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Software License Agreement

HTMI to DOCX Converter

For Win32/Win64

Vesion 14

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Getting Started

This chapter describes the contents of the software diskettes and provides a step by step process of incorporating HTMI to DOCX 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 | | |
| HDS.H | The <i>include</i> file to include into a C/C++ application module that calls the Hds routine. It contains the constant definitions and the prototypes for the API functions. | | |
| HDS32.DLL | The DLL file | | |
| HDS32.LIB | Import library for the HDS32 DLL | | |
| ter31.dll | Used internally by the HDS32.DLL | | |
| hts26.dll | Used internally by the HDS32.DLL | | |
| HDCC.DLL | Wrapper DLL to used with an ASP page | | |
| Visual Basic Interface and Demo Files: | | | |
| HDS.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 HdsSetLicenseInfo static function. This should be preferably done before creating the converter session to avoid pop-up nag screens.

int HdsSetLicnseInfo(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-zzzz". | | |

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=HdsSetLicenseInfo("xxxxx-yyyyy-zzzzz","srabnnnnn-n","Your Company Name")

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

Note: HdsSetLicenseInfo 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 HdsGetLicenseStatus function at anytime to retrieve the license status.



Incorporating the DLL into Your Application

A C/C++ application should include the HDS.h file into the application module that needs to call the HDS32 dll. It also should include the HDS32.LIB as the linker library. Please refer to the demo application for an example.

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

Please also make sure that the hds32.dll, txml2.dll and ter31.dll files are copied to a directory available at run-time.

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Sample Conversion Code

First you would create a new conversion session: dim id as long

Set the product <u>license key</u> and create a session id: result=HdsSetLicenseInfo("xxxxx-yyyyy-zzzz","srabnnnn-n","Your Company Name")

id = HdsNewSession()

You would use the session id to call other conversion functions. Here are sample code examples to convert HTMI to DOCX format.

1. Convert an HTML file to an DOCX file.

```
HdsConvertFile(id, "test.htm", "test.docx")
```

2. Convert an HTML string to an DOCX string

Dim hMem as long Dim OutSize as long Dim HtmlString as string hMem = HdsConvertBuffer(id,HtmlString, Len(HtmlString), OutSize) If (hMem <> 0) Then DocxString = Space\$(OutSize + 1) ' allocate space for the output string HdsHandleToStr(DocxString, OutSize, hMem) ' copy docx from hMem global handle to the DocxString variable. End If

After the conversion process, end the session by calling the HdsEndSession function. This frees up the memory used by the session. HdsEndSession(id)

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Application Interface functions

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

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

| In This Chapter | |
|---------------------|--|
| HdsConvertBuffer | |
| HdsConvertFile | |
| HdsEndSession | |
| HdsGetLastMessage | |
| HdsGetLicnseStatus | |
| HdsHandleToStr | |
| HdsNewSession | |
| HdsResetLastMessage | |
| HdsSetFlags | |
| HdsSetPageMargin | |
| HdsSetPaperOrient | |
| HdsSetPaperSize | |
| HdsSetTextProp | |
| HdsWriteToFile | |
| | |



HdsConvertBuffer

Convert HTMI to DOCX using memory buffers.

HGLOBAL HdsConvertBuffer(id, InString, InStringLen, OutStringLen)

DWORD id; Session id.

LPBYTE InString; Input string containing HTML 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 HdsHandleToStr 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:

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HdsConvertFile

Convert HTMI to DOCX using disk files.

BOOL HdsConvertFile(id, InFile, OutFile)

| DWORD id; | Session id. | |
|---|---|--|
| LPBYTE InFile; | Input file containing HTML document | |
| LPBYTE OutFile; | Output files, contains the converted document | |
| Detum velue. This function actume TDUE when every set | | |

Return value: This function returns TRUE when successful. **Examples:**

HdsConvertFile(id, "test.htm", "test.docx")

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HdsEndSession

End a conversion session. BOOL HdsEndSession(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.

*** ***

HdsGetLastMessage

DWORD id;

Get the last message.

int HdsGetLastMessage(id, HdsMessage, DebugMessage);

| DWORD id; | Session id. |
|--------------------|---|
| LPBYTE HdsMessage; | 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 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 HRFLAG_RETURN_MSG_ID flag. This flag is set using the HdsSetFlags function.

to



HdsGetLicnseStatus

Get the license status.

int HdsGetLicnseStatus()

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 HdsGetLicenseStatus function at anytime to retrieve the license status.

*** ***

HdsHandleToStr

Convert a global memory handle to a Visual Basic string.

BOOL HdsHandleToStr(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)
```

HdsHandleToStr(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.



HdsNewSession

Create a new conversion session.

DWORD HdsNewSession()

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

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

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



HdsResetLastMessage

Reset the last editor message.

BOOL HdsResetLastMessage(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 HdsGetLastMessage HdsSetFlags



HdsSetFlags

Set certain flags or retrieve the values of the flags.

DWORD HdsSetFlags(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:

| HDFLAG_RETURN_MSG_ID | Do not display the error messages. Save the error code to be later retrieved using the HdsGetLastMessage function. |
|----------------------|--|
| HDFLAG_EMBED_PICTURE | Convert the 'linked' pictures to the embedded pictures when saving to the DOCX format. |

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.

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HdsSetPageMargin

| Set the page margins for HTML output. | | |
|---|--|--|
| BOOL HdsSetPageMargin(id, left, right, top, bottom) | | |

| DWORD id; | Session id. |
|------------|---|
| 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 HTML document to the DOCX format. This function should be called before calling the HdsConvertFile or HdsConvertBuffer if you wish override the page margin values.



HdsSetPaperOrient

Set the page orientation for HTML output.

BOOL HdsSetPaperOrient(id, orient)

DWORD id;

Session id.

int orient;

Orientation: DMORIENT_PORTRAIT or DMORIENT LANDSCAPE

Return Value: The function returns TRUE when successful.

Comment: This function is used to override the default portrait orientation when converting an HTML document to the DOCX format. This function should be called before calling the HdsConvertFile or HdsConvertBuffer if you wish override the paper orientation.



HdsSetPaperSize

| Set the p | age size | for HTML | output. |
|-----------|----------|----------|---------|
|-----------|----------|----------|---------|

BOOL HdsSetPaperSize(id, PageSize, PageWidth, PageHeight)

int PageSize;

Use one of the following Windows SDK defined constants:

| Constant | Value |
|-------------------|-------|
| DMPAPER_LETTER | 1 |
| DMPAPER_LEGAL | 5 |
| DMPAPER_LEDGER | 4 |
| DMPAPER_TABLOID | 3 |
| DMPAPER_STATEMENT | 6 |
| DMPAPER_EXECUTIVE | 7 |
| DMPAPER_A3 | 8 |
| DMPAPER_A4 | 9 |
| DMPAPER_A5 | 11 |
| DMPAPER_B4 | 12 |
| DMPAPER_B5 | 13 |
| | |

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 HTML document to the DOCX format. This function should be called before calling the HdsConvertFile or HdsConvertBuffer if you wish override the paper size.

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HdsSetTextProp

Set a text property for the session.

BOOL HdsSetTextProp(id, prop, val)

DWORD id; Session id.

HDPROP_DOWNLOAD_DIR

Specify the project folder to store the temporary files.

LPBYTE val;

The text value of the selected property.

Return value: This function returns TRUE when successful.



HdsWriteToFile

Write the content of a global memory handle to a disk file. BOOL HdsWriteToFile(id, OutFile, hMem, InSize)

DWORD id; Session id.

LPBYTE OutFile; Output file name.

HGLOBAL hMem; Global memory handle

long length

length of the string

Description: This function can be used to write the contents of a global memory handle to a file.

Example:

```
hMem = HdsConvertBuffer(id, HtmlString, Len(HtmlString),
OutSize)
If (hMem <> 0) Then
    HdsHandleToStr(id, "test.docx",hMem,OutSize)
End If
```

The input global memory handle is freed up after writing its contents to the file.

Return Value: This function returns TRUE if successful.

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ASP Interface

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

Copy ter31.dll, hts26.dll, hds32.dll and hdcc.dll to the Windows system directory, or any other directory available at the run-time. Now register hdcc.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 HTML string into an DOCX string:

```
<%@ LANGUAGE = "VBSCRIPT"%>
<%
Option Explicit
Dim sHtml
Dim DocxBytes
Dim obj
Set obj = Server.CreateObject("hdcc.converter")
call obj.SetLicenseInfo("Your-Licence-Key","Your-Order-
number","Your-company-name")
```

result=obj.SetTextProp(obj.VAL_HDPROP_DOWNLOAD_DIR,"c:\temp")

```
sHTML = "<html><body> This <b> is </b> a test of <i> HTML </i>
to <i> PDF </i> Conversion.</body></html>"
if len(sHtml) > 0 then
  DocxBytes = obj.ConvertHtmlToDocxBytes(CStr(sHtml))
End If
Set obj = Nothing
응>
<html>
<head>
</head>
<body>
<%
      if ArrayEmpty(DocxBytes) then
         call Response.Write("Conversion failed!" + " <br/> <br/>")
         if IsArray(DocxBytes) then Response.Write("size:
"+CStr(UBound(DocxBytes))+" <br/> <br/> ) else
Response.Write("ConvertHtmlToDocxBytes returned null"+ "<br/")</pre>
      else
         Response.Clear()
         Response.Charset = ""
         Response.ContentType =
"application/vnd.openxmlformats-
officedocument.wordprocessingml.document"
         Response.AddHeader "Content-Disposition",
"attachment;filename=" + "test.docx"
         Response.AddHeader "Content-Length",
CStr(UBound(DocxBytes))
         call Response.BinaryWrite(DocxBytes)
         Response.Flush()
         Response.End()
```

```
end if
function ArrayEmpty (a)
ArrayEmpty = true
if IsArray(a) then
if UBound(a) > 0 then ArrayEmpty = false
end if
end function
%>
</body>
</html>
```

When the above asp file is loaded, IE displays generated docx codes

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

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