Rhythmyx

Implementing Word

Version 6.7

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Percussion Software
600 Unicorn Park Drive
Woburn, MA 01801 U.S.A.
781.438.9900
Internet E-Mail: technical_support@percussion.com
Website: http://www.percussion.com

Contents

How Word-based Content Editors Work 7

How to Create a Word-based Content Editor 8

Creating the Word Template File 13
Modifying the Style Sheet for Parsing Fields 14
Modifying the Content Assembler to Display Custom Word-based Content Editor Fields 15

Installing New Features of Rhythmyx Word Connector 17

Moving Rhythmyx Word Connector Files to the Correct Directory....18
Setting the Address in the Word Template Files 20
Processing Related Links....22
Copying the Template File to the Client Word Application 23
Updating the sys_FileWord Content Editor Control....24

Index 25

CHAPTER 1

How Word-based Content Editors Work

The Rhythmyx Word Connector uses Word-based Content Editors to let users create Content Items in Word and upload them to Rhythmyx. Users can then access Word from Rhythmyx to edit these Content Items.

A Word-based Content Editor opens a Word document with the `rxwordsample.dot` template. This template is stored on the Rhythmyx server in the `..\sys_resources\word\` directory. On occasion, Percussion updates the `rxwordsample.dot` template; check the readme for each build to find out whether the template has been modified since your currently installed build.

By default, this template includes the following styles:

- ArticleAbstract
- ArticleAuthor
- ArticleDisplayTitle
- ArticleBody

Note that the FastForward Word template replaces these styles with:

- PageDescription
- PageAuthor
- PageDisplayTitle
- PageBody

NOTE: An earlier version of the Word template existed and was used with earlier versions of Rhythmyx. The current version, `..\sys_resources\word\rxwordsample.dot`, supersedes it. The deprecated Word template is `..\sys_resources\word\Rhythmyx.dot`.

Each of these styles (or each of the styles you include) is associated with a field in the Word-based Content Editor. The content that the user enters in each style in the Word document becomes the value stored in the corresponding column in the backend table for the Content Editor.

The template causes various Rhythmyx features to appear in Word including a *Save to Rhythmyx* option. Rhythmyx saves files uploaded using the *Save to Rhythmyx* option as `.doc` files regardless of the file suffix indicated by the user. It saves the files to a column named BODYSOURCE in the backend table.

Rhythmyx uses an ActiveX control to download content items from the repository to MS Word, and a Word Macro to upload the files to the Rhythmyx server.

For information about using the default template styles and configuring a system to use ActiveX, see "Prerequisites for Using the Rhythmyx Connector for Word" in the Rhythmyx Content Explorer online Help.

How to Create a Word-based Content Editor

To create a Word-based Content Type, follow the usual procedure for creating a new Content Type in the Rhythmyx Workbench and add the fields and files that the Word Connector requires:

1. Create a new Content Type and add shared and system fields. See "Creating Content Types" in the *Rhythmyx Implementation Guide* for help adding new fields.
2. Add fields that will be entered in Word as local or shared fields with a data type of text. Most likely, you will also want to enter them with a sys_HiddenInput control so they can only be viewed in Word.

   See the section "Entering Content Editor Properties" in the *Rhythmyx Implementation Guide* for help, or look at the Generic Word Content Type in the Workbench. In the Generic Word Content Type, the fields *displaytitle* (shared), *description* (shared), *PageAuthor* (local), and *body* (shared) are the fields that are associated with fields in the Word document.
3. Rhythmyx uses the `sys_FileWord` control to upload files from Microsoft Word. The `sys_FileWord` control uses the fields bodysource, bodysource_encoding, bodysource_filename, and body to upload and store information. Add these as local fields and define them as follows:

Name	Control	Data Type	Format
bodysource	sys_FileWord	binary	max
bodysource_encoding	sys_HiddenInput	text	50
bodysource_filename	sys_EditBox	text	50
body (also one of the fields that is associated with content in Word)	sys_HiddenInput	text	max

4. On the Content Type properties tab, attach the following pre-processing extensions with the specified parameters in the order listed:

Extension	Parameter Name	Parameter Value
sys_copyParameter	source	bodysource_filename
	destination	filename
sys_copyParameter	source	bodysource_clear
	destination	body_clear
sys_xdTextToDom	sourcename	bodysource
	DOMname	XMLDOM

Extension	Parameter Name	Parameter Value
	tidyProperties	rxW2Ktidy.properties
	serverPageTags	rxW2KserverPageTags.xml
	encodingDefault	UTF8
	Validate	(leave blank)
sys_xdTransformDOMToText	SourceName	XMLDOM
	StyleSheet	parsebody.xsl
	DestName	body
sys_xdTransformDOM	SourceName	XMLDOM
	StyleSheet	parsemeta.xsl
	DestName	XMLDOM
sys_xdDOMToParams	SourceName	XMLDOM
	AppendParameter	(leave blank)

The first two sys_copyParameter extensions copy the value of a parameter used when uploading the Word file into a field used in the content editor or in a content editor query. In the first sys_copyParameter, the uploaded value of bodysource_filename is copied into the filename field. You must add the *filename* field to your content editor so it can retrieve it when you want to view or print the Word file:

Name	Control	Data Type	Format
filename	sys_HiddenInput	test	shared

The second sys_copyParameter copies the value of a field that clears the body content when you enter a command to clear it. You do not have to add the *body_clear* field to your content editor since this becomes part of the modify command when you want to clear the body field.

5 Return to the Content Type tab. Include the following parameters and values as links (external) with the `sys_FileWord` control used with the *bodysource* field. Click [...] beside the control to open the Control Properties dialog. Add the Name entry, which you can choose from the drop list in the Name column. Then click [...] in the corresponding Value column, and choose *Link*.

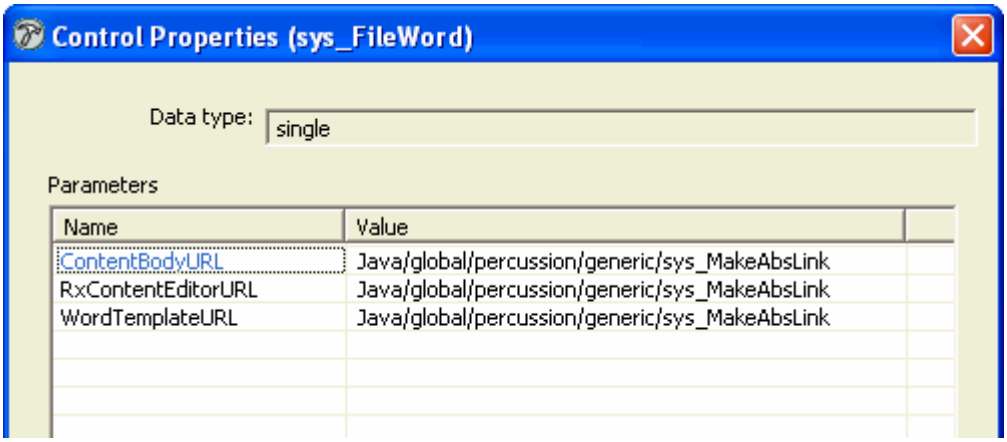

Figure 1: Control Properties

For each parameter, click [...] beside the Value to open the URL Request Properties dialog.

For ContentBodyURL, fill out the URL Request Properties dialog as follows. Base href, for a Content Type named WordContentType, would be entered as ../psx_ceWordContentType/psx_ceWordContentType.html:

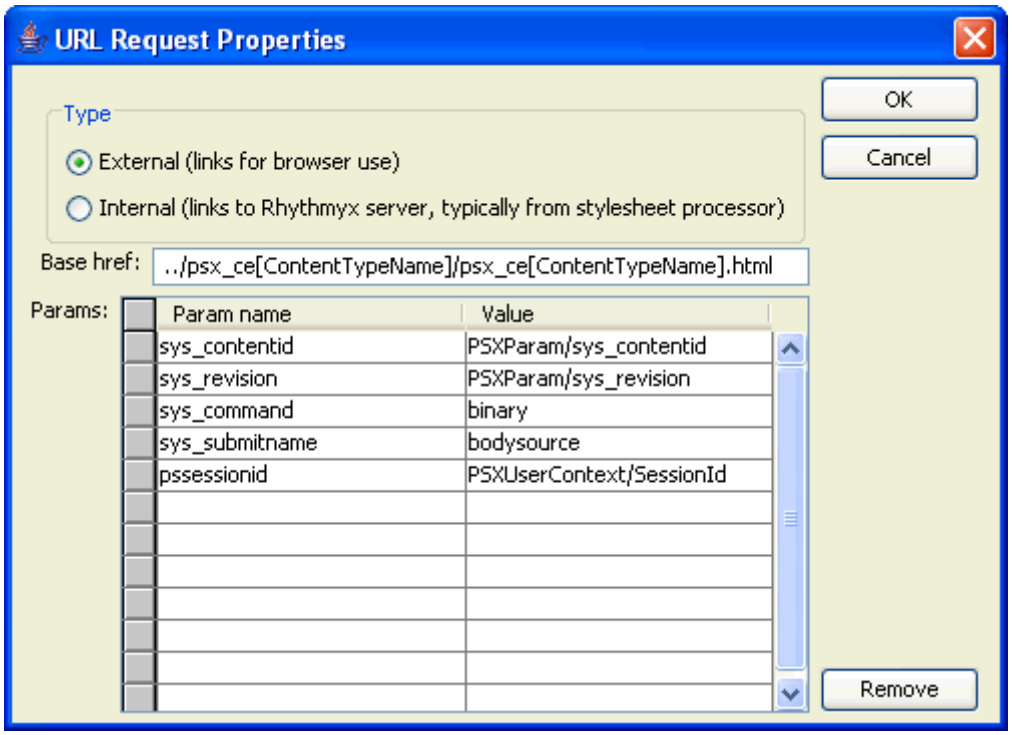

Figure 2: ContentBodyURL Value

For RXContentEditorURL, fill out the URL Request Properties dialog as follows. Base href, for a Content Type named WordContentType, would be entered as ../psx_ceWordContentType/psx_ceWordContentType.xml:

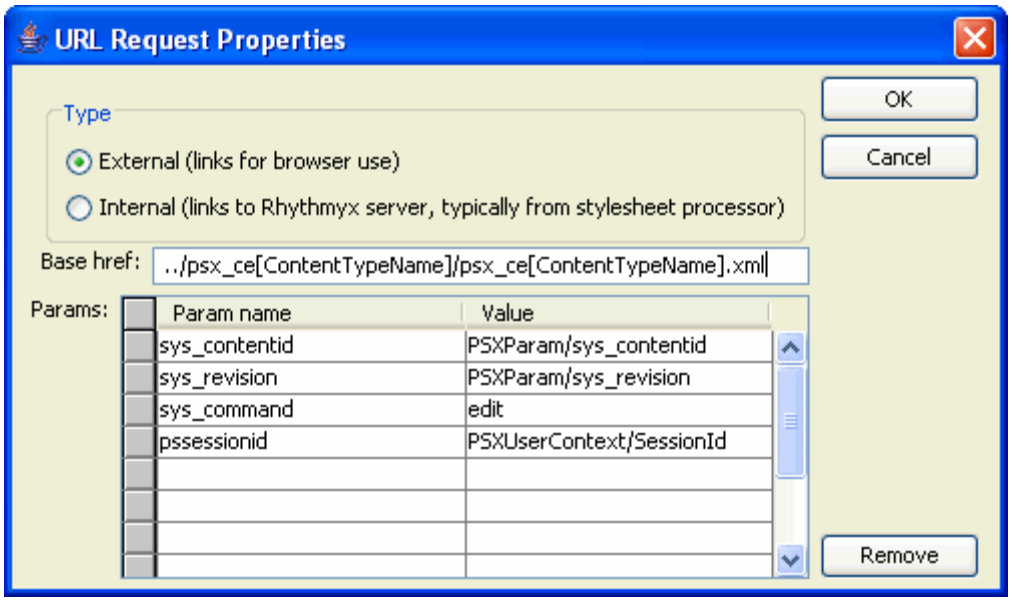

Figure 3: RXContentEditorURL Value

For WordTemplateURL, fill out the URL Request Properties dialog as follows. Base href, for a Content Type named WordContentType, and a Template named WordTemplate.dot, would be entered as ../psx_ceWordContentType/WordTemplate.doc. Note that you will be creating the Word Template in a later step in this procedure.

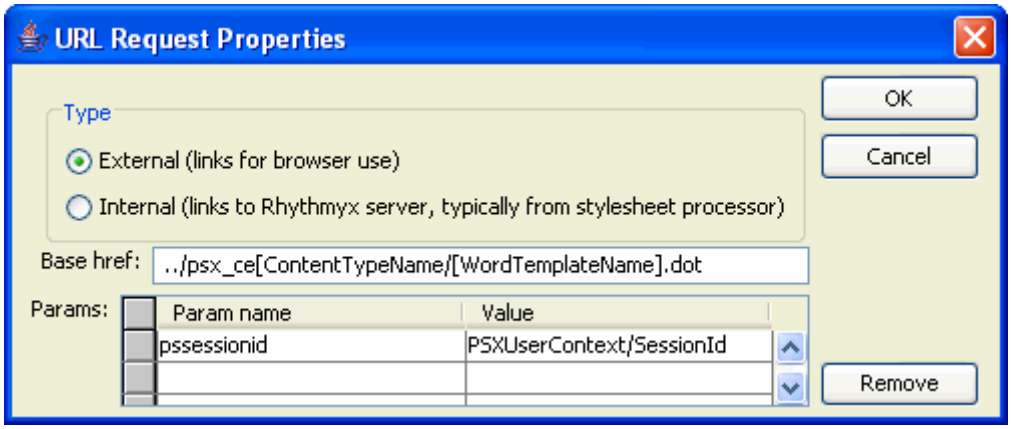

Figure 4: WordTemplateURL Value

For help, open the FastForward GenericWord Content Type in the Rhythmyx Workbench and click [...] beside the Values for an example.

6 Save the Content Type.

7 Create a folder under the Rhythmyx root named psx_ce + YourContentTypeName (for example, the folder for the FastForward rffGenericWord Content Type is psx_cerffGenericWord).

8 In your new folder, copy the `contentfilter.xsl`, `ParseMeta.xsl` and `ParseBody.xsl` files from <`Rhythmyx root`>`\sys_resources\word`.

9 Create a Word template (.dot) file.

10 ***Modify the ParseMeta.xsl or ParseBody.xsl files to reflect the new Word styles and fields added in the .dot and XML files.*** (see "Modifying the Style Sheet for Parsing Fields" on page 14)

11 ***Modify formatting of the body content fields so that they display correctly on assembled pages.*** (see "Modifying the Content Assembler to Display Custom Word-based Content Editor Fields" on page 15)

Creating the Word Template File

Creating a Word-based Content Editor involves specifying fields that will be filled by information entered in Word. The Word template file must include a style for each of these fields.

Copy the current Word template file:

```
..\sys_resources\word\rxwordsample.dot
```

and store it with the name of the new content editor in the folder for the Content Editor in the Rhythmyx root, for example:

```
..\psx_ceWordType\rxWord.dot
```

Open the template file in Word and do the following:

1. Add a style to correspond with each field in your new Content Editor that you want to be entered in Word. You may specify more than one style for your body field.

   By default, rxwordsample.dot includes the styles:

   - ArticleDisplayTitle
   - ArticleAuthor
   - ArticleBody
   - ArticleAbstract

   You can use or modify any of these default styles.

   Note that the FastForward GenericWord Content Type uses a Word template that replaces these styles with:

   - PageDisplayTitle
   - PageAuthor
   - PageBody
   - PageDescription

2. Change the custom property `RxContentEditorURL` in the template to point to the new Content Editor.

   For instructions on creating or modifying a Word template file, see *Create a Document Template* in the Microsoft Word Help. For instructions on changing a custom property in Word, see *Modify a Custom File Property* in the Microsoft Word Help.

NOTE: An earlier version of the Word template existed and was used with earlier versions of Rhythmyx. The current version, `..\sys_resources\word\rxwordsample.dot`, supersedes it. The deprecated Word template is `..\sys_resources\word\Rhythmyx.dot.`

Modifying the Style Sheet for Parsing Fields

The `ParseMeta.xsl` file performs formatting on Word-based Content Editor fields containing metadata and inserts them into the appropriate database columns in the backend table for the Content Editor. Any fields that are not included in ParseMeta.xsl are formatted by ParseBody.xsl and inserted into the body field for the Content Editor.

When you create a Word-based Content Editor, modify `ParseMeta.xsl`, `ParseBody.xsl`, and `contentfilter.xsl` to use the filenames, fields, and styles that your Content Editor uses:

1. In ParseMeta.xsl:
   - change the reference to contentfilter.xsl to point to your Content Editor directory:

```
<xsl:import href="../rx_WordContent_ce/contentfilter.xsl" />
```

   - Change metadata field names and styles to those that your Content Editor and Word template use. For example, in the following code, change the field name `<ArticleTitle>` to a name of a new field in the Content Editor. Change the style `ArticleDisplayTitle` to a new style in the Word template.

```
<ArticleTitle>
   <xsl:choose>
      <xsl:when
test="string(//html:body[1]//html:p[@class='ArticleDisplayTitle'])">
         <xsl:apply-templates
select="//html:body[1]//html:p[@class='ArticleDisplayTitle']" />
      </xsl:when>
      <xsl:when
test="string(//html:body[1]//html:p[@class='MsoTitle'])">
         <xsl:apply-templates
select="//html:body[1]//html:p[@class='MsoTitle']" />
      </xsl:when>
      <xsl:otherwise>COULD NOT FIND A TITLE</xsl:otherwise>
   </xsl:choose>
</ArticleTitle>
```

2. In ParseBody.xsl:
   - change the reference to contentfilter.xsl to point to your Content Editor directory:

```
<xsl:import href="../rx_WordContent_ce/contentfilter.xsl" />
```

3. In contentfilter.xsl:
   - Change metadata style names to those that your Word template uses. For example, in the following code, change `ArticleDisplayTitle` to a new style in the Word template:

```
<xsl:template match="html:p[@class='ArticleDisplayTitle']"
mode="contentfilter" />
```

Modifying the Content Assembler to Display Custom Word-based Content Editor Fields

Content fields that you add to the custom Word-based Content Editor may require additional processing so that they appear in the desired format on the assembled output page.

Where you add the additional formatting depends on the complexity of the style and how you want to use the output. Use the following guidelines:

- If the style that you want to apply is simple, include the formatting in your output CSS. Simple styles affect the appearance of text, for example, by changing the font or color.
- If the style is complex, add the formatting to `ParseBody.xsl` or `rx_InlineLinks.xsl`. Complex styles affect the appearance of content on a page, for example, by adding tables or line breaks.
    1. If you plan to use the style in various output formats, add a generic style for the content in `ParseBody.xsl`. `ParseBody.xsl` stores the content in the generic style prior to output assembly. When output assembly occurs, the various output mechanisms reformat the content as required.
    2. If you plan to output the style as an HTML page, add the formatting style that you want to appear on the final Web page to `rx_resources/stylesheets/assemblers/rx_InlineLinks.xsl`.

CHAPTER 2

Installing New Features of Rhythmyx Word Connector

The current build of Rhythmyx may include changes to the Rhythmyx Word Connector since your previous installation. You can install Rhythmyx either as an upgrade or as a new installation. If you install it as an upgrade, the deprecated Article Word Content Editor (if it was present in your original version) and custom Word-based Content Editors will function as they did previously, but you can install new features. If you install Rhythmyx as a new installation or you upgrade and install the new Rhythmyx Word Connector features, you must set the Rhythmyx server address in the new template file.

Moving Rhythmyx Accelerator for Word Files to the Correct Directory (see "Moving Rhythmyx Word Connector Files to the Correct Directory" on page 18)

Setting the Address in the Word Template Properties (see "Setting the Address in the Word Template Files" on page 20)

Processing Related Links (see "Moving Rhythmyx Word Connector Files to the Correct Directory" on page 18)

Copying the Template File to the Client's Word Application (see "Copying the Template File to the Client Word Application" on page 23)

Updating the sys_FileWord Content Editor Control (on page 24)

Moving Rhythmyx Word Connector Files to the Correct Directory

During development, Percussion Software may modify the rxwordsample.dot file and various .cab files used to support Rhythmyx functionality in Word. When you upgrade to a new version of Rhythmyx (and in some cases, when you upgrade to a new build, such as to fix a bug), you may need to move the Rhythmyx Word Connector files from the install directory (sys_resources/word) to the local directory (rx_resources/word) to make them available to download to your users.

You may also need to develop your Rhythmyx-enabled Word templates again based on the new version of the rxwordsample.dot template provided by Percussion Software to access new features included in the new template. Then move the custom files corresponding to the default files in the instructions below.

NOTE: Be sure you back up or rename your existing files before copying the new files.

NOTE: If you have created a custom Word-based Content Editor, move the custom files corresponding to the default files in the instructions below.

To get the new Word Connector features after upgrading:

1. Copy the following files from

   `../sys_resources/word`

   to

   `../<Word-based Content Editor folder>`.

   `rxwordsample.dot`

   `parsebody.xsl`

   `parsemeta.xsl`

   `contentfilter.xsl`

   If your system is still using the deprecated Rhythmyx.dot template, in the Content Editor definition files for your Word-based Content Editors:

   locate the `<PSXParam name="WordTemplateURL">` node and change:

   ```
   <PSXTextLiteral id="0">
   <text>../sys_resources/word/Rhythmyx.dot</text>
   ```

   `</PSXTextLiteral>`

   to:

   ```
   <PSXTextLiteral id="0"> <text>../<Word-based Content Editor
   folder>/rxwordsample.dot</text>
   ```

   `</PSXTextLiteral>`

2. Copy the file: `rxwordocx.cab`

from: `../sys_resources/word`

to: `../rx_resources/word` (If the directory "`/word`" does not exist, create it.)

3. If your system is using rxword.cab instead of rxwordocx.cab, in the file:

   `../sys_resources/stylesheets/sys_Templates.xsl`

   locate the `<object id="word">` node and change:

   `codebase = ../sys_resources/word/rxword.cab`

   to:

   `codebase = ../rx_resources/word/rxwordocx.cab`

4. Stop and restart the Rhythmyx server.

Setting the Address in the Word Template Files

If you install Rhythmyx as a new installation, or if you upgrade and follow the instructions in ***Installing New Features of Rhythmyx Word Connector*** (on page 17) to access the new features, you must change the value of the address in the template file's properties.

To change the template file address value:

1. Right click `../sys_resources/word/rxwordsample.dot` and select Properties in the drop menu. Rhythmyx opens the Template Properties dialog.
2. Click the Custom tab.

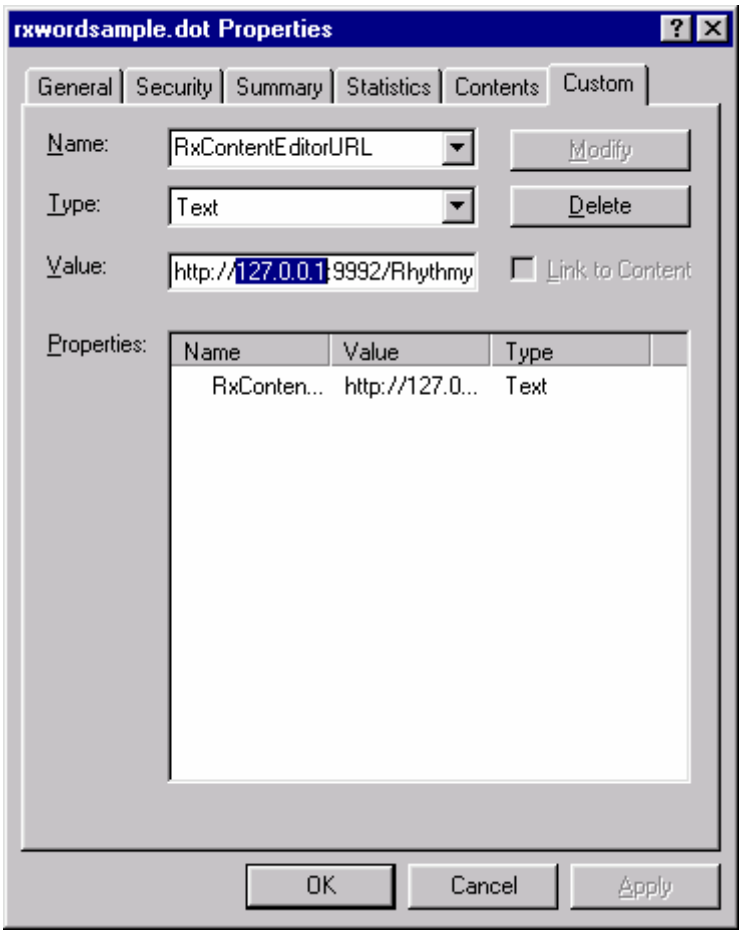

Figure 5: File Properties dialog

3. Click the Properties Name *RxContentEditorURL* to make the Value editable.
4. Change the Value of the host address from the default of 127.0.0.1 to the address of the Rhythmyx server.
5. Click [**OK**].

6 If you have already moved the new version of rxwordsample.dot into any of your Word-based Content Editor folders, repeat the procedure for those copies of the file.

Processing Related Links

If you install Rhythmyx as a new installation, or if you upgrade and follow the instructions in ***Installing New Features of Rhythmyx Word Connector*** (on page 17) to access the new features, add the sys_xdProcessRelatedLinks exit to the Word-based Content Type. The sys_xdProcessRelatedLinks exit creates the inline links and URLs for inline images for the published site.

To add the `sys_xdProcessRelatedLinks` exit to the Word-based Content Type:

1. Open the Word-based Content Type in the Workbench.
2. Click the Properties tab
3. Under Item Transforms and Validations, click the Pre-Processing tab.

   Rhythmyx opens the Exit Properties dialog.
4. Add the exit *sys_xdProcessRelatedLinks*.

   The Extensions Parameters dialog opens
5. Enter XMLDOM as the value of the SourceObject parameter.
6. Use the arrow button to move sys_xdProcessRelatedLinks to the position after sys_xdTextToDom.
7. Save the Content Type.

Copying the Template File to the Client Word Application

After you have configured and copied Rhythmyx files to use the Rhythmyx Connector for Word features, ensure that users attach the new rxwordsample.dot template to their Rhythmyx Word documents. You can install the template in one of two ways:

- Require users to open their first Rhythmyx Word document after upgrade through the [**Launch Word**] button in the Word-based Content Editor to automatically attach the template to Word. If they open their first Rhythmyx Word document directly in Word, the new template will not be attached.
- Send users the `rxwordsample.dot` template and instruct them to copy it into their Word template directories.

Updating the sys_FileWord Content Editor Control

During development or to fix bugs, Percussion Software may modify the sys_FileWord control, requiring you to update the existing copy of the control. The updated control will be in `sys_resources\stylesheets\sys_templates.xsl`. Copy the `<controlMeta>` node (and all of its children) of the `sys_FileWord` template control in this stylesheet and use it to replace the `<controlMeta>` node of the `sys_FileWord` template control in `rx_resources\stylesheets\rx_templates.xsl`.

Index

C

Copying the Template File to the Client Word Application • 17, 23
Creating the Word Template File • 13

H

How to Create a Word-based Content Editor • 8
How Word-based Content Editors Work • 7

I

Installing New Features of Rhythmyx Word Connector • 17, 20, 22

M

Modifying the Content Assembler to Display Custom Word-based Content Editor Fields • 12, 15
Modifying the Style Sheet for Parsing Fields • 12, 14
Moving Rhythmyx Word Connector Files to the Correct Directory • 17, 18

P

Processing Related Links • 22

S

Setting the Address in the Word Template Files • 17, 20

U

Updating the sys_FileWord Content Editor Control • 17, 24