



Software License Agreement

RTF to Image Converter

For .NET

Version 10

2008-2017

ALL RIGHTS RESERVED BY

SUB SYSTEMS, INC.

4380 Caldwell Palm Circle

Round Rock, TX 78665

512-733-2525

Software License Agreement

The Software is protected by copyright laws and international copyright treaties, as well as other intellectual property laws and treaties. The Software is licensed, not sold. This LICENSE AGREEMENT grants you the following rights:

- A. This product is licensed per developer basis only. Each developer working with this package needs to purchase a separate license.
- B. The purchaser has the right to modify and link the DLL functions into their application. Such an application is free of distribution royalties with these conditions: the target application is not a stand-alone RTF to Image Converter; the target application uses this product for one operating system platform only; and the source code (or part) of the editor is not distributed in any form.
- C. The DESKTOP LICENSE allows for the desktop application development. Your desktop application using this product can be distributed royalty-free. Each desktop license allows one developer to use this product on up to two development computers. A developer must purchase additional licenses to use the product on more than two development computers.
- D. The SERVER LICENSE allows for the server application development. The server licenses must be purchased separately when using this product in a server application. Additionally, the product is licensed per developer basis. Only an UNLIMITED SERVER LICENSE allows for royalty-free distribution of your server applications using this product.
- E. ENTERPRISE LICENSE: The large corporations with revenue more than \$500 million and large government entities must purchase an Enterprise License. An Enterprise license is also applicable if any target customer of your product using the Software have revenue more than \$500 million. Please contact us at info@subsystems.com for a quote for an Enterprise License.
- F. Your license rights under this LICENSE AGREEMENT are non-exclusive. All rights not expressly granted herein are reserved by Licensor.
- G. You may not sell, transfer or convey the software license to any third party without Licensor's prior express written consent.

This software is designed keeping the safety and the reliability concerns as the main

considerations. Every effort has been made to make the product reliable and error free. However, Sub Systems, Inc. makes no warranties against any damage, direct or indirect, resulting from the use of the software or the manual and can not be held responsible for the same. The product is provided 'as is' without warranty of any kind, either expressed or implied, including but not limited to the implied warranties of suitability for a particular purpose. The buyer assumes the entire risk of any damage caused by this software. In no event shall Sub Systems, Inc. be liable for damage of any kind, loss of data, loss of profits, interruption of business or other financial losses arising directly or indirectly from the use of this product. Any liability of Sub Systems will be exclusively limited to refund of purchase price.

Sub Systems, Inc. offers a 30 day money back guarantee with the product. Must call for an RMA number before returning the product.



Getting Started

This chapter describes the contents of the software diskettes and provides a step by step process of incorporating RTF to Image Converter into your application.

In This Chapter

[Files](#)

[License Key](#)

[Sample Conversion Code](#)



Files

The package contains the rin.dll and TERN files necessary to incorporate this product into your application.

The package also includes a set of files to construct a demo program. The demo program shows by example the process of linking the DLL to your program.

DLL Demo Files:

The following demo files are included in the c_demo.zip file.

demo.cs	Source code for the demo program
demo.exe	Executable demo program
demo.csproj	The project file to compile the demo.
AssemblyInfo.cs	Assembly information file

Visual Basic Interface and Demo Files:

Form1.vb	vb source file
dmo_vbn.vbproject	The project file for the visual basic demo program.
AssemblyInfo.vb	Assembly information file for the demo program.



License Key

Your License Key and License number are e-mailed to you after your order is processed. You would set the license information using the `RisSetLicenseInfo` static function. This should be preferably done before creating the `Rin` object to avoid pop-up nag screens.

```
int RisSetLicenseInfo(String LicenseKey, String LicenseNumber, String CompanyName);
```

LicenseKey: Your license key is available in the product delivery email sent to you upon the purchase of the product. It consists of a string in the form of "xxxxx-yyyyy-zzzzz".

LicenseNumber: Your license number is also available in the product delivery email. The license number string starts with a "srab" or "sno" prefix.

CompanyName: Your company name as specified in your order.

Return Value: This method returns 0 when successful. A non-zero return value indicates an error condition. Here are the possible return values:

- 0 License application successful.
- 1 Invalid License Key.
- 2 Invalid License Number.
- 3 Ran out of available licenses. Please consider purchasing additional licenses.

Example:

```
result=Rin.RisSetLicenseInfo("xxxxx-yyyyy-zzzzz","srabnnnnn-n","Your Company Name")
```

Replace the 'xxxxx-yyyyy-zzzzz' by your license key, replace "srabnnnnn-n" with your license number, and "Your Company Name" with your company name as specified in your order.

Note: *RisSetLicenseInfo* method should be called only once at the beginning of your application. Calling this method for each conversion would degrade the conversion performance.



Sample Conversion Code

Please ensure that rin.dll and tesn24.dll files are available in the project directory. Set the reference for rin.dll in your project. The tesn24.dll file is referenced indirectly by rin.dll.

Now set the namespace for the product:

```
using SubSystems.RI;           // C# example

Imports SubSystems.RI         ' VB Example
```

Now set the product license key and create an RIN type object:

```
Rin.RisSetLicenseInfo("xxxxx-yyyyy-zzzzz","srabnnnnn-n","my company name")
```

```
Rin hi = new Rin(); // C# example

dim hi as Rin      ' VB example

ri.ProjectFolder = this.MapPath("");
```

Now use one of the following calls to convert from RTF to an Image:

1. Convert an RTF file to an Image file

```
// load RTF file to determine the number of pages in the
// document

PageCount=ri.RisLoadFile("test.rtf");

ri.ImageType=Rin.PICT_JPG; // set output image type to
                          // jpg

Image image=ri.RisGetPageImage(1); // get Image for the
                                  // first page

if (image!=null) {
    result=ri.RisImageToFile(image,"test.jpg");
}
```

```
        image.Dispose();  
    }
```

2. Convert an RTF string to an Image

```
// load RTF file to determine the number of pages in the  
// document  
  
PageCount=ri.RisLoadBuffer(RTFString);  
  
ri.ImageType=Rin.PICT_JPG; // set output image type to  
                        // jpg  
Image image=ri.RisGetPageImage(1); // get Image for the  
                        // first page
```



Control Methods

These methods allow you to convert from RTF to an Image. Please set the namespace for the Rin class before using these methods:

```
using SubSystems.RI;           // C# example  
  
Imports SubSystems.RI        ' VB Example
```

In This Chapter

[RisLoadBuffer](#)

[RisLoadFile](#)

[RisGetImageType](#)

[RisGetLastMessage](#)

[RisGetPageImage](#)

[RisImageToBytes](#)

[RisImageToFile](#)

[RisImageToStr](#)

[RisResetLastMessage](#)

[RisSetFlags](#)

[RisSetHdrFtrText](#)

[RisSetImageSize](#)

[RisSetPageMargin](#)

[RisSetPaperOrient](#)

[RisSetPaperSize](#)



RisLoadBuffer

Load RTF or plain text string and determine the number of pages in the RTF document.

```
int RisLoadBuffer(InString)
```

```
String InString;           // Input string containing RTF formatted document or plain  
                           text.
```

Return value: This function returns the number of pages in the RTF document. A value of zero indicates an error condition.

Examples:

Load an RTF string into the converter

```
ri.ProjectFolder = this.MapPath("");
```

```
PageCount=ri.RisLoadBuffer(RTFString);
```



RisLoadFile

Load an RTF or plain text file and determine the number of pages in the RTF document.

```
int RisLoadFile(InFile)
```

```
string InFile;           // Input file containing RTF document or plain text.
```

Return value: This function returns the number of pages in the RTF document. A value of zero indicates an error condition.

Examples:

Load an RTF file into the converter.

```
ri.RisLoadFile("test.rtf")
```



RisGetImageType

Return the picture type constant corresponding to the extension of the given file.

```
int RisGetImageType(InFile)
```

```
string InFile;           // Picture file name
```

Return value: This function returns one of the PICT_ constant enumerations corresponding to the extension of the file name provided using the first parameter.

This information can be used to set the ImageType property. The ImageType property determines the type of image returned by the subsequent call to the RisGetPageImage method.

Examples:

```
ri.ImageType=ri.RisGetImageType("test.jpg")
```

```
Image image=ri.RisGetPageImage(1);
```



RisGetLastMessage

Get the last message.

```
int RisGetLastMessage(RisMessage, DebugMessage);
```

```
string RisMessage;           // Returns the default user message text in English
```

```
string DebugMsg;            // Returns any debug message associated with the last  
                             message. The debug message need not be displayed to  
                             the user.
```

Return Value: This function returns the last message generated by the editor. This value is valid only if saving of the messages is enabled by setting the RIFLAG_RETURN_MSG_ID flag. This flag is set using the RisSetFlags method.



RisGetPageImage

Return the image for the requested page number for the currently loaded RTF document.

Image RisGetPageImage(PageNo)

```
int PageNo;           // Page number. This value should be between 1 and
                      // the PageCount for the currently loaded RTF
                      // document.
```

Return value: This function returns the Image object for the requested page. A null value indicates an error condition.

Since this method returns an object of the Image class, the System.Drawing namespace must be included in your source module to use this method.

Examples:

```
PageCount=ri.RisLoadFile("test.rtf");
```

```
ri.ImageType=Rin.PICT_JPG;
```

```
Image image=ri.RisGetPageImage(1);
```



RisImageToBytes

Return the the requested image data in a byte array.

```
byte[] RisImageToBytes(image)
```

```
Image image // Image object to save.
```

Return value: This method returns a byte array containing requested image data. A null value indicates an error condition.

This byte array returned by this method can be assigned to a web Response object to deliver to the client machine.

Examples:

```
// write to response object

Response.Clear();

Response.Charset = "";

Response.ContentType = "application/jpg";

string strFileName = "test.jpg";

Response.AddHeader("Content-Disposition",

                    "inline;filename=" + strFileName);

Rin hi = new Rin();

ri.InWebServer = true;

ri.ProjectFolder = this.MapPath("");

ri.ImageType = Rin.PICT_JPG;

int PageCount = ri.RisLoadBuffer(RTFText);

if (PageCount > 0)

{

    System.Drawing.Image image = ri.RisGetPageImage(1);

    byte[] bytes = ri.RisImageToBytes(image);
```

```
image.Dispose();  
Response.BinaryWrite(bytes);  
}
```

```
Response.Flush();
```

```
Response.Close();
```

```
Response.End();
```



RisImageToFile

Save the current image to the requested file name.

```
bool RisImageToFile(image, OutFile)
```

```
Image image           // Image object to save.
```

```
String OutFile       // Output image file name
```

Return value: This method returns True when successful.

Examples:

```
PageCount=ri.RisLoadFile("test.rtf");

ri.ImageType=Rin.PICT_JPG;

Image image=ri.RisGetPageImage(1);

result=ri.RisImageToFile(image,"test.jpg");

image.Dispose();
```




RisImageToStr

Return the the requested image data in a string.

```
string RisImageToBytes(image)
```

```
Image image // Image object to save.
```

Return value: This method returns a string containing requested image data. A null value indicates an error condition.

Examples:

```
PageCount=ri.RisLoadFile("test.rtf");
```

```
ri.ImageType=Rin.PICT_JPG;
```

```
Image image=ri.RisGetPageImage(1);
```

```
string str=ri.RisImageToStr(image);
```

```
image.Dispose();
```



RisResetLastMessage

Reset the last editor message.

```
bool RisResetLastMessage()
```

Description: This function can be called before calling any other function to reset the last error message.

Return Value: The function returns TRUE when successful.

See Also

[RisGetLastMessage](#)

[RisSetFlags](#)



RisSetFlags

Set certain flags or retrieve the values of the flags.

```
int RisSetFlags(set, flags)
```

```
bool set; // TRUE to set the given flags, FALSE to reset the given flags
```

```
int flags; // Flags (bits) to set or reset. Currently, the following flag values are available:
```

RIFLAG_RETURN_MSG_ID	Do not display the error messages. Save the error code to be later retrieved using the RisGetLastMessage function.
----------------------	--

Return value: This function returns the new value of all the flags. Call this function with the 'flags' parameter set to zero to retrieve flag values without modifying it.



RisSetHdrFtrText

Set header or footer text.

```
bool RisSetHdrFtrText(HdrFtrType, TextType, text)
```

int HdrFtrType;	Select header or footer to set:
HF_FIRST_HDR	Header text to print on the first page.
HF_FIRST_FTR	Footer text to print on the first page..
HF_HDR	Regular header for all pages. When the first page header is also set, then the regular header text is printed on all pages except the first page.
HF_FTR	Regular footer for all pages. When the first page footer is also set, then the regular footer text is printed on all pages except the first page.

int TextType;	Text type:
HFTYPE_TEXT	Plain text.
HFTYPE_RTF	RTF text.

string text; Header or footer text. The header/footer text must be specified as plain text or RTF text depending upon the value passed for the 'TextType' parameter.

Comment: The function should be called before calling the conversion functions to set the header or footer text. You can call this function multiple times to set various types of header or footer.

Return value: This function returns TRUE when successful.

Examples:

```
ri.RisSetHdrFtrText(Rin.HF_FIRST_HDR, Rin.HFTYPE_TEXT,
    "This is first page header.")
ri.RisSetHdrFtrText(Rin.HF_FIRST_FTR, Rin.HFTYPE_TEXT,
    "This is first page footer.")
ri.RisSetHdrFtrText(Rin.HF_HDR, Rin.HFTYPE_TEXT,
    "This is regular page header.")
```

```
ri.RisSetHdrFtrText(Rin.HF_FTR, Rin.HFTYPE_RTF,  
    "{\rtf1 \qc Page: {\field{\fldinst PAGE}  
    {\fldrslt 12}} of {\field{\fldinst  
    NUMPAGES}{\fldrslt 12}} \par}" )  
' rtf example to insert page: n of m footer
```



RisSetImageSize

Set the image size.

```
bool RisSetImageSize(ImageWidthTwips, ImageHeightTwips)
```

int ImageWidthTwips; The image width in twips units (1440 twips = 1 inch).

int ImageHeightTwips; The image height in twips units (1440 twips = 1 inch).

Return Value: The function returns TRUE when successful.

Comment: This function is used to override the default image size when converting an RTF document to the PDF format. This function should be called before calling the RisLoadFile or RisLoadBuffer if you wish override the image size. The default image size is derived from the paper-size specification embedded in the rtf file.

This method works the same as the RisSetPaperSize method when called with the 'size' parameter set to 0.

RisSetPageMargin

Set the page margins for Image output.

```
bool RisSetPageMargin(left, right, top, bottom)
```

int left; Left margin in twip units (1440 twips = 1 inch)

int right; Right margin in twip units

int top; Top margin in twip units

int bottom Bottom margin in twip units

Return Value: The function returns TRUE when successful.

Comment: This function is used to override the default page margins when converting an RTF document to the Image. This function should be called before calling the RisLoadFile or RisLoadBuffer methods if you wish override the page margin values.

RisSetPageMargin

Set the page margins for Image output.

bool RisSetPageMargin(left, right, top, bottom)

int left; Left margin in twip units (1440 twips = 1 inch)

int right; Right margin in twip units

int top; Top margin in twip units

int bottom Bottom margin in twip units

Return Value: The function returns TRUE when successful.

Comment: This function is used to override the default page margins when converting an RTF document to the Image. This function should be called before calling the RisLoadFile or RisLoadBuffer methods if you wish override the page margin values.



RisSetPaperOrient

Set the page orientation for Image output.

```
bool RisSetPaperOrient(id, IsPortrait)
```

bool IsPortrait Set to true to set to portrait orientation. Otherwise set to false.

Return Value: The function returns TRUE when successful.

Comment: This function is used to override the default portrait orientation when converting an RTF document to the PDF format. This function should be called before calling the RisLoadFile or RisLoadBuffer methods if you wish override the paper orientation.



RisSetPaperSize

Set the page size for Image output.

```
bool RisSetPaperSize(kind, PageWidth, PageHeight)
```

PaperKind kind;	Use one of the PaperKind enumerations defined by .NET
int PageWidth;	The page width in twips units (1440 twips = 1 inch). This argument is used only if kind is set to PaperKind.Custom.
int PageHeight;	The page height in twips units (1440 twips = 1 inch). This argument is used only if kind is set to PaperKind.Custom.

Return Value: This method returns TRUE when successful.

Comment: This method is used to override the default letter size paper when converting an RTF document to the PDF format. This method should be called before calling the RisLoadFile or RisLoadBuffer methods if you wish override the paper size.



Control Properties

The control properties can be before the conversion to affect the Image output. The control supports the following properties:

InWebServer

This property should be set to True when this control is used in a web server. When this property is set to True, the control suppress the display of any dialog and message boxes.

ProjectFolder

Set this property to the folder containing your project, such as c:\inetpub\wwwroot\MyProject. This information helps the converter locate the images which use relative path. It is also used for creating any temporary files.

ImageType

Use this property to request a particular type of image (default is Bitmap file):

PICT_BMP	Bitmap image
PICT_EMF	Enhanced metafile
PICT_TIF	Tiff image
PICT_JPG	Jpeg image
PICT_PNG	PNG image
PICT_GIF	GIF image
PICT_ICO	Icon image
PICT_EXF	Exif Image

SizePercent

Use this property to change the size of the output image. The default value for this property is 100. You can specify a value small than 100 to obtain a smaller image. Similarly you can specify a value greater than 100 to obtain a larger image.

ImageRes

Use this property to specify the resolution of an image. The default value is 96 dpi.

MetaRes

Use this property to specify the resolution of a metafile image. The default value is 300.

ShrinkToFit

Eliminate the ending white spaces to shrink the image height. This property is only effective for one page RTF documents.

AutoWidth

Adjust the image width to fit the contents.

DontUpdateToc

Don't update the table of content.