
Subject: Mac OS X: Creating PDF figures from within IDL

Posted by [jm](#) on Fri, 14 Jul 2006 14:01:37 GMT

[View Forum Message](#) <> [Reply to Message](#)

For those Mac users who have got into the habit of wanting all their figures in PDF format (i.e for Pages, Keynote or TexShop), Ben Tupper's PStoPDF procedure is very handy (see postings April 2005). The PStoPDF procedure spawns a command that executes Apple's own `pstopdf`. It works very well, but the PDFs don't seem to employ any compression. For example, starting with a 200k EPS file, `pstopdf` creates a 200k PDF whereas Omnigraffle can export a PDF 1/10 the size without any hint of loss. There does not seem to be any way to enable compression (loss-less or otherwise) in `pstopdf`.

The perl script `epstopdf` (which calls Ghostscript) [1] seemed a promising alternative, but the compression offered is lossy (and the PDFs are only a bit smaller than what Omnigraffle can export). There are a plethora of options for Ghostscript. Wanting a 'quick fix' rather than a lesson on Ghostscript settings, I was on the verge of giving up when I stumbled on a post that recommended these options for loss-less compression:

```
-dAutoFilterColorImages=false -dColorImageFilter=/FlateEncode
```

I created a new `myepstopdf` file to include those options. The command:
`myepstopdf --nocompress foo.eps`
now produces compressed PDFs with no (sign of) loss.

So, a small modification to BT's PStoPDF procedure and all works well from within IDL. Should you wish to do the same, the `myepstopdf` script and (modified) PStoPDF procedure are here:

<http://www.iesd.dmu.ac.uk/~jm/pickup/myepstopdf>
<http://www.iesd.dmu.ac.uk/~jm/pickup/pstopdf.pro>

Just ensure that `myepstopdf` is executable and place it in a directory traversed by 'path'. I really wasn't too bothered about the size of PDFs until a report with 40+ figures (produced by TexShop) ended up 10Mb big. The exact same report is now of size 720k. All Keynote and Pages 'packages' will be a lot smaller also.

-John Mardaljevic

[1] You should have everything necessary if TexShop is installed.

Dr. John Mardaljevic
Senior Research Fellow
Institute of Energy and Sustainable Development
De Montfort University

The Gateway
Leicester
LE1 9BH, UK

<http://www.iesd.dmu.ac.uk/~jm>
