
Subject: New PostScript Configuration Program
Posted by [davidf](#) on Mon, 10 Jan 2000 08:00:00 GMT
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Hi Folks,

Well, I've finally done what I have been threatening to do for a l-o-n-g time. I've written a replacement for my poorly written, but often downloaded, PS_Form program for configuring the PostScript device.

I know, I know, I'm late. Bob Mallozzi just published a new PSConfig program a week or so ago, and Craig Markwardt has had something better than PS_Form working for a long time. But I thought, what the heck, I said I was going to do it, so I'm going to do it...

So I did it. And it took me a long time. I think I've put about 100 hours in on this thing so far, but to be fair I've built a number of tools as I've gone along, which will make subsequent programming efforts much easier. At least, that's my theory. :-)

With this program, I am debuting a new idea: shareware.

I have wanted to make professional-quality programs available to IDL users at low cost for some time. As you know, I make a number of pretty good programs available for free on my web page now. I'm planning to continue that practice. But I would also like to make my best efforts available and I feel like I can't give those away.

I'm not looking to get rich. In fact, just so you know, here is how the back-of-the-envelope calculation is done to set the price. Add up the number of hours I spend writing the program, multiply by my usual consulting fee, then divide by 10 percent of the people who have bought my book in the past two years. What it comes down to is that I have to sell about 200-300 copies to make it worthwhile. That seems optimistic to me, but this is an experiment, after all.

So, this program, named FSC_PSConfig, is priced at \$30.

I'm still working out the details of how the shareware thing is going to work, but currently my idea is to make widely available IDL save files of the programs that have been crippled in some mildly annoying way. On payment of the shareware fee, I will send you (or allow you to download, this

is still being determined) the source code for the programs. This program, for example, doesn't allow you to set the filename when you initialize the program (although you can set it to anything you like later). The filename always starts out "coyote.ps". Any reasonably competent programmer will be able to beat this pathetic attempt to protect the code in a matter of a couple of minutes. So the effort is not to keep people from stealing the code, but to gently remind people that someone--a real person--wrote the program.

What will you get in return? Three things come immediately to mind:

1. High-quality programs. You can judge for yourself, but I see a lot of IDL programs in my line of work, and I think this one ain't too bad. (At least on my machine. Please see my plea for help below.)
2. 24-hour a day, 7-days-a-week customer support. (At least to hear my wife tell it. But the truth is, I'm around a lot.)
3. A technical support person with a sense of humor and an author who is perhaps just a little more anal than necessary when it comes to quality.

That's it. I hope that is worth \$30 to you.

Anyway, if you would like to try the program, you can download an IDL save file from my web page. The program is available in IDL 5.1x, IDL 5.2x and IDL 5.3 versions. You should download the version appropriate for your IDL installation:

http://www.dfanning.com/shareware/programs/fsc_psconfig_51.s av
http://www.dfanning.com/shareware/programs/fsc_psconfig_52.s av
http://www.dfanning.com/shareware/programs/fsc_psconfig_53.s av

Save the file as "fsc_psconfig__define.sav". Note the two underscore characters in front of the word "define". Yes, this is an object, but don't be frightened. It is **very** easy to use. :-)

In fact, I have included a test program, named PS_PLOTTER, in the save file. To make a PostScript file using this new FSC_PSConfig program, all you have to do is this:

```
IDL> Restore, 'fsc_psconfig__define.sav'  
IDL> PS_Plotter, Object=psObject
```

Those of you who prefer your PostScript output on A4 paper and your units in centimeters as opposed to inches can set the EUROPEAN keyword:

```
IDL> Restore, 'fsc_psconfig__define.sav'  
IDL> PS_Plotter, Object=psObject, /European
```

The variable psObject now contains the FSC_PSConfig object. If you want to see the graphical user interface again, you can type this:

```
IDL> psObject->GUI
```

If you want to see the keywords that are used to configure the PostScript device, you can type this:

```
IDL> Help, psObject->DeviceKeywords(), /Structure
```

The PostScript device is configured, and a PostScript file created, by a sequence of commands similar to this:

```
psObject = Obj_New("FSC_PSConfig") ; Set the European keyword here, too.  
psObject->GUI, Cancel=cancelled  
IF cancelled THEN RETURN  
thisDevice = !D.Name  
Set_Plot, "PS"  
Device, _Extra=psObject->DeviceKeywords(FontType=fonttype)  
thisFont = !P.Font  
!P.Font = fonttype  
Plot, Findgen(11), Title='This is an Example Plot'  
Device, /Close_File  
!P.Font = thisFont  
Set_Plot, thisDevice
```

There are really many, many more features than I can explain here. You can find complete program instructions, including the source code to the PS_Plotter program that exercises the FSC_PSConfig program, here:

http://www.dfanning.com/shareware/docs/fsc_psconfig.html

Be sure to destroy the object when you are finished with it. (Having it around in an IDL session, however, means you always know how the PostScript device was last configured. And, incidentally, you can have any number of these objects around, so each program you write can have its own PostScript set-up.)

IDL> Obj_Destroy, psObject

I am doing some pretty sophisticated layout things in this program, and so I am anxious to know how it looks and works on something other than the Wintel machines. And I am not so naive as to think it is yet bug-free. As always, I appreciate any and all feedback.

Just as a note, I am grateful indeed to Beau Leeger of RSI and to Bob Mallozzi, who wrote the PSConfig program--which I studied a LOT--for some very nice ideas that I took and extended a bit in this program. I hope you feel, as I do, that people who copy your ideas (but not your code!) are paying you the greatest respect. :-)

Cheers,

David

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

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