

Informatik TiffDLL90Command

User Guide

18 September 2011

Introduction (please read all)

Always make sure that all affected files are safely backed up before you run the program. Always verify the output. Supplied AS IS without any warranties or liabilities. Please read the 'License, Warranty, Disclaimer' section below. Please note that the trial version will at random add a DEMO message to the output files. The trial version may only be used legally for a maximum of 30 days

Note: The TiffDLL90Command.exe and the Tifftek32.dll must always be in the same folder. The program will not work if the Tifftek32.dll file is missing.

TiffDLL90Command is a command-line driven utility to convert Tiff and other graphics files (but not PDF files).

TiffDLL90Command can be run as a traditional command-line function, or it can be run as a process within a program. A code sample of the process is shown below.

TiffDLL90Command is an executable and it can return an exit code. The exit code is 0 on success or a value representing the error code. TiffDLL90Command as an executable can easily be incorporated into applications (easier than a DLL), both 32-bit and 64-bit.

When running the program, the following files **MUST** be in the same folder as the TiffDLL90Command.exe file:

TiffDLL90Command.exe

Tifftek32.dll

(Optionally the reg.txt file, please read the 'reg=' section below)

The Tifftek32 is supplied with the TiffDLL90Command.

The program is run with a command-line. The command-line consists of the executable path and the argument/parameter. If the executable path has spaces it must be encapsulated with quotes (except if run in a process).

The argument/parameter part of the command-line is a series of instruction keywords for different conversions, each one separated by a semicolon (;). The keywords end with an equal character (=), no space. The command-line can combine many instructions, the order is irrelevant. Some of the instructions can have several subsections, each separated by a slash (/). As a minimum the 'in=' (input file) and the 'out=' (output file) instructions must be present. Blank lagging subsection can be left out.

An example of a complete command-line is:

```
"c:\xdir\TiffDLL90Command.exe" in=c:\xdir\xyz.bmp;out=c:\xdir\xyz.tif;err=0; open=1
```

The trial version of TiffDLL90Command at random adds a DEMO note to the output file. To run in the licensed mode, add the keyword reg= with the license code that you receive when buying the license. As an alternative you can create a reg.txt file and place the file in the same folder as the TiffDLL90Command.exe file. The reg.txt file must have one line with the 24-character registration code.

The program can disclose various properties of the graphics image, such as number of pages, width, height, resolutions, color depth, etc. These properties can then be used in a subsequent command. The properties are saved in an XML file for easy retrieval. See 'Image Properties' section below.

If the command-line includes the element 'open=1' then the converted file will open in the default application. The option operates only for individual files and if the output file is definitively specified.

TiffDLL90Command can run a batch (all or filtered files from a whole folder). A sample command line for a batch run is:

```
"C:\xdir\TiffDLL90Command.exe" in=c:\xdir\*,tif;out=c:\zdir\*.tif;...  
"C:\xdir\TiffDLL90Command.exe" in=c:\xdir\*,tif;out=c:\zdir\[#5].tif;ow=2;...
```

The first sample processes all files in folder that have a .tif extension, naming the files with same names but in a different folder. The second sample processes the same files but names the output files by the first 5 characters of the source name and combines (appends) same-name files.

You can also run the TiffDLL90Command program as a process in with the following Visual Studio sample code.

```
Dim proc As New Process  
proc.StartInfo.FileName = "C:\xyz\TiffDLL90Command.exe"  
proc.StartInfo.Arguments = "in=..."  
proc.Start()  
proc.WaitForExit()  
MsgBox(proc.ExitCode)
```

You may want to rename the TiffDLL90Command name to a shorter name.

When distributing the Software (subject to license terms), deploy it with a setup/installation procedure. Do not distribute the user guide and the readme text file.

For a DLL version please try Informatik's original TiffDLL90.

Command-line Elements:

err= Error Handling:

- 0 = do not show error messages; no posting to error log
- 1 = show error messages; no posting to error log
- 2 = do not show error message; post to error log
- 3 = show error message and post to error log (default)

Example: err=1

in= Full name of input file

- Example: in=c:\somedir\myfile.tif
- Example: in=in=c:\somedir*.tif
- Example: in=in=c:\somedir\ABC*.*

The asterisks are used as filters for batch processing complete folders.
For more on processing folders, see the Introduction section.

pg= Page or page range of input file(s)

- Example: 5
- Example: 5-8
- Example: -5
- Example: 5-
- Example: 5-99999

out=

Full name of output file

- Example: out=c:\somedir\myfile.tif
- Example: out= c:\somedir*.tif
- Example: out= c:\somedir\ABC*.tif
- Example: out= c:\somedir\ABC[#4].tif

The asterisks will copy the base name from the source file.
The hash (#) will copy letters from the source file. [#4] for example will copy the first four letters from the source file.

If the output file name is specified as 'out=i' the system will create an XML file with the image's properties, for example, number of pages, width, height, resolution, etc. Please read the 'Image Properties' section below.

ow= Overwrite/Append Option:

- 1 Overwrite without prompt
- 2 Append (TIFF only)
- 3 Do not overwrite; generate error (Default)

Example: ow=1

The value 3 is the default, thus not needed to be specified.

format=

Specification of output file format:

The option has 3 data fields separated by a forward slash:

a) Graphics Format

- 0 Auto (Default)
- 1000 TIFF_Auto = 1000
- 1401 TIFF_CCITT4_1bit = 1401
- 1501 TIFF_CCITT3_1bit = 1501
- 1101 TIFF_LZW_1bit = 1101
- 1108 TIFF_LZW_8bit = 1108
- 1124 TIFF_LZW_24bit = 1124
- 1724 TIFF_JPEG_24bit = 1724
- 1224 TIFF_Packbits_24bit = 1224
- 1001 TIFF_Uncompressed_1bit = 1001
- 1008 TIFF_Uncompressed_8bit = 1008
- 1024 TIFF_Uncompressed_24bit = 1024
- 108 GIF_8bit = 108
- 201 BMP_1bit = 201
- 208 BMP_8bit = 208
- 224 BMP_24bit = 224
- 301 PNG_1bit = 301
- 308 PNG_8bit = 308
- 324 PNG_24bit = 324
- 424 JPEG_24bit = 424

b) Quality Factor for JPEG Files

Applicable only for JPEG files, not for JPEG compressed Tiffs.

Do not use this option if you want to keep the quality at 100%.

Value between 20 and 95

c) Fillorder2 (for Tiff files only)

0 = As is (default)

1 = Yes

2 = No

d) Multistrip (for Tiff files only)

0 = As is (default)

1 = Yes

2 = No

Example: format=1401

Example: format=1401/70

Example: format=1401//1/1

res= Resolution

(Do not use together with text annotations!)

This option has 2 data fields, separated by a forward slash:

a) Horizontal Resolution

b) Vertical Resolution

Example: 300/300

Example: 300/(use original vertical resolution)

Example: /300 (use original horizontal resolution)

split= Use this option if output must be serialized.

This option has 2 data fields separated by a forward slash:

a) Number of digits in serial suffix

b) Starting number

Example: split=4/1 (first serial will be 0001)

Example: split=5/1001 (first serial will be 01001)

rot= Rotation:

90 Clockwise

180 Upside

270 Counter-clockwise

1090 Clockwise, conditional if Landscape

1270 Counter-clockwise, conditional if Landscape

2090 Clockwise, conditional if Portrait

2270 = Counter-clockwise, conditional if Portrait

Example= 90

text= Annotation String

Additional optional specifications are in the 'textx=' option (next below).
If 'textx=' is not used, the text will be placed at bottom-left at the default font.

Example: text=Hello World

textx= Specifications for the annotation (optional)

The option has 6 data fields separated by a forward slash:

a) Fixed Placement

- 0 HorizontalBottomLeft (default)
- 1 HorizontalBottomCenter
- 2 HorizontalBottomRight
- 3 HorizontalTopLeft
- 4 HorizontalTopCenter
- 5 HorizontalTopRight
- 6 VerticalLeftTop
- 7 VerticalLeftCenter
- 8 VerticalLeftBottom
- 9 VerticalRightTop
- 10 VerticalRightCenter
- 11 VerticalRightBottom
- 14 CenterPage

b) Custom placement, Left Position in Inches

Use only if Fixed Placement is not used.
(if negative value, position is referenced to right border)

c) Custom placement, Top Position in Inches

Use only if Fixed Placement is not used.
(if negative value, position is referenced to bottom border)

d) Font Size

A value between 6 and 72.
Some values will be adjusted to the nearest available.

e) Font Name:

- 0 Arial
- 1 MicrosoftSansSerif
- 2 TimesRoman
- 3 ComicSansMS
- 4 CourierNew

f) Text Color:

- 1 Black (default)
- 2 Red
- 3 Blue
- 4 Green
- 5 Gray
- 6 White
- 7 Yellow
- ... ARGB Color Code
Hexadecimal number with a # prefix, e.g. #FF7FFF00
(change the starting 'FF' with 'AA' to render semi-transparent)

Example: textx=1///18/1

Example: textx=/1.50/2.0/12/1

text+=

Multiple text lines, text lines placed at different locations
The option has 4 data fields separated by a forward slash:

a) File name (full path) that contains the text.

The text file includes text, left, and top positions in Inches.
The text must be in basic ASCII format.
File name must not include forward slash or semicolon characters.

Example of first three lines in the text file;
file can have many lines:

```
Hello World;1.00;0.25  
Hello World;1.00;0.50  
Hello World;1.00;0.75
```

b) Font Name:

- 0 Arial (default)
- 1 Comic Sans MS
- 2 Courier New
- 3 Microsoft Sans Serif
- 4 Times New Roman

c) Font Size, any value

d) Transparency:

- 0 = Transparent background (default)
- 1 = Opaque background

Example: text+=c:\somedir\myfile.txt/4

size= Resize Image

The option has 5 data fields separated by a forward slash:

- a) Width
- b) Height
- c) Resize Mode
 - 1 = Inches (default)
 - 2 = Pixels
 - 3 = Percent
 - 4 = PlusMinus Inches
 - 5 = PlusMinus Pixels
- d) Adjust Resolution
 - 0 = No (default)
 - 1 = Yes
- e) Preserve Canvas:
 - 1 = Image not centered (default)
 - 2 = Image Centered

Example: size=4.25/5.51///1

canvas= Resize Canvas

The option has 3 data fields separated by a forward slash:

- a) Width in Inches
- b) Height in Inches
- c) Centered Image:
 - 1 = Image not centered (default)
 - 2 = Image centered

Example: canvas=10/15

clean= Clean up borders (borders are 'white-washed')

This option has 4 data fields separated by a forward slash:

- a) Left in Inches
- b) Top in Inches
- c) Right in Inches
- d) Bottom in Inches

Example: clean=1/1/1/1

shift= Shift Image

This option has 2 data fields separated by a forward slash:

- a) Left in Inches (positive or negative value)
- b) Top in Inches (positive or negative value)

Example: shift=1/1

img= File name of image insert (full path)

This option has 9 data fields separated by a forward slash:

- a) File name of the image (full path)
(file name must not have any forward slash or semicolon characters.)
- b) Left position in Inches
(if negative value, position is referenced to right border)
- c) Top position in Inches
(if negative value, position is referenced to bottom border)
- d) Width in Inches
- e) Height in Inches
- f) Size in Percent of original, e.g. 50
- g) Color depth
0 = KeepTo8bits
1 = Unchanged
2 = ReduceToBlack
- h) Transparency, a value between 10 and 90
(for color images only)
- i) 1= Make white background transparent

Example: c:\somedir\xyz.bmp/1.25/2/2.5/2.5

mark= Watermark

The option has 7 data fields separated by a forward slash:

- a) Text of watermark
Text must not include forward slash or semicolon characters.
- b) Placement
0 = Center (default)
1 = Upper section
2 = Lower section
- c) Size
0 = Regular (default)
1 = larger
2 = Smaller
- d) Style
0 = Outline (default)

- 1 = Solid
- e) Transparency
 - Value between 10 and 90 (default is 60)
 - Used in conjunction with 'Quality' setting
 - (90 is almost invisible; 10 is almost opaque.)
- f) Quality (rarely used)
 - 1 = High Quality
- g) Brightness (rarely used)
 - 0 = Regular
 - 1 = Darker
 - 2 = Lighter

Example: mark=DRAFT//1

redact= Redaction (Black-out, white-out)

The option has 5 data fields separated by a forward slash:

- a) Left in Inches
 - (if negative value, position is referenced to right border)
- b) Top in Inches
 - (if negative value, position is referenced to bottom border)
- c) Width in Inches
- d) Height in Inches
- e) 0 = Black (default)
 - 1 = White

Example=redact=4/3/3.5/1.125

high= Highlighting in Color

The option has 5 data fields separated by a forward slash:

- a) Left in Inches
 - (if negative value, position is referenced to right border)
- b) Top in Inches
 - (if negative value, position is referenced to bottom border)
- c) Width in Inches
- d) Height in Inches
- e) 1 = Yellow (default)
 - 2 = Light Red
 - 3 = Light Blue
 - 4 = Light Green
 - 5 = Gray
 - .. = ARGB Color Code
 - as Hexadecimal number with a # prefix, e.g. #FF7FFF00

Example: redact=4/3/3.5/1.125

crop= Crop an Area

The option has 5 data fields separated by a forward slash:

- a) Left in Inches
- b) Top in Inches
- c) Width in Inches
- d) Height in Inches
- e) Preserve Canvas (optional)
 - 1 = Image not centered
 - 2 = Image centered

Example: crop=2.5/2.5/3/3

invert=Invert (White to Black, vice versa)

Example: invert=1

flip= Flip Image (Top-to-Bottom)

The Flip option flips the image top-to-bottom (mirror image). For a horizontal flip, combine the flip option with a 180 degree rotation.

Example: flip=1

flood= Flood pointed area with color (black or white)

The option has 4 data fields separated by a forward slash:

- a) Point x (pixel)
 - If negative, value is in reference to right border.
- b) Point y (pixel)
 - If negative, value is in reference to bottom border.
- c) Flood color
 - 0 = White
 - 1 = Black
- d) 1 = Use Inches instead of pixels for points x and y

Example: flood=1/1

reg= 24-character long Registration Code (License Code)

As an alternative you can create a reg.txt file and place the file in the same folder as the TiffCommand.exe file. The reg.txt file must have one line with the 24-character registration code.

Example: reg=ABCDEFGHIJKLMN1234567890

open= Post-execution opening of file

If value is 1, the converted file will open in the default application. The option operates only for individual files and if the output file is definitively specified.

Example: open=1

Image Properties

In some case you may need to know certain properties of the source file, for example number of pages, resolution, dimensions, etc. To obtain the properties, set the 'out=' option to 'out=i' (think of 'i' as 'information'. The system will create an XML file in the c:\Documents and Settings\[USER]\ApplicationData\TiffDLL90Command folder (FileData.xml). The XML file can then be read and the data used in the subsequent command.

The following Properties are available:

Pages
Width
Height
Resx
Resy
Colorbits
Rawformat
JPEGResUnits
TiffCompression
Strips
Fillorder

In Visual Studio, the XML file can be read with the following sample code:

```
Dim resxReader As System.Resources.ResXResourceReader = New
    System.Resources.ResXResourceReader(resxfilename)
For Each d As System.Collections.DictionaryEntry In resxReader
    Select Case d.Key.ToString
        Case "Pages"
            MsgBox(d.Value.ToString)
        Case "Width"
            MsgBox(d.Value.ToString)
        .....
    End Select
Next
resxReader.Close()
```

If the XML Reader returns a -1 value, it means the information is not available.

Error codes

- 1007 Destination File already exists. You can disable the Save_Overwrite option.
- 1010 Cannot open TIFF file. File does not exist or is of an incompatible TIFF Format
- 1011 Cannot open page of TIFF file.
- 1012 Cannot open file (format other than TIFF)
- 1013 Cannot open file. Probably an unsupported graphics format or a corrupted file.
- 1014 Tifftek32 file may be missing. The Tifftek32 file must be in the same folder as the application.
- 1021 JPEG Encoder/Save problem
- 1029 Problem saving file. Make sure that the destination file is not open by another application and that the file and the folder are not Read-Only.
- 1031 Error rotation
 - 1051 Error Resizing
- 1052 Width AND Height must be specified, or set ConstraintProportions.
- 1053 Output file must have a valid extension name.
- 1054 Output file name is invalid.
- 1061 Error Cropping specification. Crop width and height must be specified.
- 1071 Error setting new resolution
- 1081 Error Inversion
- 1091 Error with Annotation
- 1092 Text file for text+ not found
- 1093 Error text+
- 1094 Error Watermarks
- 1111 Error saving file
- 1121 Error createvimage. Also, make sure that the Tifftek32.dll is in the correct folder.
- 1122 Error InsertBMPreduceMono
- 1131 Error adjusting color depth
- 1141 Error opening InsertImage file. File may not exist or may be of incompatible format
- 1151 Error inserting image
- 1161 Error annotation
- 1181 Error Redaction
- 1186 Error Highlighting
- 1212 Error creating output bitmap
- 1214 Error Image Insert (Fast)
- 1215 Error creating watermark bitmap
- 1216 Error Watermark Insert (Fast)
- 1217 For multipage file processing, destination file must not be the same as the source file
- 1221 Error Flipping
- 1231 Error ColorFlooding
- 1232 Error ColorFlooding. Make sure that the Units of Measurements are correct. See UseInchAsUnits property.
- 1251 Output format cannot be multipage. Please specify the Split properties.

- 2001 Source File Name not specified
- 2002 Destination File Name not specified.
- 2003 Incorrect page specification. Both From and To must be specified. -2004 Incorrect Percentage specification. Value must be full number. Example, enter 50 for 50%
- 2005 Incompatible source specification.
- 2006 Incompatible Serialization specification. Start number must be blank if Serialization is not active.
- 2007 Incorrect Registration Code
- 2008 Page Range and Page Selection must not both be selected.
- 2009 PreserveCanvas and PreserveCanvasCentered must not both be selected.

- 3001-3009 Unspecified error.

- 5001 Source file does not exist
- 5002 Destination file does not exist
- 5003 Source and Destination folder must not be the same
- 5004 Folder does not exist
- 5005 Cannot create folder
- 5006 `Commandline` includes unrecognized item(s)
- 5099 Syntax error in command-line

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