menu on the toolbar, as well as Concept, with format defined in Developer, on the Topics and Modules and Sections submenus on the Outline menu.

- **PlayModes**: Inserts play modes as specified in the Topic section of the Properties toolpane in the Developer. It can be inserted from the Topics submenu on the Outline menu.

- **PublicationDate**: Inserts the date on which the document was published. This is a Word field. It can be inserted from the Outline menu.

- **Question_Begin**: Beginning of a set of bookmarks for a question. It is inserted as part of the Question option from the Questions and Assessments submenu of the Outline menu.

- **Question_End**: End of a set of bookmarks for a question. It is inserted as part of the Question option from the Questions and Assessments submenu of the Outline menu.

- **QuestionAnswer**: Inserts the bookmark for the possible answers within a question.

- **QuestionAnswerNC**: Inserts the bookmark for the possible answers without displaying the answers within a question.

- **QuestionChoices**: Inserts the bookmark for the answer choices within a question type bookmark.

- **QuestionCorrectAnswer**: Inserts the bookmark for the correct answer within a question type bookmark.

- **QuestionFalse_Begin**: Beginning of a set of bookmarks to insert the "False" text for a True/False question. The text can be localized. Inserted as part of the set of bookmarks for the question.

- **QuestionFalse_End**: End of a set of bookmarks to insert the "False" text for a True/False question. The text can be localized. Inserted as part of the set of bookmarks for the question.

- **QuestionImage**: Inserts the bookmark for the question background image within a question.

- **QuestionName**: Inserts the Question Name bookmark within a question.

- **QuestionRemediationText**: Inserts bookmark for the remediation text within a question.

- **QuestionText**: Inserts the Question Name bookmark within a question type bookmark.

- **QuestionTrue_Begin**: Beginning of a set of bookmarks to insert the "True" text for a True/False question. The text can be localized. Inserted as part of the set of bookmarks for the question.

- **QuestionTrue_End**: End of a set of bookmarks to insert the "True" text for a True/False question. The text can be localized. Inserted as part of the set of bookmarks for the question.

- **QuestionType**: Inserts the Question Type within a question type bookmark.

- **RequiredField**: Inserts the required fields as specified in the System Process Document section of the Properties toolpane in the Developer. It is inserted as part of the Table of Properties on the System Process Document submenu of the Topic Properties menu.

- **RequiredFieldComment**: Inserts the required field comments as specified in the System Process Document section of the Properties toolpane in the Developer. It is inserted as part of the Table of Properties on the System Process Document submenu of the Topic Properties menu.

- **Roles**: Inserts a list of roles assigned to the document as specified in the Properties toolpane for the topic or in the Roles field in the Details view of the Developer. It can be inserted from the Details menu.

- **ScreenShotImage**: Inserts a placeholder for the screenshot for a frame. It is inserted as a part of the Table of Action Steps and the List of Action Steps, both of which are on the Frames submenu of the Outline menu.

- **SPDRevision:** Inserts the revision number appended to the document type at publication as specified in the System Process Document section of the Properties toolpane in the Developer. It is inserted as part of the Table of Properties on the System Process Document submenu of the Topic Properties menu.

- **State**: Inserts the document state, such as Draft, as specified in the Properties toolpane for the document or in the State field in the Details view. It can be inserted from the Details menu.

- **Status**: Inserts the status of the document as specified in the System Process Document section of the Properties toolpane. It is inserted as part of the Table of Properties on the System Process Document submenu of the Topic Properties menu.

- **TableHeader**: Controls table row repeating and step numbering. Do not delete. Must be inserted manually.

- **TargetFrameNum**: Inserts target frame number for Decision frame paths and alternative paths. It is inserted as a part of the Table of Action Steps and the List of Action Steps, both of which are on the Frames submenu of the Outline menu.

- **TargetPageNum**: Inserts target page number for Decision frame paths and alternative paths. It is inserted as a part of the Table of Action Steps and the List of Action Steps, both of which are on the Frames submenu of the Outline menu. Do not use; it has been deprecated and remains to support legacy templates.

- **TDRevision**: Inserts test document version appended to the document type at publication as specified in the Test Document section of the Properties toolpane in the Developer. It can be inserted from the Test Document submenu of the Topic Properties menu.

- **TestNotesFrameID**: Used in the template to find an HTML element that needs to be updated with Pass/Fail/Skip status. To be used only in the Test It! Detailed Summary Report.

- **TestPurpose**: Inserts the purpose of the test as specified in the Test Document section of the Properties toolpane in the Developer. It can be inserted from the Test Document submenu of the Topic Properties menu.

- **TestResultsFrameID**: Used in the template to find an HTML element that needs to be updated with Pass/Fail/Skip status. To be used only in the Test It! Detailed Summary Report.

- **TestSetup**: Inserts the test setup as specified in the Test Document section of the Properties toolpane in the Developer. It can be inserted from the Test Document submenu of the Topic Properties menu.

- **Topic_Begin**: Beginning of a repeating bookmark for topics. It can be inserted from the Topics submenu on the Outline menu.

- **Topic_End**: End of a repeating bookmark for topics. It can be inserted from the Topics submenu on the Outline menu.

- **TopicConcept_Begin**: Beginning of a repeating bookmark for concepts. It is inserted as part of Concept, with Format Defined in Developer and Concept, or with Format Defined in Template on the Topics menu on the Outline menu.

- **TopicConcept_End**: End of a repeating bookmark for concepts. It is inserted as part of Concept, with Format Defined in Developer and Concept, with Format Defined in Template on the Topics menu on the Outline menu.

- **TopicFrameCount**: Inserts the number of frames per topic. It can be inserted from the Topics submenu on the Outline menu.

- **TopicName**: Inserts the topic name, with style defined in this template. It can be inserted from the Topics menu on the Outline menu.

- **Trigger**: Inserts action or condition that triggers the system process as specified in the System Process Document section of the Properties toolpane in the Developer. It is inserted as part of the Table of Properties on the System Process Document submenu of the Topic Properties menu.

- **TrueFalseQuestionType_Begin**: Beginning of a set of bookmarks for a True/False question. It is inserted as part of the Question option on the Questions and Assessments submenu of the Outline menu.

- **TrueFalseQuestionType_End**: End of a set of bookmarks for a True/False question. It is inserted as part of the Question option on the Questions and Assessments submenu of the Outline menu.

- **Url**: Inserts a URL link. It must be located between the UrlType repeating tags. It is inserted as a part of the Table of Action Steps and the List of Action Steps, both of which are on the Frames submenu of the Outline menu on the toolbar, as well as Concept, with format defined in Developer, on the Topics and Modules and Sections submenus on the Outline menu.

- **UrlType_Begin**: Beginning of a repeating bookmark for inserting URLs. It is inserted as a part of the Table of Action Steps and the List of Action Steps, both of which are on the Frames submenu of the Outline menu on the toolbar, as well as Concept, with format defined in Developer, on the Topics and Modules and Sections submenus on the Outline menu.

- **UrlType_End**: End of a repeating bookmark for inserting URLs. It is inserted as a part of the Table of Action Steps and the List of Action Steps, both of which are on the Frames submenu of the Outline menu on the toolbar, as well as Concept, with format defined in Developer, on the Topics and Modules and Sections submenus on the Outline menu.

- **UserDefinedQuestionType_Begin_End**: Inserts the beginning and ending of a repeating bookmark for a User Defined Question.

- **Version**: Inserts the version of the document as indicated in the Version field in the Details view of the Developer. It can be inserted from the Details menu.

- **Webpage_Begin**: Beginning of a repeating bookmark for web pages. It is inserted as a part of the Table of Action Steps and the List of Action Steps, both of which are on the Frames submenu of the Outline menu on the toolbar, as well as Concept, with format defined in Developer, on the Topics and Modules and Sections submenus on the Outline menu.

- **Webpage_End**: End of a repeating bookmark for web pages. It is inserted as a part of the Table of Action Steps and the List of Action Steps, both of which are on the Frames submenu of the Outline menu on the toolbar, as well as Concept, with format defined in Developer, on the Topics and Modules and Sections submenus on the Outline menu.

- **WebpageImage**: Inserts a placeholder for an image in a web page. It is inserted as a part of the Table of Action Steps and the List of Action Steps, both of which are on the Frames submenu of the Outline menu on the toolbar, as well as Concept, with format defined in Developer, on the Topics and Modules and Sections submenus on the Outline menu.

- **WebpageText**: Inserts web page with formatting defined in this template, with the exception of the alignment of images. Images will reflect the alignment as it is in the Developer. It is inserted as a part of the Table of Action Steps and the List of Action Steps, both of which are on the Frames submenu of the Outline menu on the toolbar, as well as Concept, with format defined in Developer, on the Topics and Modules and Sections submenus on the Outline menu.

17.8.10 Style Reference

The following is a list of styles used in the template.

- **Header**: Arial, 14 point, Bold; used for the name of the document type in the header.

- **Footer**: Arial, 10 point; used for the footer text.

- **Heading1**: Arial 16 point Bold, space before 12 point, space after 3 point, Keep with next; used for the Glossary header and all level 1 items in the outline, usually the Outline name. Text with this style will appear in the Table of Contents.

- **Heading2**: Arial 16 point Bold, space before 12 point, space after 3 point, Keep with next; used for all level 2 items in the outline. Text with this style will appear in the Table of Contents.

- **Heading3**: Arial, 14 point , space before 12 point, space after 3 point, Keep with next; used for all level 3 items in the outline. Text with this style will appear in the Table of Contents.

- **Heading4**: Arial Bold, space before 12 point, space after 3 point, Keep with next; used for all level 4 items in the outline. Text with this style will appear in the Table of Contents.

- **Heading5**: space before 12 point, space after 3 point, Keep with next; used for all level 5 items in the outline. Text with this style will appear in the Table of Contents.

- **Heading6**: space before 12 point, space after 3 point, Keep with next; used for all level 6 items in the outline. Text with this style will appear in the Table of Contents.

- **Heading7**: space before 12 point, space after 3 point, Keep with next; used for all level 7 items in the outline. Text with this style will appear in the Table of Contents.

- **Heading8**: space before 12 point, space after 3 point, Keep with next; used for all level 8 items in the outline. Text with this style will appear in the Table of Contents.

- **Heading9**: space before 12 point, space after 3 point, Keep with next; used for all level 9 items in the outline. Text with this style will appear in the Table of Contents.

- **procedure**: Times New Roman, 11 point, bold. This style defines the formatting of the word “Procedure”. This text will not appear in the Table of Contents.

- **infoblock**: Times New Roman, 11 point; used for formatting the icon for the frame-level attachments.

- **highlighttext**: Times New Roman, 11 point, 12.5% shading; used for highlighting the text in the action steps, such as Go to step and End of Procedure.

- **titlepagetitle**: Times New Roman, 16 point, Bold centered. This style is used for the Title on the Title Page of the Training Guide and the Instructor Manual.

- **titlepagedate**: Times New Roman, 14 point, Bold centered. This style is used for the date on the Title Page of the Training Guide and the Instructor Manual.

- **Leadintext**: Times New Roman, 11 point. This style is used for all lead-in text information.

- **Steptext**: Times New Roman, 11 point. This style is used for the text that appears in the action steps.

- **Glossarytext**: Times New Roman, 11 point. This style handles the definitions of the words in the glossary section.

- **Glossaryword**. Times New Roman, 11 point, Bold. This style handles the glossary words (may or may not be a style).

- **AFORWARD**: Arial 18 Small caps. This style formats the "Copyright & Trademarks" text.

- **tocheader**: Times New Roman, 20 point. This style formats the text “Table of Contents”.

- **TOC1**: Times New Roman, 12 point, Bold, 6 point space before. This is the first level heading that appears in the Table of Contents. All items that are Heading1 style will appear in the TOC using this style.

- **TOC2**: Times New Roman, 11 point, Bold, 6 point space before, Indented left 0.15". All topics that are H2 style will appear in the Table of Contents using the TOC2 formatting.

- **TOC3**: Times New Roman, 10 point, Indented left 0.30". All topics that are H3 style will appear in the Table of Contents using the TOC3 formatting.

- **TOC4**: Times New Roman, 9 point, Indented left 0.45". All topics that are H4 style will appear in the Table of Contents using the TOC4 formatting.

- **TOC5**: Times New Roman, 9 point, Indented left 0.60". All topics that are H5 style will appear in the Table of Contents using the TOC5 formatting.

- **TOC6**: Times New Roman, 9 point, Indented left 0.75". All topics that are H6 style will appear in the Table of Contents using the TOC6 formatting.

- **TOC7**: Times New Roman, 9 point, Indented left 0.90". All topics that are H7 style will appear in the Table of Contents using the TOC7 formatting.

- **TOC8**: Times New Roman, 9 point, Indented left 1.05". All topics that are H8 style will appear in the Table of Contents using the TOC8 formatting.

- **TOC9**: Times New Roman, 9 point, Indented left 1.20". All topics that are H9 style will appear in the Table of Contents using the TOC9 formatting.

17.8.11 Modify the Header or Footer

One of the most common items to customize is the header and footer of any of the document types. You can change the logo, insert any Microsoft Word fields, or add static text. Note that you cannot insert bookmarks from the toolbar in the header or footer, only standard Word fields such as page number or document name. If you do put bookmarks in the header or footer, they will not be processed and will appear as static text in the published document.

Change the Logo in the Header

Each print document displays a default logo in the header. The graphic is embedded in the Microsoft Word template. You can use the copy and paste functions within Microsoft Word to embed your logo graphic. Be sure to size the graphic properly so that the header is not stretched out of proportion.

Note: You can also use the Customize Logo tool in the Developer to replace the logo. If you use this tool, the logo should be no larger than 230x44 pixels.

Add the Document Name to the Footer

You can add the document name to the footer of the document using a Microsoft Word field. In the PrintTemplate.docm file, choose Field from the Insert menu and select FileName from the Field Names list.

17.8.12 Check Syntax

After you have made your changes to the PrintTemplate.docm file, it is highly recommended that you check the syntax. This tool checks:

- For repeating pair omission: The begin or end half of the pair was found, but not the other half. Check that the tag exists and that the bookmark name is spelled correctly.
- For begin and end tags in the wrong order: The end tag appears before the begin tag for the same repeating pair. Delete the pair and insert them in the correct order.

The syntax checker starts at the beginning of the file. When it encounters an error, the check Syntax dialog box opens with an explanation of the error that was found, and the error is highlighted in the document. Make the correction, close the Check syntax dialog box, and start the syntax checker again. Repeat this process as necessary to find and correct all errors.

Note: The syntax checking process is manual; it does not happen automatically when the document is saved.

17.9 Customize Logos by Category

Although you can manually customize the logo in each publishing style such as the Player, the Presentation, and the document formats, you can also globally change the logo in all publishing styles and languages for a specific category in the Library.

You should always make a copy of original publishing styles installed with the software before you make any modifications. Also consider adding a new category in which to store the customized publishing styles. When you publish content, make sure you choose the appropriate category that contains the customized publishing styles.

Note: If you create custom publishing styles, you should document your customizations so you can easily re-apply them, if necessary, after a software upgrade.

17.9.1 Use the Customize Logo Tool

To customize logos globally for all publishing styles in a category, you can use the Customize Logo command on the Tools menu. This command prompts you to choose a category of publishing styles and an image file. You can choose to replace the default logo with any image in .gif, .bmp, .jpg, .jpeg, .tif, or .png file format. The Developer converts and renames it to small_logo.gif, and replaces all instances of small_logo and large_logo in all output styles for the selected category. This process will override any existing graphics that are in the existing publishing styles.

Note: The image that you use is not resized, cropped, or otherwise edited. You should use an image of the recommended pixel size (230W x 44H).

Multi-user Considerations

- For changes to be made to a document using this tool, the document must be checked out. If you plan to use this tool offline, you should check out all affected documents before going offline.

  When you execute this process, the Developer searches through all of the documents in the selection, regardless of their check in/out state. If a change is necessary and the document is not checked out and if you are working online, the Developer automatically checks the document out to you and makes the change. If the document cannot be checked out, for example, if it is open in another editor or checked out to another user or you are working offline, it is skipped. At the end of the process, a summary message appears with a link to an activity log. Clicking the View activity log link in the message displays a list of the documents that were checked out to you during the process and those that could not be checked out. After you save any changes, you should check in the documents to make them available to other authors and add the changes to the Developer's version control system.

  Also note that you must have Modify permission to the folder where the publishing styles (or project documents) are stored for the category you select to successfully change logos.

To globally customize logos for a category of publishing styles:

1. On the **Tools** menu, choose **Customize Logo**.
2. Select a category or accept the default.
3. Browse to the location of the image file and select it.
4. Click **Open** to add the image.
5. Click **OK** to process the changes. When the process is complete, you can view the activity to determine the changes that were made.
6. Click **OK** to close the Update dialog box.

17.10 Command-Line Publishing

You can launch the publishing process from a command line. This allows you to create a batch publishing task that can be scheduled and run automatically at a time when the server or network is not as busy, such as at night or on the weekend.

You must publish content first to create a publishing task. This creates a folder structure and at least three files that are needed for command line publishing. The selection.xml, publishing.project.xml and at least one configuration (<format_guid>.config.xml) files are created at the root of the destination folder.

The selection.xml file contains a list of the documents to publish, the publishing.project.xml contains global parameters that apply to all publishing formats and a list of all configuration files (<format_guid>.config.xml) - one for each output format. The <format_guid>.config.xml contains the parameters that apply to a particular format.

The output from command line publishing will be stored in the same location as it would be if the publishing process was launched from within the Developer.

17.10.1 Use Command-Line Publishing

To use command-line publishing, you create a command line in the following format:

```
\path\commandlinepublish <settings> /profilename:<profile_name>
```

or

```
\path\commandlinepublish <settings> /profile:<profile_path>
```

You can use either the profilename or profile parameter; you do not need to use both. The password parameter is optional. See the descriptions below for details.

<settings>
Path to the selection.xml file in the destination location for the published content.

/profilename
The name of the user profile to use for the publishing process. This profile must exist in the UserProfiles folder of the computer on which the publishing job is being run and the password must be stored with the profile.

/profile
The path and file name of a user profile, such as \path\<profile>.xml. If this is not an absolute path, it is interpreted as a path relative to the publishing utility's folder. Use this parameter to specify a profile that exists outside of the UserProfiles folder. The password must be stored with the profile.

You must put the path for the commandlinepublish.exe file in the batch file, or issue a command to change into the appropriate directory first. The commandlinepublish.exe must reside in and be executed from the folder where the Developer is installed. In addition, the location where the Developer is installed and the destination location for publishing must be in accessible locations.

Note: If the path to the commandlinepublish.exe or the settings file contains spaces, you must enclose the entire path in quotes.

17.10.2 Execute Batch Publishing

You can execute multiple publishing jobs in a batch. Each job must be on a separate command line in the batch file.

18 Export/Import Content

You can exchange content between libraries and database servers and create backup copies of your content using export and import. When selecting content to export, you can choose a single document or folder, a selection of related documents, a collection of folders, or even an entire Library. The export process creates a single archive file that contains all of the documents included in the selection. Import adds all of the contents of an archive file to your Library, including their folder structure. If any errors occur during either process, they are written to an activity log, which is available for viewing upon completion of the process.

The export/import functionality allows you to:

- Deliver content to your clients, allowing them to import it into their own libraries on their own servers and modify it further
- Share and/or combine content among multiple developers working in single-user environments
- Modify publishing styles
- Share content defaults
- Localize content
- Share (Import/Export) sound files
- Prepare a backup archive of your current content that can be imported back into the same Library for content restoration or recovery if necessary

Note: Use of export/import as a means of backing up your content is especially recommended for single user installations, as this type of installation does not include version control.

The export command is available only from the Library and Outline Editor, whereas import is a global menu command. Both commands are invoked from the Tools menu.

All document content in the Library, such as modules/sections, topics, web pages, glossaries, roles, questions/assessments, publishing styles, and so on, can be exported and hence imported as well. Included with each exported document are its embedded document properties, such as document name and language, as well as information about its links to other documents and its location within the folder structure of the Library. This information is included in the export archive even if the folders and/or the targets of the links themselves are not. Likewise, the folder structure is recorded in the export archive even if no folders are selected for export. The links and folder structure are rebuilt upon import as needed.

Multi-user Considerations

- Unlike embedded document properties, external document properties are not included in the export of a document. These properties, such as State, are generally workflow-related and are stored on the server rather than as part of the document. When you import a document into a new Library, you must reset these properties as needed.

  Also excluded from export, and therefore import, are document history and deleted documents. As a result, export/import provides only a partial backup in a multi-user environment. Therefore, you should use export and import for backup only as a supplement to your standard server backup procedures.

  Folder permissions are not exported.

You can export and import whether online or offline. To export while offline, you must have the documents in your local cache. If you import while offline, you should check in the imported documents the next time you are working online, to make them available to other authors and add any changes to the Developer's version control system.

18.1 Export Content

Export, in combination with import, allows you to exchange content between libraries and database servers and create backup copies of your content. You can export your content from either the Library or the Outline Editor. An advantage of exporting from the Library is that you can choose a wider range of content to export by selecting multiple folders or multiple documents that are not necessarily linked to each other. In fact, you can export your entire Library by selecting the root folder.

Tip: You can back up all or part of your Library using the export command. Select the root folder of the Library to export and backup your entire Library.

Exporting from the Outline Editor allows you to easily select all or part of a specific outline for export. However, you cannot select unrelated documents or multiple, independent outlines from the Outline Editor.

Tip: You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click). You can select all items in a folder by choosing Select All from the Edit menu.

After selecting content and initiating the export process, your next step is to set the export options.

The first option is the location in which to save the export archive. The default location is the My Documents folder on your local hard drive, but you can choose any other location on your computer or server for which you have Write permissions. You must also specify a name for the archive file, which has the extension odarc.

The second option allows you to export your selection only or your selection and all related documents. In general, documents linked as children of the documents in your selection are included as related, whereas those linked as parents are not. Click the View related documents link to display a list of all documents related to your selection.

Note the following points about related documents as applied to export:

- If the selection is a folder, related documents include all documents related to the documents contained in the folder, regardless of where they are located in the Library. The folder structure of the related documents is recorded in the archive file as well.

- Any glossary assigned to a document selected for export is included as a related document, along with all packages and web pages used for definition links.

- When you export a glossary document directly (by selecting it from the Library), its related documents include all packages and web files used for definition links. Documents to which the glossary is assigned are not included as related documents.

- Icon packages (both standard and custom) are included as related documents of topics containing frame links.

- Questions or assessments (included all questions in the assessment) are included as related documents for export.

- Role lists are not included as related documents for export. However, roles assigned to each topic are included, because they are part of the topic's properties. If you wish to export a role document, you must explicitly select it from the Library.

- Custom-recorded sound is saved as part of its topic and is therefore included when the topic is exported.

- Web page sound is exported when it is part of the selection or related documents, or is part of a framelink concept.

- Templates are not included as related documents for export. To export a template, you must select it directly from the Library (System/Templates folder).

- Packages containing template and object name sound are not included as related documents of templates. To export these packages, you must select them directly from the Library (subfolder of the System/Templates folder). Alternatively, you can select the parent folder to export the template and associated sound together.

- Packages, role documents, and templates do not have related documents.

Multi-user Considerations

- In a multi-user environment, when you are online, you also have the option to choose local or server content. Local content includes the locally edited copies of all selected documents that you have checked out and the server versions of those not checked out to you. Use this option for documents in progress for review. Server content includes only the checked in versions of the selected documents. Any local changes to checked out documents are ignored. Use this option for final versions of documents.

  Also note that you can export while offline, but to do so, you must have the documents in your local cache.

During the export process, all of the selected content is written to a single compressed archive file with the extension odarc. The archive file also includes the absolute Library folder structure for each document, as well as information about all links to and from the documents. A summary message appears if some of the documents you selected could not be processed. Clicking the View activity log link in the message displays a list of the results for each document.

Note: A utility exists to uncompress and recompress odarc archives, if you need to work with the constituent files outside the Developer. See *Understand Developer Archives*.

Selecting Cancel during the export process displays a message with a link to a list of the documents that have already been exported. Although the partial archive file resulting from the cancelled process is not deleted automatically, this archive file is unusable and cannot be successfully imported. In addition, you cannot continue an export process that has been cancelled, and you cannot add to an existing archive file. To obtain a usable archive file in this case, you must restart the process from the beginning.

To export content:

1. From the Library or Outline Editor, select the folder(s) and/or document(s) you want to export.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click).

2. On the **Tools** menu, point to **Export** and choose **Documents**.

3. Set the export options.

4. Click **Export** to execute the process.

   The export tool analyzes and processes the selected documents, creating a single

archive file in the specified location.

If any errors occur, they are written to an activity log, and a Partial Export message box appears. You can click the View activity log link to view the results of the export or click OK to close the message box.

18.2 Import Content

Import, in combination with export, allows you to exchange content between libraries and database servers and restore backup copies of your content. You can import a content archive file from the Tools menu.

When importing, you can select a single archive file, identified by the extension odarc. The Developer validates the archive structure when you initiate the import process. Therefore, you cannot choose to import only specific pieces of an archive; you must import the entire archive as a unit.

Next, you specify the Library location into which the contents of the archive are to be imported. You can browse to select an existing folder or type a new folder name, including Library path if necessary, to create a new folder for the imported material.

Finally, you have the option to overwrite existing documents or not. You should choose the overwrite option if the archive contains updated versions of documents that are already in your Library. In contrast, you might choose not to overwrite existing documents to import only new documents from an archive containing some documents that are new and some that are already present in your Library. Skipping the existing documents in this way speeds the import process.

In general, the import process writes the contents of the archive file to your Library in the selected location, re-creating the documents and their Library structure as necessary, as well as links to and from the documents. A summary message appears if some of the documents you selected could not be processed. Clicking the View activity log link in the message displays a list of the results for each document.

The specific results of importing an archive depend on the contents of the archive, the existing contents and structure of the Library, and the specified import options, as detailed next.

- The Library folder structure represented in an archive corresponds to the absolute folder structure relative to the root of the Library from which the archive was created. During import, this folder structure is created relative to the import location specified in the Import dialog box. Therefore, to exactly reproduce the folder structure of the Library from which the archive was created, you should select the root ("/") as the import location.

- If the Library folder structure represented in an archive already exists in the specified import location, the contents of the archive folders are written to the existing Library folders, which has the net effect of merging the corresponding folders. Otherwise, the archive folder structure is created in the specified location.

- For the purpose of overwriting during import, documents are identified solely on the basis of Document ID, not title, language, or any other document property; location in the Library is also not important. Therefore, for a given document in an archive, the following three situations can arise:

  No document with the same ID exists in the Library - The new document is created in the specified import location.

  A document with the same ID exists in the Library but overwrite is not selected - The archive document is skipped.

  A document with the same ID exists in the Library and overwrite is selected - The

document is overwritten in its current Library location, regardless of the selected import location. That is, documents are never moved within the Library when they are overwritten during import.

- For the purpose of re-creating links during import, documents are again identified solely on the basis of Document ID; location in the Library is not important. Therefore, if a document links to a child document with a given ID and a document with the same ID as the child already exists in the Library (or is imported at the same time as the parent), the link is re-created. If no such child document exists, a broken link results.

- If the imported content includes new documents that were stored in the System folder, the new documents are always imported into the System folder and not in the folder specified for the import.

The following information summarizes the results of import for different combinations of import options:

- New content with new folder structure
  Overwrite: NA
  Results: New folder structure is created in the specified Library location; new documents are created in these folders

- New content with existing folder structure and root folder selected as the import location
  Overwrite: NA
  Results: New documents are created in the existing folder structure (the folders are merged).

- Existing content with new or existing folder structure
  Overwrite: No
  Results: Existing documents that are not overwritten are not imported.

- Existing content with new or existing folder structure
  Overwrite: Yes
  Result: Existing documents are overwritten in their current Library locations.

- Mixture of new and existing content with new or existing folder structure and the root NOT selected as the import location
  Overwrite: Yes
  Result: New folder structure is created in the specified import location, and new documents are created in these folders; existing documents are overwritten in their current Library locations.

- Mixture of new and existing content with existing folder structure and the root selected as the import location
  Overwrite: Yes
  Result: Existing documents are overwritten in their current Library locations, and new documents are created in the existing folder structure.

- Selecting Cancel during import stops processing after completion of the current document and displays a message with a link to a list of the documents that have already been imported. Click the View activity log link in the message to display a list of the results for each document.

Also note that, during import, the Developer identifies all roles used in the imported content. It then compares these roles to the master role list of the same language. If any of these roles is not included in the appropriate master role list, the Developer attempts to add the role to the role list. If the role cannot be added to the list, for example, if the master role list is open in an editor, the role is still kept in the content but is not included in any role list. You can later update the master role list to include these roles, if desired.

Multi-user Considerations

- For a document to be overwritten during import, it must be checked out. Therefore, before initiating the import process, you should ensure that any documents that must be overwritten are either checked out to you or checked in to the server. If you plan to import an archive while offline, you must check out all such documents before going offline.

  However, if a document that needs to be overwritten is not checked out and you are online, the Developer automatically checks the document out to you and replaces it with the corresponding document from the archive. If the document cannot be checked out, for example, if it is open in another editor or checked out to another user, it is skipped.

  Note that, if a document in the archive existed in the Library but had been deleted, overwriting moves the document from Deleted view to Library view, thus restoring the document. The document is restored in its original location, regardless of the selected import location.

  Also note that, if the Developer needs to add roles to a master role list during import, this master role list must be checked out. If the role list is not checked out and you are online, the Developer automatically checks it out to you and adds the necessary roles. If the role list cannot be checked out, for example, if it is open in an editor or checked out to another user, the roles are kept in the imported content but are not added to the role list. You can later update the master role list to include these roles, if desired.

  After you complete the import process, you should check in all affected documents (new and overwritten) to make them available to other authors and add the changes to the Developer's version control system. If a document was overwritten, its version number is incremented only if its contents have changed. That is, if a document in the archive was identical to the same document already in the Library, overwriting on import does not affect the document's version history.

To import content:

1. On the **Tools** menu, point to **Import** and choose **Documents**.
2. Set the import options.

   To exactly reproduce the folder structure of the Library from which the archive was created, select the root ("/") in the **Import content to** field.
3. Click **Import** to execute the process.

   The import tool analyzes and processes the selected archive, adding the archive documents and re-creating their relative folder structure in the specified Library folder.

   If any errors occur, they are written to an activity log, and a Partial Import message box appears. You can click the View activity log link to view the results of the import or click OK to close the message box.

18.3 Export and Import Sound Files in Bulk

While you can work with sound files individually while recording a topic or in the Sound Properties pane from within the Developer, you can also work with them outside of the Developer. To do this, you export and import the sound files in bulk. Exporting the sound files creates a central location for the files, with the appropriate folder structure. After you have created or edited the files, you can them import them back in to the Developer easily.

The process consists of three overall steps:

- Export the files: This creates a central location where the sound files are stored as .wav files.
- Create or edit the files: Using external tools, edit existing sound files or create new ones. The sound report, created during export, lists the existing and missing files.
- Import the files: This imports the sound files from the external location back in to the appropriate topics or web pages in the Developer.

18.3.1 Export Sound Files in Bulk

When exporting sound files, you select the location for the exported files. By default, the files are exported to \MyDocuments\<brand>\Sound. The export process creates two folders within the Sound folder. The Bubble folder contains the topic sound files, and the WebPage folder contains the web page sound files. Within each of these folders, there are folders named with the GUID of the topic or web page.

The export process also creates a Sound Report as an .html file. This report provides information about each exported sound file and is useful in identifying missing sounds that need to be created. Bubble sound and web page sound are listed separately on the report. The Sound Report can produce a report of all sounds related to See It/Try It modes or Do It mode.

Web page sound is exported if it is included in a selection or if it is part of the related documents. Web page sound that is linked to a frame using the Frame Link toolpane in the Topic Editor is also exported.

Sound files can be exported from the Outline Editor or the Library.

Note: You can export sound files on a frame by frame basis from the Topic Editor. See *Export a Sound File* for more information.

Multi-user Considerations

- In a multi-user environment, when you are online, you have the option to export local or server content. Local content includes the locally edited copies of all selected documents that you have checked out and the server versions of those not checked out to you. Use this option for documents in progress for review. Server content includes only the checked in versions of the selected documents. Any local changes to checked out documents are ignored. Use this option for final versions of documents.

  Also note that you can export while offline, but to do so, you must have the documents in your local data storage location.

To export sound files:

1. On the **Tools** menu, point to **Export** and choose **Sound**.
2. Choose whether you want to export related documents, server or local content, and the text for See It!/Try It! or Do It! modes.
3. Click **Export**.

18.3.2 Use the Sound Report

The Sound Report.html provides information about each exported sound file. It is useful in identifying missing sound files that need to be created or locating sound files that need to be edited. Bubble sound and web page sound are listed separately on the report. One of the

options during export allows you to specify whether the Sound Report has the text for See It!/Try It! mode or Do It! mode.

The Sound Report has several columns:

- **Document**: The name of the topic or web page.
- **Text**: The bubble text or the web page text, as appropriate. You can record the entire text or paraphrase it when recording sound.
- **Sound File Name**: The name of the .wav file for the sound. If the name is sound.wav, the sound is for a web page. If the name is Intro.wav, End. wav, or a number .way, for example, 12.wav, the sound is for the bubble in a topic.
- **Location**: The location where the sound file is stored or should be stored. The link also indicates whether the file belongs in the Bubble folder or the WebPage folder. You can click the link to open the correct folder for the file.
- **File Exists?**: Indicates whether the file has already been created.

18.3.3 Import Sound Files in Bulk

Once you have finished editing or creating sound files, you can easily import them back in to the Developer. Select the root folder of your audio files and import the entire sound folder structure. Topic sound is imported from the Bubble folder and web page sound is imported from the WebPage folder. Upon completion of import, an activity log is generated showing the import status, file names and locations where the files where imported.

Note: You can import sound files on a frame by frame basis from the Topic Editor. See *Import a Sound File* for more information.

To import sound files:

1. On the **Tools** menu, point to **Import** and choose **Sound**.
2. Indicate whether you want it to overwrite existing files.
3. Click **Import** to execute the process.

   The import tool analyzes and processes the selected archive, copying the sound files into the appropriate locations in the Library.

18.4 Extract a Developer Archive

If you plan to edit any of the documents contained in an archive, you must first extract the archive file. To do this, you use the command-line utility OdArc.exe. After saving your changes to the documents, you use the same OdArc.exe utility to recompress the archive so that it can be imported.

OdArc.exe is stored in the directory in which the Developer is installed. Therefore, you must change to this directory in order to execute OdArc.exe from the command line.

The syntax for extraction is as follows:

```
odarc /x <archive_path> <destination_folder>
```

where

- <archive_path> is the filename, including absolute path, of the archive to be extracted

- <destination_folder> is the location for the extracted files

During archive extraction, the OdArc utility processes the selected archive and writes its contents to the specified location in the form of an archive manifest and a collection of folders for the documents contained in the archive. Because the functioning of the archive depends on its relative structure, you should always extract each archive to a clean, empty folder, so that the folder contains only the extracted archive files. This destination_folder location can be a subfolder of the directory containing the archive to be extracted, or it can be a completely different location. However, you should not extract an archive into the same folder in which the archive itself is located.

As an example, consider a Developer archive file named "test.odarc" that was exported to the "temp" directory at the root of the local computer and is to be extracted to a subfolder named "extract" in the same directory, the command line should read:

```
odarc /x c:\temp\test.odarc c:\temp\extract
```

Tip: As with all command-line utilities, you must enclose folder names and paths in double quotation marks (") if they include spaces. For example, if the archive mentioned above had been exported to a folder named "export" on the desktop of the local computer, the command line should read:

```
odarc /x “c:\documents and settings\userid\desktop\export\test.odarc”
“c:\documents and settings\userid\desktop\export\extract”
```

18.5 Understand Developer Archives

The export process writes all of the selected content to a single compressed archive file with the extension odarc. The import process then takes a single odarc file as input to re-create the contents of the archive in the current Library. Therefore, to exchange documents between libraries, you need not open any archive files. However, if you plan to edit any documents contained in an archive outside the Developer, you need to extract the archive and understand its structure and contents. When you are done making your changes, you must then recompress the archive to make it available for import. See the *Extract a Developer Archive* and *Recompress a Developer Archive* topics in the *Import/Export Content* chapter of the Content Development manual for more information. The overview of Developer archives provided here can help you determine which files you need to edit to make your desired changes.

Each archive file consists of several components representing the documents it contains and their relative structure. In particular, the archive consists of an archive manifest and a folder for each document, labeled with the document ID. The manifest lists all of the Library folders and documents included in the archive, and each document folder in the archive contains all necessary information and files required to re-create the document in the Developer upon import. The specific contents of each archive folder therefore depend on the type of document, as summarized later in this section.

Manifest File

The manifest file, manifest.xml, begins with a list of the Library folders making up the absolute Library paths of all documents in the archive. The manifest then lists each document, along with several properties, including absolute Library path, document ID, title, type, and language. The schema used to render the document type upon import is also included.

The manifest file therefore functions as a table of contents for the archive, defining the documents it contains and their relative folder structure. Upon import, the Developer reads the manifest and verifies that appropriate archive folders exist for all documents listed therein. All of the documents specified in the manifest must be present for the archive to be imported. This manifest information then directs how the archived documents are re-created during import from the contents of the archive folders.

Warning! Do not rename or delete any of the files and folders contained in a Developer archive, as this renders the archive unusable.

Module/Section Archive Folder

The archive folder for each module and section contains the following three files:

- section.xml: List of several properties of the module/section, including document schema, template, glossary (if assigned), screen resolution, and directly linked children
- linksto.xml: List of document IDs of all documents directly linked as children of the module/section, as well as the template and glossary (if assigned)
- search.xml: Search proxy file used to speed text search, spell checking, and glossary markup in the Developer

Topic Archive Folder

The archive folder for each topic contains the following three files, as well as a varying number of graphics files depending on the number of frames in the topic:

- topic.xml: List of several properties of the topic, including document schema, template, glossary (if assigned), screen resolution, play modes, and topic context; also includes detailed information specific to each frame of the topic, such as screenshot file name, action, hotspot, and custom bubble text
- linksto.xml: List of document IDs of all linked attachments and link icons, as well as the template and glossary (if assigned)
- search.xml: Search proxy file used to speed text search, spell checking, and glossary markup in the Developer; includes all searchable text in the topic, such as bubble text, keywords, and decision frame text
- *n*.png: Graphics files containing screenshots for all frames, numbered in the same order as the frames in the Frame Structure window of the Topic Editor

Package Archive Folder

The archive folder for each package contains the following subfolder:

- Parts subfolder: Contains all package files and folders, if applicable

Web Page Archive Folder

The archive folder for each web page contains the following three files and one subfolder:

- webpage.xml: List of properties of the web page, including document schema and glossary (if assigned)
- linksto.xml: List of document IDs of any packages or other web pages linked through hyperlinks inserted in the web page; also includes glossary (if assigned)
- search.xml: Search proxy file used to speed text search, spell checking, and glossary markup in the Developer; includes all searchable text in the web page, such as visible text and hyperlink tooltips
- Parts subfolder: Contains index.html, the web page document itself; also contains an images sub-subfolder for embedded graphics, if used in the web page

Note: Images inserted in a web page from a package are represented in index.html by the "file not available" indicator . However, the link to the package graphic is maintained and is restored upon import as long as the web page was exported with its related documents or the same package already exists in the new Library.

Images inserted in a web page from a URL remain linked and visible in index.html.

Glossary Archive Folder

The archive folder for each glossary document contains the following three files:

- glossary.xml: List of glossary terms, including document IDs or URLs of definition links, tooltips, and matching conditions (match whole word, match case)
- linksto.xml: List of document IDs of packages and web pages used as definition links (does not include URL definition links)
- search.xml: Search proxy file used to speed text search, spell checking, and glossary markup in the Developer; lists text of all glossary terms and tooltips

Role Archive Folder

The archive folder for each role document contains the following file:

- roles.xml: List of the roles included in the role document
- search.xml: Search proxy file used to speed text search, spell checking, and glossary markup in the Developer; lists text of each role

Template Archive Folder

The archive folder for each template contains the following two files:

- template.xml: Detailed listing of all template components, such as context-specific template bubble text and associated sound files
- template.xsl: Stylesheet transformation file for processing the template

Publishing Style Archive Folder

The contents of the archive folder for a publishing style depend on the specific output format selected. In general, each publishing style includes files with instructions for executing the publishing process (the two most important being project.xml and style.xml), as well as components needed to build the output. Also included are settings for the publishing style in the Developer publishing Wizard and options pages.

The types of components included in a publishing style vary depending on whether the selected publishing format is a document or Player output. For example, styles for document outputs include document templates, as well as logos, stylesheets, and stylesheet transformation files. Styles for Player-type outputs require many more components, including stylesheets and associated transformation files, graphics and icons, framesets and default frame pages, and JavaScript programs for managing Player-specific functions such as displaying attachments.

See the *Customize Publishing Styles* topic in the *Publish Content* chapter of the Content Development manual for more information.

18.6 Recompress a Developer Archive

After making changes to documents extracted from an archive, you must recompress the archive to prepare it for import. To do this, you use the same command-line utility as used for extraction, OdArc.exe.

OdArc.exe is stored in the directory in which the Developer is installed. Therefore, you must change to this directory in order to execute OdArc.exe from the command line.

The syntax for compression is as follows:

```
odarc /a <source_folder> <archive_path>
```

where

- <source_folder> is the location of the extracted files
- <archive_path> is the filename, including absolute path, of the recompressed archive

During archive recompression, the OdArc utility processes all files contained in the source_folder location and uses them to create the specified Developer archive file. Therefore, you cannot recompress an archive to the source_folder location or any subfolder thereof, as this would create a loop in which the utility was essentially trying to compress the archive into itself. In addition, because the functioning of an archive depends on its relative structure, you should not remove files/folders from or add files/folders to the directory containing an extracted Developer archive, as the archive obtained upon recompression unusable. In general, this means that you should extract each archive to a clean, empty folder; edit the extracted files in place; and then recompress the archive from the same folder.

As an example, consider a Developer archive file named "test.odarc" that was exported to the "temp" directory at the root of the local computer and then extracted to a subfolder named "extract" in the same directory. To recompress this archive back to its original name and location, the command line should read:

```
odarc /a c:\temp\extract c:\temp\test.odarc
```

Note that the name and path of a recompressed archive do not need to match those of the original archive. For example, you might use a name to indicate that the archive had been edited, such as "test_edited.odarc" in the above example.

Tip: As with all command-line utilities, you must enclose folder names and paths in double quotation marks (") if they include spaces. For example, if the archive file mentioned above had been extracted to a subfolder named "extract" within the folder "export" on the desktop of the local computer and was being recompressed to a folder named "edited archives" in the same location, the command line should read:

```
odarc /a “C:\Documents and Settings\userID\Desktop\export\extract”

“C:\Documents and Settings\userID\Desktop\export\edited
archives\test.odarc”
```

19 Localize Content

Once you have created content in one language, you might want to translate it into one or more different languages. The Developer provides functionality that facilitates this aspect of the localization process.

The Developer localization flow involves four main steps:

- Create a duplicate of the existing content to be translated
- Re-record each topic to update screenshots, actions, and object names and apply the appropriate template for the target language to update template text
- Translate custom Developer text, including custom bubble text, web page text, link tooltips, and glossary terms
- Translate external content, such as package files and graphics, and relink these documents to the translated Developer content, if necessary; update glossary links

The first step in any localization task is always to create a duplicate of the content to be translated. The remaining steps involve the translation of different types of content and can be performed in any order, and even concurrently.

Create a Duplicate

To begin the localization process, you must first create a duplicate of the content to be translated. You do this using the Copy command and the Duplicate (selection and related) option of the Paste Special command. This creates new copies of the entire selection and all related documents, including glossaries, and updates the links so that the new parent documents link to the new child documents. The resulting documents serve as placeholders that will be overwritten with the translated content. Therefore, you need to create one duplicate of the original content for each language into which you plan to translate. For example, to translate English content into French, German, and Japanese, you need to create three separate duplicates of the original content.

For simplicity in managing translations, especially those involving multiple languages, it is recommended that you create the duplicate for each target language in a separate, clearly identified Library folder. For the example above, if the English content were an outline titled "Document Basics" stored in a folder of the same name, you might create the folders "Document Basics - FR", "Document Basics - DE", and "Document Basics - JA" and paste one duplicate outline into each folder.

Re-record Topics

A crucial aspect of localizing content is capturing the screenshots and actions of each topic in the target language. To do this, you can use the re-record option in the Topic Editor, which allows you to easily re-create the same series of actions in the new language using the original topic as a guide. You must also update the template bubble text in the topic by selecting the appropriate template for the target language from the Properties toolpane. This provides a localized version of the automatically generated text portions of a topic.

Note: The Developer provides a standard set of Default and Microsoft templates for all supported languages. Therefore, you do not need to translate template text unless you use a custom template or translate your content into an unsupported language.

Translate Custom Text

In addition to recording topic steps, you can also customize your content by adding custom bubble text, using modules and sections for organizational headings, and linking to attachments such as web pages to provide additional information. The text you produce while modifying your content in this way must also be translated for localization. The Developer provides a Localization export and import flow to assist in the translation of this custom text.

The custom text included in the Localization export/import flow depends on the document type as follows:

- Module
  - Document name
- Section
  - Document name
- Topic
  - Document name
  - Custom bubble text, including formatting and markup for play modes and Player and print outputs
  - String input text
  - Implicit text (for string input action)
  - Object names
  - Jump-in points
  - Topic properties such as document output properties, keywords, and roles
  - Frame link tooltips
  - Expected Test Results
  - Author Notes
  - Instructor Notes
- Package
  - Document name
- Web Page
  - Document name
  - Body text, including formatting
  - Image alternative text
- Assessments
  - Document name
- Questions
  - Document name
  - Remediation text
  - Question text
  - Blank Answer text
  - Option text
- Glossary
  - Document name
  - Glossary entries
  - Glossary entry tooltips

You can export this text in Word format for manual translation or XLIFF format for use in professional translation software that supports this format. The export results in a single file that contains a listing of all custom text in the source language that needs to be translated, divided into individual translation units, along with processing information required to ensure that each unit of text is imported correctly. During translation, you add translated text to the Word or XLIFF file so that the file includes the translated text in the target language in parallel with the original source text. After completing the translation, you then import the modified file back into the Developer, using the Import Localization command. During import, the documents that were originally exported in the source language are overwritten with the translated text provided in the Word or XLIFF file, and the Language property of these documents is updated to match the target language.

Note: Because the import process overwrites the text in the original documents, you MUST make a duplicate of the content to be translated before exporting it for localization; otherwise, you will overwrite the content in the original source language.

For a detailed discussion of this process, see *Export Content for Localization* and *Import Localized Content*.

Translate External Content and Update Glossary Links

The third type of content to translate is external material such as package and URL attachments. For example, you might link to an Excel spreadsheet or an external web site from a topic frame, or you might include an embedded graphic in a web page. Such external content is not included in the Localization export/import flow and must be translated separately. After translating such package files, graphics, and so on, you might need to update links in your translated content to ensure that they point to the appropriate targets. For example, if you translate the name of a file in a package, you must ensure that all links in the translated content are updated to reflect the new package file name.

Tip: To avoid having to update links to package files in translated content, you should apply a language-neutral naming convention for package items. You can then differentiate package files of the same name based on the name of the package in which they are contained, which can be translated without breaking any links.

After all text in your content has been translated, you should update glossary links in the translated documents. Because glossary documents are included in the duplication process and the Localization export/import flow, the appropriate glossary, including translated terms and tooltips and updated definition links, will already be assigned to each translated document. However, the links themselves are not preserved during the localization process so as to allow flexibility in the treatment of glossaries.

Note that, aside from glossary links, the only links that might need to be updated in the translated content are those to package files, which are identified, in part, by file name. For other document types, which are identified solely on the basis of Document ID, links are updated automatically when you duplicate the selected content and related documents. Therefore, as stated above, duplication should always be the first step in the localization process.

Multi-user Considerations

- You can use the State workflow property as a means of tracking the various stages of a localization project. For example, you could create State values that identify the typical events that occur such as Released for Translation, Sent to Translation, Translation Review, Translation Complete, and so on.

19.1 Export Content for Localization

The purpose of exporting documents for localization is to extract the text added while customizing your content in a format that makes it convenient for translation.

Before exporting any documents for localization, you must create a duplicate of the complete set of related documents to be translated. The duplicated documents serve as placeholders for the translated content; therefore, one set of duplicates must be created for each target language. It is recommended that you create the duplicate for each target language in a separate, clearly identified Library folder.

After creating the duplicate, you can export it for localization from either the Library or the Outline Editor. If you create the duplicate in a separate folder as recommended, you can simply select the folder itself from the Library. Alternatively, you can select one or more individual documents.

Tip: You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click).

After selecting content and initiating the export process, your next step is to set the export options.

The first option is the location in which to save the localization file. The default location is the My Localization subfolder of the My Documents folder on your local hard drive, but you can choose any other location on your computer or server for which you have Write permissions. You must also specify a name for the localization file. This file name does not in any way affect the processing or translation of the documents it contains, but it is recommended that you use a meaningful name that reflects the intended translation process. For example, you might use the name Document Basics_EN_HU for content to be translated from English into Hungarian. Also note that certain reserved characters are not permitted in localization file names.

In addition to specifying the file name, you also must select the translation file format as either Microsoft Word or XLIFF. In both cases, the same text components of the selected documents are exported; the difference is in the intended translation process. Exporting to Microsoft Word format (file extension doc) provides an easily readable listing of text that is amenable to manual translation. Exporting to XLIFF format (file extension xlf) provides an XML-based file for use with translation tools that support this format. See *Localization Using Microsoft Word* and *Localization Using XLIFF* for more detail.

The second option allows you to export your selection only or your selection and all related documents. In general, documents linked as children of the documents in your selection are included as related, whereas those linked as parents are not. Any glossary assigned to one or more documents in the selection is also included as a related document. Click the View related documents link to display a list of all documents related to your selection.

The third option is to specify the source and target languages. The source language is determined by the Developer and reflects the Language property of the selected document(s). The target language is the language into which the content is being translated. Note that only one target language can be selected. If the same content is intended for translation into multiple languages, this content must be duplicated multiple times, and each set of duplicated content must be exported separately with the appropriate target language specified.

Note: The content of a package document is not exported for localization.

Multi-user Considerations

- In a multi-user environment, when you are online, you also have the option to choose local or server content. Local content includes the locally edited copies of all selected documents that you have checked out and the server versions of those not checked out to you. Use this option for documents in progress for review. Server content includes only the checked in versions of the selected documents. Any local changes to checked out documents are ignored. Use this option for final versions of documents.

  You can also export while offline, but to do so, you must have the documents in your local cache.

  Nevertheless, it is recommended that you check in all documents to be exported for localization and export the server content to ensure that you include the most up-to-date versions.

During the Localization export process, the Developer extracts the custom Developer text included in the selected document(s) and writes it to a single localization file of the selected format (Microsoft Word or XLIFF). Included with the text is some required processing information, such as document and translation unit IDs, that is essential for the text to be imported successfully after translation and must not be changed. (See *Localization Using Microsoft Word* and *Localization Using XLIFF*.) The custom Developer text that is exported for localization depends on the document type as follows:

- Module
  - Document name

- Section
  - Document name

- Topic
  - Document name
  - Custom bubble text, including formatting and markup for play modes and Player and print outputs
  - String input text
  - Implicit text (for string input action)
  - Object names
  - Jump-in points
  - Topic properties such as document output properties, keywords, and roles
  - Frame link tooltips

- Package
  - Document name

- Web Page
  - Document name
  - Body text, including formatting
  - Image alternative text

- Assessments
  - Document name

- Questions
  - Document name
  - Remediation text
  - Question text
  - Blank Answer text
  - Option text

- Glossary
  - Document name
  - Glossary entries
  - Glossary entry tooltips

A summary message appears if some of the documents you selected could not be processed. Clicking the View activity log link in the message displays a list of the results for each document.

Selecting Cancel during the export for localization process displays a message with a link to a list of the documents that have already been exported. Although the partial localization file can be edited and imported, it will include only a subset of the documents intended for translation. Therefore, it is recommended that you delete the partial localization file and restart the process from the beginning.

To export content for localization:

1. From the Library or Outline Editor, select the folder(s) and/or document(s) you want to export for localization.

   You can select multiple documents using the standard Windows selection keys (CTRL+click and SHIFT+click).

2. On the **Tools** menu, point to **Export** and choose **Localization**.

3. Set the export options.

4. Click **OK**.

   The Developer processes the selected documents, creating a single file containing all extractable text, and associated processing information, in the specified location.

   If any errors occur, they are written to an activity log, and a Partial Export message box appears. You can click the View activity log link to view the results of the export or click OK to close the message box.

19.2 Import Localized Content

After editing the exported localization file to include translated text, you use the Localization import command to add the translated content to your Library. This process overwrites the text in the set of duplicate documents that you exported for localization with the translations contained in the imported file.

When importing for localization, you can select a single Microsoft Word or XLIFF localization file. The Developer reads the selected import file and identifies the documents to be replaced according to the Document IDs recorded during export. The replacement of source text by translated text within a document is then based on the translation unit IDs contained in the localization file. If no translation is provided for a particular translation unit, the source text is left unchanged.

In addition to adding the translated text to the imported documents, the import process also updates the Language property of each document to the target language selected during export. If the language of a document has changed since it was exported, you will not be prevented from continuing with the import process, but an informational message will be added to the activity log.

Tip: If the imported content includes topics for which role assignments were translated, you should update the master role list for the target language to include these roles. If no master role list exists for the target language, you should create a new master role list before importing the translated content.

A summary message appears if some of the documents you selected could not be processed. Clicking the View activity log link in the message displays a list of the results for each document.

Selecting Cancel during import stops processing after completion of the current document and displays a message with a link to a list of the documents that have already been imported. Click the View activity log link in the message to display a list of the results for each document.

Multi-user Considerations

- For a document to be overwritten during import, it must be checked out. Therefore, before initiating the import process, you should ensure that any documents that must be overwritten are either checked out to you or checked in to the server. If you plan to import a localization file while offline, you must check out all such documents before going offline.

  However, if a document that needs to be overwritten is not checked out and you are online, the Developer automatically checks the document out to you and replaces it with the corresponding document from the localization file. If the document cannot be checked out, for example, if it is open in another editor or checked out to another user, it is skipped. At the end of the process, a summary message appears with a link to an activity log. Clicking the View activity log link in the message displays a list of the documents that were checked out to you during the process and those that could not be checked out.

  After you complete the import process, you should check in all affected documents to

make them available to other authors and add the changes to the Developer's version control system. When you check in a translated document, its version number is incremented, reflecting the fact that its contents have changed.

It is recommended that you always manually check out all documents to be overwritten during import, to ensure that all documents are processed during import of localized content.

To import content for localization:

1. On the **Tools** menu, point to **Import** and choose **Localization**.
2. Click **Browse** and navigate to the translated file you want to import.
3. Click **OK**.

   The Developer processes the selected file, replacing the text in the original documents with the translated copy.

   If any errors occur, they are written to an activity log, and a Partial Import message box appears. You can click the View activity log link to view the results of the import or click OK to close the message box.

19.3 Localization using XLIFF

XLIFF, or XML Localization Interchange File Format, is an XML-based format that was developed specifically for use in translation projects. As its name and origin suggest, XLIFF was designed to facilitate the exchange of information across different systems during document localization. In general, source text of an arbitrary file format is converted into XLIFF by a filter that depends on the source structure. This filter extracts the translatable content as plain, unformatted text, allowing the translator to concentrate on the meaning of the text to be translated, regardless of the original source file format, structure, or appearance. Such additional information about the source is still preserved in the XLIFF file in the form of tags, which are used to apply the appropriate processing to the translated text so that the original structure and formatting are reproduced upon conversion of the translated text back to the original format.

It is assumed that, if you choose to localize your Developer content using XLIFF, you are already familiar with basic XLIFF concepts and are working with an XLIFF tool or sending your content to a localization vendor who does. Therefore, the discussion here provides only a description of the content of Developer-generated XLIFF files and the subset of XLIFF applicable under these conditions. For further information on XLIFF in general, see the web site of the OASIS Technical Committee on XLIFF at http://www.oasis-open.org/committees/tc_home.php?wg_abbrev=xliff.

Developer XLIFF Processing

When you execute the Export Localization command, the Developer applies a filter to the selected content, extracting all translatable text and rendering it in a form that complies with XLIFF specifications. The text extracted depends on the type of document selected, as discussed later in this section. Within the XLIFF file, the text is organized by document and then by translation unit within each document. Therefore, as you process the XLIFF file, you proceed sequentially through each of the exported documents.

Warning! During the Localization export process, the Developer applies a unique ID to each translation unit that includes information regarding the document ID, document type, and text type (if the document can have multiple translation units; see below). Therefore, you should neither merge nor split translation units during processing in XLIFF, as this could lead to problems upon import. Specifically, if the file selected for import contains translation units with invalid IDs or other problems, the Developer will skip such translation units, thus not importing the corresponding text.

For module, section, assessment, user-defined questions and package documents, the only text exported for translation is the document name. Each of these document types corresponds to a single translation unit containing just the unformatted document name.

For glossary documents, in addition to the document name, each term and each definition link tooltip is also exported as a separate translation unit. Therefore, the number of translation units created for a glossary document equals the number of terms plus the number of tooltips plus 1. These translation units also consist of unformatted text.

For question documents, the text that is exported depends on the question type. All question types have a document name. All question types, with exception of User-Defined, contain Remediation Text and Question Text that are each exported as translation units. Multiple Choice (Many Answers and Single Answer) and Matching questions have Option text for each answer option. Each Option text is exported as a translation unit. Fill In questions have Blank Answer text that is exported as a translation unit. All question translation units consist of unformatted text.

Each web page document is exported as at least two translation units, one for the document name and one for the body of the web page, regardless of the amount of text it contains. As for the other documents, the translation unit for the document name contains only unformatted text. However, unlike the preceding document types, web pages can include such elements as formatted text, images, and hyperlinks. Although such information is not relevant to the translation of the text itself, it is important for ensuring that the translated document has the same structure and appearance as the source document. Therefore, the XLIFF generated by the Developer includes such information within web page translation units using the standard XLIFF processing tags <bpt> (begin paired tag) and <ept> (end paired tag). These tags surround appropriate pieces of text in the source translation unit and contain XHTML code (generated by the Web Page Editor) corresponding to the formatting and/or processing needed.

For Developer web pages, the XLIFF processing tags can contain three basic types of XHTML code: text formatting, paragraph formatting, and image and hyperlink properties. Tags for text formatting that are supported by the Web Page Editor include <font>, , , and <u>, for font properties (such as font family/style, size, and color), bold, italic, and underline, respectively. Paragraph formatting tags supported by the Web Page Editor include <p> (with the optional align attribute), <br>, <ul>, <ol>, and <li> for paragraph return (including paragraph alignment, if necessary), line break, unordered (bulleted) list, ordered (numbered) list, and list item, respectively. Both text and paragraph formatting tags should be copied, unchanged, from the source text to the corresponding portion of the translated text. This ensures that the appearance of the translated text matches that of the equivalent source text.

For images (<img> tag) in web pages, the processing tags always include the image source attribute (src) and might also include attributes representing the properties that can be set using the Image Properties dialog box, namely, alternative text (alt), size (style), border (border), and alignment (align). Likewise, for hyperlinks (<a>, or anchor, tag) in web pages, the processing tags always include the hyperlink target attribute (href) and might also include an attribute representing the tooltip (title). In general, image and hyperlink processing tags should also be copied from the source text to the corresponding portion of the translated text. However, you might want to translate the alternative text for an image or the tooltip for a hyperlink. You can do so by directly editing the corresponding <bpt> processing tag to include the appropriate translation in the alt or title attribute, respectively.

Note that, except for URL images or URL hyperlinks, you should not need to edit the image source (img src) or hyperlink target (a href) attributes in web page translation units. Rather, these values are updated when you create a duplicate of your content (including related documents) before exporting it for localization. If you need to change these attributes further, you should edit the image properties or edit the hyperlink properties from the Web Page Editor after importing the translated web page.

Note: Hyperlinks are included in translation units only for manually created links, not for glossary links. Rather, you should update glossary links from the Developer after importing the translated content and glossary (or glossaries).

Topics can consist of a large number of translation units, and the translation units corresponding to bubble text can include both formatting and markup for play modes and outputs. Specifically, each of the following components of a topic, if present, corresponds to an individual translation unit:

- Document name
- Custom bubble text (one or more translation units per topic frame, depending on play mode and output markup)
- Object name
- Decision frame header
- Decision path name
- Jump-in point
- Frame link tooltip
- Implicit text
- String input text
- Topic properties, including each System Process Document, Instructor Manual, Job Aid, and Test Document field; Keywords; and Roles

Except for custom bubble text, all of the other topic translation units contain unformatted text.

Custom bubble text can contain both text and paragraph formatting, as well as bubble text links. As for web pages, this information is included within bubble text translation units using the standard XLIFF processing tags <bpt> (begin paired tag) and <ept> (end paired tag). These tags surround appropriate pieces of text in the source translation unit and contain XML code (generated by the Topic Editor) corresponding to the formatting needed.

For topics, the XLIFF processing tags can contain three basic types of XML code: text formatting, paragraph formatting, and hyperlink properties. All text formatting supported by the Topic Editor is specified using the <fmt> (format) tag, including the attributes font, sty, clr, and unbr, for font family and size, style (with possible values b for bold, i for italic, and u for underline), color (specified using hexadecimal color codes), and nonbreaking text. The only paragraph formatting tag supported by the Topic Editor is <p> with the optional align attribute, for paragraph return including paragraph alignment, if necessary. As for web pages, both text and paragraph formatting tags in custom bubble text should be copied, unchanged, from the source to the corresponding portion of the translated text. This ensures that the appearance of the translated text matches that of the equivalent source text.

For hyperlinks (<a>, or anchor, tag) in bubble text, the processing tags include only the hyperlink target attribute (href). In general, these hyperlink processing tags should also be copied, unchanged, from the source text to the corresponding portion of the translated text.

Note that, except for URL hyperlinks, you should not need to edit the hyperlink target (a href) attributes in bubble text translation units. Rather, these values are updated when you create a duplicate of your content (including related documents) before exporting it for localization. If you need to change these attributes further, you should update the bubble text link from the Topic Editor after importing the translated topic.

Note: Hyperlinks are included in translation units only for manually created links, not for glossary links. Rather, you should update glossary links from the Developer after importing the translated content and glossary (or glossaries).

In addition to formatting and hyperlinks, custom bubble text can also include markup for play mode (visible in See It/Try It, Do It, and/or Know It modes) and output (visible in Player and/or print outputs). If all of the custom bubble text in a topic frame is marked for the same play modes and outputs, it is exported as a single translation unit. However, if the same bubble contains custom text marked for different modes and/or outputs, multiple translation units are generated, one for each unique set of play modes and outputs.

For example, consider the bubble containing the text "This text is valid in all modes. All of the text is valid in both outputs. This text is valid only in Know It? mode." In the Topic Editor, the first two sentences are marked to appear in all play modes, whereas the third sentence is marked to appear only in Know It mode; all of the text is marked for both Player and print outputs. When this topic is exported for localization, two translation units are created for this bubble: One contains the text "This text is valid in all modes. All of the text is valid in both outputs." The second contains the text "This text is valid in all modes. All of the text is valid in both outputs. This text is valid only in Know It? mode." The IDs of the two translation units indicate the difference in markup in the source, with the first being specified for See It/Try It and Do It modes and both outputs and the second being specified for Know It mode only and both outputs. If the output markup of any of the bubble text had also differed (for example, if the second sentence had been marked for print only), these translation units would have been divided further to reflect these differences.

Despite the obvious overlap in content, these translation units should be translated and maintained as two separate units because they represent different combinations of mode and/or output markup. Upon import, these translation units will be written to the same frame bubble, with the first marked to appear only in See It/Try It and Do It modes and the second marked to appear only in Know It mode. That is, where the original bubble text consisted of three sentences, the translated bubble text will appear as five sentences overall, one set of two sentences from the first translation unit and another set of three sentences from the second translation unit. Although this approach leads to some duplicate translation and repetition in the bubble of text appearing in different markup combinations, it ensures that the play mode and output markup of the source text is accurately reproduced in the translated bubble text, so that the translated topic publishes correctly. In addition, this approach simplifies the translation process. That is, translators are frequently comfortable with formatting attributes such as bold or font name, but might find it more difficult to interpret and appropriately process the mode and output markup, which are specific to the Developer. Moreover, use of a translation memory can minimize the impact of any duplication.

Summary

In summary, the translation of custom Developer text using XLIFF is relatively straightforward, with most translation units consisting simply of unformatted text. The exceptions are web page body text and custom bubble text, which can include formatting and processing information in the form of <bpt>/<ept> processing tags. For the most part, these tags should be copied directly from the source text to the linguistically equivalent portion of the translated text.

In addition, in cases where the mode and/or output markup of the text within a bubble differs, multiple translation units are created for a single bubble. Because the IDs of the resulting translation units contain information on markup, these translation units should always be processed individually, even if they contain similar text. This preserves the appropriate bubble text markup upon import of the translated content. A translation memory should prove helpful in automating translation in such cases.

19.4 Localization Using Microsoft Word

If you will not be using XLIFF-based translation tools, you should use the Microsoft Word option for localizing your content. Exporting to Microsoft Word provides an easily readable listing of text that is amenable to manual translation.

The same initial processing is applied to your content when you execute the Export Localization command, regardless of whether you choose to export to XLIFF or Microsoft Word. Specifically, the Developer applies a filter to the selected content, extracting all translatable text and creating a list of translation units, or logical segments of text, organized by document. The text extracted depends on the type of Developer document selected, as discussed later, but is the same for both XLIFF and Microsoft Word. In XLIFF, the translation units are presented as plain, unformatted text, with any necessary formatting or processing information managed through the use of processing tags. In contrast, in Microsoft Word, any formatting applied to the text in the Developer is directly reflected in the exported file, so that you can see how it actually appears in the source documents. You then replicate this formatting in the translated text using standard Microsoft Word formatting controls so that the translated content has the same appearance in the Developer upon import.

Localization File Structure

The localization file created upon export to Microsoft Word consists of a series of tables, one for each Developer document exported. Each table is labeled with the Document ID and Data Type (these fields must not be edited) and contains all translatable text from the document, with one row for each translation unit. (The number of translation units depends on document type and contents, as explained further below.) The five columns in each table are as follows:

- Id: Translation unit ID; this field must not be edited
- Source (language code): Source text extracted from Developer content, labeled with the appropriate XML/HTML language code
- Translation (language code): Placeholder for translated text, labeled with the appropriate XML/HTML language code
- Notes: Field available for notes about the translation, if necessary; added after export
- System Data: Processing information needed for translation unit, such as image properties; this field must not be edited

The source, translation, and possibly Notes columns are the primary focus for translation; the information in the remaining columns can help provide context for the text to be translated but is required for system processing and should not be changed.

Warning! Do not edit any system information contained in the exported localization file, including Document IDs, document data types, translation unit IDs, and System Data entries. Doing so can cause the import process to fail, either for the entire localization file or for any directly affected document(s). You should also not change layout attributes such as splitting tables, and so on.

Use of a Microsoft Word file for localization is straightforward: Simply translate each source translation unit in the source column and add the translated text to the appropriate table cell in the translation column. If a particular translation unit, such as a technical term, does not need to be translated, you can copy the source text directly to the translation column without modifying it or leave the table cell empty. If the source text is formatted (which might be the case only for bubble text and web page body translation units, as explained in detail below), you should apply the same formatting to the translated text so that it matches the appearance of the source. If desired, you can also use the Notes column for communication with the translator about the translation. For example, you might include the note "Do not translate" for a translation unit that should be kept in the source language. Likewise, a translator could include notes about particular translation units, such as questions about the translation of technical terms.

Upon import, the Developer processes each document and each translation unit in the localization file, overwriting the original source content with the text provided in the translation column. If no translation is provided for a particular translation unit, the source text is left unchanged. The import and overwriting process is based solely on document and translation unit IDs; it is not affected by any changes that might have been made in the

Developer content after it was exported or in the Source column text of the localization file. Any entries in the Notes column also do not affect the import process.

Translation Unit IDs

As mentioned above, you can localize your Developer content using Microsoft Word by considering only the source and translation columns in the localization file. However, an understanding of the surrounding system information can be helpful in providing context for the text to be translated, if needed. Therefore, a detailed explanation of the translation unit IDs appearing in Developer-generated Microsoft Word localization files is provided here for reference.

Note: The same translation unit IDs and other system information are also included in Developer-generated XLIFF localization files. However, this information generally remains hidden during XLIFF processing because it is not exposed by most XLIFF translation tools.

Translation unit IDs depend on the function of the text within the document. As a result, each type of Developer document can correspond to only certain types of translation unit IDs.

For module, section, user-defined question, assessment and package documents (Data Type = plaintext), the only text exported for translation is the document name. Each of these types of documents corresponds to a single translation unit containing just the unformatted document name. Therefore, the only translation unit ID possible for module, section, and package documents is:

- TXT_Title = document name

For glossary documents (Data Type = plaintext), in addition to the document name, each term and each definition link tooltip is also exported as a separate translation unit. Therefore, the number of translation units created for a glossary document equals the number of terms plus the number of tooltips plus 1. These translation units also consist of unformatted text. The translation unit IDs possible for glossary documents are:

- TXT_Title = document name
- GLE*m*.trm, where *m* is a unique integer = glossary term
- IL*n*.tt, where *n* is a unique integer = glossary link tooltip

For question documents (Data Type = plaintext), the text that is exported depends on the question type. All question types have a document name. All question types, with exception of User-Defined, contain Remediation Text and Question Text that are each exported as translation units. Multiple Choice (Many Answers & Single Answer) and Matching questions have Option text for each answer option. Each Option text is exported as a translation unit. Fill In questions have Blank Answer text that is exported as a translation unit. All question translation units consist of unformatted text. The translation unit IDs possible for question documents are:

- TXT_Title = document name
- QuestionText = text that asks a question
- RemediationText = text that provides remedial information
- BlankAnswer = text entered in the blank field on a Fill In question
- Option# = possible answer choice on Multiple Choice and Matching questions

Each web page document (Data Type = xhtml) is exported as at least two translation units, one for the document name and one for the body of the web page, regardless of the amount

of text it contains. If the web page contains one or more embedded image(s), one additional translation unit is created for each image. Therefore, the translation unit IDs possible for web page documents are:

- TXT_Title = document name
- H_Body = web page body text
- I_*m*_E, where *m* is a unique integer = image inserted in web page

As for the other types of documents, the translation unit for the web page name contains only unformatted text. However, unlike the preceding document types, web pages can include such elements as formatted text, images, and hyperlinks. In addition to translating the text, you must also address these aspects of web page translation units.

If the source web page contains text and/or paragraph formatting (such as bold, italics, bulleted lists, and so on), you should apply the same formatting to the translated text using Microsoft Word's formatting tools. However, you should use only the types of text formatting supported by the Web Page Editor, as all other formatting will be removed upon import. In addition, if the source web page has a background color, the cells corresponding to the Source and Translation of the web page body translation unit have the same background color. However, this color is provided for illustration only, simply to match the appearance of the source document. Changing this color does NOT change the background color of the translated web page document upon import into the Developer.

If an exported web page contains an image, a small placeholder graphic appears in the source web page body translation unit to indicate its position in the layout of the web page. You should copy this graphic to the same location in the layout of the translated web page to include the image in the translated web page upon import. In addition, as mentioned above, a separate translation unit is created for the image itself. The translatable text in this translation unit is the alternative text of the image, if assigned. Even if there is no source alternative text, you can add text to the Translation column that will be imported as the alternative text for the image in the translated web page. Image translation units also always contain an entry in the System Data column that specifies the source of the image, as well as other image properties (such as size, border, and alignment), if assigned. You should not edit any system data.

If an exported web page contains a hyperlink, the hyperlink also appears in the source translation unit for the web page body. Use the Microsoft Word controls for editing and inserting hyperlinks to create the same hyperlink in the corresponding location of the translation (from the equivalent text or the placeholder graphic, as appropriate). You should use exactly the same Address for the hyperlink target in the Edit Hyperlink dialog box for the two hyperlinks. However, you can translate the hyperlink tooltip, or add a tooltip for the translated web page even if none is provided in the source web page, by clicking the ScreenTip button in the Edit Hyperlink dialog box and editing the text as necessary.

Note that, except for URL images or URL hyperlinks, you should not need to edit the image source or hyperlink target attributes in web page translation units. Rather, these values are updated when you create a duplicate of your content (including related documents) before exporting it for localization. If you need to change these attributes further, you should edit the image properties or edit the hyperlink properties from the Web Page Editor after importing the translated web page.

Note: Hyperlinks are included in translation units only for manually created links, not for glossary links. Rather, you should update glossary links from the Developer after importing the translated content and glossary (or glossaries).

Topics (Data Type = xml) can consist of a large number of translation units, and the translation units corresponding to bubble text can include both formatting and markup for play modes and outputs. Specifically, each of the following components of a topic, if present, corresponds to an individual translation unit:

- Document name
- Custom bubble text (one or more translation units per topic frame, depending on play mode and output markup)
- Object name
- Decision frame header
- Decision path name
- Jump-in point
- Frame link tooltip
- Implicit text
- String input text
- Topic properties, including each System Process Document, Instructor Manual, Job Aid, and Test Document field; Keywords; and Roles

Except for custom bubble text, all of the other topic translation units contain unformatted text. They correspond to the translation unit IDs listed below. In examining this list, note that many translation unit IDs consist of prefixes and suffixes, where the prefix represents the general category and the suffix describes the specific type of text. Prefixes include A for action, BUB for bubble text, F for frame, IL for frame link, and TXT for plain text. Suffixes (such as on and tt) are detailed below in terms of the specific translation units to which they apply.

- TXT_Title = document name
- BUB_*m*.txt_[DP_CP_AP_DD_CD_AD], where *m* is an integer and the portion in brackets varies depending on mode and output markup = custom bubble text (see further detail below)

  (the integers *m* in multiple translation units for text from the same bubble always match)
- A*n*.on, where *n* is a unique integer = object name
- F*q*.dhl, where *q* is a unique integer = decision frame header
- A*r*.dt, where *r* is a unique integer = decision path name
- F*s*.jip, where *s* is a unique integer = jump-in point
- IL*t*.tt, where *t* is a unique integer = frame link tooltip
- A*u*.iit, where *u* is a unique integer = implicit text (for string input action)
- TXT*v*, where *v* is a unique integer = input text (for string input action)

The remaining translation unit IDs are all for topic properties, as assigned using the Properties toolpane.

- TXT*w*, where *w* is a unique integer = role
- TXTx, where *x* is a unique integer = keyword

- bpddep = System Process Document Department property
- bpdver = System Process Document Revision property
- bpdlcb = System Process Document Last changed by property
- bpdst = System Process Document Status property
- bpdtr = System Process Document Trigger property
- BPDRF*y*.n, where *y* is an integer = System Process Document Required fields property Required Fields field
- BPDRF*y*.c, where *y* is an integer = System Process Document Required fields property Comments field

  (the integers in the translation units for an n/c pair always match)
- BPDOUT*z*.r, where *z* is an integer = System Process Document Output property Result field
- BPDOUT*z*.c, where *z* is an integer = System Process Document Output property Comments field

  (the integers in the translation units for an r/c pair always match)
- bpdai = System Process Document Additional information property
- imnot = Instructor Manual Instructor notes property
- javer = Job Aid Revision property
- tdver = Test Document Revision property
- tdpps = Test Document Purpose of test property
- tdest = Test Document Estimated time property
- tdstp = Test Document Test setup property
- tdav = Test Document Additional validation property

The translation units for custom bubble text require additional explanation for two reasons: formatting and mode and output markup.

If the source bubble text contains text and/or paragraph formatting (such as bold, italics, paragraph alignment, and so on), you should apply the same formatting to the translated text using Microsoft Word's formatting tools. However, you should use only the types of text formatting supported by the Topic Editor, as all other formatting will be removed upon import.

If exported bubble text contains a hyperlink, the hyperlink also appears in the source translation unit for the bubble text. Use the Microsoft Word controls for editing and inserting hyperlinks to create the same hyperlink from the corresponding text in the translation. You should use exactly the same Address for the hyperlink target in the Edit Hyperlink dialog box for the two hyperlinks.

Note that, except for URL hyperlinks, you should not need to edit the hyperlink target attributes in bubble text translation units. Rather, these values are updated when you create a duplicate of your content (including related documents) before exporting it for localization. If

you need to change these attributes further, you should update the bubble text link from the Topic Editor after importing the translated topic.

Note: Hyperlinks are included in translation units only for manually created links, not for glossary links. Rather, you should update glossary links from the Developer after importing the translated content and glossary (or glossaries).

In addition to formatting and hyperlinks, custom bubble text can also include markup for play mode (visible in See It/Try It, Do It, and/or Know It modes) and output (visible in Player and/or print outputs). The ID of each custom bubble text translation unit indicates the mode(s) and output(s) in which the text is set to appear. In the generic example of a bubble text translation unit listed above, BUB_*m*.txt_[DP_CP_AP_DD_CD_AD], it is the portion in brackets that specifies mode and output markup. Specifically, in each pair of letters, the first letter indicates the play mode and the second indicates the output. The codes for play mode are:

- D = See It/Try It mode
- C = Do It mode
- A = Know It mode

The codes for output are:

- P = Player
- D = Print (document) output

For example, the translation unit ID BUB24.txt_DP_CP_DD_CD corresponds to text that appears in only See It/Try It and Do It mode in both outputs, whereas the translation unit ID BUB32.txt_DP_AP corresponds to text that appears in See It/Try It and Know It modes but only in Player outputs.

If all of the custom bubble text in a topic frame is marked for the same play modes and outputs, it is exported as a single translation unit. However, if the same bubble contains custom text marked for different modes and/or outputs, multiple translation units are generated, one for each unique set of play modes and outputs. In this case, the same integer appears after the prefix BUB in all translation units corresponding to the same bubble, but the mode and output codes differ as needed to reflect the text markup.

For example, consider the bubble containing the text "This text is valid in all modes. All of the text is valid in both outputs. This text is valid only in Know It? mode." In the Topic Editor, the first two sentences are marked to appear in all play modes, whereas the third sentence is marked to appear only in Know It mode; all of the text is marked for both Player and print outputs. When this topic is exported for localization, two translation units are created for this bubble: One contains the text "This text is valid in all modes. All of the text is valid in both outputs."; it has a translation unit ID of the form BUB15.txt_DP_CP_DD_CD. The second contains the text "This text is valid in all modes. All of the text is valid in both outputs. This text is valid only in Know It? mode."; it has a translation unit ID of the form BUB15.txt_AP_AD. If the output markup of any of the bubble text had also differed (for example, if the second sentence had been marked for print only), these translation units would have been divided further to reflect these differences.

Despite the obvious overlap in content, these translation units should be translated and maintained as two separate units because they represent different combinations of mode and/or output markup. Upon import, these translation units will be written to the same frame bubble, with the first marked to appear only in See It/Try It and Do It modes and the second marked to appear only in Know It mode. That is, where the original bubble text consisted of three sentences, the translated bubble text will appear as five sentences overall, one set of two sentences from the first translation unit and another set of three sentences from the

second translation unit. Although this approach leads to some duplicate translation and repetition in the bubble of text appearing in different markup combinations, it ensures that the play mode and output markup of the source text is accurately reproduced in the translated bubble text, so that the translated topic publishes correctly.

Summary

In summary, the translation of custom Developer text using Microsoft Word is relatively straightforward, with most translation units consisting simply of unformatted text. The exceptions are web page body text and custom bubble text, which can include text and paragraph formatting and processing information such as hyperlinks. For the most part, this formatting should be exactly reproduced in the linguistically equivalent portion of the translated text. Any formatting present in the translated text that is not supported by the Developer is removed during import.

In addition, in cases where the mode and/or output markup of the text within a bubble differs, multiple translation units are created for a single bubble. Because the IDs of the resulting translation units contain information on markup, these translation units should always be processed individually, even if they contain similar text. This preserves the appropriate bubble text markup upon import of the translated content.

Note: If you localize your content using Microsoft Word, the maximum number of documents that can be imported from a single localization file is 65,535. If you need to process more documents than this, you have a variety of options. You can export the documents in multiple batches that stay below the 65,535 limit. You can export all of your documents into one Microsoft Word file and then copy the extra tables beyond this limit to a new Word file that you import separately. Finally, you can change the limit on the number of tables processed during import of a Microsoft Word localization file. You do this by modifying the tableIndex parameter in the RunMe macro in the wordtoxliff.dot file in the installation folder. Specifically, edit the line

While (tableProcessed < ActiveDocument.Bookmarks.Count / 5 And tableIndex < 65535)

and replace the value 65535 with the maximum number of documents you plan to process at one time.

19.5 Summary of the Localization Process

Create a duplicate of all documents to translate.

- Creating a duplicate must be the first step.
- You need one new duplicate for each language into which content is being translated.
- It is recommended that you create each duplicate from the Library, using a separate, clearly labeled folder for each language.

Re-record topics.

- Re-recording captures screenshots and object names in the target language.
- This provides a translation only of automatically recorded content.
- Apply the appropriate template for the target language to update template text.

Use export/import for localization of custom Developer text.

- You can export to Word and/or XLIFF formats.
- It is recommended that you check in all content to be translated prior to exporting and export the server version.

- Translation is performed external to the Developer.
- Importing overwrites exported documents with translation added to localization file.

Translate external content and update glossary links.

- Package files containing text, package graphics, and URL attachments must be translated separately from custom Developer text.
- If necessary, fix any links to package files that might have been broken during the translation process (for example, if the name of a linked package file was changed).
- As a final step after all content has been translated, update glossary links.

20 Customize Templates

Templates are used for a variety of purposes in the Developer. They generate bubble text automatically for frames, determine the instructional text to be shown during Know It mode playback, and control the example text given with string input events. You can customize these templates to reword the text or even translate it into any language not provided in the Developer.

Templates are stored in the /System/Templates folder in the Library. There is a subfolder for each supported language, named according to the language code.

Each folder contains two existing template sets, Standard and Microsoft. Each template has a template.xml file which contains the customizable text. These existing templates should not be customized, because when you upgrade to newer versions of the Developer, they will be overwritten and your customizations will be lost. Instead, make a copy of one of the templates, rename it, and make your customizations to the copy.

20.1 Start the Template Editor

The Template Editor is a tool included with the Developer that provides an interface that enables you to easily edit the template.xml file to customize a template. The interface has several sections, each of which allows you to modify different parts of the template. You can change existing text elements or add text, or localize the text into any language. In addition, you can preview the results of your changes immediately.

You can launch the Template Editor from the Windows Start menu. The installation process creates a shortcut in the same program group as the Developer.

To create and customize a template:

1. Open the Library.
2. Navigate to the System/Templates folder, and then open the folder for the language templates you want to customize.
3. In the language folder, select the template set you want to copy.
4. On the **Edit** menu, choose **Copy**.
5. On the **Edit** menu, choose **Paste**.
6. Select the copy you just made.
7. On the **Edit** menu, choose **Rename**.
8. Type the name for the customized template.
9. Press ENTER.
10. Right-click the template set and choose **Open**.
11. Copy the **template.xml** file to your local drive or a network drive.
12. Start the Template Editor.
13. Open the **template.xml** file in the Template Editor.
14. Modify the text as desired, referring to the following sections.
15. Save the **template.xml** file.

16. Copy the modified file into the template document in the Library.

17. Close and save the template document.

18. Apply the template to topics as appropriate. See *Template Property* for more information.

20.2 Edit the Template.xml File

The template.xml file has several different sections.

Styles
Statements used to format parts of the template text.

Events
Lists all events (actions) that are possible.

Classes
Lists all classes (types) of supported objects.

Defaults
Generic template definitions used when a specific template definition does not exist for a Class.

Key Names
The names of the special keys on the keyboard, such as Enter, Insert, Delete, Home, End, and Escape.

Instructions
Instructional text, such as "Press Enter to continue", found in the Player.

The template text in the bubble is defined in the Classes and Defaults sections. The Classes define the objects, such as combobox, menuitem, pushbutton, or radiobutton. Each class has the same list of events, such as LClick1 or Drag. In the Template Editor, a pane at the top of the window displays the list of Classes. The Template section displays the Events in the left pane. The elements that make up the text for the event appear in the main pane, while the preview appears at the bottom of the window. See the following sections for details about how to use these panes to edit the template text.

There is a Default template for each event. However, a particular Class may need a specific template, called a local template. For example, the Default template for the LClick1 action (single left click) is "Click the". However, for the Column class, the local template for the single left click action is "Click an entry in the". If there is a local template for a Class, it appears in the Events list in bold text. If it is a Default template, it appears in non-bold text.

To open the template.xml file:

1. In the Template Editor, select the **File** menu and choose **Open**.

2. Navigate to the location on the network or local drive to where you copied the **template.xml** file.

3. Select the **template.xml** file and click **Open**.

20.2.1 Edit a Class

A class defines a single type of object, for example a button or a menu. The list of classes appears in the Classes pane at the top of the Template Editor window. Each class has four attributes, displayed in columns in the Classes pane.

Name
Unique identifier for the object type; for example, ROLE_STANDARD_ACTIVEX. You cannot change this attribute.

List Name
Text that appears in the object type list in the Frame Properties toolpane in the Topic Editor, for example ActiveX.

Display Name
Text that appears in the template-generated text when the <ObjectType/> attribute is used within a template definition.

Gender
Used to refer to the appropriate set of gender templates in the Defaults section. This affects languages other than English. See the *Use Genders* topic in the Translate Templates chapter of the Content Development manual for more information.

To edit a class definition:

1. In the Template Editor, open the **Template.xml** file you want to edit.
2. Scroll the list of Classes as necessary and double-click the Class definition you want to edit.
3. Edit the text in the List Name and Display Name boxes as desired.
4. Change the Gender, if necessary.
5. Click **OK**.

20.2.2 Edit an Event in a Class

An event definition is a sequence of elements that produces the default template text. Keep in mind that if you edit an event definition that is in non-bold text, you are changing the definition for all Classes that use the Default definition.

text
The static template text appears between <Text> and </Text> tags in the template.xml file. Note that a template may contain multiple text statements.

ObjectType
The ObjectType element is a placeholder used to insert the display name of the object type as defined in the Class.

ObjectName
The ObjectName element is a placeholder used to insert the name of the object on which the action is performed.

To edit an event definition:

1. In the Template Editor, open the **Template.xml** file you want to edit.
2. Scroll the list of Classes as necessary and select a class.
3. In the Event list, click the event definition you want to edit.
4. In the pane to the right of the Event list, double-click the element you want to edit.
5. Edit the element properties as desired.
6. Click **OK**.

To add elements to an event:

1. In the Event list, click the event definition to which you want to add an element.
2. In the pane to the right of the Event list, click **Add**.
3. In the Create New Element dialog box, click the Type list and select the type of element you want to add and click **OK**.
4. Edit the element properties as desired.
5. Click **OK**.

To reposition elements in an event:

1. In the Event list, click the event definition.
2. In the pane to the right of the Event list, click the element you want to move.
3. Click **Move Up** or **Move Down** to move the element to the desired position.

To delete elements in an event:

1. In the Event list, click the event definition.
2. In the pane to the right of the Event list, click the element you want to delete.
3. Click **Delete**.

20.2.3 Edit or Suppress Example Text for String Input Events

During topic playback, steps in which a user is asked to enter text are called string input events. The bubble for a string input event frame has example text, which you can customize.

This text is defined in the default StringInput event. It has several elements to account for the string input options that you may have chosen in the Developer, such as adding meta entries or specific entry text. See *Edit Action Properties* in the Use the Topic Editor chapter for more information.

As you edit the text, check the Preview area at the bottom of the Template Editor to see how your changes will look in the content. There are options that allow you to view how the template changes with the different meta entries of Something, Anything, or Blank. In addition, the Exact option shows you how an exact match, i.e. no meta entry, will appear.

To change example text for string input events:

1. In the Template Editor, open the **Template.xml** file you want to edit.
2. Click **StringInput** in the Event list.
3. In the pane to the right of the Event list, double-click the text or string input extension element you want to edit.
4. Edit the text as desired.
5. Click **OK**.

   Note: The "or" text that occurs between entries in a list of valid entries is instructional

text. See *Change Instructional Text for the Player* for more information, and use the strinp_or instruction.

To suppress example text for string input events in Do It! mode:

1. In the Template Editor, open the **Template.xml** file you want to edit.
2. From the **Edit** menu, choose **Instructions**.
3. In the Instructions toolpane, select the strinp_suppress_example instruction.
4. In the Template toolpane, double-click the text element and change the entry to 1 to suppress the for example text.
5. Click **OK**.

20.2.4 Add a Local Template to an Event

You can create a local template for an Event that uses the Default template. This allows you to customize the template for a specific event without affecting other events.

You can also remove a local template so that the event for the Class reverts to the Default template. Be aware that you cannot undo this operation. If you decide you want a local template again, you must add it and create the elements manually.

To add a local template to an event:

1. In the Template Editor, open the **Template.xml** file you want to edit.
2. Scroll the list of Classes as necessary and select a class.
3. In the Event list, right-click the event definition to which you want to add a local template.
4. On the shortcut menu, click **Add Local Template**.
5. Edit the elements in the template as desired.

To remove a local template from an event:

1. In the Template Editor, open the **Template.xml** file you want to edit.
2. Scroll the list of Classes as necessary and select a class.
3. In the Event list, right-click the event definition to which you want to add a local template.
4. On the shortcut menu, click **Remove Local Template**.

20.3 Change Instructional Text

When a user plays a topic in the Player, instructional text appears in various situations. During See It!, Try It!, Do It! and Know It? mode playback, navigational instructions appear in certain frames, such as "Press [Enter] to start" on the Start frame. Know It mode has additional instructions plus remediation which appears when a user has performed a step incorrectly. In addition, a string input frame, which instructs the user to enter text, has example text.

Each instruction may have more than one text element. The Leading Space option in the Element Properties dialog box enables you to insert a space before a text element to separate the text.

20.3.1 Change Instructional Text for the Player

In the Player, instructional text appears in See It!, Try It!, and Do It! modes for the Start and End frames and on Explanation frames. In addition, there is a Pause link, which allows the user to pause the playback in See It! mode, and the instructional text that appears at the top of a Decision frame. You can customize this text in the template.xml file.

This text is defined in the template elements in the Instructions toolpane, as shown below.

- leadin: Start frame
- leadout: End frame
- continue: Explanation frame
- decision_headline: Text at the top of a Decision frame
- pauselink: Pause link in bubble

Note: When you select certain instructions, the text in the Template area displays in raw XHTML format because it contains formatting that is not supported in the native template. The text you can edit is located between the <a class> and tags. As you edit this text, be careful not to change or delete any of the other text or codes in the template definition, or the template may not work properly.

To change instructional text for the Player:

1. In the Template Editor, open the **Template.xml** file you want to edit.
2. From the **Edit** menu, choose **Instructions**.
3. In the Instructions toolpane, select the instruction you want to edit: leadin, leadout, continue, pauselink, or decision_headline.
4. In the Template toolpane, double-click the text element that you want to edit.
5. Change the text as desired.

   or

   Edit the text in the XHTML code as desired.
6. Select the **Leading Space** option, as necessary.
7. Click **OK**.

20.3.2 Change Instructional Text for Know It? Mode

During Know It mode playback in the Player, instructional text appears for the Start and End frames and on Explanation frames. In addition, there are four levels of remediation that can appear if a user performs a step incorrectly. There is also text which informs a user the score needed to pass at the beginning of the topic, the score achieved at the end of the topic, and whether the user passed or failed. You can customize this text in the template.xml file.

This text is defined in the Instructions section. The Template Contexts are defined as shown below.

- knowit_leadin: Instructional text for the Start frame
- knowit_leadout: Instructional text for the End frame

- knowit_explanation: Instructional text for the Explanation frame
- knowit_nextstep: Show Step text
- leadin_score: Text informing the user of the score needed at beginning of the topic
- knowit_warningL1: Text for the first level of remediation
- knowit_warningL2: Text for the second level of remediation
- knowit_warningL3: Text for the third level of remediation
- knowit_warningL4: Text for the fourth level of remediation
- scoring: Scoring information at the end of the topic
- scoring_YES: Indicates that the user has passed
- scoring_NO: Indicates that the user has not passed
- knowit_continue: Indicates that the user should continue working to complete the task
- knowit_confirmdemo: Confirms that the user wants to view the step in See It mode
- knowit_dragwarning: Warns the user that the step is a drag and drop and that it will be completed for them
- knowit_finish_close: Gives the user a choice to exit without being scored or to return to Know It mode

Note: When you select certain instructions, the text in the Template area displays in raw XHTML format because it contains formatting that is not supported in the native template. The text you can edit is located between the <a class> and tags. As you edit this text, be careful not to change or delete any of the other text or codes in the template definition, or the template may not work properly.

To change instructional text for Know It? mode:

1. In the Template Editor, open the **Template.xml** file you want to edit.
2. From the **Edit** menu, choose **Instructions**.
3. In the Instructions toolpane, select the instruction you want to edit.
4. In the Template toolpane, double-click the text element that you want to edit.
5. Change the text as desired.

   or

   Edit the text in the XHTML code as desired.
6. Select the **Leading Space** option, as necessary.
7. Click **OK**.

20.4 Change the Font Format for Template Text

In the template text generated for the bubble, there are certain items which have special formatting. These text items are listed below; each item is followed by its style name and format, for your reference.

- Object name: ObjectName; dark blue color, bold
- Text entered in a string input: Content; red color, bold
- Key name: Key; dark blue color, bold
- Link: Link; light blue color, bold

If you want to change this formatting, you cannot use the Template Editor; you must open the template.xml file in the xml editor of your choice. The statements in the Styles section at the beginning allow you to customize the color or the font weight of the text. The style is made up of three parts, as shown in the example below:

```
<Style Name="ObjectName" Bold="true" Color="#000080"/>
```

The Bold element is a Boolean value; it can be true or false. The Color element is the HTML code for the color. You can change either of these two values as desired. Do not change the style name.

20.5 Translate Templates

The Developer includes templates in several languages. If you need language(s) other than these, you can a new template set for that language and translate the appropriate text in the template.xml file.

First, create a subfolder for the language in the System/Templates folder. You must use the correct language codes, for example hu for Hungarian or pl for Polish. For a list of these codes, go to the following site:

http://msdn2.microsoft.com/en-us/library/ms533052.aspx

Follow the instructions for customizing the templates, except when you make a copy of an existing template, paste it into the new language folder. You can then translate the text in the template.xml file.

The following items should be translated.

Template text in the bubble
See *Edit the Template.xml File* for more information.

Instructional text for the Player
See *Change Instructional Text for the Player* for more information.

Instructional text for Know It? mode
See *Change Instructional Text for Know It? Mode* for more information.

Example text for String Input events
See *Change Example Text for String Input Events* for more information.

Note: Many of the templates have multiple elements. When you translate the templates into other languages, the order of these elements may need to be changed to account for differences in word order in various languages.

20.5.1 Edit Event Names

In the template.xml, there is a list of event types with corresponding names. These names should be translated.

To edit Event names:

1. In the Template Editor, open the **Template.xml** file you want to edit.
2. From the **Edit** menu, choose **Event Names**.
3. In the **Name** list, click the event name once to select it.
4. In the **Name** list, click the event name again to edit the text.
5. Change the text as desired.
6. Press ENTER.

20.5.2 Edit Key Names

In the template.xml, there is a list of all of the names of the non-alphanumeric keys on the keyboard. The names of the keys should be translated.

To edit key names:

1. In the Template Editor, open the Template.xml file you want to edit.
2. From the **Edit** menu, choose **Key Names**.
3. In the **Name** list, click the key name once to select it.
4. In the **Name** list, click the key name again to edit the text.
5. Change the text as desired.
6. Press ENTER.

20.5.3 Edit Shift Key Prefixes

When there is an event that uses a keyboard combination, such as Shift+Click, the text in the bubble is "Press the Shift key and click...". There is a second template for multiple keyboard combinations, such as Alt+Ctrl+Click, for which the template text in the bubble is "Press Alt+Ctrl and click". These prefixes should be translated.

For the multiple keyboard combinations, there are also separators that you can edit.

To edit the shift key prefixes:

1. In the Template Editor, open the **Template.xml** file you want to edit.
2. From the **Edit** menu, choose **Shift Key Prefixes**.
3. In the Prefix toolpane, click **ShiftKeyPrefixSingle** or **ShiftKeyPrefixMulti**.
4. In the Template toolpane, double-click the text element in the Text column that you want to edit.

   Note: There may be no text in the Text column for the names of the keys. The name in the Shift Key field is the default. When you double click one of the names, you can add custom text to be used instead.

5. Change the text as desired.

6. Select the **Leading Space** option, as necessary.

7. Click **OK**.

20.5.4 Use Genders

In English, there is only one gender, called neutral in the English templates. In languages other than English, you may need to use multiple genders. For example, in English, a pushbutton and a radiobutton.

To create and use genders, follow these basic steps:

- Create the gender: When you create a new gender, it is copied from an existing gender of your choice.
- Edit the class to use the appropriate gender: After you have created the genders as necessary, you must assign the correct gender to the class.
- Edit the text for the events: Edit the text to be gender-appropriate for the events in a class. If the event uses the default template, then all events that use the default template for that gender are also updated.

To create a new gender:

1. In the Template Editor, open the **Template.xml** file you want to edit.
2. In the Gender toolpane, right-click the gender you want to copy to create a new gender.
3. From the shortcut menu, click **Create New Gender**.
4. Enter a name in the Name field for the gender.
5. Click **OK**.

To edit the gender for the class:

1. Scroll the list of Classes as necessary and double-click the Class definition you want to edit.
2. Click the **Gender** list and select the appropriate gender.
3. Click **OK**.

To edit the text for an event:

1. In the pane to the right of the **Event** list, double-click the text element you want to edit.
2. Edit the element text as appropriate for the gender.
3. Click **OK**.

21 Appendix A: Considerations for Setting Defaults

When you use the Developer to create content, you may have many content authors working on the same project. Before you begin to record the content, it is important to determine certain defaults so that the finished content is consistent, no matter which content author created it. These defaults fall in to three basic categories: the content author's workstation, the target application, and the content defaults in the Developer.

21.1 Set Workstation Defaults

The Developer captures the entire screen, so how the screen looks on each computer is critical. Users can get confused if the data is inconsistent. Using default settings, then, is extremely important to provide consistency across all topics. You should determine these default settings before you begin development.

Note: If authors are working in a team to develop content with sound, make sure that all authors are using the same microphones for a more consistent sound output. See *Sound Recording Best Practices* in the Enhance Content with Sound chapter for more information about recording sound.

21.1.1 Set the Windows Default Color Scheme

The color scheme on the development computers should be set to the company standard color scheme. If the company does not have a standard color scheme, the suggested color scheme is the default scheme for your operating system.

21.1.2 Set the Video Resolution and Color Depth

The color depth should be set to 256 or higher. The video resolution should be set to the lowest common resolution in the company, as it may impact the playback in See It! and Try It! modes. The bubbles may not be placed correctly, or the user may need to scroll to view the entire screen.

21.1.3 Change the Taskbar Settings

The option to always keep the taskbar on top of other windows and the option to auto-hide the taskbar should be selected before you record. These settings prevent the taskbar from appearing in the screen captures, and yet the taskbar is still easily accessible when needed.

21.1.4 Turning Off Other Applications

When you create content, you take screen shots of the entire screen. Therefore, items that appear on the desktop can also appear in the screen shot. You should close any other applications that are running or toolbars that appear. Also, turn off any memory-resident programs that might interrupt the screen capture process; for example, programs that automatically notify you when you have e mail. This procedure not only prevents these things from appearing in the screen shots but also reduces the load on system resources. A partial checklist of applications includes:

- Mail programs, especially those with automatic notifications
- Shortcut bars, such as the Microsoft Office shortcut bar
- Customized menu bars
- Virus protection software, where possible

Note: You should also be sure to maximize the target application window while you are recording content.

21.1.5 Set the Defaults in the Target Application

In many applications users can configure their GUI with colors and fonts. In addition, the user profile may have other defaults set as well, such as the date format or the default screen at startup. For the authors creating content, these defaults should all be reset to the defaults in general use at the company. This creates a uniform look and starting place for every topic.

In addition, you should maximize the window for the target application when you are recording content. If the target application's window covers the entire screen, then the Windows desktop icons will not show in the screenshot. If possible, turn off tooltips in the target application as well.

21.2 Set Content Defaults

Content defaults act as a default set of properties for the creation of new frames and Web Pages. When the content defaults are changed, any existing content will not be affected.

These defaults must be set on each individual workstation and should be done before you begin development. You do not have to change the original default settings in the Developer; changing these defaults is a matter of choice to create the "look" you want for the content. Consistency is the key element. After deciding on a standard set of content defaults and creating them in the Developer, you should export these defaults and distribute the export (.ops) file to the other authors developing content.

Certain changes that are highly recommended are indicated as such in the sections below.

Note: When choosing font and background color defaults, it is recommended that you choose web safe options. For example, Arial is a font style widely used in web page development.

21.2.1 Set Bubble Defaults

The Bubble page in the Content Defaults category contains the options that allow you to change the icon, pointer position, background color, and font for the bubble. In addition, the Bubble page contains the options that control if template text appears in the bubble and if custom text appears above (the default) or below template text.

21.2.2 Set Other Font and Color Defaults

You use the pages in the Content Defaults category to set the font and color defaults for the following components:

- Introduction/End Frame: These frames appear at the beginning and end of each topic, displaying introductory and concluding text that the content author enters in the Topic Editor. In addition, the Introduction text for each topic displays in the Introduction pane in the Outline Editor and Player windows. By default, Introduction and End frame text uses the 10 point Arial font and a pale yellow background color. Changing these options affects the appearance of the Introduction pane, as well as the Introduction and End frames in all play modes.

- String Input: String inputs are events that occur while recording a topic when you are typing, such as entering information into a field. When a user plays the topic in Try It! mode, the user must enter the specified text to move to the next step. The action area (the area in which the user must type the text) uses an 8 point font size in the default MS Sans Serif font, and white background color shown in the sample box in the String Input page You can change these options to better simulate the application in which you are recording.

- Web Page: Web pages contain extra information that can be attached to the content. Web pages can display a simple note or definition of terms, or display a more complex arrangement of text, graphics and hyperlinks. The default setting is a 10 point Arial font and a white background color.

21.2.3 Set the Frame Delay

In See It! mode, there is a predetermined delay time between each action. This delay controls the amount of time that elapses between the appearance of the frame and the start of the action. The delay gives the user time to read the text in the bubble before the action starts. By default, the delay for all frames is 5 seconds. However, you can change the default frame delay time. You can either use a selection from the Frame Delay list or enter another delay time manually. If you choose the 0 or skip option, a "0" frame delay will be applied to all action frames and "Skip" will be applied to non-action frames. As a result, the playback for action frames will start immediately when the frame appears and for non-action frames, the playback will skip the frame and move immediately to the next frame. If you choose the Infinite option, the playback will wait for the user to press ENTER before advancing to the next step. The bubble will automatically display the text "Press ENTER to continue."

Warning! Be careful when setting the default Frame Delay to 0 or skip. This setting causes the playback in See It! mode to skip the Introduction, End and Explanation frames for all newly recorded content.

21.2.4 Set Know It? Defaults

Know It? mode is the assessment mode for the playback. If you intend to make this mode available to your users, you can select the defaults for the mode in the Know It? Options section on the General page, under Content Defaults, in the Options dialog box.

Know It? defaults affect new content in a different way than other content defaults. Content defaults, as found on the Bubble, Introduction/End Frame and String Input pages, only affect a topic at the time of recording. You can create your entire outline and set those content defaults just before you start the recording process. The recorded topics will reflect the new content selections. Know It? defaults, however, affect a new topic when you create/link it to the outline. Newly created topics, even those without content, inherit the defaults in the Know It? Options section. Therefore, it is best to set your Know It? defaults BEFORE you add topics to your outline.

Note: You can change the Know It? defaults for existing topics by selecting the desired topics and opening the Properties toolpane. To open the Properties toolpane from the Library or Outline Editor, select the View menu, point to Panes, and select the Properties command, or click the Properties icon on the toolbar. You can also right-click your selection and select the Properties command from the shortcut menu. To disable Know It? mode entirely for the selected topics, deselect the Know It? option in the Play Modes property list.

Set the Default Passing Score

After users complete the task in Know It? mode, they are presented with their score, the passing score for the topic, and an indication of whether they passed or failed the topic. A separate passing score for an individual topic can be set in the Properties toolpane.

Set the Remediation Levels

When a user fails to complete a step in Know It? mode, they are marked incorrect for that particular step and presented with up to four levels of remediation. The first three levels of remediation prompt the user to complete the step with increased support at each level. You can reduce the default number of remedial steps by eliminating levels. You can eliminate any of the first three levels; the fourth level completes the action for the user and cannot be removed. You can apply separate remediation settings for individual topics in the Properties toolpane.

22 Appendix B: Development Considerations

This appendix describes various considerations for developing content.

22.1 Assign Development Tasks and Flow

You can assign the development tasks as best suits your available resources. Listed below are the major tasks and a suggested division of responsibility for each task.

Develop standards
Project leaders. Includes content, formatting, and naming conventions.

Create content
Content authors. Includes recording topics, adding Introduction and End frame text, creating and linking attachments, adding Glossary terms, Jump-in points, adding bubble text (including Know It? mode text) as necessary, and creating questions and assessments to test existing competency and learning.

Edit content (initial)
Content authors or Editors. Includes playing topics in all play modes in the Developer to check for correct screens, correct text, correct web pages, and so on. May also need to publish and test Jump-in points and See Also links in the Player window. This task could be done by a separate team of editors, or the content authors could check each other's work.

Spelling/grammar check
Content authors. Includes checking spelling and grammar, or creating a printed reference document.

Create glossary terms
Editors, Project leaders, or Content authors. Includes creating glossary terms.

Create roles
Editors or Project leaders. Includes creating and attaching roles to the topics.

Attach keywords
Editors or Project leaders. Includes attaching keywords to the topics.

Testing (QA)
Project leaders. Includes playing the topics in all modes in the Player and testing questions and assessments linked to the outline.

In addition to assigning development tasks, you should create a development flow through the various tasks. A good flow can make the process smooth from first development through final editing. A bad flow can extend the process far longer than necessary. A recommended flow is shown below:

1. Create scripts for the transactions (Development Team)
2. Record initial content (Content authors)
3. Test the recorded frames (Content authors)
4. Make corrections or re-record frames as necessary (Content authors)
5. Add text to recorded topics (for example, Introduction/End frames, extra bubble text, Know It? mode text) (Content authors)
6. Create and link attachments (Content authors)
7. Create, link and set properties for questions and assessments (Content authors)

8. Create and update Glossary terms (Editors or Project leaders, Content authors)
9. Test the recorded topics (Editors)
10. Verify text in Introduction/End frames, bubbles, attachments (Editors)
11. Make necessary corrections (Content authors or Editors as appropriate)
12. Preview questions and assessments to verify answers, remediation, and content links. (Content authors or Editors as appropriate)
13. Create and associate Roles (Editors or Project leaders, Content authors)
14. Assign keywords (Editors or Project leaders, Content authors)
15. Perform spell check and final glossary update (Content authors)
16. Test topics in the Player
17. Test pre and post assessments in the Knowledge Center (available in the Professional edition only)

22.2 Create Scripts

Before you begin to create content with the Developer, you should first create scripts that identify the tasks your audience will use in the target application. These scripts should contain a list of the steps in each task and valid test data from the target application to complete the task. It can also include supplemental information about the task, such as the following:

- Why and when the task is performed
- Required and optional input fields
- Appropriate results of the task; for example, a printed report or a file
- Any hints, tips, and tricks for the user
- Create an audio script with the verbal text for each topic action if recording sound and actions at the same time.

When you are creating scripts, keep in mind the needs of your users. Try to anticipate the questions your audience will have and what information they will need to use the application and perform the task successfully. For example, if there is prerequisite information needed before a task can be accomplished, or if specific information should always be used, these instructions should be available to your audience.

22.3 Suggestions for Developing Content

The following are some suggestions that may help you develop and organize content more effectively and efficiently:

- Be consistent in naming modules, sections, topics, questions, and assessments in the outline. If the naming convention is not consistent, it is much more difficult for the user to locate a topic.
- If you will be authoring content as a team in a multi-user installation of the Developer, or if you will be linking content from multiple outlines, it is a good idea to develop a draft outline before you start creating content. Also, you may want to designate a small number of people to make changes to the outline. This can help avoid confusion about who is working on what content.

Note: If you are using the multi-user version of Developer, you can use the Owner property to assign documents to authors.

- Create an overview course with topics that cover the basics of using the target application. This could include logging in, using the interface, general navigation (menus and shortcuts), and using searches to find valid values for data entry. Introducing the user to these techniques allows you to shorten the task topics by assuming a basic level of knowledge for the user.

- Avoid using search features when recording most topics. This is most important for accurate steps in Do It! mode. The dialog boxes that open when a user searches for valid data offer many options. If a user chooses a different option than the one indicated by the Player in Do It! mode, the steps will not match and the Player will not be able to display the appropriate information.

- If you want to include navigation in the topic, use the shortcuts instead of the menu path if possible. This shortens the number of steps, as some menu paths may be quite long.

- Create "stem" topics for those tasks that start with the same steps. Then, you can copy and rename the topic, or copy individual frames, and insert the necessary frames to complete the task.

- Use only template text in the bubbles as much as possible. As changes are made to the system, the template text is updated more easily than custom text.

22.4 Create Content in Multiple Languages

At some organizations, content must be deployed in several languages. As you develop content, keep in mind that the default text in the bubbles is generated from templates. If you apply a template set in another language, the template text is "translated" into that language. The templates do not affect other text items, such as user-entered text in bubbles, Introduction and End frame text, web pages, and object names in bubbles. These items must be translated manually. In addition, the graphics that are captured will remain in the original language.

When you create content in a different language you should install the Developer and set the primary authoring language to match the language that you are creating content in. Add your content in the language that you want and make sure all documents that you create have the appropriate language template assigned. When you publish the content, make sure you use the correct publishing style that matches the content language.

Target application screens in each local language; Developer content in local language

In this situation, you need to localize not only the text in the content, but the screenshots as well.

To help you in recording the content, you record the content in one language (for example English) first. Then, create a duplicate of the content and assign the target language and template to the content. Open the application in the other language and use rerecord to guide you through capturing the screens and actions in the localized language.

You can manually translate the bubble text for your content in-house or use localization to package the content for translation. After an exported package is localized, you import the package back into your Library.

If you need to supply content for a language not supported by Developer, you can translate the supplied templates.

Target application screens in same language; Developer content in local language

In this situation, you only need to localize the text in the content. To do this, you should create a duplicate copy of the content and assign the target language and template to the content. You can manually translate the bubble text for your content or use localization to package the content for outside translation.

Note: See the *Localize Content* chapter for more information on localization.

22.5 Development Tips

Create the Outline

- Be consistent in verb tense when naming outline items.
- Create the outline even if it has not been finalized. You can always go back and rename and reorganize outline items.
- Avoid using special symbols such as &, $, *, and so on when naming modules, section, and topics since they may cause problems when publishing.
- Create an audio script if you intend to record sound at the same time you record the steps.

Before You Record

- Test the steps of the task to make sure you have all the steps and adequate test data.
- Test the data before you record it and make sure it works. This will help prevent errors in your topic.
- Make sure you set up the target application at the correct screen for the beginning of the topic. This may include logging out and logging in again to clear any “sticky” data.
- Check your sound and microphone recording levels and settings if you will be recording sound at the same time.

As You Record

- Go slowly when you are recording to be sure that the Developer has had time to read the objects on the screen completely and the screens in the application have a chance to refresh.
- Make sure that the step you want to record is showing in the Next screenshot records area of the Recorder window before you press PRINTSCREEN.
- Make sure that the action displayed in the Last recorded event area of the Recorder window accurately reflects the action you wanted to record. If it does not, click the Undo button in the Recorder window and re-record the action.
- If you are not sure, record the action. It is easier to delete extra frames than insert ones that you missed.

After You Record

- Immediately preview the topic in Try It! mode before you add attachments, bubble text, Introduction/End frame text, and so on. If you discover errors and have to re-record the topic, you will not lose a lot of extra work.

- Listen to the recorded sound for each frame.

Editing Content

- You can not move (drag and drop) a frame in the Frame Structure window in the Topic Editor so make sure you insert it in the right place. However, you can copy frames within a topic and from topic to topic.

- Be sure you know on which frame an Alternative Path starts and ends. However, if you choose the wrong end frame, you can change it.

Fonts and Colors

- Changing the defaults in the Developer has no effect on the text fonts or colors for the printed outputs if you use the default Word template. If you want to change them, you should customize the PrintTemplate.docm file in the Styles folder for the appropriate print output. See *Customize Document Formats* in the Publish Content chapter for more details.

Multi-user Considerations

- When working in a multi-user installation, be sure to check in your checked out documents so that they are under version control and available to other authors. Before leaving on a vacation, check in all of your documents.

- If you need to work on a portion of an outline, only check out those documents that you need to edit.

22.6 Test the Content

Before content is deployed to the user community, it should undergo a QA review. It should be tested for the accuracy of the information, to make sure that the topics play correctly in each mode; hidden frames and bubbles function correctly; items such as web pages, packages, see also links, jump-in points, and alternatives are in the right place and launch correctly; and sound, if included, possesses clarity and consistent sound levels. While much of this can be done using the Developer, it is a good idea to publish it to a Player environment and have a small group of users test it.

22.6.1 Test Play Modes

Play the topic in each play mode that your audience will be using. Ask the following questions for each play mode.

See It! Mode

- Is this mode an appropriate mode for this topic?

- Does the user have enough time to read the bubble text before the Player advances to the next step, or does the delay time need to be adjusted?

- Is the action area in the correct location on the screen?

- Is the text in the bubble appropriate for the screenshot?

- Do all the paths of the available Decision frames work correctly?

Try It! Mode

- Is this mode an appropriate mode for this topic?
- Can the steps be completed correctly based on the information in the bubble?
- Do the Alternative paths and actions work correctly? Do the paths rejoin at the appropriate place?
- Do all paths of the Decision frames work correctly and/or rejoin at the correct location?
- Do the web pages, packages, and URLs launch correctly? Do the links appear in the correct location?
- Do the glossary terms work? Are they assigned correctly?
- Are the screenshots accurate?

Do It! Mode

- Is this mode an appropriate mode for this topic?
- Are any necessary "set-up" instructions explained in the Concept pane or on the Introduction frame (for example, "You must have the Purchase Order number before you start this topic?")
- Are the instructions for each step generic enough to allow for different situations in the target application?
- Should any step be displayed in the window with the step following it? (using the Keep with next option, especially for menus and drop-down lists).
- Do the Alternative paths and actions work correctly? Do the paths rejoin at the appropriate place?
- Do all paths of any Decision frames work correctly and/or rejoin at the correct location?
- Do the web pages, packages, and URLs launch correctly? Do the links appear in the correct location?
- Do the glossary terms work? Are they assigned correctly?
- Do the users use Firefox and will they have access to the plug-in to keep the Do It! window on top of the application.

Know It? Mode

- Is this mode an appropriate mode for this topic?
- Does the user have the appropriate objective statement before beginning the topic?
- For each step, are there hints and tips, if appropriate, to allow the user to complete the step successfully? For example, indicating what choice to make from a drop-down list or what to enter in a string input frame?
- Do the glossary terms work? Are they assigned correctly?

- Is the assigned score appropriate for the topic?
- Is the correct remediation level assigned to the topic?

22.7 Player Window

Publish the content for the Player environment that your audience will use. Ask the following questions about these features:

- Does the correct information display in the Concept and Introduction panes when the user clicks an outline item?
- Do the Jump-in points work correctly for each topic?
- Does each role display the correct content?
- If you published content by role, were the correct modules, sections and topics included in the published package?
- Does the Search feature (if available) display the correct content?
- Does the Applicable option display the correct list of topics?
- Do See Also links work correctly?
- Do the Show Associated Content links work correctly for questions?
- Does the sound play correctly for the selected play mode?

22.8 Document Outputs

Publish the content for the document format that you will use. Ask the following questions about the format and contents:

- Does the document contain all the information that you want your audience to have?
- Does the information appear in the appropriate location in the document; for example, does the concept information appear in the Training Guide document? Do the instructor notes appear in the Instructor Manual? Are the documentation fields for a System Process Document and Test Document populated?
- Are there enough screenshots in the document, or should there be more or less?

23 Appendix C: Develop Content for Different Deployments

You have many choices for deploying your content to your audience. When you create content, you can easily publish the content for the Player, as separate topics, and for documentation.

When you create standards for authoring content, you should take into account the type of deployment method(s) you will use. Depending on the deployment method you choose, there could be an impact on how you organize the content in an outline, how and where you use web pages and packages to convey information to the user, and where other information, such as Introduction or custom bubble text appears.

23.1 Develop Content for Deployment in the Player

If you will be deploying your content via the Player, you are essentially creating online training. Typically, content for online training is brief and to the point. Online users are generally more interested in learning by doing (for example, performing the steps) rather than reading text on the screen. The following lists the items where you can add information to the topic and indicates suggested uses for each.

Concept pane
Provides helpful and/or critical information by links to web pages, package documents, and URLs at the module, section, or topic level for all modes.

Topic frame and bubble text attachments
Frame and bubble text links provide helpful and/or critical information by linking to web pages, package documents, and URLs. Frame links appear for all modes and bubble text links appear for Try It! and Do It! modes.

Introduction frame
Introduces a task in all modes.

End frame
Identifies the completion of a task in all modes.

Explanation frame
Calls attention to an area of the screen or provides an explanation of an action.
Custom bubble text Adds specific information in bubbles for all modes, only simulated modes, or only Do It! or Know It? mode.

Glossary terms
Provides definitions for specialized terms and links to package files or URLs.

Print It! mode
Allows the user to print the topic steps from the Player in a Job Aid or System Process Document format for those topics for which the Print It! play mode is enabled.

See Also list
The See Also list provides links to other modules, sections or topics with related content. The See Also list only appears in the Player for documents that have the See Also property set.

Recorded sound
Recorded sound can duplicate the information in the web page or frame bubble, or it can contain additional supplemental information. If you use sound to add supplemental information, be sure to create web pages with the additional content and hyperlink them to your concepts or frames to make your content accessible.

23.1.1 Outline

While users can search in the Player to locate topics, it is recommended that an outline has a logical flow. This could mean an outline for training, with the topics grouped in a hierarchy of

modules and sections that build on previous modules and sections, or an outline for reference, with the topics grouped in modules or sections that contain all the topics that have to do with a specific subject. You could also build an outline in which each topic in a section is a different task in a particular business process.

23.1.2 Attachments: Web Pages and Packages

You should consider what information should be placed into attachments, and then where the attachment should be attached: a frame, a topic, a section, or a module. When you link an attachment to a frame, an icon appears in the bubble during playback. When you link an attachment to a module, section, or topic in the Outline Editor, it appears in the Concept pane in the Player. You may also want users to launch attachments through glossary hyperlinks.

Note: Frame link attachments are not available in See It! or Know It? modes. Attachment links to bubble text appear in text marked to display in Know It? mode.

When you link an attachment to a frame, you choose from icons that will appear in the bubble in Try It! mode or at the top of the checklist in Do It! mode. It is highly recommended that you use these icons consistently to indicate the different types of information the attachment can contain.

Note: If you do not enter a tooltip when you link an attachment, the default tooltip "Link" appears when the user points to the attachment. No tooltip appears if you delete the "Link" text.

23.1.3 What Appears in Which Play Mode

There are several choices you can make about how you transfer information from a script into the Developer. You can place any of this information in various places, including attachments, Explanation frames, bubble text, and Introduction and End frames, but it is important to consider in which mode the information will be available to the user. The following list shows what features are available in each play mode.

- Introduction/End text
  See It!, Try It!, and Do It!
  Know It? - if text is marked for Know It?

- Attachment icons
  Try It! and Do It!

- Bubble text links to attachments
  Try It! and Do It!
  Know It? - if text is marked for Know It?

- Glossary terms
  Try It! and Do It!
  Know It?

- Jump-in points
  See It!, Try It!, and Do It!

- Explanation frames
  See It!, Try It!, and Do It!
  Know It? - if text is marked for Know It?

- Alternative Actions
  Try It! and Do It!
  Know It?

- Alternative Paths
  Try It! and Do It!
  Know It?

- Decision frames
  See It!, Try It!, and Do It!

- String Input text
  Do It! and Know It? - can display additional text entries if the list does not contain "anything" or "something" entries

23.1.4 Fonts and Colors

Since content in the Player can be delivered through a browser window, users could have widely varying screen resolution and color depth settings. Therefore, it is important to consider the fonts and colors that you use in the content. Not all fonts are easily readable on the screen, and not all colors appear correctly. In general, sans-serif fonts such as Arial are recommended for anything appearing on the screen, since they appear more clearly. Also, avoid special fonts that every user may not have installed on their computer.

Different colors may appear differently on a user's computer, depending on the color depth that is set on the machine. For example, if a user has a lower color depth setting on his or her machine, a particular color may appear so dark that it prevents them from reading the text or viewing a graphic.

23.2 Develop Content for Deployment as Printed Documentation

You can publish content in four different document types: System Process, Training Guide, Job Aid, and Test Document. In addition, you can publish an Instructor Manual, which is a training guide that also includes instructor notes, or publish topics that can be exported via a comma separated (CSV) file (which can be opened in Microsoft Excel) to a testing application. Each of these documents has a different format and includes slightly different information from each topic.

The following lists the items where you can add information to the topic and indicates suggested uses for each.

Concept pane
Provides helpful and/or critical information or images at the topic level in the System Process, Training Guide and Instructor Manual formats.

Web pages
Provides helpful and/or critical information at the concept (module, section, topic) or frame level for the System Process, Training Guide and Instructor Manual formats.

Package image files
Image files appear for module, section and topic concepts, and frame level links in the System Process, Training Guide, and Instructor Manual formats. Glossary terms that link to package images also appear in the Glossary for the Training Guide and Instructor Manual formats.

Introduction frame
Appears above the procedure steps in the System Process, Training Guide and Instructor Manual formats.

End frame
Identifies the completion of a task in all outputs.

Explanation frame
Appears in all document outputs.

Custom bubble text
Adds specific information in the procedure steps for all document outputs.

23.2.1 Outline

In the Training Guide and Instructor Manual formats, the publishing process creates a single Word document for the entire selection. Each document has a table of contents, which is the

same as the outline in the Developer. The outline, therefore, should reflect an outline for training, with the topics grouped in modules and sections that build on previous modules and sections.

In the other document outputs, the publishing process creates a separate document for each topic. There is no table of contents, so the hierarchy of the outline is not used in the documents other than the outline and/or topic name, which may appear in the header.

23.2.2 Attachments

If you will be publishing the content for printed training materials or a System Process Document, keep in mind that the document output will include web pages, graphics in packages, URLs as static text plus hyperlink, and link icons. In addition, linked bubble text appears as plain text; it is not underlined and hyperlinked as it appears in the actual topic. In addition, attachments that appear in the Concept pane will appear as concept (discussion) text in the training guide output.

23.2.3 What Appears in the Document Outputs

There are several choices you can make about how you transfer information from a script into the Developer. You can place any of this information in various places, including web pages, packages, URLs, Explanation frames, bubble text, and Introduction and End frames, but it is important to consider in which mode the information will be available to the end user. For example, you may not want to put critical information in the Introduction frame if you are using one of the printed output formats that do not include the Introduction frame.

The list below gives a brief summary of the features that appear in each of the document formats:

System Process Document
Concept attachments (topics only)
Introduction and End frames
Explanation frames
Decision frames
Alternatives - Included (selectable)
Bubble text mode - See It!/Try It! (selectable)
Web pages
Images in web pages (selectable)
Images in packages (selectable)
URLs
Relative links (selectable)
Screenshots - Topic settings (selectable)

Training Guide
Concept attachments (all outline items)
Introduction and End frames
Explanation frames
Decision frames
Alternatives - Included (selectable)
Bubble text mode - See It!/Try It! (selectable)
Web pages
Images in web pages (selectable)
Images in packages (selectable)
URLs
Relative links (selectable)
Screenshots - Topic settings (selectable)
Questions and Assessments

Instructor Manual
Concept attachments (all outline items)
Introduction and End frames
Explanation frames
Decision frames

Alternatives - Included (selectable)
Bubble text mode - See It!/Try It! (selectable)
Web pages
Images in web pages (selectable)
Images in packages (selectable)
URLs
Relative links (selectable)
Screenshots - Topic settings (selectable)
Questions and Assessments
Instructor Notes

Job Aid
End frame
Explanation frames
Decision frames
Alternatives - Not included (selectable)
Bubble text mode - Do It! (selectable)
URLs
Relative links (selectable)
Screenshots - None (selectable)

Test Document
End frame
Explanation frames
Decision frames
Alternatives - Included (selectable)
Bubble text mode - Do It! (selectable)
URLs
Relative links (selectable)
Screenshots - Topic settings (selectable)

23.3 Control Bubble Text for Document Outputs

The play mode for which custom text is marked determines in what playback or document output the text will appear.

See It!/Try It!

- System Process Document
- Training Guide
- Instructor Manual

Do It!

- Job Aid
- Test Document
- Test Case

However, you may want custom text to appear during playback, but not appear in your training manual. Conversely, you may want text to appear in the document output, but not in the Player. By using the Visible in Player and Visible in Print buttons, you can control whether your custom text appears for Player output only, a Print output only, or in both.

Warning! Selecting or deselecting the Visible in Player or Visible in Print buttons affects the visibility of the selected text in all selected play modes for Player or document output. If custom text is marked for both See It!/Try It! and Do It! modes, deselecting the Visible in Print button means that the text will not appear in any document output.