



Software License Agreement

DOCX to Image Converter

For Win32/64

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Getting Started

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

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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
DIS.H	The <i>include</i> file to include into a C/C++ application module that calls the dll routine. It contains the constant definitions and the prototypes for the API functions.
dis32.dll	The DLL file
dis32.lib	Import library for the Dis32 DLL
ter31.dll	Used internally by the dis32.dll
txml2.dll	Used internally by the dis32.dll
dicc.dll	Wrapper DLL to used with an ASP page

Visual Basic Interface and Demo Files:

DIS.BAS	Function declaration file.
DMO_VB.FRM	Demo form file.
DMO_VB.BAS	Demo variable declaration file.
DMO_VB.VPB	Demo project 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 `WisSetLicenseInfo` static function. This should be preferably done before creating the converter session to avoid pop-up nag screens.

```
int DisSetLicenseInfo(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 "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=DisSetLicenseInfo("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: *DisSetLicenseInfo* 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 `DisGetLicenseStatus` function at anytime to retrieve the license status.



Incorporating the DLL into Your Application

A C/C++ application should include the `DIS.h` file into the application module that needs to call the `Dis32.dll`. It also should include the `dis32.lib` as the linker library. Please refer to the demo application for an example.

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

Please also make sure that the dis32.dll, txml2.dll and ter31.dll files are copied to a directory available at run-time.



Sample Conversion Code

First you would create a new conversion session:

```
dim id as long
```

Set the product [license key](#) and create a session id:

```
DisSetLicenseKey("xxxxx-yyyyy-zzzzz")
```

```
id = DisNewSession()
```

You would use the session id to call other conversion functions.

Here are sample code examples to convert DOCX to Image format.

1. Convert an DOCX file to an image file.

```
PageCount = DisLoadFile(id, "test.docx")
If (PageCount > 0) Then
    PageNo = 1 'Get image for the first page of the document
    result = DisImageToFile(id, "test.jpg", PageNo)
End If
```

2. Convert an DocxString to a string containing image data:

```
Dim hMem as long
Dim PageCount as long
Dim ImageType as long
Dim OutString as string
Dim DocxString as string

'load the document and return the number of pages
'in the document
PageCount = DisLoadBuffer(id, DocxString, Len(DocxString))
```

```

If (PageCount > 0) Then
    ' get the output image type from a file name
    ImageType = DisGetImageType(id, "test.jpg")

    ' set the output image type
    call DisSetNumProp(id, DIPROP_IMAGE_TYPE, ImageType)

    ' return the page image in global memory handle
    hMem = DisImageToBuffer(id, OutSize, PageNo)
    If (hMem > 0) Then
        ' allocate space for the output string
        OutString = Space$(OutSize + 1)
        Call DisHandleToStr(OutString, OutSize, hMem)
    End If
End if

```

After the conversion process, end the session by calling the `DisEndSession` function. This frees up the memory used by the session.

```
DisEndSession(id)
```

Note: DOCX to Image converter makes use of Windows' GdiPlus API. GdiPlus must be installed on a system to use DOCX to Image Converter.



Application Interface functions

These API functions allow you to convert from DOCX to Image format. Your application must include the DIS.H file (c/c++), or DIS.BAS (VB) files. These files declare these functions.

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

In This Chapter

[DisEndSession](#)

[DisGetImageType](#)

Examples:

```
' get the image type for a file name
ImageType = DisGetImageType(id, "test.jpg")

' set the output image type
DisSetNumProp(id, DIPROP_IMAGE_TYPE, ImageType)
```



DisGetLastMessage

Get the last message.

```
int DisGetLastMessage(id, HICMessage, DebugMessage);
```

DWORD id;	Session id.
LPBYTE HICMessage;	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 DIFLAG_RETURN_MSG_ID flag. This flag is set using the DisSetFlags function.



DisGetPageImage

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

```
HANDLE DisGetPageImage(PageNo)
```

DWORD id;	Session id.
int PageNo;	// Page number. This value should be between 1 and the PageCount for the currently loaded DOCX document.

Return value: This function returns a metafile handle for a metafile image, or a bitmap handle for other type of images. A null value indicates an error condition.

This function is useful if you wish to retrieve the image handle for further processing before saving to a Disk file.

Examples:

```
PageCount=DisLoadFile(id,"test.docx");  
  
DisSetNumProp(id, DIPROP_IMAGE_TYPE, PICT_JPG)  
  
handle=DisGetPageImage(id, 1);
```



DisLoadBuffer

Load rtf string and determine the number of pages in the rtf document..

int DisLoadBuffer(id, InString, InStringLen)

DWORD id; Session id.

LPBYTE InString; Input string containing DOCX document.

int InStringLen; length of the input document string.

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

Examples:

```
Dim DocxString as string  
  
PageCount = DisLoadBuffer(id,DocxString, Len(DocxString))
```



DisImageToBuffer

Save the current image in a memory handle.

HGLOBAL DisImageToFile(id, OutFile, PageNo)

DWORD id; // Session id

LPLONG OutSize; // (output) size of the global memory block returned by this function.

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

Return value: This method returns TRUE when successful.

Examples:

```
PageCount = DisLoadBuffer(id, DocxString, Len(DocxString))

If (PageCount > 0) Then
    ' set the output image type to Jpeg
    call DisSetNumProp(id, DIPROP_IMAGE_TYPE, PICT_JPG)

    ' return the page image in global memory handle
    hMem = DisImageToBuffer(id, OutSize, PageNo)
    If (hMem > 0) Then
        ' allocate space for the output string
        OutString = Space$(OutSize + 1)
        Call DisHandleToStr(OutString, OutSize, hMem)
    End If
End if
```



DisImageToFile

Save the current image to the requested file name.

BOOL DisImageToFile(id, OutFile, PageNo)

DWORD id; // Session id

```
LPBYTE OutFile;           // Output image file name

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

Return value: This method returns TRUE when successful.

Examples:

```
PageCount = DisLoadFile(id, "test.docx")
If (PageCount > 0) Then
    PageNo = 1 'Get image for the first page of
               'the document
    result = DisImageToFile(id, "test.jpg", PageNo)
End If
```



DisGetLicenseStatus

Get the license status.

```
int DisGetLicenseStatus()
```

Return Value:

- 0 License application successful.
- 1 Invalid License Key.
- 2 Invalid License Number.
- 3 Ran out of available licenses. Please consider purchasing additional licenses.
- 4 The evaluation period has expired.

You can use the DisGetLicenseStatus function at anytime to retrieve the license status.



DisHandleToStr

Convert a global memory handle to a Visual Basic string.

BOOL DisHandleToStr(string, length, hMem)

LPBYTE 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.



DisLoadFile

Load rtf file and determine the number of pages in the rtf document..

int DisLoadFile(id, InString, InStringLen)

DWORD id; Session id.

LPBYTE InFile; Input file containing DOCX document.

int InStringLen; length of the input document string.

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

Examples:

```
Dim DocxString as string

PageCount = DisLoadFile(id,"test.docx")
```


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

DIFLAG_RETURN_MSG_ID	Do not Display the error messages. Save the error code to be later retrieved using the DisGetLastMessage 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.



DisSetBoolProp

Set a boolean property for the conversion.

BOOL DisSetBoolProp(id, prop, val)

DWORD id; Session id.

int prop; One of the following property type to set:

DIPROP_AUTO_WIDTH	Adjust the image width to fit the contents.
-------------------	---

DIPROP_SHRINK_TO_FIT	Set to TRUE to eliminate the ending white spaces to shrink the image height. This property is only effective for one page rtf documents.
----------------------	--

LPBYTE val; The text value of the selected property.

Return value: This function returns TRUE when successful.



DisSetHdrFtrText

Set header or footer text.

BOOL DisSetHdrFtrText(id, HdrFtrType, TextType, text)

DWORD id; Session id.

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_DOCX	DOCX text.
LPBYTE text;	Header or footer text. The header/footer text must be specified as plain text or DOCX 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:

```

DisSetHdrFtrText(id, HF_FIRST_HDR, HFTYPE_TEXT,
                  "This is first page header.");
DisSetHdrFtrText(id, HF_FIRST_FTR, HFTYPE_TEXT,
                  "This is first page footer.");
DisSetHdrFtrText(id, HF_HDR, HFTYPE_TEXT,
                  "This is regular page header.");
DisSetHdrFtrText(id, HF_FTR, HFTYPE_DOCX, "{\\rtf1 \\qc
Page: {\\field{\\fldinst PAGE}{\\fldrslt 12}} of
{\\field{\\fldinst NUMPAGES}{\\fldrslt 12}}
\\par}" ); // rtf example to insert page: n of m string

```



DisSetImageSize

Set the image size.

BOOL DisSetImageSize(id, ImageWidthTwips, ImageHeightTwips)

DWORD id; Session id.

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 DOCX document to the PDF format. This function should be called before calling the DisConvertFile or DisConvertBuffer 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 DisSetPaperSize method when called with the 'size' parameter set to 0.



DisSetNumProp

Set a numeric property for the conversion.

BOOL DisSetNumProp(id, prop, val)

DWORD id; Session id.

int prop; One of the following property type to set:

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

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

DIPROP_SIZE_PERCENT 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.

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

If you need to use a paper size not listed above, please set the PageSize argument to zero and specify the page width and height using the next two arguments.

int PageWidth; The page width in twips units (1440 twips = 1 inch). This argument is ignored if the PageSize is set to one of the defined page sizes listed above.

int PageHeight; The page height in twips units (1440 twips = 1 inch). This argument is ignored if the PageSize is set to one of the defined page sizes listed above

Return Value: The function returns TRUE when successful.

Comment: This function is used to override the default letter size paper when converting an DOCX document to the PDF format. This function should be called before calling the DisConvertFile or DisConvertBuffer if you wish override the paper size.



DisSetTextProp

Set a text property for the conversion.

BOOL DisSetTextProp(id, prop, val)

DWORD id; Session id.

int prop; One of the following property type to set:

 DIPROP_DOWNLOAD_DIR Folder to store temporary rtf pictures files during conversion.

LPBYTE val; The text value of the selected property.

Return value: This function returns TRUE when successful.



ASP Interface

This chapter describes the usage of the DOCX to Image Converter within an ASP page. The product includes an additional wrapper DLL called dicc.dll which is used to access the converter within an ASP page. Please follow the following steps:

Copy ter31.dll, txml2.dll and dis32.dll and dicc.dll to the Windows system directory, or any other directory available at the run-time. Now register dicc.dll using the regsvr32 system utility. The other dlls do not need registration. Now you are ready to use this product within an ASP page.

Here is an example ASP page to show a conversion of Rtf string into an image:

```
<%@ LANGUAGE = "VBSCRIPT"%>
<%
Option Explicit

Dim obj
Dim PageCount
Dim result
Dim DocxString

DocxString=""

Set obj = Server.CreateObject("dicc.converter")

call obj.SetFlags(1,obj.VAL_DIFLAG_RETURN_MSG_ID) ' quiet mode

' read the test.docx file into a string
DocxString =
    obj.FileToString("c:\inetpub\wwwroot\DmoDic\test.docx")

if len(DocxString) > 0 then
    PageCount = obj.LoadBuffer(CStr(DocxString))
    result =
obj.ImageToFile("c:\Inetpub\wwwroot\DmoDic\test.jpg",1)
End If

Set obj = Nothing
%>

<html>
<head>
</head>

<body>
```

```
<p> Some text before </p>
```

```

```

```
<p> Some text after </p>
```

```
</body>
```

```
</html>
```

When the above asp file is loaded, IE Displays the generated image.

The method names used by the dicc.dll are the same as the functions mentioned in the Application Interface functions. However the 'Dis' prefix is not used by the DICC method names. For example, the DisConvertFile function is named as ConvertFile within the dicc.dll file.

Also, the constants values are prefixed with an 'VAL_' prefix. For example, the constant DIPROP_IMAGE_TYPE becomes VAL_DIPROP_IMAGE_TYPE.