
Subject: Re: IDL and PDF

Posted by [David Fanning](#) on Fri, 12 Oct 2001 14:50:04 GMT

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Steve Worland (worley@maths.ex.ac.uk) writes:

- > Does anyone know any way of producing a .pdf output using IDL, or any
- > way of converting .ps to .pdf but keeping the graphics looking nice?

I've converted my entire book to PDF files. Almost all the figures are created in IDL as encapsulated PostScript output. I've never noticed any problem with graphics looking nice, and I'm pretty anal about things like that.

Cheers,

David

--

David W. Fanning, Ph.D.

Fanning Software Consulting

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Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: IDL and PDF

Posted by [Med Bennett](#) on Fri, 12 Oct 2001 15:21:23 GMT

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Steve Worland wrote:

- > Does anyone know any way of producing a .pdf output using IDL, or any
- > way of converting .ps to .pdf but keeping the graphics looking nice?
- >
- > Cheers

Yes - get a copy of Ghostscript (you don't say what platform you're working on though) - it does .ps -> to .pdf very nicely!

Subject: Re: IDL and PDF

Posted by [Todd Clements](#) on Fri, 12 Oct 2001 16:10:17 GMT

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Steve Worland <worley@maths.ex.ac.uk> wrote:

- > Does anyone know any way of producing a .pdf output using IDL, or any
- > way of converting .ps to .pdf but keeping the graphics looking nice?

Steve -

My favorite answer is to use ghostscript. If you're on some sort of UNIX box, here's your command line:

```
gs -sDEVICE=pdfwrite -dBATCH -dNOPAUSE -q -r 72 -sOutputFile=outFileName  
inputFileName
```

where the 72 is the resolution (in dpi) you want your graphics rendered at, inputFileName is the name of the .ps file you've created, and outFileName is the name of the PDF you want created.

I create this string at run time with the appropriate file names and resolution:

```
str = 'gs -sDEVICE='+device+' -dBATCH -dNOPAUSE -q -r'+ $  
      strtrim(fix(res),2)+' -sOutputFile='+ $  
      strippedFileName+extension+' '+ fileList[i]
```

and then use spawn to execute it.

Todd

Subject: Re: IDL and PDF

Posted by [Paul van Delst](#) on Fri, 12 Oct 2001 16:33:08 GMT

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Todd Clements wrote:

- >
- > Steve Worland <worley@maths.ex.ac.uk> wrote:
- >
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- > gs -sDEVICE=pdfwrite -dBATCH -dNOPAUSE -q -r 72 -sOutputFile=outFileName
- > inputFileName
- >
- > where the 72 is the resolution (in dpi) you want your graphics rendered
- > at, inputFileName is the name of the .ps file you've created, and

```

> outFileName is the name of the PDF you want created.
>
> I create this string at run time with the appropriate file names and
> resolution:
>
>     str = 'gs -sDEVICE='+device+' -dBATCH -dNOPAUSE -q -r'+ $
>         rtrim(fix(res),2)+' -sOutputFile='+ $
>         strippedFileName+extension+' '+ fileList[i]
>
> and then use spawn to execute it.

```

Note: Some systems may not like the space after the "-r" in the example above.

Or use the Unix "convert" utility (sorry for the length of the following):

```
% man convert
```

```
convert(1)
```

```
convert(1)
```

NAME

convert - converts an input file using one image format to an output file with the same or differing image format.

SYNOPSIS

```
convert [ options ... ] file [ file... ] file
```

DESCRIPTION

convert converts an input file using one image format to an output file with the same or differing image format.

convert recognizes the following image formats:

Tag	Description
AVS	AVS X image file.
BIE+	Joint Bi-level Image experts Group file interchange format.
BMP+	Microsoft Windows bitmap image file.
BMP24+	Microsoft Windows 24-bit bitmap image file.
CGM	Computer Graphics Metafile.
CMYK	Raw cyan, magenta, yellow, and black bytes.
DCX+	ZSoft IBM PC multi-page Paintbrush file.
DIB	Microsoft Windows bitmap image file.
DICOM	Medical image file.
EPDF	Encapsulated Portable Document Format.
EPI	Adobe Encapsulated PostScript Interchange format.
EPS	Adobe Encapsulated PostScript file.
EPS2	Adobe Level II Encapsulated PostScript file.

EPSF Adobe Encapsulated PostScript file.
 EPSI Adobe Encapsulated PostScript Interchange format.
 EPT Adobe Encapsulated PostScript Interchange format with TIFF preview.
 FAX+ Group 3.
 FIG TransFig image format.
 FITS Flexible Image Transport System.
 FPX FlashPix Format.
 GIF+ CompuServe graphics interchange format; 8-bit color.
 GIF87+ CompuServe graphics interchange format; 8-bit color (version 87a).
 GRAY Raw gray bytes.
 GRANITE
 granite texture.
 HDF+ Hierarchical Data Format.
 HISTOGRAM
 HPGL HP-GL plotter language.
 HTML Hypertext Markup Language with a client-side image map.
 JBIG+ Joint Bi-level Image experts Group file interchange format.
 JPEG Joint Photographic Experts Group JFIF format; compressed 24-bit color.
 ICO Microsoft icon.
 LABEL text image.
 MAP Red, green, and blue colormap bytes followed by the image colormap indexes.
 MIFF+ Magick image file format. MNG Multiple-image Network Graphics.
 MONO Bi-level bitmap in least-significant-byte (LSB) first order.
 MPEG+ Motion Picture Experts Group file interchange format.
 MTV+ MTV Raytracing image format.
 NETSCAPE
 Netscape 216 color cube.
 NULL NULL image.
 PBM+ Portable bitmap format (black and white).
 PCD Photo CD. The maximum resolution written is 512x768 pixels.
 PCL Page Control Language.
 PCX ZSoft IBM PC Paintbrush file.
 PDF+ Portable Document Format.
 PGM+ Portable graymap format (gray scale).
 PICT Apple Macintosh QuickDraw/PICT file.
 PIX Alias/Wavefront RLE image format.
 PLASMA plasma fractal image. Specify the base color as the filename (e.g. plasma:gray). Use fractal to initialize to a random value (e.g. plasma:fractal).
 PNG Portable Network Graphics.
 PNM+ Portable anymap.
 PPM+ Portable pixmap format (color).
 PS+ Adobe PostScript file.
 PSD Adobe Photoshop bitmap file.
 PS2+ Adobe Level II PostScript file.
 P7 Xv's visual schnauzer format.
 RAD Radiance image format.
 RGB Raw red, green, and blue bytes.

RGBA Raw red, green, blue and matte bytes.
RLA Alias/Wavefront image file; read only
RLE Utah Run length encoded image file; read only.
SGI+ Irix RGB image file.
SHTML Hypertext Markup Language with a client-side image map.
SUN+ SUN Rasterfile.
TEXT raw text file; read only.
TGA+ Truevision Targa image file.
TIFF+ Tagged Image File Format.
TIFF24+
24-bit Tagged Image File Format.
TILE tile image with a texture.
TIM PSX TIM file.
TTF TrueType font file.
UIL X-Motif UIL table.
UYVY Interleaved YUV.
VICAR read only.
VID Visual Image Directory.
VIFF+ Khoros Visualization image file.
WIN select image from or display image to your computer screen.
X select image from or display image to your X server screen.
XC constant image of X server color. Specify the desired color as the filename
(e.g. xc:yellow).
XBM X11 bitmap file.
XPM X Windows system pixmap file (color).
XWD X Windows system window dump file (color).
YUV+ CCIR 601 4:1:1 file.

I use IDL 5.4.1 and use convert to create GIF output of my pretty PostScript files (which have always looked better than IDL produced GIF files if you can handle the larger file sizes).
Works fine for PS->PDF too (lathough you may have to dick about with fonts

cheers,

paulv

--

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Subject: Re: IDL and PDF
Posted by [Steve Worland](#) on Tue, 16 Oct 2001 08:43:09 GMT
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Paul van Delst wrote:

```

> Todd Clements wrote:
>>
>> Steve Worland <worley@maths.ex.ac.uk> wrote:
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>> where the 72 is the resolution (in dpi) you want your graphics rendered
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> % man convert
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> convert(1)                                convert(1)
>
> NAME
>     convert - converts an input file using one image format to an output file with the
>     same or differing image format.
>
> SYNOPSIS
>     convert [ options ... ] file [ file... ] file
>
> DESCRIPTION
>     convert converts an input file using one image format to an output file with the
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EPSF	Adobe Encapsulated PostScript file.
EPSI	Adobe Encapsulated PostScript Interchange format.
EPT	Adobe Encapsulated PostScript Interchange format with TIFF preview.
FAX+	Group 3.
FIG	TransFig image format.
FITS	Flexible Image Transport System.
FPX	FlashPix Format.
GIF+	CompuServe graphics interchange format; 8-bit color.
GIF87+	CompuServe graphics interchange format; 8-bit color (version 87a).
GRAY	Raw gray bytes.
GRANITE	granite texture.
HDF+	Hierarchical Data Format.
HISTOGRAM	
HPGL	HP-GL plotter language.
HTML	Hypertext Markup Language with a client-side image map.
JBIG+	Joint Bi-level Image experts Group file interchange format.
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MTV+	MTV Raytracing image format.
NETSCAPE	Netscape 216 color cube.
NULL	NULL image.
PBM+	Portable bitmap format (black and white).
PCD	Photo CD. The maximum resolution written is 512x768 pixels.
PCL	Page Control Language.

- > PCX ZSoft IBM PC Paintbrush file.
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- > TILE tile image with a texture.
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Thankyou all for your help!!!

Subject: Re: IDL and PDF
Posted by [src](#) on Fri, 26 Oct 2001 17:06:59 GMT
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Or, if you have LaTeX installed, it has a script called epstopdf that calls ghostscript to convert eps to pdf - very easy to use. Personally I wish you could output pdf direct from IDL, since then I wouldn't have to convert my eps files to pdf for use with pdflatex (which won't accept eps files)
