

PDF TO TIFF COM COMPONENT USER MANUAL

Overview

PDF TO TIFF COM component provide a quick, easy and affordable way to convert PDF documents to TIFF images, It allow developers easily to integrate it and add “PDF to TIFF” ability to their applications.

Features:

- Supports newest PDF 1.7 standard.
- Supports Type1, Type 0, True Type and CIDFONT (as know as CJK character sets).
- Supports export TIFF with variant compression methods. (Uncompressed, CCITT Fax3 (CCITT G3), CCITT Fax4 (CCITT G4), LZW, PACKBITS, JPEG).
- Support resizing the exported TIFF.

Installation

After download PDF to TIFF COM component package from our website, you need unzip the package into a folder. The package contains three DLL files (P2TIFF.DLL, CIDFONT.DLL, and CIDMAP.DLL) and a Fonts directory (contains the PDF standard fonts).

1. Copy *.dll to your application directory.
2. Create a directory named **fonts** under the app (your application) directory and copy all PDF standard fonts to it.
3. Run Regsvr32 to register p2tiff.dll, from dos command line:

```
Regsvr32 c:\yourapp\p2tiff.dll
```

*** Register the COM component on Windows Vista**

Create a bat script:

```
regsvr32 c:\yourapp\p2tiff.dll
```

Right-click on the .bat, select "**Run as Administrator**".

Reference

Properties

1. *long BitsPerPixel*
Property to set or get color depth, Allowed value are 1, 8, 24.
2. *long xDPI*
Property to set or get x-axis pixels per inch (dpi) of the TIFF images, Allowed value are from 36 to 800.
3. *long yDPI*

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Property to set or get y-axis pixels per inch (dpi) of the TIFF images, Allowed value are from 36 to 800.

4. *short Rotate*

Property to set rotation of the TIFF images, Allowed value are 0,1,2,3 (0-No rotation, 1-rotate the image 90, 2-rotate the image 180, 3-rotate the image 270)

5. *short Gray*

Set the value to 1 if you want to get gray scale tiff image, default value is 0. (Valid when BitsPerPixel=8).

6. *short Dither.*

When convert PDF to B&W tiff, you can choose different dither method, default dither method is "Floyd-Steinberg error diffusion", if you select a different dither method, you need set dither to 1.

7. *short Dithermethod*

Valid when BitsPerPixel=1 and Dither=1.

Valid value:

1. Multi-Level Ordered-Dithering
2. Burkes error diffusion
3. Stucki error diffusion
4. Jarvis, Judice and Ninke error diffusion
5. Sierra error diffusion
6. Stevenson and Arce error diffusion
7. Bayer ordered dither

8. *double PageWidth(int nPage)*

Get Page Width (in pixel) of specified page.

9. *double PageHeight(int nPage)*

Get Page Height (in pixel) specified page.

10. *int strip*

0: Create multi-strip tiff. 1: Create single-strip tiff. Default value:0.

Methods

1. long Open (BSTR PDF Filename)

Open PDF document.

Parameters:

PDFFilename: File name of PDF document

Return Value: Page count of the PDF document if successful, -1 if cannot open the file. -2 if requires password to open the PDF document.

2. long CreateMultiPageTiff (BSTR strTIFFName)

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Create Multi-page TIFF image.

Parameters:

strTIFFName: File name of the TIFF image.

Return Value: 1 if successful else return 0.

(Only used when create multi-page TIFF image)

3. void CloseTIFF ()

Close Multi-page TIFF FILE.

(Only used when create multi-page TIFF image)

4. void SetCodecOption (int CodecOption)

Compression methods of the TIFF images.

Parameters:

CodecOption: Allowed value are 0, 1,2,3,4,5

0-Uncompressed

1- PACKBITS

2-CCITT Fax3

3-CCITT Fax 4

4-LZW

5-JPEG

Note: CCITT Fax3 and CCITT Fax4 only support B&W TIFF image.

5. void SetImageSize(long x, long y)

Set the dimension of the exported TIFF (in pixel). x is the width, y is the height.

6. long ConvertPage (long Page, BSTR strTIFF)

Convert page Page to TIFF image

Parameters:

Page: Page number of the PDF documents.

strTIFF: File name of the TIFF image.

Return Value: 0 if cannot open the PDF file, -1 if fails, 1 if successful.

7. long Close ()

Close the PDF document.

Return Value: 1 if successful, 0 if fails.

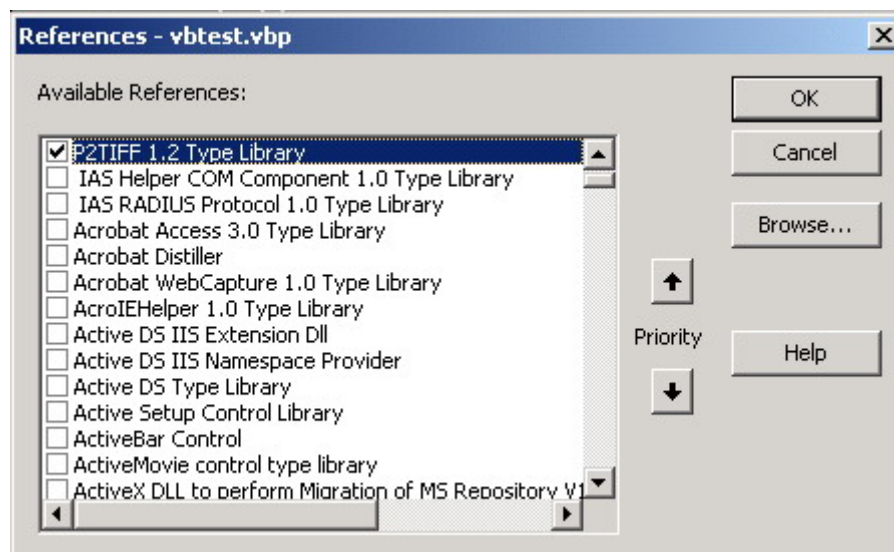
Samples

VB Sample:

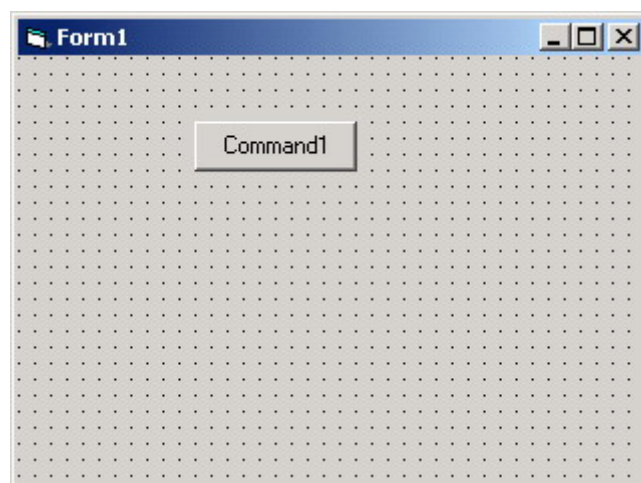
Make sure you have registering the COM component (See installation)

1. Start Visual Basic and create a new Standard Exe project.
2. Include the COM component to your project (Click the menu **Project->Reference**)

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3. Place a command button on the form.



4. Double click the command button (command1)

```
Private Sub Command1_Click ()  
Dim pdf2tiff As New P2TIFFLib.P2TIFFCOM  
Dim nPages As Integer  
nPages = pdf2tiff.Open ("f:\bmp\sample.pdf")  
If (nPages > 0) Then  
    pdf2tiff.SetCodecOption (1)  
    pdf2tiff.BitsPerPixel = 24  
    pdf2tiff.xDPI = 150  
    pdf2tiff.yDPI = 150
```

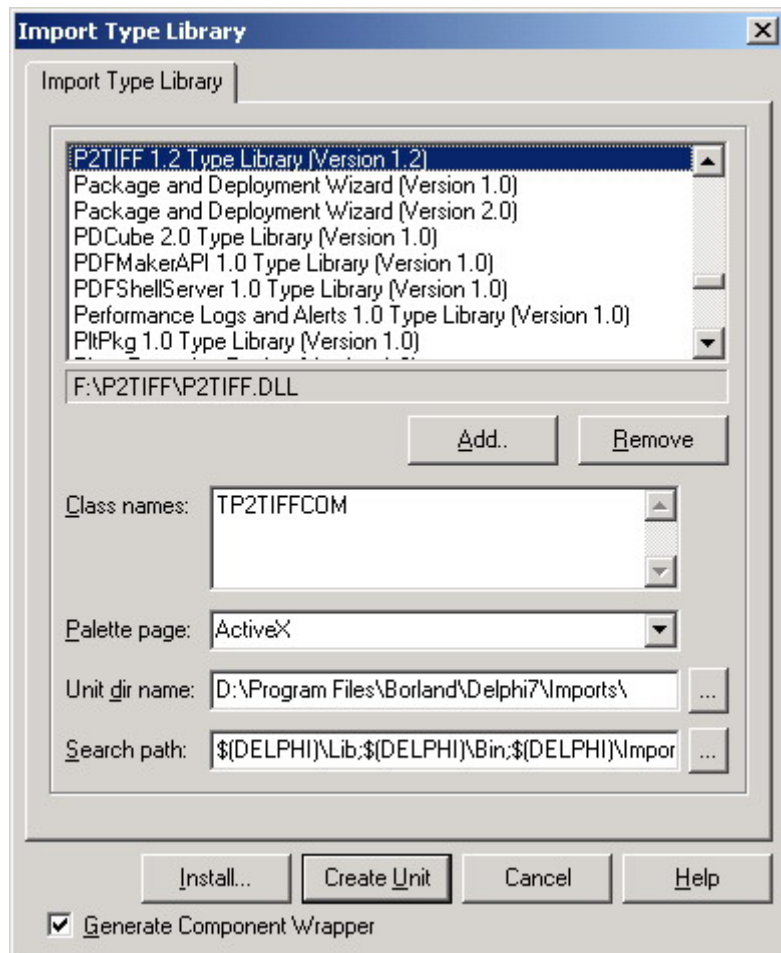
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```
pdf2tiff.Rotate = 0
Dim i As Integer
Dim ret As Integer
Dim strName As String
For i = 0 To nPages - 1
    strName = "f:\bmp\" + Str (i) + ".tif"
    If pdf2tiff.ConvertPage (i, strName) = 0 Then
        Exit For
    End If
Next
pdf2tiff.Close
End If
End Sub
```

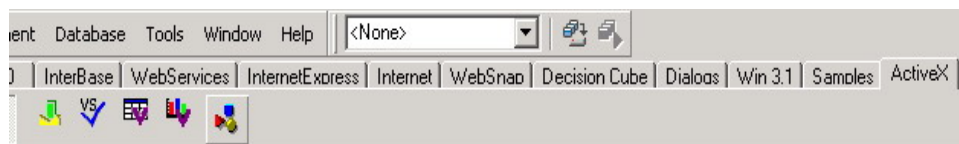
Delphi Sample

Make sure you have registering the COM component (See installation)

- 1) Import Type Library: Click the menu Project->Import Type Library



- 2) Click install to install the COM component.
- 3) A new control will be added to the ActiveX page of the component palette.



- 4) New a project and selecting the control (P2TIFFCOM) from ActiveX page of the component palette, click the Form to place the control to the form, then add a button to the Form, Click the button and add following code to the Button click event.

```

Procedure TForm1.Button1Click (Sender: TObject);
var strFileName: WideString;
    strTifName: WideString;

```

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```
nPages, I : Integer;
begin
  strFileName: ='f:\test\sample.pdf';
  nPages: =P2TIFFCOM1.Open(strFileName);
  if nPages>0 then
    begin
      P2TIFFCOM1.SetCodecOption(1);
      P2TIFFCOM1.BitsPerPixel:=24;
      strTifName: ='F:\test\new.tif';
      P2TIFFCOM1.CreateMultiPageTIFF(strTifName);
      For i:=0 to nPages-1 do
        P2TIFFCOM1.ConvertPage(i, strTifName);
      P2TIFFCOM1.Close();
      P2TIFFCOM1.CloseTIFF();
    end;
  end
end
```

BCB Sample

```
WideString strFileName=OpenDialog1->FileName;
WideString strTiff="F:\\bmp\\2.tif";
P2TIFFCOM1->CreateMultiPageTiff(strTiff);
int nPages=P2TIFFCOM1->Open(strFileName);
if(nPages>0)
{
  P2TIFFCOM1->SetCodecOption(0);
  P2TIFFCOM1->set_BitsPerPixel(24);
  P2TIFFCOM1->set_xDPI(150);
  P2TIFFCOM1->set_yDPI(150);
  P2TIFFCOM1->set_Rotate(0);
  for(int i=0;i<nPages;i++)
    P2TIFFCOM1->ConvertPage(i,strTiff);
  P2TIFFCOM1->Close();
}
P2TIFFCOM1->CloseTIFF();
```

C++ Sample

```
#include <stdio.h>
#include <stdlib.h>
#include "p2tiff.h"
```

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```
#include "p2tiff_i.c"

int main(int argc, char * argv[])
{
    ::CoInitialize(NULL);
    IP2TIFFCOM * TiffCom = NULL;
    HRESULT hResult = ::CoCreateInstance(CLSID_P2TIFFCOM, NULL,
    CLSCTX_INPROC_SERVER, IID_IP2TIFFCOM, (void**) &TiffCom);
    if(FAILED(hResult))
    {
        fprintf(stderr, "failed to create P2TIFF COM instance!\n");
        ::CoUninitialize();
        return 1;
    }
    wchar_t * wszFileName=L"F:\\bmp\\1.pdf";
    long dwResult;
    TiffCom->Open(wszFileName, &dwResult);
    if(dwResult>0)
    {
        hResult=TiffCom->put_BitsPerPixel(1); //B&W
        hResult=TiffCom->SetCodecOption(3); //CCITT_FAX4
        hResult=TiffCom->put_xDPI(150);
        hResult=TiffCom->put_yDPI(150);
        hResult=TiffCom->ConvertPage(0, L"F:\\bmp\\1.tif", &dwResult);
        hResult=TiffCom->Close(&dwResult);
        TiffCom->Release();
    }
    ::CoUninitialize();
    return 0;
};
```

VBA Sample:

```
szFileName="e:\\test\\586ECCDD9C43.pdf"
Set oP2TIFF = CreateObject("P2TIFF.P2TIFFCOM")
nTotalPages=oP2TIFF.Open(szFileName)
```

```
oP2TIFF.SetCodecOption (3)
oP2TIFF.BitsPerPixel = 1
oP2TIFF.Dither = False
```

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```
oP2TIFF.Rotate = 0
oP2TIFF.SetImageSize 2550, 3300
oP2TIFF.xDPI = 300
oP2TIFF.yDPI = 300
```

```
strName =Left( szFileName , InStr(1, szFileName, ".pdf", 1 ) ) + ".tif"
oP2TIFF.CreateMultiPageTiff (strName)
For nPage = 0 To nTotalPages - 1
    If oP2TIFF.ConvertPage(nPage, strName) = 0 Then
        Exit For
    End If
Next
oP2TIFF.Close
Set oP2TIFF=nothing
```

Other Sample

Please email us at support@digitzone.com if you need other samples.

Known Issues and Common Problems

When you upgrade project to VS2008 and run your application on Windows Vista, you will get:

"Retrieving the COM class factory for component with CLSID {C69B07A8-FD4D-4D5B-B0D0-54F6ECF9307C} failed due to the following error: 800703e6."

To solve this problem, you need use **editbin.exe** to remove the PE header for NXCOMPAT. **Editbin.exe** is part of the .NET 2.0 SDK.

Usage:

```
editbin.exe /NXCOMPAT:NO <your binary>
```

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