
Subject: Re: Printing iTools window to PS file

Posted by [David Fanning](#) on Tue, 03 Jan 2006 20:51:14 GMT

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Kenneth Bowman writes:

```
> I am trying to print an iTools window to a Postscript file. Printing works fine
> if the output is sent directly to an HP Color Laserjet.
>
> If I print to a file (xprinter.out), however, the file is not usable in any of
> my usual Postscript tools (Illustrator, pstopdf, Preview, Distiller). The
> Distiller output log is:
>
> .
> .
> .
> %[% Error: ioerror; OffendingCommand: imageDistiller ]%%
>
> Stack:
> 1.0
> -save-
>
> %[% Flushing: rest of job (to end-of-file) will be ignored ]%%
> %[% Warning: PostScript error. No PDF file produced. ] %%
>
>
> pstopdf chokes with a similar error.
>
> %[% Error: ioerror; OffendingCommand: image ]%%
```

First of all, I think this is not an iTool problem. I've encountered exactly the same problem trying to make PDF files of book chapters. Unfortunately, I don't know exactly what the problem is now, because it has gone away. I attributed this "lack of a problem" to upgrading to version 7 of Acrobat Distiller, but I don't feel 100% comfortable with this hypothesis.

I just tried creating PostScript files with iPlot and ilmage, using an Apple Color Laserwriter 12/600 PostScript driver on Windows. I had no difficulty creating a PDF from these files with Acrobat Distiller 7, but--oddly--the PDF file is not in grayscale for either file. It seems to be in shades of a subdued red! Go figure!

I notice too that if I try to print directly to a PDF file by selecting the Adobe PDF driver that IDL completely hangs and I have to get out the ol' CNTL-ALT-DELETE. :-)

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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

Subject: Re: Printing iTools window to PS file

Posted by news.qwest.net on Tue, 03 Jan 2006 21:23:37 GMT

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"Kenneth Bowman" <k-bowman@null.tamu.edu> wrote in message
news:k-bowman-A56A92.13435703012006@news.tamu.edu...

> I am trying to print an iTools window to a Postscript file. Printing works

> fine

> if the output is sent directly to an HP Color Laserjet.

>

> If I print to a file (xprinter.out), however, the file is not usable in

> any of

> my usual Postscript tools (Illustrator, pstopdf, Preview, Distiller). The

> Distiller output log is:

...

>

> IDL Version 6.2, Mac OS X (darwin ppc m32). (c) 2005, Research Systems,
> Inc.

>

>

> P.S. The beginning of the PS file looks like this

>

> %-12345X@PJL JOB

> @PJL ENTER LANGUAGE=POSTSCRIPT<0A>

> %!PS-Adobe-3.0

> %XprinterPrinter-Model: HP Color LaserJet PS

> %%Creator: Wind/U Xprinter Version 3.3.1 (darwin) (Compile Date: Oct 22

> 2001

> 12:42:02) (bowman)

> %%Title:

> %%CreationDate:Tue Jan 3 12:48:02 2006

> %%DocumentSuppliedResources: (atend)

> %%Pages: (atend)

> %%LanguageLevel: 2

> %%EndComments

> %%BeginProlog

Hi Ken,
offhand I would suggest that it is a problem with the
printer driver. Can you install a pure postscript driver
instead of going through xprinter (I know nothing about macos)

It works fine for me under windows, idl 6.1. I can ghostview,
distill it to pdf etc.

Details:

{ x86 Win32 Windows Microsoft Windows 6.1.1 Oct 11 2004 32 64}
and

```
%-12345X@PJL JOB
@PJL SET RESOLUTION = 600
@PJL ENTER LANGUAGE = POSTSCRIPT
%!PS-Adobe-3.0
%%Title: IDLGr2Document
%%Creator: PScript5.dll Version 5.2.2
%%CreationDate: 1/3/2006 14:18:23
%%For: stockwell
%%BoundingBox: (atend)
%%Pages: (atend)
%%Orientation: Portrait
%%PageOrder: Special
%%DocumentNeededResources: (atend)
%%DocumentSuppliedResources: (atend)
%%DocumentData: Clean7Bit
%%TargetDevice: (HP LaserJet 5) (2014.103) 1
%%LanguageLevel: 2
%%EndComments

%%BeginDefaults
%%PageBoundingBox: 13 13 599 780
%%ViewingOrientation: 1 0 0 1
%%EndDefaults
```

Cheers,

bob

Subject: Re: Printing iTools window to PS file
Posted by [David Alexander](#) on Tue, 03 Jan 2006 21:36:03 GMT
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Ken,

To save an image of what's in your iTool window, use the File->Export option in any iTool, then select "To a file" on the first screen. You can save to any of the IDL-supported file formats (including eps, if you want postscript).

Dave

Subject: Re: Printing iTools window to PS file
Posted by [K. Bowman](#) on Tue, 03 Jan 2006 22:42:16 GMT
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In article <uXBuf.32\$X3.10047@news.uswest.net>,
"R.G. Stockwell" <no@email.please> wrote:

> Hi Ken,
> offhand I would suggest that it is a problem with the
> printer driver. Can you install a pure postscript driver
> instead of going through xprinter (I know nothing about macos)
>
> It works fine for me under windows, idl 6.1. I can ghostview,
> distill it to pdf etc.
>
> Details:
>
> { x86 Win32 Windows Microsoft Windows 6.1.1 Oct 11 2004 32 64}
> and
>
> %-12345X@PJL JOB
> @PJL SET RESOLUTION = 600
> @PJL ENTER LANGUAGE = POSTSCRIPT
> %!PS-Adobe-3.0
> %%Title: IDLGr2Document
> %%Creator: PScript5.dll Version 5.2.2
> %%CreationDate: 1/3/2006 14:18:23
> %%For: stockwell
> %%BoundingBox: (atend)
> %%Pages: (atend)
> %%Orientation: Portrait
> %%PageOrder: Special
> %%DocumentNeededResources: (atend)
> %%DocumentSuppliedResources: (atend)
> %%DocumentData: Clean7Bit
> %%TargetDevice: (HP LaserJet 5) (2014.103) 1
> %%LanguageLevel: 2
> %%EndComments

>
> %%BeginDefaults
> %%PageBoundingBox: 13 13 599 780
> %%ViewingOrientation: 1 0 0 1
> %%EndDefaults

Hi Bob,

I don't have any problems when I use the PS driver for direct graphics, but with iTools I think the Printer device is the only option. Is that what you meant?

MacOS should work just like any of the other Unix flavors. (That is, with the awful Xprinter interface. The copyright notice on the Xprinter interface is dated 1998, which may indicate something.)

Ken

Subject: Re: Printing iTools window to PS file
Posted by [K. Bowman](#) on Tue, 03 Jan 2006 22:42:45 GMT
[View Forum Message](#) <> [Reply to Message](#)

In article <1136324163.321719.67800@g44g2000cwa.googlegroups.com>,
"David Alexander" <davidessandro@yahoo.com> wrote:

> Ken,
>
> To save an image of what's in your iTool window, use the File->Export
> option in any iTool, then select "To a file" on the first screen. You
> can save to any of the IDL-supported file formats (including eps, if
> you want postscript).
>
> Dave

Ah, that shows how much I understand iTools. I thought Export was to export the *data*, not the *graphics*. (I can't say that I care much for the Microsoft step-through-these-dialog-boxes "Wizard" approach, though.)

When I print to hardcopy (HP color printer), the text looks like vectors (i.e., crisp), not bitmaps. The text in the EPS file created by Export has that quaint, fuzzy, bitmap look.

Exporting in bitmap mode apparently just puts a bitmap into an EPS file. Exporting in vector mode loses the texture-mapped colors on the iSurface. Oh well, I guess I'll get by with large bitmapped files.

Thanks for the help, Ken

Subject: Re: Printing iTools window to PS file
Posted by [news.qwest.net](#) on Tue, 03 Jan 2006 23:58:29 GMT
[View Forum Message](#) <> [Reply to Message](#)

"Kenneth Bowman" <k-bowman@null.tamu.edu> wrote in message
news:k-bowman-5FC461.16421603012006@news.tamu.edu...

> Hi Bob,
>
> I don't have any problems when I use the PS driver for direct graphics,
> but with
> iTools I think the Printer device is the only option. Is that what you
> meant?

Yeah, i guess. When you print from itools under windows, it pops up the
printer dialog, and gives you access to all the printers. I've got about 5
actual printers there, and 2 "virtual" printers which are just postscript
drivers
that will print to file. It is a handy way of creating postscript files
even if your
application does not allow it. I don't think I can help you with MacOS
though.

Cheers,
bob

Subject: Re: Printing iTools window to PS file
Posted by [Maarten\[1\]](#) on Wed, 04 Jan 2006 14:24:17 GMT
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R.G. Stockwell wrote:

> I've got about 5 actual printers there, and 2 "virtual" printers which are just postscript
> drivers that will print to file. It is a handy way of creating postscript files even if your
> application does not allow it. I don't think I can help you with MacOS though.

If you can reach the print dialog, you can print to pdf or ps file from
any application on Mac OS X (the left-most button is actually a popup
menu that allows you to select one of the various output options).
However, since IDL allegedly uses the X-Window system, rather than the
native system, I think you will not reach the standard print dialog. (I
prefer to use a Mac, but I'm stuck with Linux at work, so I've never
seen IDL under Mac OS X).

The PS header you showed suggests that the HP driver is acting up: the
first two lines indicate a PCL wrapper around the postscript. You may
want to remove those first two lines and try to convert again. Can you
try to print to some "generic" postscript printer?

Maarten

Subject: Re: Printing iTools window to PS file

Posted by [K. Bowman](#) on Wed, 04 Jan 2006 16:54:11 GMT

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In article <1136384657.557317.34320@g44g2000cwa.googlegroups.com>, "Maarten" <maarten.sneep@knmi.nl> wrote:

> If you can reach the print dialog, you can print to pdf or ps file from
> _any_ application on Mac OS X (the left-most button is actually a popup
> menu that allows you to select one of the various output options).
> However, since IDL allegedly uses the X-Window system, rather than the
> native system, I think you will not reach the standard print dialog. (I
> prefer to use a Mac, but I'm stuck with Linux at work, so I've never
> seen IDL under Mac OS X).

Since IDL runs in the X-Windows environment, it does not use the standard MacOS print facilities. Instead it uses the Xprinter software that RSI bought from Bristol a long time back. One of the annoying things about Xprinter is that it spits out error message when you do simple things like click on a menu

Warning:

Name: printerCombo_listSW

Class: XmScrolledWindow

Illegal value (255) for rep type XmRDirection

That does not inspire confidence that it works well.

> The PS header you showed suggests that the HP driver is acting up: the
> first two lines indicate a PCL wrapper around the postscript. You may
> want to remove those first two lines and try to convert again. Can you
> try to print to some "generic" postscript printer?

I tried that simple expedient to no avail.

Thanks for the suggestions, Ken

Subject: Re: Printing iTools window to PS file

Posted by [David Alexander](#) on Wed, 04 Jan 2006 17:01:24 GMT

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You can actually use the Export feature to export data (by selecting "To an IDL variable" on the first Export Wizard screen) . It's a sort of all-purpose export command, I guess.

As for the bitmap vs. vector output issues: those are limitations of bitmap and vector output. There's a pretty good discussion of this in the IDL docs in:

Object Programming
--Display, Copying, and Printing Objects
----Bitmap and Vector Graphics Output

In particular, see the section titled "Guidelines for Choosing Bitmap or Vector Graphics".

But fonts could still use improvement in IDL. We need vector quality fonts in bitmap mode.

Subject: Re: Printing iTools window to PS file
Posted by news.qwest.net on Wed, 04 Jan 2006 17:15:35 GMT
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"Kenneth Bowman" <k-bowman@null.tamu.edu> wrote in message
news:k-bowman-806969.10541104012006@news.tamu.edu...
> In article <1136384657.557317.34320@g44g2000cwa.googlegroups.com>,
> "Maarten" <maarten.sneep@knmi.nl> wrote:
....
>> The PS header you showed suggests that the HP driver is acting up: the
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>> want to remove those first two lines and try to convert again. Can you
>> try to print to some "generic" postscript printer?
>
> I tried that simple expedient to no avail.
>
> Thanks for the suggestions, Ken

I also had the PCL wrapper around my postscript file, and it didn't cause any trouble. (I could ghostview it, distill to pdf etc.) I don't think that is the cause of the problem.

Ken, I doubt it matters, but did you remove the last line as well as the first 2 lines?
(i.e. keep the eof line, but delete the last 2)
(%%EOF
%-12345X@PJL EOJ
%-12345X)

Cheers,

bob

Subject: Re: Printing iTools window to PS file
Posted by [K. Bowman](#) on Wed, 04 Jan 2006 21:37:45 GMT
[View Forum Message](#) <> [Reply to Message](#)

In article <%oTuf.26\$oD4.5809@news.uswest.net>,
"R.G. Stockwell" <no@email.please> wrote:

> Ken, I doubt it matters, but did you remove the last line as well as the
> first 2 lines?
> (i.e. keep the eof line, but delete the last 2)
> (%%EOF
> %-12345X@PJL EOJ
> %-12345X)

Yup, did that. Didn't help.

I tried printing the file two different ways with the HP Color PS device:
direct to printer (I stopped the print queue and saved the file)
to a file (created xprinter.out)

The two files are both about 13 MB. They appear to have a sequence of
high-resolution bitmaps (tiled image, I suppose).

The files are also nearly identical. Except for the date stamp, they are the
same for the first 8.1 MB. (Don't ask me why they are different after that
point.)

Both files can be sent to an HP color printer without problems. To the eye they
are indistinguishable.

Neither file will open in any of the software tools I normally use with PS files
(Illustrator, Distiller, pstopdf, Photoshop (reports a parser error),
GraphicConverter, ...)

So, to send graphics to a colleague, I can send them the ps file, which they can
print, but not view on their screens; or I can make low-res bitmaps.

Do users of Windows or other versions of Unix have this problem, or is it just
MacOS? That is, can you convert an xprinter.out file to PDF, for example?

Ken

Subject: Re: Printing iTools window to PS file

Posted by [Maarten\[1\]](#) on Thu, 05 Jan 2006 10:52:41 GMT

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

Kenneth Bowman wrote:

- > Neither file will open in any of the software tools I normally use with PS files
- > (Illustrator, Distiller, pstopdf, Photoshop (reports a parser error),
- > GraphicConverter, ...)

If the Adobe utilities cannot handle this file, I think you are on a dead end. Unfortunately, postscript errors are really obnoxious, and totally unintelligible even to experts.

Have you tried ghostscript? Sometimes pstops will clean a file enough to get the rest of ghostscript (or other utilities) to understand the file. Another one is to try ps2epsi, as it may filter out some of the offending commands.

Are you sure the file is ascii only? Some utilities save to a "binary" form, that is perfectly fine with printers, but utterly useless with other tools.

Maarten
