



Software License Agreement

DOCX to PDF Converter

For Win32/Win64

Version 8

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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 PDF Converter into your application.

In This Chapter

[Files](#)

[License Key](#)

[Incorporating the DLL into Your Application](#)

[Sample Conversion Code](#)



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 |
| DPS.H | The <i>include</i> file to include into a C/C++ application module that calls the Dps routine. It contains the constant definitions and the prototypes for the API functions. |
| DPS32.DLL | The DLL file |
| DPS32.LIB | Import library for the DPS32 DLL |
| ter25.dll | Used internally by the DPS32.DLL |
| txml2.dll | Used internal by the DPS32.DLL |
| pd32.dll | Used internally by the DPS32.DLL |
| DPCC.DLL | Wrapper DLL to used with an ASP page |

Visual Basic Interface and Demo Files:

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

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



Incorporating the DLL into Your Application

A C/C++ application should include the DPS.h file into the application module that needs to call the DPS32 dll. It also should include the DPS32.LIB as the linker library. Please refer to the demo application for an example.

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

Please also make sure that the dps32.dll, pdc32.dll, txml2.dll and ter25.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:

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

```
id = DpsNewSession()
```

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

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

1. Convert an DOCx file to an PDF file.

```
DpsConvertFile(id,"test.docx","test.pdf")
```

2. Convert an DOCx string to an PDF string

```
Dim hMem as long
```

```
Dim OutSize as long
```

```
Dim DocXstring as string
```

```
hMem = DpsConvertBuffer(id,DocXstring, Len(DocXstring),  
OutSize)
```

```
If (hMem <> 0) Then
```

```
    PdfString = Space$(OutSize + 1) ' allocate space for the  
                                   output string
```

```
    DpsHandleToStr(PdfString, OutSize, hMem) ' copy pdf from
```

```
        hMem global handle to the PdfString variable.
```

```
End If
```


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

```
DpsEndSession(id)
```



Application Interface functions

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

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

In This Chapter

[DpsConvertBuffer](#)

[DpsConvertFile](#)

[DpsEndSession](#)

[DpsGetLastMessage](#)

[DpsGetLicenseStatus](#)

[DpsHandleToStr](#)

[DpsNewSession](#)

[DpsResetLastMessage](#)

[DpsSetFlags](#)

[DpsSetBoolProp](#)

[DpsSetNumProp](#)

[DpsSetTextProp](#)



DpsConvertBuffer

Convert docx to pdf using memory buffers.

HGLOBAL DpsConvertBuffer(id, InString, InStringLen, OutStringLen)

| | |
|---------------------|---|
| DWORD id; | Session id. |
| LPBYTE InString; | Input string containing DOCx document. |
| int InStringLen; | length of the input document string. |
| LPINT OutStringLen; | The variable to receive the length of the converted document. |

Return value: This function returns a global memory handle containing the converted documented. You can either use the DpsHandleToStr or GlobalLock functions to access the data string contained in this global memory handle. GlobalLock is a Windows SDK function.

A null return values indicates an error.

Examples:

```
Dim hMem as long

Dim OutSize as long

Dim DocXstring as string

hMem = DpsConvertBuffer(id,DocXstring, Len(DocXstring),
OutSize)

If (hMem <> 0) Then

    PdfString = Space$(OutSize + 1) ' allocate space for the
                                     output string

    DpsHandleToStr(PdfString, OutSize, hMem) ' copy pdf from
                                     hMem global handle to the PdfString variable.

End If
```



DpsConvertFile

Convert docx to pdf using disk files.

BOOL DpsConvertFile(id, InFile, OutFile)

DWORD id; Session id.

LPBYTE InFile; Input file containing DOCx document

LPBYTE OutFile; Output files, contains the converted document

Return value: This function returns TRUE when successful.

Examples:

```
DpsConvertFile(id, "test.docx", "test.pdf")
```



DpsEndSession

End a conversion session.

BOOL DpsEndSession(id)

DWORD id;

Session id.

Description: This function is called at the end of the conversion process to free up the session related resources.

Return Value: The function returns TRUE when successful.



DpsGetLastMessage

Get the last message.

```
int DpsGetLastMessage(id, DpsMessage, DebugMessage);
```

| | |
|--------------------|--|
| DWORD id; | Session id. |
| LPBYTE DpsMessage; | 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 DPFLAG_RETURN_MSG_ID flag. This flag is set using the DpsSetFlags function.



DpsGetLicenseStatus

Get the license status.

```
int DpsGetLicnseStatus()
```

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 DpsGetLicenseStatus function at anytime to retrieve the license status.



DpsHandleToStr

Convert a global memory handle to a Visual Basic string.

```
BOOL DpsHandleToStr(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.



DpsNewSession

Create a new conversion session.

DWORD DpsNewSession()

Description: This function needs to be called before calling any other conversion function. This function creates a new conversion session.

The DpsEndSession must be called at the end to free up the session resources. All other conversion functions are called between the calls to the DpsNewSession and DpsEndSession functions.

Return Value: The function returns a non-zero session-id when successful. A zero value indicates a fail return.



DpsResetLastMessage

Reset the last editor message.

BOOL DpsResetLastMessage(id)

DWORD id;

Session id.

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

[DpsGetLastMessage](#)

[DpsSetFlags](#)



DpsSetFlags

Set certain flags or retrieve the values of the flags.

DWORD DpsSetFlags(id, set, flags)

DWORD id; Session id.

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:

| | |
|----------------------|--|
| DPFLAG_RETURN_MSG_ID | Do not display the error messages. Save the error code to be later retrieved using the DpsGetLastMessage 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.



DpsSetBoolProp

Set a boolean property for the pdf document.

BOOL DpsSetBoolProp(id, prop, val)

DWORD id;

Session id.

int prop;

One of the following property type to set:

| | |
|-----------------------------|---|
| DPPROP_COMPRESS_TEXT | Compress text inside the pdf document. Default = false. |
| DPPROP_EMBED_FONTS | Embed font data in the pdf document. Default = false. |
| DPPROP_BOOKMARK | Include bookmarks. Default = true. |
| DPPROP_HYPERLINK | Include hyperlinks. Default = true. |
| DPPROP_RC4_128 | Enable RC4 128 bit security when a password is specified. |
| DPPROP_AES_128 | Enable AES 128 bit security when a password is specified. |
| DPPROP_PDFA_1B | Generate PDF-A/1b compliant document |
| DPPROP_PDFA | Generate PDF-A compliant document |
| DPPROP_NO_TOC_UPDATE | Do not update the table-of-content before generating the pdf document. |
| DPPROP_USE_ORIG_JPG | Insert the original jpeg data into the pdf document. |
| DPPROP_TAGGED_PDF | Generate tagged pdf. |
| DPPROP_EXACT_TEXT_PLACEMENT | Use exact text placement. This flag causes the editor to emit character width for every character. Default = false. |
| BOOL val; | Specify TRUE or FALSE value for the specified flag. |

Return value: This function returns TRUE when successful.



DpsSetNumProp

Set a numeric property for the pdf document.

BOOL DpsSetNumProp(id, prop, val)

DWORD id;

Session id.

int prop;

One of the following property type to set:

DPPROP_PICT_QUALITY

Specify the picture quality from 1 to 5, where 1=lowest, 5=highest, 3=default.

DPPROP_PERM_FLAGS

Permission flags. The permission flags is effective only when UserPassword or OwnerPassword is also specified using the DpsSetTextProp method.

One or more of the following permission flags can be specified using the 'val' parameter:

PERM_PRINT

Allow printing of the document

PERM_MOD

Allow modification

PERM_COPY

Allow copying of the document to clipboard.

You can specify more than one permission flags using the 'or' operator.

int val;

The numeric value of the selected property.

Return value: This function returns TRUE when successful.



DpsSetTextProp

Set a text property for the pdf document.

BOOL DpsSetTextProp(id, prop, val)

DWORD id;

Session id.

int prop;

One of the following property type to set:

DPPROP_AUTHOR

Author of the document

DPPROP_TITLE

Document title

DPPROP_SUBJECT

Subject

DPPROP_KEYWORDS

Key words

DPPROP_CRE_DATE

Creation date

DPPROP_MOD_DATE

Modification date

DPPROP_USER_PASSWORD

User password

DPPROP_OWNER_PASSWORD

Owner password

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 PDF Converter within an ASP page. The product includes an additional wrapper DLL called DPCC.DLL which is used to access the converter within an ASP page. Please follow the following steps:

Copy ter25.dll, txml2.dll, pdc32.dll, DPS32.dll and dpcc.dll to the Windows system directory, or any other directory available at the run-time. Now register dpcc.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 DOCX string into an PDF string:

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

<%

Option Explicit

Dim DocxString

Dim sPdf

Dim obj

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

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

DocxString=""

sPdf=""

' read the test.docx file into a string

DocxString =

    obj.FileToString("c:\inetpub\wwwroot\DmoDpc\test.docx")

if len(DocxString) > 0 then

    sPdf = obj.ConvertBuffer(CStr(DocxString))
```

```
End If
```

```
Set obj = Nothing
```

```
%>
```

```
<html>
```

```
<head>
```

```
</head>
```

```
<body>
```

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

```
<%
```

```
Function StringToByteArray(S)
```

```
    Dim i, ByteArray
```

```
    For i=1 To Len(S)
```

```
        ByteArray = ByteArray & ChrB(Asc(Mid(S,i,1)))
```

```
    Next
```

```
    StringToByteArray = ByteArray
```

```
End Function
```

```
Response.Clear()
```

```
Response.Charset = ""
```

```
Response.ContentType = "application/pdf"
```

```
Response.AddHeader "Content-Disposition",  
"inline;filename=" + "test.pdf"
```



```
Response.BinaryWrite(StringToByteArray(sPDF))
```

```
Response.Flush()
```

```
Response.End()
```

```
%>
```

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

```
</body>
```

```
</html>
```

When the above asp file is loaded, IE displays generated pdf document.

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

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