ENTERPRISE ARCHITECT

User Guide Series

# Help System Authoring

Author: Sparx Systems
Date: 16/10/2024
Version: 17.0

CREATED WITH ENTERPRISE ARCHITECT

# Table of Contents

# Help System Authoring

Enterprise Architect enables you to provide support for the users of the models, systems and processes you develop, using the Help System Model. This is a simple-to-use model that has a number of facilities for creating a structure of Help topics to document your model or system as extensively and as deeply as you require. These facilities include:

- A Help Profile, defining the Help stereotypes, Tagged Values and the Help page of the Diagram Toolbox
- A Help Perspective (accessed from the Management Perspective group)
- Help model patterns that provide a starting point for you to create your own Help model using stereotyped elements from the Help Profile
- Help generation templates
- A basic CSS file that you can modify and extend as required
- An HTML generator and a PDF generator, building documentation from the same source Help model

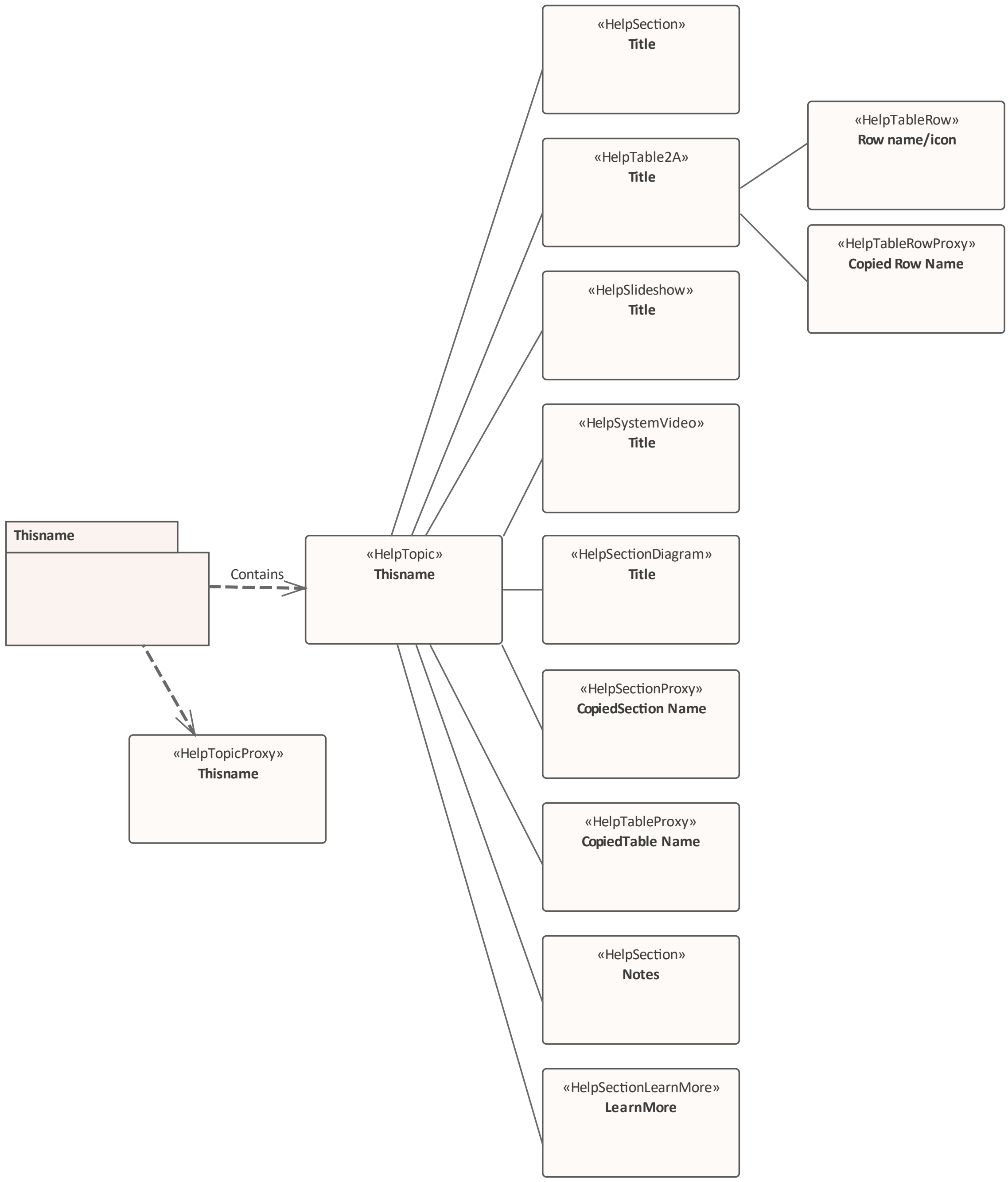
HTML files generated from your Help model, can be deployed on the Internet through your own website or on your local file system and then viewed with any Web browser. PDF documents can also be generated for those users wanting to access a more 'linear' version of the Help.

The final section of this topic provides a brief explanation of how you generate and view the Help pages you are creating.

## Introducing the Help System Model

The Help System model is built from a standard set of UML elements that are stereotyped using a custom Enterprise Architect Profile. The major profile elements include such items as a HelpTopic, HelpSections and various HelpTables (see the *Overview of Help System Components* table). Each stereotype has a specific purpose and governs how the resultant web or PDF content will be generated. It is important that the correct types are used to ensure a consistent and pleasing result.

This diagram identifies the elements that can be used to build a Help page in the Help system, and their relationships to one another. Note that the HelpTable2A element represents the range of Table elements available for use in the Help model.




## Overview of Help Model Components

This table defines the major stereotyped elements in the Help System profile that are used in building an online Help System. A more detailed discussion of each element type is provided in the *Use of the Help System Elements* Help topic.

| | |
|---|---|
| **HelpPackage** | Each individual Help topic is defined by a «HelpPackage» element. This can be owned by a parent Package or HelpPackage, and can own child HelpPackages to form a hierarchy of topics providing general and then more detailed and specific information on some aspect of the system.<br>Each HelpPackage element contains one - and only one - HelpTopic element, which must have the same name as its parent HelpPackage. |

**HelpTopic**

A «HelpTopic» element corresponds to an HTML page. The name of the HelpTopic element is rendered as the page title in any generated documents. The HelpTopic 'Alias' property is used as the name of the .html file that the topic is generated to.

The HelpTopic element usually contains some introductory text to explain the purpose of the topic and how it fits into any topic structure of which it is a part.

There can only be one HelpTopic element in a HelpPackage. The HelpTopic can be the parent of other Help elements, except for:

- Other HelpTopics
- HelpTopicProxy elements
- HelpTableRows, and
- HelpTableRowProxy elements

**HelpTopicProxy**

If you want to duplicate an existing Help topic, you can add a «HelpTopicProxy» element to the HelpPackage instead of the HelpTopic element. You do not add any other elements under a HelpTopicProxy element, because it calls in the entire contents of the topic being duplicated.

**HelpSection**

A «HelpSection» element corresponds to one or more related paragraphs within a page, discussing a particular subject.

The name of the HelpSection element is rendered as a subheading within the document generated for the parent topic.

A HelpSection can only be a child of a HelpTopic, and cannot contain any other type of element, including other HelpSections. You can have many HelpSections under a HelpTopic, or one, or none.

A HelpSection element with the name *Notes* is usually placed second-to-last under the HelpTopic (before the *Learn More* section), containing a bullet list of additional points on the subject of the topic. However, it is not mandatory to have a *Notes* section.

**HelpSectionProxy**

A «HelpSectionProxy» element captures the contents of an existing HelpSection elsewhere in the system. You use this element to duplicate material in one or more other points in your Help structure. A HelpSectionProxy can only be a child of a HelpTopic, cannot contain any other type of element, and has no text content of its own.

**HelpSectionDiagram**

A «HelpSectionDiagram» element is used as a placeholder/container for a diagram that will appear in the Help as an image. The diagram should be created as a child of the HelpSectionDiagram element; any (non Help) elements or constructs used to create the diagram will not appear in the HTML or PDF documents themselves.

The diagram in this element is usually a stand-alone diagram that illustrates the topic as a whole. You can also create links within a HelpTopic, HelpSection or HelpTableRow to show diagram images that illustrate a specific point.

**HelpSystemVideo**

A «HelpSystemVideo» element is used as a container for a video control, which will play a video within the web browser in which the Help is being viewed. This allows for the inclusion of short 'How To' videos from your website, which can be viewed 'within' the User Guide.

**HelpSlideshow**

A «HelpSlideshow» element is used as a container for a slide show control, which will play a sequence of slides within the web browser in which the Help is being viewed. This allows for the inclusion of 'What this feature looks like' slides on your website, which can be viewed 'within' the User Guide.

**HelpTable**

A «HelpTable*xn*» defines one of several types of table according to the actual

| | |
|---|---|
| | stereotype selected. The HelpTable identifies the number of columns, the relative column widths and, in Tagged Values, the column headers. The different types of table are described in the *Help Systems Tables* Help topic. The Help Table can have any number of child HelpTableRow or HelpTableRowProxy elements.<br>The name of the HelpTable element is rendered as a heading above the table in any gererated documents. |
| **HelpTableProxy** | A «HelpTableProxy» element captures the contents of an existing HelpTable of any type elsewhere in the system. You use this element to duplicate material in one or more other points in your Help structure. A HelpTableProxy can only be a child of a HelpTopic, cannot contain any other type of element, and has no content of its own. |
| **HelpTableRow** | A «HelpTableRow» element defines the content of a single row of a table of any type. The element name is the row title, and the Notes for the element provide the description or explanation of the row title. Tagged Values define the hyperlinks to supporting Help topics, in the 'See also' column. If the table does not support a 'See also' column, those Tagged Values are ignored.<br>A HelpTableRow can only be a child of a HelpTable, and cannot contain any other type of element.<br>You can also use Tagged Values to add an icon to the row header, or to replace the header text with an icon. This is discussed in the *Use of the Help System Elements* Help topic. |
| **HelpTableRowProxy** | A «HelpTableRowProxy» element captures the contents of an existing HelpTableRow elsewhere in the system. You use this element to duplicate material in one or more other points in your Help structure. A HelpTableRowProxy can only be a child of a HelpTable, cannot contain any other type of element, and has no content of its own. |
| **HelpSectionLearnMore** | The «HelpSectionLearnMore» element is used to provide a list of hyperlinks to related topics that have not been linked elsewhere in the topic, nor in the Help hierarchy displayed next to the generated Help topic. It is usually placed at the end of the topic so as not to distract from the material presented in the body of the topic. The element name is always 'Learn more'; there is only one 'Learn more' section under a HelpTopic, and it cannot have any child elements.<br>The PDF generator ignores this element. |

## Generating Help

When you have created a structure of Help elements and added content and illustrations to form a Help page, you can generate and display the topic to examine how it appears as an actual HTML page. To do this, select the HelpTopic element at the highest point of the structure you want to generate, right-click on it and select the 'Generate Help on Current Item' option. The System Output window displays to show the progress of the Help generation. The generated HTML files can then be viewed in your favorite web browser.

The Help topic *Generating Help Files* provides a detailed explanation of how to generate both HTML files and PDF files from your Help model.

## Example Model

The branch of the Help model used to create this Help topic has been copied into the Enterprise Architect Example model, within the 'Model Publishing' section. There, you can explore the sample Help model, generate files from it and experiment by extending or updating it.

To open the Example model, choose the ribbon option 'Start > Help > Help > Open the Example Model'.

# Use of the Help System Elements

This topic explains how to set up each type of Help element so that it is generated as a functional and useful component of the Help page.

It is assumed that you have read the Help topic *Help System Authoring* and are aware of what elements are available and how they fit into the Help page structure.

## Set up the Help Page

There are two quick ways to set up a structure for a new Help topic.

**Model Patterns**

Open the Model Builder dialog (Ctrl+Shift+M), click on the icon and select the Help Profile.

Review the patterns listed in the left-hand panel, select the most appropriate for your Help page, and click on the Create Model button.

**Drag from the Diagram Toolbox Help System page onto the Browser window**

1. Select the Package/Help Package to contain this topic.
2. Drag the HelpPackage icon from the Toolbox onto the selected Package in the Browser, and in the 'New Package' dialog give the new HelpPackage a name.
3. Drag the HelpTopic or HelpTopicProxy icon from the Toolbox onto the new HelpPackage in the Browser.
4. Drag the appropriate HelpSection, HelpTablexn or other Help element icon from the Toolbox onto the HelpTopic in the Browser. Repeat this as often as you require.
5. If you have added any HelpTables, drag the HelpTableRow icon from the Toolbox onto the appropriate HelpTable in the Browser.
6. Finally, if required, drag the HelpSectionLearnMore icon from the Toolbox onto the Browser window, and position it at the end of the set of elements.

Having set up the structure, you can then add the contents and set any Tagged Values and properties that might be required. You can use the Notes window on each Help element to add the text, and the Properties window to set the properties. The Notes window gives you a quick and flexible means of writing and formatting text.

Whilst you can use the Notes window alone to begin with, it is far better to use it in conjunction with the Specification Manager, which allows you to see the structure and content of the Help page as you create it.

The Specification Manager is also the best tool to add further Help elements to the topic as it develops, dragging the appropriate icon from the Toolbox Help System page onto the preceding or parent element in the Specification Manager. You are prompted to select whether the new element comes after the existing element as a peer, or under the existing element as a child.

## Creating Help Elements

Each Help element is a Class element modified by a stereotype. If you happen to drag the wrong Help element into a Help structure, or you change your mind about how to present your information, you can change the stereotype of the existing element to make it the correct element type. To do this:

1. Click on the element and then go to the Properties window for the element.
2. In the 'Stereotype' field, click on the ... icon and, in the 'Stereotype for *element name*' dialog, scroll up or down the list to locate the required stereotype, and select the checkbox against it.
3. Click on the OK button.
4. Click on the ... icon in the 'Stereotype' field again and clear the checkbox against the incorrect stereotype.

5. Click on the OK button.

Note that by adding the correct stereotype before deleting the incorrect stereotype, you should retain the values in any Tagged Values that are common to both stereotypes (such as column headings), avoiding the need to reset the values.

Remember that Tagged Values allocated to stereotypes by profiles are listed on the 'Element' tab of the Properties window, not on the 'Tags' tab.

**HelpPackage**

Each topic in the Help System is represented by a HelpPackage containing a HelpTopic child element of the same name.

HelpPackages are arranged in a hierarchy of parent and child Packages to develop the structure of Help pages in the Help system. This package hierarchy is then reflected in the generated webpages, through a breadcrumb control at the top of the page and a menu like list of links to child topics on the left of the page.

Note that the top-level packages in a Help hierarchy (effectively the 'Chapter' nodes; for example, in Enterprise Architect's own Help, 'Modeling Languages') should have the code engineering 'Namespace Root' flag set. When generating Web Help, Enterprise Architect creates sub-folders within the specified output folder, using the names of the Namespace Root packages as the folder names. Each generated topic file is placed in the sub-folder created from its nearest parent package that is marked as a Namespace Root. As a minimum, a single top-level package must be marked as a Namespace Root. The Namespace Root can be set by clicking on a Package then selecting the 'Develop > Source Code > Options > Set Package as Namespace Root' ribbon option.

The HelpPackage is not directly generated as Help, but rather acts as the container for the HelpTopic and its own child elements. It is important that the Help Package and Help Topic element share the same name.

**HelpTopic**

A HelpTopic element corresponds to an HTML page.

It is important that the HelpTopic 'Alias' property is set to the required filename for the Help topic in the final generated output. The Alias must have a unique name within the whole Help System and should not include the extension. For example 'requirements_management' (without quotes) is a valid Alias and will provide the filename 'requirements_management.html' when generated.

The HelpTopic element usually contains some introductory text (in the element 'Notes' field) to explain the purpose of the topic and how it fits into any topic structure of which it is a part.

There can only be one HelpTopic element in a Package. The HelpTopic can be the parent of most other Help elements, except for HelpTopicProxy, HelpTableRow and HelpTableRowProxy.

**HelpTopicProxy**

A HelpTopicProxy element captures the content of an existing HelpTopic element and its child elements, and duplicates them under another HelpPackage. You therefore insert the HelpTopicProxy element as a child of the HelpPackage.

You give the HelpTopicProxy its own topic name and appropriate Alias. In the Properties window for the element, for the 'refTopic' Tagged Value, you click on the ... icon and locate and select the HelpTopic to duplicate.

You do not need to do anything else in the HelpTopicProxy or the HelpPackage elements.

**HelpSection**

A HelpSection element corresponds to one or more related paragraphs within a page, discussing a particular subject. The HelpSection name will appear as a heading and the element notes as the content.

A HelpSection can only be a child of a HelpTopic, and cannot contain any other element.

If you have more than one HelpSection element under a topic, they will appear in the generated page in the order they appear in the Browser window and Specification Manager. You can embed links to diagrams and screen shots within the HelpSection content, and these will be reproduced in the web or PDF content as required.

A HelpSection element with the name 'Notes' is usually placed second-to-last in the HelpTopic (before the 'Learn More' section, if present), containing a bullet list of additional points about the subject of the topic, such as which Enterprise Architect or DBMS permissions might be required to perform a task.

**HelpSectionProxy**

Similar to the HelpTopicProxy, a HelpSectionProxy duplicates the content of an existing HelpSection. You insert the HelpSectionProxy as a child of the HelpTopic element, in the appropriate position in the sequence of peer HelpSection, HelpSectionProxy, HelpTable and HelpTableProxy elements under the HelpTopic.

The HelpSectionProxy has its own element name. In the Properties window for the element, for the 'refSection' Tagged Value, you click on the ... icon and locate and select the HelpSection to duplicate.

**HelpSectionDiagram**

A HelpSectionDiagram element is used as a placeholder/container for a diagram that will appear in the Help as an image.

The diagram should be built below the HelpSectionDiagram element; any elements or constructs that appear in the diagram will not appear in the HTML, Web or PDF documents themselves. This allows for the creation of explanatory diagrams without the burden of fitting each represented element into the Help document itself. The elements in the diagram will, however, be listed in the Browser window and the Specification Manager.

You can include text in this element. As the diagram is essentially subordinate to the HelpSectionDiagram element, the text belonging to element will display above the diagram.

Apart from providing a name for the HelpSectionDiagram element you do not have to set any properties.

This element is generally used for stand-alone diagrams that illustrate general features or concepts. If a diagram or image is an example of a point explained in a HelpTopic, HelpSection or HelpTableRow, you have hyperlink mechanisms in the text for linking to that diagram or image held elsewhere in the model or in the Image Manager.

**HelpSystemVideo**

A HelpSystemVideo element is a container for a video control, which will play a video within the web browser in which the Help is being viewed. This allows for the inclusion of short 'How To' videos from your website, which can be initiated from within the online Help.

After providing a name for the element, you set up this facility by completing this set of Tagged Values.

- VideoTitle - Type in a title or label for the video
- VideoURL - Click on the ... icon and locate and select the url to play the video; the URL can be an absolute or a relative value, it is inserted into generated document without modification
- VideoType - Type in the type of file; for example, video/mp4
- Duration - Type in the time the video takes to play, in seconds
- ThumbnailURL - Type in the location of the icon that represents the video; the URL can be an absolute or a relative value, it is inserted into generated document without modification

Note that the Duration and ThumbnailURL values are not included in generated HTML or PDF docuements, they (along with the other values) are written into the 'site-map.xml' file, which is used to improve the search rankings of your website files.

**HelpSlideshow**

Similar to the HelpSystemVideo element, the HelpSlideshow element enables the user to run a slide show of static screens depicting stages in a process, or examples of output, or other images illustrating the subject of the Help topic. Again, you provide a name for the element, and complete these Tagged Values:

- Icon - click on the ... icon and locate and select the image from the Image Manager on which the user will click to start the slide show; this image could be a standard for all your slide shows
- Image1 - click on the ... icon and locate and select the image from the Image Manager that represents the LAST slide to be shown; see the explanation below this list
- DiagramRef - To Be Defined

The HelpSlideshow definition includes the Tagged Value 'Image1'. If you intend to have a slideshow of more than one image, you go to the 'Tags' tab of the Properties window and create further Tagged Values there. You have two options:

1. Create as many additional 'Image1' Tagged Values as you require, without limit. Each new Tagged Value is added to the top of the list and, all being of the same name, they will be acted on in the sequence top to bottom, so perhaps just add the Tagged Values first and add the slide images in the required sequence when you have finished.
   As these are all 'Image1' Tagged Values and part of the definition, they will appear in the 'Element' tab in the stereotype Tagged Values section, in the order newest to oldest (if they don't, click off the element and click back onto it again).
2. Create up to four Tagged Values of the type HelpSystem::Image2 through to HelpSystem::Image5. Add the first image in your slideshow to the 'Image2' Tagged Value, and the next to 'Image3', and so on. These Tagged Values are part of the HelpSystem profile but not part of the HelpSlideshow stereotype definition, so they are listed in the 'Tags' tab of the Properties window. All Tagged Values are processed by tag name in alphanumerical order, so the HelpSlideshow tags will be processed from '**H**elpSystem::Image2' through 'HelpSystem::Image5' to '**Ic**on' to '**Im**age1'.

This is why the initial Image1 Tagged Value provided by default when the element is created always contains the last slide in the slideshow - it is the oldest and the last in alphanumerical order.

**HelpTable**

HelpTable elements come in a variety of formats, depending on the stereotype assigned.

Column names are applied using Tagged Values in the Properties window. In three-column tables the third column contains hyperlinks to other Help topics (set in the HelpTableRow elements), and its heading defaults to 'See also' in the Help generator. Note that 'See also' columns are not reproduced in PDF output generated from the Help source.

A HelpTable element can only be a child of a HelpTopic element, and can only contain HelpTableRow or HelpTableRowProxy child elements.

A complete list of table formats and their stereotypes is provided in the *Help System Tables* topic.

**HelpTableProxy**

A HelpTableProxy duplicates the content and definition of an existing HelpTable in a different Help topic, of any style and format. This includes all HelpTableRow and HelpTableRowProxy elements the existing HelpTable might have. The HelpTableProxy element can only be the child of a HelpTopic and cannot have any child elements itself.

| | |
|---|---|
| | After you give the element a name, in the Properties window for the element select the 'refTable' Tagged Value, click on the ... icon and locate and select the HelpTable that you want to duplicate in the current topic. |
| **HelpTableRow** | A Help Table Row element represents a single row in a table. Generally, the element name becomes the row title, and the Notes field becomes the row description. However, the element has various Tagged Values defined in the Properties window that support different types of row header and column content. These are:<br>• ImageRef - you can *replace* the row header text with an image, in which case you use the image name in the Image Manager as the element name; click on the ... icon and locate and select the image from the Image Manager<br>If you want to have a row title *and* an image, give the HelpTableRow element that title as its name<br>• Lytebox - To Be Defined<br>• ImageArtifact - if you want to add an image held in an *Image Artifact* to the row, or replace the row title with that image (using the same principles as for ImageRef), click on the ... icon and locate and select the image from your file browser<br>• ImageLink - click on the ... icon and locate and select the Help topic that is displayed when the user clicks on the image<br>• SeeAlso - enables you to add a link to another Help topic, the name of which will display in the See also column (where appropriate to the table type)<br>Note that these links can only be to HelpTopic elements, not to any other type of object; if you need to link to a website or other URL, create the link in the second column, using the Notes field<br>HelpTableRows are generated in the table in the same sequence as they are listed in the Browser window. |
| **HelpTableRowProxy** | A HelpTableRowProxy element duplicates the content of an existing HelpTableRow element elsewhere in the model. It has no content of its own. As for the other Proxy elements, after you give the element a name, in the Properties window for the element select the 'refTableRow' Tagged Value, click on the ... icon and locate and select the HelpTableRow that you want to duplicate in the current table. |
| **HelpSectionLearnMore** | The HelpSectionLearnMore element is used to provide a list of hyperlinks to related topics that have not been linked elsewhere in the topic, nor in the Help hierarchy displayed next to the generated Help topic. It is usually placed last in the HelpTopic so as not to distract from the material presented in the HelpTopic body; however, if there is a lot of content, such as long tables of parameters, attributes or methods, the Learn More section can be inserted above such material, closer to the start of the Help page.<br>Within the Enterprise Architect Help the section usually consists of a simple bulleted list of hyperlinks to other Help topics or to web sites of relevance. However, you can add explanatory text if necessary, or omit the section if there are no points of reference beyond those already linked to in the rest of the topic.<br>The PDF generator ignores this element, so the list of links does not display in a PDF document. |

## HelpPackage Tagged Values for PDF Generation

In the Properties window for a HelpPackage you will see the following list of properties:

- ReportAlias
- ReportAuthor
- ReportCoverImage
- ReportKeywords
- ReportProducer
- ReportStatus
- ReportSubject
- ReportSummary
- ReportTitle
- ReportVersion

The properties are stored as tagged values, belonging to the stereotype <<HelpPackage>>.

These properties, as well as some standard element properties, are collectively referred to as Report Constants. The Report Constants (when present) are used when generating PDF documents from your Help model.

From the properties listed above, ReportAuthor, ReportCoverImage, ReportKeywords, ReportStatus, ReportSummary, ReportTitle and ReportVersion, are available for inclusion in your generated documents. These properties, along with several standard element properties can be inserted as fields into your document templates. They appear under the 'Report Constants' menu when you right-click in the template editor. Typically, they would be used in a CoverPage template, or in the header and footer sections of the main document template.

Some of these properties have names similar to standard element properties. They are: Name, Alias, Keywords, Status and Version. If the values of any of these stereotype properties are empty, the document fields will use the corresponding standard element property values in their place.

A second and slightly smaller list of properties: ReportAuthor, ReportKeywords, ReportProducer, ReportSubject, ReportTitle, is used to write out metadata for the generated PDF file.

The tagged values from the 'root package' selected for PDF generation, will be used for the entire document. If the selected package also includes a series of child packages, the tagged values from the child packages are not used as those topics are rendered.

# Help System Tables

Tables provide a convenient way of presenting information to people; the Help Model helps you to set up a range of different types of table to suit different purposes, such as defining the meanings of icons, or describing stages in a process, or describing numbered steps in a procedure. The HTML and PDF generators support definitions for 2-column or 3-column tables.

The two generators determine how to render tables using different rules. The HTML generator operates on business rules stored in code.

The PDF generator works on element stereotypes, each stereotype being rendered via a fixed RTF template:

- The element's stereotype determines the table layout, column width and fields used; all of these settings are fixed
- The layout applies to the entire table, so all rows of a table must follow the same configuration

## Table Considerations

When designing how to present data in tables, it is important to consider these conditions:

- All HelpTables have borders and headers except for HelpTable2AX, 2DX, 3AX and 3CX
- The column headings are set in the Properties window, in the 'Column1' and 'Column2' Tagged Values; you type the column heading text in the appropriate Tagged Value
- If you provide column headings, they are displayed in a highlighted row at the top of the table; if you do not provide column headings, the table has no header row

- The third column in a 3-column table (with the 'Column3' Tagged Value) is always the 'See also' column, which is designed to contain a hyperlink to another Help Topic
- In some types of 2-column table, 'Column2' is designated as the 'See also' column
- The PDF generator does not support hyperlinks in a table and so ignores the 'See also' column, which means that a 3-column table in the source is rendered as a 2-column table in the generated PDF, and a 2-column table containing a 'See also' column in the source is rendered as a single-column table in PDF

- The data for each table row is sourced from the name, notes and Tagged Values of a HelpTableRow element
- The contents of the first column are drawn from the element name and/or ImageRef Tagged Value of each HelpTableRow element
- The contents of the second column are generally drawn from the Notes field of each HelpTableRow element.
- If a HelpTableRow element has a completed 'ImageRef' Tagged Value, the specified image is loaded into the first column
- If the HelpTableRow element name is the same as the image name recorded in the 'ImageRef' Tagged Value then the element name is NOT included in first column; otherwise both element name AND ImageRef are loaded into the first column
- If a HelpTableRow element has one or more completed 'See also' Tagged Values, the HelpTopic names they reference will be loaded into the third column of the table

- The table widths displayed in generated HTML are controlled by the length of text loaded into the row cells, and vary according to the width of the screen in which they are displayed
- In HTML output, the column widths vary depending on the longest HelpTableRow element name and the volume of text in the other column(s)
- The table and column widths displayed in generated PDF are fixed, and based on predefined RTF templates

## Table Formats

| Format | Description |
|---|---|
| HelpTable2A | A general two-column table that displays text in both columns.<br>In PDF output this appears as a 2-column table, the first column being 25% of the table width and the second 75%. |
| HelpTable2B | A two column table that displays text in the first column and hyperlinks in the second.<br>In PDF, this will be a single-column table containing text from the HelpTableRow element notes, across the width of the page. |
| HelpTable2C | A 2-column table generally used to display a series of steps, with the first column displaying the step number (as the HelpTableRow element name), which is why it is narrow. The step instructions are drawn from the HelpTableRow element notes.<br>In PDF output the first column is 10% of the table width, the second 90%. |
| HelpTable2D | A two column table that displays both element name and 'ImageRef' Tagged Value images in the first column and notes in the second column.<br>In PDF output this appears as a 2-column table, the first column being 25% of the table width and the second 75%. |
| HelpTable2E | A two column table that displays an ImageRef in the first column (NO text) and notes in the second.<br>In PDF output this appears as a 2-column table, the first column being 25% of the table width and the second 75%. |
| HelpTable2AX | A general two-column table that displays text in both columns. This table has no column headers or borders.<br>In PDF output this appears as a 2-column table, the first column being 25% of the table width and the second 75%. |
| HelpTable2DX | A two column table that displays both element name and 'ImageRef' Tagged Value images in the first column and notes in the second column. This table has no column headers or borders.<br>In PDF output this appears as a 2-column table, the first column being 25% of the table width and the second 75%. |
| HelpTable3A | A general three column table that displays text in the first two columns and 'See also' links in the third column. The first column contains the HelpTableRow element name and the second contains the element notes text.<br>In PDF output this appears as a 2-column table, the first column being 25% of the table width and the second 75%. |
| HelpTable3B | A three column table, generally used to display a series of steps, with first column displaying the step number (as the element name), the second displaying Notes and the third containing 'See also' links. You could depict the element numbers in, say, WordArt style, by using ImageRef images in the HelpTableRow elements.<br>In PDF output this appears as a 2-column table, the first column being 10% of the table width and the second 90%. |
| | |

| | |
|---|---|
| HelpTable3C | A three column table with the HelpTableRow element name and 'ImageRef' Tagged Value image shown in the first column, notes in the second and a 'See also' in the third.<br>In PDF output this appears as a 2-column table, the first column being 25% of the table width and the second 75%. |
| HelpTable3D | A three column table with the HelpTableRow 'ImageRef' Tagged Value image shown in the first column, notes in the second and a 'See also' in the third.<br>In PDF output this appears as a 2-column table, the first column being 25% of the table width and the second 75%. |
| HelpTable3AX | A general three column table that displays text in the first two columns and 'See also' links in the third column. The first column contains the HelpTableRow element name and the second contains the element notes text. This table has no column headers or borders.<br>In PDF output this appears as a 2-column table, the first column being 25% of the table width and the second 75%. |
| HelpTable3CX | A three column table with the HelpTableRow element name and 'ImageRef' Tagged Value image shown in the first column, notes in the second and a 'See also' in the third. This table has no column headers or borders.<br>In PDF output this appears as a 2-column table, the first column being 25% of the table width and the second 75%. |

# Authoring Help System Content

The Enterprise Architect Help System model provides all the structure, formatting and styles you require to immediately create and generate Help topics that resemble the Enterprise Architect Help itself. You can then edit the CSS file and the templates to tailor the output to reflect your organizations own standards and presentation.

The format of the source Help material is largely controlled by Enterprise Architect, and then interpreted by the HTML and PDF generators as defined by the templates and CSS file. There are, however, various formats and styles you can impose as you write your Help text, and these are discussed in the sections of this topic.

## Using the Specification Manager

The primary tool for authoring help content is the Specification Manager. This is a customizable 'document like' interface into which you can add and author Help content. To open the Specification Manager, select a HelpPackage in the Browser window, then either:

- Press Ctrl+0
- Right-click and select Specification Manager, or
- Select the Design > Package > Specification View ribbon option.

Thereafter, when you click on a Help element in the Browser Window, the Specification Manager changes focus to the parent HelpTopic for that element.

The Specification Manager has a number of columns that help you check and maintain properties of a Help element, such as Status, Priority and Stereotype. You might also prefer to hide all the columns except for 'Item', which will just show the element name and Notes content (the Help text). You use the 'Field Chooser' context menu option to add columns, and simply drag column headers out of the header bar to hide them.

When you open the Specification Manager, the Specification-Specify ribbon automatically displays. Useful options in the ribbon include:

- 'Element > Insert > Show Toolbox' - displays the Diagram Toolbox, which you can pin to the Help System page so that it always opens at that page.
- 'Element > Move Up' and 'Element > Move Down', which help you re-order the sequence of peer-level elements
- 'Display > Notes Format', which enables you to put the Notes text where it best suits you to read and edit it, either underneath the Help element name or to the right of it, or to hide the column headings ('Document View')
- 'Display > Level Numbering', which - in more complex topic structures - numbers parent and child elements so that you can see which elements are children of which parents
- Display > Bold Names', to bolden the element names and make them more visible in amongst the blocks of text
- 'Display > Collapsible Regions' to hide child elements underneath their parent elements, so that you can expand only the element group you want to work on (very useful when you have a number of tables, especially with many rows)
- 'Display > Font Size', which allows you to change the display size of all text to make it easier to read, or to include more text within the window area

## The Notes window

The second important window for developing Help text is the Notes window, which makes it a bit easier to do formatting and hyperlinks through the Notes window toolbar options.

Some useful shortcuts in notes are:

- Ctrl+. Starts or ends a bulleted list
- Ctrl+0 Starts or ends a numbered list
- Ctrl+B Set Bold on or off

- Ctrl+I Set italics on or off
- Ctrl+U Set underline on or off

## Referencing Images

Using images in the Specification Manager is achieved by using the normal Notes window. To link to an image open the Notes window and use the Hyperlink toolbar button to add a hyperlink to an image in the Image Manager (select the hyperlink type as 'Image Manager'), or as an Image Asset held in a reference diagram (select the hyperlink type as 'Element Image'). It is also possible to add a Hyperlink directly to a diagram held in the same project (select the hyperlink type as 'Diagram Image').

## Style and Formatting Considerations

As you will be editing a document that will later be generated, most of the formatting and style considerations are already handled automatically at generation time. Try to avoid manually applying bold, italics, underline or color to text. Instead use the Glossary to consistently markup terms by category (see the later section on the glossary).

Where a HelpSection or HelpTable contains a lot of code, you might prefer to format the text in monospace. You can do this by selecting the 'Tags' tab of the Properties window for the element and adding a new Tagged Value 'ContentType' with the value 'basic'.

## The Role of the Glossary

As you add content you might see some terms underlined; this is because they are defined in the glossary and will appear in the final Help document with a special color or appearance. If you are including new terms for user interface elements, hot keys or special terms, it might be that you should add them to the appropriate section in the glossary. You can do this by highlighting the term and using the context menu to Create | Glossary Definition. Add the term to the appropriate place and check your generated content to ensure it appears as expected.

The Model Glossary also plays a part in defining the native language in which you write the Help text, and any other language you translate it into. See the *Translation Facility* Help topics.

# Generating Files from a Help Model

Once you have created a documentation model using the Help Authoring tools available in Enterprise Architect, the next step is to generate documentation from the model.  Enterprise Architect supports generation of both HTML web pages and PDF files, from the same model.

In both cases the formatting and layout is controlled by stylesheets and templates, which can be customized to suit your specific requirements.

The Help topics *Generating HTML Files* and *Generating PDF Files*, set out the steps required to generate the respective file sets, as well as providing details about the templates and stylesheets that are used and how to modify them.

During the Help Authoring process and upon completion it is important to generate the content you are working on into HTML and/or PDF form. This allows you to view how your material will appear to the final consumer, and to check for obvious formatting errors, omissions and other mistakes. It is best to generate both formats as there will be subtle differences between the two outputs.

A good PDF document will be easy to read, well formed and of a consistent look and feel. Ensure paragraph spacing, image placement, heading placement and other formatting issues are checked and corrected if necessary. The same approach should be used for HTML with the additional necessity of checking hyperlinks and other web-only constructs.

# Generating HTML Files

After constructing a Help model in Enterprise Architect, you can then generate HTML files from the model, suitable for uploading to a web site, or for use on a local file system.

The generation process is as simple as choosing the package for which to generate Help pages and invoking the 'Generate Help' command. In the dialog that displays, specify an output folder, specify the location of the template files, specify the master template file to use, then click on 'Generate'.

## Access

| | |
|---|---|
| Browser menu | In the Browser window, right-click on a «HelpPackage», «HelpTopic» or a «HelpTopicProxy» element, then choose the menu option 'Generate Help on Current Item'. |
| Ribbon | With a «HelpPackage», «HelpTopic» or a «HelpTopicProxy» element selected in the Browser window, choose the ribbon option "Publish > Model Reports > Generate Help". |

## Steps for Generating HTML Files

The table below steps through the procedure for generating HTML files from your Help model, in its simplest form, using only the default values.

The 'Generate Help' dialog is explained in detail in the help topic *'The Generate Help Dialog'*.

| Step | Description |
|---|---|
| Select the Package/Topic to Generate | In the Browser window, right-click on a «HelpPackage», «HelpTopic» or a «HelpTopicProxy», then choose the command 'Generate Help for Current Item'.<br>The 'Generate Help' dialog is displayed. |
| Select an Output Folder | Use the 'browse' button to select an existing folder on your file system, in which to write the generated HTML files.<br>Note: Do not choose "C:\" as the output folder, as the generator cannot extract the necessary files into the root folder. |
| Specify the Location of the Template Files | If this is the first run of the Help Generator, the 'Templates Location' field was empty up to this point. When the 'Output Folder' is selected using the 'browse' button, the 'Templates Location' is updated with the value 'Templates', as a sub-folder of the chosen output folder.<br>Note: The Help Generator will copy the set of provided template files into the specified 'Templates Location' on every run, if the files do not already exist in that location. |
| Specify the Master Template to Use | The 'Master Template' field will have been populated with the default value 'HelpPageTemplate.html'. For now, leave this value as is. |
| Generate | Click on the 'Generate' button to generate a set of HTML files for the model hierarchy starting at the selected «HelpPackage». |

| | |
|---|---|
| | The System Output window is displayed and a processing log is written into the 'Help System' page of that window. |
| View the Generated Files | At the top of the processing log in the System Output window, you will find the full path of the file generated for the root package of the model branch you just generated.<br>Open a web browser and load the file named in the output window. |

## Template Files

A set of ready to use template files is provided as part of Enterprise Architect. The template files will be extracted into a sub-folder named 'Templates' in your specified output folder each time you generate HTML files. Once the files have been copied to the output folder, you are free to modify them to suit your own needs. Existing files will not be overwritten when you next generate your HTML files.

It is expected that you will customize the master template file to suit your own needs, however, it is far less likely that you will need to modify the element template files.

For detailed information on the template files, see the Help topic *Help Template Files*.

## CSS File

A CSS file named 'user-guide.css' that defines the styles used by the generated HTML is also provided as part of Enterprise Architect. When generating HTML files, this file is also extracted into your specified output folder if it does not already exist there. Once the file exists in your output folder, you can update the styles it defines to suit your needs.

# The 'Generate Help' Dialog

This topic explains the use of the various fields that appear on the 'Generate Help' dialog.

## The Dialog Fields

| Field Name | Purpose/Use |
|---|---|
| Output Folder | Use this field to specify a file system folder, into which the generated files should be written.<br>Note:  Do not choose "C:\" as the output folder, as the generator cannot extract the necessary files into the root folder. |
| Templates Location | This field is used to specify the folder in which the generator can find the template files used in the generation process.<br>By default, this field will be empty, however, when the 'browse' button is used to select an output folder, this field will be updated with the value 'Templates', as a sub-folder of the selected output folder.<br>On every run of the Help Generator, a default set of template files will be copied into the folder specified here.  Existing files within the folder will not be overwritten. |
| Master Template | The 'master template' file acts as the container for the generated content.<br>By default, the value of this field is 'HelpPageTemplate.html'.  This file is part of the set of template files provided by Enterprise Architect.  It is intended to be used as a starting point for creating HTML files that will be viewed from your local file system.<br>A second 'master template' file named 'HelpPageTemplateWeb.html' is also provided in the set of template files.  This file is intended as a starting point for creating web-based files.<br>You are free to copy and modify these file to suit your specific needs - in that case you would specify the name of the modified file. |
| Translate into | Use the drop-down list in this field to choose a target language for translation.  The element names and Notes fields will be translated into this language during generation, resulting in HTML file rendered in the chosen language.<br>Note:  Translation services are only available when you connect to your Enterprise Architect model using Pro Cloud Server, and only when the required SBPI facilities have been set up.  Otherwise, "SBPI unavailable" will be shown in the drop-down list. |
| Update Translation | The values in the drop-down list of this field are used to control whether the generator uses a saved translation string or queries the translation service to retrieve a new translation string.<br>• **Never** - Do not query the translation service for a new translation string. Use the saved translation if one exists.<br>• **Auto** - Query the translation service for a new translation string, only when the Name, or Notes of the element being processed have been updated since the last translation string was saved. Otherwise, use the saved translation.<br>• **Always** - Query the translation service and retrieve a new translation string in every case. |

| | |
|---|---|
| | Whenever a new translation string is retrieved, it is saved in the model. |
| Web Site Path | This field is used to specify the URL of the web site's root folder.<br>The value is used when writing entries for the file 'site-map.xml'.  It can also be used to substitute the placeholder "#SITE_PATH#" in the master template file. |
| Generation Options | **Generate Sub-Packages** - Select this option when generating a full set of HTML files for publication.  By de-selecting this option, you can generate an HTML file for just the package or topic selected in the Browser window, which is very useful when you want to review changes you have made to a single topic.<br>**Write errors to 'Errors.txt'** - Choose whether or not errors and warnings from the generation process should be written to the file 'errors.txt' in the specified output folder.<br>**Generate Image Captions** - Use this option to specify whether or not to generate the HTML <caption> tag for images that are embedded in the element's Notes fields.  The text for the caption is retrieved from the Notes field of an Image Artifact element, or from the 'Description' field of an image stored in the Image Manager. |

# Help Template Files

Enterprise Architect makes use of a series of template files when generating HTML content from your Help model. Each of the template files contains some formatting information, as well as placeholders where generated content will be inserted.

As each model element is rendered, the corresponding template file is loaded into memory and the element data is substituted into the appropriate placeholders. The page content is built up as each element is rendered, until finally, the page content is substituted into the corresponding placeholder in the 'master template' file.

There is a specific template file that corresponds to each type of element available in the Help model, as well as two sample 'master template' files.

All of these template files are provided as a part of Enterprise Architect and will be copied to a sub-folder named 'Templates' in your specified output folder the first time you generate files from your Help model.

It is expected that you will customize the master template file to suit your own needs, however, it is far less likely that you will need to modify the element template files.

You should have a sound working knowledge of HTML before attempting to customize any of the template files.

## Master Template File

The master template file is unique, in that you specify the name of the file that you want to use when commencing a generation. You are encouraged to copy and rename this file, and edit it to suit your needs. Essentially, it is used as a container for the generated content and you are free to edit the layout of your content however you wish.

The following table describes the use of the content placeholders that are available for use within a master template file.

| | |
|---|---|
| TOPIC_TITLE | This placeholder is substituted with the name of the «HelpTopic» element.<br>In the default content of the master template file, this value is used to set the title of the generated web page. The page title is used by web browsers to label individual tabs in the browser. |
| SITE_PATH | This placeholder is substituted with the value of the 'Site Folder Path', taken from the 'Generate Help' dialog. A typical use would be to create the initial item in the page's breadcrumb navigation control. For example:<br><li class="home"><a href="#SITE_PATH#/index.html">Index</a></li> |
| META_DESCRIPTION | This placeholder is substituted with a value constructed using the generated HelpTopic's name, followed by the first sentence from the generated HelpTopic's Notes field. The 'meta description' value is used by search engines such as Google, for indexing the web page.<br>Typical usage would be to include the following line within the <head> section of the master template file:<br><meta name="Description" content="#META_DESCRIPTION#" /> |
| BREADCRUMB | This placeholder is substituted with a string of HTML code, that is used to create a breadcrumb style, navigation control. The HTML string is constructed as a list of hyperlinks to the generated pages associated with each of the parent packages under which the current topic resides.<br>The default content in the master template file, wraps this placeholder with <div>, <table> and <ul> tags, that specify the CSS classes required to display the list of hyperlinks as a breadcrumb control. If you want to remove the breadcrumb control, you should remove the entire <div> fragment. |
| | This placeholder, used in conjunction with the 'PREV_LINK_CLOSE' placeholder, |

| | |
|---|---|
| PREV_LINK | is used to create a button that provides a hyperlink to the web page associated with the 'previous' topic in your Help model.<br>If you do not wish to display 'Prev' and 'Next' buttons, you should remove the entire table fragment that begins with <table class="hnavright"> |
| PREV_LINK_CLOSE | This placeholder is substituted with HTML code that closes the tag that is opened with the 'PREV_LINK' placeholder. |
| NEXT_LINK | This placeholder, used in conjunction with the 'PREV_LINK_CLOSE' placeholder, is used to create a button that provides a hyperlink to the web page associated with the 'previous' topic in your Help model.<br>If you do not wish to display 'Prev' and 'Next' buttons, you should remove the entire table fragment that begins with <table class="hnavright"> |
| NEXT_LINK_CLOSE | This placeholder is substituted with HTML code that closes the tag that is opened with the 'NEXT_LINK' placeholder. |
| TOPIC_TEXT | This placeholder is substituted with a string of HTML text, that makes up the body of the generated web page. The generator processes each of the child elements within a «HelpTopic» element, using the template file that corresponds with the type of each child element and builds a single HTML string that encompasses all of the model content for the current Help topic. |
| NAVIGATION | This placeholder is substituted with a list of hyperlinks, that produces a menu on the left side of the web page, supporting navigation to Help topics that are siblings of the current topic. That is, topics that are at the same level in the model hierarchy. |

## HelpTopic

The following table describes the use of the content placeholders that are available for use within the template file named "HelpTopic.html". You can edit the content of this file if you need to, but we recommend that you use it without modification - at least to begin with.

You cannot rename this template file - the Help Generator expects to find a file with this name.

| Placeholder Name | Description |
|---|---|
| TOPIC_NAME | This placeholder is substituted with the name of the «HelpTopic» element.<br>The default content of the template file "HelpTopic.html" uses the Help Topic name as a heading for the page. |
| NOTES | This placeholder is substituted with the Notes of the «HelpTopic» element.<br>The default content of the template file "HelpTopic.html" displays the Notes of the Help Topic immediately following the page heading. |
| PAGE_CONTENT | This placeholder is substituted with the page content generated as a result of processing child elements of the «HelpTopic» element.<br>The default content of the template file "HelpTopic.html" displays this 'page content' following the Notes of the «HelpTopic» element. |
| LEARN_MORE | Currently not used. At this time, this placeholder is substituted with a 'carriage |

| | |
|---|---|
| | return' character. |

## HelpSection

The following table describes the use of the content placeholders that are available for use within the template file named "HelpSection.html". You can edit the content of this file if you need to, but we recommend that you use it without modification - at least to begin with.

You cannot rename this template file - the Help Generator expects to find a file with this name.

| Placeholder Name | Description |
|---|---|
| ELEMENT_NAME | This placeholder is substituted with the name of the element being processed.<br>The default content of this template file renders the element name as a heading for the content generated from the element. |
| NOTES | This placeholder is substituted with the Notes of the «HelpSection» element.<br>The default content of this template file, displays the Notes of the element immediately following the element heading. |

## HelpTableNN

The following table describes the use of the content placeholders that are available for use within the set of template files named "HelpTableNN.html". You can edit the content of these files if you need to, but we recommend that you use them without modification - at least to begin with.

You cannot rename these template files - the Help Generator expects to find a file with a name that corresponds to the type of table being processed.

The default content of these template files is constructed such that the element name appears as a heading, followed by any notes associated with the element, then the table follows on with column headings across the top, and the content of the tables rows follows under that.

| Placeholder Name | Description |
|---|---|
| ELEMENT_NAME | This placeholder is substituted with the name of the element being processed.<br>The default content of this template file renders the element name as a heading for the content generated from the element. |
| NOTES | This placeholder is substituted with the Notes of the element being processed.<br>The default content of this template file, displays the Notes of the element immediately following the element heading. |
| TAGGED_VALUES | This placeholder is substituted with a generated string of HTML code, that makes up the beginning of the table definition. It includes column headings generated from the element's tagged values named "Column1", "Column2" and, in the case of three column tables, "Column3". |
| TABLE_ROWS | This placeholder is substituted with the HTML string generated by processing the «HelpTableRow» elements that are children of the «HelpTable» element being processed. |

## HelpTableRow

The following table describes the use of the content placeholders that are available for use within the template file named "HelpTableRow.html". You can edit the content of this file if you need to, but we recommend that you use it without modification - at least to begin with.

You cannot rename this template file - the Help Generator expects to find a file with this name.

| Placeholder Name | Description |
|---|---|
| ELEMENT_NAME | This placeholder is substituted with the name of the element being processed.<br>The default content of this template file renders the element name in the first (left most) cell of the table row. |
| NOTES | This placeholder is substituted with the Notes of the element being processed.<br>The default content of this template file renders the Notes in the second cell of the table row. |
| ROWS_LINKS | This placeholder is available for use only in the template files for three column tables.<br>It is substituted with hyperlinks generated from data contained in the 'See also' tagged values of the table row element being processed.<br>The default content of this template file renders 'See also' hyperlinks in the third cell of the table row. |

## HelpSectionLearnMore

The following table describes the use of the content placeholders that are available for use within the template file named "HelpSectionLearnMore.html". You can edit the content of this file if you need to, but we recommend that you use it without modification - at least to begin with.

You cannot rename this template file - the Help Generator expects to find a file with this name.

| Placeholder Name | Description |
|---|---|
| ELEMENT_NAME | This placeholder is substituted with the name of the element being processed.<br>The default content of this template file renders the element name as a heading for the content generated from the element.<br>Typically, the element would be named "Learn more" |
| NOTES | This placeholder is substituted with the Notes of the element being processed.<br>The default content of this template file, displays the Notes of the element immediately following the element heading. |

## HelpSlideshow

The following table describes the content placeholders that are used within the template file named "HelpSlideshow.html". The default content of the template file 'HelpSlideshow.html', arranges the generated HTML content as a table having a single row with two columns. An icon representing the slideshow is placed in the first column. The second column contains the element name written as a heading, with the element Notes placed underneath the heading. You can edit the content of this file if you need to, but we recommend that you use it without modification - at least to begin with.

You cannot rename this template file - the Help Generator expects to find a file with this name.

| Placeholder Name | Description |
|---|---|
| FIRST_LB_IMAGE | This placeholder is substituted with HTML code that opens the tags used for the lightbox style control and specifies the first image of the slideshow. |
| TAGGED_VALUES_ICON | This placeholder is substituted with the HTML code that specifies the image to display as the slideshow icon. |
| FIRST_LB_IMAGE_END | This placeholder is substituted with HTML code that closes the tag for the first slideshow image |
| TAGGED_VALUES_IMAGE | This placeholder is substituted with HTML code that lists all of the subesquent images in the slideshow. |
| ELEMENT_NAME | This placeholder is substituted with the name of the element being processed.<br>The default content of this template file renders the element name as a heading, to the right of slideshow icon. |
| NOTES | This placeholder is substituted with the Notes of the element being processed.<br>The default content of this template file, displays the Notes of the element immediately below the element heading. |

## HelpSystemVideo

This table describes the use of the content placeholders that are available for use within the template file named "HelpSystemVideo.html". You can edit the content of this file if you need to, but we recommend that you use it without modification - at least to begin with.

You cannot rename this template file - the Help Generator expects to find a file with this name.

| Placeholder Name | Description |
|---|---|
| VIDEO_TITLE | This placeholder is substituted with the value of the element's tagged value named 'VideoTitle'. The default content of this template file, displays the title as a heading above the HTML video control. |
| VIDEO_URL | This placeholder is substituted with the value of the element's tagged value named 'VideoURL'. This is used within the HTML 'video' tag, to provide the URL value for the 'src' attribute of the 'source' tag.<br>The default content of this template file, displays a full width video control. When the 'play' button is clicked, the control will load and play the video file found at the specified URL. |
| VIDEO_TYPE | This placeholder is substituted with the value of the element's tagged value named |

| | |
|---|---|
| | 'VideoType'. This is used within the HTML 'video' tag, to provide a value for the 'type' attribute of the 'source' tag. |

## HelpVideoLocal

The template file 'HelpVideoLocal.html' is currently not used.

| Placeholder Name | Description |
|---|---|

## HelpSectionDiagram

This table describes the use of the content placeholders that are available for use within the template file named "HelpSectionDiagram.html". You can edit the content of this file if you need to, but we recommend that you use it without modification - at least to begin with.

You cannot rename this template file - the Help Generator expects to find a file with this name.

| Placeholder Name | Description |
|---|---|
| IMAGE_LOCATION | This placeholder is substituted with the generated path name for the diagram image. The generated HTML includes only the path name for the file containing the diagram image. It does not include the element name or notes. |

## Notes

- The content placeholders in the template files are (and must remain) surrounded by a single "#" character front and back, in order that the Help Generator will recognize them as placeholders.

# Generating PDF Files

After constructing a Help model in Enterprise Architect, you can then generate PDF files from the model. The PDF generator includes content from the selected package as well as recursively including content from all of its child packages. So you can produce one large document covering all of your Help model, or smaller documents that cover just selected topics from within your model.

It is also possible to save a 'Resource Document' associated with a package, so that you can easily regenerate the PDF document associated with a package as its content is updated and revised over time.

## Steps for Generating PDF Files

The generation process is as simple as choosing the HelpTopic for which to generate a PDF file and invoking the 'Generate Documentation' command. In the dialog that displays, specify an output filename and the templates to use, then click on 'Generate'.

The table below steps through the process of creating a PDF document for a topic.

| Step | Description |
|---|---|
| Select the Package | Using the Browser window, find and select the Package containing your topic. Note that the document generator (as well as the HTML generator) will generate content recursively, so you might select to build a set of Packages by building from a common parent, or build a single leaf topic as required. |
| Open the Document Generator | Once you have selected a Package, either:<br>• Press F8 or<br>• Select the 'Publish > Model Reports > Report Builder > Generate Documentation' option or<br>• (If you are editing your topic in the Specification Manager) select the 'Specification-Specify > Element > Documentation > Generate Documentation (DOCX, PDF, RTF)' option<br>These options display the 'Generate Documentation' dialog.<br>An important difference in the third method is that the Specification Manager will create a non-recursive document, meaning that only the elements in the current Package will be output. This is ideal for testing high level Packages without the need to generate child Packages at the same time. |
| Set Type and Filename | In the 'Generate Documentation' dialog check the output filename and path and modify if necessary, ensuring that the output file extension is set to .pdf. |
| Select Generation Templates and Stylesheet | A set of system templates and a stylesheet have been provided for you to use.<br>Select the 'User Guide' template in the 'Template' drop-down list and the 'User Guide Styles' template in the 'Stylesheet' drop-down list. Optionally, you can also select 'User Guide Cover' in the 'Cover Page' drop-down list and 'User Guide TOC' in the 'Table of Contents' drop-down list. If no selection is made in the Cover Page and Table of Contents fields, then those items will not be generated. |
| Set Generation Options | There are a couple of additional options to select before creating the PDF document.<br>1. On the first page of the 'Document Generation' dialog, tick the 'Markup Glossary Terms' option to enable automatic highlighting of glossary terms as per the CSS stylesheet, defined along with glossary definitions.<br>2. On the 'Options' page select the 'Hide Non-Printable Objects' option. This will |

| | |
|---|---|
| | ensure any diagrams rendered 'on the fly' will exclude elements that are designated as non-printable. This is important if you have placed explanatory notes on diagrams, that you want to suppress in PDF (and HTML) output. |
| Create PDF Document | Once everything is set, click on the Generate button to create the PDF file. |
| View and Verify | Once the document has been successfully created you can immediately display it by pressing the View button.<br>Carefully examine the document for excessive or missing vertical spaces, inappropriate use of tables, images that render poorly, poor readability, bad grammar and other obvious errors that mar the overall effect. If necessary return to the HelpTopic and correct outstanding problems, then re-generate and confirm the fix has been effective. |

## Resource Documents

Once you are ready to generate the PDF document, all of the generation parameters such as the root package, the output file's pathname and the templates to use, can be saved for re-use, as a Resource Document. To save the parameters, click on the button labelled 'Resource Document' in the upper right hand side of the 'Generate Document' window. Provide a name for the new Resource Document, then click on OK.

To regenerate the document for that package, using the saved settings, open the Resources tab of the Browser window, then expand the node 'Document Publishing > Report Library'. Right click on the saved Resource Document, then select 'Generate Document...' from the menu. The 'Generate Document' window is displayed, populated with all of the saved generation parameters.

At this stage, you have the option to modify the generation parameters before generating and if you wish, any updated values can then be saved back to the Resource Document by clicking the 'Update Resource' button.

# Templates For Generating PDFs

Enterprise Architect provides a set of document templates for you to use when generating PDF files from your Help models, so you can get started right away. The provided templates are 'system' templates and as such cannot be modified. However, you are free to copy and save them as 'custom' templates, which you can then modify as you see fit. When specifying the templates to use for document generation, you are free to choose from system templates or your own custom templates.

For more information on creating new document templates, see the Help topic *All About Document Templates*.

## Template Types

The 'Generate Documentation' dialog has four fields in which you can specify different templates. The fields are labelled Template, Cover Page, Table of Contents and Stylesheet. The templates specified in each of these fields serves a specific purpose, as described below.

## Document Template

The main document template is used to define the content and layout of the body of the generated document. It is specified in the 'Template' field of the 'Generate Documentation' dialog. The system template 'User Guide' has been provided as a starting point for you. It calls on the template fragment 'Help Template Selector'. The selector template in turn specifies which template fragments are used to render the different types of elements that make up a Help model.

## Cover Page Template

This template defines the content and layout of the Cover Page for your document. It is specified in the 'Cover Page' field. If you don't want to generate a cover page for your document, you can choose '<none>' instead of a template name. The system template 'User Guide Cover' has been provided as a starting point for you. The template 'User Guide Cover' applies various formatting styles to the text and fields that it uses. Those styles are defined in the stylesheet template.

## Table of Contents Template

This template that defines the content and layout of the Table of Contents Page for your document. It is specified in the 'Table of Contenets' field. If you don't want to generate a table of contents page for your document, you can choose '<none>' instead of a template name. The system template 'User Guide TOC' has been provided as a starting point for you. The template 'User Guide TOC' applies various formatting styles to the text and fields that it uses. Those styles are defined in the stylesheet template.

## Stylesheet Template

A stylesheet template is used to define character and paragraph formatting styles. Those styles can then be used by the various 'content' templates to apply different formatting styles to specific sections of the generated documents. The stylesheet template is specified in the 'Stylesheet' field of the 'Generate Documentation' dialog. The system template 'User Guide Styles' has been provided as a starting point for you. It defines a large number of styles, such as Heading1, Heading2, CoverHeading1, CoverHeading2, Help Element Header, Help Section Header, TableHeading, TableText and Normal, that are used by (referenced by) the other templates in the set provided. You can also choose <none>, which will give you a reduced set of standard styles, such as Normal, Heading1, Heading2 and so forth. Note however, that the various provided templates make use of several non-standard styles defined within 'User Guide Styles'. So it is recommended that you use the stylesheet template provided, at least until you have a good grasp of how all the templates fit together and which formatting styles you are using. Like all of the other templates, you can copy and save 'User Guide Styles' as a custom template, then subsequently modify it as you see fit. You could change the formatting styles it defines to use different paragraph formatting, fonts, text size or color. You can also add or delete styles from the existing definitions.

## Selector Template

The document template 'User Guide', makes use of Enterprise Architect's template selector facility. It calls on the template fragment 'Help Template Selector', which in turn specifies which template fragments are used to render the different types of elements that make up a Help model. There is a separate template fragment corresponding to each of the stereotyped elements available in the UML profile 'HelpSystem', with the exception of HelpTableRow. The selector template has an entry for (nearly) every stereotyped class defined in the 'HelpSystem' profile. The exceptions are HelpTableRow, HelpSectionLearnMore, HelpSlideshow and HelpSystemVideo. HelpTableRows are handled as child elements in each of the HelpTable template fragments, so they don't need an entry in the selector template. At Sparx Systems, we do not generate the HelpSectionLearnMore elements in PDF documents, as they typically contain hyperlinks to related Help topics. The generated hyperlinks work well in generated HTML files, but not in PDF documents. Similarly, the Slideshows and Videos work well in HTML web pages, but not so much in PDF documents. If you want to generate content in your PDF documents for elements of these types, simply add an entry to the selector template, following the format of the existing entries.

For more information see the Help topic *How to Define a Template Selector Fragment.*

## Template Fragments

There is a separate template fragment corresponding to each of the stereotyped elements available in the UML profile 'HelpSystem', with the exception of HelpTableRow. The HelpTableRow is handled as a child element in each of the HelpTable templates. The template fragments apply various formatting styles to the text and fields that it uses. Those styles are defined in the stylesheet template 'User Guide Styles'.

The provided templates are 'system' templates and as such cannot be modified. However, you are free to copy and save them as 'custom' templates, which you can then modify as you see fit.