Software License Agreement

RTF Code Generator

Version 7

Win32/Win64

1998-2024

ALL RIGHTS RESERVED BY

SUB SYSTEMS, INC.

3200 Maysilee Street

Austin, TX 78728

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 Code Generator; 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 \$50 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.
- H. The license remains valid for 12 months after the issue date. The subsequent year license renewal cost is discounted by 20 percent from the license acquisition cost. The

license includes standard technical support, patches and new releases.

I. You may not disable, deactivate or remove any license enforcement mechanism used by the software.

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.



Desclaimer

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.

MSDOS, Windows 95/98/NT/2000/XP, Visual C++, MFC, and Visual Basic are the trademarks of Microsoft Corp. (for ease of reading Windows refer to MS Windows)

Delphi is the trademark of Borland International.

The Graphics Interchange Format(c) is the Copyright property of CompuServe Incorporated. GIF(sm) is a Service Mark property of CompuServe Incorporated.



Getting Started

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

Files
License Key
Incorporating the DLL into Your Application
Creating a sample document



Files

The package contains the DLL and header files. 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.C Source code for the demo program

DEMO.H Include file for the demo program

DEMO.RC Resource source file for the demo program

DEMO.DEF Definition file for linking the demo program

DEMO.EXE Executable demo program

DEMO_DLG.H Dialog Identifiers for the demo program

DEMO_DLG.DLG Dialog templates for the demo program

DEMO DLG.RES Compiled dialogs for the demo program

RCG.H The *include* file to include into a C/C++ application module that

calls the RCG routine. It contains the constant definitions and

the prototypes for the API functions.

RCG32.DLL The DLL file

RCG32.LIB Import library for the RCG32 DLL

Visual Basic Interface and Demo Files:

RCG.BAS Function declaration file.

DMO_VB.FRM Demo form file.

DMO_VB.BAS Demo variable declaration file.

DMO_VB.VPB Demo project file.

Delphi Interface and Demo Files:

RCG.PAS Global constant declaration file.

RCG_PROT.PAS Function declaration file.

DMO_DLP.DPR Demo project file.

DMO_DLP1.DFM Demo form file.

DMO_DLP1.PAS Demo code file.



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 RcgSetLicenseInfo static function. This should be preferably done before creating the converter session to avoid pop-up nag screens.

int RcgSetLicenseInfo(LPBYTE LicenseKey, LPBYTE LicenseNumber, LPBYTE 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 "smo" 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=RcgSetLicenseInfo("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: RcgSetLicenseInfo method should be called only once at the beginning of your application. Calling this method for each conversion would degrade the conversion performance.

Also, you can use the RcgGetLicenseStatus function at anytime to retrieve the license status.



Incorporating the DLL into Your Application

A C/C++ application should include the rcg.h file into the application module that needs to call the RCG32 dll. It also should include the RCG32.LIB as the linker library. Please refer to the demo application for an example.

A Visual Basic application needs to include the RCG.BAS file in the project. Please refer to the DMO_VB project for an example.

A Delphi application needs to include the RCG.PAS and RCG_PROT.PAS units. Please refer to the DMO_DLP project for an example

▲ ▼

Creating a sample document

The following sample document would contain 2 lines. The first line is created with the bold style. The second line is centered and uses 'Arial' font. The lines are terminated with CR/LF (Ascii 13 and Ascii 10) pair to end the current paragraph.

C/C++ Example:

```
RcgInsertText(DocId, "This is the first line\r\n");
   RcgTextFont(DocId, "Arial", 12, RCG_BOLD, FALSE);
   RcgParaFlags(DocId,RCG_CENTER);
   RcgInsertText(DocId, "This is the second paragraph\r\n");
   RcgSaveFile(DocId, "test.rtf"); // save the rtf code to
                                   // the file
   RcgEndDoc(DocId);
                       // free the current document handle
Visual Basic Example:
   Dim DocId As Long
   Dim result As Integer
   DocId=RcgNewDoc()
                      ' begin new document, and return
                              a document 'handle
   Result=RcgInitSect(DocId) ' begin first section
   Result=RcgBeginSectText(DocId) ' begin the text for
                                          the section
   Result=RcgTextFont(DocId, "Times New Roman", 12, RCG_BOLD,
                      True)
   Result=RcgInsertText(DocId, "This is the first line" +
        chr$(13) + chr$(10))
                               ' Ascii 13/10 pair terminates
                                  the paragraph
   Result=RcqTextFont(DocId, "Arial", 12, RCG BOLD, False)
  Result=RcgParaFlags(DocId,RCG_CENTER)
   Result=RcgInsertText(DocId, "This is the second paragraph" +
                        chr$(13) + chr$(10))
  Result=RcgSaveFile(DocId, "test.rtf") ' save the rtf code to
                                           the file
   Result=RcqEndDoc(DocId) ' free the current document handle
Delphi Example:
   DocId: LongInt;
   DocId=RcgNewDoc();
                        { begin new document, and return a
                              document handle}
   RcgInitSect(DocId); { begin first section}
   RcgBeginSectText(DocId); { begin the text for the section}
   RcgTextFont(DocId, 'Times New Roman', 12, RCG_BOLD, TRUE);
   RcgInsertText(DocId, 'This is the first line' + chr(13) +
                    { Ascii 13/10 pair terminates the paragraph}
     chr(10));
   RcgTextFont(DocId, 'Arial', 12, RCG_BOLD, FALSE);
   RcgParaFlags(DocId,RCG_CENTER);
   RcgInsertText(DocId, 'This is the second paragraph' +
```

```
chr(13) + chr(10));
RcgSaveFile(DocId, 'test.rtf'); {save the rtf code to the file}
RcgEndDoc(DocId); {free the current document handle}
```



Application Interface functions

These API functions allow you to load and manipulate HTML data in an existing TER window. Your application must include the RCG.H file, which defines these functions.

The following is a description of the RCG API functions in an alphabetic order:

```
In This Chapter
RcgBeginCellText
RcgBeginFrame
RcgBeginGroup
RcgBeginHdrFtr
RcgBeginSectText
RcgBeginStyleItem
RcgBeginStyleSheet
RcgBeginTableRow
RcgBeginTextBox
RcgCharStyleId
RcgDrawLine
RcgDrawRect
RcgEndCellText
RcgEndDoc
RcgEndFrame
RcgEndGroup
RcgEndHdrFtr
RcgEndStyleItem
RcgEndStyleSheet
RcgEndTableRow
RcgEndTextBox
RcgGetData
RcgGetLastMessage
RcgHandleToStr
RcgInitSect
RcgInsertBookmark
RcgInsertBreak
RcgInsertControl
RcgInsertFootnote
RcgInsertMergeField
RcgInsertPageField
RcgInsertPictFile
```

RcgInsertRaw RcgInsertText RcgInsertTocField RcgInsertUText RcgMargin RcgNewDoc RcgNextCellInfo RcgPaper RcgParaBullet RcgParaFlags RcgParaIndent RcgParaShadeColor RcgParaSpace RcgParaStyleId RcgParaTabStop RcgPastePicture RcgResetLastMessage RcgResetTextProp RcgResetParaProp RcgSaveFile RcgSectInfo RcgSetFlags RcgTextColor RcgTextFont



RcgBeginCellText

Begin the text for a cell.

BOOL RcgBeginCellText(DocId)

DWORD Docld; The id of the current document being generated.

Description: Any text or graphic within a cell must be placed between the RcgBeginCellText and RcgEndCellText calls. The first call for RcgBeginCellText for a row would occur after calling the RcgNextCellInfo function for all cells in the row. The RcgBeginCellText call for the next cell would occur after the RcgEndCellText call for the previous cell in the row. Please refer to the demo program for an example of calling this function.

Return Value: This function returns TRUE if successful.





RcgBeginFrame

Begin a positionable frame.

BOOL RcgBeginFrame(DocId,PageRelative,x, y,width,height)

DWORD Docld; The id of the current document being generated.

BOOL PageRelative; Set to TRUE to create a frame relative to the top of the page.

Set to FALSE to create a frame relative to the current

paragraph.

int x; The x position in twips.

int y; The y position in twips

int width; The width of the frame in twips.

int height The height of the frame in twips.

Description: This function begins a positionable frame. Any call to the text or graphic insertion functions after this function call would place the text or graphic inside the frame. The text outside the frame flows around the frame. When done, call the RcgEndFrame function to end the frame.

Return Value: This function returns TRUE if successful.





RcgBeginGroup

Begin an RTF group.

BOOL RcgBeginGroup(DocId,name,IsDest)

DWORD Docld; The id of the current document being generated.

LPBYTE name; The name of the group

BOOL IsDest; Set to TRUE to create a destination group. An entire

destination group is ignored by an RTF reader if it does not

support the group.

Description: This function is useful to manually add unsupported RTF features into the document. You would typically build a group manually by using the RcgInsertControl and RcgInsertText functions after calling this function. When done, the group must be closed using the RcgEndGroup function.





RcgBeginHdrFtr

Begin a page header/footer group.

BOOL RcgBeginHdrFtr(DocId,type)

DWORD Docld; The id of the current document being generated.

int type The header/footer type:

RCG_HDR: Regular header
RCG_FTR: Regular footer
RCG_FHDR: First page header
RCG_FFTR: First page footer
RCG_LHDR: Left page header
RCG_LFTR: Left page footer
RCG_RHDR: Right page header
RCG_RFTR: Right page footer

Description: This function begins a header or a footer group. Call the text and graphic insertion functions to place text and graphic inside this group. When done, call the RcgEndHdrFtr function to end the group.

The header/footer information resides in the section initialization area. Therefore, this function is valid only after calling the RcgInitSect function and before calling RcgBeginSectText function.

Return Value: This function returns TRUE if successful.





RcgBeginSectText

Begin the text for the current section.

BOOL RcgBeginSectText(DocId)

DWORD Docld; The id of the current document being generated.

Description: This function begins the text or the body of the section. It is typically called after the section initialization is complete. The section initialization process consists of calling the RcgInitSect function and optionally followed by RcgSectInfo, RcgBeginHdrFtr, RcgBeginStylesheet, RcgPaper, RcgMargin function. In a simplest document, RcgBeginSectText would followed immediately after the RctInitSect function.

Return Value: This function returns TRUE if successful.





RcgBeginStyleItem

Begin a stylesheet item.

BOOL RcgBeginStyleItem(DocId,ParaStyle,StyleId,name)

DWORD Docld; The id of the current document being generated.

BOOL ParaStyle; TRUE to create a paragraph style, or FALSE to create a

character style.

int StyleId; A numeric style id. The first style should be given the id of 0,

the second the id of 1, and so on.

LPBYTE name The style name.

Description: This function begins a style item. It should be followed by the paragraph (such as RcgParaIndent and RcgParaSpace) and character formatting functions (such as RcgTextFont and RcgTextColor). A paragraph style can use both paragraph and character formatting attributes, but a character style can use only the character formatting attributes. When done, call the RcgEndStyleItem function.

The first two styles in the stylesheet should have the predefined id and name. The first style should be a paragraph style with the id of 0 and the name 'Normal'. The second style should be a character style with the id of 1 and the name 'Default Paragraph Font'. The subsequent style would use the next sequential id and a unique name.

This function is valid only inside the stylesheet group which is begun using the RcgBeginStyleSheet function.





RcgBeginStyleSheet

Begin the stylesheet group.

BOOL RcgBeginStyleSheet(DocId)

DWORD Docld; The id of the current document being generated.

Description: This function begins the stylesheet group. There can be only one stylesheet group in an RTF file. If a stylesheet is desired in the RTF file, this function should be called after calling the RcgInitSect function but before calling the RcgBeginSectText function. To begin a style item, call the RcgBeginStyleItem function immediately after calling the RcgBeginStyleSheet function. When done creating all style items, call the RcgEndStyleSheet function to end the stylesheet group.

Return Value: This function returns TRUE if successful.





RcgBeginTableRow

Begin a table row.

BOOL RcgBeginTableRow(DocId,indent,height,just,IsHdr,CellMargin)

BOOL RcgBeginTableRow2(DocId,indent,height,just,lsHdr,LeftMargin. RightMargin, TopMargin, BotMargin)

DWORD Docld; The id of the current document being generated.

int indent; The left indentation of the table row in twips unit. Set to 0 for

default.

int height; Use a positive value (in twips) for this parameter to specify the

minimum height for the table row. Use a negative value (in twips) to specify the *exact* height for the table row. Set to 0 for

default.

int just; Set to 0 for default, or use one of the following values:

RCG_CENTER: Center the table row

RCG_RIGHT: Right justify the table row

BOOL IsHdr; Set to TRUE to repeat this row on the next page if the table

overflows the page. Set to FALSE for default.

int CellMargin; The distance of the text in the cell to the left and right edges of

the cell. Set to 0 for default. This parameter is used by the

RcgBeginTableRow method only.

int LeftMargin; The distance of the text in the cell to the left edge of the cell.

int RightMargin; The distance of the text in the cell to the right edge of the cell.

int TopMargin; The distance of the text in the cell to the top edge of the cell.

int BotMargin; The distance of the text in the cell to the bottom edge of the

cell.

Description: This function begins a table row. This function should be followed by the RcgNextCellInfo function for each cell in the table. Please refer to the demo program for an example of using this function.

Return Value: This function returns TRUE if successful.





RcgBeginTextBox

Begin a text box group.

BOOL RcgBeginTextBox(DocId,PageRelative,x,y,width,height,ZOrder,FillColor,BorderColor,BorderWidth,Xparent)

BOOL RcgBeginTextBox2(DocId,PageRelative,x,y,width,height,ZOrder,FillColor,BorderColor,BorderWidth,Xparent,TextAngle)

DWORD Docld; The id of the current document being generated.

BOOL PageRelative; Set to TRUE to create the text box relative to the top of the

page, or set to FALSE to create the text box relative to the

next paragraph.

int x; The x position of the text box in twips.

int y; The y position of the text box in twips.

int width; The width of the text box in twips.

int height; The height of the text box in twips.

int ZOrder; The Z order of the text box. Set to 0 for default.

COLORREF FillColor; The background color of the text box. Set to hex FFFFF

for default.

COLORREF BorderColor; The color of the border. Set to 0 for default.

int BorderWidth; The width of the border in twips.

BOOL Xparent Set to TRUE to create a transparent text box. Set to FALSE

for default.

int TextAngle The text angle parameter can be set to one of the following

values:

0 = Horizontal text

90 = Bottom to top vertical text 270 = Top to bottom vertical text

Description: This function begins a text box. This function can be followed by any text insertion, and character/paragraph attribute functions. When done, call the RcgEndTextBox function to end the text box.

Return Value: This function returns TRUE if successful.





RcgCharStyleId

Specify a character style id for the character.

BOOL RcgCharStyleId(DocId,id)

DWORD Docld; The id of the current document being generated.

int id; The id of a character style item. This id must be one of style ids

already created using the RcgBeginStyleItem function.

Description: When the character style id is used for character formatting, the corresponding character attributes in the style must also be specified for the text using the character formatting functions such as RcgTextFont and RcgTextColor.



RcgDrawLine

Add an item to the selection box.

BOOL RcgDrawLine(DocId,PageRelative,x1,y1,x2,y2,ZOrder,LineColor, LineWidth)

DWORD Docld; The id of the current document being generated.

BOOL PageRelative; Set to TRUE to create the line object relative to the top of the

page, or set to FALSE to create the line object relative to the

next paragraph.

int x1; The beginning x position of the line object in twips.

int y1; The beginning y position of the line object in twips.

int x2; The ending x position of the line object in twips.

int y2; The ending y position of the line object in twips.

int ZOrder; The Z order of the line object. Set to 0 for default.

COLORREF LineColor; The color of the line object. Set to 0 for default.

int LineWidth; The line width in twips.

Return Value: This function returns TRUE if successful.





RcgDrawRect

Add an item to the selection box.

BOOL RcgDrawRect(DocId,PageRelative,x,y,width,height,ZOrder,FillColor, BorderColor,BorderWidth,Xparent)

DWORD Docld; The id of the current document being generated.

BOOL PageRelative; Set to TRUE to create the rectangle object relative to the

top of the page, or set to FALSE to create the rectangle

object relative to the next paragraph.

int x; The x position of the rectangle object in twips.

int y; The y position of the rectangle object in twips.

int width; The width of the rectangle object in twips.

int height; The height of the rectangle object in twips.

int ZOrder; The Z order of the rectangle object. Set to 0 for default.

COLORREF FillColor; The background color of the rectangle object. Set to hex

FFFFFF for default.

COLORREF BorderColor; The color of the border. Set to 0 for default.

int BorderWidth; The width of the border in twips.

BOOL Xparent Set to TRUE to create a transparent rectangle object. Set to

FALSE for default.

Return Value: This function returns TRUE if successful.





RcgEndCellText

End the text for a cell.

BOOL RcgEndCellText(DocId)

DWORD Docld; The id of the current document being generated.

Description: Any text or graphic within a cell must be placed between the RcgBeginCellText and RcgEndCellText calls. The RcgEndCellText call for the last cell in the row is followed by RcgEndTableRow function call. Please refer to the demo program for an example of calling this function.



RcgEndDoc

End the current document and release the document handle.

BOOL RcgEndDoc(DocId)

DWORD Docld; The id of the current document being generated.

Description: This function is typically used after retrieving the generated RTF code using the RcgSaveFile or RcgGetData functions. The current document handle is no longer valid after calling this function.

Return Value: This function returns TRUE if successful.





RcgEndFrame

End the current frame.

BOOL RcgEndFrame(DocId)

DWORD Docld; The id of the current document being generated.

Return Value: This function returns TRUE if successful.



RcgEndGroup

End the current RTF group.

BOOL RcgEndGroup(DocId)

DWORD Docld; The id of the current document being generated.

Description: This function is used to close an RTF group which was created using the

RcgBeginGroup function.

Return Value: This function returns TRUE if successful.

See Also:



RcgEndHdrFtr

End the current header/footer group.

BOOL RcgEndHdrFtr(DocId)

DWORD Docld; The id of the current document being generated.

Comment: The last paragraph must he duly terminated before calling this function. To terminate an unterminated paragraph, insert a string containing ASCII 13 and ASCII 10.

Return Value: This function returns TRUE if successful.





RcgEndStyleItem

End the current style item.

BOOL RcgEndStyleItem(DocId)

DWORD Docld; The id of the current document being generated.

Description: To begin the next style item, call the RcgBeginStyleItem function immediately after calling this function. To end the stylesheet group, call the RcgEndStyleSheet function immediately after calling this function.

Return Value: This function returns TRUE if successful.





RcgEndStyleSheet

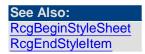
End the stylesheet group.

BOOL RcgEndStyleSheet(DocId)

DWORD Docld; The id of the current document being generated.

Description: This function is called immediately after ending the last style item using the RcgEndStyleItem function.

Return Value: This function returns TRUE if successful.





RcgEndTableRow

End a table row.

BOOL RcgEndTableRow(DocId)

DWORD Docld; The id of the current document being generated.

Description: This function terminates a table row. This function follows after the RcgEndCellText function for the last table row.

Return Value: This function returns TRUE if successful.





RcgEndTextBox

End a text box group.

BOOL RcgEndTextBox(DocId)

DWORD Docld; The id of the current document being generated.

Return Value: This function returns TRUE if successful.





RcgGetData

Retrieve the RTF code.

HGLOBAL RcgGetData(DocId,len)

DWORD Docld; The id of the current document being generated.

LPLONG len; The pointer to receive the byte length of the generated RTF

code.

Description: This function can be used before calling the RcgEndDoc function. This function returns the RTF code in a memory handle.

A Visual Basic application can use the RcgHandleToStr function to convert the memory handle to a Basic string.

The memory handle returned by this function can also be passed to TE Edit Control using the SetTerBuffer function. TE Edit Control is a separate product (an advanced RTF Edit control) offered by Sub Systems, Inc.

Return Value: This function returns TRUE if successful





RcgGetLastMessage

Get the last message.

int RcgGetLastMessage(RcgMessage, DebugMessage);

LPBYTE RcgMessage; // Returns the default user message text in English

LPBYTE 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 RFLAG_RETURN_MSG_ID flag. This flag is set using the RcgSetFlags function.

The message string constants (MSG_) are defined in the RCG.H, RCG.BAS and RCG.PAS files. The description for the message ids can be found in the RCG_MSG.H file.





RcgHandleToStr

Convert a global memory handle to a Visual Basic string.

BOOL RcgHandleToStr(string, length, hMem)

LPBYET string; pointer to a visual basic string

long length length of the string

HGLOBAL hMem; Global memory handle

Description: This function can be used to copy the contents of a global memory handle to a given visual basic string. The calling routine must expand the string to appropriate length before calling this function.

Example:

string=space(length)
HandleToStr(string,length,hMem)

The input global memory handle is freed up after copying its contents to the string.

Return Value: This function returns TRUE if successful.





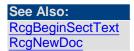
RcgInitSect

Initialize a section.

BOOL RcgInitSect(DocId)

DWORD Docld; The id of the current document being generated.

Description: This function initializes a section. This function must be called immediately after calling the RcgNewDoc function to initialize the first section. It must also be called immediately after calling the RcgInsertBreak function to initialize the new section. Any section information functions such as RcgSectInfo, RcgBeginHdrFtr or RcgPaper must be called after calling the RcgInitSect function, but before calling the RcgBeginSectText function.





RcgInsertBookmark

Insert a bookmark.

BOOL RcgInsertBookmark(DocId, name, start)

DWORD Docld; The id of the current document being generated.

LPBYTE name; The bookmark name. A space character is not allowed in the

bookmark name.

BOOL start; Set to TRUE to start a bookmark. Set to FALSE to end a

previously started bookmark. Every bookmark should be ended

properly by calling this function.

Return Value: This function returns TRUE if successful.





RcgInsertBreak

Insert a text break in the document.

BOOL RcgInsertBreak(DocId,type)

DWORD Docld; The id of the current document being generated.

int type; Please use one of the constants to specify the text break type:

RCG_BREAK_PAGE: Page Break

RCG_BREAK_COL: Column break

RCG_BREAK_SECT: Section Break.

Description: If a section break is created using this function, then RcgInitSect function must follow immediately to initialize the new section.





RcgInsertControl

Insert an RTF control word.

BOOL RcgInsertControl(DocId,name,UseParam,param)

DWORD Docld; The id of the current document being generated.

LPBYTE name; The name of the control

BOOL UseParam; Set to TRUE if the control uses a parameter.

long param; The numeric value of the control parameter. This parameter is

ignored if UseParam is set to FALSE.

Description: This function is used to manually insert an RTF control word.

Return Value: This function returns TRUE if successful.





RcgInsertFootnote

Insert footnote text.

BOOL RcgInsertFootnote(DocId, marker, text)

DWORD Docld; The id of the current document being generated.

LPBYTE marker; The footnote number text. Set this parameter to NULL to

specify auto footnote numbering.

LPBYTE text; The footnote text.

Description: This function can be called within any group that allows for text insertion.

Return Value: This function returns TRUE if successful.



RcgInsertMergeField

Insert a mail-merge field.

BOOL RcgInsertMergeField(DocId,name,data)

DWORD Docld; The id of the current document being generated.

LPBYTE name; field name

LPBYTE data; initial data

Description: This function can be called within any group that allows for text insertion.

Return Value: This function returns TRUE if successful.



RcgInsertPageField

Insert page number or page count.

BOOL RcgInsertPageField(DocId,InsertPageNo)

DWORD Docld; The id of the current document being generated.

BOOL InsertPageNo; Set to TRUE to insert the page number field, or set to FALSE

to insert page count field.

Description: This function is typically called inside a header/footer group, but it can be called within any group that allows for text insertion.

Return Value: This function returns TRUE if successful.



RcgInsertPictFile

Insert a picture.

BOOL RcgInsertPictFile(DocId,file,width,height,linked)

DWORD Docld; The id of the current document being generated.

LPBYTE file; The picture file name or full path of the picture.

int width; The picture width in twips. Set to 0 to use the actual width of

the picture.

int height; The picture height in twips. Set to 0 to use the actual height of

the picture.

BOOL linked Set to TRUE to create a link to the picture file instead of

embedding it inside the RTF document.

Description: Currently the DLL supports the BMP and WMF picture formats for embedding. It supports all picture formats when the picture is linked instead of embedded.

Return Value: This function returns TRUE if successful.



RcgInsertRaw

Insert raw RTF code into the document.

BOOL RcgInsertRaw(DocId,code)

DWORD Docld; The id of the current document being generated.

LPBYTE code: The rtf code text to be inserted.

Description: This function inserts the rtf code without any character translation.

Return Value: This function returns TRUE if successful.



RcgInsertText

Insert text into the document.

BOOL RcgInsertText(DocId,text)

DWORD Docld; The id of the current document being generated.

LPBYTE text; The text to be inserted. To end a paragraph, terminate the text

string with a cr/lf (Ascii 13 and Ascii 10) pair of characters.

Description: The RcgBeginSectText function must have already been called for this function (as well any character and paragraph formatting functions) to succeed.

Return Value: This function returns TRUE if successful.



RcgInsertTocField

Insert Table-of-Content field.

BOOL RcgInsertTocField(DocId,FirstLevel,LastLevel)

DWORD Docld; The id of the current document being generated.

int FirstLevel; The first header level to be extracted to build table-of-contents.

This parameter value must be between 1 and 9.

int LastLevel; The last header level to be extracted to build table-of-contents.

This parameter value must be between 1 and 9. The LastLevel

value must be equal to or greater than the FirstLevel

parameter value.

Description: This function is use to insert a table-of-content field. An RTF reader would create a table-of-content by extracting the paragraph text which uses the paragraph style names 'heading 1', 'header 2', etc.. Therefore, you would need to use the RcgBeginStyleSheet function to create such paragraph styles for the document. You would then apply these style ids to the selected text as they are appended to the document. You can use the RcgParaStyleId function to apply the paragraph style to the paragraph being added.

Optionally, you can also create the style names 'toc N' (such as 'toc 1', 'toc 2', etc.). These styles are used to create the text lines for the table-of-content. For example, an RTF reader would apply the style name 'toc 1' to the document text which uses the style name 'heading 1' to create a line for the table-of-content'. If you do not create these styles, then an RTF reader would create these styles for your document by use using the default values for font and paragraph attributes.

Return Value: This function returns TRUE if successful.

See Also
RcgBeginStyleSheet
RcgBeginStyleItem
RcgParaStyleId



RcgInsertUText

Insert Unicode text into the document.

BOOL RcgInsertUText(DocId,text)

DWORD Docld; The id of the current document being generated.

LPWORD text; The text to be inserted. To end a paragraph, terminate the text

string with a cr/lf (Ascii 13 and Ascii 10) pair of characters.

Description: The RcgBeginSectText function must have already been called for this function (as well any character and paragraph formatting functions) to succeed.

Return Value: This function returns TRUE if successful.



RcgMargin

Set the margin for the current section.

BOOL RcgMargin(DocId,LeftMargin,RightMargin,TopMargin,BotMargin,HdrMargin,FtrMargin)

DWORD Docld; The id of the current document being generated.

int LeftMargin; The left margin in twips.

int RightMargin; The right margin in twips.

int TopMargin; The top margin in twips.

int BotMargin; The bottom margin in twips.

int HdrMargin; The distance of the page header from the top of the page. Set

to 0 for default.

int FtrMargin; The distance of the page footer from the bottom of the page.

Set to 0 for default.

Description: This function is called between RcgInitSect and RcgBeginSectText

functions.





RcgNewDoc

Begin a new document.

DWORD RcgNewDoc()

DWORD Docld; The id of the current document being generated.

Description: This function begins a new RTF document creation process. The product allows the creation of multiple documents simultaneously. The handle retrieved by this function must be eventually released by calling the RcgEndDoc function after the document is complete and the finish code is retrieved.

This function must be followed by the RcgInitSect function to initialize the first section of the document.

Return Value: If successful, this function returns the document handle which must be passed to the subsequent functions to build the document. A zero return value indicates an error.





RcgNextCellInfo

Specify the attributes of a table cell.

BOOL RcgNextCellInfo(DocId,width,valign,shading,BackColor,LeftWidth,RightWidth,TopWidth,BotWidth,MergeFlags)

BOOL RcgNextCellInfo2(DocId,width,valign,shading,BackColor,LeftWidth,RightWidth,TopWidth,BotWidth,BorderColor,MergeFlags)

BOOL RcgNextCellInfo3(DocId,width,valign,shading,BackColor,LeftWidth,RightWidth,TopWidth,BotWidth,BorderColor,MergeFlags,TextAngle)

DWORD Docld; The id of the current document being generated.

int width; The width of the cell in twips.

int valign; Vertical alignment of the text inside the cell. Use one of the

following constants or set to 0 for default.

RCG_VALIGN_CTR: Center the text vertically.

RCG_VALIGN_BOT: Align the text to the bottom of the cell.

int shading; Cell shading percentage. Set to 0 for default.

COLORREF BackColor; Background color for the cell. Set to hex FFFFF for default.

int LeftWidth; The width of the left edge of the cell in twips.

int RightWidth; The width of the right edge of the cell in twips.

int TopWidth; The width of the top edge of the cell in twips.

int BotWidth; The width of the bottom edge of the cell in twips.

COLORREF BorderColor: Cell border color.

UINT MergeFlags; Set to 0 for default, or use one of the following constants:

RCG_MRG_ROW_FIRST: The first cell to be merged

vertically.

RCG_MRG_ROW: The subsequent cell to be merged

vertically.

RCG_MRG_COL_FIRST: The first cell to be merged

horizontally.

RCG_MRG_COL: The subsequent cell to be merged

horizontally.

Text Angle The text angle parameter can be set to one of the following

values

0 = Horizontal text

90 = Bottom to top vertical text 270 = Top to bottom vertical text

Description: Typically this function is called after calling the RcgBeginTableRow function. This function is called for each cell in the row before calling the RcgBeginCellText function for the first cell in the row.





RcgPaper

Set the paper dimension for the current section.

BOOL RcgPaper(DocId,width,height,landscape)

DWORD Docld; The id of the current document being generated.

int width; The paper width in twips.

int height; The paper height in twips.

BOOL landscape; Set to TRUE to use the landscape orientation.

Description: This function is called between RcgInitSect and RcgBeginSectText

function.

Return Value: This function returns TRUE if successful.





RcgParaBullet

Create paragraph bullet or paragraph numbering.

BOOL RcgParaBullet(DocId,IsBullet,type,level,BefText,AftText,flags)

DWORD Docld; The id of the current document being generated.

BOOL IsBullet; Set to TRUE to create the paragraph bullet, or set to FALSE to

create the paragraph numbering.

int type; Specify one of the following constants if the 'IsBullet' argument

is set to TRUE::

BLT_ROUND Round bullet

BLT_DIAMOND: Diamond shaped bullet

BLT_SQUARE: Square shaped bullet

BLT_HOLLOW_SQUARE: Hollow square

BLT_4_DIAMONDS: Four diamond shaped bullet

BLT_ARROW: Arrow shaped bullet

BLT_CHECK: Check mark bullet

Specify one constants if the 'IsBullet' argument is set to FALSE:

NBR_DEC: Decimal numbering

NBR_UPR_ALPHA: Upper alphabetic characters.

NBR_LWR_ALPHA: Lower alphabetic characters.

int level; Bullet level. Set to 0 for default.

int start; The starting paragraph number. Set to 1 for default.

LPBYTE BefText; The text before the paragraph number. Set to NULL for default.

LPBYTE AftText; The text after the paragraph number. Set to NULL for default.

UINT flags; Set to BLTFLAG HIDDEN to hide the paragraph numbering.

Set to 0 for default.

Description: This paragraph formatting set by this function is effective for the subsequent RcgInsertText function. The paragraph formatting can be reset by using the RcgResetParaProp function.

Return Value: This function returns TRUE if successful.

See Also:

RcgParaFlags RcgParaIndent

RcgParaShadeColor

RcgParaSpace

RcgParaStyleId

RcgParaTabStop



RcgParaFlags

Set the paragraph flags.

BOOL RcgParaFlags(DocId,flags)

DWORD Docld; The id of the current document being generated.

DWORD flags; Use one or more of the following constants:

RCG_CENTER: Center the paragraph.

RCG_RIGHT: Right justify the paragraph.

RCG_JUSTIFY: Left/right justify the paragraph.

RCG_DOUBLE_SPACE: Double space the paragraph.

RCG_PARA_KEEP: Keep the entire paragraph in the

same page.

RCG_PARA_KEEP_NEXT: Keep the last line of the paragraph

and the first line of the next paragraph in the same page.

RCG_PARA_WIDOW: Keep the first 2 lines or the last 2

lines of the paragraph in the same

page.

RCG_BOX_TOP: Create the top paragraph border.

RCG BOX BOT: Create the bottom paragraph

border.

RCG_BOX_LEFT: Create the left paragraph border.

RCG_BOX_RIGHT: Create the right paragraph border.

RCG_BOX_DOUBLE: Create the double line paragraph

border.

RCG_BOX_THICK: Create the thick line paragraph

border.

Please use the logical OR operator to specify more than more constants

Description: This paragraph formatting set by this function is effective for the subsequent RcgInsertText function. The paragraph formatting can be reset by using the RcgResetParaProp function.

Return Value: This function returns TRUE if successful.

See Also:

RcgParaBullet RcgParaIndent RcgParaShadeColor RcgParaSpace RcgParaStyleId



RcgParaIndent

Set the paragraph indentation.

BOOL RcgParaIndent(DocId,LeftIndent,RightIndent,FirstIndent)

DWORD Docld; The id of the current document being generated.

int LeftIndent; The left indentation in twips. Set to 0 for default.

int RightIndent; The right indentation in twips. Set to 0 for default.

int FirstIndent; The additional indentation for the first line of the paragraph.

Set to 0 for default.

Description: This paragraph formatting set by this function is effective for the subsequent RcgInsertText function. The paragraph formatting can be reset by using the RcgResetParaProp function.

Return Value: This function returns TRUE if successful.

See Also:

RcgParaFlags
RcgParaBullet
RcgParaShadeColor
RcgParaSpace
RcgParaStyleId
RcgParaTabStop



RcgParaShadeColor

Set the paragraph shading or paragraph background color.

BOOL RcgParaShadeColor(DocId,shade,BkColor)

DWORD Docld; The id of the current document being generated.

int shade; The paragraph shading in percentage. Set to 0 to set

paragraph background color instead.

COLORREF BkColor; The background color for the paragraph. This argument is

ignored when the 'shade' argument is non-zero.

Description: This paragraph formatting set by this function is effective for the subsequent RcgInsertText function. The paragraph formatting can be reset by using the RcgResetParaProp function.

Return Value: This function returns TRUE if successful.

See Also:

RcgParaFlags RcgParaIndent RcgParaBullet RcgParaSpace RcgParaStyleId RcgParaTabStop



RcgParaSpace

Set paragraph spacing.

BOOL RcgParaSpace(DocId,SpaceBef,SpaceAft,SpaceBet)

DWORD Docld; The id of the current document being generated.

int SpaceBef; The space before the paragraph in twips. Set to -1 to leave this

value unchanged.

int SpaceAft; The space after the paragraph in twips. Set to -1 to leave this

value unchanged.

int SpaceBet; A positive value specifies the minimum space between the

paragraph lines. Set to -1 to leave this value unchanged. Any

other negative value specifies exact line spacing.

Description: This paragraph formatting set by this function is effective for the subsequent RcgInsertText function. The paragraph formatting can be reset by using the RcgResetParaProp function.

Return Value: This function returns TRUE if successful.

See Also:

RcgParaFlags
RcgParaIndent
RcgParaShadeColor
RcgParaBullet
RcgParaStyleId
RcgParaTabStop



RcgParaStyleId

Specify a paragraph style id for the paragraph.

BOOL RcgCharStyleId(DocId,id)

DWORD Docld; The id of the current document being generated.

int id; The id of a paragraph style item. This id must be one of style

ids already created using the RcgBeginStyleItem function.

Description: When the paragraph style id is used for paragraph formatting, the corresponding paragraph attributes in the style must also be specified for the text using the paragraph formatting functions such as RcgTextFont and RcgTextColor.

Return Value: This function returns TRUE if successful.





RcgParaTabStop

Set a tab stop for a paragraph.

BOOL RcgParaTabStop(DocId,type,pos,flags)

DWORD Docld; The id of the current document being generated.

int type; The tab stops type:

TAB_LEFT: Left tab.

TAB_RIGHT: Right tab

TAB_CENTER: Center tab.

TAB_DECIMAL: Decimal tab.

int pos; The tab stop position in twips.

UINT flags The tab leader type:

TAB_DOT: Dot leader

TAB HYPH: Hyphen leader

TAB_ULINE: Underline leader.

Or, set to 0 for default.

Description: When a paragraph uses multiple tab stops, the tab stops must be created in the ascending tab position order.

This paragraph formatting set by this function is effective for the subsequent RcgInsertText function. The paragraph formatting can be reset by using the RcgResetParaProp function.

Return Value: This function returns TRUE if successful.

See Also: RcgParaFlags RcgParaIndent RcgParaShadeColor RcgParaSpace RcgParaStyleId

RcgParaBullet



RcgPastePicture

Paste a picture from clipboard for memory buffer.

BOOL RcgPastePicture(DocId,format, hData,width,height)

DWORD Docld; The id of the current document being generated.

int format; The format of the picture data:

CF_DIB: Device independent bitmap

CF_METAFILEPICT: Windows metafile

CF_ENHMETAFILE: Enhanced metafile (Win32)

HGLOBAL hData; The picture data in the format specified by the 'format'

argument. Set the format and hData to NULL to paste the

picture from clipboard.

int width; The picture width in twips. Set to 0 to use the actual width of the

picture.

int height; The picture height in twips. Set to 0 to use the actual height of

the picture.



RcgResetLastMessage

Reset the last editor message.

BOOL RcgResetLastMessage()

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.





RcgResetTextProp

Reset the character formatting attributes.

BOOL RcgResetTextProp(DocId)

DWORD Docld; The id of the current document being generated.

Description: This function is typically called before setting new character formatting attributes.

Return Value: This function returns TRUE if successful.





RcgResetParaProp

Reset the paragraph formatting attributes.

BOOL RcgResetParaProp(DocId)

DWORD Docld; The id of the current document being generated.

Description: This function is typically called before setting new paragraph formatting attributes.

Return Value: This function returns TRUE if successful.

See Also:

RcgParaFlags
RcgParaIndent
RcgParaShadeColor
RcgParaSpace
RcgParaStyleId
RcgParaBullet



RcgSaveFile

Save the generated RTF code.

BOOL RcgSaveFile(DocId,OutFile)

DWORD Docld; The id of the current document being generated.

LPBYTE OutFile The file name to save the RTF code.

Description: This function is typically called to save the RTF code before calling the

RcgEndDoc function.

Return Value: This function returns TRUE if successful.





RcgSectInfo

Set the section information.

BOOL RcgSectInfo(DocId,columns,ColSpace,NewPage,FirstPageNo)

DWORD Docld; The id of the current document being generated.

int columns; The number of columns for the section. Set to 1 for default.

int ColSpace; Space between the columns. Set to 0 for default.

BOOL NewPage; Set to TRUE to begin this section on the new page.

int FirstPageNo; The first page number for the section. Set to 0 to use

continuous page numbering.

Description: This function can be used immediately after the RcgInitSect function to specify new attributes for the section.

Return Value: This function returns TRUE if successful.





RcgSetFlags

Set certain flags or retrieve the values of the flags.

DWORD RcgSetFlags(DocId, set, flags)

DWORD Docld // The Docld to be accessed. If Docld is set to 0, this

function sets the common initialization flags. When a new

document is created, it inherits all common flags.

BOOL set; // TRUE to set the given flags, FALSE to reset the given

flags

DWORD flags; // Flags (bits) to set or reset. Currently, the following flag

values are available:

RFLAG_RETURN_MSG_ID Do not display the error messages. Save

the error code to be later retrieved using

the RcgGetLastMessage function.

RFLAG_FIRST_MSG_ONLY Only display the first error message.

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.



RcgTextColor

Specify text color.

BOOL RcgTextColor(DocId,CurColor,foreground)

DWORD Docld; The id of the current document being generated.

COLORREF CurColor The foreground or background text color.

BOOL foreground; Set to TRUE to set the foreground color, or FALSE to set the

background color.

Description: This text color set by this function is effective for the subsequent RcgInsertText function. The text color can be reset by using the RcgResetTextProp function.

Return Value: This function returns TRUE if successful.





RcgTextFont

Set the text font.

BOOL RcgTextFont(DocId,typeface,PointSize,style,set)

BOOL RcgTextFont2(DocId,typeface,PointSize,style,CharSet,set)

DWORD Docld; The id of the current document being generated.

LPBYTE typeface; The font typeface. Set to NULL or "" to leave this attribute

unchanged.

int PointSize; The point size for the text. Set to 0 to leave this attribute

unchanged.

Use negative sign to specify half-points. For example, to specify a value of 8.5 points, pass -17 for this parameter.

UINT style; Use one or more of the following style constants:

RCG_ULINE: Underline

RCG_BOLD: Bold
RCG_ITALIC: Italic

RCG_HIDDEN: Hidden text
RCG_STRIKE: Strike through
RCG_PROTECT: Protected text
RCG_SUPSCR: Superscript
RCG_SUBSCR: Subscript

RCG_ULINED: Double underlined text RCG_CAPS: Capitalize the letters

RCG_SCAPS: Apply small caps

Or, set to 0 to leave this attribute unchanged.

Please use the logical OR operator to specify more than one

styles.

int CharSet; The character set (Windows SDK constant, such as

CHINESEBIG5_CHARSET) to use for the font.

BOOL set; Set to TRUE to set the styles specified by the 'style' argument.

Set to FALSE to reset the styles specified by the 'style'

argument

Description: This text font set by this function is effective for the subsequent RcgInsertText function. The text font can be reset by using the RcgResetTextProp function.

